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## **ORGANISATIONAL COMPETENCIES OF INNOVATIVE** ENTERPRISES IN DIFFERENT COUNTRIES

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### Abstract:

The advancement of globalization processes, the growing dynamics and discontinuity of the changes occurring in the environment make contemporary companies face a necessity to accept continuous adaptation to new challenges. A significant role in acquiring and maintaining a permanent competitive advantage by the companies is played by their internal resources based on knowledge, known as organizational competencies. The idea of "organizational competencies" has been defined in many different ways, however, it can be stated generally that they are the enterprise's specific skills referring to the placement of its resources, together with its cognitive abilities which make it possible to undertake activities leading to reaching assumed goals. Organizational competencies of an enterprise include elements such as its unique, specific knowledge, experience and skills which have all been developed by this organization and which give it a competitive advantage. The paper presents the results of empirical studies performed in order to identify organizational competencies and comparison of competence profiles of innovative enterprises in different countries. The study covered 280 innovative enterprises employing at least 10 people, located in five countries: Poland, USA, Thailand, Austria and Ukraine, with the use of a specially developed questionnaire. Finally, the work presents some recommendations for managers, concerning the directions of changes that should be made in the approaches to development of organizational competencies.

Keywords: organizational competences, core competences, innovative enterprise, competitive advantage

## 1. INTRODUCTION

Today's enterprises, regardless of their size, type of activity or location, must meet the growing challenges of the environment, which include, among others, globalization, the use of the opportunities created by technology, generating intellectual capital as a source of competitive advantage, the need for action in the conditions of permanent changes (Ulrich, 1997, pp. 126-127). For this purpose, it is necessary to flexibly adapt the organisation to the changing needs of the environment. An important source of competitive advantage of enterprises is their ability to produce something that no one else can, or to do it even better (Bessant and Tidd, 2013, p. 23). P.F. Drucker mentions innovation as a prerequisite for the functioning of both the organisation and the entire economy, at the same time pointing out the role of innovation as a factor of achieving competitive advantage by defining innovation as "a special tool of entrepreneurs through which they convert a change into an opportunity to start a new business or to provide new services" (Drucker, 1992, p. 29). Through the implementation of innovative actions, the enterprise can gain a competitive advantage (Porter, 2001), the stability of which is possible thanks to having internal, knowledge-based resources, known as "competencies of the organisation" (Łoboda and Sitko-Lutek, 2007, p. 13), with particular emphasis on the importance of core competencies (Prahalad and Hamel, 1990, pp. 79-91).

## 2. INNOVATIVE ENTERPRISE

The term "innovative enterprise" appears in the literature very often, however, it is defined in different ways. According to the Oslo Manual, the characteristic feature of an innovative enterprise is the introduction at least one technological innovation during the period under review (usually three years), i.e. a new or improved product or a new or improved process, which are new at least from the point of view of that enterprise (Stawasz, 2005, p. 133). Similarly, an innovation active enterprise is defined by the Polish Central Statistical Office (GUS) as an enterprise that during the period under review has introduced at least one process or product innovation or that was implementing at least one innovative project which has been interrupted or abandoned during the period under review (unsuccessful) or which has not been completed by the end of that period (i.e. it is ongoing) (GUS, 2013, p. 29).

Taking into consideration these definitions, a great number of enterprises can be included in the group of innovative enterprises, and therefore it is advisable to present its components and characteristics that it should have. For example, according to A. Jasiński (Jasiński, 1992, p. 25), an innovative firm is one that:

- carries out extensive research-development works (or purchases new products or technologies),
- makes relatively large financial outlays on that type of activity,
- systematically implements new scientific and technological solutions,
- represents a large share of novelties (new products and technologies) in the volume of production and services,
- constantly introduces innovations to the market.

A. Sosnowska, S. Łobejko and A. Kłopotek define innovative firm as an intelligent organisation, constantly generating and implementing innovations, finding recognition among consumers due to being highly modern and competitive, and the manner and structure of management are aligned to the primary task (Sosnowska, Łobejko and Kłopotek, 2000, p. 13). The authors discern the most important features of an innovative firm, which include:

- the ability to continuously generate innovation, creativity,
- the ability to use the innovative potential of the firm in order to maintain highly competitive position based on core competencies,
- the ability to predict the future, forward-looking thinking,
- constant communication with the customers of the company in order to get to know their current and future needs,
- having a team of designers, innovators to guarantee high level of innovation in the company,
- a suitable amount of information allowing proper evaluation,
- flexibility in adapting to changing operating conditions (Sosnowska, Łobejko and Kłopotek, 2000, p. 11).

Innovative activity carried out by the enterprises consists in engaging in all kinds of research, technical, organisational, financial and commercial activities that lead or are intended to lead to the implementation of innovation. Some of these activities are innovative, while others are not new but are necessary for the implementation of the innovation. In addition, innovative activity includes also research and development (R&D) which is not directly related to the creation of a specific innovation (GUS, 2012, p. 13). The innovative activity carried out by enterprises consists mostly of three elements (processes):

- collection of information, or researching the market, its size, the structure of the buyers and their expectations,
- implications of the acquired information in the R&D activities, broken down by creating completely new technologies and products, using existing technologies in offering new products, modifications to the technology of production and sales of the existing products on the market,
- implementation of the solutions adopted in the operating activity of the enterprise and performance measurement (Szczepankowski, 2010, p. 38).

Many authors indicate that success of an innovative enterprise depends on a number of factors. According to J. Dyer, these are: the right people, processes and philosophies, i.e. elements of organisational culture (Dyer, Gregersen and Christensen, 2011, pp. 167-173). J. Tidd and J. Bessant claim that innovative enterprise is made up of: a shared vision, leadership, the will to be innovative, an appropriate structure, important persons, effective team work, a high degree of commitment to innovation, the atmosphere of creativity, as well as focus on the environment (Bessant and Tidd, 2013, pp.151-152). A much wider approach is presented by L. Białoń, who has identified the following characteristics of an innovative enterprise:

- a wide scope of R&D,
- systematic implementation of new scientific and technical solutions,
- large share of technological, organisational and product novelties,
- it constantly introduces innovations to the market,
- it is able to predict the future,
- it is characterized by flexibility of operation,
- it employs creative teams,
- it is characterised by the ability to exploit the innovative potential,
- it maintains constant communication with the customers,
- it is capable of generating innovation on a regular basis (Białoń, 2010, p. 174).

Developing an innovative company is a complex activity that requires the creation and maintenance of innovative environment in the enterprise, which is affected by a number of factors. It should be noted that the factors developing innovativeness of the enterprise depend on the type of innovation being implemented in the enterprise. For the purposes of this study, an innovative undertaking is defined in accordance with the Oslo methodology, in which it is defined as an enterprise that has implemented at least one product, organisational, process or marketing innovation.

## 3. COMPETENCIES OF THE ORGANISATION

The literature does not provide a clear definition of the term "competence". This concept has many different dimensions, and its definition depends on the perspective adopted by the authors. Competencies are, inherently, abstract, complex and multidimensional, defined taking into account various theoretical approaches, for example psychological, situational and cognitive (Thierry and Sauret, 1994, p. 84). G.T. Milkovich and J.M. Newman mention even the confusion that is caused by attempts to answer the question of what competencies are and why they are so important (Milkovich and Newman, 2008, p. 152). The term "competence", used in a variety of ways, is a notion that has many meanings and is defined and understood in many different ways. It derives from the Latin words:

- competentia meaning affiliation, suitability, and
- *competere* to jointly apply for something, to agree (Caba, Latoń, Latusek, Sobiło and Borowczyk, 2009, p. 188).

In the management practice, the term "competence" is used in different senses. Initially, the term was used in a very narrow sense, with reference only to employees – "competencies" were understood as having the formal right to deal with particular matters and to take decisions in a specified scope.

Therefore, competencies meant only the right, regulated by laws and regulations in force in a given organisation, to perform certain activities. The ability of an employee to work effectively was, however, associated with suitable qualifications which were usually considered a result of education and length of employment (Oleksyn, 2006, p. 17). Modern approach to competencies refers to the effects of actions. The person who made a breakthrough in understanding of competencies in such a way was D.C. McCleland – when he was looking for differences between successful employees and employees who failed to succeed, he has shown that success is dependent on competencies in a broad sense, consisting of: high motivation, appropriate attitudes and behaviours, extensive knowledge and good skills (McCleland, 1973).

In the following years, despite the focus being still on employees, the approach to defining competencies evolved in the direction of embedding them more in the context of the organisation. C. Lévy-Leboyer states that competencies "refer to integrated use of abilities, personality traits, as well as the acquired knowledge and skills with a view to leading to successful implementation of a complex mission within the enterprise which burdened its employee with it in the spirit of the enterprise's strategy and culture" (Levy-Leboyer, 1997, p.19).

In the literature, there are many sets of competencies because it is impossible to distinguish one universal list of competencies. An important element that determines the understanding of competencies is defining their main characteristics. A. Orlińska-Gondor lists five main features that characterise competencies. These are:

- complexity competencies do not involve one factor, but consist of at least a few different elements,
- operability and advisability competency makes sense only if it refers to a specific action and when it is considered from the angle of the purpose that action is to serve,
- situationality competencies are context-specific, full competency means the ability to adapt and to act most effectively in a changing environment,
- variability the level of competencies of workers changes when impacted, therefore it can be adjusted to the needs and objectives of the organisation,
- measurability competencies are a gradable category and it is possible to determine different levels of their possession (Orlińska-Gondor, 2006, pp. 171-174).

M. Bennour and D. Crestani state that competencies are often presented as an application of the combination of knowledge (theoretical, contextual and procedural), know-how (practical and empirical experience) and behaviour (relational or cognitive attitudes and behaviours) (Bennour and Crestani, 2007, pp. 151-163). In this concept, competencies are considered divided into individual and collective, whereby the latter are seen as a combination of individual competencies (Mudrack, 1989, pp. 771-785).

The definitions presented above relate to individual employees' competencies which make up the work potential. The employee's individual work potential is made up of his knowledge and skills (the so-called "hard competencies"), as well as personality traits, predispositions, motivation and social roles (the so-called "soft competencies") (Olczak and Kołodziejczyk-Olczak, 2006, pp. 145-146). When relating the individual competencies to the level of the organisation, it can be concluded that the competency potential of the organisation is therefore the product of individual work potentials expressed in the number of employees and their individual working time (Łoboda and Sitko-Lutek, 2007, p. 13).

The second, broader approach to defining competencies relates to competitive advantage of the company on the market, and the subject of interest here are the competencies of the organisation which can be described as the abilities to develop, coordinate and use the existing resources to fulfil the tasks and objectives of the organisation (Amit and Schoemaker, 1993, pp. 33-46). This approach made managers aware of the fact that in order to maintain competitive advantage it is necessary for them to identify and develop their own specific core competencies (Scarbrough, 1998, pp. 219-232).

R. Sanchez defines organisational competencies as the ability to take coordinated action aimed at the use of existing resources in a way that allows to achieve company's objectives (Sanchez, 2004, pp. 518-532). Competencies of the enterprise, therefore, include those of its attributes which enable it to combine and coordinate its own existing resources. They constitute "a complicated bundle of resources, processes and abilities" (Bratnicki, 2000, p. 64). The resources are not valuable in

themselves, but in relation to individual markets. They are meaningful only in terms of actions designed to achieve competitive advantage.

R. Sanchez, A. Heene, H. Thomas claim that the competencies of the organisation should have the following components:

- the organisational component, i.e. they should be related to coordination and deployment of resources;
- the intentional component they should result in well-thought-out actions to ensure the coordinated deployment of resources;
- the objective-related component coordination of resources must serve the attainment of organisation's objectives (Sanchez, Heene and Thomas, 1996, p. 78).

From the beginning of the 1990s, when businesses were looking for opportunities to gain competitive advantage, more and more attention was paid to factors inherent in the organisation itself. A new concept was developed which explained how the resources and skills of the organisation affect its performance in the fast-changing competitive environment. The concept was defined as *resource-based view of the firm (RBV)*, combining the analysis of events taking place in the company with analysis of the industry and the competitive environment which was the focus of attention before, and the sources of success were sought in the ability to adapt to it (Collis and Montgomery, 2008, pp. 140-150). The resource-based approach to management uses the term "core competencies". It was first introduced in 1990 by C.K. Prahalad and G. Hamel who claimed that core competencies decisively contribute to gaining and maintaining continuous competitive advantage, are developed as a result of collective learning of the organisation and are related in particular to the coordination of diverse production skills and integration of multiple streams of technologies (Prahalad and Hamel, 1990, pp. 79-91). They are embedded in a given organisation and are the main determinants of its competitiveness due to:

- their importance in creating value for the customer,
- being difficult to copy,
- the possibility of using them in new business (Prahalad and Hamel, 1990, p. 90).

Core competencies of the organisation include, among others, communication, engagement and deep commitment to working in different organisations. Core competencies do not lose their value over time. Unlike physical resources, with time they become greater because they are used and shared in the organisation (Prahalad and Hamel, 1990, p. 82). Core competencies of the organisation should meet three conditions:

- provide potential access to many different markets,
- contribute significantly to the provision of benefits to the final customer of the product,
- be difficult to copy by competitors, and will be difficult to copy if they constitute a combination of organisation's own technologies and operating skills in the field of their application (Prahalad and Hamel, 1990, pp. 83-84).

Therefore, it can be concluded that core competencies are the result of the actual potential of the organisation and the company's success is, thus, the result of innovation, creativity, knowledge and experience available in the organisation.

Core competencies of the organisation represent a unique combination of business expertise and human skills that create the uniqueness of an organisation, include expertise in specific areas of operation of the company and the effect of synergy of intangible resources, such as motivation and contribution of work of employees, their professional knowledge, ideas concerning collaboration and management. Systematic and structured actions aimed at improving core competencies lead to an increase in the strategic potential of the organisation. Core competencies are inherently difficult to copy by competitors because they are unique and specific to each organisation. As a result, focusing on them helps the organisation achieve its objectives, and this, in turn, may lead to gaining continuous competitive advantage. Core competencies can thus constitute success factors of organisations and support the determination of new trends in their business activity (Bergenhenegouwen, ten Horn and Mooijman, 1996).

To sum up, a reflection on competencies can be defined as a combination of knowledge and skills that reflect both basic (tacit) knowledge, as well as skills necessary to perform the necessary actions. Competencies are based on knowledge embodied in the skills of individual employees and on the

knowledge that is available to individual organisational units. In general, it can be concluded that competencies are made up of specific, enterprise-owned skills in the deployment of resources, cognitive skills that allow for taking actions ensuring the attainment of the set objectives.

# 4. COMPETENCIES OF THE ORGANISATION IN THE LIGHT OF EMPIRICAL STUDIES

In the modern economy, innovations are considered to be one of the key success factors determining the achievement of competitive advantage by enterprises, and development of innovative enterprise is a significant challenge posed to managers. One of the aims of the performed empirical study was to identify competencies of innovative enterprises with particular reference to the universal competency elements characteristic to all enterprises covered by the study, regardless of their location.

### 4.1. Research methodology

The study has been carried out using the method of questionnaire survey, based on a specially prepared questionnaire. The respondents answered the questions in the survey using a 5-point Likert scale, in which the scores meant respectively:

- 1 Strongly disagree
- 2 Somewhat disagree,
- 3 Neutral,
- 4 Somewhat agree,
- 5 Strongly agree.

The study covered 280 innovative enterprises employing at least 10 people, located in five countries:

- Poland 161 enterprises,
- USA 16 enterprises,
- Thailand 40 enterprises,
- Austria 27 enterprises,
- Ukraine 36 enterprises.

The obtained results of the empirical study were analysed statistically using descriptive statistics in the form of average and weighted average. In addition, the percentage of positive answers given to individual questions (answers 4 and 5 in the adopted Likert scale) was calculated. The analysis has been carried out in respect of research samples from individual countries.

Competencies of the surveyed enterprises were evaluated using a 5-point Likert scale, in a variety of functional areas:

- management,
- finance,
- personnel policy,
- the use of IT,
- the use of technology,
- marketing activity,
- development,
- logistics,
- supply,
- servicing [after-sales servicing],
- relationships with the environment.

### 4.2. The level of competencies of the surveyed enterprises

Competencies of the surveyed enterprises in the individual areas were assessed by the respondents as average and high. The score is different in different countries. The average level of competencies in the surveyed enterprises in the USA was assessed the highest, and the most high-level competences were assessed in Austria. The level of competencies of enterprises in Thailand and in the Ukraine was assessed most critically. When comparing the obtained results with the level of innovation of the selected countries according to the 2014 Global Innovation Index, it should be noted that the highest level of innovation is in the USA and Austria, which is confirmed by the results of the study. The lowest

level of innovation is in the Ukraine, whereby the competencies of the surveyed enterprises were assessed slightly higher than in Thailand. The summary of these indicators has been presented in Table 1.

 Table 1: Comparison of the innovation indicators of the selected countries and average competencies in the surveyed enterprises

Country Indicator	Poland	USA	Thailand	Austria	Ukraine
Innovation indicator	40,62	60,10	39,29	53,42	36,28
Average competencies	3,86	4,24	3,50	4,16	3,75

Source: own compilation on the basis of the survey results and data adapted from the 2014 Global Innovation Index (retrieved on 12 March 2015) www.globalinnovationindex.org

In the enterprises in Poland, the level of competencies in the area of the relationship with the environment was assessed as high (4.05). What is worrying is a relatively low scoring related to the level of competencies of the surveyed enterprises in the area of development (3.76), especially that the subject of the study were innovative enterprises. According to the managers, the lowest score was given to competencies in the area of servicing/after-sales servicing (3.76) and the use of IT (3.64). The other competencies were assessed similarly, at an average level.

The surveyed U.S. enterprises have very high competencies of the organisation in the area of management (4.56) and the use of technology (4.56), while the lowest competencies, assessed at an average level, are competencies the areas of finance (3.88), as well as servicing (3.88).

The level of competencies of the enterprises surveyed in Thailand has been assessed generally as average and low, whereby these enterprises have the highest level of competencies in the area of servicing (3.75), and the lowest in the area of development (3.4), logistics (3.2) and supply (3.15).

The level of competencies of enterprises in Austria is the highest in the area of personnel policy (4.44) and supply (4.44); the lowest – in the area of logistics (3.78).

The level of competencies of enterprises in the Ukraine was assessed as average and low. The enterprises have the highest competencies of the organisation in the area of management (4.00) and marketing activity (4.00), and the competencies in supply (3.58), servicing (3.58) and finance (3.42) were considered the lowest.

A general summary the obtained results relating to the competencies of the surveyed enterprises is shown in Table 2.

Area of competence		Country						
Area of competence	Poland	USA	Thailand	Austria	Ukraine			
Management	3,98	4,56	3,60	4,11	4,00			
Finance	3,95	3,88	3,50	4,22	3,42			
Personnel policy	3,90	4,31	3,50	4,44	3,75			
The use of IT	3,64	4,19	3,55	4,33	3,83			
The use of technology	3,85	4,56	3,65	4,00	3,75			
Marketing activity	3,80	4,31	3,65	4,00	4,00			
Development	3,76	4,31	3,40	4,22	3,75			
Logistics	3,89	4,31	3,20	3,78	3,83			
Supply	3,88	4,13	3,15	4,44	3,58			
Servicing [after-sales servicing]	3,76	3,88	3,75	4,00	3,58			
Relationships with the environment	4,05	4,06	3,65	4,00	3,75			
Average	3,86	4,24	3,50	4,16	3,75			

Table 2: The level of competencies of the surveyed enterprises in the selected countries

Source: own compilation based on the results of study

When comparing the assessments made in all the surveyed companies, their management competencies were assessed the highest, followed by competencies relating to the relationship with the environment and personnel policy. The competencies of the enterprises in the use of technology, in marketing activities and in finance were at a slightly lower level. Then, they are followed by competencies in the area of supply and logistics, as well as development. Competencies that are at the lowest level in the surveyed enterprises are those in the area of servicing and the use of IT. Summing up, it can be concluded that in the surveyed innovative enterprises significant attention is paid to organisation management, but also to human resources. The surveyed enterprises are open to the environment, maintaining appropriate relationships, but also conducting marketing activities well. In general, it can also be concluded that the level of competencies of the surveyed organisations in the field of financial management and the use of technologies is average. The worrying fact is attaching relatively low significance to competencies in the area of development.

Taking into account the varied level of competencies in the surveyed countries, the structure of competencies was analysed based on a relative assessment of their level. In each of the surveyed countries, the level of competencies in the individual functional areas was determined in relation to the highest scoring in a given country, and therefore the scoring of 1.00 means the competencies assessed the highest in the country. The resulting scoring is presented in Figure 1.

Analysing the obtained results, it can be concluded that the most balanced level of competencies have the studied enterprises in Poland – competencies in the use of IT, which have been assessed the lowest, are on average about 10% lower than the highest competencies in the area of relationships with the environment. The greatest diversity is evident in the surveyed enterprises in Thailand – the difference between the competencies assessed the highest and the lowest, i.e. competencies in the area of servicing and supply, respectively, is 16%. In the other countries these disparities are at the level of 15%, while in the USA the competencies in two areas (management and the use of technology) reach a maximum level, and competencies in another two areas (finance and servicing) reach a minimum level.

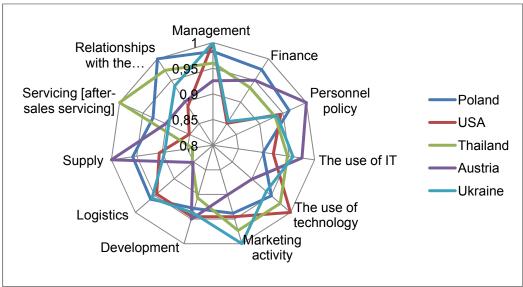


Figure 1: The level of competencies of the surveyed enterprises in the selected countries

Source: own compilation based on the results of study

## 5. CONCLUSIONS

The analysis of the results of the conducted study shows that the level of organisational competencies is different from country to country, however, a noticeable relationship can be observed between competencies and the level of innovation of a given country, measured by the Global Innovation Index. Although the structure of competencies of the surveyed countries is different in each of them, it can be concluded that the greatest importance is attached to the general management of the enterprise (USA – 4.56, Austria – 4.11, Ukraine – 4.00, Poland – 3.98), but also to good relationships with the environment, owing to maintaining these relationships, however, the assessment of the level of this

kind of competencies differs slightly between the countries (USA – 4.06, Poland – 4.05, Austria – 4.0, Thailand – 3.65), but also to appropriate marketing activities (USA – 4.31, Ukraine, Austria – 4.0). The appreciation of the need to take into account the impact of the environment on the enterprises' business influences placing the greatest emphasis on competencies that allow to operate effectively in that area. The surveyed enterprises have a slightly lower level of competencies related to the enterprise itself; that is management (Slovenia – 2.0) and development competencies (Austria – 4.22, USA – 4.31, Thailand – 3.4).

To sum up, it can be concluded that the high innovativeness of the surveyed companies is largely related to the competencies of the organisation, and therefore their improvement can have a positive effect on the development of the enterprises, but also on maintaining a continuous competitive advantage.

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