INNOVATIVE COMPANIES AND THEIR COMPETENCE IN SELECTED COUNTRIES

Urszula SKURZYŃSKA-SIKORA[1]

[1] Maria Curie-Sklodowska University in Lublin, Faculty of Economics, Lublin; urszula.skurzynska-sikora@poczta.umcs.pl

Abstract: The paper presents the results of empirical studies performed in order to identify organisational competencies of innovative enterprises in different countries. The study covered 476 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 organisational competencies.

Keywords: innovative enterprise, organisational competences, core competencies.

1. Introduction

Today's enterprises must meet the growing challenges of the environment, which include, among others, globalisation, the use of the opportunities created by technology, generating intellectual capital as a source of competitive advantage, or the need for action in the conditions of permanent changes (Ulrich, 1997). 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.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).

2. Innovative enterprise

Increasing competition, emerging markets, and different consumer preferences imply the introduction of new, innovative methods and solutions in a variety of areas of production, technology, distribution, marketing, sales and, management. P.F. Drucker concluded that innovation is a prerequisite for the functioning of both organisations and the economy as a whole, pointing to the role of innovation as a driver of competitive advantage, defining innovation as "a particular tool by which entrepreneurs make the transition to a new business. to provide new services" (Drucker, 1992, p. 29).

Innovation is an ambiguous concept, which is difficult to define. The innovation definitions highlighted in the literature emphasise the importance of introducing significant changes that lead to improved products, processes, procedures, and business models, thereby providing new value to stakeholders (Timmerman, 2009).

It can also be said that innovations are systematically implemented in order to increase the efficiency of the enterprise. Customers, suppliers, and other organisations from the company's environment are often involved in their implementation (Kraśnicka, and Ingram, 2014).

Innovation is closely linked to innovativeness, most often defined as the ability of a company to innovate, both technological and organisational (Nowacki, 2010).

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 of 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). 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).

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 (1992), 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 the 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). The innovative activity carried out by enterprises consists mostly of three elements – processes (Szczepankowski, 2010):

- 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.

Many authors indicate that the 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). J. Tidd and J. Bessant claim that the 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, an atmosphere of creativity, as well as focus on the environment (Bessant, and Tidd, 2013).

Developing an innovative company is a complex activity that requires creation and maintenance of an 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 delineated as an enterprise that has implemented at least one product, organisational, process, or marketing innovation.

3. Competences 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. Competences are, inherently, abstract, complex and multidimensional, defined taking

into account various theoretical approaches, for example psychological, situational, and cognitive (Thierry, and Sauret, 1994).

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 – "competences" were understood as having the formal right to deal with particular matters and to take decisions in a specified scope. Therefore, competences 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). Modern approach to competences refers to the effects of actions. C. Lėvy-Leboyer states that competences "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).

These definitions relate to individual employees' competencies which make up the work potential. The employee's individual work potential is made up of his or her knowledge and skills (the so-called "hard competences"), as well as personality traits, predispositions, motivation and social roles (the so-called "soft competences"). When relating the individual competences 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).

The second, broader approach to defining competences relates to competitive advantage of the company on the market, and the subject of interest here are the competences 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). 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).

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 a company's objectives (Sanchez, 2004). Competences 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.

Since the beginning of the 1990s, when businesses were looking for opportunities to gain competitive advantage, more and more attention has been to factors inherent in the organisation itself. The resource-based approach to management uses the term "core competencies". It was first introduced 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). 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, 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 an innovative enterprise is a significant challenge that managers face. 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 a 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 476 innovative enterprises employing at least 10 people, located in five countries:

- Poland – 357 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 the 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], and 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 the most critically. When comparing the obtained results with the level of innovation of the selected countries according to the 2017 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	41.99	61.40	37.57	53.10	37.62
Average competencies	4.14	4.24	3.50	4.16	3.75

Note: own compilation on the basis of the survey results and data adapted from The 2017 Global Innovation Index. Retrived from www.globalinnovationindex.org (2017, September 29).

In the enterprises in Poland, the level of competencies in the area of relationship with the environment was assessed as high (4.23). What is worrying is a relatively low scoring related to the level of competencies of the surveyed enterprises in the area of the use of IT (3.95), especially that the subject of the study was innovative enterprises.

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

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

Area of competence	Country				
	Poland	USA	Thailand	Austria	Ukraine
Management	4.21	4.56	3.60	4.11	4.00
Finance	4.22	3.88	3.50	4.22	3.42
Personnel policy	4.04	4.31	3.50	4.44	3.75
The use of IT	3.95	4.19	3.55	4.33	3.83
The use of technology	4.17	4.56	3.65	4.00	3.75
Marketing activity	4.13	4.31	3.65	400	4.00
Development	4.09	4.31	3.40	4.22	3.75
Logistics	4.22	4.31	3.20	3.78	3.83
Supply	4.23	4.13	3.15	4.44	3.58
Servicing [after-sales servicing]	4.03	3.88	3.75	4.00	3.58
Relationships with the environment	4.23	4.06	3.65	4.00	3.75
Average	4.14	4.24	3.50	4.16	3.75

Note: own compilation based on the results of the 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.

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, Poland – 4.21, Austria – 4.11, Ukraine – 4.00), 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 (Poland – 4.23, USA – 4.06, 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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