
IMPACT OF INTELLECTUAL CAPITAL ON THE VALUE OF THE ORGANIZATION

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Abstract: Intellectual capital is considered as one of the vital and most crucial strategic assets for success and sustainability of organizations in the competitive business environment. In today's fast changing society, knowledge has become one of the most meaningful resources. In accordance with this, the traditional factors of production have not disappeared, but have become secondary. It is much more difficult to see and count ideas and expertise, than to count money or products.

Nowadays, in strategic perspective for the companies, knowledge and intellectual capital are used to create and enhance organizational value, and the success of an organization depends on its ability to manage these scarce resources. Therefore, the knowledge of individuals has inevitably become as important as other financial and physical assets of the organizations. This paper examines the relationship between intellectual capital and knowledge management and their roles in creating organizational value.

The first condition of building global knowledge society and increasing organizational value is building knowledge organizations and within them, building such culture which will support these intentions, hence changing it into knowledge culture. In particular, it means creating such environment and conditions that will enable people doing a job they are skilled for, they enjoy and, at the same time, the job that satisfies them, so they can achieve results above standard. When an organization has qualified people at all working positions, the individuals, improving themselves and their working capacity, are able to enhance the efficiency of all the organization which itself, can make a profit for the organization.

Effective knowledge management requires knowledge, contributing for the key processes development and organization's activities, to be available for the right people at immediate practical use in time. Thus, knowledge management represents a systematic approach towards searching and using the knowledge on behalf of creating values.

Keywords: intellectual capital, knowledge management, value of the organization, measures

1. INTRODUCTION

In today's fast changing society, knowledge has become one of the most meaningful resources. In accordance with this, the traditional factors of production have not disappeared, but have in fact become secondary. It is much more difficult to see and count ideas and expertise, than to count money or products. Usually, the main problem is that employers have problems to identify the value-added knowledge that is embedded in goods and services. If knowledge is considered as an essential resource for establishing competitive advantage, the company's management obviously should attempt to identify, generate, develop and transfer knowledge. Hence, managers need more knowledge about knowledge (Drucker, 1993: 43) and about how it can be managed.

If organizations and companies want to be successful in present world, they must be willing to learn. That implies that organizations/companies consider that they are not perfect and they must improve themselves by enabling their employees to develop. Therefore, modern companies must understand the need of permanent improvement. Some of the managers have found out that they need qualitative strategy that can help to achieve success at heavy competition markets in present dynamic time and strong globalized tendencies. Inseparable part of such strategy must be also securing of qualitative human capacities, therefore it is necessary to invest to this area. From the same reasons, companies should find proper approach to the effective development of its own employees and to be interested in proper process and methods for evaluation of such processes.

In present globalized world with dominant market economy, one of its characteristics is also fact, that there is deepening difference between accounting and market value of the organizations. More and more knowledge of its employees decide about competition advantage and success on the market.

First, the intellectual capital of a company can be defined as "the sum of the knowledge of its members and the practical translation of this knowledge" (Roos et al., 1997: 27) into organizational action. From a financial perspective, the intellectual capital concepts define the market value of a firm as the sum of financial and intellectual capital (Edvinsson and Malone 1997; Sveiby 1997; Stewart 1997; Roos et al. 1997). Intangible assets is a term used frequently in accounting literature to reference patents, licenses, trademarks, and copyrights. In the knowledge-based economy, products and organizations ensure their survival based on knowledge. The most successful organizations

are those which are using these intangible assets better and faster than the competitors. Studies have shown that, unlike return loss of traditional sources, knowledge is really a resource to increase the value of organizations and to gain competitive advantage and business performance.

Nowadays, in strategic perspective for the companies, knowledge and intellectual capital are used to create and enhance organizational value, and the success of an organization depends on its ability to manage these scarce resources. Therefore, the knowledge of individuals has inevitably become as important as other financial and physical assets of the organizations. This paper examines the relationship between intellectual capital and knowledge management and their roles in creating organizational value.

Intellectual capital can be defined as 'the stored knowledge possessed by an organization'. This knowledge may be tacit (personal knowledge possessed by an employee that may be difficult to express or communicate to others); and explicit knowledge, which is codified and stored by the organization and available to all employees.

2. INTELLECTUAL CAPITAL – DEFINITIONS

Intellectual capital is all the knowledge resources possessed by organization and its dynamic development and renewal can ensure organization's advanced position in the market competition at the era of knowledge economy. Intellectual capital is a main source for organizations to gain competitive advantage and is a main pillar of knowledge-based economy in a knowledge-based economy. Intellectual capital management leads management to make appropriate operation decisions, appropriate investment, and management of the organizations and in achieving competitive edge (Shaari et al., 2011). For organizations intellectual capital has been regarded as an important source of competitive advantage, which influences the levels of creativity and innovativeness (Taliyang et al., 2011). Since the beginning of research in the early 1980s in the field of intellectual capital, there are numerous definitions for intellectual capital (Goh, 2005). Different concepts are proposed in the literature and each of them tries to capture a particular phenomenon given the intangible nature of knowledge. It is realized by successful companies that investing in knowledge is essential to their ability to create high-value products and services and competitive advantage (Chang & Hsieh, 2011). Sustainable competitive advantage is mainly based on knowledge assets. The rapidly growing field of intellectual capital is an existing area of interest for both the researchers and practitioners (Bontis, 2001). For successful competition in today's world economies it is absolutely necessary for organizations to understand and properly manage their intellectual capital if they want to succeed. The field of intellectual capital is developing into a diverse and multidisciplinary field which contains multiple meanings, methods and concepts, and it is supported to be knowledge generation and knowledge about knowledge (Jorgensen, 2006).

For organizations, intellectual capital is considered as an essential source to gain competitive advantage (Bontis 1998). Similarly it is argued that, unfortunately there is generally no accepted definition of intellectual capital (Chang and Hsieh, 2011). In modern economies for success and competitive advantage of organizations, intellectual capital is increasingly recognized as critical strategic asset (Khaliq et al., 2013).

There are many definitions of intellectual capital, for example:

- “the sum of everything people know which gives a competitive advantage in the market“ (Stewart, 1991)
- “knowledge residing within human capital... combined with systems, technologies, processes and knowledge repositories. Thus, we view intellectual capital as managed organizational knowledge capable of adding value to bottom line profit.” (Coakes and Bradburn, 2005).
- “the economic value of two categories of intangible assets of a company", that is, organizational (“structural”) and human capital" (OECD)

Lönnquist and P. Mettanan in their review of the definition of intellectual capital identified the following characteristics:

- It is invisible;
- It is closely related to knowledge and experiences of employees as well as customers and technologies of an organization;
- It offers better opportunities for an organization to succeed in the future.

A consensus has been developed that intellectual capital can be characterized as consisting of three components:

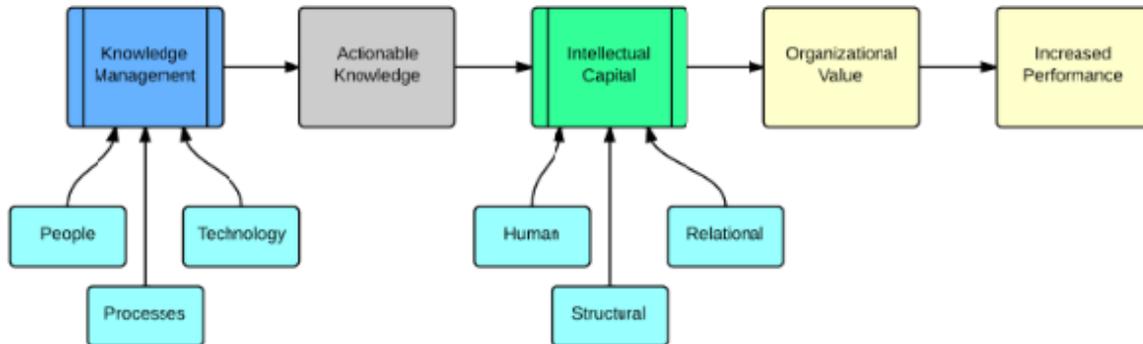
- human capital;
- external capital;
- internal capital (Edvinsson and Malone, 1997; Stewart, 1997; Sveiby, 1997).

3. RELATIONSHIP BETWEEN INTELLECTUAL CAPITAL AND KNOWLEDGE MANAGEMENT

Knowledge management can be considered as a system of processes, people, and technology working together to increase the organization's performance through learning (Seleim & Khalil, 2011). This KM system, as Liebowitz (2012) argued, is consisted of 80% people and processes while the remaining 20% is the enabling technology. This means these systems are predominantly determined by the organization's ability to engage people and apply the right supporting processes to manage knowledge.

Intellectual capital is considered the next step in knowledge management. Intellectual capital is the organizational value added when the organization's knowledge assets are leveraged. It is considered the stock of the available knowledge assets (Seleim & Khalil, 2011). Intellectual capital includes human capital, organizational capital, and the relational capital.

Figure 1: Knowledge management and Intellectual capital



Most knowledge management projects focus on collecting, storing and making this knowledge available. Knowledge management projects can involve a wide range of software tools and products, ranging from simple collaborative software to intranets, extranets, portals and sophisticated databases. Much of the published material suggests that organizations can get immediate benefits from a KM project. Knowledge Management projects need to be approached constructively, and with a clear understanding of both the benefits and the challenges inherent in such projects.

Key to long term success with knowledge management projects is the full understanding and involvement of everyone in the organization. The better a knowledge management project is structured, and the better an understanding everyone involved has, the more likely will the project deliver the real, long-term benefits expected of it.

Intellectual capital (IC) is a key driver of innovation and competitive advantage in today's knowledge based economy (Teece, 2000). At the same time, knowledge management is recognized as the fundamental activity for obtaining, growing and sustaining intellectual capital in organizations (Marr and Schiuma, 2001). This means that the successful management of intellectual capital is closely linked to the knowledge management processes an organization has in place; which in turn implies that the successful implementation and usage of KM ensures the acquisition and growth of IC. Current performance management thinking recognizes the need to address the management of IC and the introduction of frameworks such as the Balanced Scorecard (Kaplan and Norton, 1996), the Performance Prism (Neely et al., 2002), and the IC-Index (Roos et al., 1997) underline the importance of managing the financial and non-financial value contributions of IC. However, we believe that a discrepancy exists between theory and practice in terms of the management of intellectual capital in organizations..

Today intellectual capital is recognized as a key strategic asset for organizational performance and its management is critical for the competitiveness of organizations. According to Roos et al. (1997) and Marr et al. (2003) the management of intellectual capital involves:

- identifying key IC which drives the strategic performance of an organization;
- visualizing the value creation pathways and transformations of key IC;
- measuring performance and the dynamic transformations;
- cultivating the key IC using KM processes;
- and the internal and external reporting of performance.

Knowledge management (KM) and intellectual capital (IC) are believed to influence each other, and the relationship between the two constructs is of vital importance to organizational effectiveness.

Summarizing these brief definitions, we can say that IC is typically intangible, includes tacit aspects and therefore is not in the focus of classic economic analysis. Hence, neither IC nor intangible assets may simply be interchanged with knowledge, since this would imply the reductionistic interpretation of knowledge as an object, neglecting the processes of knowledge and their partial tacit characteristics. Based on this understanding, the challenge of the IC perspective can briefly be outlined as follows: In contrast to the development of organizational learning theories, the promoters of the IC debate are mainly practitioners. The vision that is reflected in their models clearly points towards better management of the resources considered to be essential in the knowledge economy. Additionally, the IC measurement movement is nourished by the shareholder-value approach that requires more transparency and information directed towards external constituencies. The first perspective leads to the development of internal IC reports whilst the latter implies the need for external IC reporting.

4. IMPORTANCE OF INTELLECTUAL CAPITAL

Intellectual capital measures can be subdivided into two major perspectives (North 1998):

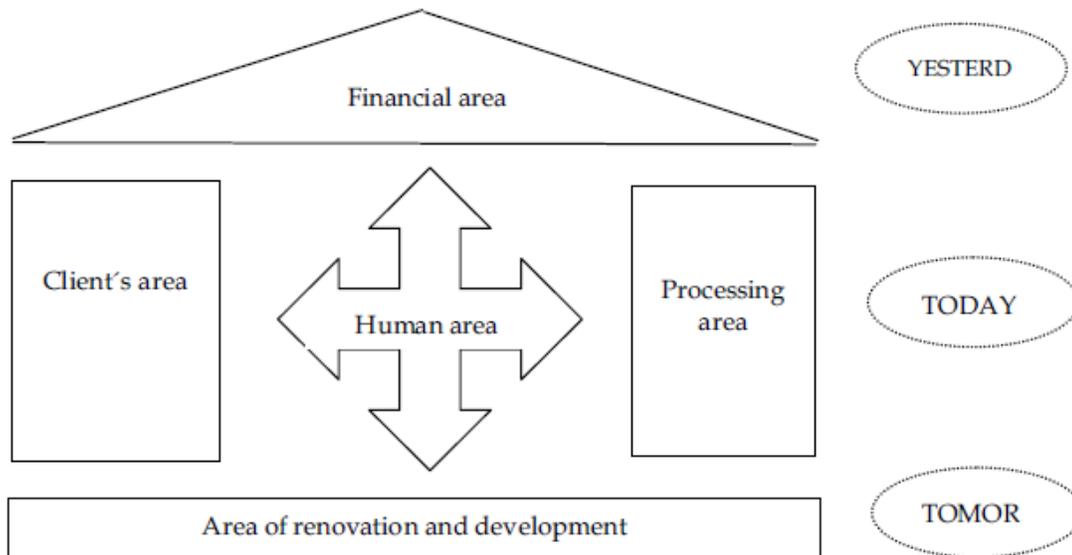
- financial measures, which have been derived deductively,
- and non-financial measures, which have been developed inductively.

The main intention of this paper is to focus on the non-financial measures of the intellectual capital.

4.1. Non- financial measures of intellectual capital

The oldest concept and intellectual root of IC accounting originated in Scandinavia and was developed by Sveiby in the late 1980s with his models of the invisible balance sheet and the Intellectual Capital Monitor and has been implemented in several companies (e.g. Celemi, WM data). The most prominent concepts of IC accounting comes from Skandia, which started to document IC in 1991 and has published IC reports since 1996. Dow Chemical started to harvest their intellectual property rights systematically in 1993, when they turned ‘a passive function—central record keeping for their 29.000 in-force patents—into active management of the opportunities patents represented in their portfolio’ (Stewart 1997: 62). Other companies have started to monitor their intellectual capital and also have institutionalized managerial positions such as a CKO (chief knowledge officer) or a CLO (chief learning officer). Skandia’s approach does not claim to focus merely on accounting but tries to improve shareholder relations through increased transparency of its IC stock. The main idea of the Skandia Navigator is very similar to the balanced scorecard—to define five key areas for the future success of the company: financial, human, customer, process, renewal and development focus, where the first represents past achievements, the next three present results, and the renewal focus stands for the future.

Figure 2: Scandia Navigator Method



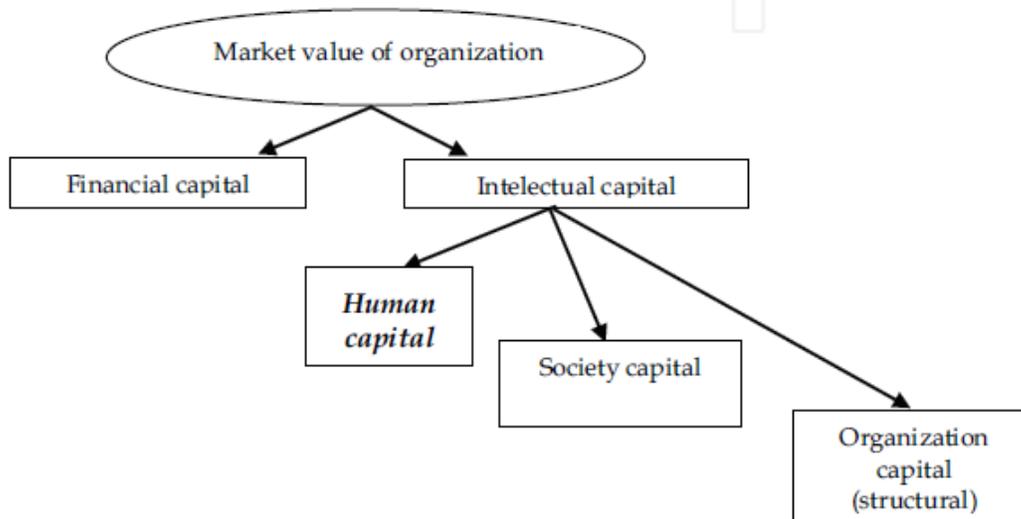
Source: Antosova, M., & Csikosova A., (2011) Intellectual capital in the context of Knowledge Management

4.2. Intellectual capital and market value of the organization

Present market economy is orientated mainly to the expressing of direct financial revenues, but there is growing more and more force to the expressing of not tangible capital, since it is also part of the market value of the subject. In present time expressing of organization’s value must be more orientated to the maintenance of key employees and

to use their knowledge and innovation abilities as for emphasizing of image, brand as well as for basic equity growing. Very soon such organizations that are using ability to find and develop human capital necessary for obtaining of competition advantage, will have better position.

Figure 3: Market value creation and IC of the organization



Source: Antosova, M., & Csikosova A., (2011) Intellectual capital in the context of Knowledge Management

Market value of organization creates financial and intellectual capital:

- Financial capital presents monetary assets by the way of cash and securities,
- Intellectual capital is presented by organization knowledge using for creation of organization wealth. According Armstrong (2002) it can be stocks and flow of knowledge disposal in organization. Such knowledge can be considered as not tangible sources that contribute to the quality of internal processes and create value added.

Intellectual capital is combination of human, society and organization capital.

- Human capital is created by employees, by their inherent and obtained knowledge, skills, abilities, talents and competences. Human capital can be considered as dynamic index and very important factor for organization prosperity relating to the present time. From the view of future success, perspective and development of organization, quality and development of such aspects of human capital is very important, and they must be used effectively, and they must help to go ahead. In this case it means human potential, as file of dispositions and assumptions of people, orientated to the performance of such activities that enable organization to go ahead and increase its competitiveness. That means ability of man to produce products and services and to transform himself. Also human capital contents elements of dynamics and it is related more and more to the future time. (Differences between human capital and human potential is not so significant, in practice these concepts are replacing and differed not so consistently.)
- Society capital presents stocks and flow of knowledge, resulting from the relationships in the frame of organization and outside it. They are such characteristics of society life (relationships, norms, expectations, liabilities) that enable participants to work common effectively on goals achieving. It is relating to the institutions, relationships and norms which create quality and quantity of social interactions in the society. Not only stock, but also flow of knowledge is decisive for intellectual capital, therefore in organization such processes, during which people work and act mutually are important.
- Organization capital presents institution knowledge created and owned by organization that is stored in databases, manuals, etc. Here are also working processes, organization norms, technological processes, know-how, brand, etc. It is marked many times also as structural capital.

5. INTELLECTUAL CAPITAL AND KNOWLEDGE MANAGEMENT IN THE KNOWLEDGE CULTURE

The first condition of building global knowledge society is building knowledge organizations and within them, building such culture which will support these intentions, hence changing it into knowledge culture. In particular it means creating such environment and conditions that will enable people doing a job they are skilled for, they enjoy

and at the same time the job that satisfies them, so they can achieve results above standard. When an organization has qualified people at all working positions, the individuals, improving themselves and their working capacity, are able to enhance the efficiency of all the organization which itself, can make a profit. This implies employees' motivation, their participation in strategic plans, ability and willingness to support the organization, which gives them a job.

Corporate culture nowadays has to follow the rule, that it is inevitable to guide education and gaining knowledge according to the requirements of the organization with the tendency to synchronize them with the employees' personal goals. One of the ways how to improve corporate management nowadays is a project of "learning organization" - expressed in increased capacity to learn, adapt and change through people who are learning. However, individual education does not guarantee a learning organization. It depends on radical change on people's thinking and the philosophy of the management associated with the change of culture, which is defined as a set of concepts, attitudes and values in a company, broadly shared and relatively maintained in the long term. In the organization, where knowledge gradually has to become a crucial factor, the change in people's thinking and at the same time the change of culture is inevitable. Knowledge management implementation is not possible in every environment, i.e. not only gaining and formation, but also mutual exchange, using and handling the knowledge. Not all the subjects are willing to change steady corporate culture.

Shared corporate culture is the key to the usage and development of the employees' potential in knowledge culture. It represents sharing the philosophy, concepts and values into organization's developing orientation and its employees. It is the set of relatively constant and developing concepts, attitudes and values shared in an organization, which is meant for external adaptation and internal integration of employees, expressed in the unity of common value orientations, norms, behavior and negotiation patterns. It is mostly expressed in:

- accepting the philosophy, strategy, plan and goal of the company
- well – informed employees about the situation happening in a company
- willingness to look for new attitudes towards increasing the management efficiency
- attitudes and approaches oriented towards mutual problem solving
- employees' motivation and initiative
- participation in directing and managing the employees
- informal application of a constant improvement principal
- the support of implementing innovations in an organization
- constant individual and company's improvement in order to get the maximum
- increasing efficiency and profitability
- increasing added value
- overall flexibility and openness towards changes etc. (Barták, 2006)

Knowledge management can be effective only on condition that it does not become only a declared conception, but people – their work, habits and culture – will become its active part. Knowledge management should lead to employees' mutual exchange of gained information and knowledge. However, this is not that easy. People possess knowledge in their heads, it is the result of their education, experience and opportunities and it is their possession. These are the people who ensure the competitive advantage for their company. The knowledge cannot be privatized, bought or taken by any company. However, a company can enable its employees to develop and manage them in their environment. A change in people's thinking and also the change of corporate culture is inevitable at the place where knowledge becomes the crucial factor.

Tangible condition of knowledge management existence is so called knowledge-sharing culture, i.e. willingness to share own knowledge, know-how and experience and this way let the other employees make a profit in favor of the whole company. Senge's theory of learning organization (1995) appears from similar assumptions. According to him, the success of corporate culture does not depend only on employees sharing their knowledge, but also on the fact if the knowledge is contribution for other colleagues and if they are willing to admit and use the knowledge. This theory has become practical assumption of correct application of knowledge management.

6. CONCLUSION

The change of corporate culture into a knowledge culture has a strategic meaning for an organization. Its positive effect cannot be quantified in a short term perspective, expected expose has a long term and strategic nature. The basic expose of the change is accepting plans, strategies, commission and goals of an organization by its employees, nevertheless the increase of resistance against negative influence and employees' orientation of the changes and new attitudes with the aim of building competitive advantages for an organization.

The real changes leading towards building knowledge culture in a knowledge organization, however, depend on managers who are initiators, proprietors and coordinators of the changes. Managers are those who are able to

motivate and affect pragmatic and emotional personal side of individual employees so that they release their potential leading towards systematic learning and improving, cooperation and initiative.

Intellectual capital looks through the main dynamics which affect economic competition in knowledge economics from different perspectives. It must be a main moving power in a company heading towards success, while the pattern of success is a development of intellectual capital, including administrative management skills. Nowadays the transition from negativistic behavior in human resources management towards the employer's positive attitudes is inevitable, being expressed in creating favorable conditions supporting knowledge acquisition, skills improvement and universal development of working power. Investments into human capital are long-term investments, but they must not be missed by managers just because they focus on short-term goals. It is important to create such environment in economic and political system that will favor organizations taking part in creating human capital as a basic part of intellectual capital and thus enhance the motivation to invest in it. The development of business in competitive environment depends, to a great extent, on the ability to identify with the knowledge of people and use their skills, experience and knowledge faster and in a better way than competition. It is a strategy of gaining competitive advantage as a basic condition of success just by managing the knowledge. Effective knowledge management requires the knowledge, contributing for the key processes development and organization's activities, to be available for the right people at immediate practical use in time. Knowledge management thus represents a systematic approach towards searching and using the knowledge on behalf of creating values.

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