KNOWLEDGE AS THE BASIS OF BUSINESS OPERATIONS

Abstract. The new enterprise development paradigm is currently one of the major challenges facing enterprises. This is connected to the need to analyse the network structures in the organisation through the prism of the triumvirate of management roles consisting of the following archetypes: the entrepreneurial, leadership, and managerial role. This means the implementation of modern organisational, technological, market, and social innovation solutions. The purpose of process management is to standardise the organisation's activities in order to anticipate changes in production processes, services, and environmental variability. These processes are currently based on knowledge which can strengthen the financial, organisational, social, technical and technological efficiency of the enterprise. Its theoretical and practical application is included in this article.

Keywords: organisational network, knowledge, information technology, logistics in the acquisition process, intellectual capital, knowledge maps

Formulas: 0, fig.: 2, tabl.: 2, bibl.: 29

JEL Classification: O32, L16

Introduction. The globally compromised balance, which manifests itself in the disruption of the socio-economic order, is an important problem of the contemporary world. It is accompanied by a syndrome of increasing impermanence in the economy and its internal structures. These unfavourable phenomena are reflected in the economic and political restructuring of states, emerging crises, highly polarised wealth and poverty, labour market instability, unemployment as well as social, demographic, and ecological dysfunctions. This violation of the balance according to L.C. Thurow was caused by the movements of the so-called five economic tectonic plates relevant for global change [Maćzyńska 2015].

Literature review and the problem statement. Economic operators were also subject to these processes. In the Polish enterprises of the late 20th and early 21st century, it was recognised that the crisis of the companies and the clear deterioration of their financial condition, the lack of reaction to the environment and the need to find new ways of development were the directions of enterprise development [Podczarski 2016]. The construction of a new market economy (knowledge, capital, land, production), in which knowledge and innovation play a key role, has become a challenge for states and enterprises seeking a high level of development and competitiveness. This new economy, i.e. digital or networking economy, has gained recognition among economists and practitioners of economic life [Toffler 2003].

It is also worth mentioning, as emphasised by B. Mikula, A. Pietruszka-Ortyl, A. Potocka et al., that there occurred a clash of the industrial era with the post-industrial one, which influenced the transformation in the post-capitalist, digital economy, of the information society, the telematic society, the information
overload society, based on knowledge [Potocka 2001; Drucker 2009]. Thus, the knowledge and information based economy is the most competitive world economy directly based on the production, distribution and use of knowledge and information. The high technology industries play a special role as the carriers of knowledge in such an economy. Having new technologies and products and being supported by highly qualified labour force decide on the innovation of a given economy, and thus, its modernity and dynamics. But, as M. Porter rightly observes, the wealth of nations is created, rather than inherited. It does not grow out of the natural wealth of the country, its labour force, its interest rates or its currency, as classical economics maintains. The competitiveness of the nation depends on the ability of its industry to innovate and to raise its level [Porter 1992; Miśkiewicz 2017; Podczarski 2016].

**Methodology.** System and process approaches, methods of deduction, expert evaluations, economic and statistical analysis and others were used.

**Research results.** Knowledge is not only one of the enterprise’s main resources, but is also the basis for defining its strategic elements in the management system, such as: mission, vision, goals, plans, and strategies. Proper management, using the latest methods and techniques, is designed to ensure that the enterprise is innovative and competitive [Kłak 2010].

The considerations of A. Polak referring to maps of knowledge are interesting in this regard. The lists of areas and elements of enterprise organisation knowledge identified by him can be used to assign specific elements of knowledge that is included in the resources of the enterprise to specific motives of merging the organisations. As a result, the actual motive of the merger may be determined. If there are a few of them (which is not uncommon), it is possible to determine the share of knowledge in individual partial motives. Detailed solutions are to be found in Table 1.

<table>
<thead>
<tr>
<th>Areas of knowledge</th>
<th>Elements of knowledge</th>
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<tbody>
<tr>
<td>1. System and environment</td>
<td>1. Mission and goals of the company</td>
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<td></td>
<td>2. Organisational structure</td>
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<td></td>
<td>3. Environment (authorities)</td>
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<td>4. Suppliers and subcontractors</td>
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<td>5. Competitors</td>
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<td>2. Threats</td>
<td>1. Quality threats</td>
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<td>2. Occupational safety threats</td>
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<td>3. Environmental threats</td>
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<td>3. Resources</td>
<td>1. Human resources</td>
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<td>2. Material resources</td>
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<td>3. Immaterial resources</td>
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<td>4. Technical preparation</td>
<td>1. Products (goods)</td>
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<td>2. Technical specifications</td>
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<td>5. Processes</td>
<td>1. Management processes</td>
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<td>2. Manufacturing processes</td>
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<td>3. Supporting processes</td>
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The data contained in Table 1 requires an adaptation to the purpose and content of the conducted analysis. As regards areas of knowledge, there is no need to expand or reduce their number, except for removing point 10. (documentation), which falls entirely within the concept of formalisation, which is part of the basic features of the organisational structure (area no. 1). It is therefore desirable to introduce certain changes to the nomenclature in order to correctly and appropriately assign to the relevant type of activity the associated with it knowledge. Therefore, "and goods" was added to the name "Production Preparation." In point 6, "in the field of procurement" was added to the name "Projects," as there may exist various projects in different areas [Miśkiewicz 2017].

Literature indicates that the basis of knowledge is the data and information, which become knowledge only after they have been processed. [Brdulak 2005]. This is presented in detail in Figure 1.

For cognitive purposes, the elements of knowledge were subjected to change. There have been certain removals, additions, and changes to the names of the elements of knowledge. For example, it is difficult to consider the mission and goals of the company as separate elements. They fit perfectly in the "Organisational Structure", forming part of the formalisation. If one employs this reasoning, one could create any number of components, such as: enterprise statute, organisational scheme, staff duty register, documentation circulation. This, in turn, would not lead to the achievement of the objective, for instance due to the competition of the elements in attribution to a specific motive, and, consequently, would lead to a lack of clarity of the situation.
Area no. 4 should include the following elements: the product cost estimate, transferred from item 7 (Finances) and forming an integral part of production preparation, product documentation, and product technology. In the area of processes, the process of investment realisation, which was not included elsewhere, but is important due to the knowledge transfer, was added. In point 7, the superfluous element of knowledge (flows) was eliminated, as, if there is a separate point – transport – then the flows simply mirror it. At the same time, the flows cannot mean product flow in the production process, as it is discussed in the area of "Processes". In the area of "Planning" instead of "Management planning", which is unclear, "production cost and output plans" (balance sheet) was introduced. In the “Planning” area, instead of "Product cost estimates," "Cash Flow", which is typical for this business, and important for the role of knowledge, was introduced [Śnieżek, Wiatr 2014, p. 36 ff.]. Following these generalisations, it can be stated that the relevant areas and elements of knowledge are those contained in Table 2.

Table 2 – List of areas and elements of enterprise organisation knowledge

<table>
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Such a list of organisational knowledge areas and the basic elements that constitute them, does allow for an assignment of a corresponding, specific knowledge. However, it should be emphasized that, despite the considerable approximation, the areas and the aforementioned elements are not sufficiently operational to use them in the course of further analysis, aimed at attributing knowledge to a specific motive of a company merger. The presented list attempts to assign specific manifestations of knowledge to the elements of knowledge, generally occurring in the steel industry [Freese 2016].

The first element of knowledge in Table 2 details organisational structure. It is a medium of both practical knowledge (tacit) and, above all, explicit knowledge expressed in the formalisation of the company's activity [Miśkiewicz 2017]. Organisational structure, as a multidimensional object, is defined by many features, the number of which ranges from several to even several hundred. In practical activity, and especially in the case analysed herein, it is impossible to use a large number of features. Therefore, when considering the organisational structure as an element of knowledge, the author is closer to the features formulated by K. Mrela in his work on the analysis of the multidimensional organisational structure [Mrela 1988]. A similar range of features is also present in other studies. Examples include configuration,
centralisation (or decentralisation), specialisation, formalisation, and
standardisation. These features bring a wealth of organisational knowledge that
plays a significant role in the integration process of the merged enterprises
[Pugh, Hickson, Hinnings, Turner].

As far as configuration is concerned, this knowledge is quite limited. It is
reduced to the differences in the arrangement of organisational units and their
interrelations, which are significant in the case of merging enterprises of
different production scales and in a vertical merger, for instance in the
combination of raw materials and processing units. However, in the steel
industry, horizontal connections are predominant, and so the knowledge
regarding configuration is only slightly varied. Nevertheless, knowing these
differences can help with the integration in the organisational structure. In turn,
dependant on the degree of centralisation is, among others: knowledge creation
in the enterprise; a wide autonomy fosters the creation of technical and
organisational ideas, allowing certain risks in the concerned undertakings. This
particularly applies to knowledge as regards technology and production
organisation, whose implementation depends to a certain extent on the freedom
of operation of various level units. Decentralization is conducive to the
emergence of virtual teams, called upon to solve emerging problems, as well.
Knowledge in the area of the organisational structure within the scope of
centralisation is mainly needed in these cases. As a result, the merger of a
highly centralised company with a loose organisational structure may lead to
the use of the experience (knowledge) that has so far been alien to a
centralised enterprise [Grudzewski, Hejduk 2004; Miśkiewicz 2017].

Another aspect of knowledge is included in the specialisation of the
company. It is very often precisely the desire to seize a specific technology or
rare specialists in the labour market that is one of the major causes of mergers.
The most important – from the point of view of knowledge transfer –
characteristic of the organisational structure is formalisation. This is usually
explicit knowledge. Companies that are merging often differ when it comes to
details. Knowledge contained in organisational, analytical, financial and payroll
documents, as well as knowledge resulting from valid systems, is extremely
important to the acquirer, and allows for accurate and rational decisions. It
should be noted that the employees of the acquired company have and follow
the knowledge coded in their minds. Failure to consider their experiences can
disrupt integration (primarily in the sphere of production). It is worth
remembering that part of this knowledge may also be of value to the acquirer.
It is therefore desirable that the transfer of knowledge progress in a two-way
direction [Mikuła 2005; Sarvary 1999].

Organisational structures are also characterised by a wide degree of
standardisation. It is a knowledge very specific and useful, both for cost,
productivity and overall efficiency. It is well known that the level and type of
products and other spheres of business activity varies. Therefore, the transfer of
standards may be one of the hidden goals of the acquisition. It is worth stressing
that the flow of knowledge contained in standards may also work in reverse, in
different proportions. It can result in an added value in the acquired company.
This is a clear example indicating that the goals included in the process of
minimising costs and maximising sales are, in fact, the pursuit of knowledge
acquisition [Świtalski 2005].

In the area of knowledge, the elements that are covered by the term
"Suppliers and subcontractors" play a significant role. It is interesting that
knowledge is not only understood here as the knowledge of the most advantageous sources of supply and markets, but, above all, relationships established by the people employed in the organisational units that deal with it. The personal relationships of these people with their counterparts in sourcing and sales constitute a valuable knowledge useful in relations with the environment. It is very difficult, however, to acquire it along with the company, as it is a typical tacit knowledge, which is carried by individual employees. It is therefore important that during the integration process after the merger the company be protected against the outflow of employees. Also important is the knowledge of the competition, in terms of information gained and analyses carried out, but also the sources of information of the employees specialised in this area who have access to due to private connections. This latter knowledge is not written anywhere and is a typical tacit knowledge. In the area of "threats," the quality threats are the most important. Quality can be understood twofold: as a threat of being overtaken by competitors in terms of quality or as a decline in the quality of one’s own products. In the first case, we are dealing with a similar situation as with the knowledge of competitors. It is therefore worth to have knowledge regarding the level of quality of the competition, the research and innovation processes that are being carried out by it or the attestations and prizes awarded to it, etc. This knowledge, rather tacit, allows the management of the company to signal threats. Its acquisition is often a matter of individual employees and its rapid obtaining will enable executives to take appropriate pre-emptive action. In the second case, the knowledge regarding quality is explicit, which does not diminish its value. Knowledge of this element of knowledge is relevant in terms of preventing losses due to deficiencies and complaints and in terms of "showing off" of the company on the market [Davenport 2007].

The nature of occupational safety knowledge is different. As a rule, it is explicit, written in regulations, post-accident protocols, analyses; although, there is also a margin of tacit knowledge: in the individual experience of employees and executives. Knowledge acquisition in the context of workplace hazards, however, is of specific importance when it comes to different knowledge in both merged companies, as potential higher work accident rates can affect the integration process negatively.

Environmental threats are of yet another nature. These are typically problems with gas emissions as well as land and water contamination. There are a number of publications, regulations, and institutions that prevent these phenomena. They may be different in the merged enterprises. A lack of transfer of this knowledge may cause, for example, the new authorities to be less vigilant in the area of environmental pollution, which not only means additional costs but also possible conflicts with local authorities and obstacles to continued business activity [Hausner, Primus 2013].

**Conclusions.** The share of knowledge in technology and infrastructure as well as sales maximisation covers 49.4% of the total motivation, which is significant as regards the shaping of the acquisition motives. The market and financial motives are strengthened by the value of the intellectual capital. Knowledge regarding customers, their needs, relationships with all stakeholders, and competences are related to the management of the organisation, the technological know-how, patents, etc., and are therefore important. The courses of action in this regard are presented in Figure 2.

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Figure 2 – The way to determine the relationship between motives and their components

Source: [Miśkiewicz 2017]

References

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