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# CURRENT ECONOMICAL STATUS OF DZHAMBUL REGION AND ITS DEVELOPMENT PROSPECTS IN KAZAKHSTAN

# S.T. Abildaev<sup>\*</sup>

# 1. Introduction

The goal of this paper is investigation and analysis of the current state of the region and ways of its development. The article deals with the development of entrepreneurship in the industrial sector. The analysis of the composition and structure of the industry in Dzhambul region is made and the state program of industrialization is summed up.

# 2. Analysis of the socio-economic status of Dzhambul region

Dzhambul – is a region located in the southern part of Kazakhstan. The administrative centre of the region is the city of Taraz. There live about 1.2 million people (2010 estimation). The population is represented by more than 100 nationalities and ethnic groups. About 71% of the resident populations are Kazakhs. The region is concentrated 71.9% of phosphate reserves of the Republic, 68% of fluorspar, 8.8% of gold, 3% of copper, 0.7% of uranium. The area is rich in nonferrous metals, barite, coal, cladding, semiprecious stones and technical, construction materials. There are explored several fields of natural and technical gas within Shu-Sarysu depression. The food reserves of salt are about 10 million tons. Dzhambul region has all conditions for development of entrepreneurship in the region, including the raising of living standards. Table 1 presents some technical and economic indicators of the level of entrepreneurship in Dzhambul region [1, p.215].

in Dznanou region						
Name of indicators			Year	`S		
	2006	2007	2008	2009	2010	(+,-)
1.General regional product, including	192,2	266,5	324,8	348,8	446,4	254,2
- products industry	80,3	97,5	150,2	115,6	119,6	39,3
- agricultural products	45,8	60,3	63,2	68,5	68,5	22,7
2. Retail trade, billion tenge	36,3	11,0	43,7	59,0	67,9	31,6
3. Services rendered to the population, million tenge	1353,4	1556,5	1627,9	2411,9	3272,7	1919,3
4. Freight turnover of all modes of the transport, million tons / km	1437,8	1593	1667,8	1654,7	1707,7	269,9
5. Commissioning of residential buildings, thousand m2	217,7	211,2	233,6	240,0	218,3	0,6
6. Number of employed in the economy, thousand people	463,9	506,2	530,1	539,2	551,3	87,4
7. Specific weight of earnings in money incomes of population,%	79,5	83,2	81,5	81,0	81,0	1,5
8. Number of unemployed, thousand persons	46,8	42,4	37,0	37,7	33,4	-13,4
9. Average monthly cost of living, n	7276	8506	10903	11167	11759	4483,0
10. Nominal money income per head of population, n	11885	16669	21251	26740	28585	16700
11. Average monthly wage, n	26750	333996	37546	43951	51340	24590

Tab. 1. Technical and economic indicators of the level of entrepreneurship in Dzhambul region

In this period all the socio-economic indicators in this area grow due to active business activities. The level of gross regional product has increased from 192.2 billion tenge to the 446.4 billion tenge, or about 2.5 times. Industrial production has increased from 80.3 to 119.6 billion tenge or 39.3 billion tenge in comparison to 2006; agriculture volumes – 22.7 billion tenge. The product grows and retail sales has increased from 36.3 billion tenge to the level of 67.9 billion tenge. It should be noted that the standard of living in Dzhambul region on the reporting

<sup>&</sup>lt;sup>\*</sup> © S.T. Abildaev; Ph.D.; Taraz State University named after M. Kh. Dulati

period also increased. This is evidenced by such factors as the volume of services rendered to the population at 1.9193 billion tenge, the turnover of all modes of transport - to 269.9 million tons / km, enacted a total area of the residential buildings with 217.7 to 218.3 thousand m2. The administration of the region is working hardly to increase the number of people employed in the economy through the road map, through the expansion of existing facilities and opening new businesses. In the review period the number of employed workers increased by 87.4 thousand people, the number of unemployed fell from 46.8 to 33.4 thousand people or a thousand people by 13.4 thousand people. The growth of living standards of the region is indicated by the average cost of living, personal income on average, average monthly salary per capita. The nominal monthly income of the population rose from 11,885 to 28,585 or 16,700 mr. With an increasing of income increases the monthly costs of population up to 8971 n, 16 331 n, 7360 n. One of the key indicators of living standards is the average salary, which is changed from 26,750 to 51,340 tenge, or it is increased to 24 590 tg. In the region the cost of living increases from 7276 mr to 11,759 mr. In order to support entrepreneurs in the region today are functioning 10 business associations, entrepreneurs, a business incubator, 8 business centres. To protect the rights and interests of entrepreneurs in the region are active regional branch of Union "Atameken", Dzhambul regional employers association, the Association of Business Women of Kazakhstan and other public organizations. Thus, the level of entrepreneurial activity in the industrial sector has positive trends in the reporting period. In further studies it will be assessed the development of entrepreneurship in the industrial sector in agriculture.

# 3. Development of entrepreneurship in the industrial sector

In the industrial business are engaged 356 industrial enterprises and industries, including 62 enterprises engaged in food production, 10 belong to the chemical industry, 24 production and distribution of electricity, gas and water production of the 51 non-metallic mineral products, etc [2]. Entrepreneurial activity in the industrial sector of the economy is represented by the following economic activities:

- mining and quarrying, including coal, crude oil, natural gas, nonferrous metals, and various technical services to the mining industry;
- the manufacturing industry, including production of food, clothing, shoes, paper, furniture, production of chemical, metallurgical and petroleum industries, etc.;
- production and distribution of electricity, gas and water;
- water supply: sewer system, the control of waste management and remediation.

The volume of industrial production by economic activity at current prices is presented in table 2 [3, p.306].

		%				
Name of indicators	2006	2007	2008	2009	2010	
1.Industry	80347,5	97484,4	150204,7	115612	119569,6	148,8
- Mining and quarrying	3996,1	4503,0	7738,0	6517,9	8651,1	216,5
-Processing	65041,4	72751	109479,5	88175,1	91090,3	140,0
- Production and distribution of electricity, gas, water	11310	20230,4	32987,2	19865,4	18334,4	162,1
- Water supply	-	-	-	-1053,6	1493,8	-

Tab. 2. The volume of industrial production by economic activity

It can be seen from the data in table 2 that the volume of industrial production in the period under review increased from 80347.5 to the level of 119 569 600 000 tenge or 48.8%. In turn, the volume of mining and quarrying increased by 116.5%, manufacturing 40%, production and distribution of electricity, gas and water supply by 62.1%, and services related to water supply, sewerage system,

control over the collection and distribution of waste production increased to the level of 1.4938 billion tenge to 2009. The author considers the structure of industrial production by economic activity as a percentage of the total (table 3).

Name of indicators			Year			
Name of mulcators	2006	2007	2008	2009	2010	A (+,-)
1.Industry only	100	100	100	100	100	-
- Mining and quarrying	4,9	4,6	5,1	5,6	7,2	2,3
- Processing	81,0	74,6	72,9	76,3	76,2	-4,8
- Production and distribution of electricity, gas and water	14,1	20,8	22,0	17,2	15,3	1,2
- Water supply	-	-	-	0,9	1,3	1,3

Tab. 3. The structure of industrial production by economic activity

In industrial production the largest part shares to the manufacturing. It ranges from 81.0% to 76.2% in total industry. In the mining industry is only 7.2% of the total industrial production is dominated by such activities as 1.4% of crude oil and natural gas, other mining and quarrying 4.3%. In the manufacturing sector the total regional production is 76.2%, the highest proportion of 29.6% is food production, 24.2% – chemical products, 6.2%, machinery, etc. The production and distribution of electricity, gas and water share in total industrial output 15.3%, the distribution of electricity accounts for 12.3% and 2.5% is air conditioning. The reason of increasing the share of mining industry in 2010 is the increased production of coal and lignite to 355.0 thousand tons compared with 2006 and 64.3 million m3 of natural gas. The share of manufacturing industry is reduced because of production of fine flour for 67,391 tonne of fresh bread – 6589 tons, the production of cattle hides at the 10,211 th. dm2, phosphorus of 3.8 thousand tons, phosphoric acid, 11.7 thousand tons, and so etc. The share of its electricity, gas and water was increased because of thermal energy production to 404.6 thousand Gcal. Industrial production output in 2010 exceeded the 10 districts of the region, except Moinkum area. The financial and economic activity of all types of industrial products in 2010 is shown in table 4.

Industry	Profit before tax, million tenge	profitability of production,%
1. Mining and quarrying	-1174,2	-17,0
2. Manufacturing industry	-163,6	-0,3
3.Production and distribution of electricity, gas and water	-337,1	-2,2
4. Water supply	-16,3	-1.4

 Tab. 4. The main figures of financial-economic activity of industrial enterprises in 2010

It can be seen that the entrepreneurial activity in the industrial sector in 2010 for all types of economic activity is reduced. The author comes to the following conclusions based on the investigations carried out in this section:

- There is positive dynamics of growth in the volume of industrial production in all economic activities in the reporting period (2006 to 2010): the volume of industrial production as a whole grew by 48.8%, including the mining industry (116.5%), manufacturing (40,0%), the production and distribution of electricity and water (62.1%). The new service sewer system was added in 2009 and 2010. The control of waste management and remediation increased from 1.0536 billion tenge to the level of 1.4938 billion tenge.
- In the structure of industrial production also observed the significant changes. The share of the mining industry in total industrial production increased on 2.3% in comparison with 2006, the manufacturing industry decreased the proportion of 4.8%, the share of production and distribution of electricity, gas and water increased on 1.2% and the proportion of water increased on 1.3%.

 Entrepreneurial activity in the industrial sector in 2010 for all types of economic activity had losses. The losses of mining are n 1174200000, manufacturing 163 600 000 n, production and distribution of electricity, gas and water – 337 100 000 n, water – 16.3 million tenge.

# 4. Development of entrepreneurship in agriculture of Dzhambul region

At present, the rural population in the region is about 644.5 thousand people. Most of their business activities associated with the cultivation of land. Their activities are provided through a variety of agro. The process of economic reforms in agriculture, new types of agricultural units of various forms of ownership are taken place. The collective and state farms were reformed into joint stock companies, partnerships, production cooperatives, farmer economy (tab. 5).

Tab. 5. The dynamics of agriculture of Dzhambur region							
Farms of all types	1991	2005	2006	2007	2008	2009	2010
1. Agro categories of management	39	15148	15948	16080	16261	16734	16799
- agricultural enterprises	-	362	392	371	331	475	383
- collective	31	14786	15556	15709	15930	16259	16192
- state farms	8	-	-	-	_	_	_
2. Industry population		166540	163744	164181	166863	168100	169020

Tab. 5. The dynamics of agriculture of Dzhambul region

As you can see the data in Table 4, the number of different economic entities increased from 339 units to 16,799 units, or 49.5 times compared with 1991. The largest share among all the agro, in recent years accounts for the farmer economy and the private sector of the population. So, in 1996 the share of agricultural enterprises (partnerships, joint stock companies, production cooperatives, joint stock companies) was 4.6%, and the farmer economy -95.4%. And in 2010 the share of agricultural enterprises is equal to 2.3% and the farm -97.7%. But in absolute terms the number of farms increased from 103 to 383 units or 3.7 times, the farms from 193 to 16 192 units or 83.9 per cent. Along with the growth of various agro it were increased the number of private farms in rural and urban populations. Number of private households for the period increased to 169,020 units, in compared with 2005. The growth in number of households is reasoned by the lack of work in large farms on the one hand, and the creation of conditions for their development on the other side. In private farms provide the cattle population of the region, which is engaged in gardening and growing vegetables. Production of private farms the villagers and townspeople is a great help to stabilize the family budget, providing the population with crop and livestock production. It should be noted that the increase in the number of different agro evaluates as a positive moment in the development of agriculture, but on the other hand, it contributes to a smallscale production. In 2005 agricultural enterprises on average accounted for 36.4 hectares of land, including agricultural enterprise - 509.4 hectares, the farmer economy - 23.3 ha. In 2010, 63.2% farms had an average size of agricultural land to 18 hectares, 22% - up to 116.4 hectares. The situation is further aggravated by the fact that among the registered farms only 39.6% were active, and among the farm - 91.7%. Dzhambul region has a developed area of agriculture by the specialization and the volumes of crop, farming of animals (tab. 5). According to the table 5 the gross output of agriculture increased in 2010 compared with 1995 to 68.5 billion tenge, or 6.3 times. The volume of crop production increased to 26.0 billion tenge and livestock – 31.6 billion tg. Crop production in the structure of gross area in the reporting period is composed the 48.3% and livestock – 57.1%. Despite the vastness of the territory of Dzhambul region, it is very low share of agricultural output in total output of Kazakhstan. If in 1995 the share of agricultural area was 5.7%, whereas in 2010 it would compose 4.7%. Crop production is the dominant industry in the area of irrigated agriculture. Most of the crop production comes from irrigated land, which is about one-third of the arable area. The main areas are animal production of meat, milk, wool, karakul and eggs.

# 5. Prospects for the development of the region

The author would like to consider the largest investment project in the region to create a production of complex fertilizers, which on behalf of the Head of State will be implemented in Dzhambul region [2]. The project of "EuroChem-Fertilizer" worth more than \$ 350 billion provides for the creation based on the fields. "John Cook" and "Gimmelfarbskoe" include production of phosphorus, nitrogen and complex fertilizers capacity of 1.4 million tons per year [3, p.160]. It will be released almost the entire range of world-renowned complex fertilizers for agriculture. The project will create about 3000 jobs during construction and 2000 in the period of operation. In addition, in related industries will be provided 3000 work places. Agreement between the Government of the Republic and the company "EuroChem-Fertilizers" were signed. The company's investment in this project will amount to more than 100 million U.S. dollars this year [4, p.80–134]. This gigantic project, of course, will give a powerful impetus to the development of not only our region but the entire southern region of the country. Let's give the historical structure of the chemical industry. In Dzhambul plan there is a creation of a special economic zone "Chemical Park" Taraz "with the participation of the National Welfare Fund "SK" and "United Chemical Company" The main purpose of the FEZ "Chemical Park "Taraz" is the creation of new export-oriented industries of chemical products, which are based on high technology. FEZ "Chemical Park "Taraz" involves the creation of 15 factories, which produce a wide range of products. A number of planned production has no analogues in the CIS. The implementation of these projects, the annual income derived by enterprises of FEZ, will amount to 75 billion tenge. The project has great social significance, because it provides for the creation of more than 1.5 thousand new jobs.

# 6. Conclusions

The volume of foreign investment in Kazakhstan since its independence is reached \$ 108 billion, which is composed the 80% of all foreign investment in the Central Asian region [5]. There are 20 thousand enterprises with foreign capital at present time in the country, including seven thousand that are not in the primary industries. Dzhambul region needs to be provided by foreign investments. A conductor and a window to Europe can become Poland as a fast-growing economy. We can cooperate in the agricultural sector (milk, meat and meat products) and in mining industry as a whole.

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### **Summary**

There were implemented seven investment projects in various industries in the last year. All these figures in the article clearly show that the development of the region is in the right direction. The investigations in agricultural area are transformed into the agro-industrial area course. It should become a major industrial development factor of the country.

Key words: business economic status; Dzhambul region; industry.

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# THEORETICAL AND METHODOLOGICAL BASIS OF REGULATION OF COMPLEX NATURE USING

# Marina Baldgi<sup>\*</sup>

# 1. Introduction

The relationships between humanity and environment are quite complex, internally contradictory and closely interdependent. Their positive character can be realized only through the coordination of laws of nature and society development.

The world economy development is in close dependence on natural resources, that influence more and more on rising of antagonism between society and nature.

Sustainable strategy is a significant contribution to the implementation of updated approaches in use of natural resources. It combines environmental, social, economic, legal, natural and other interests which are considered as a method of integrating the different goals for the development of the position of national and international interests [1, p.10–53].

The main attention needs to be focused on searching of the most effective ways of the natural resources using.

Modern theoretical studies of Ukrainian scientists in the sphere of nature using mainly devoted to the development and implementation of sustainable use of natural resources, but the complex of nature using is not giving enough attention. These problems are very important for a market economy, while increasing the possibility of comprehensive utilization of natural resources.

There is need for development and resource conservation activities. They should be focused on improving environmental performance of economic efficiency, social and economic needs.

Ukrainian scholarship has not paid adequate attention to regulation of these approaches in using nature despite major scientific achievements [2, p.120–197].

# 2. The essence of the concept of nature using

The major Ukrainian problem is to ensure effectiveness and efficiency of the formation and implementation of ecological-oriented policy, which is possible due to the introduction of defined regulatory policy of nature using, aimed at achieving sustainable development.

To eliminate existing negative manifestations in the sphere of nature it is reasonable to review the modern system of natural resources on the principles of sustainable development and achieve a compromise between economic, environmental and social needs. For such an alternative is proposed to apply the concept of integrated of nature using, which is possible in the implementation of ecologically oriented market economy and environmentally responsible business.

Evolution of the concept from system to area-system, in which nature is the result of complex interactions between society and nature, highlights features of synergistic approach in coordination of regulatory policy and practice. Integrated natural resources become a necessary fact and an important factor of regional social and economic development in market conditions. Contents of this category are focused on the complex of nature using.

The term "complex of nature using" is conceptually different from the traditional definition. It is considered as a socio-ecological-economic process extraction of using and restoration of natural resources, which is based on modern interpretations of sustainable development concept of the balanced nature and optimization of resources and ensures the growth of resource-efficiency in a market economy.

<sup>&</sup>lt;sup>\*</sup> © Marina Baldgi; Docent; Candidate of Geography Science; Odessa National Economic University; Ukraine

The proposed definition is quietly accurate disclosure problems in the system "human – nature – the economy" and reflects their interaction in specific situations.

Complex natural resources contribute most fully environmentally and economically viable to attract resources to commercial trade, the formation of rational industrial structure, based on its natural resources; settlement close relationship of inter-farm systems and production links between enterprises.

It is based on scientific researches in the sphere of nature and selected awards perturbations paradigm of sustainable development to the conditions of market economy in Ukraine. A respondent had developed theoretical and methodological positions of the concept of integrated natural resource-based, priority-based and balanced nature, unlike the others, taking into account trends of optimization for nature using resources and preserving the quality of the environment (fig. 1).

Conceptual directions promote better mechanisms for regulation of anthropogenic load on the environment by reducing the capacity of natural and industrial systems, waste-free production and introduction of market incentives environmentally responsible business [3, p.157–290; 4, p.23–98].

Basis concepts of area-based system approach, which is emphasizing the complex interaction between society and nature in the process of complex natural resource, focuses on features of synergistic approach in coordination of regulatory policies and practices of natural resources.

The integrated natural resources include certain main principles, which allow defining dominant general realization of the goals by the knowledge of regularities in the system "human – nature – economics".

These include:

- principle of territorial integration due to the necessity of complex approach to the study of integrated territorial unit. It seems that integrated research of economic integration, environmental and social development should be undertaken at three levels. The first level represented philosophical-methodological research, aimed at structural analysis of component-specific territory, disclosure mechanism of interaction of social, economic and natural components and more. The second level combines integrated studies in the following directions: territorial Studies resource, system-structural nature of social research, multilevel and multi-zoning. The main provisions of the development of regional social and economic development, participation in project appraisal, etc. are at the third level;
- systemic and subjective-objective principles parity follow the specifics of the integral concept of integrated natural resources and its need for adequate representation, they contribute to sustainability, with environmental and socio-economic point of view, combination, concentration and cooperation on the use of natural resources;
- the social parity principle stems from the basic task of social development to ensure social, including environmentally comfortable living conditions. This principle identifies the importance of research not only social and economic components, but also exercised in their demographic, social and industrial and natural interaction in Expected results: improvement of mechanisms of regulation, incentives decrease nature capacity production systems, introduction of waste-free production, promotion of environmentally responsible business;
- the principle problem of situational or problem-orientation directly follows from the previous one. At this important issue, author recognize the ecological and economic comfort of living conditions, which depends on a certain natural resources and natural environment in general;



# Fig. 1. Conceptual conception scheme of complex of using nature

- the sustainability of natural landscapes and the fulfillment of socio-economic functions. This
  will help the modeling of water, land and other resources as well as distribution and intensity of
  individual adverse natural and natural-technogenic processes that are needed, primarily for the
  quality of work of different sectors and sectoral variations prevent environmental problems;
- multilevel analysis in the most general form involves the selection of four levels of analysis of complex natural resource: global, national, regional and local. Regional and local in Ukraine makes it possible to detail the territory into eight sub-levels, in accordance with the peculiarities of the regional organization of production, distribution and nature: the state, regional, state, inter-regional, regional (within agglomerations and units), local-regional (in regionally-sintering complexes, within individual centers) and for individual companies and industries.

Integral-criterion of complex natural resource should be considered to maximize the socio-ecological-economic efficiency of implemented waste-free production, implemented through qualitative changes in the regulatory nature, focusing on the optimal use of its natural resources.

To implement the social, environmental and economic components of complex natural resource should be performed by the following functions:

- standard-setting activities;
- strategic management,
- organizational structure of environmental governance;
- improvement of machine tools;
- socio-economic and ecological monitoring;
- natural intensity measurements, modeling and forecasting.

Applied appointment complex nature is the creation of economic and social, scientific and technical measures for their full usage and protection.

This system includes:

- feasibility (detection, exploration, assessment, feasibility studies and resource use);
- organizational and administrative (organization and management of natural resources);
- environmental mechanisms (preservation and protection or restoration of their properties).

Implementation of integrated environmental management, in terms of sustainable development and ecological policy necessitates environmental governance to improve relations between business management and recourse using.

# **3.** Key provisions of the organizational and economic regulation of the complex nature using

Nowadays in Ukraine in the sphere of nature and market self-regulation has actively implemented the system partial state regulation.

The new proposed concepts, that based on the systemic, structural and logical analysis of concepts ("organizational and economic regulation" and "regulation of complex natural resource") are important [5, p.250–291; 6, p.123–315].

The central link in the regulation is administrative structures. Matching interests with the interests of different nature of economic structures or areas can be achieved using a special economic mechanism that will ensure preservation of centralism at the decision on environmental and economic agents to increase accountability

for the outcomes of natural resources. Thus this principle should be used in solving strategic problems, and independence – traceable in specific nature.

Priority in state regulation of economic relations on the use of natural resources is determined by the combination of organizational, economic and legal mechanisms of economic incentives. It helps to use, protect and rehabilitate the natural resources, especially for the donors regions of natural resources.

Thus the need for organizational and economic mechanism of regulation of complex natural resource regulatory policy is a priority of environmental and socio-economic nature. It is reproduced in specific forms of management, organization and encouraging the implementation of nature and waste-free production. The strategic goal defines the achieving mechanism for sustainable socio-ecological-economic development through the introduction of integrated natural resources.

# 3. Conclusion

Defining a significant role in regulating the state of nature, it is reasonable to improve the state strategy. It should be directed to the extended reproduction of natural resources, their complex and growing use of public utility, as well as preserving environmental potential.

Implementation of integrated natural resource can be realized by strengthening resource components in strategies, projects and programs of regional socio-economic development and creation of special institutions which take the function of organizational and economic regulation of natural resources for improving the organizational, economic mechanism and introduction of innovative approaches, applying the diagnostics and monitoring research during natural resources using.

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### Summary

The article deals with innovative approaches of natural resources using. The main attention is paid to the developing conceptions of implementation of a nature, which combines the principles of balance and optimizes to the use of natural resources. There are suggested approaches for regulation of the complex nature resources in terms of Ukrainian economic situation.

Key words: sustainable development, regulation, complex nature, balance, optimization.

### **UD classification:** 504.056

# **DRIVING FORCES OF MANAGERIAL EFFECTIVENESS**

# Viktoriya Borshtsh\*

# **1. Introduction**

Nowadays the society is facing an acute problem of increasing the social production's qualitative level and consequently the level of competitiveness of national economic. Its solution in many ways depends on the improvement personnel's labour quality, i.e. the growth of their qualification. The key moment in this situation is the professional competence of managerial staff and the effectiveness of their activity. That's why a determination of a qualification of different categories and groups of human structural capital (first of all, the top executives) and impact factors on its development represents one of the main directions of analysis of the social and economical evolution's basic tendencies of modern society. The urgency of the article is readily apparent from foresaid. The issue problem of this research lies in the elaborating of new technologies (of advisory and imperative nature), which provide development of the staff's professional skills (including managerial), thereby ensure the management effectiveness' improving and the effectiveness of the whole enterprise in general. Thus the determination of the factors, which influence the effectiveness of the managerial staff's work, is the aim of this article.

Many world's leading experts in economic and management sphere devoted themselves to the problem of the managerial effectiveness. Piter F. Drucker, Robert Kaplan, David Norton, Robert Eklz, L. Bossidy, R. Charan, Justin Menkes have contributed this problem significantly. The question of professional skills and competency was given great consideration in the works of David Whetten and Kim Kameron. Thus the authors in the book Developing Management Skills consider these categories, propose new techniques of manager's training and improving their professional abilities (that the manager needs in his/her practice), their diagnostical and appraisal approaches [1, p.205–311]. Doctor Ichak Adizes also focused his attention on the problem of professional competencies. In his book The Ideal Executive: Why You Cannot Be One and What To Do About It the author describes different managerial roles, which give managers opportunity to make their organization more effective, proposes his own theory of "ineffective supervisor", examines the factors, that causes ineffective management [2, p.120–190]. The category "culture of effectiveness" was studied by L. Bossidy and R. Charan [3, p.23–68].

Among Ukrainian scientists, which are occupied themselves with this topic, are V. A. Beloshapka, I. S. Nydga, V. V. Stremyadin, V. V. Palamarchyk, G. V. Angelov.

# 2. Presentation of material

One of the main tasks of the construction of a mechanism of managerial staff's effectiveness appraisal in the enterprise is the identification of the influence factors on the effectiveness of their work. The determination of such factors allows:

1) to fix main critical moments in mechanism of the effectiveness appraisal;

- 2) to systemize the appraisal mechanism;
- 3) to identify mechanism's internal and external direction;

4) to define the appraisal criterions in the development process of this mechanism.

Factors that influence on the effectiveness of the personnel administration can be classified by the features, represented in table 1 [4].

<sup>\* ©</sup> Borshtsh Viktoriya; Post-graduate; Department of Economics and Management; Odessa National I. I. Mechnikov University

Criterion of description	Factors	Characteristic				
	organizational	structure of management, functional differentiation of labour, personnel selection and placing, labour discipline, documents circulation				
	economical	system of material incentive and material responsibility				
By the content		technical level of production, mechanical availability and labour automation, level of an usage of technics, managers' technical culture				
	physiological	sanitary and hygienic conditions of the work				
	social and	interpersonal relationship, the manager's				
	psychological	authority, system of moral motivations				
By the forms of an influence	direct exposure	organization of a manager's individual work, their qualification, rightness of a personnel selection and placing in the management system				
inituence	indirect exposure	team's psychological atmosphere, managemen style, dynamics of formal and informal groups				
By the duration of an	short-term exposure	for example, violation of a labour discipline				
By the duration of an influence	long-term exposure	the majority of the factors are of a long-term influence; for example, management style and psychological atmosphere				
By the degree of a	quantitatively measurable	the degree of a labour mechanization, dataflow's intensity				
formalization	immeasurable	they cannot be formalized: satisfaction with a work, psychological atmosphere				
By the direction of an	internal	individual features of an agent of the management				
By the direction of an influence	external	organizational factors of the managerial effectiveness				

Source: Practical personnel administration - Access mode: http://www.managepeople.ru/index.htm

The literature analysis shows, that it is necessary to pay particular attention to the classification of the main powers by the direction of an influence distinguishing them by individual features and organizational factors of managerial effectiveness.

The individual features define the managers' behavior and effectiveness in an organization. They are divided into three interrelated groups:

- knowledge and practices (competency);
- skills;
- position (mindset).

Knowledge and practices is the main product of the classical management education. In 2002 The Quality Assurance Agency for Higher Education (Great Britain) has determined the international standards of the specialists' training in the management sphere.

According to them the managers' target knowledge is determined in such spheres of their activity:

1) external environment and its influence on an organization;

2) functioning of markets and consumers' behavior;

3) principles of a production and marketing organization;

4) enterprise's financial sources and financing methods (including, understanding of a managerial and financial accountancy);

5) company's personnel administration;

6) knowledge of tools of qualitative and quantitative business researches;

7) formation and use of data systems (including communication technologies);

8) business policy design in the conditions of an unsteady external environment.

The practices expected from the graduate of the management sphere are chiefly boiled down to the following:

1) formulation and substantiation of the conclusions, including demonstration of a critical and creative thinking;

2) analysis and solving business problems;

3) work with data array, ability to conclude the main idea;

4) running and administrating company's researches;

5) effective use of informational and communication technologies;

6) two-way communication;

7) work in a team;

8) leadership and administration of the implementation;

9) individual effectiveness;

10) ability of a constant training and self-improvement [5, p.23-24].

Knowledge and practices are checkable and developable; they are partially intercrossing and interrelated. The practices follow from the knowledge, and in accordance with D. Whetten and K. Kameron, they are the set of actions, which the individual, who aims to the goal achievement, implements [1, p.45]. In this case the matter is a practical usage of the practices for the solution of a clearly defined task in the real-life environment. Thereafter, knowledge and practices are the basic elements of the manager's professional competence, i.e. of the executor's ability to do his/her work accordingly to the job responsibilities, tasks and standards, which are established in an organization or branch of the national economics. Nowadays not the category of the professional competency, but the system of the professional competencies is used. The usage of this system as the tool of the personnel administration:

- allows to tie directly a system of the human resource administration with business goals of an organization in the current term and in the strategic prospect;
- bases a system of the work with the staff, when all the elements and the aspects of this system are oriented towards the highest possible outcome in certain field of economics;
- is equally suitable for the different types of the organizations, because it's based on the coordination mechanisms, that ensures unity and conformity in the work of the all organizational departments;
- increases an output in case of its using as a tool combined with the other practices of management.

In obedience to aforenamed, the development of managerial staff supposes a learning and usage the body of the up-to-date professional skills and practices, an acquisition the effective methods and technologies. Generally five components of the manager's professionalism can be defined. They are:

- intimate knowledge of the management theory and practice, sufficient proficiency in the sphere
  of production technology that is specific for the managed object, and also a grasp of the
  economic, juridical, psychological knowledge (to the extent required), which features and extent
  vary depending on the particular kind and level of a managerial activity;
- specific managerial abilities (table 2);
- practical skills that are necessary for the managerial activity;
- psychological features of the personality: dominancy (the feature of the personality, that consists of an and requirement to influence other people and bend them to one's will), selfconfidence, emotional stability, stress tolerance, creativity, conation the achievements, entrepreneurial spirit, responsibility, reliability, self-dependence, wavelengthmanship, exactingness, fairness in the relationships with subordinates and so on.

Tab. 2. Admites that are specific for the managerial activity					
General abilities (specify an effectiveness of this type of activity in general):	Particular abilities (provide an effective performance of the certain managerial functions):				
<ul> <li>psychological selectiveness and empathy;</li> <li>practical psychological intellect (for example, the exertion of an adequateness of the responsibilities' allocation between the subordinates);</li> <li>psychological grace (a sense of moderation in relationships with colleagues and subordinates);</li> <li>social vitality (logical convincing by words and deeds);</li> <li>exactingness;</li> <li>criticism;</li> <li>addiction to an organizational activity</li> </ul>	<ul> <li>ability to forecast;</li> <li>planning facility;</li> <li>addiction to make managerial decisions;</li> <li>communicative abilities;</li> <li>motivate aptitudes (to infect with one's idea);</li> </ul>				

<b>Tab. 2.</b> A	bilities th	nat are specifi	ic for the ma	nagerial activity

Source: developed by the author

Therefore, the manager's peculiarity is an integrative mode of thinking and spacious mind, which is confirmed by a qualification and a practice. But the context of the listed elements forms only a potential of worker's professionalism, and the main component of this context is a realization of the executive's potential. It is a practical activity of an organization of subordinates' labour efforts that are the managerial working objects; this activity defines by high intensity and effectiveness and is based on a sum of all the above mentioned components. Herewith the differences of each individuum in a speed of learning, duration and effectiveness of usage of the same experiences in the practical conditions have to be taken into account, what depends on the individual particularities and especially on the supervisor's abilities. Manager's abilities are the system of psychological and physiological features which provide an easiness of knowledge and practices acquisition and predetermine results achievement in the particular activity type. Six key abilities are pointed out in management:

1) capacity to keep facts in mind; 2) analysis facility; 3) intuition; 4) stress tolerance; 5) training aptitude; 6) leadership ability [6, p.97].

Besides mentioned typology, D. Golman has proposed the conception of emotional intelligence (EQ) that was added by J. Menkes, who has initiated a category of executive intelligence. It is the system of the intellectual or rather cognitive abilities (brainpowers) as suppositions of managerial success. Herewith, he proposes methodic of executive intelligence metric for its appraisal aside of traditional valuation methods, such as IQ-testing and Past Behavioural Interview. It bases on the statement, that the vast majority of managerial situations suppose the necessity of developing three main types of executive's competencies: accomplishing tasks, understanding people, judging oneself (table 3) [7, p.39–55].

Tab. 5. Wain types of executive s competencies (by J. Weinkes)					
Type of manager's competency	Its characteristics				
	- adequate definition of a problem content, separation main tasks from secondary ones;				
	- prediction of difficulties in goal reaching and settling the ways of their				
Accomplishing tasks	overcoming;				
	- critical appraisal of key assumption's objectivity, which underlie the drawn scenario;				
	- clear formulation of advantages and disadvantages, that are said during arguments' and assumptions' discussion;				
	- determining data needs for the task's accomplishing and the ways of data				
	receiving;				
	- ability to remember different views at the problem, especially with a goal of risks' identification				
	- motives' and agenda's definition;				
Understanding people	- prediction of subordinates', clients' and other stakeholders' potential reaction on the undertaken actions and the ways of their communication;				
Understanding people	- determining key questions and positions, tied to the conflict situation;				
	- ability to understand and balance different needs of stakeholders				
	- implementing feedback, that is able to define mistakes in one's judgments and				
	make necessary corrections;				
	- accounting one's stereotypes of thinking for the improvement of a quality of				
	the made decisions;				
Judging oneself	- ability to identify the weaknesses in one's ideas and actions, when they need				
	public acknowledgement of mistakes and making amendments in a scenario;				
	- identifying weaknesses in positions of the other people and using advantages				
	of their argumentation;				
	- ability to define, when an opponency of objections of others' and a				
	continuation of the made scenario is necessary				

Tab. 3. Main types of executive's competencies (by J. Menkes)	Tab. 3. Main	types of	executive's com	petencies (b <sup>y</sup>	y J. Menkes)
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Source: J. Menkes, Executive Intelligence: What All Great Leaders Have, Collins, 2005

Such approach has following advantages: 1) it takes in account an important, but often ignorable feature of manager's profession, that consists in that, that manager achieves one's results only via interactions with other people; 2) the result of cooperation increases by virtue of using such ability as estimation subordinates' weaknesses and strengths and finding the ways of an effective usage of everyone's advantages; 3) training of manager's cognitive aptitudes depends on conclusions, which he/she draws from his/her own successes and failures. Supervisor's position (mindset). In accordance with a category's definition of J. Newstrom and K. Davis, position is a set of feelings, awareness and faiths that determines individual's perception of an environment and prompts him/her to the planning certain actions and behaviors [8, p.102]. Manager's skills are reflected in his/her position, and his/her needs, motives and values have the vast influence with it. Herewith three main components of the position (mindset) are discerned. They are cognitive, emotional (affective) and behavioural aspects.

The system of components of individual factor in the management theory is defined as "a manager's triangle". In this case each element has the different grade of importance from the point of view of its influence on the effectiveness of a manager's activity. In the world and national practices their correlation is 10:30:60 accordingly. Three causes of executive's ineffectiveness can be determined in accordance with above-mentioned components of individual factor. They are: 1) because of lack of knowledge and skills; 2) because of lack of certain abilities that are necessary for a specific task accomplishing; 3) on account with the manager's unwillingness to solute the concrete task, expressing in that way one's position (mindset).

However, even if the executor possesses the necessary knowledge, skills, abilities, and his/her position coincides with existing wish to accomplish one's activity, and he/she shows amazing

results in the company, belonging to the category of "stars" among the colleagues, the huge probability is existing, that if he/she changes the organization, there he/she won't be so successful as in the previous one. Such a phenomenon in management practice is called "stars' paradox". It makes us fall to thinking, why high results cannot be carried over from one company to the other. And consequently, in this case the main task of the supervisor is to understand, what inside the organization and how influences on the administrative process. The answer is: it is an organizational factor that is also important driving force of managerial effectiveness. Hereby the special attention is paid to the its following components:

- company's data system;
- company's resource and tool bases;
- "Appraisal Stimulation Control" system (ASC);
- system of responsibilities' allocation.

First the ideas of effective work with information were stated by professor T. Gilbert (USA) in 1978, which are still urgent. In his opinion, the clear task assignment and valid feedback (confirmation of the rightness of activities) are the powerful and necessary components of an informational effectiveness [5, p.35–36]. However, they are insufficient or nearly entirely absent at the most workplaces. The subordinates do not understand mission and strategy of the organization; they have no clearly determined tasks, goals and criterions of work. Accordingly, they are not able to define, if their work is effective, if a correction of their activity is necessary, how results of their work correspond to the organizational requirements. In this regard a special attention has to be paid to such an important moment of data interaction with subordinates as task setting, taking in account a psychology of each subordinate and providing everyone with the necessary information for accomplishing tasks. Thereby the providing of a reliable feedback is one the important components of a data communication. Tools, resources and ASK system. The other layer of the organizational factors, which determines the results of a manager's activity, is the ASK mechanism. The same as the systems of data communication it is formed by a manager in his/her own, and the main criterion of its effectiveness is how the manager effectively accomplishes his functions in an organization.

The "star's paradox" is considerably explained by the differences in the resource bases, with which a company provides an executive staff. In this case the main criterion of effectiveness is a quality of the resource base and how managers use it, playing three roles in a company, of: a negotiator, a resource allocator and an entrepreneur (G. Mintzberg). And the last but not less important factor is the system of responsibilities' allocation in a company. The assurance of a balance of responsibilities and authorities is one of the most important and a fundamental principle of the effective managerial work's designing of all the companies. Hereby the way of allocation of responsibilities influences on the all elements of the managerial effectiveness. When the manager delegates his responsibilities, he delegates his authorities, consequently his possibilities to affect the formation and allocation of a data, usage of resources and work of the ASK mechanism. Thus an influence on each subordinate and the possibility to use his qualification, skills and mindsets is realizing.

So a culture of effectiveness is built in accordance with all above-mentioned driving forces of the managerial effectiveness. The culture of managerial effectiveness is an aggregate and integrating vector of competencies, knowledge and skills, behaviour, mindsets and positions of all employees of a company. Thereby "the culture of managerial effectiveness has to become a part of the general corporate culture" for the purpose of determining the successes of an effective supervisor (L. Bossidy, R. Charan) [3, p.143]. At the same time the main component of such a culture is the professionalism of the all personnel of an organization and especially of a group of the executive managers, which is an integral and systematic attribute that is compiled due to the received theoretical knowledge during the practical activity of the specialists on basis of worked out organizational conditions and individual features, possibilities and mindsets of managers. So the multipurpose and comprehensive development of a manager as the individuality, scientific and practical leader is necessary in the modern society.

# **3.** Conclusion

The individual features (professional competency, skills and mindsets) and organizational factors (data ware, resource and tool bases, system of responsibilities' allocation) were considered in the article as the main conditions of the managerial effectiveness in a company. However, these factors are insufficient in the modern conditions of development of the national economic and an enterprise, because they don't entirely reflect specificity of the goals of an organization (its main goal is an extended reproduction of the capital on the innovative basis). In accordance with this, the attention must be paid to the innovative trend of the transactor's activity and the level of its innovative potential, the conditions of functioning of a system of an extend reproduction of the capital in the whole structure of the company's activities, the conditions of an intellectual capital's development, and also make an accent not only at the individual features of the managers, but also at a company's team-work (it was said above, that even if a manager is super effective in one company, he/she cannot be the prime power of success in the ineffective team) and culture of effectiveness. Therefore, the challenging task set before the author is to study a phenomenon of an executive intelligence, a category of the culture of effectiveness and principles of its interaction with other company's systems, to analyze an innovative activity and a specific of intellectual capital as the impact factors of the managerial effectiveness.

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### **Summary**

In the article the author analyses the main factors, which affect the effectiveness of personnel management, and gives their classification. Also the categories of culture of effectiveness, managerial intelligence and professional competency were considered in the article, it was given the classification of professional skills, which the modern supervisor needs.

**Key words:** individual factors of effectiveness; organizational factors of effectiveness; professional competency; managerial intelligence; "Star paradox"; effectiveness culture.

### **UD classification:** 331.108

# DEVELOPMENT OF ENTERPRISES IN RURAL AREAS IN POLAND

# P. Bórawski; J. W. Dunn<sup>\*</sup>

# 1. Introduction

The integration of Poland with the European Union has created possibilities of improving the situation of farms in rural areas, but most of them still face many problems. The main issues are small incomes and lack of possibilities of development. There are more than 2 million farms in Poland, but only 200-300 thousand have possibilities to development in rural production. The others can exist in the market but their owners have to look for alternative sources of incomes.

The term alternative sources of income of farms are not explained well in the literature. Some authors describe the alternative incomes as new plants and kinds of animals in rural areas.

Some authors claim that breeding of fallow deer, ostrich and goats are good examples of alternative income of farms. However, the number of such farms in Poland is rather small (150).

Such a small number of farms will not solve problems of many farms because the breadth of the market is small. Few Polish consumers will buy such products and most farmers must export the animals.

Agritourism is an example of alternative incomes in rural areas. Polish tourists like to spend free time in rural areas.

Over last fifteen years the number of agritourism farms has increased to 12 thousands. Such farms cooperate well in the market, but they will not solve problems of all farms.

Agritourism is developing well in regions with good natural resources and many lakes such as Warmia and Mazury located in north-east part of Poland.

The most popular alternative source of incomes of farms is non-agricultural activity. Some farmers look for alternative incomes because they have no possibilities to improve their economic situation in agricultural production.

Non-agricultural activity in rural areas is represented by small and medium-sized enterprises. They employ mainly people from families and local villages. Such enterprises can be a catalyst of local rural development.

However, such enterprises face many problems of development. The development of Polish economy would not be possible without the small and medium-sized enterprises.

This sector is fundamentally important for economic sustainability. According to data from the Central Statistical Office, the number of small and medium-sized enterprises in Poland exceeded 1.6 million in 2009.

The SME sector is a significant source of new jobs and innovations.

A dynamic development and the possibility of rapid development to the changing market conditions are the most important characteristics of this sector.

<sup>&</sup>lt;sup>\*</sup> © P. Bórawski; Doctor; University of Warmia and Mazury in Olsztyn; Poland;

<sup>©</sup> J. W. Dunn; Professor; Pennsylvania State University; USA

According to the Ministry of Economy the SME sector makes up to 99.8% of all enterprises in Poland, including 96% of micro-enterprises employing fewer than 10 people, 3% of small business employing 10 to 50 people and fewer than one percent of the medium-sized companies employing between 50 to 250 people [1, p.25].

The most important characteristic of small and medium-sized enterprises is independence of decision making and responsibility for the obligation of the owner. These smaller firms can adapt to changing market conditions are much easier than large companies [2, p.20].

The topic of small and medium-sized enterprises development has been discussed in the past literature.

Schumpeter formulated the thesis of "creative destruction" according to which capitalism would have not existed without the continual emergence of new companies.

The capitalist economy is still on the go and that is why the process of transformation is leading it to the higher level of development. There are various conditions having an impact on the process of death and birth of new companies.

The most important are new requirements of the markets, integration and globalization processes and the improvement of technology. The process of development and promotion of new small and medium-sized enterprises depends on the entrepreneurial culture and attitude of the society to conduct a business [3, p.24].

# 2. Aim and methodology

The objective of the survey was to recognize the conditioning of enterprises development located in rural areas. We have surveyed 354 farms operating in eight provincies:

- Warmińsko-Mazurskie;
- Podlaskie;
- Pomorskie;
- Zachodnio-Pomorskie;
- Lubuskie;
- Mazowieckie;
- Lubelskie;
- Łódzkie.

The owners of 354 business entities were run by farmers.

The research was carried out in 2009, and the main interviewers were the ODR (Agricultural Advisory Centre) employees.

The survey was carried out as part of a habilitation degree project with the support of grant No. NN112 386240 from the Ministry of Science and Higher Education.

The subject of the research includes kind of activity, territorial range of activity, state of development, increase of turnover, assortment and market.

We asked the entrepreneurs whether they are satisfied with incomes and about the farm's area.

# 3. Results

The research of Sikorska-Wolak proved that the owners of farms need to identify entrepreneurial achievements that give the ability to adopt to change and introduce new innovations [4, p.73–74].

In economic sciences the form entrepreneurship is linked with the establishment of the enterprises. In the praxeological meaning, entrepreneurship is the ability to act and in terms of the teaching enterprises is education.

However, most definitions of entrepreneurship combine this with the functioning of the company"making and maintaining its own business".

Much non-agricultural economic activity in rural areas is carried out by women. Frequently the owners of business are younger and middle-aged women (up to 40 years).

They have often a degree in economics, agriculture, catering and other sciences [5, p. 65].

Research conducted by the authors shows that the rural environment has a positive impact on the development of entrepreneurship in Poland, the U. S. and other countries.

Rural businesses run by women are perceived positively. If the enterprise is run by a woman this has a positive effect on sales, customers.

The author has shown that the success of businesses run by women in rural areas is affected by: hard work, economic factors, enthusiasm and passion, and effective management.

According to SAWICKA small business in the country plays an important role, because it has features that enable the rural development by [6, p.104]:

- job creation and employment of the local population;
- the development of innovation regions;
- co-operation with other entities, which contributes to the steady development of the larger enterprises.

There are many reasons that rural areas need entrepreneurial activity [7, p.25]:

- the traditional way of farming and an unfavorable agrarian structure;
- high unemployment outside agriculture and idle labor;
- unemployment in the country, especially in areas where there were state farms;
- small scale of farm production, which means that production costs are high and there are problems with the sale of products;
- low level of education of farmers, which negatively affects the development of farm.

Entrepreneurship in rural areas is manifested not only in the modernization of farms but also in the development of agricultural product processing, development services, commercial projects or crafts.

These are all common entrepreneurial activities in rural areas.

The development of rural enterprises is closely linked with competitiveness and innovation. The word innovation means renewal and creating something new.

According to Firlej competitiveness of rural enterprises depends on competition in the market, transformation processes and integration with European Union.

Moreover, innovations in rural enterprises are characterized by the share of new products in the value of total products sold [8, p.84].

It should be noted, however, that the possibility of the development of enterprises and innovation in rural areas are determined by many factors, including mainly infrastructure, wealth of the population, local initiatives and other institutions.

Farmers also play an important role because they are seeking different paths to improve the performance of their farm businesses [9, p.383].

The literature allows us to evaluate our own research.

Most of the surveyed enterprises are trading companies (fig. 1). This activity usually does not require big capital outlays. These companies are represented by:

- small village shops;
- groceries;
- green-groceries;
- firms selling agricultural production inputs;
- other products.

Another kind of activity is service (34,5%). Companies providing services in rural areas are represented by:

- transport;
- advisory;
- finance;
- agriculture services;
- other.

Such companies deliver services for local inhabitants.

Some enterprises operated as production companies (20.5%). Such activities need money for necessary equipment, machinery, technologies and other items.

The smallest number of surveyed enterprises operated as processing firms (2.7%). These companies mainly process food and natural resources into final products. Such companies produce furniture for local inhabitants and other products.



Fig. 1. Kind of activity of surveyed enterprises (%)

Source: own research

One phenomenon which is a challenge for management of modern enterprises is globalization. According to Bogdanienko, globalization is entering the latest competitors firms in the domestic market are international.

The author uses the term to define the processes of growth between the different actors of economy regardless of their nationality [10, p.119].

The internationalization of the economy is not new, but it looks different today than a few years ago.

The most important difference is the mobility of capital, goods, services and technical progress on a larger scale.

Another important characteristic of today internationalization are decreasing transaction costs of international cooperation. Today's globalization is characterized by increasing liberalization of economic activity [11, p.228].

We wanted to recognize the globalization processes of surveyed farms and their territorial range of activity (fig. 2).

Some enterprises ran activity in their own village (16.4%) and several villages (9.0%). Such firms are typically small. These enterprises normally provide food and other goods for local inhabitants.

Some enterprises operated in gmina (14.4%) and several gminas (18.4%). Such enterprises scale is larger than previous analyzed firms. Only 8.8% operated in voivodeship and several voivodeships (6.2%). Enterprises working in voivodeship are even larger.

The survey found that only 8.1% of enterprises worked in the whole country and abroad. Enterprises operating in the country are bigger, have a wider assortment of products and are more flexible in adjusting to the requirements of the market.



Fig. 2. Territorial range of activity (%)

### Source: own survey

The owners of the rural enterprises were asked to point out the state of enterprises' development. The vast majority of them pointed out that their enterprises are in the developing state. This means that the conditions for their development are good. Their products meet demand.

Another big group of entrepreneurs pointed out that their companies have an established position in the market (35.9%). Such enterprises offer good products and are recognized in the market. Their owners do not need to have outlays on advertisement.

Only 10.5% of surveyed entrepreneurs said their enterprises are in the introductory phase. This means that they started to operate in the market recently.

The situation of new established enterprises in the market is rather difficult. Nearly 60% of them close down after the first year. That is why only innovative enterprises have the possibilities to survive in the market.



Fig. 3. The state of enterprise development

Source: own survey

Entrepreneurs were asked to point out whether their turnover, assortment and markets are increasing.

The research shows that the biggest number of entrepreneurs showed a turnover increase. It shows good conditions for their development.

Another quite big group pointed out an increase in products or services offered. Such enterprises want to develop well in the future and adjust their offering to consumers' requirements.

Only 28% of entrepreneurs pointed out market growth. It means that the possibilities of market development are limited. Enterprises' owners must look for new markets because the competition is great.



Fig. 4. Percentage of respondents declaring increase of turnover, assortment and market

Source: own survey

Entrepreneurs were asked if they are satisfied with the incomes they achieve.

Only 16.1% of entrepreneurs pointed out that they are satisfied with incomes and 35.3% pointed out that they are rather satisfied.

Other entrepreneurs dissatisfied with their income. These results show problems of small and medium-sized enterprises.

Lack of satisfaction of entrepreneurs from achieved incomes is a bad situation for these enterprises.



Fig. 5. Percentage of respondents declaring satisfaction from incomes

Source: own survey

Another important information was the area of farms. We wanted to know what land the farms have. Poland has six classifications of land quality. The best are I and II class and the worst – V-VI classes.

Specification	ha	%
Average farm area	51,6	100.0
Arable land	33,4	64.7
Land class I-II	1,5	2.9
Land class IIIa-IIIb	12,6	24.4
Land class IVa-IVb	17,2	33.3
Land class V-VI	2,1	4.1
Meadows and pastures	6,7	13.0
Orchard and horticulture	4,2	8.1
Other	7,3	14.2

Source: own survey.

The survey proved that the average farm area running non-agricultural activity was 51.6 ha. This is much bigger than average farm's area in Poland (8.2 ha in 2010).

We asked the owners of the farms how they evaluate quality of their land.

Most of them pointed out that they have average (61.3%) and poor (21.2%) lands. Only 1.1% of farmers said they have very good lands and 16.4% had good land.



Fig. 6. Farmers opinions about lands in their farms

Source: own survey

### 4. Summation

The survey proved the development of farms running non-agricultural activity. It is the most popular source of alternative incomes for farms in Poland.

However, the conditions for private activity are changing in Poland. Most of them are affected by the integration processes and changing market competition.

Farms running non-agricultural activity in Poland are much bigger than a typical farm in Poland. It demonstrates the concentration of capital in bigger farms.

Furthermore farms with non-agricultural activity are much stronger and more competitive and their owners still look for more possibilities of their development.

Most of the enterprises operated in voivodeship, gminas and village. Such results prove small scale of activity. The development of such enterprises depends on consumers' buying force and the level of innovations.

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### Summary

Rural areas in Poland and other countries of Europe and the world face many problems of development. The most important are as high unemployment, low productivity of traditional branches of agriculture and bad standard of living of people in rural areas compared to urban inhabitants. One of possible way to improve the difficult situation of rural inhabitants is finding alternative incomes. They include mainly nonagricultural activity, agritourism and other activities. We focused mainly on enterprises run by farmers as we consider this activity as the most important source of alternative income. In 2007 nearly 4.5% of farms in Poland ran nonagricultural activity. It included; service using own machinery, agritourism, agricultural products processing, wood processing, handicraft, plant culture and animal breeding in water and other. The research covered 354 enterprises located in the following provinces of Poland: Warmińsko-Mazurskie, Podlaskie, Pomorskie, Zachodnio-Pomorskie, Lubuskie, Mazowieckie, Lubelskie and Łódzkie. The owners of 354 business entities were run by farmers. The research was carried out in 2008, and the main interviewers were the ODR (Agricultural Advisory Centre) employees. The subject of the research included the problems of enterprises development, chances and threats. We asked the entrepreneurs about possible ways of improvement their situation and sources of finance necessary in their firms' development.

**Key words:** enterprises: rural areas; alternative income of farms.

**UD classification:** 658.005

# INSTITUTIONAL SUPPORT OF DEVELOPMENT AND REALIZATION OF THE REGIONAL DEVELOPMENT STRATEGY

# A. Boyko; H. Molina<sup>\*</sup>

# **1. Introduction**

At this stage of development and implementation of development strategies in the region need appropriate institutional support of the process at all levels. An estimation of the institutional mechanism's effectiveness for the implementation of regional strategies and transformations in the region determines how this mechanism actually providing the social and economic development of the region.

The problems of the regional economy are not new. They appeared at different stages of economic development in many countries. But for the most part they are confined to the tasks of more effective proportions of material production. There was given the scientific and technological progress and impact of the energy crisis that has gripped most of the developed world in the mid-70.

Recently, the processes of globalization are significant drivers of the structural transformation of the economies in the world today.

The significance and complexity of the restructuring of regional economies except the above factors also determined the peculiarities of the transition phase for Ukraine.

Institutional changes taking place in the country on a background of deep transformations in the state system and the socio-political structure of society, caused by the transition from administrative-planned to a market economy and building an independent state.

# 2. Analysis of the latest research

Institutional aspects of regional economies found a significant place in the work of economists' market school: V. Kosedovskyy, P. Krugman, K. Oppenlender, M. Porter, J. Tyrol, Joseph Schumpeter, etc. At the regional level, the problem of economic transformation investigated: A. Amosha, M. Dolishniy, N. Dorogov, S. Zlupko, J. Krisanov, Yu. Perevalov, V. Pila, E. Podsolonko, V. Silvestrov, A. Slepokurov etc.

Despite the rather substantial scientific and practical endeavor in this area, the problems of transformation can not be considered settled. Especially a lot of questions arise when the object of transformation are the regions themselves.

This is due to region-specific: the scope of the development of productive forces, the availability of natural resources, geographical location, role and place in the economic system of the state, etc.

In each case, the necessary scientific systematic assessment aggregate regional conditions and factors that affect the formation of the regional economy, identification of patterns of quantitative and qualitative interaction, the goals and features of the socio-economic development of the region.

Modern theories of implementing transformations (model transformations H. Chenery, external dependency theory, the theory of the dual of the theory of linear stages of growth, Rostow,

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development theory A. Lewis model "triple helix", etc.) encountered in the former Soviet Union with a strong institutional inertia (with the advent of complex local institutional projects such as alternative, promoted at the regional level). These projects are being implemented in different regions, have common basic approaches that can characterize them as a form of a certain type of institutional project-based search for the best options for the interpretation, correction and legalization in the new system for the regulation of public-partnership type, based on the traditions of the Soviet economy. The goal in this case is the recovery in new forms of control over the resources of the territory of the consolidated regional power elite.

The purpose of this article is the analysis and evaluation of both the current problems of institutional change, ensuring the implementation of regional strategies and the formation of long-term policy of Ukrainian regions.

# **3.** Presentation of the basic material

Macroeconomic analysis does not understand the factors of regional development. Known today macroeconomic models show that traditional factors – labor and capital – describe regional development by only 30%, the rest, that is, 70% – are undefined factors. The latter allows understanding the new economic geography of the Nobel laureate P. Krugman. According to his theory in spatial development are highlighted the competitive advantages of the "first" and "second nature." Based on the Krugman terminology, today Ukraine is in the painful transition from the benefits of the "first nature", chief of which is the factor of natural resources, the benefits of a "second nature," implying the agglomeration effect, human capital and institutions. If the theory P. Krugman institutions are considered as factors of development, according to a World Bank study, they can also act as a brake on development or barriers.

The main factors of spatial development, according to the methodology of the World Bank, are divided into three groups:

- density agglomeration effect;
- distance economical distance (transport, transactional costs);
- division barriers, institutional first of all.

Today Ukrainian regions need to understand what factors really stimulate their spatial development, and which, in particular, institutional, are an obstacle. In this case, the shortcomings of Russian regional studies should include the fact that, with enough development of theoretical constructs very weak empirical analysis.

At present, the region has two types of institutions: Governmental institutions of regional policy and regional institutions. However, they are not effective enough. First, in dealing with the triple task of maintaining the balance of the alignment and enabling policies, the choice of spatial development priorities and coordinate the interests of part and whole, that is, the region and the state [1, p.15–70].

Today, Ukraine is distributed to 30% of total revenues.

The first center collects funds from the regions, and then distributes them in the form of targeted social transfers, dictating in this region, to which they can be spent. The stimulatory effect of such policies is small.

When choosing the spatial development priorities remain poorly formulated regional priorities. Provide the best value investments in regions and territories with significant competitive advantages. The latter in Ukraine, as before, are mainly raw materials, not the quality of human capital, institutions, and agglomeration, as is common in modern regionalism.

The country as a whole and its subjects – regions objectively have divergent interests. In such a conflict of interest is immanent and requires special institutional permits. In Ukraine dominated manual control, which makes policy coordination of interests unstable and opaque.

Institutions can be divided into several types:

- the institution of capital status;
- the institution of special economic zones;
- institute internal offshore zones:
- special institutions of so-called "regional creativity."

The first manifestations of the institute "regional folk art" 90 years – is the internal offshore, the economic effect of which was not.

They failed to convert, but after having the territory of a special relationship with big business, in fact, the same domestic offshore, but the benefits were given, not all, but only need a company. When their owners are "gone" after the sale of assets, the state budget had to replenish the regional budgets [2].

The creation of a special institutional environment – is backup, which knocks out the very first deterioration empirically proved. Any man-made institutional advantages increase the risk of development. In the current environment the basic tasks of the Ukrainian regions is to attract investors, and to attract them, are special conditions for a particular company. In such a situation it is impossible to achieve sustainable improvements in institutional systems, their transparency.

Ukraine has still not really growing competition for human resources that becomes more and more expensive. And while the competition is not there, there will be an inadequate institutional environment. However, the country formed the scale of institutional practices, which already can be decomposed into a "best-worst".

There are leading regions, as well as lagging. Improving the institutional environment of the region – it is most often the result of an active role of its leader. And the worst regions exhibit the classic effect of the "rut." Improving the institutional system is possible only where the possibility of institutional improvement combined with other factors of competitive advantage.

The result of competition and institutional projects of the Centre region was the formation of persistent gap between the normative picture of the institutional organization of the economy and the real models of institutional arrangements of regions of Ukraine. This raises the question about the reasons why alternative institutional projects, despite the fact that they moved to the lower level of the power hierarchy, were successful? Sustainable regional localization and segmentation of the institutional environment is a consequence not inconsistent state or its errors, and objective characteristics of the object of reform.

The domination of universal "rules" of the market type in developed countries reflects the agreement reached in these high "density" of the economic space providing infrastructure and the accumulated stock of social capital, a nationwide "radius of trust", which is expressed at a high enough level of impersonal and institutional trust. In Ukraine the situation is qualitatively different. It is the structure of social capital is the most important factor in defining the direction of institutional development. This is due to the fact that economic institutions, including market can only function as a "social embeddedness." This means that real entities always operate in a specific network of economic and social ties, bonded channels for information, general rules for its interpretation and patterns of behavior. The participants of the network, having common value orientations generated through cultural mechanisms - through religion, traditions, historical traditions, and practices of joint solutions to problems of survival and adaptation to the new

economic conditions, perceive the same information available to them and more accurately interpret the actions of other members of the network. The generalization of these phenomena, as we know, is the concept of "social capital", coined to describe the impact of socio-cultural factors on economic cooperation [3, p.37].

Social venture capital regions can be of two types (fig. 1).

The first type of social capital embodied in open business networks. The generality of the objective functions of actors such networks is determined by their orientation to represent the collective interests of business in collaboration with the government, conservation and the accumulation of social capital as excluding public good. The main signs of open business networks are horizontal, uniform, low barriers to entry and exit price. Sign horizontality with successive tiers sets organizational structure networking. Horizontal includes features such as direct access to all the actors in the central actor, the inability to block decisions of other actors, mutual control of the central actor and other members of networking.

Uniformity – fundamental characteristic of "narrow" networks because it enshrines the exclusive nature of the private property right. Major components of the selected feature are: non-participation of the authorities in making business decisions and in the appropriation of the results of business decisions, with the exception of the statutory framework of restrictions and tax payments, as well as the non-participation of the authorities in the implementation of business solutions.

Open nature of network corresponds to relatively low barriers to entry and exit. In this case, the main role is played by the entry barriers that act as a filter, which provides an exception to the network of those actors who do not follow the accepted norms of networking.

They include: "club", and personalized administrative barriers. In the first place on the importance of business in open networks are "club" barriers, which require the recognition of goodwill on the part of the professional community, the second – the administrative, having thus the same for all (non-selective) character. Personalized same barriers are not essential.



Fig. 1. Structure of the social capital of the region

In the case of open networks, the overall loss is relatively low output prices, and they are mostly complementary barriers to entry. In first place is the status of loss associated with the loss of public goodwill, the second – the personality associated with decreased self-esteem and self-development opportunities, and only the third – the property.

All these features are integrated to the fact that as a central actor in the open network serves the collective body representing the interests of its rank and file. In this case, the "constitutional" level, the body is an agent of the actors that form a network as "a broad group of interests," and to "postconstitutional" grassroots actors act as agents that implement commonly agreed goals.

As for the second type of social capital, studies show that in the regions dominated by now closed social networks, including business and government representatives. The generality of the objective functions of these networks of actors determined focus on seizing control of territory and resources regional markets, the joint defense strategy against competition from other mixed networks and groups of entrepreneurs. The main signs of closed social network of government and business are: hierarchy, heterogeneity, high barriers to entry and high exit price [3, p.39].

Sign de facto hierarchy of ranks last among the others because it mainly characterizes the shape of the network. To assess the internal structure and hierarchy of varieties to select three additional features: the number of levels of hierarchy to the main actor, the ability to block decisions of the lower in the hierarchy of party networking, control by the central actor for all members of a closed "social club." The first sign describes the general structure of a social network, the second - the principle of the relationship between the levels, and the third defines a mechanism to ensure the integrity of the hierarchy.

Promiscuity – a fundamental feature of such networks. The seizure of control over the resources of the region is impossible without the use of administrative resources, which requires the inclusion of the authorities to the network, not just CEOs, but the officials of different levels. Essentially, this means that the formal private property rights at the level of the real property becomes a "mixed" nature. Therefore essential parts of this type of network are: the part of the authorities in making business decisions and in the appropriation of the results of business decisions implemented through practice areas through additional financing business. The third feature is supplementing the two major – part of the authorities in the implementation of business solutions.

Entrance barriers play a role of a "filter" on access "club goods", which accumulates within the networks. In contrast to the imminent loss of output, at this level, a person remains a certain freedom of choice, but only as the freedom to choose between one or another closed social network. At the same time, especially at the regional level, the number of alternatives is extremely limited.

Entrance barriers can be personalized, "club", and administrative. With personificated relationship is primarily concerned with the inclusion of rights in terms of "their people." In second place are the "club" barriers. As part of a closed mesh network as a "total team" stand out "professional clubs." Therefore, to enter the regional market, such as a new insurance company, its representatives should be recognized by the existing community of local insurers. Formal administrative barriers are mostly "instrumental" in nature. Their size varies depending on the inclusion in the network connection and place in the hierarchy.

Exit barriers are central to the system of "selective incentives" to ensure the production and accumulation of such "club goods", as the social capital of the second type. Exit costs include status, property and personal losses. First in importance is the loss of the status of the network. As an exception to the network makes it virtually impossible to carry on business for this activity is a property losses. Since in this environment is wealth - the basis of self-respect, it leads to a loss of personal losses associated with decreased self-esteem and opportunities for self-fulfillment as a person [3, p.45].

A considerable part of the forms of social capital has the quality of public goods. On the property is his notes J. Coleman: "... types of social structures that contribute to the development and improvement of social norms and sanctions do not bring benefits, especially a person or group of people whose efforts were needed when they are created, but to benefit all those who are part of such a structure ". By its nature, the first type of social capital serves as a public good. As a public good it produces large positive externalities [3, p.50].

However, in our opinion, it does not meet the criteria of a pure public good. According to its characteristics can be attributed to the group of excluded public goods whose consumption indiscriminately, but the cost of the removal of additional consumers not-prohibitly high.

An exception is provided intercontrol actors in multilateral networking. At the same time, as the number of consumers of the good out of it increases. Networking is so in this case the "open" character: the participants could potentially be all business entities operating in the territory of that country or region.

Social capital is the second type is in the form of local group norms and rules, as confidence personified in the form of personal relationships entity. According to its characteristics it is closest to the concept of "binding" and is a reserve of social contacts, by allowing the local interaction to ensure the sustainability of economic agents to enhance their competitiveness through exclusive access to certain kinds of economic resources.

Communication and relationships available to economic agents, allow them to "fit" into the existing institutional environment by obtaining privileges given by the membership of a particular social group. It facilitates the implementation of private interests in the mode of preference, the private exchange of services and requires the entity a special effort to create a network of individual bonds or entering into any relatively closed group. In its economic nature, it acts as a club good, which is known to be characterized by the fact that the property not excludability in consumption is only available for members of the club that is a group of people associated for joint production and consumption. And in this case it is a "private club" – a coalition whose members can be excluded from the benefit of the consumers who are not involved in its delivery.

Both types of social capital coexist, complementing each other and having the property of interchangeability [4, p.83–86; 5; 6, p.109–129.]. In countries that have a long way to market development, social capital, the second type is complementary. It increases the flexibility of the economic system, adjusts the results of its operation due to the development of informal networks of interpersonal relations.

In less developed countries, it replaces the social capital of the first type, still does not have the level of development. In this case, the network of informal interpersonal relationships makes it possible, in principle, the normal functioning of the economy as a shortage of formal and informal norms of impersonal market interaction.

Dominance in the structure of the social capital of the region of the second type of social capital has important implications for the economy [7].

First, the mixed network of entrepreneurs and government representatives replaces some corrupt deals that generate a high price "exit" from the network for entrepreneurs. The fact is that in place of a single corrupt transaction, which allows solving the problems of entrepreneurs, took systematic social exchange in the network.

Moreover, if a single bribe could give any entrepreneur, and resources to bribe determines the result of the activities, the systematic social exchange network provides opportunities and blocks the path regardless of the amount of economic resources from the business. It is based on the current structure of social capital the individual entrepreneur.
Second, at a time when such a network is formed, stop working mechanisms of bargaining with the government, based on the exchange of resources for business development of the area and counter granting privileges, access to resources and information. Opportunities for such exchanges are mostly members of the mixed social network with a central actor in the mayor, governor, etc.

## 4. Conclusions

Thus, in contrast to government, business to a wide group of interests in Ukraine's regions do not exist. It is a conglomeration of individual entrepreneurs and narrows on the composition of teams lining up personalized communication with the authorities. This suggests that in the modern Ukrainian economy business has not invests enough to create their own networks of social interactions.

Investing in specific contacts with the authorities, he is doomed to lose in the competition with strong social networks of state structures and networks of government and business. Changing the structure of the social capital of entrepreneurs in the region associated with the development of such important components of the social capital of the first type as non-interference power in business decision-making, in the assignment of their results, as well as the growing role of reputation in the professional community.

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#### Summary

The article considers the institutions of regional development. Comparative characteristics of the types of structures of social capital in the region are identified. It is concluded that at the regional level in the modern national economy dominated the second type of social capital, which is represented by a mixed social network of business and government. The detailing estimation of the main components of the basic social capital priorities of the first and second type is completed.

Key words: region; development strategy; social capital;

**UD classification:** 332.341.1

## STATUS AND BARRIERS DEVELOPMENT OF THE INNOVATIVENESS OF POLISH ECONOMY

# **B.** Grzybowska<sup>\*</sup>

## **1. Introduction**

In contemporary economic conditions implementation of innovation is a necessity. First of all, it results from conditions of global competition, the dynamic changes shaped by technological advances and the lack of resources. Willingness and motivation to implement innovative solutions, supported by a real commitment to this activity, influences the level of innovation of companies, regions and countries. But it is not the same. Differences are a result of economic policy and innovation policy and the feedbacks that occur between the elements of the national innovation system [1, p.56].

The EU is taking a many initiatives aimed at reducing this differences. They are aimed at reducing disparities in the level of innovation among the member countries, as well as between the EU and the United States and Japan. The reason for this type of activity is also to meet the challenges of increasing competition among others from the BRIC countries (Brazil, Russia, India and China). Deepening technological and economic distance in Europe compared to those countries required (and still requires) to take steps that would reduce this negative phenomenon. In 2000, the European Council approved the Lisbon Strategy, which include specifies types of projects which boost the development of the European economy. It was assumed that by 2010 Europe will become one of the most competitive, knowledge-based economies in the world. This was to be achieved, among others through innovation and research and development. Unfortunately, the scale and rate of the work set out in the Strategy were too low. With published in 2004 W. Kok's report, summarizing the results of a 4-year period of implementation of the Strategy showed that the distance of the European economy compared to the U.S. increased. The main reasons for this was too broad program of work, poor coordination, conflicting objectives and lack of political determination on the part of Member States [2, p.6]. Finally, after 10 years of implementation of the Strategy has failed to achieve its objectives. There were noticed some positive signs showing joint efforts to solve longterm problems in the EU.

In 2010, the Council of Europe adopted new targets for the development of the European Union and approved by the Europe 2020 strategy. They favor the exit from the crisis of the European economy and boost its development. Priority actions to serve that purpose, point to smart, sustainable and inclusive growth [3, p.5]. The need for smart growth due to lower economic growth in Europe (compared with major competitors). It was result of lower level of investment in research, development and innovation, and low use of ICT. Sustainable development should be aimed at promoting a more resource efficient, environmentally friendly and more competitive economy. The third priority is to contribute to building the economy with high employment economy delivering economic, social and territorial cohesion. The assessment of the results of the assumptions of this strategy is still too early. However, you can assume that, although to some extent a continuation of pre-determined direction, it is the experience of the crisis, combined with the failure of the Lisbon Strategy will be a sufficient motivator for more decisive and coordinated actions to strengthen the EU's position on the global economy. This is reflected in a statement by José Manuel Barroso, President of the European Commission, located in the introduction to the Strategy: "This is Europe's moment of truth. It is the time to be bold and ambitious" [3, p.2].

The article characterizes innovation of the Polish economy in the context of its position in the international rankings. Summary Innovation Index (SII) and the Global Innovation Index (GII) were

<sup>&</sup>lt;sup>\*</sup> © B. Grzybowska; Ph.D; Warmia-Mazury University in Olsztyn; Poland

the main indicators used for comparison. There are identified barriers that disturb or prevent the implementation of innovative projects. It also drew attention to the status and conditions of business cooperation with other business entities. This is a factor that is now recognized as one of the basic conditions for successful and effective innovation.

#### 2. Polish position in the ranking of European innovativeness

Present economic conditions for enterprises have dynamic character. Increasing competition, globalization and integration processes, make changes to both the determinants of effective implementation of the activities, as well as market needs. For this reason, the issue of whether to adapt to these changes no longer considered, but the main – how to do it, or even better – how to overtake. Businesses recognize the importance of innovation as one of the most important tools to compete and achieve competitive advantage. High compatibility or even unanimity of many authorities in the benefits associated with the implementation of the innovation is not random. Fact is supported by observations of practice and the results of empirical research. This situation results in the increasing importance and scope of surveys on innovation. Increasingly popular and highly rated (though not without flaws) are composite indicators. They are designed for multi-dimensional phenomena described by specific indicators, which are then compiled into a single index.

Researches on innovation (according to the principles of the Oslo Manual) were carried out in the early 90s in Europe. Their goal is to provide comprehensive assessment of the level of innovation of all EU Member States (and a few others) and monitoring the changes occuring in these countries in the coming years. This also applies to monitoring the effectiveness of national innovation policies and their strengths and weaknesses. The results are presented in the form of EIS (Innovation Union Scoreboard – IUS, replaced the European Innovation Scoreboard), which was established to observe the progress of the implementation of the Europe 2020 objectives, in particular one of its seven flagship initiatives – the Innovation Union. IUS Rank is one of the most frequently indicated analyzes in European and Polish strategic documents.

In a recent report, Innovation Union Scoreboard (from 2012) Poland was among the moderate innovators (Figure 1). However, took the last place there. The result Summary Innovation Index (0.296) was much lower than the average EU-27 (0.539). European innovation leaders (among EU members) are: Sweden (0.755), Denmark (0.724), Germany (0.700) and Finland (0.691). The least innovative countries: Latvia (0.230), Bulgaria (0.239), Lithuania (0.255) and Romania (0.263). In comparison to the results of the previous year, the situation of Poland has improved (increase of SII indicator). On the other hand the overall standings dropped its ranking position. In 2010, less innovative than the Polish economy was Slovakia, but now – no longer. Bukowski et al. [4, p.15] by analyzing the structure of the sub-indices estimated that despite the fact that included Poland in the group of moderate innovators, however, it has the characteristics of the least innovative countries in the EU. They pointed to the potential for innovation is unbalanced. It is based mainly on human resources, weak propensity to innovate and the low intensity of research and development cooperation. The strength of Poland is intellectual capital, but it is not fully used. Long-term growth of the economy depends on the use of such a potential. In this situation, no change could mean further weaken the position of Polish innovation (the already very weak).

Global innovation is analyzed by INSEAD (Institut Européen d'Administration des Affaires). Global Innovation Index (GII) is used to evaluate the innovation of countries. It is created on the basis of two sub-indices: the potential (Innovation Input) and outputs (Innovation Output) in the area of innovation in terms of: institutions, human capital and research, infrastructure, market maturity, maturity business, results of scientific activity and creativity. An important factor is also the environment. Rating INSEAD in 2012, places Poland on 44th position among 141 countries included in the ranking (in an earlier round was ranked at 43<sup>rd</sup> possition). The top ten are (in order): Switzerland, Sweden, Singapore, Finland, the United Kingdom, the Netherlands, Denmark, Hong Kong, Ireland, United States. In the ranking of the Ukraine took the 63 place among the countries of the European Union.



Fig. 1. EU member States' Innovation Performance

Source: [5, p.7].

Poland was classified at 25th position, better than Romania and Greece [6].

The report shows that, in principle, only political stability can be considered as a positive factor affecting the state of Polish economy (15 position). Definitely worse results reported for the ease of starting and running a new business (92 place).

ICT is also considered a "driving force" innovative economy do not provide positive about Polish modernity (50 position).

The negative image of Polish innovativeness (indicate that, in addition to SII and GII, the results of other studies and compilations, including Knowledge Economy Index and the Global Creativity Index) is reduced by the data published in the Economist Intelligence Unit Report, which presents the most innovative countries in the world [7, p.17].

Result cannot be considered as a success – Poland was ranked the 44th position out of 82 included in the analysis (years 2004-2008). However, noteworthy is projected to improve the ranking position up to 8 places (comparison period 2009-2013 to 2002-2006).

Higher than the Polish growth was observed in only four countries: China (13), Serbia (13), Costa Rica (12) and Lithuania (+11). A similar view is represented by the President of the Polish Agency

for Enterprise Development – by 2-3 years Poland will move up in the rankings of innovation. The activities carried out by the company with the financial support of the EU harvested in 2008-2009 will bring results.

#### 3. Innovativeness of Poland – internal weaknesses and limitations

The ability to innovate determines the development of businesses and creates opportunities to increase market share, which is one of the most important sources of competitive advantage.

Polish economic performance in recent years (in comparison to other EU countries) made it possible to include it among the leading European growth.

However, these results are not high enough or stable to define it as a competitive economy. Also, the low level of innovation does not strengthen its competitive position in world markets. Such a situation could mean that Polish companies are not yet fully prepared to ensure that through innovation to meet foreign competition [8, p.10]. This is confirmed by the results of the cyclic tests of international competitiveness of companies and countries (Table 1).

As in the other innovation rankings in this case, Poland is on distant places. However, the improvement in rankings is quite optimistic. During the economic downturn caused by the global crisis, many countries have reached a much weaker results. It didn't remain without effect on the ranking position of Poland.

However, this situation can be only half success – better position was result of "weakness" of others (though not only reason).

Ranking name	Current rank	Previous rank
Doing Business 2011	70 ↑	73
The Global Competitiveness Report 2010-2011	39 ↑	46
Index of Economic Freedom 2011	68 ↑	71
World Competitiveness Yearbook 2011	34↓	32

Tab. 1. Polish position in international rankings of competitiveness of economies

Source: [9, p.8]

Innovative activity of enterprises is determined by a wide variety of events and factors. Some of them are barriers that prevent of taking actions to the implementation of innovative projects, such as high innovation costs too high interest rates on loans, the lack of its own resources and the limited access to external financing [10, p.80]. In addition, companies in Poland are still primarily focused on lowering operating costs.

Meanwhile, investments in new and innovative solutions generally require significant financial resources, but the effects will appear after some time.

If you combine the fact that the main source of financing of innovation are those of enterprises. In effect, this translates to a low general level of investment in this type of projects.

Structure of investment in innovation should be considered as Weakness of the domestic enterprises.

The majority of them (about <sup>3</sup>/<sub>4</sub>) is spent on restoration and modernization of fixed assets. Far less of invests in research and development projects and the acquisition of knowledge (less than 10%). This means that business investment in innovation have restoration character and rely on taking over existing solutions.

Such a structure is not conducive to the rapid reduction of the innovation gap that separates Poland and developed countries. It contributes to reducing the technological gap.

Among the factors limiting the tendency of companies to undertake innovative activities attention is paid at unrecognized market needs and the consequent lack of information on technology [11, p.53; 12, p.29].

This may indicate an insufficient level of skills in the implementation of projects to adapt the company to changing environmental conditions. Cooperation with other companies is an underestimated source of information and knowledge. In current models of innovation co-operation is a key importance. This is due to the fact that the resources and capabilities of individuals acting alone is generally insufficient to meet the demands and expectations of the market. These capabilities could be increased by cooperation with other entities. This would increase the chances of reaching effects often impossible to obtain by individual companies (especially smaller). Companies in Poland are increasingly deciding to undertake joint work with other actors in the field of innovation. Greater tendency in this field is observed in manufacturing than service companies [13, p.85]. But this is not a common phenomenon – in 2008-2010 cooperation declared about 1/3 of companies active in innovation. Partner for cooperation in the field of innovation were suppliers of equipment, materials, components and software.

Marginal importance to cooperation has the R & D sector. The supply of new solutions to meet the needs of enterprises is low. Businesses rarely look for solutions to their technological or organizational problems. Also the intermediary in the transfer of technology is relatively underdeveloped. The negative influence has uneven distribution of innovative business support units on territories of the country (mainly in urban concentration and large and medium cities) [14, p.238].

Operating in close geographical distance (in the region) promotes networking and the development of cooperation between companies and other entities. The regions are now identified with the dynamic systems that foster the creation and diffusion processes of innovation. In turn, the ability to generate (or absorption) new solutions determines their development.

Geographical proximity and confidence partners drawn from the same region creates opportunities to establish contacts and relationships that can turn into a collaborative relationship. Regional networks, in addition to the implementation of joint projects are also channels of knowledge and information transfer. This also applies to Euro-regions, provided, however, that they are "bottom-up" rather than "top-down" initiatives.

An example of Polish-Ukrainian cooperation, which, according to Mykhasiuk and Osidach is unstable and there is no prospect [15, p.81–82]. The growing importance of regions in innovative development is indicated in EU policies (including the Europe 2020 Strategy).

#### 4. Conclusion

Poland in international rankings of innovativeness is on distant positions. It may be noticed some signs of improvement this condition (slight rise in most classifications), but the pace of change is very slow. Stronger position and a faster rate of catching-up innovative economies have more countries with which Poland joined together in the structure of the EU (the level of innovation was very close). They are more dynamic and more effective in the implementation of innovative projects (eg Estonia and the Czech Republic). But there are many barriers that inhibit the activity of innovative companies. The most important of them is financial. A weakness of the companies are also inadequate skill acquisition of knowledge and information (not always due to lack of funds). Cooperation of business with other entities in the implementation of common innovation projects needs more intensive activities.

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#### Summary

The article characterizes innovation of the Polish economy in the context of its position in the international rankings. Summary Innovation Index (SII) and the Global Innovation Index (GII) were the main indicators used for comparison. There are identified barriers that disturb or prevent the implementation of innovative projects. It also drew attention to the status and conditions of business cooperation with other business entities.

Key words: innovativeness; polish economy; barriers to development.

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## ISO STANDARDS AND QUALITY COSTS AS INSTRUMENTS OF COMPANIES'COMPETITIVE ADVANTAGE

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### **1. Introduction**

The theory and practice of operation of modern enterprises shows that the quality is the most efficient instrument to achieve a competitive advantage over the market rivals [1, p.151]. A new approach to management involves verification of a company's policies and objectives, changes in the structure of the whole organization and that company's management principles. The implementation of the quality policy and instruments for its deployment makes it easy to create and link the activities undertaken at a strategic and operational level with their economic viability. Establishing these relationships is only possible when an enterprise information system provides data on the costs and effects of quality-oriented activities undertaken and management tools used in enterprise enable the planning, monitoring, analysis and evaluation of these parameters.

ISO standards are one of the key factors in building the competitiveness of companies and necessary to operate in the international market [2, p.21]. The companies that have introduced a quality management system should demonstrate the effectiveness of all actions taken. As the efforts to achieve the desired level of quality (effectiveness intended) are constantly improved, the efficiency can be considered as a process, generally treating it as the ability to implement the business strategies and achieve the assumed objectives.

The efficiency improvement oriented companies need the changes in their management structure because the properly selected management structure considerably affects the overall efficiency of the company. The quality assurance system as an effective tool to organize all areas of the company activities is a proven instrument for productivity and competitiveness growth. It guarantees the production monitored in specified standards and confirmation of the company preparation to the production according to specified levels of reliability. The production monitoring and standardization systems give the opportunity for large and medium-size enterprises to participate and compete in the market gambling of international scale. ISO standards, their implementation and certification have become a tool for monitoring the technical and consumer quality. ISO standards under the basic and industry standards have become one of the key conditions for placing products on the international markets. Enterprises wishing to develop business are forced to implement and standardize the production by certain guidelines, namely ISO 9001 – Guidelines for the construction of a quality assurance system, focusing directly on the quality of processes, ISO 13485 - Quality Management System for Medical Devices, developed in accordance with the requirements of the ISO 9001, ISO 14001 - a standard determining the method of the implementation of effective environmental management systems, ISO 22000 - standard for the food industry, "Food Safety Management Systems-Requirements for all participants in the food chain," ISO 27001 - standard for standardization of information security management systems, ISO/TS 16949 - is the ISO Technical Specification, which unifies the existing American (QS-9000), German (VDA6.1.), French (EAQF) and Italian (AVSQ) standards of quality systems in the automotive industry within the global automotive industry, in order to eliminate the need for multiple certification to meet customer requirements.

The quality system is an opportunity to reduce costs of production and cost of non-quality, tool to improve the liquidity, efficiency and financial autonomy, possibility of creating the market offer quality and the ability of continuous improvement form an important advantage in the competitive

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battle. In economic terms it is one of the most important conditions for success in the market and therefore it must be a strategic goal, an issue of particular importance for the management staff of the companies.

The effectiveness of the quality management systems should also be measured from the financial stand point and from the point of view of economic impact [3, p.21; 4, p.22]. To evaluate the effectiveness of the quality assurance system, among other things, the quality cost analysis is used, which can be read from ISO 9004-1:1994 [5, p.47]. Cost of quality or cost accounting is essential for a quality management system, of which it is the most important element. On the basis of the cost of quality and functioning of the whole quality management system, you can determine whether the company achieves the intended benefits in reducing the cost of quality in relation to expenditures incurred on the implementation and functioning of the system, as well as the increase in efficiency of the company activity in the market.

There are three main types of approaches to collecting and analyzing financial data on quality.

The first is the cost of quality approach, which distinguishes between four types of costs. The cost elements of internal operations are analyzed according to the model PAF (Prevention, Appraisal, Failure). The components of these costs are the costs of prevention, the cost of evaluation – related to investigations, inspections and checks whether the quality requirements are met, internal inconsistencies - costs resulting from non-compliance with the quality requirements of the product, which have been detected prior to delivery of the product to the customer (related for example, to re-execution, alteration, re-test), external non-compliance – costs resulting from the failure to satisfy the quality requirements of the product, which were detected upon delivery to the customer (for example, product service and its repair, costs of guarantees and refunds, direct costs and overheads, withdrawal costs, the cost of liability).

The second is the cost of production (process) approach; it refers to the analysis of the costs of compliance and non-compliance of the process, which are defined as follows: compliance costs – are the costs of meeting all fixed and assumed customer needs, at normal process course, whereas the costs of non-compliance – are the costs caused by improper process course.

Another approach is by the quality losses. This approach focuses on the internal and external losses due to the poor quality in the following system: measurable loss (loss on shortcoming), and intangible losses: a) external, such as customer dissatisfaction, b) internal, lower efficiency due to corrective actions, poor ergonomics, unused opportunities.

## 2. Scope of studies

The main purpose of the deliberations in this article is to indicate selected instruments of quality policy such as ISO standards and to identify quality costs which are necessary to reach competitive advantage in the overseas markets.

Thesis:

- the increase in attractiveness of overseas markets results into dynamic changes in the range of competitiveness improvement of the companies in developing countries as Poland and Ukraine (for example, the increase in number of companies where ISO standards are implemented).
- the assessment of economic efficiency of quality management systems in a company is possible when implementing and monitoring of quality costs take place.

The secondary data concerning the quantity of standards such as ISO 9001, ISO 14001, ISO 22000, ISO 27001, ISO 13485, ISO TS 16949 implemented in the years 1993-2010 in Poland and Ukraine were used in the research. The data were given by the company SGS Polska. The data have been gathered by International Organization for Standardization. In the second part of the article the data concerning the type of quality costs and their dynamics of changes in the years

2005-2010 were used. The data were given by a Polish production company.

The main problems raised in the article are:

- indication of the dynamics of selected ISO standards implementing in Polish and Ukranian companies;
- the description of quality costs and the assessment of quality costs in an overseas production company – case study.

## 3. Results

The latest edition of The ISO Survey of Certifications, for 2010, underlines the global market relevance of ISO's management system standards for quality, environment, medical devices, food safety and information security revealing an increase in certificates of 6.23 %, a worldwide total of 1 457 912 certificates and users of one or more of the standards in 178 countries. The biggest increases in certification are to the sector-specific ISO 22000:2005 food safety management system standard which is up by 34 % and to the issue-specific ISO/IEC 27001:2005 information security management system standard which has risen by 21 %. ISO Secretary-General Rob Steele comments, "Indicating nearly a million and a half users at the end of 2010, these figures illustrate the continuing attraction of the ISO management system model pioneered by ISO 9001 for quality management and since extended to meet other challenges faced by public and private sector organizations." ISO 9001:2008, which gives the requirements for quality management systems, remains firmly established as the globally implemented standard for providing assurance about the ability to satisfy quality requirements and to enhance customer satisfaction in supplier-customer relationships. Up to the end of December 2010, at least 1 109 905 ISO 9001 certificates had been issued in 178 countries and economies. The 2010 total represents an increase of 45 120 (+4 %) over 2009, when the total topped one million for the first time with 1 064 785 certificates. China retains its number one position at the head of countries for the total number of ISO 9001 certificates, with Italy in second place and the Russian Federation taking the 3<sup>rd</sup> position. Highest growth in the number of certificates was also in China, followed by the Russian Federation and then Italy.

ISO 14001:2004, which gives the requirements for environmental management systems, retains its global relevance for organizations wishing to operate in an environmentally sustainable manner. Up to the end of December 2010, at least 250 972 ISO 14001:2004 certificates had been issued in 155 countries and economies, a growth of 27 823 (+12 %). China, Japan and Spain are the top three countries for the total number of certificates, while China, the United Kingdom and Spain are the top three for annual growth.

ISO/TS 16949:2009 gives the requirements for the application of ISO 9001:2008 by suppliers in the automotive sector. There is 43 946 ISO/TS 16949:2009, which certificates a growth of 7 % up to the end of December 2010. It had been issued in 84 countries and economies. The top three countries with the highest totals of certificates were China, the Republic of Korea and the USA, while the top three for growth were China, India and the Republic of Korea.

ISO 13485:2003 gives quality management requirements for the medical device sector for regulatory purposes. Up to the end of December 2010, at least 18 834 ISO 13485:2003 certificates had been issued in 93 countries and economies. The 2010 total represents an increase of 2 410 (+15 %) over 2009. The top three countries for the total of certificates were the USA, Germany and Italy and the top three for growth since the 2009 survey were Italy, the USA and the United Kingdom.

ISO/IEC 27001:2005 gives the requirements for information security management systems. At the end of 2010, at least 15 625 ISO/IEC 27001:2005 certificates had been issued in 117 countries and economies. The 2010 total represents an increase of 2 691 (+21 %) over 2009. The three countries with the highest total of certificates are Japan, India and the United Kingdom, while the top three for growth in 2010 were Japan, China and the Czech Republic.

ISO 22000:2005 gives the requirements for food safety management systems. Up to the end of December 2010, at least 18 630 ISO 22000:2005 certificates had been issued in 138 countries and economies. This total represents an increase of 4 749 (+34 %) over 2009 when the total was 13 881 in 129 countries and economies. The top three countries for number of certificates were China, Greece and Turkey and the top three for growth in 2010 were China, Japan and Greece.

In Poland, the most of companies implement ISO 9001 standard; In 2010, as compared to 2005, the number of certified companies increased by 125% and in 2010 this is a number of 12,195 companies (Table 1).

Tab. 1. Number of companies certified in the scope of the production conformity by ISO
standards selected in Poland

Types of ISO	2005	2006	2007	2008	2009	2010				
standards		Number of companies receiving certificates								
ISO 9001										
	9718	8115	9184	10965	12707	12195				
ISO 13485										
	25	70	76	76	144	158				
ISO 14001										
	948	837	1089	1544	1500	1793				
ISO 22000	-	-	137	268	549	629				
ISO 27001	-	11	45	75	187	229				
ISO/TS 16949	191	297	392	436	445	468				

\*The figures include certificates accredited by national accredited bodies not members of the IAF.

Source: International Organization for Standardization. The ISO Survey of Certifications

In 2009 and 2010 in Poland, the most intensively growing interest in implementation of ISO standards among entrepreneurs concerned ISO 14001 and ISO 22000.

In the analysis of the dynamics of the phenomena occurring in the implementation of quality management systems in Poland an upward trend can be seen that indicates the fact that large and medium-size enterprises are involved in building competitiveness and willing to participate in the competition for segments of international customers (Table 2).

Tab. 2. Chain index of the number of companies in the scope of the production conformity by
ISO standards selected in Poland

Types of ISO	2005	2006	2007	2008	2009	2010				
standards	Chain index of the number of companies receiving certificates									
ISO 9001	-									
		84	113	119	116	96				
ISO 13485	-									
		280	109	100	189	110				
ISO 14001	-	88	130	142	97	120				
ISO 22000	-	-	-	196	205	115				
ISO 27001	-	-	409	167	249	122				
ISO/TS 16949	-	155	132	111	102	105				

\*The figures include certificates accredited by national accredited bodies not members of the IAF.

Source: Own study based on data from International Organization for Standardization. The ISO Survey of Certifications.

Taking into account the aspect of creating a competitive advantage among the enterprises operating in Ukraine, the structure of the standards implemented popularity is similar to the Polish market. Analyzing the market of companies operating in Ukraine, the most of them have implemented the ISO 9001 standard and the dynamics in 2005–2010 is increasing (Table 3).

In 2010, the number of companies with the implemented ISO 22000 standards in Ukraine increased by ca.140% of (Table 4.)

Types of ISO	2005	2006	2007	2008	2009	2010				
standards	Number of companies receiving certificates									
ISO 9001										
	1808	2150	2453	3252	2592	1808				
ISO 13485										
	-	2	6	5	6	2				
ISO 14001										
	55	37	90	123	126	206				
ISO 22000	-	-	32	64	51	121				
ISO 27001	-	1	1	3	5	1				
ISO/TS										
16949	4	8	12	16	19	26				

# Tab. 3. Number of companies certified in the scope of the production conformity by ISO standards selected in Ukraine

\*The figures include certificates accredited by national accredited bodies not members of the IAF. Source: International Organization for Standardization. The ISO Survey of Certifications

#### Tab. 4. Chain index of the number of companies in the scope of the production conformity by ISO standards selected in Ukraine

Types of ISO	2005	2006	2007	2008	2009	2010				
standards	Chain index of the number of companies receiving certificates									
ISO 9001	-									
		131	119	114	133	80				
ISO 13485	-	0	• • •							
		0	300	83	120	33				
ISO 14001	-	67	243	137	102	163				
ISO 22000	-	-	-	200	80	237				
ISO 27001	-	-	100	300	167	20				
ISO/TS	-									
16949		200	150	133	119	137				

\*The figures include certificates accredited by national accredited bodies not members of the IAF.

Source: Own study based on data from International Organization for Standardization. The ISO Survey of Certifications

The main conclusion of analyze is the fact that companies in Poland and Ukraine have taken the effort to build their own individual quality management systems, which are based mainly on industry quality certificates or ISO standards. This is due to the dynamic growth of international competitiveness and the needs and expectations of customers in the domestic market.

Evaluation of the effectiveness of the quality-oriented actions taken by the company, should be based on the analysis of the level of quality costs incurred, including an analysis of their structure, which are useful in the creation of effective management systems. Therefore, the next part of the study is devoted to the structure of quality costs incurred by the company operating in the general construction, housing and building engineering industry.

The solutions presented were obtained from the company with a long tradition in providing construction services in Poland and experienced in the international market, which has a quality management system since 2000. In the described company the classification of quality costs has been made, which are described as a case study and are presented in Tables 5, 6 and 7.

Report on the quality costs incurred is drawn up by the accounting department on the basis of the accounting records and data submitted by individual organizational units. It is developed on a quarterly basis, by the end of the first month of the next quarter, for the previous quarter.

Name	Interpretation
Qualification (certificate of approval, quality marks)	• cost of obtaining a certificate of quality, quality marks, safety marks and required national and international markings
Control of purchases - supplies	<ul> <li>costs of inspection control of quality and quantity of purchased products for the compliance with the applicable documents;</li> <li>costs of approving tests at the suppliers;</li> <li>cost of laboratory tests to assess the quality of purchased goods including tools and equipment;</li> <li>cost of specialized tests carried out by the specialized units;</li> </ul>
Inter-op control	<ul> <li>costs of inter-operational checks and tests of products and processes;</li> <li>costs of checks and tests of semi-finished products, own and purchased;</li> <li>costs of internal control for the release of the product;</li> <li>cost of self-control and surveillance;</li> </ul>
Quality control of finished products	<ul> <li>control costs before delivery of the product to the customer or store;</li> <li>control costs before handover of the customer's product;</li> </ul>
Documentation of control and qualitative test	<ul> <li>administration costs; preparation and filling the product inspection and test documentation, processes, with particular emphasis on the requirements for liability of the contractor;</li> <li>costs of preparing the documentation provided with the product to the customer (eg, certificate of quality);</li> </ul>
Control, measurement and testing equipment	<ul> <li>equipment acquisition costs;</li> <li>equipment repair costs;</li> <li>depreciation of equipment;</li> <li>costs of equipment maintenance in full working order (inspections, maintenance, consumables))</li> </ul>

## Tab. 5. Classification of the cost of the quality assessment in the company

Source: Own study based on data from the examined company X

#### Tab. 6. Classification of the costs of internal errors in the company

Name	Interpretation
Corrective actions, repairs, alterations	costs of labor and, material;
Machinery and equipment downtime	<ul> <li>costs resulting from product defects and interrupted processes;</li> </ul>
Correction of construction and technology documentation due to quality	<ul> <li>costs incurred after the product approval for manufacturing;</li> </ul>
defects	
Sorting - selection	<ul> <li>100% control costs, above and beyond the planned quality control to select defective products;</li> </ul>
Re-examinations and tests	<ul> <li>cost of carried out re-checks;</li> </ul>
Investigations of the causes and effects	<ul> <li>cost of detecting and determining the causes of non-compliance;</li> </ul>
Corrective actions	<ul> <li>costs of measures taken to eliminate recurring non-compliance;</li> </ul>
Reducing product class	<ul> <li>costs arising from differences between the normal sale price and the reduced price due to non-compliance with the required quality;</li> </ul>
Replacement of defective	*cost of replacing the defective products from the purchase
products from the supplier	

Source: Own study based on data from the examined company X

Name	Interpretation
Quality Management	<ul> <li>costs of supervision and administrative work;</li> <li>development and documentation of quality control systems and product control;</li> <li>costs of collecting, analyzing and reporting data on quality;</li> </ul>
Planning and implementation of the studies in the field of quality	<ul> <li>costs of tests in the field of quality at each stage of the manufacturing process</li> <li>quality system software costs;cost of improving the quality of manufactured products</li> <li>costs of testing the reliability and durability of the product;</li> <li>cost of benefit and risk analysis;</li> <li>costs of standardization;</li> <li>cost of purchasing standards, publications in the field of quality;</li> <li>costs of statistical control;</li> </ul>
Analysis and verification of new projects and improved products in terms of quality	<ul> <li>cost of the analysis/verification of design and technological documentation of a newly launched and improved products (objects);</li> <li>costs of assessment of a model, informational series of product, related to the assurance of the assumed level of quality;</li> <li>costs of tests of material and raw material usefulness;</li> <li>costs of quality expertise carried out by external units</li> </ul>
Selection, evaluation and approval of suppliers	<ul> <li>cost of assessment, verification and audits at suppliers</li> </ul>
Maintaining a constant efficiency of the equipment for inspections and tests	<ul> <li>costs of legalization, authentication and verification of equipment;</li> <li>equipment supervision and administration costs;</li> </ul>
Internal audit of the quality system	<ul> <li>costs of internal audits of products, processes and quality system;</li> </ul>
Training in quality assurance	<ul> <li>costs of organizing training in quality;</li> <li>cost of the campaign to raise personal awareness about the quality.</li> </ul>

### Tab. 7. Classification of costs of preventing "bad quality" in the examined company

Source: Own study based on data from the examined company X

# Tab. 8. The structure of selected categories of quality costs in the examined<br/>company in 2005-2010 (in %)

Cost group	Years						
	2005	2006	2007	2008	2009	2010	
Costs of prevention	12,9	11,1	12,8	13,7	12,5	13,4	
Evaluation costs	63,2	63,1	62,2	62,3	63,0	64,8	
Costs of rejects	23,9	25,8	25,1	24,1	24,5	21,8	
Total quality costs	100	100	100	100	100	100	

Source: Own study based on data from the examined company X

Cost group	Years						
	2005	2006	2007	2008	2009	2010	
Costs of prevention	_	73,21	118,80	102,83	88,03	97,75	
Evaluation costs	-	84,89	101,63	96,23	97,79	93,56	
Costs of rejects	-	91,79	100,00	92,28	98,46	80,76	
Total quality costs	-	85,04	103,12	96,08	96,61	90,95	

#### Tab. 9. Chain factors of the total cost of quality in 2005-2010 (in%)

Source: Own study based on data from the examined company X

Report on the quality costs incurred performs the informational and control functions in the company.

The feature of the right quality cost structure is a low-share of poor quality coats due to external and internal errors, as well as the high proportion of the costs of prevention, which should be spent on detecting and removing the causes of improper quality of products. Misunderstood saving and reduction of total costs in the long term is a destructive action, which could bring more losses than profits.

#### 4. Summary

As a result of the analysis, the following recommendations can be formulated for the company: to maintain the downward trend of the total cost of quality, reduce the cost of rejects, prevention and assessment costs, maintain a low level of complaints, reduce the cost of staff dealing with complaints and warranty service. In the case of consolidation of the small number of complaints' phenomenon, consider the possibility of reducing the costs of maintenance of the staff dealing with complaints and warranty service, with the possible shift of funds to finance the prevention and evaluation.

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#### Summary

This article examines the selected instruments of quality policy. The importance of quality changes over time, because nowadays it is seen not as a target but as a way of functioning of the entire organization. The company, which can operate in a competitive market, must invest in quality. Evaluation of the effectiveness of the quality management system can be developed by analyzing the cost of a quality that can draw attention to the prevention of deficiency.

Key words: ISO standards; competitiveness; quality costs.

**UD classification:** 658.516

# CONSUMER ATTRIBUTES OF FOOD QUALITY AND COMPETITIVENESS OF A COMPANY'S OFFER

## M. Grzybowska-Brzezińska; K. Tadajewska; M. Brzezinski<sup>\*</sup>

## **1. Introduction**

A particular character of competitiveness in product and service markets causes that gaining competitive advantage is starting to have a special meaning for their participants. That is why it seems that competitiveness in free market is a general issue and proper wording of a competitive strategy is gaining a basic meaning for processing and development of an institution or an enterprise [1, p.15]. It is acknowledged that so called internal factors such as forming of production size, a decrease in own cost level, an increase in product or service quality, offer of new types of products and services and an increase in productivity have a dominated influence on the level of competitiveness [2, p.36–45].

During the last years an interest rate concerning the question of quality both among customers and producers has particularly increased as it generally determines a customer satisfaction level and company profits [3, p.43].

For many years quality was perceived by Polish economics as an objective category which is a subject to normalization and was expressed as certain detailed material features which describe physical and chemical properties of a product. The opinion that quality is a relation between assumed and achieved technical parameters in a production process was widely used.

However, later quality was treated as an important element of a competitive struggle. As a result, it was included for company purposes and it became an element of management [4, p.145].

During the last fifty years several systems of quality management have come into being all around the world. The main reasons of their appearance and development are gaining customer confidence and meeting his requirements and expectations. Implementation of quality management systems is aimed to improve functioning of company processes and to minimize business risk.

A great importance of the norm ISO series 9000, which should structure a quality system, is noticed in Polish companies [5, p.19–35; 6, p.12–14]. These are international standards which deal with quality system assurance.

They are concentrated directly on quality processes in which a final product is a result. The use of the series 9000 is, first of all, aimed to gain and sustain quality of a product or service on the level which permanently meet stated and implied customer needs and also to improve quality actions and management methods constantly.

Management, staff, customers and others should have confidence that quality requirements are fulfilled and also will be fulfilled.

It is necessary to draw attention to the fact that quality has particularly become an essential and distinct feature in a competitive market of food products [7, p.43].In order to assure food safety, economic entities which are present in the market are obliged to implement the standards such as GHP, GMP and HACCP [8, p.32–33]. The new international standard ISO 22000, which has already become the Polish norm PN-EN ISO 22000, standardize and integrate the requirements in the range of assurance and management of food safety. In such a way it enables companies, which are a link in food chain, to manage safety in the whole chain of a product delivery to a consumer.

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Standard ISO 22000 is a universal document for the whole food industry. Its main purpose covers delivery of a safe ready-made product to consumers or customers. It means that this norm is addressed not only to food producers, but also to the companies which cooperate with them , for example, packaging producers, companies which supply equipment for food industry, transport companies and warehouses [3, p.84].

The rising competitiveness between food companies, a wide range of similar products manufactured according to the same technology and financial means are resulted into the situation, when producers draw a particular attention to the possibility of standard affirmation on packaging, especially when an increase in consumer consciousness and interest rate in food quality are observed. However, it is necessary to mention that food quality is a complex concept. What is more, the way of its perception has a lot of elements [9, p.48]. According to food technologists, the main quality criteria will be the level of satisfying formal requirements and norms which at the same time should guarantee consumer health safety [10, p.35]. What is food quality for consumers? The answer to this question is a key element which helps to formulate an efficient company quality strategy.

There are a lot of definitions of food quality, approaches and concepts concerning the perception of quality by a consumer and determining features as well [9, p.48].

The definition that can be presented in Polish literature more often is the following: food quality is a level of healthiness, which is singled out through its diet, calorie and nutrition value and health safety. It is also the level of sensor attractiveness (appearance, appearance in intersection, consistency, texture, flavor, smell) and level of availability(unit size, sort recognition, durability, ease in cooking) in consumer and social semantic range and it is essential within limits of the possibilities defined by predictable raw materials, technology and price for these products [9, p.48; 11, p.15–17].

The suggested definition by Luning and the others (2005) sounds similar.

They single out "internal features" (directly related to product properties such as product safety and healthy aspects, sensor properties, product reliability and comfort of use as well as "external features "which do not have to influence directly on physical properties of a product such as properties of a production system, environmental aspects and marketing actions [12, p.13–17].

Taking into consideration meeting customer needs and, at the same time, attributes which are a criteria of a choice and constitute quality determinants, it is necessary to differ three levels of a product:

- Basic product main advantages taken into account by a consumer. These are all the elements of a product which constitutes its essence.
- Formal product "changeable combination of product features adapted to consumer needs and requirements, which are decisive in perception level of a product".
- Enriched product additional consumer advantages [13, p.86].

The set of features which are decisive as for food quality clearly demonstrate the way which was presented by T. Levitt.

He simultaneously referred to a marketing strategy of a product – figure 1 [14, p.104–105; 15, p.15].

It should be remembered that every group of food articles is characterized as individual specific quality determinants in consumer perception [16, p.36]. As for Polish food production branch, milk production has an essential position [17, p.39].

Milk production is an important branch of agricultural economy in Poland. What is more, it is the

fourth milk producer in the European Union after Germany, France and Great Britain. Polish farmers have more than 8% of share in European milk production. A steady increase in milk product consumption has been observed since 2006 in Poland. It is a result of a decrease in milk products price in relation to other food products (including meat and fish) and also an increase in consumer interest rate as for healthy products of high nutrition value.

According to Institute of Agricultural and Food Economics, in 2011 balance milk consumption (except milk used in butter production) was probably about 193 liters per person and it was by more than 1% higher than the previous year and by 11% higher than in 2005, when milk consumption reached historically the lowest level. Milk market characterizes as the market of big competitiveness.

There are more than 200 production units which manufacture milk products.

The market is also fragmented since besides some global brands, regional producers, which offer a wide range of products in their regions, have still a lot of shares in comparison with global brands.



#### Fig. 1. Food product from the marketing point of view

The profile of the expected consumer attributes in milk and yoghurt offer is indicated.

Thesis of the research includes:

- 1. Consumers assess milk product quality taking into account mainly their smell and flavor value and freshness. Moreover, high nutritive value and health safety are advisable;
- 2. Consumers' decisions in milk and yoghurt markets to a large extent depend on promotional activities of companies and brand positions in the market.

#### 2. The range of material research

The research was conducted with CAPI method among 170 inhabitants of villages and towns in the north-east of Poland in the spring 2011. The selection of samples was accidental. Among 170 respondents there were 69% of women and 31% of men. The vast majority of respondents were at the age 26-45 years old (45%).

The most respondents had university degree or were secondary school graduates (56%). The biggest group were white collar workers (41%). As for place of living, 35% of respondents lived in the village, the rest group were from towns.

Income of respondents and their average monthly spending on food was taken into account, as well. The vast majority of respondents claim that monthly net income per farm is in PN 1000 - 2500 range (52%). 29% of respondents had a three-person farm, 24% of them had a two-person farm and 21% of them had a four-person farm.

#### 3. The results of the research

As it was mentioned above, there is a great number of food producers in Poland nowadays, including milk producers. They are putting the marks of their quality system certificates on the packages more and more often. These marks have to assure consumers that a company guarantees the level of products. In order to check whether the marks from packages function, respondents were asked if their knowledge about such marks as HACCP, ISO 9001 and ISO 22000 make them more decisive when they purchase the product. Acquaintance with quality marks is not enough among Poles, especially when quality system certificates are concerned. Up to 63,5% of respondents cannot answer what ISO 22000 mark means. Only 11,2% of them declare their acquaintance with it and the impact of this mark on their decisions in milk product purchase. Half of respondents claimed that HACCP mark (57,1%) and ISO 9001 mark (51,2%) are not known to them. As for respondents who declare their acquaintance with these marks, the vast majority declared that they do not influence on their purchase decisions. "Q" quality mark is definitely more known to consumers. Only 28% of them declared that they did not know this quality mark. Among people who are acquainted with "Q" mark there are more consumers, who declared that they pay attention to it when they buy milk products (41,2%) – table 1.

Details	I know and it has a large impact on the decision to buy	I know but it does not affect the decision to buy	Indifferent
ISO 9001	17,1	31,8	51,2
ISO 22000	11,2	25,3	63,5
НАССР	18,8	24,1	57,1
quality mark "Q"	41,2	30,6	28,2

 

 Tab. 1. Declared acquaintance with quality marks and their impact on purchase decision among respondents [%]

Source: own study based on the research

Consumer declarations show that they are not aware of what quality management systems are and their functioning can actually affect quality of a final product. Consumers are also accustomed to paying attention to marks on packages. Currently Polish market of milk products has an increasing competition. That is why the main purpose of a company is to learn consumer needs and expectations in order to adapt them to its production profile thus strengthen its position in the market. So respondents were asked to define to which extend specific features are important to them during a food milk and yoghurt purchase. To define the strength of influence percent disintegration of assumed scale of total score starting with 1 point, which means completely unimportant feature and finishing with 5 points-a very important feature – table 2.

The results of the research demonstrate that the group of respondents drew the greatest attention to

expire date during food milk purchase (on average 4,6). Flavor and reasonable price are on the second place (on average 4,2) while guarantee of quality is on the third place (on average 4,0). As for yoghurts, freshness and expire date(on average 4,8)and also sensor features (especially flavor – on average - 4,7; smell – on average 4,1 and consistency – on average 4,0) and reasonable price (on average 4, 2) are the most essential factors for consumers and influence the most on their purchase decision. Advertising and sale promotion were not so important to consumers. It is worth paying attention to the fact that consumers, as a rule, make a decision as for healthy safety of a certain product through the prism of appropriate expire date, not through quality marks from packages. Earlier the research showed that in fact few consumers pay attention to quality marks during a milk product purchase [7, p.47]. The market of milk products in Poland has a rich offer. As a result, in order to affect consumer behavior efficiently it is necessary to identify which features are identifiers of milk product "quality" since this term can be interpreted in different ways. To learn perception of food milk quality, 16 features have been introduced including both market and technological ones. Then respondents were asked to line them according to the criteria of importance where the figure 1 means the most important feature and 16 – the least important (table 3).

FOOD MILK		YOGHURT			
Details	The average points	Standard deviation	Details	The average points	Standard deviation
Expire date	4,6	0,71	Expire date	4,8	0,52
Flavor	4,2	0,96	Flavor	4,7	0,57
Reasonable price	4,2	0,90	Reasonable price	4,2	0,98
Quality guarantee	4,0	1,06	Smell	4,1	0,85
Fat content	3,9	1,11	Consistency	4,0	0,91
Nutritional content	3,8	1,08	Quality guarantee	3,9	1,08
Producer	3,5	1,17	Nutritional content	3,9	1,05
Pro-health actions	3,5	1,15	Color	3,7	1,00
Famous brand	3,4	1,15	Pro-health actions	3,7	1,05
Habit	3,2	1,15	Famous brand	3,6	1,19
Capacity of packaging	3,2	1,15	Capacity of packaging	3,5	1,01
Calorific value	3,1	1,23	Extra content	3,5	1,13
Method of solidification	3,0	1,23	Producer	3,5	1,14
Type of packaging material	2,8	1,19	Calcium content	3,4	1,21
Type of packaging	2,8	1,16	Habit	3,3	1,19
Sale promotion	2,4	1,19	Fat content	3,3	1,29
Advertising	1,8	0,90	Sale promotion	2,6	1,29
			Advertising	2,1	1,04

 Tab. 2. The importance of factors which are taken into account while they purchase food milk and yoghurt-respondents' opinions [in points]

1 – completely unimportant feature, 5 – very important feature Source: own study based on the research

According to respondents' opinion, the three features dominated among milk quality identifiers: flavor (on average 3,3), expire date(on average 4,8) and smell (on average 5,3).On the other hand, such features as appearance of packaging (on average 12,5), reliability (on average 12,4) and way of producing (on average 12,2) were the least important.

As for yoghurt quality identifiers, the five features dominated: smell (on average 2,8), expire date

(on average 5,5), nutrition value (on average 5,9), consistency (on average 6,0) and smell (on average 6,0). Such features as appearance of packaging(on average 12,6), ways of producing(on average 12,6), ease in cooking (on average 12,4%) and reliability (on average 12,4) were the least important.

FOOD MILK			YOGHURT		
Details	The average points	Standard deviation	Details	The average points	Standard deviation
Flavor	3,3	3,19	Flavor	2,8	2,88
Expire date	4,8	2,98	Expire date	5,5	3,48
Smell	5,3	3,46	Nutritional content	5,9	3,73
Nutritional content	6,1	3,90	Consistency	6,0	3,39
Health safety	7,0	4,18	Smell	6,0	3,61
Price	7,1	3,87	Contents	7,0	3,63
Contents	7,7	3,92	Health safety	7,4	3,97
Consistency	8,1	3,67	Price	7,8	3,96
Color	8,6	3,43	Color	8,1	3,56
Brand	8,9	3,79	Brand	9,1	3,57
Producer	9,3	3,66	Producer	9,7	3,46
Low calorific value	10,7	4,32	Low calorific value	10,3	4,28
Ease in cooking	11,8	3,16	Ease in cooking	12,4	2,96
Way of producing	12,2	3,61	Reliability	12,4	3,98
Reliability	12,4	4,14	Way of producing	12,6	3,30
Appearance of packaging	12,5	3,66	Appearance of packaging	12,6	3,51

Tab. 3. The importance of the features which define food milk and yoghurt quality perceived by respondents [points]

1- the most important feature, 16- the least important feature

Source: own study based on the research

To resume the results of the research it is necessary to indicate that consumers assess quality of milk products through their sensor attractiveness and freshness identified as expire date. Due to the results of the research an attempt to place individual factors which determine the choice of food milk and yoghurt by consumers and, at the same time, being its quality identifiers, to certain levels of a product structure, was done. After that the research concerning the desirable features of food milk and yoghurt was conducted – table 4.

Tab. 4. Consumer attributes of food milk and yoghurt quality and	
their desirable features according to respondents' opinion	

	Food milk		Yoghurt		
	Consumer attribut of quality	es $\longrightarrow$ Desirable features (optimal values)	Consumer attributes of quality (optimal values)		
	empire date	➡ 14 days	empire date 🖙 14 days		
The most	flavour	$\Rightarrow$ natural	flavour 🖙 fruit (strawberry)		
essential features	price	$\Rightarrow$ PLN 2,16 per 1 liter	consistency		
	quality guarantee	➡ quality mark "Q"	price  PLN 1,26 per 150 g		

	fat content $\implies$ 3,2%	nutritional content 🖙 standard nutrition content
	nutrition content Standard nutrition content	pro-health actions bacteria
Essential features	method of solidification $\Rightarrow$ UHT	extra content
forming product perception	pro-health	producer ➡ "Danone"
	producer 🛋 "Mlekpol"	quality guarantee
	brand	type of packaging $rightarrow$ a cup with a lid
	capacity of packaging $\implies$ 1 liter	capacity of packaging ⇒ 150-300 g
Additional features	type of packaging $rightarrow$ carton	calcium content
	type of packaging	fat content ⇔ standard fat content
	promotion $rightarrow$ lower price	promotion  ☐ lower price
	information from  → competitions advertising	information from  → competitions advertising

Source: own study based on the research

#### 4. Conclusion

It is necessary to have a new approach to the issue of quality in order to create company market success. Quality should not be only treated as accordance to appropriate parameters, but even as a main concept related to prediction and meeting consumer needs. The analyses of consumer behavior and a consumer decision in food milk and yoghurt market, which enable to conclude that widely used quality of researched products is assessed through the prism of individual consumer preferences, which are not always related to technological parameters, can be a confirmation of this. The research clearly demonstrates that consumers perceive milk and yoghurt quality using the parameters of sensor attractiveness and freshness. Respondents often declare that trust to brands is a guarantee of high quality, particularly freshness and health safety. The information about production according to the standards ISO 9001, ISO 22000 and HACCP is not, however, essential for them while shopping, because the vast majority of consumers do not know them and do not understand what they mean. It is worth paying attention to the fact that consumers claim in unison insignificance of advertising or special offers as decisive factor while shopping. However, their real behavior shows a certain discrepancy, as in the case of food milk brand and yoghurt producers. Consumer decisions were not related to a particular nutrition value or properties of a product, but mainly to popular packages and promotional actions. Consumer declarations could be an important guideline for producers in a process of competitive product offer forming.

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#### **Summary**

The article makes an attempt to identify the features of milk products which are considered as quality attributes by consumers and also to define the possibility of their use in creating a company offer. Learning consumer attributes of quality in relation to a product as well as favored features which influence on their choice enable producers to improve a product, its parameters and also add the most desirable values from the marketing point of view.

Key words: food quality; consumer attributes; marketing.

#### **UD classification:** 338.246

# DETERMINANTS OF COMPETITIVENESS **OF THE FOOD INDUSTRY**

# Małgorzata Juchniewicz<sup>\*</sup>

# **1. Introduction**

In the reality of today's economy, competitiveness is becoming one of the most important determinants of both prospects and assesses the functioning of enterprises in the market. The study of research was the food sector, which is a key sector in many EU countries. The importance of the food industry in the EU demonstrates its leading position in international trade. In the years 2000-2009 the share of EU food exports decreased from 20.4% to 18.6%, but they are still a leader in the export of highly processed foods [1, p.12]. In Poland, the food industry is one of the most dynamic sectors after the Polish accession to the European Union. The value of food trade in 2010 increased by almost 20%, exports to 13.5 billion, and imports to 10.9 billion [2, p.14]. The continued success of the sector will depend on the skillful use of internal and external conditions for its development.

Internal factors of competitiveness of enterprises, such as business strategy, structure, competence, capacity for innovation have been the subject of research by many authors. The study assumes that the use of internal competitiveness depends on external factors, because they form a process of competition and its course. The aim of this paper is to identify and evaluate major external competitiveness factors of the food industry.

### 2. Globalization and competitiveness of the food industry

The process of globalization and the internationalization of enterprises activity is a phenomenon that must be addressed to effectively compete in the market in the long term. There are several principal manifestations of globalization in the process of competition in food markets. These are the new conditions of gaining a competitive advantage, the mechanism of uncooperation, and the production and distribution monopsony. Globalisation has also led to major changes in the development of market structures and organizational business. The food supply chain has a unique and complex structure, which includes a very fragmented market for input producers and a very concentrated market of large retailers. In most EU countries for which data are available, the market share of the top three retailers ranges from 30% to 50%. Significantly, it is above 50% in Greece, above 60% in Ireland and almost 80% in Sweden. Even the largest food companies account for only 1-2% of a retailer's business at national level, while conversely a retailer may represent 20-30% of those companies' businesses [3, p.19]. Similar conclusions are based on research and Gehlhar Boiling [4, p.9]. The largest food companies in the world are less than three percent of food sales worldwide. Although the standard concentration of the food industry in the market is low, the processed food sector is much higher.

In Poland, the structure of the food industry is still fragmented and relatively low level of concentration. Food industry concentration factor is 0.784 and it is significantly lower than the average in the Polish industry (0.809). In industries with a high concentration of large companies involved in the production of the sector exceeds 60%, and 3-4 major groups of companies dominate the domestic market. These include the sugar industry, tobacco, beer, soft drinks, confectionery (manufacture of chocolate and pastries durable), and dairy, fish, and spirit. The second group consists of fragmented industries where production is located in mid-sized enterprises and small and micro enterprises (the wine industry, bakery, pasta, coffee and tea processing, potato). Lack of consolidation limits export opportunities and entry of major retail chains in these sectors [5, p.77].

<sup>&</sup>lt;sup>\*</sup> © Małgorzata Juchniewicz; prof. UWM; dr hab.; Warmia-Mazury University in Olsztyn; Poland 60

#### 3. The impact of private labels on the competitiveness of food

Market concentration also drives private label penetration in Europe. In the EU, this is most evident in Switzerland, they are responsible for the sale of 53% of the entire turnover. Range offered under the brands of retailers is important also in Spain (responsible for 49% of the market), England (47%), Portugal (42%) and Belgium (39%). This was followed by, among others, Austria, Germany, and France. The situation is worse in the countries of Central and Eastern Europe, including Poland. However, even in these countries the market share of products sold under its own brand grow steadily. Currently, Europe is the world leader in private label sales with a share of 23% in 2009. This is a high percentage compared to world partners in North and Latin America as well as Asia [3, p.19]. For example, in the U.S. grocery market share of private label is 19.5. In Poland in 2011, retailers offered at least one type of own branded product. In addition, private label products have a 12.8% share of the food basket. In contrast to products of particular manufacturers own brand recorded a 18% increase in sales [6, p.6]. Foodstuff own branded retail chains in Poland are produced in food processing plants, both little-known entrepreneurs and reputable large companies, with their own brand producer. Observing the development of commercial networks in the last few years you will find that supermarkets and hypermarkets play an increasingly important role in the domestic market. Estimated share of the sales of these units in retail stores and gas stations in 2010 was 22.1% and it was about 2 percentage points greater than last year. The food hypermarkets, supermarkets and discount stores already control 40% of the grocery market, compared with 30% five years ago. The ownership structure of retail stores in Poland is diverse. Most supermarkets is owned by international companies and operates under the name of wellknown retail chains in other countries, such as Tesco, Carrefour, Auchan, E. Leclerc and Real. Most supermarkets also belongs to retailers, either directly or on a franchise - as an example, stores Lidl, Aldi, Dino, Intermarché, Eco [7, p.89]. In the category of the most popular foods are: dairy, dry and free flowing products (pasta, cereal, rice, flour, tea and coffee), fish and meat products and sweets, but, in the period February 2010 - March 2011 private label products were 12,8-percent share in the food basket. Significant impact on private label products in Poland has discount stores. They are up 60-70% of the whole assortment. The trends indicate that ,,in the future the quality of food will split into different directions: there will be one consumer segment that is looking for higher quality and one bigger segment that is looking for lower quality at a lower price. So overall we are in a situation, where consumers are changing dramatically, because their expectations are changing" [8, p. 88–93]. These changes in consumer behaviour lead to new markets with specific consumer segments. Some networks in Poland, offers two different private label product groups: one addressed to the customer-oriented price (economy), the second – to seek quality (value for money). The changes in the retail sector in a decisive influence on the processes of the food industry competing entities are discussed. Hanf [9, p.7] presented the following classification of these companies:

- 1. "The first category comprises very large multinational food processing firms that traditionally dispose over a large number of subsidiary companies that are worldwide distributed and engaged in many different food branches.
- 2. The second category includes firms that are more or less strictly concentrated around their kernel competence but are globally producing and supplying. Hence, these firms dispose over a remarkable market power that is based not on size but on consumers' appreciation.
- 3. The third category is made up of medium-sized firms that produce diverse food for the national or regional market. Their competitive strength is based on a few strong national brands and a large number of more or less weak or regionally supplied brands.
- 4. The fourth category shall consist of small and medium specialized food processors that mainly produce by order of retail firms."

On this basis, there can be identified the following strategies to compete in food industry

companies. The first is to collaborate with retail chains in the production, under their "own brands". Another strategy is to co-operation with global manufacturing companies, active in international markets. For local businesses it is possible to undertake the production of goods in the niche market segments such as regional and organic products. It is also possible to integrate and concentration of domestic producers to create the so-called "national champions".

## 4. Institutional determinants of competitiveness

An important factor in the process of competition in the food industry is European Union and national legislation, as well as other international institutions. These include the conditions created by the GATT/ WTO, the EU's common trade policy and regulations appearing in the Common Agricultural Policy. It is pointed out that the existing CAP differentiated competitive potential and competitive position of the agri-food sector in the EU. It does not promote maintaining and improving the competitiveness of the EU food industry in the world.

The causes of change in the CAP processes were restricting protectionist policies, inspired by the decisions of the WTO. Decisions made in the field of international agricultural trade liberalization have a direct impact on the competitiveness of companies operating in this market.

It is stressed at the same time very clearly that a significant part of the instruments of the CAP, especially related to the second pillar should be focused on increasing the competitiveness of the food industry. Efforts in this area are related to activities away from subsidized food products. It was considered that they distort international trade and competitiveness. These actions result from two conditions:

- increase customer awareness of the products promoted consumption and change their dietary preferences;

– improvement the competitive position of EU producers in world markets.

Promotion of food products, providing detailed information on their composition, methods of preparation and quality advantages, favors the conclusion of commercial contracts with foreign customers. Motivates both food business operators comply with certain standards of quality and food safety.

In the years 2004-2011 the campaigns of agri-food products, led by Poland, the domestic and foreign markets, there have been 42.8 million euros from the EU budget and 30.0 million from the national budget. Allocation of funds was reasonably proportionate. Promotion of food products on the Polish market accounted for 56% and 44% of the world market of the total expenditures [10, p.98–126]. Internal activities were mainly aimed at increasing public knowledge about food products. Promotion and information campaigns in foreign markets were carried out mainly in Ukraine, Russia and the U.S. market. They were intended to disseminate knowledge about the high standards of production in the EU, while promoting high quality and taste of the food offered.

#### 5. Clusters in developing the competitiveness of the food economy

The analysis of external conditions highlights the competitiveness of not only the process of competition between them, but also the opportunity to take their cooperation and collaboration. This approach is consistent with the functioning of the economic theory and practice, the idea of clusters. In the case of the food economy in which there is a strong relationship between the characteristics of the regions and the potential manufacturing sector is undoubtedly one of the elements to strengthen their competitive position. It is also in line with the recommendations of the European Commission, which considered the development of clusters as a very important way of strengthening the competitiveness of the economy [5, p.6]. The idea of clusters connects the activities of a competitive and cooperative. Cluster initiatives and associated regional policy can be described by a set of universal attributes.

They include [11, p.18]:

- increased focus on microeconomic business environment in place of the traditional approach, focusing on macroeconomic issues;

- long-term program aimed at improving the competitiveness of the clusters, not individual companies;

- emphasis on local and regional areas;
- improving contacts between companies in the cluster and to build trust;
- the provision of seed capital in place of subsidies;
- a combination of competition and cooperation as essential factors for learning and innovation;

- partnership in the triple helix, including not only companies from the cluster, but also public authorities and business-related organizations;

- learning and innovation based on the totality of the system, rather than an example of individual companies.

You can point to the two main determinants of the formation of clusters in the food industry – the economic and institutional conditions. The researches [12, p.129] investigate the process of formation and development of clusters in the Polish agri-food sector especially conducive to supply factors associated with a significant potential for the manufacturing sector.

An important role is also played by structural and institutional factors that currently are not conducive to the formation of clusters in the food industry. Particularly pronounced in this context is the lack of cooperation of cluster structures with the R & D sector. In the longer term, the creation and development of cluster structures, may affect demand factors.

The competitive position of businesses in the food markets will depend on the perception of trends occurring in the consumer and their adaptation ability.

#### 6. Behavior of buyers in the competitive process

Another factor in the competitiveness of the food industry is the expectations and behavior of consumers in relation to food and changes in the demographic structure of the consumer. The increased mobility of people in the spatial and socio-professional and conformed lifestyles of different social groups make more and more homogeneous consumer attitudes. On the other hand, this leads to the so-called – consumer ethnocentrism.

This is manifested in the conscious consumer preference for domestic products. Research Holt, Amilien [13, p.2] and Hinrichs [14, p.33–45] pay attention to the paradox of globalization, namely the revival and reconstruction of local and regional values. In the sphere of consumption of food products is reflected by growing demand for traditional and regional products. In the European Union was created provisions to promote food produced using traditional methods. They allow easier identification of such products by consumers through the use of uniform marks. In mid-2009, there were 699 registered by the EC regional and traditional products – most of them in Italy, France, Portugal and Spain. In conclusion it can be said that globalization processes resulting in the unification of patterns of consumption (assimilation patterns of consumption and consumer behavior) also trigger consumption and attitudes that promote traditional food.

Vinaver [15, p.13] ads that regional products as products of the "special" and high quality can be supported by the EU aid funds, but also in the interest of better income groups of the population. From natural reasons, the amount of that production is limited; however, these products make the region of origin is recognizable. Increasingly, regional products acting kind of "card" or "brand" of the region, they become part of the competitiveness of companies located in the area.

Another factor influencing the process of competing food producers are lifestyle changes societies. They affect the change of views on nutrition, for example preference for healthy food, as light products, etc. Changes in consumer views are the result of improving the economic situation of the population and demographic changes, the expansion of the fashion cuisine of different countries, and finally the growth activity of women. Manufacturers must keep pace with these changes and provide consumers with products that meet the diverse and changing needs. It also involves the taking of their innovative activity. It is worth to point out specific features of product innovation in the food industry.

Galizzi and Venturini [16, p.133–153] discuss some kind of empirical paradox of innovation in the food industry. Firstly, the food industry is a sector characterized by a very low level of R & D intensity.

Connor [17, p. 607–617] explained the paradox of low spending on research and development in the food industry that innovation generally occur ,,outside" of the industry, but it productively implemented. The second observation indicates that competition on the merits, and the rivalry between the companies of the food industry is very intense.

Therefore, the long-term competitiveness factors are the food industry innovation – product, process, organizational and marketing.

Padberg i Westregen [18, p. 620–625] point out however, that consumers have a specific form of risk aversion in their choices regarding the purchase of new food products. According to this point of view, the introduction of new products is not hampered by the availability of technology, but by the existence of certain conditions of demand for new products.

#### 7. Summary

Competitiveness of enterprises of the food industry is determined by many factors. External conditions of competitiveness mainly stemming from the processes of globalization affect the need for allocative decisions in accordance with the offer of the global market.

As a result, global brands impact on both the competition within food supply chains and the range of food products that are available to consumers. In this context, the importance of institutional factors affecting the competitiveness of the food economy.

Information and publicity are undoubtedly instrument in contributing to strengthening the competitiveness of food producers from the EU on world markets. An important field of activity of enterprises of the food industry should be cooperation in the cluster structures. This allows for synergies and increased ability to compete in the market. The competition in food markets also depend on consumer preferences. Adaptation to their needs and creating new products is essential to increase the competitiveness of the food industry.

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#### **Summary**

The study assumes that the use of internal competitiveness depends on external factors, because they form a process of competition and its course. The aim of this paper is to identify and evaluate major external competitiveness factors of the food industry. It was found that the external conditions of competitiveness mainly stemming from the processes of globalization. These include: private label, institutions, and cluster structure, consumer preferences.

Key words: food industry; competitiveness; external conditions.

**UD classification:** 658.330

# STATISTICAL ESTIMATION OF THE INVESTMENT PROJECTS ON THE REGIONAL LEVEL

# Karpenko L.N.\*

## 1. Evaluation of formation and development of the Ukrainian investment policy

Subsequent development of Ukrainian economy, its place in the world economy in the age of globalization and transformation, sharp socio-economic problems' solution of our compatriots in a considerable extent depend on volumes, direction and effective investments streams, which are used in a country. It makes extraordinarily actual theoretical validity problem of investment policy, financial mechanism enterprise forming, economic and statistical estimation of the investment projects. Economical efficiency of the activity of enterprises, ensuring high rates of their development is determined by their investment activity level and range. Investment activity of enterprises is one of the most difficult and risky kinds of business. Therefore, regulation and management of investment activity and economic processes, connected with it, takes main place in solving problems of structural alteration of economy of Ukraine, scientifically and technical progress activation, increase of efficiency of enterprise activity. The problem of involving internal and external investments in the real sector of economy was always actual, was the question of the real surviving and development. Investments are the most ponder able factor of economic growth, difficult economic category, which is characterized by many-sided nature, they are a catalyst in the process of expanded scale reproduction and underlies the relations that turn out at the investment market. Our estimation of the formation and development of investment policy in Ukraine conducted by author allowed single out definite stages of investment policy in the state and conduct the analysis of its dependence on the economic situation.

1991-1993 is characterized by the formation of the legislative normative base. There is forming of new investment policy, searching of the new investment sources (it's characterized for all stages). New Ukrainian Laws in the field of investments are accepted.

1993-1996 Legislative normative bases forming are continuing, there is a process of creation of the new system of ménage. There is a creation and forming of the credit system, enterprise development, national currency is inculcated; there is the process of privatization. There is the acceptation of the Law of Ukraine from 19.03.1996 №93/96 «About the policy of foreign investing» and Decree of Cabinet of Ministers of Ukraine (CMU) «About the policy of foreign investing».

1997-2000 The process of creation of the market system of ménage continues. Stabilizing of economic situation, activation of social policy, activation of investment environment assistance is appreciable.

2000-2005 There is a process of creation of favorable investment climate in the state, improvement of «investment legislation».

2005 – present time. The row of documents is accepted, which is directed on the development of investment activity in Ukraine, which regulates the problems of the foreign investing. The program of the investment activity development is accepted on 2005-2011, ratified CMU.

The aim of the article is determination of conceptual approaches to the economic and statistical projects estimation of investments and analysis on the basis of existed methods, from the point of view of their advantages, insufficient determination and possibilities of bringing over to the specific conditions of the Ukrainian economy. The conducting of complex statistical research of the kind of processes on the investment market of Ukraine wit: analysis of dynamics, intercommunications and other structural changes of investments and determination of main tendencies.

<sup>\* ©</sup> L. N. Karpenko; c.e.s assistant professor; department of economy of enterprise; Odessa National Economic University

#### 2. The essence of investment climate

There are a lot of interpretations of investment climate. To author's opinion, the concept of investment climate is closely connected with an investment attractiveness, because it's determined on the basis of investment climate estimation, however analysis of literary sources allows to conclude, that a number of authors doesn't differentiate these two concepts - "investment climate" and "investment attractiveness" – and gives them almost identical determination.

The author thinks that the investment climate is a multicriterial, cost estimation of certain enterprise environment, in which different factors of investment processes are dynamically developed and are under its action.

Investment attractiveness – is a level of integral estimation of separate subject of enterprise environment (industry, region, subject of ménage, etc.), that characterizes perspective of development, profitableness of investments, investment risk and other substantial factors [1, p.61].

### 3. Algorithm for economic and statistical evaluation of project

Economic and statistical estimation of investment project is an aggregate of receptions and methods of estimation of its efficiency during all life cycle.

An algorithm of the estimation of investment project is the research program. Its purpose consists of realization of objective economical estimation of investment project. Estimation contains manysided, integral and associate idea about investment project and that's why it's the most important source of information for substantiation and acceptation of administrative decision. Estimation can be expressed in numerically or qualitatively (categorically).

Numerically expressed estimation is widely used in practice and has a quantitativelly-numirecal component. Estimation, expressed qualitatively, uses in the case quantitative determination is not possible. It should be noted that the aggregate of estimation indexes, criteria and methods, formulates the methodology of estimation. Selection and application of the methodological approaches to the estimation of the company activity should be made with the account of time of conducting the estimation. The enormous influence on their structure maintenance and essence make inflectional processes which take place in the economy. We should mark that the combination of methods is enough perspective direction in the improvement of the estimation of company's activity [1, p.131–140].

The algorithm of economic and statistical estimation of investment process has such forming elements: purpose and aim of estimation, object and subject of estimation, forms and types of estimation, system of indexes, criteria (comparison base), scale of estimation, informative base of estimation(determination and collection of information), methods of estimation, sequence and stages of estimation, hardware's, algorithms and programs.

The economic and statistical estimation of investment process synthesizes conclusions about its efficiency, is a connective link between the stages of economical analysis and making administrative decision. In a general view, estimation is a result of determination and analysis of numeral and qualitative characteristics of object, and also to the process of management of manufactured economy activity. The constituents of economic and statistical estimation of the investment project are presented on a fig. 1.

The next system of indexes, which is used in a statistical analysis, consists of two blocks. At first are investigated indexes that characterize investment process in this region.

The relative quantities of dynamics of investment activity, structures of investments and sources of their financing, coefficients of concentration, territorial localization, intensity of structural changes and investment activity need to be determined. An attention should be put on the questions of static analysis of investment capital structure. The main problem for many investment projects is a problem of financing.



Fig. 1. Integral investment project estimation

At presence of favorable terms it is possible to get necessary additional means only in case, if considerable part of necessity in the investment capital will be covered due to own financing resources.

Thus, minimum possible stake of property asset, depending on the level of project risk and solvency is within the limits of 25 to 50 %. That's why working out modern analytical approaches, connected with optimum investment activity basing of the long-term investments financing is an actual problem of statistics of investment activity.

During statistical analysis and optimum structure estimation of investment capital it is necessary:

- to estimate a general necessity in a capital without depending on possible sources of financing;
- to define the maximally possible stake of property asset in the general size of resources, which

are directed on the investments financing;

- to calculate speed of the invested capital return;
- to define an optimum combination of resources which come on investment financing from different sources within the biggest stake of property asset and its zero level in the general volume of financial means.

# 4. The practical application of economic and statistic methods of analysis for selected issues

The practical side of aqarticle is an economic and statistical research of chosen problems. With the purpose of realization of complex research of the character of processes at the investment market of Ukraine, to author's opinion, it is expedient to conduct the analysis of dynamics, intercommunications and other structural changes of investments and to define main tendencies.

Statistical data testify, that on the January, 1, 2012 the general volume of direct foreign investments made up 49362.3 \$ mil (fig. 2). It can be seen the process of attracting direct foreign investments to Ukraine had a positive tendency - volumes of direct foreign investments increased.



Fig. 2. Dynamics of direct investments

The analysis of dynamics of the direct foreign investments on the years, their structure, geographical origin and usage enables to define certain tendencies.

Enough actively direct foreign investments had begun to inlay in the domestic economy only since 2005 y., till this year, during this year 7843.0 millions joined Ukraine that almost equaled the volume of direct foreign investments, attracted in the country for the whole last years (on 01.01.2007 are 21607.3 \$ mil.).

In 2007 the volume of direct foreign investments, inlaid in the Ukrainian economy, multiplied on 27.9%, in comparison with the previous year, in 2008 and 2009 – accordingly on 36.7 and 36.7%. After a world financial crisis in 2008 volumes of receipt of foreign investments to Ukraine at first (1 quarter) abbreviated considerably, however a situation improved in 2010 – there was an increase of direct foreign investments almost 35,6% in comparison with the 2008 year.

A positive tendency to the growth of volumes of direct foreign investments was saved to the 2011 y., on 1.01.2011 y. a general volume of direct foreign investments made up 1084 dol. USA on one person.

In 2011 in the economy of Ukraine was inlaid 49362.3 mil. dol. of direct investments by foreign investors.

In 2011 the biggest volumes of foreign capital augmentation were observed on the enterprises of wholesale and mediation in trade made up 5403,9 mil. dol., in chemical and petrochemical industry there were 5153,8 mil. dol., in produce processing industry there were 5117,2 mil. dol., and also in organizations, which make operations with immovable property, leasing and services to the artificial persons were 5196,8 mil. dol. and financial activity made up 4183,2 mil. dol.

In 2004-2006 about a half of all foreign investments got the enterprises of industry (accordingly 3314,6 mil. dol. (48,78%) and 3824,0 mil. dol. (45,78%). During the last 5 years and specifically in 2004 enterprises of fast repaying activity were investly attractive, such as wholesale and mediation in trade, which made up 1567,5 mil. dol. (18,76% of the general volume of investments) and food retail industry and produce processing industry, which made up 1123,7 mil. dol. (13,5%). Enterprises of engineer does not remain out of eyeshot from the in residents, where there were inlaid 676,4 mil. dol. (8,1%), transport and connection made up 629,6 mil. dol. (7,54%), there were 471,9 mil. dol. (5,6%) in chemical and petrochemical industry, 425,4 mil. dol. in metallurgies and treatments of metal (5,1%), and also in organizations of financial activity there were 687,5 mil. dol. (8,23%), operations with immovable property, leasing and services to the artificial persons made up 589,2 mil. dol. (7,05%).

In 2010 foreign investments were inlaid in 10542 enterprises of Ukraine. Among regions leading places on the volumes of investments occupy Kiev, where there were 2684,1 mil. dol. (3768 enterprises and 32,1% volume of foreign capital), Dnepropetrovsk – 778,6 mil. dol. (640 and 9,3%), Kievan – 511,5 mil. dol. (331 and 6,1%), Odessa – 507,3 mil. dol. (648 and 6,1%), Donetsk region – 493,6 mil. (349 and 5,9%) and etc.

Thus, the conducted analysis allows to assert that the volumes of direct foreign investments have a positive tendency of growth, however they are wretched, comparing to the other states.

It's understood, that the dynamics of volumes of the attracted investments depend on the condition of investment climate in the state, to wit: social and legal terms, which favor investment activity of domestic and foreign investors. Concrete strategy of investment development is absent in Ukraine. As a confirmation, there is a tendency of capital investments in development of economy of Ukraine to directions and sources of financing. It is expedient to divide research in two parts, namely to trace a process from 1990 to 1997 to inclusive and from the beginning of 1998 to the present time. As statistics testify, from the beginning of the ninetieth in Ukraine permanent reduction of investment activity was marked under act of general economical crisis. 1998 year can be considered a critical year, when it turned out well to attain the increase of internal investments. Indexes for 1990-1998 characterize an investment sphere on the stage of

permanent reduction. The volume of capital investments for 6 years of transitional period (1992 - 1997) abbreviated almost in 5 times (on 79 %), or in the annual average on 13,2 %.

The author presents by visual demonstration on fig. 3 the dynamics of volumes of direct investments in Odessa region during 2005-2010, that meets the linear form of trend, that is tendency to the even growth of volumes of investing in the economy of region [3, p.166; 4, p. 92].



#### Fig. 3. Dynamics of volumes of direct investments in Odessa region in 2005–2011 years (information is brought with transitional balance)

The potential of economical growth, formed in 2010-2011 has a double foundation. In 2005-2007 the main factors of economical recovery were extensive factors - an increase of economy at the expense of free capacities of productions [5, p.28].

#### **5.** Conclusions

Thus, author carried out a description of main tendencies of the development of investment trends. It is necessary to notice that an investment process is an inalienable constituent of the process of reproduction of national capital, and consequently, – of social reproduction.

Economical transformation that take place in the economy of Ukraine, create conditions for stabilizing sphere of financial production and achieving considerable rates of it's growth in the future.

However, without substantial investments in a production sphere with the purpose of wide reproduction and structural alteration of capital assets of all industries, it's impossible to solve the problem of increase of production efficiency.

For the countries, which are on the stage of transformation in the economy, possibilities of

mobilization of internal investment resources on the direct time become limited. That's why main attention should be paid to the problem of bringing in foreign capitals, increase of investment effectiveness of domestic enterprises.

A question of attractiveness of Ukraine appears including the Odessa region as the object of the foreign investing. It is expedient to pay attention to application of methods of economic and statistical analysis of investment projects, methods of financial estimation of results of economic activity. Foregoing conception, offered in the article, has already begun to use by the author for the estimation of potential of innovative investment sphere of the Odessa region, it's attractiveness, possible changes, directions of development.

Concerning to the prospects of subsequent development, deepening of existed elaborations of management methodology of the innovative-investment mechanisms important, in opinion of author; determination of directions, which will further success in development of region; construction and analysis of econometrical model of influence of the Ukrainian economical condition on the volume of direct foreign investments in our country. Such model will allow to get quantitative expression of intercommunications and directions of numerous co-operations within the economy of Ukraine and is a base for working out recommendations for the improving investment situation in the state.

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#### **Summary**

In article the modern methods of the economic statistical analysis of productivity of investment activity of the domestic enterprises, as lever of processes of growth of economy of Ukraine are generalized. The circuit of an integrated estimation (economic and statistical) investment projects is offered developed structurally and the system of statistical parameters consisting of two blocks is argued. The complex economic statistical research of the chosen problematic in territory of Ukraine and Odessa region is carried out.

**Key words:** investments; investment activity; investment processes; dynamics of investments; direct investments; statistical estimation.

**UD classification:** 330.322 (477)
# FOOD QUALITY CONTROL IN INTERNATIONAL TRADE

# Kowalkowski A.\*

# 1. Introduction

Quality is the fundamental problem of present-day world where the borders are open for the relatively free flow of goods and services and where the competition is fierce. Quality is particularly important in evaluation of food products. This is accompanied by the increase in demands from consumers and all intermediaries in food trading. Increased awareness of consumers demanding safe food of the highest quality caused that producers wanting their products to enjoy consumer confidence must possess certificates confirming that high quality.

During 1990's, in Western Europe, because of the BSE, cattle herds were subject to mass slaughter, which showed shortcomings in the food safety assurance system harmonisation. Consequently, the food law system has been harmonised within the entire European Union to cover the entire food chain. Mass consumption that is the base of mass production caused increase in importance of quality. The first attempts at defining the notion of quality were undertaken already by ancient philosophers. Aristotle qualified quality to the set of ten categories describing the reality. According to him, "Quality is to express the definiteness of the being and the specific subjection of the matter to the form manifesting in it. We should identify permanent, discretionary, difficult to change because related to the difference of species of the being and the variable qualities – the states that can transform into their opposites" [1, p.32]. Today that notion is being defined as the "level of health, sensor attractiveness and availability in wide consumer and social meaning significant only within the limits determined by the raw materials, process and characteristic stipulated for that product" [2, p.114].

Quality management in food industry is of particularly high importance as a consequence of the emotional attitude of the consumer to food products that, consumed every day, influence his mind-set and health [3, p.75]. Within the frameworks of quality control, the enterprises conduct activities that are linked to specific notions, institutions, regulations and certificates.

Quality is the extent to which the set of inherent characteristics satisfies the requirements [4, p.208]. Quality control is the continuous process of performance evaluation and taking the corrective measures when necessary [3, p.207].

Food legislation is the set of legal norms (acts) that set the principles for production of and trade in the raw materials, food and products that get in contact with them to the extent necessary for protection of health and satisfying consumer expectations [4, p.9].

RASFF – (Rapid Alert System for Food and Feed) is the rapid alert system concerning dangerous food products and feeds [5, p. 14].

Quality assurance and quality management systems represent formalised actions and methods applied during the production process offering the guarantee of obtaining food of the highest quality possible and its full safety [5, p.16]. In evaluating food quality, safety, sensor attractiveness, energetic and nutritive value as well as trade characteristics such as shelf life, preparation ease or type of packaging should be considered. Responding to consumer needs by satisfying them is the fundamental task of quality. Food safety is linked inseparably to the notion of food quality. The requirements that must be satisfied within the entire food chain have been defined for the purpose of minimising the risk related to floating dangerous foods to the market. Those requirements are found not only in the legal regulations in the field of food law but also in the systems. Implementation of quality assurance and management systems is necessary to obtain guaranteed quality foods. Those

<sup>&</sup>lt;sup>\*</sup> © A. Kowalkowski; Ph.D.; University of Warmia and Mazury in Olsztyn

systems have been defined as formalised actions and methods applied in the production process offering the guarantee of obtaining the best possible quality of food as well as its full security. Undoubtedly, the following systems should be listed among the food quality assurance, and consequently food safety assurance, systems: HACCP, Good Practices (Manufacturing – GMP, Hygienic – GHP, Agricultural – GAP, Laboratory – GLP).

An important role in quality management in food sector enterprises is played by the systems of:

- ISO 2000 series.
- ISO 9000 series.
- IFS.
- BRC.
- EUREPGAP.

Supervision of food in the entire food chain is conducted on the base of two systems:

- Internal control system representing control performed at the plant for which the manufacturer is responsible. It is based on the principles of the fundamental quality assurance systems such as Good Practices, HACCP, or ISO 9000.
- External control system, where the control is independent of the manufacturer and it is conducted by bodies of official food control. The following bodies are responsible for the statutory food control:
  - Sanitary Inspection.
  - Veterinary Inspection.
  - Agricultural-Food Quality Products Trade Quality Inspection.
  - Trade Inspection.
  - Plants Protection and Seed Production Inspection.

The Government Sanitary Inspection and the Government Veterinary Inspection possess the best professional competences for performance of food quality and safety control.

## 2. Aim and methodology of studies

Faced with the increasing consumer awareness and fierce competition in food sector, producers from that sector are forced to carry continual work aiming at improving quality at the enterprise. The certificate is the confirmation that the identified process of a given organisation is compliant with the requirements of one or many standards assumed for the base of certification. That is why, enterprises that obtained certificates are subject to control conducted by specialised entities that in case of finding noncompliances may suspend or withdraw the certificate.

Consequently, the aim of the paper is to define the benefits resulting from quality management systems implementation and certification with particular focus on their influence on international trade and obtaining knowledge on quality control methods applied at food sector enterprises.

The empirical part of the work was based on the survey conducted at food sector enterprises during the first half of 2011.

According to the European Classification of Economic Activities, those enterprises are classified as large. The analysed enterprises are situated in various areas of the country. They also conduct their activities in various segments of food industry. Those enterprises are also exporters of their products to the markets of both the European Union and the countries that are not members in the Community.

## 3. Quality systems in the analysed enterprises

As of 1 May 2004, HACCP system implementation is compulsory in all food sector enterprises. That duty applies to all enterprises indifferent of their size and production specificity. That is why all the analysed enterprises possess that system implemented. Indykpol was the first company that has implemented the HACCP system both among the companies surveyed and in the country. The system was implemented already in 1999. The analysed organisations implemented the HACCP system at all stages of operation from obtaining the raw material to finished products distribution. Implementation of Good Practices, in particular Good Manufacturing Practice and Good Hygienic Practice was the base for implementation of that system. Application of Good Practices and the HACCP system represents the minimum for the food sector enterprises to be able to manufacture appropriate quality product safe for the consumer. The HACCP system also forms the foundation for implementation of other, voluntary quality management systems. Increasingly often food manufacturers decide to implement quality assurance systems that increase consumer trust in their products and make the products more competitive. Among the analysed Indykpol S. A., Tymbark-GMW Sp. z o. o. Sp.k., Sertop Sp. z o. o. and Okręgowa Spółdzielnia Mleczarska [Circuit Dairy Cooperative] in Piatnica possess implemented quality management systems according to ISO 9001. Those companies conduct activities aiming at satisfying the expectations of their clients. Two of the analysed organisations, Indykpol and Sertop, decided also to implement the international quality standards of the BRC (British Retail Consortium) and the IFS (International Food Standard). The BRC system developed by the British Retail Consortium specifies the requirements that must be satisfied by food manufacturers interested in marketing their products in the United Kingdom. The working group of the Federal Association of Trade Enterprises BDH created the IFS. The IFS standard is accepted mainly in Germany and France although every year it enjoys increasing popularity in other countries of Europe also. To a significant extent, it is based on the BRC requirements. The creators of both systems put a lot of pressure on the HACCP system.

For the Circuit Dairy Cooperative in Piątnica care for the environment is of high importance. The enterprise values its cleanliness also because it wants to manufacture the finished products of the cleanest raw materials possible. Taking care for the natural environment the organisation has implemented the environment management system according to the ISO 14001 standard. One of the analysed organisations decided to implement the food safety management system according to the ISO 22000 standard. That system has been implemented by the Food Processing Enterprise "Pekpol Ostrołęka" S. A. The ISO 22000 system is targeted at all enterprises participating in the food chain, both directly and indirectly. The ISO 22000 is the first international food safety management standard that was adjusted to the food suppliers' chain specificity "from the field to the table" (Table 1).

ENTERPRISE	IMPLEMENTED QUALITY SYSTEMS
INDYKPOL	Good Practices, HACCP, ISO 9001, IFS, BRC
TYMBARK	Good Practices, HACCP, ISO 9001
SERTOP	Good Practices, HACCP, ISO 9001, IFS, BRC
O. S. M. PIĄTNICA	Good Practices, HACCP, ISO 9001, ISO 14001
PEKPOL	Good Practices, HACCP, ISO 22000

Tab. 1. List of quality systems implemented in the enterprises surveyed	Tab. 1	. List of	quality	systems	implemen	ted in	the enter	prises sı	urveyed
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Source: Own work

Possession of quality system certificates causes that the enterprise possessing such certificates is more trustworthy. All the analysed enterprises possessing quality system certificates noticed increased volumes of exports following certification. Sertop pointed out that following certification, exports of its products increased by as much as 50% as the enterprise succeeded in establishing

collaboration with countries such as the USA, Canada and Israel. Earlier it sold its products in the domestic market and markets of the Czech Republic and Slovakia. Indykpol brand has been known abroad for many years.

The enterprise has exported its products already since 1993. Around 30% of its products go to the European Union markets, mainly the United Kingdom and Germany, while smaller volumes are exported to the Far East countries. Exports of Tymbark also increased significantly, particularly to the European Union countries. This is linked to the absence of customs barriers, which allows easier and faster logistics.

The organisation decided to increase exports of its products to the European Union markets, particularly the United Kingdom, because many Poles have settled there during the recent years. Piątnica recorded only minor increase in exports. This results from the fact that the organisation is focused on production of fresh products that go to the domestic market mainly. Products by that organisation are exported mainly to the Czech Republic and Slovakia but also Russia. Currently, exports represent just 1 - 2% of the income. On the other hand, the organisation notices the continual increase in sales of its products in the domestic market. In the nearest future, it is planning to increase exports of its products to Russia.

We know already that all the analysed enterprises decided for certification of their quality systems. The reasons for certification and selection of the certifying body are important elements in activities of the enterprise. All the organisations surveyed presented the following as the main reasons for certification:

- Willingness to improve quality and safety of offered products.
- Increase of export potential.
- Increase of competitiveness of enterprise products.
- Increase of consumer trust.
- Winning new clients.
- Increase of organisation prestige.
- Demand of trade chains (in case of BRC/IFS).
- Demands of clients.
- General trend in the industry.
- Management effectiveness improvement.

For the modern client the product brand counts. The organisation can achieve brand value and identificability increase by, among others, building it on the base of continual quality improvement. Certified organisations are considered better and more reliable than those that possess no certificates.

Consequently, the certificate offers potential for gaining position in the competitive and demanding international market. Organisations deciding to initiate the certification process enjoy freedom in selecting the certification body. There are many certification bodies operating in Poland. There are large and small, domestic and international bodies available.

All the enterprises analyses considered the opinion among entrepreneurs on the given certification body the most important criterion in selecting the certification body. It is important that a trustworthy body enjoying good opinion awards the certificate and that the certificate awarded by the given body is recognised internationally.

The offer by the certifying body and the ease of establishing collaboration with it are the criteria of equally high importance.

Enterprise	Opinion among entrepreneurs	Ease of cooperation	Costs	Certification body offer
INDYKPOL	$\checkmark$	$\checkmark$		$\checkmark$
TYMBARK	$\checkmark$			$\checkmark$
SERTOP	✓	✓		$\checkmark$
PIĄTNICA	✓	✓	$\checkmark$	
PEKPOL	$\checkmark$		$\checkmark$	$\checkmark$

 Tab. 2. Criteria for choice of the certification body

Source: Own work

Certification involves the necessity of making a variety of outlays that result in numerous difficulties for the organisation (fig. 1).



Fig. 1. Evaluation of the severity of difficulties encountered in the quality systems certification process

Source: Own work

All the analysed organisations considered interpretation of legal acts the most difficult issue in the certification process. They explain that difficulty as resulting from inconsistency of both domestic and international law, frequent changes in the regulations and imprecise formulation. Piatnica and Pekpol considered the necessity of making financial outlays and of modernizing the plants that is linked tightly with incurring costs, significant hindrances in the certification process. All the organisations ranked the need for training employees and low awareness of the employees next. Low awareness of employees hinders effective training. The mentality of employees that are frequently afraid of changes creates additional difficulties.

Enterprises that passed the certification audit with positive result became certificate holders. Possession of such certificates offers numerous benefits (figure 2).



**Fig. 2. Evaluation of the level of benefits resulting from possessing certificates** Source: Own work

Enterprise possessing certified quality systems is considered better, more reliable, assuming higher responsibility for its products. Increase of awareness among the employees, who learned assuming responsibility for all the processes in the organisation and are conscious of the fact that product quality is determined at every stage of production, were considered the undoubted benefit.

Benefits such as increase of exports, winning new foreign markets or increase of the organisation income and prestige were ranked by the organisations as inferior to the quality improvement and consumer trust.

## 4. Quality control in analysed enterprises

The process of food raw materials or finished products manufacturing should be designed appropriately together with implementation of controls of its functioning.

The main objective of quality control is to manufacture the product satisfying the specified requirements and is within the tolerance limits set.

Continuous quality improvement represents another very important aspect of quality control. Supervision of food production in the analysed organisations, in the same way as in all food sector organisations, is based on the internal and external control systems.

The external control system is independent of the manufacturers.

Specialised bodies of official food control such as the IJHARS, Veterinary Inspection and Sanitary Inspection conduct it. Supervision by official food control bodies is based on statutory regulations and therefore it is objective. Official food control is conducted in the uniform way at all the enterprises analyses and all enterprises in general.

The uniform method of conducting control indifferent of the production specificity gives the consumers the feeling of security.

Control	ENTERPRISE				
method applied	INDYKPOL	TYMBARK	SERTOP	PIĄTNICA	PEKPOL
Internal audit	6-8 x a year	6 x a year	10-12 x a year	4 x a year	2 x a month selected departments; 1 x a year all departments
Laboratory tests	$\checkmark$	~	$\checkmark$	$\checkmark$	<ul> <li>✓</li> </ul>
Random control	Daily	Daily	Daily	Daily	Daily
Raw materials control		~	~	$\checkmark$	~
Employee training	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	~
Maintaining documentation	$\checkmark$	✓	~	$\checkmark$	$\checkmark$

#### Tab. 3. Internal control system in the enterprises surveyed

Source: Own work

The enterprises surveyed implement internal control based on own schedules. This allows efficient organisation of that control adjusted to the specific conditions of the organisation. Thanks to such a solution quality control is conducted in the effective was allowing detection of possible noncompliances and at the same time it creates more difficulties.

For the organisation, the certificate is the document that allows building consumer trust, competitiveness of the enterprise and winning partners. It represents confirmation of satisfying the expectations formulated by the buyers of the enterprise products.

Consequently, enterprises must improve quality continually to prevent suspension or withdrawal of certification. Certification loss would result in loss of consumer trust built for a long time and even stopping exports to areas where possessing the certificate is the condition for allowing a product for trading.

## **5.** Conclusion

As a consequence of creating the single market covering the area of the European Union, many barriers to international trade have been removed.

Poland as a Member State and a free market system of economy was forced to adjust standards concerning quality assurance and control to the European Union and global requirements.

As a result of the survey concerning food quality control in international trade conducted on the group of five food sector organisations, the following general conclusions can be formulated:

 improvement of offered products quality and safety is the main reason for implementation of quality systems and obtaining certificates by organisations;

- obtaining certificates for the implemented systems allows increasing international trade volume.
   All organisations recorded increases in exports after certification;
- opinion concerning the certifying body, its market position and recognition of the certificated awarded in the international markets were the most important criteria determining the selection of the certifying body;
- interpretation of legal acts causing misinterpretations and sometimes differences in interpretation was the major difficulty during implementation and certification of quality systems;
- undoubtedly, increased enterprise competitiveness results from the enterprise focus on the quality of its products. Certificates represent confirmation of high products offered quality;
- the organisations surveyed understand very well the idea of quality as continual quality improvement as they declared unanimously implementation of further quality systems and obtaining further certificates.

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#### **Summary**

This article examines food quality control as the fundamental problem of present-day world. Poland as a Member State and a free market system of economy was forced to adjust standards concerning quality assurance and control to the European Union and global requirements. Enterprises must improve quality continually to prevent suspension or withdrawal of certification. Improvement of offered products quality and safety is the main reason for implementation of quality systems and obtaining certificates by organisations. There are given recommendations concerning increasing the international trade volume.

Key words: food quality control; international trade; enterprises.

**UD classification:** 339

# DYNAMIC CLUSTER LOGISTIC (SEA PORT) MODEL AS AN INSTRUMENT FOR REGIONAL ECONOMIC DEVELOPMENT

# Yuriy G. Kozak; Igor Onofrei<sup>\*</sup>

# **1. Introduction**

The inclusion of an open economy of Ukraine into the world economy on a parity basis is impossible without reforming the economy and its sustainable development. The leading role in this process is given to the establishment and development of a competitive national economy, which is impossible without the use of all available mechanisms to accelerate the reforms and improvement of the internal market institutions [1, p.42–44].

One of the theories of the formation and development of regional competitiveness is the cluster theory of economic management.

The problems that the country faces in this context, in the most general terms are listed by the Ministry of Economy of Ukraine in their "Concept of Creation of Clusters in Ukraine" at the end of 2008. The concept highlighted the main vectors of state policy in the field of cluster development and suggests that the implementation within the cluster investment and innovation projects should strengthen competition with their own operating company and attract foreign investors [2].

However, among the aspects of the theory of cluster management most relevant today is the use and implementation into the Ukraine's economy the models of development of innovative regional industrial clusters, particularly in the field of maritime transport and logistics.

Models of creation and development of sea port clusters today in Ukraine's economy in general are not used and are not discussed; therefore they are recommended to study, analysis and use of international experience in Europe and other world regions. The success of these models is proved in practice and has a clear digital expression [3].

# 2. Actuality of the research subject

Nowadays, Ukraine and its regions face many problems, which were accumulated and not solved during last several decades.

Some issues and problems of the current economic stagnation and situation have their deep roots in previous economic and historic experience. To those problems one could assign:

1. Regional misbalances in the economic development, which mostly are the result of the downfall of the common internal market of the ex-USSR and the following breakage of close ties and production cycles within them. Up to now Ukraine at the state level has enormous systemic difficulties with rebuilding its economic power and has not find the way to create and improve many of substitution productions in a wide range of sectors.

2. Low-tech economy.

3. Agricultural backwardness.

4. Week and outdate road network, which was not substantially renovated and modified during Euro-2012 football championship as it was expected.

5. Low level of social support and morality etc.

<sup>&</sup>lt;sup>\*</sup> © Yuriy G. Kozak; DEcon; Prof.; Department of International Economics; Odessa National Economic University; Odessa;

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Now as a state Ukraine is still far away from the way of modern capitalist development and EU standards. It is obvious that Ukraine should implement the overtaking economic development by inheriting and adopting the best global practices of economic management. Besides that, we should find new effective instruments for our economic development and one of them is clusters.

The steep drop of production volumes in terms of the global economic crisis have had a great impact on the Ukrainian volume of transportation of goods by all types of vehicles and transport, including marine transport. The forming process of transport infrastructure and complex system of activities in regional logistic nets should play the decisive role in the current difficult situation. According to the abovementioned, the theoretical issues concerning innovative transport infrastructure and logistic system development in Ukraine and its regions in terms of globalisation needs to be revised using cluster models and mechanisms.

In modern conditions, in order to succeed in the competitive global market, companies need to understand their costs in the economic chain as a whole, and to cooperate with the rest of the chain in the interest of cost management and revenue maximization. This means the transition of enterprises from cost accounting only in their organizations to estimate the costs of the economic process as a whole, in which even the biggest company is just a link. In terms of the short-term contracts and relationships, poor communication and lack of coordination between providers and consumers in one economic process the guarantee of cost control of the whole chain is impossible. Again, such opportunity is given to enterprises through the organization of participants of the chain into the cluster.

The main task of the article is to analyze implementation of the dynamic cluster (sea port) logistic models in the economy of the Odessa region.

## 3. The degree of problem's development

Cluster approach to the economy structuring and justifying strategies of economic policy and competitiveness' increase of countries and regions is generally recognized.

Clusters and cluster policy are sufficiently widely covered in the works and publications of western and local scientists – Ukrainian and Russian experts.

In particular, these issues are revealed in scientific publications of leading Western cluster specialists, among them such prominent authors like Michael E. Porter (the founder of a cluster concept), Peter W. de Langen, Dimitrios V. Liridis, Vassilios K. Zagkas, Maria Angel Diaz, Maria Esteban Soledad – world experts in the area of sea port clusters, Thomas Andersson, Sylvia Schwaag-Serger, and also Ukrainian and Russian scientists, among whom are distinguished such authors as A. Stepanov, A. Titov, L. Rybina, S. Sokolenko, J. Kovaleva., S. Gritsenko, S. Bludova, L. Pryshtchyepa etc [4; 5; 6, p.20–130]. Many works of both domestic and foreign scholars and scientists are dedicated nowadays to the issue of modelling of economic processes, as well as problems of regional clusters and foreign economic activity.

Among those who considered the problems mentioned in the article are such scholars as already mentioned Michael E. Porter, as well as Lance Taylor, H. Amman, P. Dixon, B. Parmenter, and local scientists V. Makarov, A. Bakhtyzin, S. Sulakshyn, T. Pankova, N. Jankovskyi, L. Sukhova and others.

It should be noted that the issue of efficiency of foreign economic activity of individual industrial enterprises is covered quite extensively. But still up to now there was no substantial research that could examine in details the mechanisms and models for improving the efficiency of foreign economic activity in the region, in particular using dynamic cluster models. It is worth noting that there are a number of problems in application of cluster model and sea port clusters in the Odessa region nowadays. In the first place, such a problem is the existence of appropriate organizational and functional mechanisms of creation and construction of the cluster, and the problem of availability of adequate mathematical economic models. Their implementation in practice would provide an opportunity to assess the effectiveness of the cluster and to identify ways to improve and further develop. The core of the new clusters may be large industrial and economic systems. Center of Odessa Sea cluster potentially can become a state enterprise "Odessa sea commercial trade port". Creating a cluster in this case refers not so much and not only in the form of new investments in technical modernization, but actually changing the very nature of the organization and interaction between members of the chain within the cluster.

## 4. Disclosure of main material

One way of mobilizing resources in the regions for dynamic social and economic development in the medium and long term, competitiveness and diversification of the regional economy is the development and use of clusters and cluster policy based on market principles.

New tasks facing reform-minded regional and local authorities on the content of the socio-economic development of territories and their communities is to step up innovation and investment potential of the territorial organization of economic cooperation and businesses. International experience proves successful regional dependence of their results not only from the classical factors – resource support, successful placement, availability of improved technologies. Much attention in the theory and practice of optimal strategy of regional development today is given to the cluster model of sectoral and territorial development.

The concept of clusters is very promising for use in the transformation economy of Ukraine. Through cluster approach at the level of a region becomes possible the cross-sectoral cooperation, as initiators and active participants in its favour are local authorities. With the spread and ongoing communication are possible mutually beneficial business contacts in the region, extends cooperation between different-business entities. Thus, consumers have the opportunity to get better products, made from local resources. The mechanism of cluster cooperation is beneficial because considerably reduced transaction costs participants become possible large-scale entrepreneurial projects through participation in cluster members on the basis of cost-sharing, enhanced information capabilities of enterprises in the region, which helps to attract domestic and foreign investment, the consumer market is filled with quality and diverse products.

The emergence and rapid spread and success of cluster model sectoral-territorial entities related to a change in economic priorities in the context of globalization changes. As noted by foreign and domestic researchers, members of the cluster benefit, based on local institutional specificity (knowledge, motivation, relationships). Only local economic actors, as opposed to distant competitors have this specific and are able to use it. Thus, globalization indirectly leads to an increase in performance of production units, which are parallel to the principle of individual economic interests are able to take advantage of the principle of collective activity. In domestic economic conditions, this combination is subject to deliberate and consistent support of cluster systems of regional and local authorities.

Many advantages of cluster model does not deprive it of deficiencies in a market-oriented economy can be significant. Primarily this is excessive concentration, and therefore – potential for monopolistic tendencies in certain market sectors. In this connection it should be emphasized the need for authorities of cluster formations (Administration Council of the cluster, etc.) consider formal features of the market environment and avoid receiving sanctions under state antitrust correction.

#### 4.1. "Region-Cluster" model

For the calculation of efficiency of foreign economic activity of the Odessa region is suggested to use a "Region-Cluster" model.

For the first time for this purpose the methods of economic-mathematical modelling are applied.

Pursuing the structure of this model which is offered, there are three levels, which are determined by the groups of factors and special indexes. This model allowed us to form the unique method of

calculation of efficiency of foreign economic activity of region through Odessa port.

It is also important to make proposed cluster models dynamic. That means that they should go much far away from traditional "Economics" provisions. Traditional static models do not take into consideration qualitative changes. That stands for not only quantitative changes should be observed, but first of all, changes in values should be examined and included into measurement of the regional economic structure. Qualitative changes are not properly reflected in current economic theories.

The main idea is that economic models should serve the people, not visas versa at the first place. Those people, the population, who have their own economic interest, but moreover, and that is much more important have their own values. These modern cluster models should be aware of cultural and religious peculiarities of regional development, demographic tendencies and changes.

All these dynamic sea port logistic cluster models should be much more social-oriented. Besides, there is no doubt they should be applied. This is the most important philosophical point of all concept of cluster regional development. Current software techniques give an opportunity to make a research in constantly changeable environment. The other point is that we should have criteria connected with "the chain of values" inside the dynamic clusters.

Our method includes such steps:

1) For providing comparableness of data of various years we will correct the monetary indicators on the accumulated size of deflator. The indexes of the prices of the year 2009 should be taken (previous year to the research).

2) Calculations should be taken after a formula 1.1.

$$\boldsymbol{D}_{i}^{A} = \boldsymbol{D}_{i+1} \times \boldsymbol{D}_{i+1}^{A}, \tag{1}$$

where

 $D_{i+1}$  – deflator for the next year after i-d year;

 $D_{i+1}^{A}$  – the accumulated size of deflator for the next year after i-d year;

 $D_n^A = 1 - \text{prices of } 2009 \text{ year.}$ 

The accumulated values of deflator since 1999 till 2009 are given in Table 1.

Years	Deflator for the current year	Accumulated value of deflator
1999	127,3	4,322
2000	123,1	3,511
2001	109,9	3,195
2002	105,1	3,040
2003	108,0	2,814
2004	115,1	2,445
2005	124,5	1,964
2006	114,8	1,711
2007	122,7	1,394
2008	129,1	1,080
2009	108,0	1,000

Tab. 1. Accumulated value of deflator in 1999-2009 years

3) The integral indexes should be applied to objectively characterize all categories of efficiency of second level of the offered "Region-Cluster" model: investments in the fixed assets in millions of hryvnas (UAH, national currency), unemployment rate in Odessa region after the methodology of <sup>94</sup>

ILO in percents, turnover of goods of Odessa port in thousands of tones.

4) The real foreign trade turnover in the prices of 2009 should be calculated.

5) Next step is to calculate the correlation of the real commodity turnover in the i-year (in millions UAH) to turnover of goods of i-year (in thousand of tones). Value, which is got for turnover of goods for 2009 year we take as a standard, at the same time the calculation index is equal 1 (one).

6) Then we should calculate the turnover of goods in "conditional units of commodity", taking into account the indexes of calculations, that represent high-quality changes in a model, which take place in the structure of loads that are transported through Odessa port.

A model was tested after the Fisher's test which confirmed its adequacy [7].

The compared data for this model resulted in Table 2.

As it could be seen from the abovementioned model the direct dependence between a gross regional product per capita and investments in the fixed assets and turnover of goods of port is obvious. Thus there is a reverse dependence between a gross regional product per capita and unemployment rate in the Odessa region.

In accordance with the abovementioned model and conducted calculations we can assert that increase of investments in the fixed assets in the Odessa region on 1 million UAH through port results in growth of gross regional product per capita on 23 copecks (1 UAH = 100 copecks).

Multiplying unemployment on 1 % brings to the loss of 292 UAH over 24 copecks of gross regional product per capita.

Multiplying turnover of goods with a nowadays commodity structure per 1 million tones will result in multiplying of gross regional product per capita on 7 copecks.

Years	GRP real per capita in UAH in the prices of 2009	Investments in the fixed assets of Odessa Port in millions of UAH in the prices of 2009	Turnover of goods in Odessa port in conditional units of commodity	Unemployment rate in a region after the methodology of ILO, %
1999	13 025,87	3 553	11762	12,6
2000	13 474,63	4 733	22294	12,6
2001	14 258,54	7 894	19147	10,3
2002	14 750,14	7 930	25072	6,9
2003	15 626,04	9 313	29339	5,7
2004	17 184,53	12 561	34845	7,4
2005	16 927,52	10 122	30570	5,9
2006	17 756,20	12 555	30888	5,6
2007	19 278,71	14 640	33101	4,8
2008	19 400,09	13 483	36035	4,9
2009	17 451,13	6 426	28008	5,1

#### Tab. 2. Compared Data in the Prices of 2009 year in the "Region-Cluster" Model\*

\*Source: [8] Data of the State Statistics Committee of Ukraine for 1999-2009 years is used

Dynamics of gross regional product of the Odessa region (efficiency of foreign economic activity) per capita in the prices of 2009 year for 1999-2009 years is represented on fig. 1.



# Fig. 1. The dynamics of GRP of the Odessa region (efficiency of foreign economic activity) per capita in the costs of 2009 for 1999-2009 years in UAH

Main relations and logic inside the dynamic sea port logistic cluster model in Odessa region are represented at fig. 2.

The core of new clusters may be large industrial and economic systems. In Odessa transport cluster (also known as the Odessa sea port maritime cluster) according to a preliminary concept the core is state-owned enterprise "Odessa Commercial Sea Port".

On August 26, 2011 in accordance with Article 43 of the Law of Ukraine "On Local Self-Government in Ukraine" and the execution of the decision of the Odessa regional council "On implementation of the cluster model for infrastructure development of the Odessa region" No. 88-VI dated February 18, 2011, given the results of the public hearing of April 21, 2011 and the recommendations of the working groups and experts, Odessa Regional Council decided to approve the Regulations on the transport cluster, which can be a base for the formation of clusters of transport in the Odessa area. In this case, the improvement and development of the cluster continues.

Creating cluster in this case involves not so much and not only investment in technological upgrading, as the change of the nature and organization of interaction between the chains belonging to the defined cluster (fig. 3).

Through a combination of measures will allow the cluster to effectively implement international agreements and to achieve effective co-operation, reduce operating time and reduce transaction costs. The successful development of the Odessa transport cluster is necessary formulation of its strategic vision, which is compatible with the long-term goals for the region. The organizational structure of the cluster arises from the functional structure and is defined by the short-and long-term goals and objectives of the cluster. It is worth noting that the participants of foreign economic activity within the cluster communicate with each other under certain integration. In this case, the importance and opportunities for such integration are dictated by trends in the global economy in a globalized world. According to the review of the concept, state enterprise "Odessa Commercial Sea Port" will be, as already noted, perform the core of the cluster, which is to unite around another cluster different transport and logistics and trade groups. That is, a cluster that is developing, will be a complex system that takes into account all aspects and logistics network of Odessa region.

From the creation of the cluster in the long run will benefit not only one of us, the economy and the Odessa region in general.



Fig. 2. The layout scheme of main relations and logic inside the dynamic sea port logistic cluster model (Odessa region)



Fig. 3. "The chain of values" inside the logistic sea port dynamic cluster (production chain) explained

It is need to be mentioned that the introduction of the cluster policy and the creation of the corresponding cluster is not a one-time procedure; it requires constant monitoring of the results of this policy, monitoring and making appropriate adjustments.

Implementation of cluster policy and the creation of the Odessa transport (sea port) cluster in the modern Ukrainian economy in the short term can cause price increases in some markets, the demand for which will increase due to the revitalization of the industrial chains in the cluster. Therefore, to prevent wash-out of funds from production to ensure quality control for the preservation of competition, free access to goods and services, as well as transparency in pricing. Moreover, the need is to control the activities of the cluster management to prevent the development and application of corruption schemes.

To estimate the expected effect on the formation of the Odessa transport cluster I created economic and mathematical model that determines what percentage of the gross regional product of the Odessa region is generated transporting goods across the state enterprise "Odessa Commercial Sea Port". Also offers the opportunity to evaluate not only the profitability of investments within a single enterprise, but also the effect on investment in the cluster to scale a specific region or group of settlements, that is, to take into account the socio-economic impact of public investment policy in general. With the use of this model is to assess adequately the assets of Odessa transport cluster as a single production system in response to external effects, which are clearly higher than the value of the individual companies. The application of this model is the most efficient way investment to determine state funds.

When you create a model designation I took into account that the economic system is a subsystem of the Odessa region of Ukraine's economy and, in many respects, the fluctuations in the primary system determine the state of its subsystems. In this case, the state enterprise "Odessa Commercial Sea Port" is an element of the economic system of the Odessa region. The port does not function in isolation from the rest of its elements, on the one hand generates costs of its customers, on the other hand is a source of income for their employees and maintain the plants. The latter, in turn, spend funds received, generating revenue other companies. This whole chain leaves its "footprint" in the path of the economic system of the Odessa region.

Gross Regional Product (GRP) in the Odessa region, per capita, which characterizes its economy, because of the economic relations with other regions of the Ukraine, a single currency, financial, legal systems, etc. has a close relationship with the other regions of the GRP. This connection is largely determined by territorial imbalances in regional development in Ukraine, which is stored for many years.

The tests carried out using Fisher's exact test and Student's criteria indicate the significance of the constructed model and its parameters. As part of the model variation in sales volume of services the state enterprise "Odessa Commercial Sea Port" explains 89% of variation of the Odessa region of GRP per capita. As a result, in view of the fact that the state enterprise "Odessa sea trading port" is operating in a monopolistic competition, and has enough self-tariff policy, also adopted a hypothesis about the degree of influence of the state enterprise "Odessa Commercial Sea Port" on the economy of the Odessa region.

The analysis of the model parameters led to the conclusion that an increase in the volume sold the port services per 1 USD leads to an increase in the Odessa region of GRP 7 UAH 73 kopecks.

For the prediction of possible outcomes and highlight the scale of the cluster was used scenario approach.

If we consider the scenario of a return to the highest cargo handling state company "Odessa Commercial Sea Port" at the 2008 level, by the low-key (pessimistic) evaluation as a result of the calculations increase the port capacity in the cluster at 1 kt leads to an increase of the gross regional product of the Odessa region 200 thousand 980 UAH.

Also, if pessimistic assessment (ie, a minimum cluster implementation of the project) as a result of the calculations showed that to increase the gross regional product of the Odessa region of the current level of 1% is necessary to increase the current port capacity by 2 million 296 thousand tons [9; 10; 11; 12].

All these tasks are achievable. Their implementation can help Odessa transport cluster, which acts as the most effective way to improve the efficiency of the foreign activities of Odessa region.

## 5. Conclusions. The perspectives for further research

We offer unique economic and mathematical model for evaluating the effectiveness of investing in the creation of the cluster in the region's economy. An opportunity to evaluate not only return on investment within individual enterprises, but also the effect of investments in the cluster to scale a particular region or group of settlements that take into account the socio-economic impact of public investment policy in general. Using this model makes possible an adequate assessment of the assets of the cluster as a single production system based on externalities, which is definitely higher than the cost of individual enterprises. Application of this model will determine the most effective option for investment of public funds.

We offer unique, based on an analysis of international experience in the creation and development of clusters, the model and method of constructing an organizational structure that provides a real connection between the goals of the establishment and functioning of the cluster and its organizational structure by functional relations between its members and external contractors. This structure establishes clusterpreneur – particularly nonprofit organization that provides effective representation of real interests of the cluster, including representatives of private capital to the state. Having clusterpreneur will combine regulation undertaken by the relevant sectoral ministries, with territorial adjustment, which will increase its effectiveness. The proposed model has been tested in SE "Odessa Sea Commercial Port", which is the largest and most successful seaport of Ukraine. SE "Odessa Sea Commercial Port" provides 19% of the gross regional product of the Odessa region. On the basis of the port consider creating Odessa sea port cluster.

Constructing such cluster structure determinable methods and establish the necessary mechanisms within it, thus achieving such predictive results:

- the growth of gross regional product Odessa area per capita by 5% only as the effect of the inclusion of cluster port – the overall effect when creating a cluster would be more;
- return port in the cluster will increase to 171%, which is almost 2 times;
- income port cluster increased by 36%;
- port costs reduced by 14%;
- expected growth in fixed capital Port for 1.85 times.

The results and methods of modeling can be used at sea ports, transport and logistics and other industrial enterprises, as well as other sea port clusters. Defined in Article models are versatile because they can be used to design and build sea port clusters and other industry clusters, both in Ukraine and abroad. The proposed methods and models can be applied to the creation of clusters of various industries, including shipbuilding, chemical, metallurgical, mining and other industries.

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#### **Summary**

This article is dedicated to the economic mechanism of the dynamic sea port logistic (transport) cluster in the economy of the Odessa region. The need to transition to the new cluster structures and their implementation into the Ukrainian economy is caused by the high degree of efficiency, as well as the influence, which the ports and logistics businesses have on the economy of the country. In this paper, models of influence of transport and logistics companies in the form of cluster on the effectiveness of foreign economic activity of the Odessa region are associated with the State Enterprise "The Odessa Sea Commercial Port". The results can be used at sea ports, transport and logistics, and other industrial enterprises, as well as to create sea port dynamic clusters. Defined and described in the article models and mechanisms are universal, so they can be used for the calculations to improve the efficiency of foreign economic activity in different regions.

**Key words:** foreign economic relations; dynamic cluster logistic (sea port) model; human values; modelling of economic processes; quantitative changes; qualitative changes; "chain of values" inside the cluster; "Region-Cluster" model; economic justification of the dynamic logistic sea port cluster models; Odessa region.

#### **UD classification:** 658

# SELECTED ASPECTS OF MARKETING OUTCOMES MEASUREMENT

# W. Kozłowski; J. Michalak<sup>\*</sup>

# **1. Introduction**

Until the early 1960's, there is dominated the opinion that measurement of marketing outcomes was impossible because marketing does not produce measurable and tangible outcomes as explained among others by Buzzel. Only the breakthrough works by Sevin on marketing productivity analysis as well as by Kotler, Gregor and Rogers concerning marketing audit [1, p.12] became the inspiration for wide interest in the issue of marketing. Since then, measurement of marketing expanded beyond not only in the field of interest of financiers and accountants but also the scope of its application expanded from assessment of selected aspects of marketing activities to comprehensive evaluation of marketing outcomes. The popularity and importance of measuring the outcomes of marketing also increased. That measurement involves selection and interpretation of appropriate measures. Creating exhaustive and universal set of measures, however, is impossible. In addition, specific conditions and methodological problems involved in the measurement make absolute accuracy of marketing outcomes evaluation impossible.

#### 2. Levels of marketing outcomes measurement

During marketing outcomes evaluation are applied such notions as marketing productivity, marketing efficiency, marketing results, marketing efficacy and marketing effectiveness measures. As those notions are not equivalent and in practice they are frequently used as equivalents causing numerous cases of misunderstanding, it is justified to make clear interpretational differentiation of those terms. At the same time, one should realise the lack of consensus as concerns the definition of each of those notions. Sevin was one of the first authors to introduce the notion of "marketing productivity" to the subject literature. He defined it in the category of effectiveness stating that it is the "ratio of sales and net profits to marketing costs for a defined business segment". Currently marketing productiveness is considered according to two extremely different approaches. First as "efficient effectiveness" interpreted as achievement of marketing activities effectiveness at low costs. Second, it is interpreted as the "chain of marketing productiveness" that represents the holistic approach explaining how marketing activities increase the value of the company for its shareholders [2, p.26-27]. Marketing efficiency is the notion encompassing two notional and analytic sub-categories, i.e. efficiency and effectiveness. According to the general approach, it is a business process or marketing decision supporting the system that evaluates the results of marketing activities and their influence on the enterprise results. In that process, the measurement and evaluation of marketing outcomes is linked to use of appropriate indicators. They represent the tools that help quantification, comparison and interpretation of the marketing activities' outcomes. Within the wide spectrum of them, a specific group of indicators referred to in the Anglo-Saxon literature as "marketing metrics". They are defined as the measures of achievements that the highest-level management staff uses or should use regularly to trace and evaluate business development [3, p.76].

Considering lack of clarity in interpretation of the category of efficacy in the works on organisation and management as well as marketing, appears the reflexion of general. Efficacy is the function of reciprocal relation between the assumed goal of activities and the result achieved that is the actual outcomes. Consequently, it is the ex-post category as efficacy evaluation is possible only when the

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measurable goal of the activities is defined earlier, which is then confronted with the results achieved through taking those actions. As different from efficacy, effectiveness is an economic category and it concerns evaluation of the outcome of activities by business entities from the perspective of outlays used (costs incurred) in the economic process [4, p.70–73]. Effectiveness should be treated as the priority economic criterion for both the choice and evaluation of marketing strategy or individual actions undertaken within the frameworks, linking the results achieved with the outlays causes.

#### 3. Importance of marketing outcomes measurement

Clark [5, p.711] indicates four phenomena motivating managers to evaluate marketing outcomes. First, it is the observed change in marketing perception towards treating it as the source of creating sales and consequently the profitability and growth of the business. Second, the increasing demand of investors for information concerning the quality of marketing efforts that traditionally used to be poorly presented and underestimated in the financial reports is the source for increased interest in measuring marketing. Third, establishment and popularity of such concepts for comprehensive methods of measuring the results of businesses as the "strategic results scorecard" by Norton and Kaplan of "rate of return on marketing investment" by Lenskold, gave the impulse for searching for the answer to the question "what marketing measures should be included in the system of comprehensive evaluation of business outcomes?" Finally, the increase in the interest of marketing concerning the traditional measures of outcomes that undervalued the contribution of marketing to the financial results of the organisation.

Stewart [6, p.636] highlights that the increasing marketing costs and their significant share in total expenditures are the source of pressure faced by the managers in the area of providing more evidence that marketing strategies accepted would really lead to higher profits, business value and the value for its shareholders. Rust, Ambler, Carpenter, Kumar and Srivasta [7, p.77-79] in turn justify measurement of the financial outcomes of marketing by the statement that in that way the position of marketing itself in the enterprise would be strengthened. Halachmi [8, p.506] believes that if something cannot be measured then it cannot be understood, and if something cannot be understood then it cannot be controlled. And then, if something cannot be controlled, it cannot be improved. Solcansky, Suchrova and Milchowsky [9, p.1323] motivate that measurement of marketing outcome measurement is justified by the necessity of increasing competitiveness of the organisation and its effective functioning in the market in relation to competitors. Clark, Abela and Abler [10, p.191–193] highlight the informative function of the measures, which helps the organisation in taking better decisions based on the information. From that perspective, referring to the core of the organisation marketing orientation in the cultural and governance dimensions, we should agree with the opinion expressed by Kozielski [11, p.454]. He believes that "measurement of effectiveness permits transformation of the marketing philosophy into actions, concepts into decisions and organisation culture into the sphere of governance". Consequently, by means of measurement, the marketing culture in the organisation can be built and it becomes the link between the marketing cultural dimension and the marketing governance dimension, which are coexisting components of the organisation marketing orientation.

In its nature, measurement and evaluation of marketing strategy outcomes and marketing instruments cause numerous problems making measurement of marketing continually imperfect. The existing controversies in the world of science and the world of practice in the area of perception of marketing and its role in management are the primary source of those problems. Although in the subject literature, the opinion is presented concerning the key role of marketing in enterprise management, which would motivate its evaluation [12, p.863–865] opinions still appear concerning marginalisation of it. As pointed out by, among others, Verhoef and Leeflang [13, p.17] as long as there is no evidence for marketing contribution to the organisation financial result the role of marketing will be marginalised. That situation will represent a significant barrier decreasing the

motivation and scope of marketing outcomes measurement. This is additionally highlighted by the fact of functional perception of marketing limited to its responsibility for promotion and sales only in the competitive combat. In that situation, the contribution of marketing to long-term organisation development and currently exceptionally important role of marketing in creating value through building lasting relations with the marketing chain participants, i.e. clients, suppliers and distributors is disregarded [14, p.97].

# **4.** Dilemmas of measurement – the problem of marketing outcomes identification and choice of indicators

Appropriate measurement of marketing effectiveness requires precise identification of outcomes, which is exceptionally difficult or even impossible. Determination of outcomes resulting from marketing investments is troublesome as not all the final outcomes should be linked only and exclusively to marketing activities. Consequently, the results may be dependent or independent of marketing. This is highlighted additionally by the fact that the outcomes are also influenced by the external environment in which the organisation functions, i.e. many factors that are beyond the organisation control and in particular, actions and reactions by the competitors. In that light, Brooks and Simikin [15, p.3-4], referring to Ambler, expose two difficulties related to marketing outcomes measurement. First, marketing activities result in both tangible and intangible outcomes. If marketing activities generate tangible outcomes (e.g. the sales level or market share), the measurement of those outcomes is relatively simple. On the other hand, evaluation of intangible outcomes such as the brand value or customer satisfaction is difficult. Although measurement of such outcomes is not impossible still, in the best case, it is just the estimation. Second, marketing activities result in outcomes observed in both short and long time perspective where we deal with time lapse in obtaining the outcomes in relation to the outlays incurred. In the first case, measurement of the outcomes is relatively simple. Measurement of the long-term outcomes, however, is more difficult as it requires relying on numerous assumptions that are open for manipulation. Additionally, in that case the problem appears of determining the long-term outcomes of actions taken and of applying the appropriate measures.

There is no agreement in the subject literature concerning the outcomes that should be measured and consequently the indicators that should be employed. Traditional approach to market activities measurement and evaluation is based on the use of financial indicators. That approach dominated until the early 1980's where the outcomes were assessed mainly from the level of sales perspective. Because of the critique of the financial approach to measuring marketing resulting from short-time focus, static presentation of metrics, registration of outcomes of actions taken in the past, management accounting perspective and negligence of intangible effects the interest in nonfinancial measures increased [16, p.49]. Within that approach that historically started during the early 1980's it is assumed that the measurement of marketing outcomes should be conducted using non-financial measures only. Those measures reflect various areas of marketing activities and because of linking them to the strategic goals, they represent long-term perspective of marketing activities. Within that trend, the market share as well as customer satisfaction and loyalty are exposed specially as the outcomes of marketing activities. The currently visible practice of establishing measurement systems that contain both financial and non-financial indicators is the consequence of those two different approaches. Currently, the increasing importance of the financial measures (return on investment, client value) is observed.

Marketing generates diversified outcomes. A wealth of potential indicators for evaluation of those outcomes can be used at different levels of management. This in itself does not make measurement of marketing effectiveness easier because the issue of selecting the indicators that are the most valuable from the perspective of the organisation has not been solved fully yet. In that area of dilemmas, Clark [5, p.712] points at the evolution of the measurement system. To quote that author, "measurement of marketing outcomes has been shifting over the years in three directions: from financial to non-financial measures, from output to input measures and from single-dimensional to

multidimensional measures". Seggie, Cavusgila and Phelan [17, p.837] point out additionally that the evolution is also taking place in the direction from looking into the past towards looking into the future, from measuring short-term to measuring long-term outcomes, from using macro data in the measurement to using micro data, from independent indicators towards the cause and effect chain, from absolute to relative measures and from objective to subjective measures. Gao [2, p.31] complements those evolution directions with a relatively new trend (from single-dimensional to multidimensional financial measures) based on the increasing demand for the "financially responsible marketing" that combines the marketing efficiency with the value of the organisation and value for the shareholders. Measurement of marketing outcomes is a complex and difficult process. It requires productivity evaluation of numerous market instruments and actions, which forces the necessity of using not only financial, but also non-financial measures in the measurement. The decision on whether productivity of all activities should be evaluated. Measuring the effectiveness of the strategy or maybe just choosing the main components should be assessed, remaining a still unsolved dilemma. In the circumstances when, on the one hand, linking a specific activity with its specific outcome and outlay becomes difficult, and on the other marketing should be treated as the integrated set of marketing instruments and activities, it is difficult to evaluate efficacy and effectiveness of a single activity because only a combination of activities gives the required outcome. Hence, it is justified to measure effectiveness of marketing at the aggregated level, i.e. in case of the whole set of activities or the entire marketing campaign

# 5. Dilemmas of measurement – problem of marketing costs identification and measurement

Not only precise identification of the outcomes, but also appropriate recording of the costs and linking them to appropriate marketing activities and outcomes represent the necessary conditions of marketing effectiveness measurement. However, in that area also we deal with numerous problems. As indicated by the studies under the leadership of Garbarski [18, p.459], there is no comprehensive approach to identification of marketing activities costs, which has its source in the unclear interpretation and, consequently, categorisation of "marketing costs" and the difficulty in separating them from the total costs incurred by the enterprise. During the last couple of decades formulation of different opinions on what should be treated as marketing costs was observed. In the light of the above, the undertaken attempts at definition and categorisation of individual outlays to individual types and fragmentary nature. The above causes their limited potential for making practical use of them for accounting and consequently in effectiveness measurement.

Understanding marketing itself is the key problem in practice limiting measurement of marketing outcomes at the level of costs of attaining them. If the outcomes are understood in a very wide way then costs are frequently taken in an excessively narrow way. As marketing is most frequently treated as equivalent to promotional activities, the identification of costs is narrowed to the costs of advertising and widely understood costs of representation. Resulting from narrow or wide treatment of marketing narrower or wider inclusion of marketing expenditures into the marketing costs has its consequences for marketing effectiveness evaluation reliability. As rightly noticed by Garbarski and Czarnecki [18, p.501], while we will be dealing with either overstating or understating the marketing effectiveness, not only appropriate allocation of marketing costs but also the computation of them is necessary. Therefore, determination which activities in the organisation should be treated as marketing activities becomes the fundamental base for allocating the appropriate cost items to them. Limitation of the measurement results in that context also from the difficulty in identification of costs that can be generated outside the marketing department, incurred by that department and external entities providing marketing services. In this case deciding that specific costs are marketing costs should be decided not by the fact who generates them but whether they are related to the marketing activities undertaken.

In the area of recording the costs of specific marketing undertakings important differences in the

approach to and expectations from the system of recording them expressed by financial and marketing managers appear. These results in lack of cooperation and effective communication between the departments of marketing and finance and the enterprise management aimed at establishing such a system of costs recording and consequently the marketing indicators that would show the financial consequences of marketing activities undertaken. As shown by the practice, the legally binding costs classification system developed to meet the needs of financial reporting is the cause for impossibility of complete marketing costs identification. This is a consequence of absence of the precise marketing costs understanding in the binding regulations. The effective accounting system, focused on the tax-legal perspective, contains no notion of marketing costs. It contains the notion of advertising costs are set next to the costs of sales. Its limited use is also a consequence of the absence of the definition of marketing costs. This hinders appropriate separation of marketing costs from the total enterprise costs as well as recording and desegregation of marketing costs. Consequently, it is difficult to link a specific item of costs to a specific marketing activity.

Traditional accounting focuses on accounting for the outlays on products to meet the needs of the pricing policy. According to Karasiewicz [19, p.24], measurement of marketing outcomes at the level of effectiveness would be easier if the marketing outlays could be allocated to products (brands), market segments and buyers, distribution channels, geographic markets, sales methods of salespersons. In case of marketing costs, the method for accounting for the outlays over time is still a problem that has not been solved completely, which applies in particular to long-term outcomes. Marketing outlays, with the exception of sales promotion, which is short-term in its nature, generate outcomes spread over time and contribute to creating assets. Consequently, the time dimension of marketing costs in the aspect of putting the outcomes off in time causes that marketing outlays should be treated as long-term investment.

#### 6. Conclusion

Measurement and evaluation of advertising outcomes is linked to the choice and interpretation of appropriate measures. However, creating a complete and universal set of measures is not just impossible. Specific conditions and methodological problems related to measurement make also absolute accuracy of efficacy and effectiveness evaluation impossible. Although the measurement toolbox has been expanded over the years providing a wide spectrum of potential indicators that can be used, the managers should develop the evaluation format that is individual and specific for their enterprise. Indifferent of what system is developed in every organisation for evaluation of outcomes, it must be useful informatively. This means that before specific measures are applies, it is necessary to identify and record the outcomes and costs by linking the outcomes to activities and, in turn, the activities to the costs and outlays. If such a chain of mutual links is developed then implementation of necessary corrective actions becomes possible in case of inefficient / ineffective activities or activities characterised by low level of efficacy/effectiveness. It will form, at the same time, the baseline for marketing budgeting assuring appropriate allocation of resources to marketing activities and operations taken with the aim of attaining the goals assumed.

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#### Summary

The article presents the theoretical considerations of marketing results measurement. The main attention is directed towards emerging problems on the ground both identification and choice of marketing outcomes indicators, assessed at the level of efficiency and effectiveness, and marketing cost identification and measurement. The main conclusion is that specific conditions and methodological problems related to measurement make absolute accuracy of marketing productivity evaluation impossible. This is mainly due to difficulties in the area of precise identification marketing results, measurement of the short-term and long term outcomes, selecting the indicators and appropriate recording of the costs and linking them to appropriate marketing activities and outcomes.

Key words: marketing outcomes; efficiency; effectiveness; measurement problems.

**UD classification:** 336.71

# CROSS-BORDER COOPERATION DEVELOPMENT: UKRAINE'S POINT OF VIEW

# Yevhen Kravchenko<sup>\*</sup>

# **1. Introduction**

European choice and the integration into European Union is the strategic foreign politic course of Ukraine. When Partnership and Cooperation Agreement between European Union and Ukraine entered into force, it was adopted the Ukraine's integration strategy into the European Union. One of the key areas of the Ukraine's integration into European structures stands cross-border cooperation. Cross-border cooperation is one of the perspective directions of international integration. Areas of cross-border cooperation include development of border infrastructure, tourism and recreation, ecology and environment, fighting crime, cultural exchange and so on. A new milestone in the development of cross-border cooperation of Ukraine became with spread of the European Neighbourhood Policy into the Ukraine's territory, which opens up great prospects for economic integration, because of offering a wider range of mechanisms of interaction.

Aim of the article is to study the influence of mechanisms and instruments for cross-border cooperation development on the formation of competitiveness of Ukrainian regions and to identify possible ways of consideration benefits of cross-border cooperation.

# 2. Analysis of researches and publications

Problems of regional development and cross-border cooperation were studied by many Ukrainian scientists, among them: O. Amosha [1, p.159–176], Y. Kish [2, p.168–172], N. Mikula [3, p.10–57] and others. However, the impact of mechanisms and instruments of cross-border cooperation on the competitiveness of Ukrainian regions is little research in the context of current European integration processes and the Ukraine's participation in them.

# 3. Statement of the basic material

The current state of international economic relations makes it necessary to search new forms of cross-border cooperation in order to increase the efficiency of the cooperation and competitiveness of regions, which take part in it. Cross-border cooperation is a joint action aimed at establishing and deepening of economic, social, scientific, technical, environmental, cultural and other relations between local communities and their representative bodies, local executive authorities of Ukraine and local communities, relevant authorities of other states within competence as defined by their national legislation [4]. In addition to the above-stated roles, cross-border cooperation plays a role of a "pulse (potential) of growth", and cross-border regions, in their turn, – "poles of growth". If to illustrate the movement of social and economic development from West to East, from more developed economic environment to less developed (Fig. 1), and note that social and economic development in each i-country occurs from center (Si) to the periphery (Ai and Bi), then cross-border cooperation creates additional opportunities to mobilize resources of the territory (AiAi' and BiBi') for accelerating its socio-economic development and improvement of life quality. i = 1,...,n, where n - number of states considered.

As can be seen from the figure, resource potential of border regions (shaded triangle) can significantly accelerate the development through cooperation by bringing together potentials and usage of more advanced society. Considering that the potential of border areas is different in both states and in neighboring ones, ie AiAi '= BiBi' and BiBi '= Ai +1 A'i +1, development will be provided by the sum of AiAi' + BiBi ', which will adjusted by a factor  $\lambda$  - active cross-border

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cooperation. A certain analogy can be made with the basic tenets of the theory of boundary processes. On the one hand, cross-border cooperation plays a role of increasing capacity, on the other – eliminates the presence of the border, reducing its barrier function [5, p.684-685].



Fig.1. The role of cross-border cooperation in regional development [5, p.684–685]

However, due to cross-border cooperation can be changed the trend of regional development "center – periphery" and eliminate the analogy between the "border", "peripheral" and "backward." In other words, you can agree with J.-P. Lehner, who says "... that cross-border regions allow you to change peripheral to the central situation" [6, p.291–292]. There are several forms of cross-border cooperation, such as: in the euroregion form by agreements on cross-border cooperation in specific areas, by establishing mutually beneficial contacts between business cross-border cooperation and so on [4]. The main objective of new forms of cross-border cooperation is to accelerate growth by combining the efforts of participants, providing competitive advantages of cross-border regions. The classification of new forms of cross-border cooperation you can find on the Fig. 2.

From the most common organizational forms of cross-border cooperation, experience of which is gained in both Europe and Ukraine, in particular, are the "cross-border clusters" and "cross-border industrial zone." Their further development, improvement of operational efficiency will help revive economic activity and stimulate economic growth that positively affects the alignment of indicators of socio-economic development and competitiveness of the region in line with European standards. Implementation actuality of such forms as cross-border cluster and cross-border industrial zone in the Ukrainian regions is caused by a number of trends and characteristics, given below. Firstly, Ukrainian regions use a little the potential of industrial zones and clusters, including cross-border, which is the main component of institutional innovation and investment model of economic development. Their implementation would radically improve the situation of investment and competitiveness in the regions and in country whole.

The policy of cross-border industrial zones and cross-border clusters using was most common in cross-border regions of Europe and, as shown practice, these forms significantly contribute to the economic development of border areas, stimulate innovation and investment in the region, ensuring efficient use of resources, and create jobs in the outlying, remote from central areas. Secondly, the inefficient use of euroregions as the organizational forms of cross-border cooperation, whose tasks is to facilitate obtaining funds for cross-border co-financing projects with European Union structural funds and other international financial institutions. Thus, the activity of cross-border cooperation within the Ukrainian euroregions is defined as low. It suggests significant unused potential of euroregions, which can be the coordinating structures for the development of European Union regional policy aimed at supporting the development of border areas provide opportunities for additional funding for cross-border projects with budgets of cross-border programs. Ukrainian regions are involved in following cross-border programs: "Poland-Belarus-Ukraine 2007-2013", "Hungary-Slovakia-Romania-Ukraine 2007-2013", "Romania-Ukraine-Republic of Moldova 2007-2013" and "Black Sea 2007-2013".



Fig.2. Classification of new forms of cross-border cooperation

Source: developed by author.

There are the institutional cooperation and the promotion of socio-economic development of border regions among the priorities of these programs. In particular, it is supported the projects of formation of cross-border industrial zones and cross-border clusters. However, the low activity of the Ukrainian side has led to a relatively low presence in the lists received grant funding. This situation could provide a further stage of the implementation of the ENPI (European Neighbourhood and Partnership Instrument), which, unlike other countries, Ukraine's interests were not represented properly.

Thirdly, in Ukraine there is no corresponding state support of innovation infrastructure (including crossborder industrial zones and cross-border clusters). Unlike cross-border industrial zones, which operate within a clearly defined territory and require significant investments in infrastructure, cross-border clusters combine voluntary participants who freely placed in a cross-border space. This makes it more affordable to implement, with appropriate government support [7, p.23–26]. We think it should be carried out reform of national legislation regarding cross-border cooperation of Ukraine. Law of Ukraine "Cross-Border Cooperation" defines only the basic foundations of such activities. So should be the Law of Ukraine on such forms of cross-border cooperation as cross-border cluster and industrial zone, which would clearly define and regulate the activity of these forms. Equally important is the transition to creation of the cross-border industrial zones (parks) along with the promotion of regional innovation activities with a view to forming peripheral region of the structure, which would play a role of business incubators and would help investors to start production, creating a financial intermediary in obtaining funds financial assistance from European Union structural funds.

As the coordinating structure of cross-border clusters or industrial zones should use euroregions, which, however, is that institution, which must develop and implement a strategy of the crossborder region. Taking into account that cluster strategy applies to all strategies aimed at creating a favourable environment for cooperation between different stakeholders at local, regional, crossborder, national and supranational levels, euroregion can and should take on the role of "centre" through which information is exchanged and activities of cross-border cooperation between members of the cluster or industrial zone are coordinating. Development and implementation of effective, transparent project management, monitoring and evaluation of cross-border projects on the basis of transparency and accountability will allow public participation at all stages of project implementation. For this purpose, it will be appropriate to involve cooperation with the authorities leading, research institutions, NGOs and experts of European Union in cross-border cooperation (Joint Technical Secretariats). An important role may take the providence of organizational and financial support to participants in international projects implemented within the European Union cooperation programs with neighbouring countries. This will ensure the transfer of powers to local authorities regarding the selection of projects of international cooperation. The introduction of such a financing is subject to the state budget formation "from below to the top" and the transfer of authority from the forming of local budgets communities that ensure their financial independence in the implementation of joint international projects, including cross-border ones.

Regional authorities and local governments should implement active support of economic interregional and cross-border cooperation and also should consult the economic entitles, who look for partners across the border, as support business contributes to the economic development of the region and increase revenues to local budgets. This solves the problem of limited financial resources and allows you to provide the mandatory introduction of funding for cross-border projects. This may contribute to implementation of the mechanism of preferential landing loans (low interest rate) for the Ukrainian beneficiaries of cross-border European Union programs to enable them to finance the required 10% of project budget (principle of co-financing).

## 4. Conclusions

1. Using the advantages of cross-border cooperation acts an important factor in strengthening the competitiveness of the regions in post-crisis stage of Ukraine's economic development and limited public funding for equalization of regional disparities of socio-economic development.

2. Intensification process of cross-border cooperation are complementary, and therefore experience of inter-regional cooperation can be successfully used to improve cross-border cooperation and strengthening the competitiveness of the Ukrainian regions.

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#### **Summary**

The state of cross-border cooperation in Ukraine is determined in the article. Mechanisms and instruments of cross-border cooperation development are proposed by the author to enhance the competitiveness of the Ukrainian regions. Recommendations concerning cross-border cooperation development are highlighted.

**Key words:** cross-border cooperation development; cross-border cluster; cross-border industrial zone; competitiveness.

**UD classification:** 339. 942 (447)

# QUALITY MANAGEMENT – A WAY TO BUSINESS EXCELLENCE

# Krystyna Lisiecka; Ewa Czyż-Gwiazda<sup>\*</sup>

## **1. Introduction**

Quality constitutes a basic prerequisite to pursue excellence [1, p. 317–318]. Quality should be a way of life, a way of behaving so that individual and collective contribution is maximized along with personal and organizational advancement through continuous improvement and learning. Harmony, creation of stability in a dynamic self improving circle, constant monitoring, team working, continuous learning and personal advancement through reflection and conjecture are factors that explain and describe "excellence". The different excellence models and frameworks can help in the identification of suitable and dynamic performance dimensions, relevant quality criteria and the transformation of human behaviour and action through a mentality of excellence. In this aspect quality management in organization constitute a way to business excellence. The goals of Total Quality Management (TQM) are to satisfy customers, prevent poor quality rather than correcting problems, develop an attitude of continuous improvement, understand the value of measuring performance to identify opportunities and maintain improvements, and to eliminate chronic sources of inefficiencies and costs. These goals could be achieved if there is a total commitment by entire organization (including top-management and employees) as well as principles of TQM are fully understood by them [2, p.564]. It is highly obvious that there are striking similarities between the TQM and the content of excellence. It can be observe, that in the time the concept of quality and quality management has changed and evolved. A path of quality management development is going to be a way to business excellence.

## 2. Quality management and business excellence

Previously quality management focused only on quality inspection. Quality inspection deals with counting, grading and sorting to ensure that customers do not receive defective products. Than quality inspections included quality assurance and finally total quality management (TQM). Quality control applies various statistical techniques such as control charts and sampling plans to monitor processes. Quality assurance emphasizes process control to conform to customer requirements. The traditional quality management approach was reactive and result-oriented, whereas the modern approach to quality management is broader and now also emphasizes quality at source or process control, at every stage, to prevent any errors that could cause defects. The latter is a proactive process-oriented approach [3, p.252].

In the literature we can see, that the term "control" was replaced by "management". This was because quality is not only a control issue, but also a management issue and TQM concept was introduced. Many countries have developed this further by developing their own TQM frameworks, which are used as the basis for national quality award criteria, to promote quality awareness and to improve their business sectors such as the Malcolm Baldrige National Quality Award (MBNQA) or European Excellence Award. In the literature there are defined different levels of TQM development. For instance, quality management can be classified according to set of five levels: could do better; room for improvement; promising; vulnerable; potential winners; and world class [3, p.252]. Achieving a business excellence is not easy - it is a great challenge to whole organization. Probably it is not achievable at all. It requires often a change in management and leadership skills at every level of an organization.

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Category of excellence has been the subject of interest many generations of thinkers – philosophers, researchers, practitioners. Its roots began in the distant times, and attempts to define the category of excellence concern different aspects. Excellence is a change in philosophy, culture or strategy. It is a form of conceiving the business world. Excellence can be understood and developed in several ways. Philosophers saw the main source of human excellence in human's wisdom. Excellence in the tradition of Greek philosopher is closely linked with the idea of good, which may be defined by specific characteristics or actions which describes. According to Confucius self-controlling and self-development through long life training and education are seen as a method of execution of the entire human potential and as a way of achieving harmony in society in general. He underlined the unique role of leaders – the brilliant people, excellence people. Excellence in this context means doing ordinary, everyday things and it is not depends on comparing the results with others. It should refer to the human's efforts how they constantly mobilize themselves, are excellent and use their ability throughout the whole life.

In the organization's management literature can be found many attempts to define the concept of excellence and to build models that contribute to the exploitation of the possibilities and capabilities for achieving business excellence. Phenomenon of excellence is not easy to "catch" and evaluate. Authors in a similar way define the category of excellence and improvement. And so for example: improvement refers to raising the efficiency of the functioning of the organization [4, p.28]; improvements are the areas that changes in the activities of each organization [5, p.258]; excellence means each deliberately implemented improvement placed in the executive and management system of the organization, aimed at improving the efficiency of organizational functioning [6, p.116]; organization's improving means raising organizational efficiency of its functioning, it is not related only to changes in the environment. It is an integral part of the operation of the company and is part of the strategy [7, p.17]. Such understanding of excellence category implies system approach including system thinking as cause-effect method which allows organization to realize continues improvements. In process of continuous improvement is important to be aware that it is always unfinished. This is precisely the potential of excellence models as an optimal orientation for the strategic management of competitive companies.

The place of excellence category can be seen following through evolution of the quality concept [8, p.136]: inspection; quality control (emphasis  $1^{st}$ : prevention; emphasis  $2^{nd}$ : product and processes); quality assurance (emphasis  $1^{st}$ : customer; emphasis  $2^{nd}$ : continuous improvement); total quality; excellence (emphasis on ethics aspects and social commitment). Another describe a so-called evolution of excellence based on a series of phases started form the pre-excellence and leading to today's excellence 5.0 which is describe as an "innovative integrated development which is fundamentally viewed as a combination of strategic management and change".

In Management Sciences excellence as important issue has become a subject of interest for many researcher representing both science and practice of management. The category of excellence was took up by such authors as for example: T. Peters, R. Waterman, S.M. Dahlgaard-Park and J.J. Dahlgaard, J.S. Oakland, N.L. Frigon and H.K. Jackson, as well as representatives of such organizations as: School of St. Gallen, Mc Kinsey or Toyota. Some eminent thinkers, e.g. Deming, Ishikawa, Peters, Imai etc. have advocated a quality as the foundation stone of excellence; where as other eminent experts like Juran, Crosby have focused on the immediate needs of the business [9, p.4].

In the organizational context, business excellence is a framework that offers systemic view, asks for high engagement of human resources, enables self improvement and evolution and thus it contributes to constant change and conformance to new situations through quality monitoring at each stage and every process of the organization. From the management perspective, excellence acquired different meanings according to the dominating school of thought each time (table 1).

Also the review of business excellence models of the organization shows that they can be divided into some different groups. On the basis of our study there were identified three main groups of

business excellence models: international and national Quality Awards (European, American, Japan, Polish, etc.), ISO Standards and works of scientists, researchers and practitioners. Table 2 shows three main groups of business excellence models of the organization.

School of thought	View on excellence	
Classical	Work division, mechanistic orientation, hierarchical coordination	
	Peters and Waterman (1982) "Excellent companies present the strengths	
	of innovation, ability to change and a leadership that excels through their vision	
	and values"	
Behavioural	Emphasis on human, motivation of Workers	
	Peters and Austin (1985)	
Socio-technical	The enrichment of tasks and the implications of the actors in defining the	
	socio-technical organizational environment (under a dynamic perspective)	
	Peters (1988)	
Structural/systems	Global treatment, combination of management theory and hard sciences	
	Xerox Excellence Models (1990, 2002)	
Neo-classical	Combination of learning from the classical and behavioral school	
	Senge (1990) influenced by Argyris, Forrester, Deming and Dewey	
Sociological	Analysis of organizational actors, their behaviours, the importance of	
	power can lead to excellence	
	Aubert and de Gaulejac (1992)	
Models/frameworks	Excellence through strategy, structure, systems, staff, shared values,	
suggested by	skills and style	
McKinsey 7S 1980	Deming Prize 1951 MBNQA 1987 EQA 1991	
Pascale and Athos,	Focus on human and superior values to form a guiding vision	
1981	The 4P model Dahlgaard and Dahlgaard-Park (1999, 2003); Toyota 4P	
	model Likert, 2004	

 Tab. 1. Views on excellence – review the evolution of excellence in management

Source: Anninos L.N., The archetype of excellence in universities and TQM, Journal of Management History, 2007. – Vol. 13. – No. 4. – P. 317–318.

Excellence models according to				
Quality Awards	ISO Standards	Academics, researchers,		
		practitioners		
<ul> <li>1. Most famous Business</li> <li>Excellence Models (BEM) used as global reference models: <ul> <li>EFQM Excellence Model</li> <li>in Europe (European Foundation for Quality Management)</li> <li>MBNQA in USA (Malcolm Baldrige National Quality Award)</li> <li>Deming Prize in Japan</li> </ul> </li> <li>2. National Quality Awards (NQAs), e.g.: <ul> <li>Polish Quality Award</li> </ul> </li> </ul>	<ul> <li>Requirements of standard ISO 9001</li> <li>Self assessment according to ISO 9004</li> <li>Self assessment according to ISO 10014</li> </ul>	<ul> <li>T. Peters, R. Waterman</li> <li>J.S. Oakland</li> <li>H.J. Leavitt</li> <li>P. Senge</li> <li>S.M. Dahlgaard-Oakland</li> <li>Park and J.J. Dahlgaard,</li> <li>N.L. Frigon and H.K.</li> <li>Jackson</li> <li>School of St. Gallen</li> <li>Mc Kinsey</li> <li>Toyota, etc.</li> </ul>		

Source: own work.

These three main groups of business excellence models were describe below.

## 3. Excellence according to national and international Quality Awards

There are business excellence models described by the criteria used in national and international Quality Awards, such as: the European Quality Award – EQA (with the EFQM Excellence Model), the Malcolm Baldrige Quality Award (USA), W.E. Deming's Prize (Japan) or the Polish Quality Award. The Deming Prize was the first award, established in 1951. It was set up by the Union of Japanese Scientists and Engineers (JUSE) to commemorate W.E. Deming's contribution to the Japanese industry in quality area and to promote further the continuing development of quality control in Japan. The Prize is given to companies that have achieved distinctive performance

through the application of company-wide quality control [10, p.463; 11, p.22–24]. The MBNQA (Malcolm Baldrige National Quality Award) was established in 1987 by the US government as a statement of national intention to provide quality leadership and improve the competitiveness of the USA companies. The European Quality Award (EQA), known as the EFQM Excellence Model, was established in 1991 with the support of the European Organisation for Quality and the European Commission [10, p. 463–464]. The EFQM Excellence Model is a management framework, often used as a diagnostic tool to implement the principle of continuous improvement for organizations which implemented TQM strategy [12, p.1,6]. In the 1990s there were very few scholars exploring the EFQM model. Studies on the EFQM model were actively started in 2000, because the majority of papers were published during that time [13, p.690]. The EFQM Excellence Model is based on 9 criteria divided into two areas of "potential" and "results" [14, p.117].

The Deming Prize, MBNQA and EFQM excellence model are the famous and recognized worldwide quality awards. With the objective of helping industries to enhance competitiveness in their respective countries, several national governments and industry associations came forward and established national (NQA) and regional (RQA) quality awards to serve as business excellence models. Most European countries adopted the EFQM excellence model as the basis for national quality awards during the period 1994-1998; however, there has been a tendency towards homedeveloped national quality awards or modified EFQM models during the decade 2000 onwards. Simultaneously with Europe, several countries in Asia evolved their own business excellence models too, mostly using the EFQM excellence model and MBNQA as their reference (e.g. India in 1994, Singapore and Japan in 1995, Philippines in 1997, Fiji in 1998, Thailand in 2001). The study of Talwar allowed identifying 100 BEMs/NQAs being used in 82 countries worldwide [11, p.22–24]. Some findings of this study shows that: three major BEMs (i.e. MBNQA, EFQM and the Deming Prize) are recognized worldwide and used as the basis of most BEMs in various countries; BEMs/NQAs are dynamic, are reviewed periodically, and have also changed over the years; the objectives and core values of most of the BEMs/NQAs are similar, and focus on enhancing the global competitiveness of companies of their respective countries; evaluation criteria of most of the BEMs/NOAs are similar although they differ in the relative criteria scores; there are identified three new criteria for BEMs - "values & process flow", "universal wellbeing" and "sustainable success"; the Deming Prize follows a hand-holding approach and is highly prescriptive supported with "TQM diagnosis" by the assessors - in contrast, most BEMs, including MBNQA and EFQM, are non-prescriptive by nature [11, p.28–29].

Carrying out the process of self-assessment is one of inseparable conditions to receive the prize. Self-assessment makes the extraordinary opportunity for organization to identify and often to discover their strengths and weaknesses (so-called potential improvements). Continues improvements help organization following the right path towards excellence, they make a right step in right direction on the "excellence roadmap".

# 4. Excellence according to ISO standards

On the other hand there are some ISO standards. ISO 9001 is the most famous standard. In this standard there are requirements for quality management system. Meeting the requirements of ISO 9001 standard allows moving organization closer to excellent. There are some similarities and differences between quality award models and ISO 9001.

In terms of main similarities: the quality award models (the EFQM and the MBNQA models) and ISO 9001 follow the principles of TQM that have ramifications for all functions of organizations. All three models encourage also companies to conduct value-added audits and emphasize process management to achieve organizational performance [13, p.686]. With regards to the differences, the three models have different purposes and managerial areas. Other differences are in importance of each category, scoring scheme and in maturity level [13, p. 686–687].

There are also other ISO standards, which contain e.g. ISO 9004, ISO 10014. The self-assessment

process is presented in these standards and outlines a path for building excellence in organization. The main criteria of self-assessment process according to ISO 10014 concern eight quality management principles while in ISO 9004 criteria are taken from quality management system requirements. Process of self-assessment, similarly to self-assessment process in quality award models, makes a lot of opportunity to the organizations and lead organizations to try sustaining the excellence. This process is continuous and never ending.

# 5. Excellence according to academics, researchers and practitioners of management

The category of excellence in the context of the organizational management and organizational results was presented for the first time 25 years ago by T. Peters and R. Waterman in their book "In Search of Excellence...". Model for analysis used by T. Peters and R. Waterman was a model of McKinsey – well known as McKinsey's 7S framework. This model consists of the seven criteria of success needed for achieving excellence in the organization divided into two groups: hardware which included: strategy and structure; software which included: style, systems, staff, skills, shared values [15, p.10]. Although T. Peters and R. Waterman did not define the category of excellence but through manager's work observation they came to the conclusion that managers are able to do more when they are careful about all 7S, and not only about hardware (structure and strategy). Additionally they noticed that real changes in large institutions are a function of manager understands of the organizational complexity and relationships between all key success criteria in 7S framework.

In 1985 T. Peters as co-author with N. Austin published work concerning excellence: "A Passion for Excellence". The conclusions of previous studies have been simplified by the authors and presented by less complex model. According to T. Peters and N. Austin excellence is conditioned by four key success indicators. These are: employees, customer care, continuous innovation and leadership (Management by Wandering Around – MBWA) which combines the first three indicators by gaining experience in the functioning of the entire organization and its knowledge at all levels [16, p.374].

TQM Model according to J.S. Oakland includes such items as: planning, process, performance, people (4P) and culture, communication and commitment (3C) [17, p.26–27]. 4P belong to hardware group should be integrated with software (3C) group. Only through high organizational culture, reliably and quickly communication and suitable commitment of all people in the organization can understand its processes, plan its development, control and achieve its determined performance.

Another proposal for a model of excellence is proposed by S.M. Dahlgaard-Park and J.J. Dahlgaard [16, p.372]. Their excellence model of organizational excellence is based on following "the 4Ps": people; partnership; processes; products. The 4Ps model consists of five components, among which leadership is a basis for organizational excellence [18, p. 11]. This model suggests that the basis for achieving the organizational excellence is to have excellent people, led by the leaders. Excellence people create the excellent partnership that creates excellence processes and products. This all elements together are the basis for defining the characteristics of excellent organization, which over time can become a foundation for building excellent communities and societies (excellent world). According to S.M. Dahlgaard-Park excellence can be attained if you: care more than others think is wise; risk more than others think is safe; dream more than others think is practical and expect more than others think is possible [18, p. 5–6].

Other organizational excellence model was presented by St. Gallen School [19, p.179]. This model joined hard elements from 4P model of McKinsey (strategy, structure, systems) with other three soft elements (culture of the organization, management style, problem solving).

Another approach to the construction of a model of organizational excellence can be found in the

work of the N.L. Frigon and H.K. Jackson [20, p.8]. In their model of Enterprise Excellence they used ideas from previously models of excellence and expanded them by adding others elements of value chain. Other elements which one can take into consideration during the building the excellence model may be those which are presented in the "4P Model of the Toyota Production System (TPS). The 4P Model of the TPS developed by Toyota Corporation is based on: the philosophy of management, processes, people and partners and problem solving. Listed above 4P of Toyota are based on the 14 principles of management formulated also by Toyota. The 14 principles of management were divided into four categories. The 4P Model can be considered as a validated example of organizational excellence model because of many years' standing using it in practice. It confirms large experience of Toyota corporation on the road to the excellence on the automobile market.

According to P. Senge there are five basic techniques (disciplines) of self-improvement of the organization. These are: personal mastery; mental models; building shared vision; team learning; systems thinking. Each of the presented above disciplines are needed to achieve excellence. It means that one cannot build the organization without a continuous learning of the organization. Organizations learn only through learning of individuals. This does not mean that learning of individual guarantees a learning of whole organization, but in general without individuals learning does not occur the learning of the whole organization. Individual learning is a precondition for organizational learning and organizational "walking" towards excellence. To activating cycle of deep learning are needed five basic disciplines of learning.

## 6. Conclusion

Business excellence is become the aim of the organizations. Excellence category follows evolution of the quality concept. In Management Sciences business excellence as important issue has become a subject of interest for many academics, researchers and practitioners, such as: T. Peters, R. Waterman, S.M. Dahlgaard-Park and J.J. Dahlgaard, J.S. Oakland, N.L. Frigon and H.K. Jackson, School of St. Gallen, Mc Kinsey or Toyota. There were identified three main groups of business excellence models: international and national Quality Awards (European, American, Japan, Polish, etc.), ISO Standards and works of scientists, researchers and practitioners which are the roadmap for organizations to strive after excellence. There was shown also the evolution concept of quality from quality management to business excellence. Because of this trend – comprehensive strive after excellence – a comprehension of good and excellence become a basic priority for every nation across the globe, for every organization and for every human being [1, p. 310].

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#### **Summary**

The purpose of the paper is to show the change in quality concept which evolved from quality inspection, through quality management to business excellence. The paper presents also evolved perceptions of excellence in management theory during the time and some different groups of business excellence models. The main research methodology is the literature review regarding business excellence.

Keywords: quality control; quality management; total quality management (TQM); business excellence.

**UD classification:** 339.137.24: 338. 2

# **EMPLOYEE MOTIVATION IN UKRAINIAN ENTERPRISES**

# Olena Machtakova\*

# **1. Introduction**

At the present time due to deepening of the globalization process Ukrainian enterprises are faced with the problem of increased competition and access to foreign markets. But Ukraine's overall labor productivity, measured as GDP at PPP per employee, is 16 percent of that of the United States (MacKinsey & Company, 2009) and it is one of the lowest in the Europe [1, p.9]. This may have implications for the attractiveness of Ukraine to foreign investors, despite low labor costs. In our opinion, many of the problems and failures of integration into the world economy in Ukraine have been associated with problems in the area of human resource management, and particularly in performance motivation and staff retention.

This article examines employee motivation in Ukrainian enterprises of sunflower oil industry and is based on case studies among employees and managers of the largest plants, members of the Association «Ukrolijaprom».

Ukraine is the second largest country in Europe and the second largest in the former Soviet bloc, with considerable strategic importance for Russia, the European Union, USA and China, because of its geographical position, raw materials and human potential.

The fat-and-oil industry was chosen as a subject of our research because of its strong influence on the Ukraine's economy. Ukraine, however, takes the leading position on the world market in the areas of sunflower seed and oil production. In Ukraine sunflower is the second most popular agricultural crop for cultivating (wheat occupies the first place), the majority of entities of agricultural activity is engaged in crop growing (over 40% of agricultural enterprises). In the current marketing year, agricultural enterprises of all forms of ownership stay as the main producers of sunflower seed in Ukraine, which produce over 80% from the general production of the oilseed in the country. In 2011 Ukraine took the first place in producing sun flower oil and reaches about 52% of the world market. The fat-and-oil complex is one of the largest branches of the food industry of Ukraine, which covers 10% of all produced commodities. To date, the country consumes 20% of the produced volumes of sunflower oil only, thus the industry is export-oriented and has strategic importance [2, p.1]. That is why the importance of this branch to the Ukrainian economy as whole may hardly be overstated and the necessity of study of employee motivation in sunflower oil enterprises is increased.

# 2. Motivation and the national system of values

Mentality can be defined as the collective mental programming of the people in the environment. Culture is not a characteristic of individuals; it encompasses a number of people, who were conditioned by the same education and life experience. When we speak of the culture of a group, a tribe, a geographical region, a national minority, or a nation, culture refers to the collective mental programming that these people have in common; the programming that is different from that of other groups, tribes, regions, minorities, or majorities, or nations.

Culture in this sense of collective mental programming, is often difficult to change; if it changes at all, it does so slowly. This is so not only because it exists in the minds of the people, but if it is shared by a number of people, because it has become crystallized in the institutions these people have built together: their family structures, educational structures, religious organization,

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associations, forms of government, work organizations, law, literature, settlement patterns, buildings and even scientific theories. All of this reflect common beliefs that derive from the common culture [3, p.43].

Most countries' inhabitants share a national character that is more clearly apparent to foreigners than to the nationals themselves; it represents the cultural mental programming that the nationals tend to have in common. But the concept of national culture or national character has suffered from vagueness. There has been little consensus on what represents the national culture of, for example, Ukrainians, Americans, Chinese, Russians, Japanese, French or Germans. We seem to lack even the terminology to describe it. At the same time, significant progress has been made in understanding cross-cultural differences in work motivation. Mediating mechanisms explain why motivational strategies vary in different countries [4, p.493].

Ukrainian scientist D. Boginya studies labor mentality of the Ukrainian nation and its influence on employee motivation [5, p.99]. Ukrainians have such psychological characteristics as industry, love of their land, traditions and culture; Ukrainian workers seem to have striving for success, wealth and respect of the society and community; despite they can be considered as individualists, they appreciate opinions and judgments of other representatives of their group. Ukraine, however, went through the social experiment of communism, but this experience was extremely negative, because collectivism is unfamiliar and even opposite to the Ukrainian mentality.

Y. Kondo and a group of Japanese scientists argue that an effective system of motivation functions well in all enterprises and all countries and doesn't depend on society, cultural traditions and system of values [6, p.32]. They have proved this fact by social cases and Kondo's system of motivation was successfully implemented not only in Japanese plants, but also in American industry.

At the same time we know some examples in history, that the same nation has showed antipodal results of productivity and socio-economic development because of quite different economic systems: highly developed West Germany and backward East Germany. That's way the question about correlation of national system of values, strategy of motivation and productivity is not so simple as it can seem to be at first sight.

## 3. Western theories of motivation and Ukrainian reality

Early management theories, such as Frederic W. Teylor's Scientific Management Theory suggested using financial compensation to impel motivation and job performance. However, work motivation has been of interest to industrial psychologist at least since 1930s, stimulated in large part by the famous Howthorne studies, which focused mainly in the affects of supervision, incentives, and working conditions [3, p.388]. The static-content theories of motivation are standard in Western practice of management. They underline assumptions about motivating employees in Western world. The best known theories are those of Maslow (1958), McGregor (1960), Herzberg (1968), McClelland (1987), and largely address the question "What outcomes are attractive to an individual and why?" The development of incentive schemes within Western companies tends to focus on the satisfaction of such needs identified by Maslow and Herzberg through job design, involvement and participation in decision making, promotion opportunities, working conditions and pay.

Yet Maslow's hierarchy of needs has been criticized as reflecting a particular individualist view of the world with "self-actualization" being at the top of the pyramid. In our opinion, in the Ukrainian situation are possible other versions of positions of needs in this hierarchy.

More appropriate for Ukrainian reality can be Herzberg's theory of hygiene factors where extrinsic factors, such as working conditions and money, when absent may cause demotivation.

Motivators or intrinsic factors include content of the task, achievement, responsibility and growth. Belongingness may well be a "hygiene" factor in this sense, where if this is absent little

else is particularly meaningful.

McClelland motivation theory suggests that people are differently motivated towards achievement, power, affiliation, and avoidance, where the achievement motive is a key to McClellend's views of economic development. Such achievement involves the creation of more efficient ways of doing things and solving problems, the preference for tasks which reveal successful performance, and the taking of personal responsibility for performance.

The avoidance motive, which was described by McClelland and other scientists, may be high in Ukraine and may be a real problem for productivity: the fear of being punished for mistakes seems to be deep rooted in the consciousness of Ukrainian employees. It means that a person learns from an experience of past inadequacies to feel incapable of future success. A senior manager who is already a victim of learned helplessness does not expect initiative from middle managers. This may lead to passivity in the workplace and even a need for a high level of supervision. This is connected to a lack of achievement where taking risks is avoided, a high level of uncertainty avoidance, and in McGregor's terms, a preponderance of management styles and techniques which favor Theory X, rather than Theory Y. The former assumes that most workers dislike work and therefore try to avoid it. They must be controlled and coerced into achieving organizational goals. The latter assumes that employees seek responsibility, can make decisions and will exercise self-control when properly motivated.

Other theories and approaches have focused on specific psychological processes, as does Vroom's theory. Organization behavior modification, which is not influential today, was derived from Scinner's behavioristic philosophy that denied the importance of consciousness. This approach stresses the automatic role of rewards and feed-back on work motivation; however these effects are mediated by psychological processes such as goals and self-efficacy.

To understand more fully why Western assumptions of employee motivation do not work in Ukraine, it is important to first understand Ukrainian work values within the context of broader theories of cultural differences, and, particularly, historical background.

## 4. Main motives and value orientations of Ukrainian employees

The case study of motivational guidance of managers and employees in enterprises of fat-andoil industry denied the previous hypothesis about the increasing role of self-actualization in the pyramid of needs of Ukrainian employees. Actually, self-realization and need of social recognition, esteem and respect play a big role in the value orientations of managers, but the driving force is still a need for monetary reward for the satisfaction of basic needs. According to the study, the first or the second place of importance respondents assigned earnings to life for the family maintenance - 67% of respondents, 56% of respondents to the first or the second place put the need of respect for the achievement of certain employment outcomes and implementation of their knowledge and skills , 48% - self-realization and creative activity, realization of personal tendencies and abilities, and only 15% of respondents assign the primary importance to the involvement of the team and work together (see fig.1).

Thus, we can see that the main motive for work is material reward. And our research is faced with a paradox, because wages in Ukraine are low. Against an internationally comparable poverty line, Ukraine has experienced a dramatic reduction in poverty levels [7, p.5]. The Law of Ukraine "About State Budget of Ukraine for 2012" align the minimum wage of 1094 HUA starting from 1.04.2012 [8]. At the same time the level of inflation in Ukraine is increasing, and official wage growth is only nominal. The value of the minimum wage, also increased considerably fell in real terms after the world financial crisis in 2008. According to statistics, the average salary in enterprises in Ukrainian industry is 3219 HUA as of January, the 1-st, 2012 that makes 310 Euro that is one of the lowest in Europe [9; 10]. Obviously, this fact can be one of the main reasons of low productivity [11, p.5].

Moreover, the current systemic context provides little support for anything other than minimal initiatives. The social security safety net is under-developed in that falling into it poses a major threat to families' capacity to survive. This reduces employee confidence in job tenure and also their willingness to invest in training or a deeper or broader relationship with management. Wage areas remain common, reducing employee motivation. So, do "official" and "unofficial" wages whereby employers pay employees "white" wage including taxation and social security contributions and a second, "black" one which does not. This practice is employer-rather than employee-driven since the latter are aware of its disadvantages for themselves. There is an extensive "grey" labor market; in its most common form, workers are already employeed in legitimate employment, but supplement this by undeclared work. Because of this fact employees' interest and motivation in work for their primary employer reduce and promote detachment rather than a wish for either involvement or participation or increasing of their productivity.



Fig. 1. Main motives of employees and managers

During the survey also that the measures implemented in enterprises as a financial motivation and included in the standard benefits package were studied. In Fig. 2 is shown that the elements of welfare package are enough simple.

Thus, a study found that companies considered financial motivation system is not flexible, primitive and not various. They do not meet the present day criteria and needs of management.

So, the system of financial motivation in enterprises, which participated in our study, is imperfect and has some limitations. First, the structure of wages is not clear and does not meet modern requirements of strategic management. Second, the social package is not enough variable, has often a formal, nominal sense and does not take a motivational function. However, we believe social package is an effective lever of financial motivation, which has successfully operated in both countries with developed market system, and successfully used in period of the command economy in Ukraine.

### 5. International standards of quality VS Soviet traditions of management

Foreign markets demand increased quality from Ukrainian manufacturing companies. But changes in production can be made only by changing of the whole system of management and implementation of new motivation strategy. Quality management as theorized in Western management literature requires increased levels of employee motivation and productivity. Three of the five main elements of quality management (continuous improvement, team-working and employee involvement require that employee motivation and involvement be addressed and constitute the majority (along with benchmarking and customer focus, also arguably requiring employee involvement) of the factors discussed as significant in the management literature. These elements are in sharp contrast to the command and control modes of operation, and the hierarchical, vertically-integrated and bureaucratic structures with autocratic style of management traditional in the Former Soviet Union.

However, the necessity to meet international standards now is the main obstacle for export products of Ukrainian fat-and-oil industry. Two main quality systems are discussed in the Ukrainian context: ISO 9000 and Total Quality management (TQM). While other models exist, such as the European Foundation for Quality management' Excellence Model and Business Process Re-Engineering, these are not widely discussed in Ukraine possibly because they require even greater change from management.



Fig. 2. Welfare package in enterprises of sunflower oil industry

ISO 9000 is a management system based on documents devised by the International Standards Organization that specifies methods of organization to improve product or service quality. To adopt the standard, a firm will draw up a set of documents modeled on the ISO framework and then implement them in their operations. The documents themselves and the way they are used are regularly checked and approved by an independent certification body. The standard specifies that implementation requires in-depth involvement both within management and, crucially, in the workforce more widely since only this can improve "first time" quality and reduce the need for rectification of inadequate products or services. The effectiveness of ISO 9000 is contested. A survey conducted by the European Union criticised it for not dealing adequately with employee motivation and involvement, and too focused on production and a limited number of support processes. Total Quality management (TQM) is by design more radical than ISO 9000, going further with breaking down hierarchies and traditional barriers inside firms, notably through a stronger emphasis on increased teamwork. However, this challenges management to innovate radically rather than incrementally and therefore reduces its attractiveness.

### 6. The role of HR-departments

The influence of Human Resources Management might theoretically increase the prospects of development and implementation of effective motivation strategies in Ukrainian enterprises. Yet HRM exists in all the enterprises of fat-and-oil industry, but generally it exists in name rather in practice, with administrative personnel functions carried out through the "Labour department". While previous collective norms are being hollowed out and deprived of their former content, HR is only slowly moving into the vacuum. Managers have been renamed "HR" managers and have a very minor role in managerial hierarchies. In a small minority of (usually foreign-owned) companies the HR-function involves more than administrative tasks and degree if influence on management strategy more widely. In Ukraine HRM is focused in particular on selection methods (many of which would be ruled as unethical in West European contexts) and a combination of financial and psychological approaches to motivation.

HR is strongly influenced by the origins of those available to take these jobs. Ukrainian enterprises experience managerial difficulties due to a lack of qualified managers. To solve this problem, large organizations turn to consulting management. But consulting management in Ukraine is still in its infancy and suffers from a lack of managerial and restructuring experience in a free-market economy [12, p.30]. So, few practitioners are professionally qualified and come either from those trained pre-1990 or from those trained more recently. Those in the first and certainly largest category have one of four backgrounds: Soviet-style personnel functions, operations managers, psychologists or those trained pre-1990 as "cadre inspectors", i.e. officials responsible for obtaining, inducting, disciplining and retaining "cadres". Those in the much smaller second category have predominantly been trained in the Ukrainian system through the growing number of courses available, where American rather than European approaches are amphasised, often through partnerships with US business schools. Graduates of these schools might seek to develop progressive approaches, but they remain at the beginning of their careers and are not influential. Thus, despite the existence of the second group, there is therefore little prospect of the majority of Ukrainian HR managers initiating or playing a substantial role in driving employee motivation within companies [13, p.15]. Currently, the situation in many workplaces meets the theoretical criteria for abusive supervision in all its forms, principally because management is hierarchical and has strong power in relation to employees thereby fostering worker alienation and not motivation.

## 7. Conclusion

Thus, conclusions emanating from this review are the following. First, to understand more fully why Western assumptions of employee motivation do not work in Ukraine, it is important to first understand Ukrainian work values within the context of broader theories of cultural differences, and, particularly, historical background. According to the study, the main motive for work is material reward. And our research is faced with a paradox, because wages in Ukraine are low. Moreover, the current systemic context provides little support for anything other than minimal initiatives.

The social security safety net is under-developed in that falling into it poses a major threat to families' capacity to survive; the structure of wages is not clear and does not meet modern requirements of strategic management; the welfare package is not enough variable, has often a formal, nominal sense and does not take a motivational function. Secondly, foreign markets demand increased quality from Ukrainian manufacturing companies. But changes in production can be made only by changing of the whole system of management and implementation of new motivation strategy.

Third, the problem is, who can develop and implement new effective motivation strategies? Yet HRM exists in all the enterprises of fat-and-oil industry, but generally it exists in name rather in practice, with administrative personnel functions carried out through the "Labor department". While previous collective norms are being hollowed out and deprived of their former content, HR is only slowly moving into the vacuum. Managers have been renamed "HR" managers and have a very minor role in managerial hierarchies.

So, the problem of further prospect of research of motivation in Ukrainian enterprises is rather in practice implementation, than in theoretical models.

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#### **Summary**

This article examines employee motivation in Ukrainian enterprises of fat-and-oil industry and is based on case studies among employees and managers of the largest plants. The study explains, why Western theories and approaches to employee motivation may not work in Ukraine. We reached three conclusions, regarding the specificity of reality of management in Ukrainian enterprises.

**Key words:** employee motivation; welfare package; HR management; Total Quality management; reward, national system of values; fat-and-oil industry.

**UD classification:** 334.716: 331.101.3

# PROMOTION OF SALES INFLUENCE ON CONSUMER DECISIONS

# J. Michalak; W. Kozłowski<sup>\*</sup>

# 1. Introduction

Promotion of sales is a set of short-term stimuli that aim at increasing sales of a product or service. Depending on the target group of the activities undertaken, promotion of sales tools can be divided into three basic groups: consumer focussed activities (coupons, discounts, sales, bonuses, presentations, testing, competitions); trade intermediaries focused activities (discounts, promotional sales devices, exhibitions, presentations of goods organised for the distributors wane); canvassers focused activities (bonuses, competitions).

Deciding the use of a specific group of tools one should realise that rapid increase in sales linked to the promotion of sales is of short-term nature and does not build loyalty of customers represented by attachment to the brand. It also does not develop long-term preferences [1, p.96; 2, p.18].

Promotion of sales is also defined as a marketing technique focused on the immediate outcome, perceptible within a short time. The major goals of promotional activities also include:

- winning new clients that goal is usually difficult to achieve as a consequence of consumption habits;
- retaining the current customers particularly important in the market collapse or increasing competition situations;
- regaining lost customers and strengthening the product brand knowledge in the awareness of the consumer in that case the aim is to remind the specific product characteristics;
- increasing sales during the out of season period (price decreases) [3, p.69–84].

By applying the promotion of sales, the entrepreneur, manufacturer or trader wants to achieve the situation of the most "common" testing of the brand. The brand getting into the sales growth stage requires, first of all, advertising support while the importance of promotion of sales generally decreases (unless the brand represents imitation). At the stage of maturity, if the brand has a group of loyal clients, advertising plays more prominent role that promotion of sales. The promotion targeted at trade intermediaries gains in importance. At the sales decrease stage, advertising is usually reduced to zero while expenditures on "sales promotion" also decrease although at that stage it is still of large importance [4, p. 93–105]. That situation is presented in table 1 [5, p. 40].

Percent of budget allocated to	Floating to the market	Increase of sales	Maturity /maximum sales	Decrease of sales
Brand with outstanding characteristics, a large population of local buyers:	uie market	54105		Suies
<ul><li>advertising</li></ul>	λλ	λλλ	λλλ	λ
<ul> <li>promotion of sales</li> </ul>	λλ	λ	λ	λλλλ
Brand "imitator":				
<ul> <li>advertising</li> </ul>	λ	λ	λ	
<ul> <li>promotion of sales</li> </ul>	λλλ	λλλ	λλλλ	λλλλ
Advertising and promotion of sales budget level	Maximum	Slightly lower	Decreasing	Minimum

#### Tab. 1. Suggested division of promotion budget depending on the product life cycle stage

 $\lambda \lambda \lambda \lambda$  much more  $\lambda \lambda \lambda$  more  $\lambda \lambda$  equal  $\lambda$  less

Both the producer and the provider of services as well as the market intermediaries may also apply

<sup>&</sup>lt;sup>\*</sup> © J. Michalak ; Ph.D.; Department of Market Analysis and Marketing; University of Warmia and Mazury in Olsztyn; © W. Kozłowski; Ph.D.; Department of Market Analysis and Marketing; University of Warmia and Mazury in Olsztyn

promotion of sales. The goals of those activities, however, will be different. The producer or provider applies those actions to increase attractiveness of its offer. The market intermediary aims at making the sales point more attractive. Sales promotion instruments applied by traders aim at influencing the client during the sales process by creating nice atmosphere by, e.g. offering the client something unexpected as a souvenir.

# 2. Methodology of studies

All sales promotion forms are to fulfil one fundamental task – encourage the potential buyers to use the company offer. For the purpose of verifying the assumption made the studies were conducted that aimed at obtaining knowledge concerning clients' opinions on sales promotion as well as the changes in the sales levels before and after implementation of the promotional activities. The studies were conducted in June 2012 at one of the supermarkets in Olsztyn. The method of direct interview was applied for collecting the information. The authors' questionnaire consisting of 16 questions subjected to the aim of the study was used as the tool. Closed questions with a choice and closed questions with the scale that contained all possible answers formed the majority of the questions asked.

Additionally, the survey questionnaire was built in the way allowing identification of individual subject sections. Consequently, the information collected could be grouped and divided to define the attitude of the respondents to the promotional activities as well as the willingness of the respondents to use the selected sales promotions.

The survey encompassed 119 respondents that were chosen by purposeful selection method with elements of random choice method. The purposeful selection method represents selection of the respondents that meet the goal of the survey and through which they become elements of it (consumers shopping at the supermarket). The questionnaire-based survey was conducted at different hours of the day aiming at obtaining results that are more accurate.

Data necessary for obtaining knowledge on the sales levels was collected on the base of the sales reports covering the period of two weeks -I before (16-29.05. 2012) and II (13-26.06.2012) after the sales promotion activities conducted.

The paper also presents the results of sales (before and after promotion) for three selected products (Coca-Cola, "Tymbark" juices and "Nałęczowianka" mineral water) belonging to the product group of beverages. In case of each of the above-named products, three different types of promotional activities were applied in the form of 15% price decrease, presentation of the goods at the point of sales and adding a souvenir to the purchased product.

## 3. Subject of studies characteristic

The survey encompassed respondents representing independent households and shopping at the selected sales outlet. The information collected indicates that women represented 61.4% and men 38.7% of the population surveyed.

According to the age, people between 45 and 54 years of age were the most numerously represented group (26.1%). Respondents aged from 35 to 44 years represented 22.7% of the total and the second largest age group. The people over 65 years of age were the smallest group with only 7% share in the population surveyed while people under 25 years of age were the second smallest population with the share of 9.3% of the total.

The largest group within the population surveyed, over a half of it (49.6%) had secondary education. A slightly lower percentage, 45.4% of the respondents, was people with tertiary education. A relatively small group, only 5.0% of the respondents, was respondents with elementary education.

Another diversification occurred in case of the revenues as 46.2% of the respondents declared their monthly income at the level of the national average. Respondents with income lower than the national average represented 30.3% of the population surveyed. Respondents with monthly income higher than the

national average formed the smallest group representing 23.6% of the entire population surveyed.

Concerning the number of persons in the household the respondents from households consisting of 3 persons were the most numerous group with the share of 36.1% in the population surveyed. Over 26% of the respondents represented households consisting of 4 persons. The shares of the other groups were as follows: households consisting of 2 persons – 18.5%, of a single person – 13.4% and those of 5 persons – 5.9%. The detailed demographic information on the population surveyed is presented in table 2 below.

Item	Number of respondents	Structure (%)
Gender:		
– man	46	38.7
– woman	73	61.4
Respondent's age: 15-24	11	9.3
25-34	24	20.2
35-44	27	22.7
45-54	31	26.1
55-64	18	15.1
65 and over	8	6.8
Education: - tertiary	54	45.4
- secondary	59	49.6
- elementary	6	5.0
Income: - above the national average	28	23.6
- average	55	46.2
- below the national average	36	30.3
Number of persons in the household:		
1 person	16	13.4
2 persons	22	18.5
3 persons	43	36.1
4 persons	31	26.1
5 persons and more	7	5.9

#### Tab. 2. Demographic characteristics of the respondents

Source: own work

# 4. Attitude of the respondents to promotional activities and their participation in activities of that type

Difficulties with sales of goods and services, competition pressure, increasing the number of new products and aiming at market success cause the evident trend for increasing the importance of sales promotion actions in the system of communication between the enterprise and the buyers.

Promotional actions, however, resulted in a diversity of attitudes among the consumers in the market. The result of survey conducted at a supermarket seems to confirm that finding. The survey of the attitudes of respondents to promotional activities confirmed that over 42% of all the respondents expressed positive opinions concerning them. However, 27% of the respondents declared indifference to such activities. Less than 18% of the respondents declared their attitude was very positive. There were only 9 respondents that selected the response representing critical approach to promotional actions and they represented less than 8% of the total population surveyed (fig. 1).

Efficacy of the sales promotion means by making use of them by the consumers and the influence on purchase of products during promotion and after the end of it is expressed. 71.4% of the respondents were declared that they use sales promotion actions sometimes. There were 19.3% of the respondents declaring more frequent participation in promotional activities while just 9% of the respondent in total declared that they did not pay attention to that type of activities or did not participate in them at all.



Fig. 1. Attitude of respondents to promotional actions

Source: own work

Among all the respondents surveyed, 62.2% declared that they had participated in sales promotion activities of various types during the past week. The remaining 37.8% provided negative answers to the question concerning that issue.

Individuals that used price decrease represented the most numerous group (37.8%) among the respondents declaring participation in sales promotion activities during the past week. More than 25% of the respondents declared purchasing special packages with the increased content of the product. In addition, product testing and presentation enjoyed high popularity among the respondents and 21.8% of them declared participation in such forms of sales promotion. Just slightly more than 18% of the respondents stated that during the past seven days they participated in distribution of samples as the sales promotion activity. At the same time 10.1% of the respondents declared purchasing products with bonuses while 9.2% of the respondents participated in competitions organised by producers of goods.

As presented by the following figure, none of the respondents used coupons allowing purchase at a decreased price and none of the respondents participated in lotteries or games.



Fig. 2. Participation of respondents in the individual promotional actions

Source: own work

The study involved analysis of promotional activities from the perspective of their attractiveness to the respondents. The vast majority of the respondents (57.1%) declared their preference for price related promotional actions, i.e. temporary decreases of the price (figure). The financial reasons were the source of acceptance for that form of promotion.

Consumers were also willing to use the sales promotion forms that allowed familiarisation with the product. The percentage of respondents declaring product testing and presentations the most attractive forms of promotion was also high (36.2%). They motivated their position by the possibility of testing the product offered without the necessity of purchasing the whole pack. In case the product satisfies their needs, they return to it willingly. Also, distribution of product samples serves familiarisation of the buyers with the product. Among all the respondents, 21% declared it the most attractive. Slightly more than 8%

of the respondents declared that purchasing product in a larger package represented the best type of promotion. According to them, that form of encouraging clients to purchase the product offers the possibility of purchasing more of the product at unchanged price.

Competitions enjoyed the lowest popularity among the respondents as only 5.9% of them declared them the most attractive format of sales promotion. The respondents did not receive the possibility of purchasing a product at a decreased price on condition of presenting a coupon enthusiastically. That form of promotion was appreciated by 7.6% of the respondents only. Sensitivity of consumers to purchase of decorative packages or packages with a bonus was even lower. Those two forms of promotion activities were accepted by ca. 9% of the respondents.

Closely 1.5% of the consumers surveyed declared that lotteries and games as well as receiving bonuses by mail from the producer were the most attractive sales promotion activities. Those respondents were, however, the smallest group among the population surveyed.

# 5. Respondents' attitude to participation in sales activities and their demographic characteristic

Consumer behaviour analysis from the perspective of demographic characteristics, i.e. gender, age, education or income shows that the attitudes towards the sales promotion means are somehow correlated with those characteristics. The following table 3 shows that promotional actions cause slightly different attitudes among men and women.

	Sales promotion							
a 1								
Gender	Very positive	Positive	Indifferent	Critical	Very critical	No opinion	Total	
Man	10.87	32.61	34.78	15.22	2.17	4.35	100	
Woman	21.92	49.32	23.29	2.74	1.37	1.37	100	

Tab. 3. Attitude to the promotional actions and gender

Source: own work

Over 34.78% of all male respondent declared that their attitude towards promotional actions was indifferent. Men with that attitude towards promotions were the most numerous group among the male respondents. Women participating in the survey presented opinions concerning sales promotions that were more positive. Over 49.32% of them declared positive attitudes to activities of that type.

The survey conducted shows relatively high correlation between the respondents' age and the attitudes towards sales promotion (table 4).

	Sales promotion							
	Attitude							
Age	Very positive	Positive	Indifferent	Critical	Very critical	No opinion	Total	
15-24	18.18	81.82	0.00	0.00	0.00	0.00	100	
25-34	16.67	29.17	37.50	12.50	0.00	4.17	100	
35-44	14.81	33.33	33.33	7.41	3.70	7.41	100	
45-54	19.35	41.94	22.58	12.90	3.23	0.00	100	
54-64	11.11	61.11	27.78	0.00	0.00	0.00	100	
65 and more	12.50	50.00	37.50	0.00	0.00	0.00	100	

Tab. 4. Attitude to the promotional actions and age

Source: own work

Promotional actions were received the best by young consumers aged 15-24 years that were more susceptible to various forms of encouragement for purchase. In that age group, over 81% of the

respondents presented positive attitude towards sales promotion. Also, the respondents aged 55 to 64 years (61.1%) and those over 65 years (50%) expressed positive opinions concerning promotions. Respondents aged 25 to 34 years were slightly less enthusiastic about promotional activities of organisations and 37% of them were indifferent to promotions. Highly critical attitudes towards activities of that type were presented by only 3.70% of the respondents aged 35-44 years and 3.2% of the respondents aged 45-54 years. There were no respondents with highly critical opinions on sales promotions organised by organisations in other age groups.

High correlation between the attitude towards promotional activities and the consumer income could also be noticed. Data presented in table 4 shows that the positive attitude towards promotional actions increases with the decrease of the respondent's income. Persons with incomes lower than the average presented the most positive attitudes towards promotions. In that group, over a half (54%) of the respondents confirmed positive attitude towards promotions. Around 16% of respondents in that income group showed even higher confidence in activities of that type. Among respondents with incomes matching the national average, the largest proportion (44.4%) expressed positive opinions on promotional activities in that group increased as compared to the respondents with lower income to 27.8% and 7.4% respectively. Respondents with incomes exceeding the average presented even less positive attitude towards sales promotions. Almost 32% of respondents with such incomes confirmed their positive attitude towards such activities while the equivalent percentage expressed their indifference. There were also respondents in the group with the highest incomes that expressed negative attitudes to promotional activities of organisations. Such respondents represented 17% in that income group.

Sales promotion								
	Attitude							
Income	Very positive	Positive	Indifferent	Critical	Very critical	No opinion	Total	
Above the national average	14.29	32.14	32.14	10.71	7.14	3.57	100	
Average	18.52	44.44	27.78	7.41	0.00	1.85	100	
Below the national average	16.22	54.05	21.62	5.41	0.00	2.70	100	

Tab. 5. Attitude to the promotional actions and income

Source: own work

Attitudes towards promotional actions also differed depending on the number of household members.

Sales promotion								
Number of		Attitude						
persons in the household	Very positive	Positive	Indifferent	Critical	Very critical	No opinion	Total	
1	12.50	43.75	37.50	0.00	6.25	0.00	100	
2	27.27	40.91	22.73	9.09	0.00	0.00	100	
3	11.63	46.51	25.58	11.63	0.00	4.65	100	
4	25.81	41.94	22.58	6.45	0.00	3.23	100	
5 and more	0.00	42.86	57.14	0.00	0.00	0.00	100	

Tab. 6. Attitude to the promotional actions and the number of persons in the household

Source: own work

Promotion of sales enjoyed the highest appreciation in case of respondents representing households with two and four members. Among them 27.3% and 25.8% respectively expressed very positive opinions concerning promotions. Single persons running their own households expressed either positive attitudes (43.7%) or indifference (37.5%) towards promotion while 6.6% of respondents from that group expressed highly negative opinions concerning promotional activities. Respondents representing households consisting of three persons were in their majority (46.5%) presenting positive attitudes towards activities

of that type.

# 6. Sales results before and after implementation of promotional activities

In addition to the survey conducted at the supermarket the changes in the levels of sales concerning the selected products before and after the promotional action were recorded. The study covered one group of products – beverages from which the following products were selected for the study: Coca-Cola, "Tymbark" juices and "Nałęczowianka" mineral water. For each of the above products different types of sales promotion actions were implemented: in case of Coca-Cola the price (for all package sizes) was decreased by 15%; "Tymbark" juices (1 litre packages) were exposed near the main entrance to the supermarket in the way aiming at drawing attention of the customers entering; in case of "Nałęczowianka" mineral water (1.5 litre packages), the sales promotion by adding a souvenir in the form of a mug to every product unit was applied. The results concerning changes in the level of sales were obtained on the base of the sales reports covering two weeks (16-29.05.2012) before – Period I, and two weeks after (13-26.06.2012) – Period II, implementation of sales promotion activities. They are presented in the following tables.

Product	Period I (16-29.05)	Period II (13-26.06)			
	Sales in units				
Coca-Cola 4 x 2 L	8	196			
Coca-Cola 2 L	86	226			
Coca-Cola 2.5 L	27	194			
Coca-Cola 1 L	159	161			

Tab. 7. Coca-Col	a sales results
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Source: own work based on the supermarket sales reports

Tab. 8. "Tymbark" juices sales results	
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Product	Period I (16-29.05)	Period II (13-26.06)			
rioduci	Sales in units				
Apple juice	181	197			
Black currant juice	9	13			
Grapefruit juice	26	32			
Banana-orange juice	38	46			
Multivitamin juice	74	41			
Orange juice	44	15			

Source: own work based on the supermarket sales reports

#### Tab. 9. "Nałęczowianka" mineral water sales results

Product	Period I (16-29.05)	Period II (13-26.06)			
Floduct	Sales in units				
Mineral water 1.5 L fizzy	271	317			
Mineral water 1.5 L still	92	136			

Source: own work based on the supermarket sales reports

As presented by the above tables, the price decrease for Coca-Cola proved the most efficient promotional activity at the supermarket. Sales of that beverage in 4 x 2 l package were 8 units during the period of 16-29 October. Implementation of the price decrease by 15% (13-26 November) caused over 20-fold increase in sales of that beverage. Similar increase in Coca-Cola sales took place in case of other package sizes also. During the promotion period, the sales of 2.5-litre packages increased from 27 to 194 units and 2-litre packages from 26 to 226 bottles sold. Only in case of 1-litre packages, the decrease in price did not result in rapid increase of sales. Sales of Coca-Cola in bottles of that size were at the level of around 160 units both before and after the promotion.

Applying promotion in the form of adding a souvenir to the product package purchased proved the equally attractive action encouraging clients to purchase the product. That promotion type was applied in case of

"Nałęczowianka" mineral water. The results of that promotional activity application manifested in 16% increase in fizzy water sales and over 40% increase in still water sales. "Tymbark" juices were the other group of products for which promotion was implemented. It had the format of exposing the juices by the entrance to draw attention of the consumers entering the market. The results of sales obtained, however, proved low effectiveness of that solution. Purchases of almost all 1-litre packages of "Tymbark" juices were at very similar levels both before and after the promotional action. In case of the orange juice and multivitamin juice, even a decrease of sales by 34% and 50% respectively was recorded.

# 7. CONCLUSION

The results of studies obtained on the base of the questionnaire-based survey conducted indicate that the majority of the customers interviewed declared highly positive attitude to all types of sales promotion and that they participated in actions of that type frequently. From among all the sales promotion tools, price decrease and purchase of special packages with the increased product quantity enjoyed the highest popularity. Product presentations and testing as well as distribution of samples proved equally popular. On the other hand, acceptance was low for other promotion types such as purchase at a decreased price on coupon presentation, participation in lotteries or sending bonuses by the product manufacturer by mail.

Consumer declarations concerning future participation in different types of promotional actions were limited mainly to the choice of three types of actions: product samples, purchase at a decreased price and products testing. The respondents motivated their choices by savings or the willingness to obtain knowledge on the product prior to the purchase of a larger quantity of it.

Three different promotional actions on the selected group of products implemented at the supermarket proved that price reduction is the most effective form for attracting customers to purchase the product. The number of buyers that decide to purchase products taking into account the possibility of receiving an additional souvenir for purchase of the product was definitely lower. An attempt at attracting customers' attention by exposing the products in the shop proved the least successful attempt that had little influence on increasing sales in case of that supermarket.

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### Summary

The article presents results of own research, aimed at explanation of consumer attitudes toward sales promotional tools and changes in the levels of sales before and after implementing the promotional campaign by hypermarkets. The results of the survey indicate that the majority of clients declared positive attitude to all types of sales promotions, but such promotional tools as the purchasing at decreased price and purchase of special packages with the increased volume of the product are appreciated the highest.

Key words: consumer attitude; sale promotions; efficiency; hypermarket.

#### **UD classification:** 658

# THE ROLE OF A FINANCIAL MARKET AND ITS INFRASTRUCTURE IN THE STABILITY OF A COUNTRY'S FINANCIAL SYSTEM

# Igor Rekunenko<sup>\*</sup>

# **1. Introduction**

In today's world the stability of the economic system is primarily the stability of the financial system and the national currency. In the ideal market financial system is in equilibrium, as financial institutions and investors consistently experience two opposite aims - to get a high income and avoid high-risk. If the prevailing desire is to obtain high income while reducing attention to risks, the financial system stability is threatened. And in this case, government intervention is required to reduce the risks with the least effort.

The main way to increase revenue in the current context - is to increase the leverage, which by itself increases the risks. Moreover, in connection with the development of the OTC derivatives market, the expansion of cross-border transactions and offshore operations, the risks become out of sight of regulators. Actually, in the long run the previous crisis has been associated with too much risk, which in previous years has been taken upon banks, inflating the amount of credit issuance and scope of operations with derivative financial instruments. Therefore, during a crisis a response becomes urgent to develop new mechanisms to control risks.

A financial market of a definite country plays a substantial role in the stability of its financial system. Consequently, the financial market effectiveness is significantly predetermined by the level of its infrastructure development and by the quality of interaction of financial market operators and institutional investors with its elements. Financial market development is ultimately made on the basis and the development of its infrastructure [1, p.14].

In this regard, a financial market infrastructure is proposed to be understood as generality of elements (institutions, organizations, technologies, rules, systems) that provide, regulate and create conditions for normal, continuous, multi-functioning financial markets, and as the interaction of its subjects based on sales of financial assets.

Considerable contribution into the study of the role of a financial market and its infrastructure in the stability of a country's financial system were made by the following national and foreign scientists: O. Baranovskiy, V. Geets, A. Zadoya, V. Korneev, I. Liutyi, V. Mischenko, A. Filipenko, A. Chuhno, V. Yurchishin, L. Gitman, S. Veber, H.M. Markowitz, S.C. Mayers, W. Sharpe, E. Pozner, G. Stiglitz et al.

However, questions about the impact of the financial market on the financial stability of the country are not well studied so far. Consequently, this sphere of study requires comprehensive analysis and development, which has stipulated the topicality of this article.

The purpose of the article is to determine the role of a state financial market stability, to identify the major problems and trends in the financial market development, and to provide resources for the problem solving.

## 2. The role of a financial market in the stability of a financial system

It should be noted that in the modern world, a significant portion of investments in domestic companies is carried out by foreign investors, and, of course, this is a significant risk factor. But this

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does not mean that the markets should be closed to capital inflows. Ukraine now needs foreign investments. Such an involvement will allow our country not to remain on the sidelines of the global market, and to solve the problem of the economic development.

It is the high time for Ukraine to solve its urgent problem of the domestic financial market development. National financial market should become a strong, centralized and highly capitalized structure. According to our beliefs, among the urgent goals are: facilities for Ukrainian financial market participants developing; clearing, payment and deposit services providing on the international basis.

This issue is being discussed by the state and infrastructure organizations (exchanges, depositories, clearing organizations). In particular, measures designed to ensure the capitalization growth of infrastructure organizations, including the ways through loans and guarantees of the state. This will help to build a centralized and efficient risk management system that substantially increases the reliability of the Ukrainian financial market and its resistance to crises.

But the problem is that definite measures of monetary policy may have the opposite effect as for the account of current operations and the capital account. An economy's saturation with money, what is happening now in many countries, may adversely affect the financial sector, and as a result of these actions, money is depreciated relatively to the real sector. Therefore, the support of the financial market at present is particularly relevant.

In addition, the financial system can reduce risks by diversifying a system that affects a long-term economic growth by changing the distribution of resources and interest rates; it means that financial markets, allowing risk diversification can influence the decisions of investors to invest in long-term investment projects. A diversification has positive influences on technology: market agents are constantly trying to get technological advantages, enabling them to take an advantageous market position [2, p.89].

In the modern extremely competitive conditions only a financial market model which refers to the main demands of globalization could survive: the one which covers the widest territory possible, and the one which trades with the help of one system of different financial tools quickly, effectively and with minimal costs.

## 3. Infrastructure as a major component of the financial market

In general, the direction of the financial market infrastructure is clear. International experience and the recommendations of leading experts can unify the trends of domestic financial markets development. These principles are general and can be implemented in different national markets. However, any national market has its own development history, its specifications, and in this sense a path of national markets development is always unique.

In order to reflect national circumstances, legal regulations, the current market situation, it is necessary to analyze all the applied and tested approaches to move most effectively towards the target – the improvement of the functioning of the Ukrainian financial market.

An infrastructure organization of a segment depends on the development of the market itself, its speed, the character of its participants and instruments traded in it. However, there are some common features of infrastructure segments, repeated in the market infrastructure as a whole. They are determined by infrastructure problems, which could be formulated in two main ones:

- 1. Risk management in the financial market.
- 2. Reduction of unit costs of operations.

The Role of an infrastructure in risk management is to:

- 1. Separate different types of risks item by item, other than to allow loading of certain risks on it.
- 2. Identify a responsible for the implementation of risk person.

3. Realize the responsibility of participants for any of their losses.

If we speak about the infrastructure of the financial market of Ukraine, we often take the foreign markets as examples. While in the situation described our foreign colleagues consider the problem infinitely more complex than we are having.

The infrastructure of the European Union's financial market now includes 30 stock exchanges, 20 organizations that perform centralized clearing and settlement, about 40 custodians, and about 50 controllers, which supervise the market.

The task of centralizing securities accounts is very difficult for the Eurozone countries. Single platform TARGET 2 Securities (T2S) should be established by 2013, and the European Central Bank will become its operator. It is assumed that both national central banks and the national central depositories (CSD) will become the members of that system [3, p.4].

Legal and information risks in the infrastructure after the unification of market practices in the European market are estimated by experts to be extremely high. A financial market of a definite country plays a substantial role in the stability of its financial system. Consequently, the financial market effectiveness is significantly predetermined by the level of its infrastructure development.

Contrary to popular belief, the infrastructure of the Ukrainian market is significantly less fragmented than the EU market, and consists today of 10 stock exchanges, 3 settlement depositories, nearly 190 registrars and about 390 custodians, 360 asset management companies, 734 broker / dealers and 176 banks.

## 4. Analysis of the components of the financial market of Ukraine

Considering that the financial market of the country includes the main segments of the money market and stock market, its current prevailing trends should be noted.

### **4.1.** The state of the monetary market

Money market allocates money flows and short-term means of payment. In our country the market for means of payment is not as developed as in European countries. For obvious reasons, cash is perceived as the most reliable tool. Therefore the demand for them is observed, and the inflation rate is present, which in 2011 was more than two times higher than the average in Europe. For the 2011 in Ukraine the index of inflation becomes 4,6 % (the lowest figure over the past 9 years (except for 2002, in which the annual deflation was recorded)), Russia – 6,1 % in the Euro area - 2,1 %. Inflation is one of the factors that significantly affect the level of development of the banking sector and financial markets. Indicators of financial sector development are higher in the countries that quickly achieved macroeconomic stability, primarily by reducing inflation. Based on the current rate of inflation, the current situation in the money market of Ukraine should be given a positive assessment.

The situation in the money market remained stable and predictable in the year. The monetary policy was in line with macroeconomic developments in the country, which made it possible to slow down the rate of CPI inflation.

Banking system liquidity dynamics in the current year were determined by monetary policy objectives. Here mention should also be made of increased foreign economic risks to the economic development of Ukraine directly related to the world market instability. In 2011, the risks became evident in stronger foreign exchange demand and weaker bank deposit growth. With a view to offsetting the risks, the National Bank of Ukraine took preventive measures by pursuing a harsher monetary policy.

The stability of the monetary unit of Ukraine contributed to the following:

1. Bank lending growth in domestic currency to the real sector of the economy. The national currency loans increased by 21,6 % from the start of the year. Both loans to households

(by 34,2 % over from the start of the year) and loans granted to legal entities (by 19,1 % over from the start of the year) demonstrated growth. At the same time, the total loans almost remained unchanged in December 2011, remaining at the previous month level – UAH 793,2 billion. Stronger corporate lending accounted for the total lending growth. One of the contributors to it was the increased solvency of economic entities resulting from the improvement of their financial standing.

2. An increase in bank deposits, which climbed by 17,6 % over from the start of the year to UAH 486,8 billion, including in the national currency by 17,0 % from the start of the year and in the foreign currency by 18,5 % (tabl. 1, changes in percent points) [4].

As of: Changes:							
		AS OI:		Changes:			
Main indicators	01.01.	01.12.	01.01.	for Dece		for 201	1
	2011	2011	2012	(UAH million)	%	(UAH million)	%
1.Monetary base	225692	231061	239871	8809,9	103,8	,	106,3
2.Money supply - total: incl.	597872	653536	682701	29165,2	104,5	84829,4	114,2
- cash	182990	184164					105,3
3. Correspondent accounts	16726	17435					131,2
4. Deposits total: incl.	413851			20645,6			117,6
- in national currency	239918			-			117,0
- in foreign exchange	173933					32259,6	118,5
Legal entities deposits total: incl.	142062	163242		16114,6			126,3
- in national currency	99946	108 265					122,7
- in foreign exchange	42117			-			134,7
Natural persons deposits total: incl.	271789	302 893	307424				113,1
- in national currency	139972	153 877	157964	4087,2	102,7	17992,4	112,9
- in foreign exchange	131817	149 016	149459	443,8	100,3	17642,6	113,4
5. Loans granted to economy - total: incl.	724005	793548	793192	-356,1	99,96	69186,4	109,6
- in national currency	386686						121,6
- in foreign exchange	337319					-14181,0	95,8
Loans granted to legal entities - total:	519603						114,9
- in national currency	324523	382769	386612				119,1
- in foreign exchange	195080	211438	210371	-1066,7	99,5	15291,0	107,8
Loans granted to natural persons - total:	204403	199341			98,4		96,0
- in national currency	62164	81857			101,9		134,2
- in foreign exchange	142239			-4717,0		-29472,0	79,3
6. Monetization level (calculated)	49,6	48,5			1,1*	,	0*
7. % rate on loans in national currency: (average monthly)	15,0	18,9			-1,7*		2,2*
% rate on loans in foreign exchange: (average monthly)	10,6	8,1	8,4		0,3*		-2,2*
Integral % rate on loans	14,0	15,3	14,5		-0,8*		0,5*
% rate on deposits in national currency: (average monthly)	8,1	11,5			-0,4*		3,0*
% rate on time deposits in national currency (average monthly)	8,9	13,2	12,4		-0,8*		3,5*
% rate on deposits in foreign exchange: (average monthly)	6,0	5,2	5,7		0,5*		-0,3*
% rate on time deposits in foreign exchange: (average monthly)	6,8	5,9	6,6		0,7*		-0,2*
Integral % rate on deposits	7,4	9,6	9,6		0*		2,2*

Tab. 1. Main indicators of the money market in January-December 2011

December 2011 saw a 4,6 % increase in the cash outside banks (by 5,3 % from the start of the year) to UAH 192,6 billion, which is typical for the last month of the year. When regulating the money market in December, the National Bank of Ukraine used various monetary instruments. The volume of refinancing transactions conducted by the National Bank of Ukraine from the start of the year totaled UAH 28.8 billion. December saw a decline in the value of national currency funds and a concurrent increase in the value of foreign currency funds. Thus, the average weighted value of national currency loans went down from 18,9 % in November 2011 to 17,2 % in December 2011, whereas that of foreign currency loans went up from 8,1 % to 8,4 %. The average weighted value of national currency deposits declined from 11,5 % in November 2011 to 11,1 % in December 2011, whereas that of foreign currency deposits increased from 5,2 % to 5,7 %. In the reporting period, the foreign exchange market demonstrated divergent trends. In January – April 2011, the foreign exchange market experienced a steady increase in foreign exchange earnings fueled by the favorable dynamics of world prices for Ukrainian traditional exports and active external borrowing.

In May 2011, the net foreign exchange earnings decreased, with a net foreign exchange outflow evident already in June. It entailed, among other things, higher demand for foreign exchange compared with the supply of foreign exchange in the interbank foreign exchange market. The traditional seasonal rise in the demand for foreign exchange which took place in September was greatly intensified by negative marked expectations relating to both external and internal factors. These aspects lead to a foreign exchange deficit in the domestic market in September. It was not even set off by net foreign exchange earnings. The settlement requires foreign currency loans as well. Currently Ukraine has a moratorium on granting loans in foreign currency, but experts highlight the importance of such lending and the need to restore it. To finally improve the above mentioned trend, it is necessary for the state to protect creditors with the help of the law. And most importantly is to establish a clear mechanism for implementation and writing off hopeless debts.

### 4.2. The state of the stock market

We cannot ignore the stock market of Ukraine as one of the major segments of the Ukrainian financial market. The main objectives of developing an effective stock market are its liquidity, reliability and transparency forming. These objectives include: upgrading of existing and introduction of new financial tools, creating a central depository and the development of the Internet trading, improvements in regulation and supervision, improvements in financial literacy and promoting market equity, creating conditions for collective investment institutions, primarily – pension funds, etc.

It is necessary to highlight that the national stock market indexes and market capitalization decreased significantly in 2011. Market capitalization to GDP ratio is 10 % that is far lower than in pre-crisis period (in 2010 - 22.6 %). The part of shares in total in the total stock market trading and the number of dealers who operated with these securities reduced. Stock market was characterized by significant volatility and reduction of free float (part of company' free circulated shares). But at the same time, the volume of realized stock market contracts with securities on organized platforms was UAH 235,84 billion in 2011, it is almost twice more (for UAH 104,55 billion) than in 2010 (UAH 131,29 billion). The volume of realized stock market contracts on secondary market was 75,94 % in total volume, and on the primary market - 24,06 %. The largest volumes of realized stock market contracts were among state internal loan bills - UAH 99,13 billion (42,03 % of total volume) and shares – 79,43 UAH billion (33,68 %). However, as noted above, the financial market is a multi-dimensional structure, and its condition and development assessment must go beyond simple indicators of the size and growth rate. Such countries as Pakistan have big but inefficient financial markets. Performance indicator of the Russian market, calculated by the World Bank Group using statistical methods, is 32 (the higher the score, the lower the efficiency is). In Germany it is 11, in France – 15, in India – 46. An efficient market of shares, in particular, implies that stock prices reflect the maximum information on companies. Lack of disclosure of state companies and, consequently, low provision of information for investors (where the rights of minority shareholders are poorly protected, and managers and majority shareholders do not have special occasions to

share information) leads to the fact that small investors are mostly guided by hearsay and own intuition. As a result, rates of specific companies are greatly liable to external influences and market sentiment in general [5].

# **5.** Conclusion

To conclude with, we can highlight that the current Ukrainian financial market condition is characterized as inadequately developed in many of its segments, and by its liquidity shrinking.

Influenced by the global crisis the flow of IPO from Ukrainian companies is significantly reduced, following by the global capital markets the conditions of borrowing on the domestic debt market are deteriorated. The stock market is insufficiently diversified. It has also a small part of freely traded shares (free float), high dependence on foreign capital. At the same time, a considerable potential of the Ukrainian financial market cannot be overemphasized. The use of derivatives and securitization of bank funds are marked increased. At a time when many companies feel lack of funding, further development of key market segments could contribute significantly to the country's economy. The potential of the market is at stake for a long time, but until now the country cannot truly become a beneficiary, even taking into account the fact that many foreign investors are willing to take risks of the Ukrainian financial market infrastructure.

To raise the efficiency of financial markets of Ukraine and its financial system in general, conditions for facilitating foreign investors should be created as well as the emergence of new financial instruments in the stock market in order to increase trading volumes of exchanges to a level that meets the scope and objectives of the economy, and also to create a legal framework to stimulate IPO of Ukrainian companies in the domestic regulated market.

The abolition of currency restrictions and liberalization of foreign exchange markets are advisable to create more suitable conditions for interaction with international capital markets.

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#### **Summary**

The role and impact of financial market and its infrastructure for financial stability are discussed in this article. The current Ukrainian financial market condition is characterized as inadequately developed in many of its segments, and by its liquidity shrinking. It is provided the description of the current state of the main components of the financial market – monetary and stock market of Ukraine.

Key words: financial market, infrastructure, financial system, banks, stock market.

**UD classification:** 336.76

# **BUSINESS MODEL DESIGN AND ITS IMPORTANCE IN SUCCESSFUL STRATEGY – THE CASE OF ZARA**

# Włodzimierz Rudny<sup>\*</sup>

# **1. Introduction**

Developments in the global economy have changed the traditional balance between customer and supplier. New communications and computing technologies, and establishment of more open global trading regimes mean that customers have more choices and can easily articulate their expectations. The new environment requires that business re-define their value proposals to the both present and prospective customers. The new ways of "approaching" the customer must be worked on and new methods of value capturing form delivering products and services must be "engineered". These problems are embedde in the concept of the business model.

Over the past few years "business models" have surged into management vocabulary. But, while it has become quite fashionable to discuss business models, there is still much confusion about what business models are and they can be used. In fact, business models can serve a positive and powerful role in corporate management.

A business model articulates the logic and provides the data and other evidence that demonstrates how a business creates and delivers value to customers. It also outlines the architecture of revenues, costs, and profits associated with the business enterprise delivering that value.

There are numerous definitions of "business model", but none appears generally accepted. This lack of consensus may be in part attributed to interest in the concept from a wide range of disciplines. The theoretical aspects of the problems still require conceptual work. Simultneously, numerous case studies from a variety of sectors should be analyzed to contribute the understanding the role played by business models.

The issues related to business models are essential to the fundamental problems of how to build a sustainable competitive advantage and create value. There are numerous examples - just to mention companies like Apple, Gilette, Starbucks or Zara – whose success is atributable to innovative business models. These companies introduced innovative business models. These models were going against previous "common sense" business logic, i.e. against accepted by almost all market players ways of managing operations within value chains or value creating networks.

## 2. Business model - some data supporting importance of the concept

The concept of business model has grown in popularity during the last two decades. In particular, it is linked to the development of Internet and e-business. Generally, the category of business model refers to the descriptions of relationships between elements, the existence of which is necessary for creation and delivery of value to the customers, and to an enterprise [1, p.210].

The analysis od different business strategie leads to a conclusion that very often the innovative business model is a key factor behind market success of a company. According to some research, for every 11 out of 27 firms created during the past 25 years, and included in the Fortune 500 list of biggest companies, the market success can be attributed essentially to an innovative business model [2, p.52].

Apple is a very good example of a company, the market success of which is a direct consequence of introduction of an innovative business model. Apple launched in 2003 the iPod as well as a music store iTunes, revolutionizing the market for digital mobile music players.

The combination iPod/iTunes has become a market product worth 10 billion USD, generating about

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50% of Apple's revenues. During the period 2003 - 2007 the market value of Apple has grown from 1 billion USD to 150 billion USD.

Analyzing the success of Apple one should notice, that this firm was not a pioneer in the market for digital mobile music players.

Already in 1998 the company Diamond Multimedia has launched a digital mobile music player with a brand name Rio, and in 2000 a similar product called Cabo 64 was launched by Best Data company. Both products were of high quality and well designed. The advantage of Apple over competitors has been that the company offered to the customers much more than just a new technology and a nice design; the new technology has been packed ino an innovative business model.

The true innovation of Apple has been that the company made the proces of recording and listening to the music to be comfortable and "user friendly". Within the new business model the company packaged the hardware (iPod), the software (iTunes) and a reliable after-sale service. Buying of a relatively expensive iPod was giving access to cheap "buy opportunity" for music (iTunes). Apple's business model is sometimes referred to as well known Gillette's strategy but "in revers". Apple has offered cheap "razor blades" (very low margin for music bought in iTunes) so as to be able to charge high margins for "razors" (iPod). One can say that Apple has creatively redifined the concept of value, offering its customers a new concept of satisfying their needs.

## 3. Business model definition and interpretation

Although the term business model has been introduced to the literature only recently, the terms similar to it, from conceptual standpoint, were introduced earlier. In the first place, one should mention the concept of ,,dominant logic" introduced in 1986 by Bettis and Prahalad (Prahalad, Bettis; 1986). According to these authors, dominant logic is a set of heuristics, norms and principles which govern the behavior of managers. This logic helps managers to focus their activities on the search of new business opportunities as well as on good organization of their firms. As noted by numerous author, this logic – today usualy referred to as business model – defines the way in which the firm creates value and retains value [3, p.358].

During the last two decades numerous publications devoted to the problem of business models appeared in world literature of different areas: books and articles, reasearch results, consulting firms reports (e.g. Mahadevan, 2000; Timmers 2000; Boulton, Amit i Zott, 2001, 2007, 2008, 2010; Chesbrough i Rosenblom, 2002; Chesbrough, 2010; Shafer, Smith, Linder, 2005; Demil, Lecocq, 2010; Teece, 2010)

The definitions of business models are numerous and varied. Shafer and co-authors, after the analysis of twelve different definitions, conclude that one can distinguish four different components common to all definitions [4, p.202]:

- stategic choices;
- value nets;
- process of value creation;
- process of value appropriation.

Literature overview allows to identify a couple of different approaches to the concept of business model. First, one has to mention definitions making reference to the concept of value chain (e.g. Mahadevan, 2000; Timmers, 2000). Second, there are definitions reflecting the resource based view (RBV) of the company (e.g. Boulton and co-authors, 2000; Hamel, 2000). Third, the most recent approach where business model is interpreted as a design or business architecture, with a focus on the process of value creation.

For instance, according to Teece and co-authors business model defines the mechanisms of creating

and delivering value to customers [5, p.173]. It should also define financial as well as organizational architecture of a company.

Smith and co-authors define business model as a "configuration", which is used by the company to make startegic choices helping in the process of value creation and appropriation [6, p. 450].

Amit and Zott define business model as a "substance, structure and governance system of transactions designed to create value through exploitation of business opportunities" [7, p.511]. The substance of transactions refers to products and types of information which are subject to exchange, as well as to resources and skills required to perform transaction. The structure of transaction describes the companies which are parties to the transaction as well as relationships between them. Structure also describes the sequence of gtransactions and characteristics of mechanisms allowing for exchange. The governace of transaction accounts for the way in which the flow of information, resources and products is controlled by parties to the transaction.

Amit and Zott contend that business model can be treated as a specific template explaining how the firm operates its business, how it delivers value to stakeholders and how it coordinates markets for production inputs and outputs [8, p. 222].

It is worth highlighting that the concept of business model is different from the concept of strategy. Business model helps to analyze, test and justify strategic choices. As such it is a broader concept compared to strategy. One of the key differences between the two is that the starting point for business model development is the idea of creating value to the customers and the construction of the model is based on the process of delivering the value to customers. Strategies, on the other hand, tend to focus on the problem of creating value to shareholders and, as a consequence, focus more, as compared to business models, on financial aspects of the business. Strategies also highlight the importance of creating and maintaining competitive position, a necessary prerequisit of harnessing an economic rent and, hence, creating value.

## 4. Zara – an innovative business model

Zara is one of the brand names of Spanish group Inditex. Other brands owned by Indites include: Stradivarius, Pull & Bear, Massimo Dutti, Bershka, Oysho, Zara Home i Uterqüe. Zara is by far the best known and most important brand of the group. It generates approximately 80% of all the revenues. The group owns over 100 firms, positioned along all value chain, i.e. from design and R&D down to retail shops. Towards the end of 2011 Inditex had over five thousands of stores in more than eighty countries. Inditex annual turnover is around 12,5 billion euro. It is only in 2010 that Inditex opened new stores in 45 countries. In January of 2012 Zara opened its first shop in Peru. Since 2010 Zara is selling also online. On March 7th, 2012, Zara started to sell onlina also in Poland, which increased to seventeen the number of countries in which this form of purchase has been made available to customers. Over the years Inditex has been developing at a fast pace. Table 1 contains just a fraction of statistics that support this satement

	2010	2009	2010/2009
Net sales	12 527	11 084	13%
Net profit	1 732	1 714	32%
Number of shops	5 044	4 607	9%
Number of employees	100 138	92 301	8%

 Tab. 1. Selected Inditex performance data for the period 2009-2010

The origins of Inditex can bre traced back to 1975 when Armando Ortega - currently the

owner of Inditex, and the seventh reachest man in the world accordin to Forbes Magazine – opened a little shop, called Zara, in La Coruna, Spain.

Ortega based his business on the idea of very tight control along all element of value chain. In his own words: "you need to have five fingers touching the factory and five touching the customer".

This "dominant logic" has been underpinning Zara's and, as a consequence, the whole Inditex group business operations until today.

The company is vertically integrated (unlike competitors, e.g. H&M, Gap, Benetton), owning design and R&D units, production facilities, distribution centers, transportation fleet and shops. To compare, the close competitors (H&M, Benetton, etc) do not own any production facilities or shops (all shops operate as franchises).

The strategy of vertical integration continues in January of 2012 the Inditex Group has decided to buy fashion retailer Massimo Dutti's store networks, which operated until now under franchise agreements, in Belgium (22 stores) and Portugal (45 locations). Both deals are valued at a combined 103 million euro. This acquisition means that Inditex has taken direct management control of 100% of the shops of all Inditex retailers in Portugal and Belgium. Massimo Dutti's international presence spans more than 560 stores in 51 countries.

Long before the new economy made catchwords of speed, customization, supply-chain management, and information sharing, Spanish clothing retailer Zara was carrying out a revolution of its own. By translating the latest trends into designs that are manufactured in less than 15 days — and delivering them to its stores twice a week – Zara pioneered a new kind of quick, custom-made retailing that has transformed the relatively low-profile retailer into a global powerhouse

Not only has Zara — the flagship store of private textile company Inditex — distinguished itself by tightly integrating its design and manufacturing systems, but its clothing has filled an untapped niche. "Armani at moderate prices," according to one Goldman Sachs analyst.

Zara derives its competitive advantage from an astute use of information and technology. All of its stores are electronically linked to the company's headquarters near La Coruna, a midsized city on the northwest coast of Spain.

Store managers monitor how merchandise is selling and transmit this information, as well as customer requests, to headquarters. Together with trend-spotters who travel the globe in search of new fashion, store managers make sure their designers have access to real-time information when deciding with the commercial team on the fabric, cut, and price points of a new garment.

In addition, Inditex's production system truly differentiates Zara from its competition.

While the Gap and H&M outsource most of their manufacturing, Zara produces 60% of its merchandise in-house. Fabric — which comes from places like Spain, the Far East, India, and Morocco — is cut and colored at the company's state-of-the-art factory. Then, using information gathered from stores, production managers decide how many garments to make and which stores will get them.

Finally the fabric is sent to local shops to be assembled before being shipped around the world. This combination of real-time information sharing and internalized production means that Zara can work with almost no stock and still have new designs in the store twice a week, as opposed to the six weeks that it traditionally takes most competitors.

The three principles upon which Zara's business is built are summed up as follows:

1. Close the communication loop.

- 2. Stick to the rhythm across the entire supply chain.
- 3. Leverage your assets.

Zara's supply chain is organized to transfer both hard data and anecdotal information quickly and easily from shoppers to designers and production staff. It is also set up to track materials and products in real time every step of the way, including inventory on display in the stores.

The goal is to close the information loop between the end users and the upstream operations of design, procurement, production, and distribution as quickly as possible.

In Zara stores customers can always find new products, but they are in limited supply. Usually there are only a few items are on display even though the stores are spacious (the average size is around 1,000 square meters). Such a retail concept depends on the regular creation and rapid replenishment of small batches of new goods. Zara's designers create approximately 40,000 new designs annually, from which 10,000 are selected for production. The relentless introduction of new products in small quantities, ironically, reduces the usual costs associated with running out of any particular item. Being out of stock in one item helps to sell another. In fact, Zara has an informal policy of moving out unsold items after two or three weeks. This can be an expensive practice for a typical store, but since Zara stores receive small shipments and carry little inventory, the risks are small. Unsold items in Zara account for less than 10% of stock (compare with industry average of 17% to 20%).

Zara's customers visit its shops an average of 17 times a year (industry average is 4 shop visits annually). High traffic in the stores circumvents the need for advertising. Zara devotes just 0.3% of its sales on ads, whereas its rivals spent 3% to 4%.

Unlike majority of the companies in retail clothing industry, Zara keeps more than half of its production in-house.

The company intentionally leaves extra capacity in its factories. Rather than chase economies of scale, Zara manufactures and distributes products in small batches. Instead of relying on outside partners, the company manages all design, warehousing, distribution, and logistics functions itself.

Zara's managers reason that investment in capital assets increases the organization's overall flexibility. It normally operates its factories for only a single shift. These highly automated factories can operate extra hours if need be to meet seasonal unforeseen demands.

In distribution, allocation of resources such as space floor, layout, and equipment follows the same logic that Zara applies to its factories. Storing and shipping many of its pieces on racks, for instance, requires extra warehouse space and elaborate material-handling equipment. Having ample capacity in its first distribution center, Zara opened o new, 100 million EUR, 120,000-square-meter logistics center in Zaragoza.

The reason for this investment is thatZara's managers follow a fundamental rule of queing models, which holds that waiting time shoots up exponentially when capacity is tight and demand is variable. By tolerating lower capacity utilization in its factories and distribution centers, Zara can react to peak and unexpected demand faster than its rivals.

Thanks to the responsiveness of its factories and distribution centers, Zara has dramatically reduced its need for working capital. Because the company can sell its products just a few days after they're made, it can operate with negative working capital. The cash thus freed up helps to offset the investment in extra capacity.

## **5.** Conclusions

Then survival and prosperity of all for-profit organizations is directly linked to their ability to

both create and capture value. Therefore, business models are applicable to all these. Business models provide a powerful way for executives to analyze and communicate their strategic choices. However, one should remember that the process of making strategic choices ad testing business models should be ongoing and iterative.

The innovative business model of Zara, going "against conventional wisdom" of the textile industry clearly deserves attention. Thanks to the responsiveness of its factories and distribution centers, Zara has dramatically reduced its need for working capital. Because the company can sell its products just a few days after they're made, it can operate with negative working capital. The cash thus freed up helps to offset the investment in extra capacity.

The tacit knowledge accumulated over the decades of perfect implementation of "simple rules" has led Zara to the position of global leader in fast fashion business.

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#### **Summary**

The purpose of the article is to highlight the growing importance of the business model concept. The importance of the issue is linked to the changing balance between customer and supplier in the new economy and the consequent drive for new business concepts, structures, strategies and ways of managing the process of value creation. To help better understand business model concept this paper reviews the relevant literature, classifies the components of business models and illustrates the importance of business models using the case of Spanish retailer brand Zara. The resulting conclusion is that innovative business models, in particlur these going against "common sense" business logic, may dramatically improve competitive position and financial standing of an enterprise.

Key words: Business models; Strategy; Value; Zara.

**UD classification:** 519. 86: 330. 356. 3

# FUNCTIONING OF LOYALTY PROGRAMMES

# Adam Rudzewicz<sup>\*</sup>

### 1. Introduction

The article aims at general presentation of loyalty programmes in the present market, in which sectors of the economy are expected to be the most and which attracting the clients to use them.

Loyalty can be considered in numerous aspects, however, loyalty of clients towards a brand, enterprise or other institution is the most interesting. It is worth defining what loyalty is and what characterises it. First, it is attachment and devotion. Despite its long tradition in the marketing literature, nevertheless, it is still defined in many different ways. This depends on the approach to that issue. One of the widely accepted definitions of loyalty characterises it as behavioural results of client preferences in relation to a given brand, "manifesting at a certain time and representing the result of the valuating decisive process" [1, p.3].

Enterprises that want to base their market advantage on the loyalty effect should assure possessing devoted supporters both within the organisation and in its external environment. The organisation must find and win specific clients, employees and investors [2, p.87–92]. The advantages of that approach are presented in table 1.

Loyal investor	Loyal employee	Loyal client
<ul> <li>shares the organisation values</li> <li>possesses business knowledge</li> <li>considers long-time perspective in the decisions</li> </ul>	<ul> <li>has motivation for development</li> <li>decreases costs of the enterprise</li> <li>builds long-term partnership relations with clients</li> </ul>	<ul> <li>provides necessary cash flows,</li> <li>influences long-term profitability,</li> <li>cumulates the streams of references</li> </ul>

Tab. 1. Advantages from loyal members of enterprise environment

Focussing exclusively on the attitudes of clients and implications of their behaviours, the author can identify different loyalty types starting with full loyalty through hidden, superficial and ending with total lack of loyalty (table 2).

Category	True loyalty	Hidden loyalty	Superficial loyalty	No loyalty
Relative evaluation	High	High	Low	Low
Repeatability of purchase	High	No/minor	High	No/minor
Client attitude and behaviour	Consumer uses the offer of a given organisation only and considers it the best	Consumer expresses willingness to use the offer but he cannot use it	Consumer uses the offer but he has low opinion concerning it	Consumer is unwilling to use the offer of the enterprise and does not use it

Tab. 2. Buyer attitude and loyalty type

<sup>&</sup>lt;sup>\*</sup> © A. Rudzewicz; Ph.D.; University of Warmia and Mazury; Olsztyn

The above-presented loyalty categories combine the emotional and behavioural approach to that issue [3, p.14]. Complete loyalty (exceptional) is demanded the most by organisations because the client representing that attitude is less susceptible to looking for competitive opportunities and presents the positive attitude to the seller. The consumers representing "hidden loyalty" prefer the product range of the given organisation but buy it rarely. This does not result from antipathy or unwillingness but from diverse situational causes. Passive loyalty is characteristic to people possessing weak ties to the enterprise but high repeatability of purchases, which may result from convenience of conducting transactions at a given place or lack of opportunities for selecting a different offer. Disloyal buyers do not see the contrast between substitute products and frequently change the range of brands purchased [4, p.17].

Considering the increasing interest in the outcome, that has the form or clients' loyalty, and the opinion concerning different development stages of that phenomenon, the attention of scientists was cumulated thanks to continually introduced programmes for repeated buyers related to repeating the transactions [5, p.2]. The business tool, which the loyalty programme is, aims at maintaining the current cash flows or generating new cash flows on the base of the current clients [6, p.68]. It involves creating by the manufacturer of a process that would allow constructing lasting attachment of the consumer to a given brand, product or service [7, p.24]. Such activities may assume a variety of forms. Most frequently, they take the form of discounts, prizes or promotions that refer to the finance of the client directly. Activities focusing on building ties with consumers take the form of special events, publications, conditions of purchase or promoting limited series of products. In addition, elite consumer clubs are established that aim at building the favourable image of the organisation. It is obvious that organisations should award their loyal buyers but it happens sometimes that new users are offered more privileges and better conditions [8, p.78].

### 2. Popularity of loyalty programmes - results of studies

Statistics inform that an increasing number of Poles express willingness to participate in loyalty programmes. The number of consumers actually using such forms of inducing repeated purchases also increases. Figure 1 presents the level of clients' interest in participation in loyalty programmes. The survey BTL Monitor (report 2010) prepared yearly by the research institute ARC Rynek i Opinia [ARC Market and Opinion] was conducted during the summer of 2010 on the representative sample of the Poles aged 15–49.

Filling stations as well as super and hypermarkets record the largest numbers of participants in programs for regular clients (over a half of the population surveyed). In that second case, this is the consequence of implementing the Clubcard option by, among others the Tesco and emergence of the Payback programme. Mobile network operators recorded the largest decrease. The clients could decide that the offers by the operators did not meet their expectations or were entirely unprofitable. On the other hand, Polish distributors of wireless communication services are considered uncaring for the current customers, because they offer better conditions to new clients.



Fig. 1. Participation in loyalty programmes

Another analysis (commissioned by On Board PR ECCO Network) aiming at surveying the communication services community and based on the national public opinion showed that almost every second respondent did not see any motivations to use the loyalty programmes. One person in five declared that the programmes were just an option to exchange points for cash while 18% think that the immediate discount would be the stimulus and 16% preferred awards in kind. Those are real and tangible benefits resulting from participation. The survey also showed that people aged 18 - 39 years form the group with the highest interest in the programmes offered. Consequently, the target segment of the programme should be chosen for the appropriate age group in the offer satisfying the needs of such persons. The distribution of responses is presented in figure 2.



Fig. 2. Factors encouraging respondents to use the loyalty programme

The existing satisfaction surveys may be helpful in designing and implementing various loyalty programmes for appropriate markets. Thanks to them people responsible for marketing have the opportunity of obtaining information on the determinants for joining loyalty options and can select the appropriate moment for offering such an opportunity to those interested.



Fig. 3. Reasons for lack of interest in the programme

Almost a half of the respondents do not use any loyalty programme, because they expressed unwillingness to complete the required document. In case of 44% of the respondents, no offer was presented to them while 43% think that such programmes do not offer tangible benefits to the participants. Figure 3 illustrates the structure of those responses.

#### 3. Conclusion

Consumer loyalty is the status of his attitude to the enterprise offering products. That attitude is based on durability, acceptance of goods and services. A loyal consumer is tied to the enterprise products and indifferent to the activities of the competitors [9, p.295]. Satisfaction and loyalty of clients influence the financial results of the enterprise undoubtedly.

The highest interest in loyalty programmes occurs in case of the filling stations and retail shops (supermarkets) that is in case of the outlets where purchases are relatively frequent and repeatable. A large group of clients is not interested in participation in any loyalty programme as they do not see any benefits resulting from that or they are discouraged by administrative requirements (completing a form). The others that join loyalty programmes expect immediate financial or material benefits. They are usually middle-aged persons.

It should be assumed that loyalty programmes would continue developing in the increasingly professional formats. They are worth using for consolidating mutual relations between the enterprise and its clients.

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#### **Summary**

The article aims at general presentation of loyalty programmes present in the market, in which sectors of the economy are expected the most. The factors attracting the clients to use them are investigated. The highest interest in loyalty programmes occurs in case of filling stations and retail shops (supermarkets) where purchases are relatively frequent and repeatable. Consumers joining loyalty programmes expect immediate financial or material benefits. They are usually middle-aged persons.

Keywords: loyalty programmes; enterprise environment.

#### **UD classification:** 636.3

# FEATURES OF THE POST-CLEARANCE AUDIT IN UKRAINE

# Dariya Sagareva<sup>\*</sup>

# **1. Introduction**

XXI century characterized by a considerable strengthening of the role of globalization and integration in the world, because the orientation of many economic systems in building a market economy requires the development of comprehensive international economic relations to realize the economic potential in international markets.

As a result of close cooperation between the countries the volume of international trade each year steadily increasing. Therefore, Customs administrations all over the world are faced with new problems to solve which they should apply completely new and innovative approaches.

In the current context of globalization and integration, expansion of international relations, Ukraine strives for harmonize and standardize customs procedures.

The main condition for achieving this goal is the implementation of post-clearance audit.

### 2. Review of post-clearance audit in international customs regulations

Audit-based control methods are normally implemented as part of a Customs modernization package. Post-clearance audit means audit-based Customs control performed subsequent to the release of the cargo from Customs' custody.

The purpose of such audits is to verify the accuracy and authenticity of declarations and covers the control of traders' commercial data, business systems, records, books.

Such an audit can take place at the premises of the trader, and may take into account individual transactions, so-called "transaction-based" audit, or cover imports and/or exports undertaken over a certain period of time, so called "company based" audit [1].

Post-clearance audits can be conducted by case basis focusing on targeted operators, selected on the grounds of risk analysis of the commodity and the trader, or in a planned, regular way, set out in an annual audit program.

Furthermore the audit could also be used as criteria to offer special treatment to certain economic operators.

A special place among all customs standards belong to the International Convention on the Simplification and Harmonization of Customs Procedures (Kyoto Convention). According to Kyoto Convention customs control systems shall include audit-based controls [2]. Chapter 6 of the General Annex of the Revised Kyoto Convention sets out a large number of recommended standards relating to all aspects of Customs control, including the use of audit-based controls including the audit of traders' commercial systems (Standard 6.6. and 6.10).

Also principles and standards of the EU customs practice are concentrated in Customs Blueprints. This is a set of practical measures, developed by European customs experts. One of 22 directions of Customs Blueprints is post-clearance audit, which includes the promotion of international trade by establishing a balance between the simplification of trade procedures, on the one hand, and ensuring effective customs control and security on the other [3, p.20–25].

According to Customs Blueprints there are some objective conditions for the implementation of post-clearance audit:

<sup>&</sup>lt;sup>\*</sup> © Dariya Sagareva; applicant of the department of accounting and auditing; Odessa national economic university; Email: darja-sagareva@rambler.ru

1. Development of a comprehensive legal basis which gives customs officers the necessary powers to carry out audit/post-clearance controls efficiently and effectively.

2. Development of an organizational structure which enables auditors and their managers to carry out their duties with the maximum efficiency and effectiveness.

3. Development of an audit management system which ensures efficient, quality-controlled audits using appropriate methods and establishes an operational quality assurance programme ensuring that standards of an acceptable quality are being applied to audit activity.

4. Development of a training strategy to ensure that auditors and managers have all the necessary knowledge and skills to plan and implement their duties.

5. Development of a national audit planning policy with planned short-term and long-term controls, in accordance with priorities based on risk analysis and risk assessment.

Thereby, in foreign countries post-clearance control is a separate activity of customs authorities, which is developing rapidly and has its own subject, object, goals and objectives. It performs several important functions in the area of economic security. About 30% of all customs duties in developed countries come from holding post audit, because the customs procedures at border minimized.

# 3. Regulation and implementation of post-clearance audit in Ukraine

Significant influence on the process of implementing the post-clearance audit had a Ukraine's accession to the Kyoto Convention. According to many authors, it will facilitate the development of official relations between customs and businesses overcome the closure of customs regulations and encourage collaboration in the improvement of customs legislation and its application.

On June 1, 2012 came into force a new Customs Code of Ukraine. This document provides new opportunities for citizens and entities to facilitate foreign trade and greatly simplify existing customs procedures. Code introduced special simplified customs procedures for conscientious business. Ukrainian organizations, which have been operating in the market, have no debt, do not allow substantial violations can obtain the status of the incumbent operator of economic activity.

Article 345 of the Customs Code of Ukraine regulates the carrying out documentary checks by customs authorities. In particular, states that the customs authorities may carry out customs control through onsite documentary (scheduled or unscheduled) and off-site supervision of documentary compliance of Ukraine for state customs of:

1. the correct definition of the tax base, timeliness, accuracy, completeness, of accrual and payment of customs duties;

2. the validity and legitimacy of providing (receiving) benefits and exemptions;

3. the accuracy of classification by UCCFEA goods for which Customs held;

4. the compliance of the actual use displaced through the customs border of Ukraine goods to the declared aim of the movement and / or compliance with financial and accounting documents, reports, agreements (contracts), calculations and other documents of the company, information specified in the customs declaration, declaration of customs value, which carried out customs clearance of goods in the respective customs regime;

5. the legality of movement of the goods across the customs border of Ukraine, including the importation of goods into the territory of free customs zone or export from this territory [4].

Also it should be noted that the Customs Code of Ukraine defines the basis and procedures for documentary site inspections by customs authorities.

Thereby, in the Customs Code of Ukraine the concept of post-clearance audit is not defined, however, it contains a provision on inspection of foreign economic activity after the customs clearance, which

corresponds to the essence of the customs audit. The subjects of customs audit are the State Customs Service of Ukraine, its specialized departments and officials who are authorized to exercise control with application of audit methods.

Figure 1 illustrates the organizational scheme of carrying out of the post-clearance audit in Ukraine.



Fig. 1. Organizational scheme of carrying out of the post-clearance audit in Ukraine

Department to combat smuggling, the risk analysis and anti- corruption is a regional Customs, which is within its competence provides comprehensive monitoring of compliance with customs legislation, directing and coordinating the activities of other regional customs in combating smuggling and violations of customs regulations, analysis, control and verification of , anti-corruption.

The Department is a unit of customs, which provides in the area of customs inspection of documentary compliance with the legislation of Ukraine on customs issues, including timeliness, accuracy, completeness, calculation and payment of customs duties.

It can be concluded that in recent years the process of implementing inspection after customs clearance of goods has improved.

In particular, enhanced legal framework formed the appropriate verification agencies that already show the proper result of customs revenues from the post-clearance audit. But for introducing a system of effective audit requires not only making legislative changes, but also bring this idea to the public for a clear understanding that such arrangements will withdraw from the shadow trade imports and eliminate the possibility of obtaining illegal profits [5, p. 11].

Practical implementation of the above requires:

- development of scientific theory of post-clearance audit, involving experts from the customs affairs, public administration, government regulation and control foreign economic activity, etc;
- implementation of foreign experience in carrying out post-clearance audit in Ukraine;
- standardization of forms and methods of control activities carried out by customs authorities;
- promotion the more effective customs control in each customs post without increasing the administrative or enforcement costs through harmonized approach to post-clearance audit.

### 4. Conclusions

Customs administrations, especially those in the developing world, confront significant challenges in balancing their responsibilities for collecting revenue, protecting national borders, and facilitating trade. Consequently, customs administrations increasingly look to post-clearance audit as a means of implementing customs controls and allocating scarce resources more effectively.

Post Clearance Audit is a new and important area for the State Customs Service of Ukraine.

The successful implementation of post-clearance audit in Ukraine will help strengthen enforcement and provide the necessary support and confidence in the implementation of trade facilitating measures and simplified procedures in cargo processing and valuation specifically.

Effective program of design and implementation demand a range of responses – in legislation, in institutional reform, in building the capacity of customs and other relevant actors, and in monitoring project progress.

The program may also face financial and human resource challenges that may dictate the initial scope of the program; developing country customs administrations should scale their efforts appropriately.

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#### Summary

World practice shows that post-clearance audit, which became the worldwide way of harmonization and simplification of customs procedures, provides a clear and comprehensive picture of compliance with customs procedures applicable to the subject of economic activity. The article describes regulatory of post-clearance control in the context of international and Ukrainian legislation and identifies areas for the modernization of customs control in this area.

Key words: foreign economic activity; modernization of customs control; post-clearance audit.

#### **UD classification:** 656.073.5

# THE ROLE OF ORGANIZATIONAL CULTURE IN INNOVATION PROCESSES IN INDUSTRIAL ENTERPRISES

# A. Strychalska-Rudzewicz<sup>\*</sup>

# 1. Introduction

Successful organizations must create an institutional framework in which creativity and innovation are accepted as basic cultural norms if they want to foster innovation. Organizational culture lies at the heart of innovation [1, p.3–10]. The innovative extend can be regarded for an organization and be circumscribed by its culture. According to P. Ahmed [2, p.30–43] culture is a primary determinant of innovation. Possession of positive cultural characteristics provides the organization with necessary ingredients to innovate. Culture has multiple elements which can serve to enhance or inhibit the tendency to innovate.

The main purpose of this study is to investigate the effect of organizational culture on innovation processes of enterprises. The literature study was done, based on the results of research which were conducted in the most cases in industrial enterprises.

# 2. Theoretical background

Organizational innovativeness can be defined as an organization's overall innovative capability of introducing new products to the market, or opening up new markets, through combining strategic orientation with innovative behavior and process [3, p. 303–313]. Innovation has been defined in several ways. However, it is generally defined not only as the conceptualization of a new product or service (or a greatly improved product or service), but also as the successful bringing of the new product or service to the market. Accordingly, the firm's innovation capability is its ability to mobilize the knowledge, possessed by its employees [4, p. 325–359].

Innovation is holistic in nature. It covers the entire range of activities necessary to provide value to customers and a satisfactory return to the business [2, p. 30-43]. Innovation capability is one of the most important dynamics that enables organizations to achieve a high level of competitiveness both in the national and international market. Thus, how to promote and sustain an improved innovation capability should be the key focus area of the top managers. The standards for innovativeness is multi-dimensional, and grounded in product, process, behavioral (cultural), and infrastructure aspects. The literature provides a strong link reflecting relationship between culture and innovativeness. Hurley and Hult [3, p.42–54] found that levels of innovativeness in an organization are associated with cultures that emphasize learning development and participative decision making. Also, the antecedents of an innovation culture are similar to those of a market-oriented culture. Market orientation is widely known as an organizational culture that supports behaviors that dictate how employee's think and act as it relates to implementation of marketing concept [5, p.1-8]. Innovation offers a critical source of sustainable competitive advantage. Product innovation, for instance, entails developing new goods and services. Managing such innovation may help firms meet or even drive changing market demands. Likewise, process innovation involves creating or improving methods of production, service or administrative operations [6, p.871–884].

Many researchers in the area have adopted Schein's [7, p.109–19] three dimensional view of organizational culture – consisting of assumptions, values, and artefacts. Assumptions are the taken-for-granted beliefs about human nature and the organizational environment that reside deep below the surface. Values are the shared beliefs and rules that govern the attitudes and behaviours of employees, making some modes of conduct more socially and personally acceptable than others.

Artefacts are the more visible language, behaviours, and material symbols that exist in an

<sup>&</sup>lt;sup>\*</sup> © A. Strychalska-Rudzewicz; Ph.D; Warmia-Mazury University; Olsztyn

organization. Values are considered to be so central to understanding an organization's culture and they are also seen as a reliable representation of organizational culture.

Successful innovation requires managing flexibility-control tensions. Flexibility enables creativity, empowerment and change vital for the exploration that fuels innovation. Control, on the other hand, provides discipline, focusing innovation initiatives, for instance, on achieving long-term goals, leveraging core competencies, and meeting budgets [8, p.424–439]. Studies increasingly tout organizational culture as a key to managing innovation. Innovation-supportive culture is a firm's 'social and cognitive environment, the shared view of reality, and the collective belief and value systems reflected in a consistent pattern of behaviors among participants' [9, p.43]. The authors propose that culture may provide an overarching frame of reference, helping align employee behavior with organizational objectives of innovation and meet paradoxical demands for control and flexibility.

Studies suggest that an innovation-supportive culture derives from values, which inform an underlying belief structure and reinforce daily practice [10, p.9–12; 6, p.871–884]. The enabling potential of control values is consistent with improvisation approaches to innovation. Control aids improvisation during product development. A planned style of project management (e.g., formal reviews, milestones) provides a vital framework for brainstorming and experimentation [11, p.546–564]. Flexibility values foster a culture of experimentation and empowerment, whereas, control values may set boundaries that facilitate managerial trust and evaluation [6, p.871–884]. Further, while flexibility values enable operators to engage in creative problem solving or debug routine machine-related problems [12, p.701–728.], operators may see control as inhibiting innovation. Thus, innovation-supportive culture may appear paradoxical because of flexibility and control co-existing in underlying values and practices, but also may stem from conflicting views held by occupational and hierarchical sub-cultures within the organization [6, p.871–884].

Research [13, p.29-46] indicated that countries with low power distance have a greater tendency to innovate. According to Nigar Demircan Çakar and Alper Ertürk, [4, p.325-359] it is due to centralized authority, autocratic leadership, and many hierarchical levels, innovation capability of organizations with high power distance is expected to be very weak. High levels of centralization and formalization have been found to be associated with lower rates of innovation adoption [14, p.601–610]. Inventiveness is more likely to occur in low power distance and less bureaucratic surroundings, because bureaucracy reduces creative activity. When uncertainty avoidance is high, people like to have managers sharing information that clarifies and defines assignments, goals, policies, and procedures [15, p.102–115]. However, if uncertainty avoidance is low, employees may be more than willing to make key decisions using information they do not understand, with a potential risk. Organizations in countries with high uncertainty avoidance generally show such features as the resistance to innovations, highly formalized management, and the constraining of innovations by rules. In high uncertainty avoidance cultures, risk-averse attitudes imply that companies will not take avoidable risks and only adopts innovations if its effectiveness and value have already been proven [14, p.601-610]. Organizations in countries with collectivistic culture are characterized by making collective decisions, which may lead to a delay in the innovation decision process. Organizations in high assertiveness focus cultures, where emphasis on rewards, recognition of performance, training, and improvement of the individual are common characteristics, are innovative organizations [14, p.601–610].

The research findings of Nigar Demircan Çakar and Alper Ertürk [4, p.325–359] suggest that both power distance and uncertainty avoidance are linked to both empowerment and innovation capability on the individual level, whereas two new paths between collectivism and innovation capability and between assertiveness focus and empowerment are found on the firm level. Also, empowerment is found to be positively related to innovation capability for both small and medium-sized enterprises (SMEs) on both the individual and firm level.

The results of research done by Julia C. Naranjo-Valencia and Daniel Jime'nez-Jime'nez and
Raquel Sanz-Valle [16, p.55-72] conducted in manufacturing Spanish organizations have implications for practitioners. In order to be successful in the implementation of their innovation strategy (innovation or imitation) managers should pay attention to organizational cultures. In particular, if they adopt an innovation strategy they should foster the cultural values of adhocracy, mainly commitment to innovation, being the product innovation leader and developing a dynamic and entrepreneurial place where people take risks and, at the same time, as creating an environment where team working is highlighted. In contrast with this, if the firm decides to be a follower, in general hierarchy culture is preferable. That is, company should emphasize efficiency, dependable delivery, low-cost production, formal rules and policies, hierarchy and control. The only elements of a hierarchy culture that they should avoid are employees' conformity, predictability and stability in relationships. Organizational culture can affect the innovation or imitation orientation of the firm both positively and negatively. According to the findings, adhocracy cultures foster an innovation orientation while hierarchy cultures are associated with imitation. Taking this findings into account it seems that formal rules and procedures may foster innovation as opposed to imitation when they are balanced by other dominant characteristics but formalization should not become the employees' main shared values because it inhibits innovation.

The empirical study conducted by E. Martins and N. Martins [17, p.58–65] indicated a new model to explain the influence of organisational culture on creativity and innovation. Each factor will be discussed briefly with reference to the literature based model. The factor "strategy" leads to creativity and innovation in an organization. It is described in the vision and mission as a customer - focused marketing orientation. This orientation also includes active research into the needs of existing and potential customers with a view to promoting creativity and innovation. The core values should be integrated with activities and results and employees should be informed about the core values through the vision and mission of an organisation. It was postulated as a separate determinant for an organisational culture that supports creativity and innovation. The extent to which creativity and innovation occur in an organisation can only be determined if the vision and mission statements mention creativity and innovation. In other words the question about employees' understanding of the vision and mission does not make it possible to determine the extent to which creativity and innovation occur in the organisation; only that an understanding of the vision and mission will influence their implementation. The availability of measurable standards of the results that need to be achieved by individuals also seems to play a role in purposefulness and the promotion of creativity and innovation. Organisational culture which is based on trust that manifests in openness and sincerity, is an organisational culture that supports creativity and innovation. Trust is crucial to an organisation's success in an increasingly complex and rapidly changing environment. The trust relationship in an organisation will be strengthened when management and employees act openly toward each other. People will feel emotionally safe and this should lead to an atmosphere in which creativity and innovation can flourish. Management should also trust the process of innovation from lower to higher levels by taking note of the potential of innovative projects. trust amongst employees should increase the probability of successful change, in other words that employees will replace old practices with new practices. According to E. Martins and N. Martins [17, p.58–65] it appears that support for change and trust relate to each other and both will influence the degree to which creativity and innovation are stimulated and promoted in an organisation. Behaviour that encourages innovation is taking risk among others. Management should create values that support taking risk and should demonstrate through their actions that risk taking and experimenting are acceptable behavior. it is important that risk taking should be calculated and balanced to allow employees freedom in taking risks, but also to increase the possibility of success by creating a culture that allows for moderate risk taking, participation in decision making could lead to (among other things) more ideas being generated, quicker decisions being taken and ideas being converted into outputs, possibly explains why this item forms part of this newly postulated factor, namely behaviour that encourages innovation. The determinant "working environment" seems to focus on employees in the organisation and the way in which work takes place in the working environment as part of the organisational culture. The actualisation

of personal goals and objectives in pursuing organisational goals and objectives seems to relate to creativity and innovation. Another factor that has an influence on the degree to which creativity and innovation take place in an organisation is cooperative teams. One can conclude that if the environment is participative, employees will probably have the freedom to generate new ideas and participate in decision-making, which forms part of empowerment. The factor customer orientation focuses on understanding the needs of internal and external customers, improving customer service and flexibility in customer service. For many organisations, fostering creativity and innovation is essential to their ability to offer high quality products and services. It appears that management has a specific supporting role in promoting creativity and innovation. Open communication between employees, management and different departments as a determinant of organisational culture that would support creativity and innovation. The degree to which equipment and resources are available improves or detracts from the likelihood of there being creativity and innovation. Availability of equipment and resources is dependant on management's support. Also, the degree to which managers support the adaptation of rules and regulations to keep up with change will have an influence on creativity and innovation.

Zdunczyk & Blenkinsop [18, p. 25–40] suggest that higher-level learning, whilst not simply synonymous with innovation and creativity, clearly incorporates these processes. On this basis, one may expect that factors found to be enabling of higher-level learning will therefore be enabling of innovation and creativity. Factors which influence organizational learning can be summarized as: organizational culture, strategy, structure, procedures, resources (including technology and training), and the stability of the environment.

### **3.** Conclusions

The key focus area of the top managers should be the answer how to promote and sustain an improved innovation capability. Innovation-supportive culture derives from values, which inform an underlying belief structure and reinforce daily practice. Possession of positive cultural characteristics provides the organisation with necessary ingredients to innovate. Centralized authority, autocratic leadership, and many hierarchical levels will not increase innovation capability of organizations. Also, high levels of centralization and formalization have been found to be associated with lower rates of innovation adoption. Inventiveness is more likely to occur in low power distance and less bureaucratic surroundings. Managers should foster the cultural values of adhocracy, mainly commitment to innovation, being the product innovation leader and developing a dynamic and entrepreneurial place where people take risks and, at the same time, as creating an environment where team working is highlighted. Nowadays, trust becomes crucial to an organisation's success in an increasingly complex and rapidly changing environment.

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#### Summary

The article aims at investigating the effect of organizational culture on innovation processes of enterprises. On a basis on literature study one may conclude that innovation-supportive culture derives from values, which inform an underlying belief structure and reinforce daily practice. Possession of positive cultural characteristics provides the organization with necessary ingredients to innovate.

Keywords: organizational culture; innovation processes.

**UD classification:** 330.354

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## LOGISTIC ATTRACTIVENESS OF A REGION AS AN OPPORTUNITY FOR INTERNATIONAL COLLABORATION DEBATE AGAINST THE BACKDROP OF INTERNATIONALISATION OF MANUFACTURING

# Jacek Szoltysek<sup>\*</sup>

### **1. Introduction**

Such traditional notions as borders, distance and operating area are currently losing their meaning due to globalisation transcending national social and economic dimensions.

Increasing convergence of IT and telecommunications creates thus far unknown interdependence between development of globalisation and knowledge-based and progress-based economy [1, p.252–257].

### 2. Globalisation and internationalisation of manufacturing

Dynamics of changes in the global market does not rely solely on resources and intellectual assets of managerial teams, but first and foremost by their ability to come up with resources-based unique and profitable solutions.

Transnational corporations competing for dominance in specific markets take advantage of those factors to become market leaders, what gradually causes critical innovations of global reach to be ever-effective [2, p.203].

Globalisation of company operations takes on key significance under such market conditions, stemming from unification process of national market structures. The process of conventional market services standardisation, first described by T. Levitt was deemed as globalisation's foremost driving force, and operating in broad space of unified products was described as globalisation of an enterprise [3, p.92–102]. Once the first period of market functioning in that shape concluded, its essence came into question. Tendencies directed at market diversification emerged, factoring in local considerations, what changed perception of globalisation.

Modern methods, as opposed to early concepts of that process (unification of entities' character and commercial activity processes), lead entities to blend together and cooperate, to active transformation of forms and processes of commercial activity, all creating a structure perceived as hybrid system of multiplicity of links between global corporations.

Effective use of those relations requires improvement of structure, organisation and operating style of companies with global aspirations. The necessity to follow novel solutions stems inter alia from deliberations of V. Govindarajan, A. Gupta, who describe business globalisation as a multivariate phenomenon [2, p.274–284].

Among characteristic for a global enterprise qualities, they count presence on all important world markets and centralised purchasing according to the low-cost strategy or highest possible benefit attainable in a given country.

The managing personnel is required in turn to be able to effectively integrate various economic, organisational and cultural trends into a unified process facilitating generation of global benefits (Fig. 1) [4, p.108; 5, p.23–26].

Such considerations require support from perfectly organised logistics.

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Fig. 1. Model of a global enterprise

### **3.** Logistic considerations of a successful economy

Logistics is currently perceived as one of sources generating competitive advantage in a market. In order for a region to provide modern logistic services it needs to satisfy many infrastructural, technological, personnel, economic and legal conditions. How to evaluate a region's logistic attractiveness? The concept of such evaluation entails the notion of logistics absorptive power i.e. a region's readiness (or capability) for absorbing state of the art logistic solutions. It envisages determining measures, by means of which logistics absorptive power could be described, and subsequently differences identified between logistic attractiveness of a given region and its competitors, or region's "as-is" and target logistics absorptive power. More important basic measures of logistics absorptive power include density of linear and point infrastructure both for transport and travel (passenger transportation) and communication. Road density or number of transportation points underlies development of distribution centres – choosing best locations and creating on that basis ever-effective supply chains. Without shadows of doubt crucial premises are also size, structure and allocation of storing spaces. Those measures include also the number of airports, seaports and inland waterway shipping. Basic measures characterise logistic attractiveness of a region through describing the state of infrastructure catering for logistic services.

Logistics absorptive power can also be evaluated through complex measures, where the most commonly used is point scoring. Evaluated are (on point scale) various parameters, describing both the market and its characteristics. Counted among complex measures, is apart from e.g. costs (rental rates, land and labour prices), market access etc. Purchasing Managers Index (PMI). It is a quite characteristically composed indicator, which is intended to capture the dependency between production output and level of its logistic service. Provided there is a dependency between the level of logistic service and professionalism of logistic personnel, then such elements as raw materials purchasing price, supplier deliveries and employment differ from places where logistic service is deficient. Hence the index is a weighted mean of measures concerning new orders, export orders, production, number of items purchased, price of purchased commodities, inventory levels, supplier deliveries, employment environment.

Special importance in measuring logistics absorptive power needs to be put down to inventory levels and service efficiency measured by delivery time. The index exceeding 50.0 signals increased factor importance, and below 50.0 - its drop. Measurement and subsequent comparison of PMI not only allows for evaluation of different regions' logistics absorptive power (and building competitive advantage underlain by those factors), but also for developing investment and promotion programmes, increasing region's logistic potential. I will call such programmes, constituting regional policy a region's logistics competitive policy.

#### 4. Possibilities to use a region's logistics absorptive power in practice

Region's logistics absorptive power allows for evaluating resources at region's disposal, and for indicating actions required to increase the region's attractiveness in eyes of potential investors. Determining logistics absorptive power involves creating a resources map by means of the aforementioned measures. The procedure commences with determining – using different sources e.g. benchmarking, or drawing on potential investors' expectations – the desired target region's logistics absorptive power and comparing it against the "as-is" state. The, changes crucial to potential investor's success are analysed, along with weak and strong points of the region's offer. A simplified analysis of presented example is shown in fig. 2 [2, p.6]. Thanks to the analysis conclusions can be drawn. Investment and organisational tasks can be determined. Similar actions can be taken upon probing transport issues (fig 3) [6, p.8].



Fig. 2. Analysis of a region's weaknesses and strengths in terms of enticing potential investors



Fig. 3. Analysis of a region's strengths and weakness in terms of attracting potential investors (transport situation)

For business to operate within a region required are efficient multidirectional flows of goods, people and accompanying them information. Investment opportunities in that area depend on region's offer - on state and quality of logistic infrastructure. Construction of infrastructure, travel infrastructure is a source of regional economy's development and allows for higher region's competitiveness.

Having clearly defined strengths and weaknesses, adaptive work can commence, along with bespoke promotion. It lies within competences of marketing experts, precisely functional and strategic regional marketing, and involving also local marketing. Its aim is to prepare and offer particular areas for purposes of commercial activity in the region (areas for industrial facilities, technology parks). Strategic action is directed at identifying and satisfying systematically the needs of current and potential investors. In order to satisfy those needs, it is necessary to audit a region's logistics absorptive power in accordance with principles proposed in the paper.

### **5.** Conclusions

To summarise, worth reminding is the fact, that a competitive region is a space attractive for various users. In the age of globalisation, regions and their economies are faced with challenge of strengthening their competitive edge through fostering absorption of innovation, thus making innovation a tool for effective competing. Logistics absorptive power is a regional quality, illustrating a region's readiness to absorb logistic solutions. It can be analysed by means of basic and complex measures. Using measures allows for comparison between competitiveness of various regions and for forming a region's competitive logistic policy. Auditing logistics absorptive power enables competitive advantage strategies to be built by the region through preparations to eliminate weaknesses and transforming strengths into trumps. It also facilitates attracting new investors, through addressing their needs. Such practice is possible thanks to evaluation of a region's readiness.

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### **Summary**

In the article the author consider the role of the globalization and internationalization processes of manufacturing in the world economic relations. Also, there is determined the place of logistic in the economy and is highlighted the possibilities of usage of the region's logistics absorptive power in practice.

**Keywords:** globalisation; internationalisation of manufacturing; logistics absorptive power; region's competitiveness; international collaboration.

**UD classification:** 65:332.122

# THE ROLE OF MARKETING IN CONTEMPORARY INNOVATION PROCESSES – THE PERSPECTIVE OF TRANSITION ECONOMIES

# Maja Szymura-Tyc<sup>\*</sup>

### **1. Introduction**

Innovation is nowadays perceived as an imperative for sustainable competitive advantage of any company. Peter Drucker defined innovation as a change in value and satisfying customer needs and linked it closely with marketing. The innovation processes have been evolving since Drucker's work, as well as the role of marketing supporting them. The aim of the paper is to present the role of marketing in the contemporary innovation processes with the specificity of a transition economy enhanced. It attempts to confront the theoretical assumptions concerning the role of marketing in the networked model of innovation with the statistic data and empirical research results showing the differentiated importance of marketing in the innovation processes conducted in matured market economies and transition ones.

### 2. Innovation concepts and typology – a literature review

Innovation may be defined in many different ways. The simplest definition states that innovation means "making changes to something established by introducing something" [1, p.942]. Most researchers extend this definition of innovation by adding specific dimensions of innovation. They differentiate technology-driven and market-driven innovation, leading to technological and organisational innovation or technological and marketing innovation [2, p.134-160]. They also discriminate product innovation from process innovation [3, p.80-140], and mention that an innovation may be more or less creative or imitative. As a result of the above, innovative products may be products "new for the firm", "new for the market" or "new for the world" [4, p.100-180]. The innovation in products and/or processes may be incremental or radical i.e. replacing the previous products and processes [3, p.80–140]. It may be also a disruptive innovation i.e. changing the entire industrial sector and business practices [5, 30-83]. Depending on the type of product/service innovation may be autonomous or systemic, influencing the organisational forms of handling it (i.e. integration, alliances, virtual organisation) [6, p. 30-36; 7, p.130-150]. The diversity of innovation types causes difficulty in attempts to formulate a more complex definition incorporating all different dimensions of innovation. One of such definitions is that of D. O'Sullivan and L. Dooley: "Innovation is the process of making changes, large or small, radical and incremental, to products, processes, services that result in the introduction of something new to the organisation that adds value to customers and contribute to the knowledge store of the organisation" [8, p.5].

The innovation concepts presented above focus alternatively on the change in product/service features or processes performed by an organisation. This approach is essentially different from that adopted in the concept of innovation by Peter Drucker. He defined innovation as a change in value and satisfying customers' needs by use of appropriate resources, and claimed it to be the essence of business [9, p.14–36]. He says that the change in value may take the form of an improvement or modification of existing products or creation of a new value, new and different ways of satisfying customer needs, and transforming resources into assets or combining existing resources into a new, more effective configuration. The core of Drucker's innovation concept is then not the product or service itself, but the very value, especially customer value, and the value for firm resulting from changes in use or configuration of firm resources.

<sup>&</sup>lt;sup>\*</sup> © The paper was originally presented at 19<sup>th</sup> Annual Conference on Marketing and Business Strategies for Central & Eastern Europe organized by DePaul University Chicago and WU Wirtschaftsuniversität Wien; Vienna (Austria) 2011.

The concept of innovation introduced by Drucker in 1986 has its contemporary successors. First is the value innovation concept presented in the late 90s by W. Chan Kim and R. Mauborgne [10, p.60–90; 11, p.70–115]. The authors assert that in search for sustainable competitive advantage a company should integrate innovation in creating value for the customer with innovation in the value for a company creating processes. They insist on simultaneity in creating both values, which means that the raise in customer's value should not induce a reduction in the value for a firm. They claim that the value innovation concept may be perceived as a firm strategy integrating product innovation with process innovation, as well as technological innovation with innovation in marketing or organization of the firm. Though they assume that the strategy is specific for entering quite new, free from competition market space (i.e. "the blue ocean strategy"), the general assumptions of the concept may be effectively used for competing in matured, competition intensive markets (i.e. "the red ocean") [12, p.33–57].

The second inheritor of the Drucker's innovation concept is the concept of strategic innovation recently introduced by A. Afuah. He adopts the value approach to innovation and defines the socalled strategic innovation as "a game-changing innovation in products/services, business models, business processes and/or positioning vis-à-vis competitors to improve performance" [13, p.4] and build competitive advantage. He says, that "a new game strategy is a set of activities that create and/or appropriate value in new ways. They entail performing new value chain activities or existing ones differently from the way they were performed in the past, to create value and/or position a firm to appropriate (capture) value." [13, p.4]. He argues that the concept of strategic innovation is very close to the general concept of strategy originally introduced by A. D. Chandler and K. J. Arrow and redefined by M. Porter as the creation of a unique and valuable position, involving a different set of activities. The strategic innovation concept may be, therefore, perceived as being based on the heritage of Drucker and Porter together, combining it with the contemporary innovation theory achievements. It is also consistent with J. Schumpeter concept of innovation [14] as a process of "creative destruction" where the constant search to create something new simultaneously destroys the old rules and establishes new ones - all driven by search for strategic advantage being the new source of value for the firm [15, p.120–150].

Summing up, the contemporary innovation concepts i.e. the value innovation concept and the strategic innovation concept presented above are both very close to the approach to innovation established originally by Joseph Schumpeter and Peter Drucker. They are both strategic in that sense, that they combine external and internal factors. They merge the processes of creating value for the customer with the processes creating value for a company. They do not focus on products as alternative for processes but join the two. They do not concentrate on technological innovation only but embrace the marketing and organisational ones as well. They may be successfully adopted for autonomous and systemic innovation after the network approach is taken into consideration. Concluding, the perspective of value innovation, which is present in both concepts, represents an integrated approach for analysing contemporary innovation processes in most of the dimensions presented earlier. It offers a promising perspective for describing the innovation processes conducted in the international market in search for competitive advantage of companies and their networks.

### 3. Evolution of innovation models – towards the networked model of innovation

The review of the contemporary innovation concepts and their antecedents show that the innovation concept itself has not changed essentially since the twentieth century when J. Schumpeter and P. Drucker works were published but looped. One might suppose that the innovation processes have not changed as well, but that is not true. Researchers studying the contemporary processes of innovation prove that the understanding of the innovation process has changed over time essentially. Rothwell [16] describes the evolution of the approach to innovation by defining five generations of innovation models. He distinguishes the technology push model, market pull model,

coupling model, integrated, parallel model and finally – the integrated, networked model of innovation. The five generations of the innovation models are presented in the Table 1.

Generation	Description	Emergence	Main features
First	Technology push model	Early 1950s - mid – 1960s	<ul> <li>innovation process was linear, driven by significant R&amp;D capability that pushed technologically developed strong competences within one or many technologically superior products into the marketplace</li> </ul>
			<ul> <li>organizations developed strong competences within one or many technological platforms and focused on the discovery stage of innovation process to produce a steady stream of breakthrough technologies, dominant power rested in R&amp;D, leading to the stereotype of the innovative company as one populated by white – coated scientists</li> </ul>
Second	Market pull model	Mid –1960s - early 1970s	- innovation process was linear but driven by the needs of the marketplace rather than technology
			<ul> <li>organizations expended resources through their marketing departments to better understand what the customer wanted and than use the need as a mechanism to pull appropriate innovations through the innovation process</li> </ul>
			<ul> <li>output of the market pull process was in a better alignment with specific marketing needs, dominant power shifted from the R&amp;D function to marketing function</li> </ul>
Third	Coupling model	Early 1970s - early 1980s	<ul> <li>innovation process was coupling technology push and market pull processes as opposite ends of the spectrum</li> </ul>
			<ul> <li>organizations began to view their innovation process as sequential, functionally specific phases that are highly interdependent</li> </ul>
			<ul> <li>simplicity of a model driven by a single stimulus was abandoned in favour of a more independent and complex process</li> </ul>
			<ul> <li>dominant power shifted to higher management level because of the need of coordination and optimization across the various phases of the innovation process</li> </ul>
Fourth	Integrated, parallel	Early 1980s - mid 1990s	<ul> <li>innovation process was focused on integration and parallel development, obsessed with time to market and waste avoidance</li> </ul>
	model		<ul> <li>sequential process replaced by integrated activities that occur simultaneously and influence each other development, broadened scope of innovation process, more holistic perspective and recognized system effect within the process, promoting the idea of overlapping boundaries for innovation success</li> </ul>
			- enhanced integration and knowledge exchange across the innovation process
			<ul> <li>increased engagement of external and internal stakeholders in the innovation process</li> </ul>
			<ul> <li>reconnection of the complexity resulting from relationships of parallel activities, and recognition that process effectiveness could be enhanced through ongoing analysis and learning</li> </ul>
			<ul> <li>intensified management of innovation, driven by the desire to improve the effectiveness of the process by reducing waste</li> </ul>
Fifth	Integrated, networked	Late 1990s	- greater focus has been placed on networking, system integration, and agile communication
	model		<ul> <li>structuring the engagement of all relevant stakeholders and yet remain agile enough to adapt to contingencies, reflects the systemic nature of the innovation complexity</li> </ul>
			<ul> <li>management of innovation reflects the interwoven nature, as opposed to simplistic linear perspective of the earlier models</li> </ul>
			- management should nurture innovation development and balance structure and flexibility

Tab. 1.	Five genera	ations of	innovation	models
1 av. 1.	Tive genera	auons or	mmovation	moucis

The general direction of the evolution of the innovation model is a change from a simple linear model of innovation to an integrated and networked one. The last, fifth generation model of innovation described by Rothwell, which emerged in the late 1990s and has been dominating by now, is an extension of the fourth generation model and includes features of both. The changes in the model of innovation that occurred in the 90s were caused by several factors. The geographical dispersion of organisations, which was the result of globalisation and Internet development, called for a model maintaining the integration and engagement of all relevant stakeholders of the innovation process. It should reflect the complexity and systemic nature of innovation. These implied the innovation management routines to focus on nurturing innovation development and balancing between structure and flexibility. The evolution towards the integrated, networked model of innovation has been enabled by the development of information and communication technologies (ICT), which allow for diverse links within networks by overcoming the reach versus richness dilemma, previously included in the information economics. Networking supports shared learning leading to new knowledge as well as configuring and adopting ideas developed elsewhere. Participation in innovation networks can stimulate new ideas and creativity. Networking may also spread the risk involved in innovation processes and help in better use of scarce knowledge resources.

The evolution of the model described here is sometimes called the transition from a closed model of innovation to an open innovation model. The concept of open innovation model was developed in the early years of twenty first century by H. Chesbrough [17, p.20–57]. He describes open innovation is as a combination of internal and external ideas as well as internal and external paths of entering a market supporting the development of new technologies. The main differences between closed and open innovation are presented in Table 2.

Closed innovation principles	Open innovation principles
The smart people in the field work for us.	Not all the smart people in the field work for us We need to work with smart people, both inside and outside the company.
To profit from R&D, we must discover it, develop it and deliver it.	External R & D can create significant value; internal R & D is needed to provide part of the value.
If we discover it ourselves, we shall be the first on the market.	We do not have to be authors of research to profit from them.
Winning company is the one launching innovation onto the market.	Building a better business model is better than being first on the market.
We shall win if we create most of the best ideas in the industry.	We shall win if we make the best use of internal and external ideas.
We ought to control our IP, so that the competitors do not gain profit from our ideas.	We should make a profit from the use of our IP by others, whenever it supports our business model.

Tab. 2. The	principles	of closed	and open	innovation
I UNI ZI I IIV	principies	or crobed	und open	minovation

Source: adapted from Chesbrough, H. (2003), Open Innovation: The New Imperative for Creating and Profiting from Technology, Harvard Business School Press.

Open innovation model breaks with the conviction of the need to focus on internal development, based on own research and resources (competencies) of a company, a direct relationship between a technological leadership and a commercial success, and the absolute necessity to protect company's IP. It points to the fact that innovation can come from outside, and the source of value is not so much innovation itself but a much better business model, which uses it. The open innovation model

is being used by more and more companies today, incorporating the elements of this concept into their innovation processes.

### 4. The concepts of innovation in marketing theory

Approach to innovation, which prevails in the theory of marketing refers to the already quoted idea of Peter Drucker, that innovation is to provide the customer with better and better and more efficient goods and services, which may take the form of a lower price, new or better product, new facilities or the creation of a new need, or also finding new uses for an old product [18, p.54–55]. This approach to innovation is continuously present and developed in the marketing literature in connection with the aspects of launching new products onto the market. The modern attempt of a systematized approach to the process of creating innovation is the concept of vertical and lateral marketing of Ph. Kotler and Trias de F. Bes. These authors distinguish two ways to create innovation encountered in a day-to day running of enterprises: vertical marketing and lateral marketing [19, p.14–31].

Vertical marketing concept is based on sequential, logical (vertical) thought process in which the search for innovation goes from general to specific. The assumption of market consistency is taken, where striving after product innovation is performed within the existing market definition. Searching for innovation is based on the use of segmentation and positioning strategies, and modifying existing products in order to create their varieties. The resulting innovations do not create new product categories or new markets, as they always occur within a category in which the product idea was created. Kotler and Trias de Bes believe that this approach to innovation is adequate in the early stages of market or product life cycle (growth stages), as it allows for defending market by its division (fragmentation). Vertical marketing belongs to a low risk strategy and can be used in a situation when a company has limited funds available for R&D. The marketing department primarily bears the responsibility for innovation [19, p.110–111].

The second approach to the creation of innovation is called by Kotler and Trias de Bes lateral marketing. Lateral marketing is based on lateral thinking, in which the existing information is restructured and moves from the particular to the general as a result of the more inventive, probabilistic, provocative and creative thinking. Innovation generated within the lateral approach is located outside the defined category of a product or market, leading to the formation of a new category or market. The lateral approach to innovation causes that the selected product is transformed in a sufficient degree to ensure that it can satisfy new needs or the needs of new customers, alternatively it can be used in circumstances not previously taken into account by the company. Thus, this type of innovation does not intercept the pre-existing market, but create a new one. Lateral marketing is appropriate in the mature phase of the market or product life, allows for attacking of existing markets by substitutes from the outside. It belongs to a high-risk strategy and requires relatively large financial outlays. The responsibility for this type of innovation does not solely lie in the marketing department - it requires the involvement of other departments and even external companies [19, p.93–111].

Looking at the concepts of vertical and lateral marketing of contemporary innovation model it can be stated that they do not reflect fully the changes that have occurred in this model over the past 60 years. It seems that the marketing looks at innovation processes from the angle of the third model, at the outmost, the fourth generation, characteristic for the late 80s and 90s of the last century. This essentially corresponds with a closed model of innovation that takes place within the company, striving for leadership in launching innovation generated on the basis of company internal resources, with a strict control of owned intellectual property. Such a company focuses on product innovation, with little consideration given to its complexity and systemic nature and relationship with a business model that allows a company to appropriate the value. On less demanding markets, innovation is inherent in the concept of vertical marketing, where it is not enough – it turns to a lateral marketing. This approach to innovation processes justifies the placement of responsibility for innovation in a functionally separate marketing department. Innovation is here inspired and supported by marketing people or a higher level of company management, primarily coordinating the internal activities of participants of innovative processes.

#### 5. Marketing and innovation – basic relationships

The increase in the intensity of competition, which among other factors, is a consequence of markets and business globalization, causes that innovation is considered as an imperative of the development of modern enterprises. It is emphasized that achieving and maintaining competitive advantage is possible only on the condition of generating the capacity for systematic innovation, which is a source of growth of enterprise value for its stakeholders. This is not a new view, for innovation, along with marketing, were recognized over half a century ago as the essence of business. Since then, it has become a widely held conviction that innovation is embedded in the marketing and vice versa. Is it really like that - is innovation possible without marketing, or marketing without innovation? Is this relationship - if any - a subject to some change over time? Is it stronger or weaker in our times? What affects the strength of a possible change in the relationship between innovation and marketing?

The conducted considerations allow for a partial answer to these questions. Firstly, if innovation is defined as a change in values and satisfying the needs of customers, and marketing as a process aimed at creating and providing value to customers, the relationship between these two processes is obvious. The analysis of presented here concepts of innovation also permits us to say that so defined innovation is not possible without marketing, although on less demanding markets an effective marketing without innovation is possible. The strength of this relationship, however, varies in time. In the first generation innovation model, marketing had no significant effect on innovation processes. Its importance, however, grew with the increase of the market saturation and the intensity of competition. A surge in the diversity of customers' needs and expectations as well as their requirements meant that it was necessary to combine technological and marketing aspects in innovation processes. It seems that today the power of the relationship between innovation and marketing is even greater than in the past, as it is indicated by the characteristics of today's globalized and hyper competitive markets. The relationship between companies' innovation and marketing is not widely recognized and appreciated today, however research brings different conclusions, depending on whether they are carried out in most developed countries of Western Europe, or in less developed countries of Central and Eastern Europe.

For example, research conducted in a matured market economy, shows that innovation is the greatest weakness of marketing departments, which negatively affects the image of marketing in these enterprises. These studies have shown that the innovative skills of marketing departments are rated the lowest (1.9) among those considered to have the ability to influence the perception of marketing as: related to finance (5.2), relations with customers (4.8), creativity (4.1) and even efficiency (3.9) [20, p.30–35]. On the other hand, research on the importance and role of marketing in Polish enterprises which has been conducted in recent years show that in the majority of Polish companies marketing is appreciated, they have marketing departments, and market and marketing knowledge is highly appreciated [21]. It is believed that the marketing skills of Polish enterprises allow for better fulfillment of customers' needs and have a growing importance in ensuring the market success of companies, primarily on the domestic market, to a lesser extent on the international one. At the same time research conducted in Poland indicates that the field of marketing has a relatively large impact on innovativeness of enterprises (3.64), larger than the field of research and development (3.39), nota bene the lowest evaluated of all functional areas surveyed among Polish companies. Such a high score of marketing comes from the assessment of needs, preferences and behavior of customers and the ability to anticipate future changes (3.91), knowledge, experience and skills of marketing staff (3.90), having its own marketing departments (3.74) and budgets for marketing activities (3.63).

Commenting on the differences in the results of research it can be concluded that the cause of different perceptions of marketing impact on innovation processes could be driven from the

differences in the organization of marketing activities in the examined companies. In the more developed economies marketing activities are subject of outsourcing to a large extent, which means the transfer of marketing knowledge and expertise outside the company. Underestimating the role of marketing can also be caused by the misunderstanding of a long established fact that both innovation and marketing, are not singled out business functions, but they permeate all spheres of their functions and activities. The pursuit of the link between innovation and marketing from the perspective of cooperation among the singled-out functional departments of the company cannot, therefore. convey the whole complexity of the interpenetration phenomenon of these two processes. Studying the impact of marketing department on company's innovation does not consequently provide sufficient ground to assess the impact of marketing itself on the modern innovation processes. This approach may also lead to reduced effectiveness of the recommendations formulated by researchers and practitioners dealing with this issue. The perception of marketing from the angle of operation of only one department – the marketing department, fails to notice interfunctionality of marketing activities, and thus limitations to the recommended activities for creating the interface between the company and its customers. As a result, researchers interested in increasing the impact of marketing on business innovation recommend an increase in the innovativeness of marketing departments through the use of market knowledge and customers' knowledge for the development of new concepts for products and services, appealing to new trends, such as co-development of value by customers and introducing customers' solutions. They also recommend exercises in lateral thinking, which allow companies to transform customers' needs and expectations into ideas for new products.

The above recommendations, otherwise valid, still seem to be insufficient to strengthen significantly the impact of marketing on innovation processes. Neither the vertical nor lateral marketing in the view of Kotler and Trias de Bes is a response to the challenges to the modern model of innovation, assuming systemness and complexity of innovation processes, which require a holistic approach, parallelism and simultaneity of innovative activities, the integration of activities of participants (stakeholders) of these processes, both internal and external. The idea of vertical and lateral marketing does not solve the problem of development of cooperation in the network, efficient communication and knowledge sharing as well as intensification of innovation process management, requiring both structuring and flexibility. This means that both in practice and in theory of marketing there is a need to look for new solutions and ideas to increase participation in the processes of innovative marketing. In practice, it is worth to be modeled after best practices, such as those presented today by, for example Apple, who effectively uses a new model of innovation to achieve market success by integrating engineering skills with marketing, creating their own and getting from outside new ideas and technology, combining all these with a perfect sense of market needs. On theoretical grounds the concept of relationship marketing (network) should be developed, based on knowledge, not only would it go beyond the organizational framework for the marketing department, but far beyond the boundaries of individual companies, enabling mutual learning of many stakeholders creating innovative network of value.

### 6. Innovation processes in transition economies

The conducted here theoretical considerations and quoted empirical research findings over the perception of the role of marketing in innovation processes can be used for understanding the specificity of innovation processes taking place in transition economies and the impact of marketing on their course. The research on innovativeness of the European Union economies, shows a substantially lower level of innovation in the CEE transition economies in comparison with the economies of the EU-15. Most of these economies constitute a group of catching-up countries (Bulgaria, Latvia, Romania) or moderate innovators (the Czech Republic, Hungary, Lithuania, Poland and Slovakia). Only Estonia and Slovenia are included in the group of innovation followers and none of the transition economies is in the group of the Innovation leaders (EIS 2009, p.12). The detailed research results on the innovativeness of European economies are presented on Figure 1.



Data for the underlying indication are fro 2005 (34%), 2006 (34,5%), 2007 (13,8%) and 2008 (48,39%) Source: European Innovation Scoreboard (EIS) 2009, European Commission, 2010, p.12

The basis for measuring the level of the EU economies innovation is a synthetic indicator comprising seven factors in three areas: Enablers, Firm activities and Outputs. Enablers capture the main drivers of innovation that are external to the firm such as Human resources – the availability of high-skilled and educated people and Finance & support – the availability of finance for the innovation projects and government's support for the innovation activities. Firm activities embrace innovation efforts that firms undertake in the innovation process. First are Firm investments which cover a range of different investments firms make in order to generate innovations; next – Linkages & entrepreneurship – encompassing entrepreneurial efforts and collaboration efforts among innovating firms and also with the public sector, and last – Throughputs - including the Intellectual Property Rights (IPR) generated as a throughput in the innovation process and Technology Balance of Payments flows.

The last groups of factors – Outputs – encompass the outputs of firm activities described as Innovators – the number of firms that have introduced innovations onto the market or within their organisations, covering technological and non-technological innovations and Economic effects – capturing the economic success of innovation in employment, exports and sales due to innovation activities.

The economies undergoing transformation lag behind the EU-15 economies, mainly in the field of Firm activities - here their, by far the weakest sides, are Throughputs and Firm investments (EIS 2009, p.14). They also differ significantly from commercially mature economies in the field of Enablers, both in the area of Human resources as well as Finance and support, as is shown in Figure 2.

The Eurostat studies have revealed the innovation gap occurring between these two groups of countries, which can be justified by the fact that the transition economies began their innovation activities from a very low level, which had once been allowed by the autarchic economy of scarcity.

Today the dominant trend present in the European statistics is the convergence of innovation levels of matured market economies and the transition ones.

The increasing level of innovation of the latter over lapses with a much faster pace of growth compared to the EU-15 countries, including the very rapid growth of innovativeness of countries so far the least innovative (Bulgaria and Romania) (EIS 2009, p.14).



Fig. 2. Country groups: innovation performance per dimension

Source: European Innovation Scoreboard (EIS) 2009, European Commission, 2010, p.14.

As mentioned, one of the factors that significantly differ the most innovative economies from the least innovative in Europe is an innovative activity of enterprises, measured by the enterprises engaged in innovation activities in relation to all companies in the country. As shown in Table 3, for all companies, regardless of a size class and a branch of activity, it is up about 21 percent higher in the EU-15 than in the nine new EU countries. The biggest difference relates to medium-sized enterprises and amounts to 28 percent in general. But it is worth noting that the level of innovativeness measured by innovative activities of companies varies greatly within this group of countries. In case of the Czech Republic and Estonia, a noticeable gap in the level of innovativeness in relation to the EU-15 is about 10 percent, while in other remaining cases is up to 20 percent and more (the largest in Poland, Romania, Slovakia and Lithuania).

Tab. 3. Enterprises with innovation	activity as a percentage	e of all enterprises by size-class
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Size- class	EU- 15	EU- 9	Czech Republic	Estonia	Latvia	Lithuania	Hungary	Poland	Slovenia	Slovakia	Romania
Small	39	18	25	31	14	21	21	13	13	15	13
Medium	60	32	42	48	33	40	28	25	28	24	21
Large	77	53	66	75	58	64	44	53	55	47	41
All	44	23	30	36	19	28	23	17	21	19	17

Note: Data for Hungary do not include Mining and Quarrying

Source: Innovation activity in the new Member States and Candidate Countries. Activity, co-operation and sources. Statistics in focus. Science and Technology, European Commission, 12/2004, p.2.

It seems that the presented in the EU statistics perspective of convergence of the level of innovativeness of CEE and Western Europe is too optimistic, reflecting the fact that it does not take into account some important factors that indicate the degree of innovation, and hence - the competitiveness of enterprises and economies. The accepted indicators of assessing the level of innovativeness of enterprises, such as the share of enterprises engaged in innovation activities in the overall number of enterprises and economic effects of innovation implementations in terms of employment, exports and sales as they are not sufficient to assess the degree of innovativeness of

the action taken. Referring to the considerations contained in the initial part of this paper it should be noted that in the EU statistics innovation is simply perceived as the introduction of new or significantly improved product /service or process for a given market or across the enterprise. The reference market for companies from the CEE countries is primarily their local market. The low degree of internationalization of enterprises from transition economies does not allow them to evaluate innovativeness of the implemented solutions in the context of the international market, at least, the EU, which is certainly done, to a greater extend, by Western companies operating and competing on the EU market for many years. It can be also suspected that companies from the CEE region do not bring about a radical or destructive innovation what can be traced in the EU statistics, where companies are asked about the barriers to innovation (Table 4).

	EU - 15	EU -9	Czech Republi c	Estoni a	Latvi a	Lithuani a	Hungar Y	Polan d	Sloveni a	Slovaki a	Romani a
Economic factors											
Economic risk	18	11	9	14	9	4	16	15	11	14	8
Innovation costs	23	19	22	25	21	0	19	19	21	26	22
Sources of finance	17	23	8	31	27	1	27	21	24	41	31
Internal factors											
Organizationa I righties	5	4	2	3	4	7	6	5	4	3	2
Qualified personnel	15	8	7	13	9	8	8	4	13	4	5
Information on technology	5	4	1	6	6	7	5	4	4	2	3
Information on markets	5	6	3	8	7	6	11	4	8	4	4
Other factors											
Regulations and standards	9	6	3	8	6	5	10	7	4	7	7
Customer responsivenes	5	8	5	10	6	5	18	8	5	9	3

# Tab. 4. Enterprises reporting the following hampering factors as highly important, as apercentage of all innovation active enterprises in industry

Note: Data for Hungary do not include Mining and Quarrying

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Source: Innovation in the new Member States and Candidate Countries. Output, barriers and protection. Statistics in focus. Science and Technology, European Commission, 13/2004, p.4.

The enterprises from transition economies more rarely than their Western European competitors point at a risk associated with innovation activities. This risk increases enormously in the case of radical and destructive innovations, which cannibalize existing products /services and change the structure of the industry in which companies operate. Similarly, the costs of innovation are rarely mentioned by them as a barrier to innovation, which could indicate that they engage in market-driven innovation rather than in technology-push one, which usually entail for significantly higher outlays on R & D. This may result from lack of financial resources for innovative activity, which is

more often considered a barrier to innovation by companies from the CEE countries than the EU-15. The fact that these enterprises relatively less complain about the lack of qualified personnel and information on technology, and more acutely feel the lack of market information may also indicate a "market" and not "technological" nature of the innovations implemented.

The fact that the risk and cost of implemented innovations are relatively rarely indicated by companies from the CEE countries as a significant barrier to innovation can also result from the notion that these innovations are set in the vertical marketing concept, rather than lateral, referring to the strategy of red rather than blue the ocean. These types of strategies of CEE enterprises were initially justified by the low saturation level of markets in these countries, the relatively lower intensity of competition and openness of economies to international trade as well as associated with lower levels of economic development smaller requirements of customers. These conditions were the cornerstone of creating innovation based on sequential, logical thinking within a given category of the market and taking action aiming, chiefly, at a new segmentation of the market and product repositioning. The effectiveness to date of these strategies may explain the positive image of marketing in these countries, considered as a factor significantly influencing the innovation of enterprises as well as high scores of marketing knowledge and expertise in the process of building competitive advantage. However, it seems that so far implemented a model of innovation and marketing concept cannot be further used with success. The companies from the region have been indicating that the barrier to innovation is a lack of a positive customer response to the offer, which may be a prerequisite for having to move to a new model of innovation, referring to the concept of lateral marketing. Search for new product categories and new markets, appropriate to the new concept of innovation and marketing will require more financing, acceptance of higher risk activities and cooperation of many internal and external units within the enterprise and their networks.

Some hope for the company innovativeness development from transition economies is the fact that companies from these countries declare, twice more often than the EU-15 companies, the establishment of cooperation in the field of innovative activity, as shown in Table 5.

Size- class	EU- 15	EU- 9	Czech Republic	Estonia	Latvia	Lithuania	Hungary	Poland	Slovenia	Slovakia	Romania
Small	14	31	20	31	45	49	48	26	36	13	17
Medium	24	39	26	39	49	44	56	36	49	31	22
Large	57	55	40	67	68	60	73	49	55	46	39
All	19	37	24	35	49	48	52	32	46	24	22

Tab. 5. Enterprises with co-operation arrangements on innovation, as a percentage of all
innovation enterprises by size-class

Note: Data for Hungary do not include Mining and Quarrying

Source: Innovation activity in the new Member States and Candidate Countries. Activity, co-operation and sources. Statistics in focus. Science and Technology, European Commission 12/2004, p.4.

This applies, in principle, all size classes and types of business enterprises, whereat the observed differences are smallest in case of large enterprises. The leaders of innovative enterprise cooperation are here Hungary, Latvia, Lithuania and Slovenia, which means that innovative cooperation is developed in particular by large firms operating in relatively small markets. This may be due to the fact that large companies are implementing more advanced innovations, aimed not only at the local market, which requires greater cooperation with partners within the network. A similar situation was observed in the past in the EU-15 countries, when companies coming from a relatively small markets, were looking for innovative cooperation opportunities within the created

networks, giving them access to larger, more demanding markets and R & D resources. Undertaking an innovative collaboration with other entities is today the basis for the development of systemic innovation, allowing companies to offer products and services of such a nature, that they are relatively difficult to imitate and permitting these companies to build a competitive advantage not of individual enterprises, but rather of the whole network involved.

### 7. Conclusions

The conducted here theoretical considerations, supported by the results of empirical research and analysis of statistical data, indicate that the innovativeness levels of market-developed European economies and transition economies are today undergoing of the convergence process. Despite some lateness and barriers companies of the new EU member states increase the level of their innovativeness, realizing most often the traditional coupling model of innovation combining the technology-push and market-pull processes.

Identifying the limitations of the traditional model of innovation, these companies start an innovative collaboration with other entities, including foreign partners, mostly from European countries. At the same time they join innovative processes occurring in Europe and internationally.

The implementation of the innovation network model should allow them, in the future, to increase the degree of innovation and competitiveness to the level of their Western partners. The negative effect of networking of innovation processes, however, may be a gradual erosion of marketing image as an intraorganizational company function responsible for business innovativeness, as it is the case in today's companies that have already implemented the networked model of innovation. This does not mean that the impact of marketing, as a formula responsible for creating customer value on the process of innovation, will diminish. However, it will certainly require a different way of description, highlighting inter-functional nature of marketing as a process that goes beyond the framework of the company, which is implemented in an integrated and open innovation networks.

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#### **Summary**

The innovative processes that occur in companies usually consist of sequential, functionally specific, interdependent phases taking place within the company. A significant impact on the course of these processes still bear marketing departments, which makes the role of marketing in creating innovation a recognized and appreciated one.

Key words: marketing; innovative processes; transition economies.

**UD classification:** 338.1

# FLEET MANAGEMENT MODEL AS THE EFFICIENCY INCREASE INSTRUMENT IN THE POLICE

# **Robert Tomanek**<sup>\*</sup>

### 1. Introduction

The observation of changes in the public sector (not only in Poland) suggests that the adaptation of business solutions, may be a source of increased efficiency in this sector. A key instrument for the optimization of logistic processes is increasingly used in the logistics sector fleet monitoring systems based on telematics solutions (combining information technology and telecommunications).

In particular, a vehicle tracking systems using satellite technology and systems available through the analysis of fleet operations in real time. Monitoring allows the assessment of efficiency of the fleet. This knowledge can also be used in operating activities of the Police.

Vehicle monitoring system is the key, but only one of many organizational and economic solutions, which should be comprehensive prepared with a special reference the organizational and economic police. The transfer of relevant business solutions to public sector operating conditions requires consideration of such differences in organizational culture and specific salary systems.

### 2. Optimization of the police fleet management as a subject of research

The problem of optimizing fleet management using satellite monitoring system was the subject of research within the research and development project No. R00 0138 O 11, which is realized from 09.01.2010 until 12.31.2011 year by a consortium of scientific and industrial, composed of: University of Economics in Katowice, as leader of the project, Voivodship Police Headquarters in Krakow, WASKO S.A. (a company operating in the IT sector, specializing in telematics hardware and software).

The project is designed to develop methods to optimize vehicle operating costs and increase efficiency of the fleet of the police. The project has been included analysis and studies, especially choice of method of measuring fuel consumption in vehicles. The demonstrator system has been installed in police cars selected. The main functions of the system is receiving data from the GPS / GSM adapted to vehicles, especially fuel consumption (taken from the vehicle Controller Arena Network), processing of information collected by means of special algorithms, the presentation of calculation results in the client application, which is a fleet management tool. One of the functions of the system is able to monitor the vehicle position on a digital road map. This allows real-time surveillance of vehicle traffic police - example of the system shown in Fig. 1.

Otherwise may be enter and process information concerning the exploitation the vehicle (such as: identification, servicing, repair, fueling).

The application allows you to obtain data about the operating costs of official vehicles. Accurate measurement of fuel consumption will enable the management of fuel economy, which should contribute to reducing transport costs.

A prototype system – the so-called technology demonstrator – embraced 150 vehicles of various types of vehicles of the Police in Krakow. Vehicles are working in the police units located in areas typical of the Małopolska province (areas with characteristics of both mountain and lowland, and urban). The central servers (database and application), together with the workstation was located in Police Headquarters in Krakow. There has been the first positive observations: once installed in the vehicles selected for video recording devices nor of an accident involving one of these cars.

<sup>&</sup>lt;sup>\*</sup> © Robert Tomanek; Ph.D.; University of Economics; Katowice; Email: robert.tomanek@ue.katowice.pl



Fig. 1. Localization of the vehicle on a digital map

### **3.** Police fleet

Polish police have over 20 thousand units of transport, the majority (over 90%) are cars and trucks (Tab. 1). The average age of vehicles is decreasing as a result of purchases (only in 2009 bought nearly 5 thousand vehicles) – for vehicles is 4.7 years (Fig. 2). In 2009, the average age of vehicles decreased in comparison with 2008 by 30% for cars. It should be noted that the fleet replacement program (Tab. 2) has been completed and is no longer continued in 2011, so the average age of vehicles will increase. Fleet is used extensively - the average car mileage is just over 17 thousand km per year (Fig.2) [1].

No.	Transport units	Units 31.12.2009	Percent
1	Cars	12 955	64,2
2	Jeeps	695	3,4
3	Vans	3 642	18
4	Trucs	520	2,6
5	Buses	108	0,5
6	Special cars	356	1,8
TOT	AL	18 276	90,5
7	Boats	280	1,4
8	Other	1 629	8,1
TOT	AL FLEET	20 185	100

 Tab. 1. Polish police fleet (2009)

Source: The Polish Police data.

Funding source	PLN (mln)	Percent
The modernization of the police	362,7	89
Local government resources	14,6	3,7
The Norwegian Financial Mechanism	21,0	5,3
National Fund for Environmental Protection and Water Management	0,6	0,2
Sponsoring	7,3	1,8
TOTAL	406,2	100

#### Tab. 2. The financing of fleet purchases (2007-2010)

Source: The Polish Police data.



Source: own calculation based on the Polish Police data.

#### Fig. 2. Average age of fleet

Operating costs of the fleet is around 246 million PLN per year (2009), including fuel costs are almost 130 million PLN.

The cost calculation does not include some of the costs: in particular, depreciation and payroll. So the calculated unit cost was estimated at 0.71 PLN / km for 2009. Technical maintenance efficiency is low – on average, it is a bit over 30000 km of mileage per an employee; service costs are high (around 0,3 PLN per 1 vehicle-kilometre, which is similar to the costs of a bus maintenance) – Fig. 3 and Fig. 4.



Source: own calculation based on the Polish Police data.





Source: own calculation based on the Polish Police data.

#### Fig. 4. Unit costs of Police technical maintenance in PLN/km – data for 2009 (km/employee)

Poor use of the fleet is not reflected in the account of unit costs. Moreover, optimization actions impair the use of rolling stock – at market conditions, such an economy would be impossible, as would lead to an increase in fleet costs [1].

### 4. Model of optimization of the police fleet management

Increasing the efficiency of the transport industry requires comprehensive solutions, modelled on the approach used in business, taking into account not only the introduction of new monitoring techniques, but also organizational innovation. It is necessary to integrate the management of key fleet management processes (Fig. 5). In particular, it is necessary to draw attention to the integration of basic management functions for the processes [2, p.744–747]:

- the supply of transportation equipment – the impact of police units on purchases of rolling stock is too small, the dominant factor in this process is the availability financial resources do not sufficiently take into account the structure of the owned fleet (which affects the costs of maintenance and operation), questionable whether this planning process, and its organization;

- rolling stock, which is crucial for the effectiveness of the police fleet – the primacy of operations negatively associated with vague supervision over the operation of rolling stock (it is not possible to assign specific fuel consumption for users of rolling stock), and complement this picture is the lack of economic incentives that induce users to efficient use and care of the fleet;

- fleet service – service is based on the work of its technical equipment, it is time to commute to the service station, self-service system seems to be cheaper than based on outsourcing, probably because it does not take into account the costs of travel to the service station and the exclusion from the work of officers supplying equipment for service stations;

- cassation fleet - fleet retires from service reluctantly, no motivation, fleet sales resources go directly to the state budget, it appears that this process should be directly related to the procurement process in transport equipment and should also include elements of motivation.



#### Fig. 5. Optimization model of police fleet

The key to effective control of transport costs to implement a system that allows monitoring of rolling stock including for precise control of fuel economy. The experience of road transport operators allow to expect significant economic benefits here (especially if we consider that at present the police are monitored only large, oversize excess fuel consumption and there is no incentive system to encourage savings in this area).

Monitoring systems are offered with both the brand of vehicles, as well as independent solutions for use in the rolling stock of the carrier. An example of the first type of solutions can be FleetBoard offered by Mercedes, which is already installed in more than 75 thousand. vehicles (including in Poland, about 350).

The system monitors events responsible for more than 80% of transport costs, it allows to improve transport security and optimization of drivers (which also has an environmental dimension) [3, p.5].

There are also solutions that integrate fleet management operators – offer comprehensive fleet management (in particular, to refuel and service). Examples are offered in Poland AutoGuard party products, FmSolutions, and systems related to satellite navigation systems (GPS) – a solution based on these data integration on the work vehicle and its components, and location data [4, p.83–87; 5, p.78–82].

The monitoring system created for the police must take into account the specificity of the operating business and that the measurement of fuel consumption in passenger cars is complicated. A major problem is the preparation of solutions to the economic incentives for drivers - police system of remuneration is stiff and formalized, so you need to seek appropriate forms of bonuses or legislative changes to allow the introduction of such solutions.

A major challenge will also prepare proposals for the management of the state of rolling stock (reduction and transfers between units) and the working time of the drivers.

Bridge gaps between different lines of action should be optimization software allowing user to use information from the satellite monitoring system – such an approach is presented in the project (Fig. 6). As you can see the GPS monitoring is only one of many elements of a computer system that includes the economy as a whole fleet of the police.

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POT Gorlice	4151	JELCZ	325	CIĘŻAROWY	Obsługiwane	2011-10-26	2011-10-26	Badanie techniczne	STA10/2011/1	۹ *
POT Bochnia	4229	AUTOSAN	D-633	PRZYCZEPA	Wprowadzone	2011-10-26	2011-10-26	Obsługa OT-2		Q@G**
POT Bochnia	3560	AUTOSAN	D-83	PRZYCZEPA	Oczekujące	2011-10-26	2011-10-26	Badanie techniczne	STA14/2011/1	Q #
POT Brzesko	3375	ZIL	BTR	60 PB	Wprowadzone	2011-10-26	2011-10-26	Obsługa OT-2		Q @ G *
POT Bochnia	123	Ford	mondeo	sedan	Oczekujące	2011-10-26	2011-10-26	Badanie techniczne	STA14/2011/2	۹*
Myjnia	3243	FSC-STARAC	266	A	Wprowadzone	2011-10-27	2011-10-27	Obsługa OT-2		Q @ G *
Myjnia	10	Ford KC	m	ō	Wprowadzone	2011-10-27	2011-10-27	Obsługa OT-2		Q @ G *
Myjnia	10	Ford KC	m	o	Wprowadzone	2011-10-27	2011-10-27	Obsługa OT-2		Q @ G *
Myjnia	10	Ford KC	m	o	Wprowadzone	2011-10-27	2011-10-27	Obsluga OT-2		Q @ G *
G × ·	<b>1</b> z + H 10	*							Wyświetlar	ie elementów 1 - 10 z 1:

Fig. 6. The structure of the fleet management system with the expanded service module

### 5. Conclusion

Optimization of the police fleet is a difficult task due to the specific cost accounting in the public sector and the limitations budget system. However, the use of the police business solution brings measurable economic benefits. Satellite monitoring (treated as a key element of an integrated fleet management system) is an opportunity to improve transport efficiency of the police. In particular, the expected decrease in cost of operation and servicing of rolling stock, and greater attention to transport equipment. It is possible to more effectively manage the fleet. Obtaining the benefits depend on the implementation of telematics and organizational changes in the police. The reforms require the salary system (it is necessary motivational factors) and the system of buying and selling of vehicles. Effective management of the police fleet is a benefit in terms of logistics costs and improving operating efficiency of the police.

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#### **Summary**

Logistics costs are major expense accounts departments responsible for national security. Experience in business can be used, but must take into account the specificities of the public sector. The article presents main results of research project completed in 2010-2012 by the University of Economics in Katowice (project leader), Wasko SA (company IT) and Malopolska Police (project funded by the National Centre for Research and Development - the value of the project: 4.2 million PLN). Police fleet consists of over 20 thousands vehicles. Police fleet operating costs are approximately 246 million PLN per year (2009), including fuel costs are almost 130 million PLN. The bill does not include transportation costs to the time-dependent cost of fleet operations: in particular, amortization and payroll. Fleet economy is inefficient - both in terms of the use of vehicles and service. In the research project, this was presented in the paper, prepared telematics solutions that reduce transport costs in the police. In particular, these are systems for monitoring fuel consumption. In addition, organizational changes are proposed which allow reducing logistics costs and increasing employee motivation.

Key words: logistics; fleet management model; efficiency increase.

**UD classification:** 330. 131. 5: 351. 741. 76

# ECONOMIC ACTIVITY ACROSS EUROPE

# **Grazyna Trzpiot**<sup>\*</sup>

### **1. Introduction**

The European labour market has changed significantly in recent years. The female proportion of the labour force has increased and the gender gap is falling. Migration now also helps shape the labour market, with the accession of the new EU Member States and the right to free movement of workers bringing changes to the national and ethnic profile of the European labour market. Demographic changes associated with an ageing labour force have also been behind new labour market incentives to encourage older workers to remain in the labour force for longer.

### 2. Methodology

Labour market measurement units are overall comparable because most of the variables are defined in accordance with resolutions of the International Labour Organization (ILO) and other international organisations.

The activity rate is defined as the proportion of persons aged between 15 and 64 in the labour force in relation to the total population of the same age. Activity rates for men and for women are expressed as a percentage of the male population aged 15 to 64 and the female population aged 15 to 64 respectively, not as a share of the total (male and female) population aged 15 to 64. The labour force comprises employed and unemployed persons.

The employment rate is defined as the proportion of employed persons aged between 15 and 64 in the total population of the same age. Employment rates for men and women are expressed as a percentage of the male population aged 15 to 64 and the female population aged 15 to 64 respectively, not as a share of the total (male and female) population aged 15 to 64.

Employed persons are defined in the Labour Force Survey (LFS) as persons aged 15 and over who during the reference week did any work for pay, profit or family gain or were not at work but had a job or business from which they were temporarily absent because of, e.g., illness, holidays, industrial dispute and education or training. Employment by economic activity expresses the breakdown of employment according to the NACE classification.

The Gini coefficient is defined as the relationship of cumulative shares of the population arranged according to the level of equivalised disposable income, to the cumulative share of the equivalised total disposable income received by them. A society that scores 0 on the Gini scale has perfect equality in income distribution. The higher the number over 0, the higher the inequality, and the score of 100 indicates total inequality where only one person corners all the income.

### 3. Data Analysis

#### 3.1. Europe

The employment rate is calculated by dividing the number of persons aged 20 to 64 in employment by the total population of the same age group. The indicator is based on the EU Labour Force Survey. The survey covers the entire population living in private households and excludes those in collective households such as boarding houses, halls of residence and hospitals. Employed population consists of those persons who during the reference week did any work for pay or profit for at least one hour, or were not working but had jobs from which they were temporarily absent.

<sup>&</sup>lt;sup>\*</sup> © Grazyna Trzpiot; Ph.D.; Department of Demography and Economical Statistics; University of Economics in Katowice; Email: trzpiot@ae.katowice.pl



Fig. 1. Employment rate in Europe in 2011 [1]

Looking on this map (figure 1) we can observe five clusters. The higher employment rates have Netherlands, Iceland, Norway, Sweden and Switzerland. On the opposite the lower employment rates in Europe have Italy, Greece, Turkey and Hungary. On this map we have no Ukraine but looking on figure 4 we can state that it belongs to the third cluster.

#### 3.2. Poland and Ukraine

The number of the employed in Poland as of the state on 31 March 2012, amounted to 8526.4 thousand persons and was by 0.3% higher than last year (the last year a growth by 2.8% was observed). The share of the employed in the private sector amounted to 63.2% (the last year it was 62.5%).

Average employment in Poland in the first quarter of 2012 amounted to 8266.0 thousand persons, and was by 0.2% higher than at the same time last year; this growth was lower than the respective growth observed in the first quarter of 2011 (the last year respectively a growth by 2.8% was observed). The highest increase in average employment was observed in sections: professional, scientific and technical activities (by 4.9%), construction (by 4.8%), information and communication (by 4.3%), transportation and storage (by 2.4%), financial and insurance activities (by 1.9%), mining and quarrying (by 1.8%); while the lowest increase was observed in: water supply; sewerage, waste management and remediation activities and agriculture, forestry, hunting and fishing (respectively by 0.9% and 0.1%). A drop in employment was observed in other sections (see figure2, table 1) [2].

Data on employment at the end of a year cover: employees hired on the basis of an employment contract, owners and co-owners of establishments engaged in economic activity and contributing family workers, outworkers, agents and persons employed by agents, members of the agricultural production co-operatives.



#### Fig. 2. Structure of employed persons in Poland

Economically active population (or labour force) includes all persons aged 15 and more who are considered as employed or unemployed in accordance with the definitions presented below.

Among the employed (figure 3) are included all persons aged 15 and more who during the reference week:

- performed for at least one hour any work generating pay or income, i.e. were employed as paid employees, worked on their own (or leased) agricultural farm, or conducted their own economic activity outside agriculture, assisted (without pay) in work on family agricultural farm or in conducting family economic activity outside agriculture,
- had work but did not perform it:
- due to sickness, maternity leave or vacation;
- due to other reasons, but the break in employment:
- did not exceed 3 months;
- exceeded 3 months, but these persons were paid employees and during that period received at least 50% of the hitherto remuneration (since the 1st quarter of 2006).

Compared to the third quarter of 2011, a drop in the number of the employed, a drop in the number of employed persons by 0.5% was observed. The number of the unemployed, as well as the economically active population increased (respectively by 4.2% and 0.2%).

In accordance with the international standards, among the employed were also included apprentices who entered into occupational training or occupational preparation contract with a private or public employer, if they received remuneration [3].

The changes in the definition of the unemployed (and economically inactive persons) follow the EUROSTAT recommendation (Commission Regulation (EC) No. 1897/2000 of September 2000).

As of 31 March 2012			1	
WYSZCZEGÓLNIENIE SPECIFICATION	Ogółem w tys. Total in thous.	31 III 2011=100	31 XII 2011=1	
O G Ó Ł E M TOTAL	8526,4	100,3	100,6	
w tym: of which:				
SEKTOR PRZEDSIĘBIORSTW	5731,0	100,6	101,0	
Rolnictwo, leśnictwo, łowiectwo i rybactwo	83,8	100,4	99,6	
Przemysł	2544,2	99,4	100,4	
górnictwo i wydobywanie mining and quarrying	171,3	101,7	100,8	
przetwórstwo przemysłowe manufacturing	2094,4	99,4	100,5	
wytwarzanie i zaopatrywanie w energię				
elektryczną, gaz, parę wodną i gorącą wodę <sup><math>\Delta</math></sup> electricity, gas, steam and air conditioning supply	148,5	95,8	98,7	
dostawa wody; gospodarowanie ściekami i odpadami; rekultywacja <sup>Δ</sup> water supply; sewerage, waste management and remediation activities	129,9	100,7	100,4	
Budownictwo	515,6	104,2	103,2	
Handel; naprawa pojazdów samochodowych $^{\Delta}$ <i>Trade; repair of motor vehicles</i> <sup><math>\Delta</math></sup>	1162,4	100,8	100,3	
Transport i gospodarka magazynowa Transportation and storage	499,0	102,6	103,5	
Zakwaterowanie i gastronomia $^{\Delta}$	131,4	95,4	94,2	
Informacja i komunikacja Information and communication	175,2	104,3	103,5	
Działalność finansowa i ubezpieczeniowa Financial and insurance activities	286,7	102,4	100,2	
Obsługa rynku nieruchomości $^{\Delta}$ Real estate activities	120,3	98,2	101,0	
Działalność profesjonalna, naukowa i techniczna Professional, scientific and technical activities	242,8	104,5	103,1	
Administrowanie i działalność wspierająca <sup>Δ</sup> Administrative and support service activities	335,5	99,3	102,3	
Administracja publiczna i obrona narodowa; obowiązkowe zabezpieczenia społeczne	628,4	99,3	99,7	
Public administration and defence; compulsory social security				
Edukacja	1035,4	99,6	100,2	
Opieka zdrowotna i pomoc społeczna Human health and social work activities	630,8	99,0	99,1	

### Tab. 1. Employed persons in Poland, 2012



Fig. 3. Structure of the population in Poland by economic activity, 2011

Additionally, we present tables concerning economic activity of particular subpopulations, such as: school-leavers, students, rural population, and disabled persons.

Among school-leavers are included persons at the age 15–30 years who completed school during the last 12 months and who do not continue education. As students are referred the persons attending schools on all levels of education – beginning with primary and ending with tertiary (including doctorate studies) regardless of the system of this education (full-time, evening or weekend). The rural population was divided into two subpopulations:

- agricultural population with connections to agricultural holdings, i.e. persons living in rural areas, members of the households with a holder of agricultural farm or plot,
- non-agricultural population, i.e. persons living in rural areas, members of the households without any holders of agricultural farm or plot.

Population of disabled persons was separated from the population aged 15 years and more on the basis of legal criterion. Among the disabled were included persons aged 16 years and more who were granted a certificate of disability or inability to work.

	Total	Of which share of age groups, years						Of
		15–24	25–29	30–39	40–49	50–59	60–70	working age <sup>1</sup>
Total population	64,3	41,7	79,7	84,2	85,3	65,4	24,2	72,7
females	58,5	36,6	69,0	78,4	84,2	58,5	22,1	68,9
males	70,7	46,5	90,1	90,2	86,4	73,9	27,4	76,3
urban population	62,6	38,1	80,2	85,0	85,3	63,1	15,9	72,2
rural population	68,1	49,3	78,5	82,3	85,2	71,1	42,1	73,8

# Tab. 2. Economic activity rate in Ukraine 2011, by sex, age group and place of residence (percent of the total population in respective age group in average for period)

<sup>1</sup> Females aged 15-54, males aged 15-59.

Source: SSC of Ukraine

Similar to Poland we present economic activity based on Ukrainian data (see figure 4, table 2). We preset also data from Ukrainian labour market including by cause of inactivity (figure 5). The number of economically active population of Ukraine for the first quarter of 2012, dropped by 0,67% to 21,8 million people.



#### Fig. 4. Economic activity rate in Ukraine 2011, by sex, age group and place of residence

The number of economically active population in Ukraine aged 15-70 years in the first quarter of 2012, amounted to 21 million. 885,3 million. man. This was reported by the State Statistics Service (State Statistics Service). Relative to similar period of 2011, that number decreased to 0,67% (1st quarter 2011, the number of economically active population stood at 33,1 million 22 thousand people). Among the population of working age in the first quarter of 2012, amounted to 20 million 340.7 million people (increase of 115.6 million), over 1 million working-age-544 thsd. (decreased by 263.4 thousand). The level of economic activity, as a percentage of the population of the relevant age group, was as follows: aged 15-70 years-64.2% (unchanged);-working age-72.8% (increased by 0.2 p.p.). Older than working age-25.2% (decreased by 2.7 p.p.). It should be noted that the number of economically active population aged 15-70 years old in 2011, amounted to 22 million. 56.9 k. a man – 2010, it increased by 0.024%.



Fig. 5. Ukrainian labor market including by cause of inactivity, 2011

#### **3.3.** The European Union and the BRIC countries

At the end we want to compare Eurostat, and Brazil, Russia, India and China — the BRIC countries (figure 6). We presents the results of a desk study done in order to find best comparable information which allows an overview of EU-27 and the countries of Brazil, Russia, India and China [4].



#### Fig. 6. Employment rates, total

In Eurostat, relations with other developed countries outside of the EU take place mainly via bilateral agreements or in international fora such as the UN and OECD. Eurostat has a Memorandum of Understanding (MoU) with the Brazilian Institute of Geography and Statistics (IBGE) signed in 2010, and the National Bureau of Statistics of the People's Republic of China

signed in 2011. The MoU with the Indian Central Statistics Office was signed in February 2012 while a follow-up to the 2002 MoU with the Federal States Statistics Service of Russia (Rosstat) is currently being drafted [5].



Note: EU-27, age 15–64; BRIC, age 15 and over. Source: EU-27, Eurostat (online data code: Ifsi\_emp\_a); BRIC, ILO.

#### Fig. 7. Employment rates, 2010

In order to provide a comparative view of the situation amongst the BRIC countries and the EU, use has often been made of data collected by international organizations such as the UN and its agencies, the OECD and others. Data has also been taken from national yearbooks (figure 7 and 8, table 3). The statistical data for the EU-27 stem largely from Eurostat's statistical reference database (Eurobase) and were essentially extracted between December 2011 and February 2012. External trade data for the EU-27 have mainly been taken from Eurostat's Foreign Trade database (Comext) and reflect data availability as of the beginning of February 2012. Trade data for the BRIC countries have been extracted from the UN's Comtrade database.

(%)									
	Age	2001		2005		2009		2010	
		M	F	M	F	M	F	M	F
EU-27	15 +	60.5	43.3	59.9	44.3	59.3	45.9	58.7	45.6
	15-24	40.4	34.1	38.9	33.0	37.1	32.9	36.2	31.8
	25+	64.4	44.9	63.8	46.2	63.3	47.9	62.6	47.8
Brazil	15 +	75.3	48.1	76.5	52.0	76.3	52.4	76.8	53.4
	15-24	62.2	39.7	64.5	43.1	62.4	42.2	62.6	43.2
	25+	80.6	51.2	81.0	55.1	80.8	55.4	81.2	56.3
Russia	15 +	61.3	49.2	62.5	50.8	64.1	51.9	65.1	52.2
	15-24	37.7	30.0	35.8	29.3	40.0	33.1	40.4	32.4
	25+	67.8	53.3	70.2	55.5	70.0	55.5	70.9	55.7
India	15 +	79.4	33.4	79.9	35.1	78.4	29.4	78.1	27.7
	15-24	58.4	24.4	58.4	25.1	51.7	19.1	49.1	17.2
	25+	88.4	37.2	88.7	39.1	89.0	33.2	89.4	31.6
China	15 +	78.2	68.0	77.4	66.8	76.5	65.6	76.4	65.6
	15-24	55.7	64.6	55.3	61.0	54.6	58.7	54.4	58.8
	25+	84.2	68.9	83.7	68.3	82.6	67.4	82.4	67.3

Tab. 3. Employment rates by gender and age groups

Source: EU-27, Eurostat (online data code: Ifsa\_ergan); BRIC, ILO.



Fig. 8. Gini coefficient

### 4. Conclusions

After the analysis, we can make conclusions that economic activity across Europe is rapidly increasing. This increase can be shown the best on the example of international labour market. These tendencies are differ according to the countries and its level of economic activity, which eventually influence the migration processes.

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#### **Summary**

The author highlights the state and perspectives of economic activity development across Europe through the migration processes. The methodological approach and a lot of migration processes measurements are given in the article, which shows the last tendencies concerning this area.

Key words: economic activity; labour; migration.

**UD classification:** 330.3(4)

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