# THE ANALYSIS OF ACTIVITIES OF ENTERPRISES IN THE CONTEXT OF DEVELOPMENT OF INTELLECTUAL CAPITAL STRUCTURE

**Abstract:** Intellectual capital is a collection of intangible resources of companies which have a significant impact on the way of doing business, and in many cases determine the market opportunity for success. Despite fairly intensive development of this concept in many Polish companies still intellectual capital is not taken into account when analyzing the capacity of the enterprise and in making decisions of a strategic nature. The main obstacles seem to be here for lack of knowledge about intellectual capital and the lack of financial resources. This chapter presents the results of research conducted on a sample of 81 companies on the approach to intellectual capital and commitment to shaping its structure.

Key words: intellectual capital, human resources management, added value.

## 9.1. Introduction

Answering the question what exactly is intellectual capital, what is its construction and what factors affect its value is not an easy task. Capital in encyclopedic terms is the value of bringing added value through profit (KOPALIŃSKI W. 1989). Looking at this concept from a broader perspective, the capital can be treated as value capable of self-multiplication. This approach allows to look at the capital apart from the traditional relationship with funds, and to include the technology or resources assets. Also clearly illustrates its basic characteristic related to the fact that capital resources must bringing tangible benefits to the

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owner. Intellect, in turn, means intelligence, the amount of mental abilities, experience and knowledge of human (KOPALIŃSKI W. 1989). Thus refers to the ability to obtain and use the knowledge, understanding, thinking, cognition. The concept of intellectual capital goes significantly beyond the simple dictionary dissection.

The perception of this concept in the literature is not uniform, and the more explicit. Edvisson and Malone claim that intellectual capital is a hidden asset, reflecting the gap between market value and book value of company (EDVISSON L., MALONE M.S., 2001). It is a kind of invisible resource of companies creating effects such as growth of the value of company. At the same time Stewart (STEWART T.A., 1997) states that intellectual capital is the sum of everything everybody in a company knows, and what determines competitive advantage. References of intellectual capital to the knowledge can be seen even in Nahapiet and Ghosal, who interpret the intellectual capital as knowledge and competence to obtaining this knowledge, and thus equate it with the sum of human knowledge gathered within the organization (NAHAPIET Y., GHOSAL S., 1998). Ulrich associated intellectual capital with the worker's identification with the company and their skills that express through their way of thinking and working (URLICH D., 1998). Most fully illustrates the complexity of intellectual capital Parlby (PARLBY D., 1998), who defines intellectual capital as patents, other intangible assets, experience, skills and knowledge of both the company and its individual employees, developed models, methodologies and tools, good relationships with customers and employees.

An important element in terms of the structure of intellectual capital is the interaction of its components. Cooperation and mutual integration of individual components is subject to the expected scale of effects. The phenomenon is well explained by scheme proposed by Petrasha – presented in Figure 9.1.The increase in value of the company is not the result of individual action of any of the components of intellectual capital, but a whole range of interactions between all these elements. It can easily be seen that greater the extent circles overlap means the greater

interaction and the greater value. Even if a company has developed particularly well one or two elements of the intellectual capital and the other is weak, it cannot transformed intellectual capital into the value.

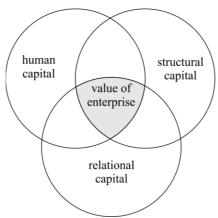


Fig. 9.1. The relationship between intellectual capital and the value of the company.

Source: Petrash G., 1996

In the organizational context human capital primarily focused on a set of properties characterizing the employee, which should be used for the benefit of both the company and the employee. According to T. Listwan these properties includes, among other things: knowledge, skills, psychological characteristics, health and behavior (LISTWAN T., 2005).

Capital Structure as opposed to the human capital is tied to the company. Being owned by the company it can be traded on the market. For many authors structural capital is interpreted as the base for the development of intellectual capital, including with its range all the elements influencing the development of enterprise knowledge (REMI M., CHLIPAŁA P., 2001).

Relational capital creates conditions for the development and use of knowledge as a result of cooperation with entities from the external environment of company (CASTELLS M., 2010).

#### 9.2. Analysis of results

The aim of this study was to characterize the actions taken by the company in the context of intellectual capital. A particularly important aspect of the study was to investigate the level of awareness of managers and determine the scale of the action taken in relation to the structure of intellectual capital. The study involved 81 companies. In the studies there were used additional criteria such as the size of the company where as a basis for differentiation was the number of employees: small - less than 50 people, the average - from 50 people to 250 people, large - more than 250 people.

Figure 9.2 presents distribution of answers to the question: Does the company strives to develop intellectual capital? As can be seen from the data presented merely about 25% of companies carries out activities related to intellectual capital. In the case of large and medium-sized enterprises percentage of this type of activity was higher and reached in both cases 28%. The small enterprises interest in such issues was significantly lower and reached only 14%. These results indicate a rather low interest in issues related to intellectual capital in the surveyed companies.

In addition, senior managers were asked about action taken to use the relationship between the individual elements of the IC (Fig. 9.3). Results indicated that the majority of companies definitely do not consider this type of issues in terms of business management. Positive responses were received from only 9% of large enterprises, 16% medium and 5% smaller.

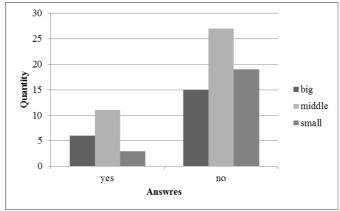


Fig. 9.2. Distribution of answers to the question: Does the company strives to develop intellectual capital?

Source: own study

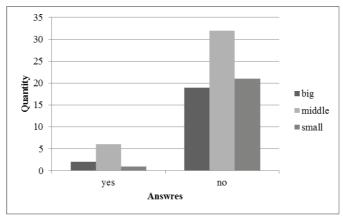


Fig. 9.3. Distribution of answers to the question: Is the action is taken to use the relationship between the individual elements of the IC?

Source: own study

Figure 9.4 presents distribution of answers to the question: Is the relationship between the elements of IC are investigated? Easy to observe a very small proportion of positive responses. In the context of these results, it seems particularly interesting analysis of reasons for not taking

complex actions in context of intellectual capital (the corresponding data is shown in Figure 9.5).

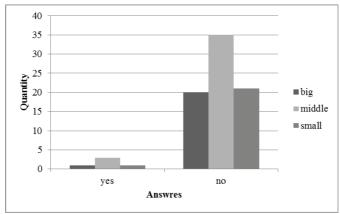


Fig. 9.4 Distribution of answers to the question: Is the relationship between the elements of IC investigated?

Source: own study

Most common reason given was the lack of knowledge about intellectual capital. Senior managers, often aware of the importance of intellectual capital, have been hesitant to management due to the high degree of uncertainty. Accompanying today's enterprises focus on profit, in many cases, is not conducive to risk-taking. Interesting is the fact that over 25% of companies stated that intellectual capital is in no way associated with the business. This indicates clearly a low level of knowledge and a complete lack of understanding of such issues. Without doubt the main reason here is generally low prevalence of intellectual capital management systems. In market practice, the best promotion is often effective functioning of solutions in other companies. Currently, intellectual capital is often seen as a curiosity rather assigned to the large corporations with foreign capital. Nearly 17% of enterprises as a barrier to taking action relating to intellectual capital indicated lack of financial resources. This is partly because erroneous approach treats the intellectual capital as a cost rather than an investment. Without a doubt, the development of intellectual capital requires financial expenditures, but there is no need to paid it immediately, some can be spread over time.

In addition, when system functioning properly, costs quickly begin to pay in terms of increased customer confidence, increased sales, reduced the number of defective products, etc.

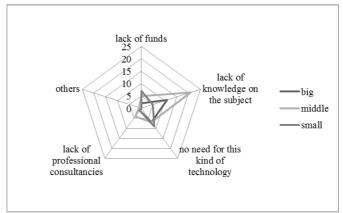


Fig. 9.5. Distribution of answers to the question: What is the main obstacle to the implementation of the IC?

Source: own study

An important element of the study was to determine the size and structure of expenditure on items related to intellectual capital. Within individual components of intellectual capital, details the elements of which it was pointed out two with the highest expenditure. The aim of the study was to determine the priorities of the enterprises. In this part of the study did not consider whether the company's intellectual capital management.

Figure 9.6 presents investment in human capital. There can be clearly observed that firms incur large expenses for the purpose of stabilizing employment and training. A minor extent, invest in issues of integration and motivation. The main priorities of the undertakings are to maintain a constant level of quality, uninterrupted production processes and the development of human resources in the required direction. The studies have confirmed the correlation between the nature of the expenditure and the size of companies. This correlation was weak, expressed in Person ratio value at 0.33. Specific differences in the structure of expenditure can be seen in the context of training and incentive schemes. Expenditure on

training in large enterprises accounted for about 33%, while 29% of medium-sized and small only 11%. Expenditure on improving employee motivation had the largest share in small companies (nearly 39%), and 18% of medium-sized and large only 5%.

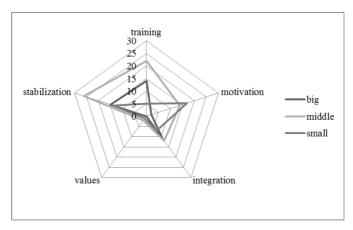


Fig. 9.6. Investment in human capital (select up to 2).

Source: own study

Figure 9.6 presents investments in capital structure. In this area, the company gives special attention to the three elements. First, research and development, which are between 19% (large companies) to 30% (small companies) share of total respondents expenditure. The second element is the information systems which form 14% to 25% of the total expenditure. The third area is corporate organizational culture. Activities in this area absorb from 19% in large companies and 25% in small enterprises. The smallest expenditures companies declare in area of creating databases and patent protection of its software. In the latter case, the reason for this is quite obvious - not all companies have their own technology or product that can be protected. It is rather a domain of a small group of companies that invest heavily in the development and use of this element to build market dominance and market image.

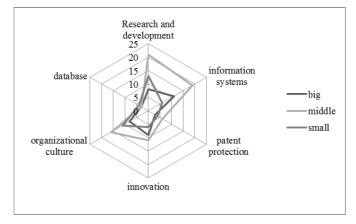


Fig. 9.6. Investments in capital structure (select up to 2).

Source: own study

Figure 9.7 presents investment in relational capital. In this area, there were no any correlation.

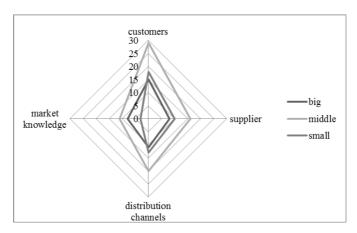


Fig. 9.7. Investment in relational capital (scroll up to 2).

Source: own study

The largest expenditure companies incur for activities related to attracting and retaining customers and building effective channels of distribution. Characteristically, the smallest role has gathering market knowledge concerning such aspects as the actions of competitors, monitor the development of technology or building scenarios of future events.

#### 9.3. Summary

Intellectual capital is a very specific element, even abstract. It seems necessary to not only explain the phenomena occurring in the general level of intellectual capital (macro), but also on lower levels (micro). Sub-elements are involved in relationships within the major components of intellectual capital. There are also possible relationships that go beyond the "parental" area (e.g. parts of the area of human capital may interact with elements of structural capital). Thus, they contribute to the development of the "parental" area, but also indirectly involved in the growth of other areas. Number of links and relationships is very large, but only the knowledge of their nature and to determining the ways in which the interaction effects allows to fully understand the concept of intellectual capital and consciously interfere with the growth of its value.

On the way to the introduction of new solutions is often a fear of people by giving in to the assessment, verification of knowledge and its actual usefulness. Particular care is required when trying implementing the latest advancements in the cases generally low initial level of organization and management in the enterprise. The chances of success of such attempts are small. Innovative activities should therefore be undertaken with caution and followed by a detailed analysis of their potential.

The study showed that in the examined group only 25% of companies are involved in issues of intellectual capital. A much smaller group analyzes relationship existing between the components of intellectual capital. Particularly disturbing seems to be a high percentage of companies declaring that the concept of intellectual capital is not associated with the specificity of their business. This means that lack of knowledge and lack of understanding of the issues. Thus, there are very

large areas for development. There is also need for more real market examples of companies that benefit from the management of intellectual capital.

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