



INTELLECTUAL CAPITAL AS VALUE ADDING ELEMENT IN KNOWLEDGE MANAGEMENT

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Abstract:

A lot of organizations have already dealt with creating, keeping, sharing and multiplying their knowledge. The current trends do not lead only to better and proper execution of these well-known knowledge management processes, but they also try to achieve the right knowledge management performance as part of the business performance. In this meaning organizations have to bring their knowledge management into line with corporate strategy and this way they can make sure that organizational goals will be achieved. The paper is focusing on intellectual capital model as a measurement system for evaluation both internal and external knowledge management activities and results.

Keywords: knowledge management, intellectual capital, measuring knowledge management.

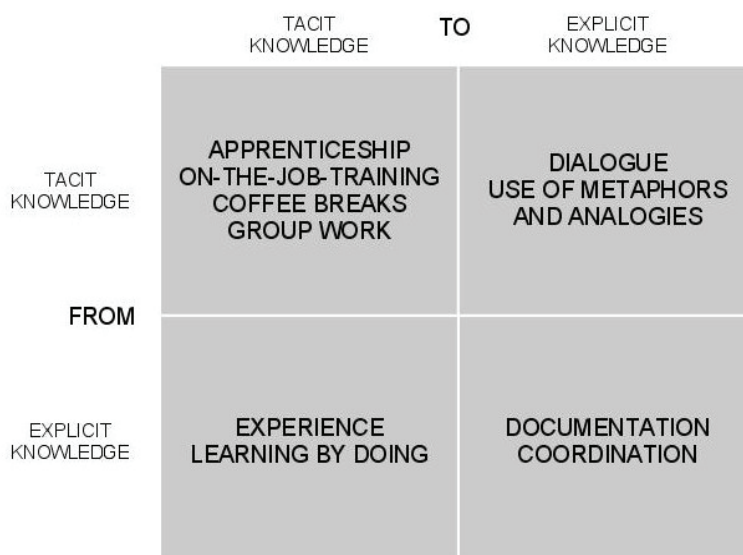
1. THE EVOLUTION OF KNOWLEDGE MANAGEMENT WITH FOCUS ON THE SOURCES OF KNOWLEDGE

In companies based on knowledge, managing human resources concentrates on increasing the so-called organization intelligence and developing potential of workers by means such as learning, participation, co-operation and initiative. To know is an advantage, to learn is necessity. This has always been acknowledged. But these attributes are gradually becoming the main comparative advantage in a knowledge company now and they are the basis for creating wealth. Knowledge management can be generally understood as an effort to make know-how available in an organization to those who need it, to where it is needed, at the right time and in a form in which it is needed in order to increase human and organization performance (Papula & Weberová, 2007).

In 1950's, Maslow and Herzberg argued in their management theories that the single individual's personal motivation plays a crucial role in realizing their activity. Later, in 1980's, this theory was confirmed by Peters and Waterman, who pointed that the single individual's involvement is an important driver of corporate success (Mouritsen & Larsen, 2005, p. 374).

Human capital of a company was thus understood as a place, where the value was created through knowledge. Because knowledge was in human individuals and it could not be created without people, the aim of the company was to develop and manage those people. Human capital became the center of knowledge management while the distribution of knowledge among organization's employees was considered as its main activity. As the supporter of this theory, Nonaka has identified knowledge management techniques which supported the distribution of both, tacit and explicit knowledge among employees within an organization (picture 1).

Picture 1: Knowledge management techniques



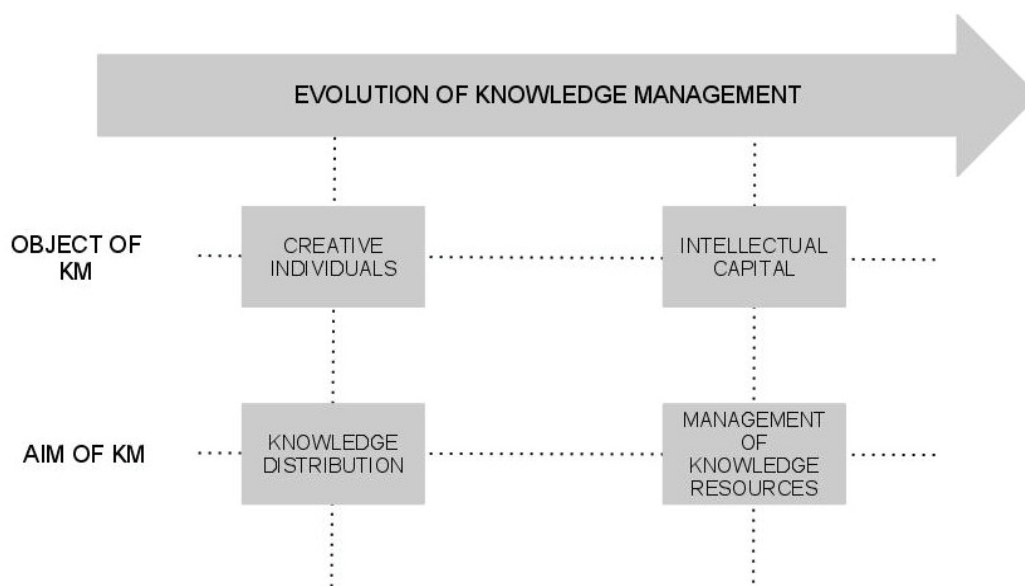
Source: Mouritsen & Larsen, 2005, p. 375.

Human capital representing the knowledge source of the company and the object of knowledge management has been later completed with other components of intellectual

capital, namely with organizational and relational capital. The idea is, that in reality it is not possible to separate employees from the company's internal and external relations. Individual items of knowledge are always oriented towards something outside the person and therefore the object of knowledge management has been broadened to all parts of intellectual capital (Mouritsen & Larsen, 2005).

The evolution of knowledge management also offers two very different views. While in the first case, when single employees are understood as the source of all knowledge in an organization, knowledge management is presented as the collection of managerial techniques and activities with the aim of knowledge distribution among employees within organization (Papulová & Mokroš, 2007). In contrast, later evolution understands the employees explicitly in the context of other elements of intellectual capital and the knowledge management is understood as measurement, reporting and analyzing of intellectual capital. The aim is to justify the interaction of skills and knowledge of employees among each other, with technologies and processes as well as with customers, resp. with external environment of a company. Picture 2 points out the evolution of knowledge management related to its object and aim.

Picture 2: Evolution of knowledge management related to its object and aim



2. OPENING THE KNOWLEDGE MANAGEMENT CONCEPT INTO EXTERNAL ENVIRONMENT

Effective use of knowledge management requires the ability to choose among all skills and knowledge those ones, which contribute to creation of key processes and activities of organization. Organizations often miss these valuable knowledge and skills, which bring innovative potential to them in relation to dynamics of external environment. Knowledge management processes definitely need not only knowledge from inside the organization, but as well from outside the company. Effective implementation of knowledge management into processes of an organization desires successful implementation on organization's culture level

through processes and technologies of company, open system of knowledge management and knowledge networks.

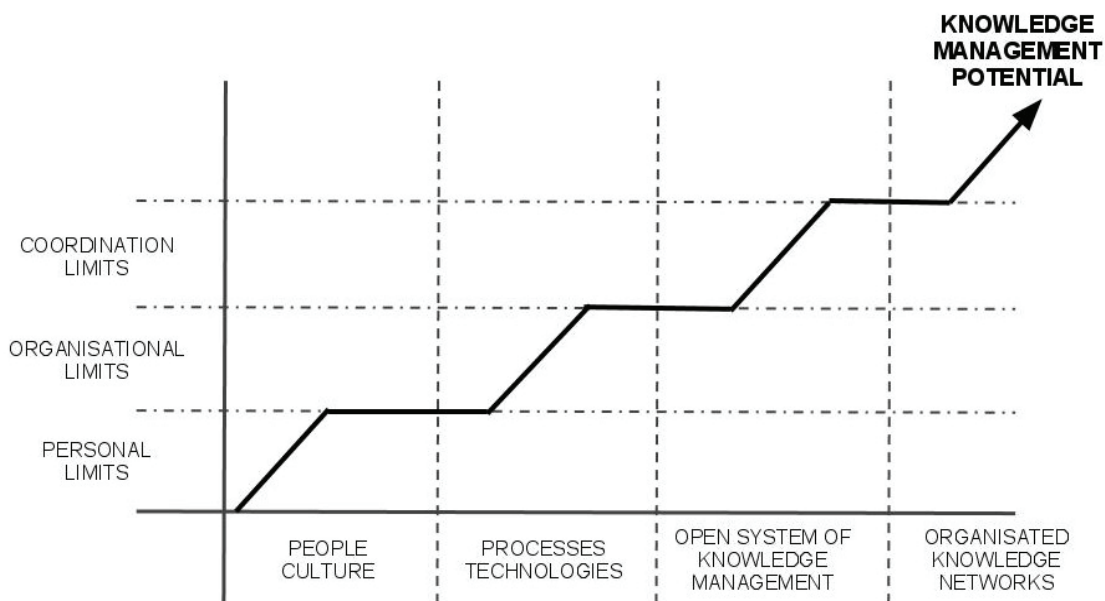
While implementing knowledge management, it is essential to find out what organization culture is like and at which level knowledge assets of the organization are, including various information, communication and knowledge technologies. It is also essential that implementation of knowledge management leads to measurable results commonly monitored in an organization. Managing company knowledge could be effective if it does not only become a declared concept but also people – their work, habits and culture – will get an active role in it (Weberová, 2007).

The importance of knowledge management in company’s development lies mainly in maximal use of the entire intellectual property of the company in main firm’s value forming processes and its development for future needs.

Another view of the development of knowledge management is to look at the performance of knowledge management initiatives. Towards intensification of knowledge management and achieving a higher contribution of knowledge management, the organization must overcome a number of limiting factors, which do not allow it to fully exploit the potential of knowledge management. While the first two levels deal with internal systems and its impact on raising the potential of knowledge management, the other two levels point to the need to enter into the externalization through collaborations, knowledge communities and networks.

Picture 3 briefly shows that the potential of successful usage of knowledge management within organization increases by exceeding the personal limits, the organizational limits and the network coordination limits.

Picture 3: The way to fulfill a potential of knowledge management in organization



Opening knowledge management system toward external environment brings the possibility for new opportunities and overcomes the natural limits of organizations that are at the level of people, culture, processes and technologies. Efficient division of labour and cooperation with external subjects leads to cost savings in the process of achieving the necessary level of knowledge on one hand, on the other hand it conduces to a significant increase in performance of knowledge management.

Fontaine and Millen point in their research on benefits of participation in the knowledge community as shown in table 1.

Table 1: Benefits from participation in knowledge community

| Type of Benefit | Impact of Community It has improved or increased the following | % Agree |
|--|---|---------|
| Individual Benefits What does participating in the community do for individuals? | Skills and Know How | 65 % |
| | Personal Productivity | 58 % |
| | Job Satisfaction | 52 % |
| | Personal Reputation | 50 % |
| | Sense of Belonging | 46 % |
| Community Benefits How does collective participation benefit others? | Knowledge Sharing, Expertise and Resources | 81 % |
| | Collaboration | 73 % |
| | Consensus and Problem Solving | 57 % |
| | Community Reputation and Legitimacy | 56 % |
| | Trust Between Members | 50 % |
| Organization Benefits How does participating in a community increase organizational efficiency, better serve customers / partners, and provide insights for the future of the firm? | Operational Efficiency | 57 % |
| | Cost Savings | 51 % |
| | Level If Service or Sales | 46 % |
| | Speed of Service or Product | 42 % |
| | Employee Retention | 24 % |

Source: Fontaine, Millen, 2004, p. 6.

In spite of mentioned advantages of open knowledge management system, it also has its limits in terms of potential benefits. These limits arise from the lack of organization of knowledge communities and networks. If the cooperation is not properly managed, we cannot talk about the full exploitation of potential that exists in the knowledge community or network.

3. MODEL OF INTELLECTUAL CAPITAL IN THE CONTEXT OF KNOWLEDGE MANAGEMENT MEASUREMENT

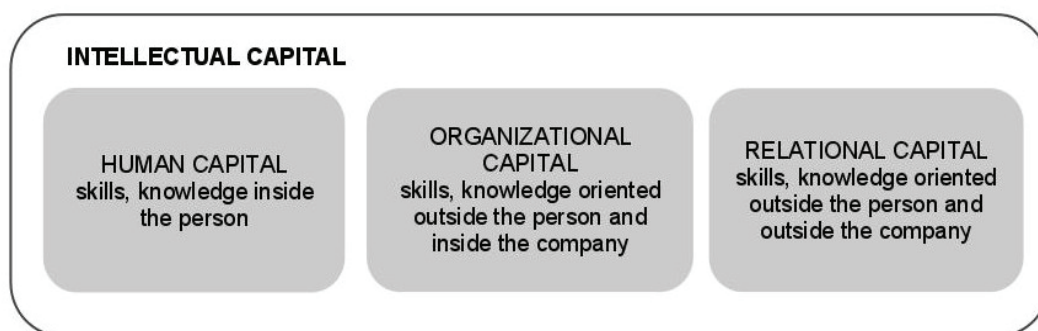
In the meaning of managing knowledge or knowledge management system, there is necessary to measure both: initiatives and results. When measuring the performance of knowledge management, organizations tend to monitor and evaluate mainly human capital, which is only the baseline. In the complex assessment of knowledge management, there is appropriate to

use the model of Intellectual Capital, which evaluates the structure of knowledge assets from the point of view of value creation.

The essence of intellectual capital is the value creation that can be understood as a complex of intangible property, knowledge, skills, processes, applied experience and technologies used in organizations to ensure a competitive advantage on the market. Intellectual capital measures knowledge intensity and knowledge performance through clearly defined structured indicators.

There are several views at the breakdown structure of intellectual capital model presented in literature, usually consisting of three main components: human capital, organizational capital and relational capital. As can be seen in picture 4, human and organizational capital both contain knowledge oriented towards something inside the organization, in contrast to relational capital which contains knowledge items oriented outside the company.

Picture 4: Components of Intellectual Capital



In the concrete, human capital encompasses all the employees with all the individual and collective knowledge they have accumulated, their capabilities, attitudes, capacities, behaviour, experience and emotions. The employees do not automatically represent human capital for the employer, but only in the case, when they are able to transform their knowledge and capabilities into actions (in accordance with the business strategy), which contribute to tangible and intangible value creation for the company (value added, new clients, better image, more successful and efficient work organization, innovative and improved products). Therefore, even the brightest people can be dead capital if they do not know how to contribute to their company's value creation. All employees have certain potential for value creation but not everybody will be successful in the same way (Jelčić, 2007, p. 27).

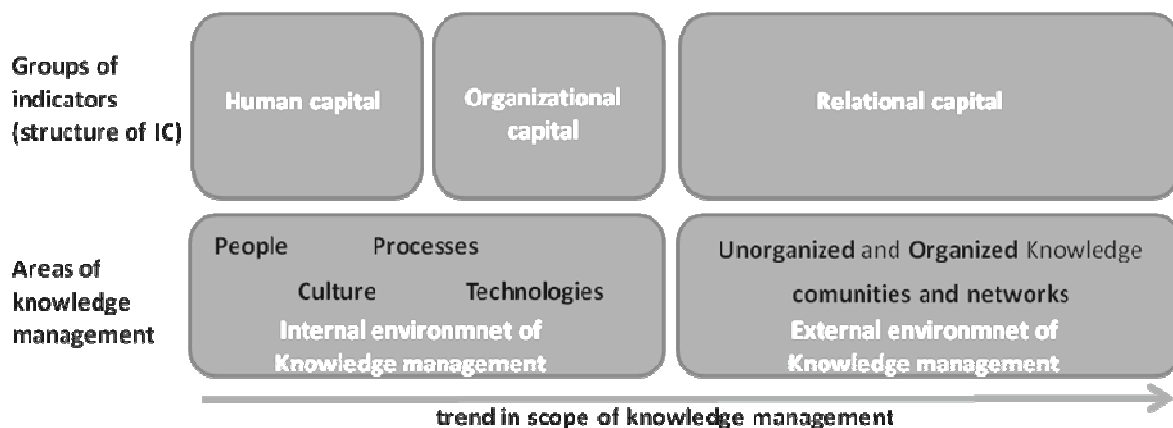
Structural capital on the other hand is the supporting infrastructure of human capital, being actually the result of human capital activity of the past. Together with the human capital, it contains the individual items of knowledge oriented towards something inside the company. Structural capital encompasses all the intangible factors, which remain in the company once the employees have left it and gone home, and which significantly contribute to business success and performance. This type of capital enables an organization to function in a systematic and codified way. Examples of structural capital are: the organizational structure of the company, the ways of running the business, management subsystems, drafts, means of control, information and communication systems, value management systems (finances, investments, accountancy), development, relationship with other employees, database, documentation and intellectual assets: for example patents, copyright, licenses (Jelčić, 2007, p. 30).

Relational capital is the knowledge embedded in the relationships with external environment – with any stakeholder that influences the organization's life, including customers, suppliers, employees, governments, partners, other stakeholders and, sometimes, even competitors. To build relational capital, it is essential to develop and maintain high-quality relationships with these stakeholders. The part of relational capital which refers to the value that is created through continuous relationship with customers is called customer capital. Strong relational capital and especially the customer capital is a necessary predisposition for a long-term competitive advantage of an organization that is difficult for competitors to replicate, what underlines its importance.

4. CONCLUSION

A competitive company has to maximize productivity of all its resources that are at its disposal. To sustain competitiveness it is inevitable to search constantly for ways how to improve the use of all company's resources – people, machines, materials, information and other inputs – by day-to-day running and managing the company through managing and measuring its needs. Knowledge management processes definitely need not only knowledge from inside the organization, but as well from outside the company, recognized by the concept of intellectual capital as relational capital. Picture 5 visualizes intellectual capital as the value adding element in knowledge management.

Picture 5: Intellectual Capital as value adding element in knowledge management



Both knowledge management and intellectual capital tend to manage knowledge assets towards creating values for better achieving of strategic goals of organization. While knowledge management brings theoretical and practical framework of setting and realizing knowledge initiatives throughout all of defined areas of internal and external environment, intellectual capital on the other hand gives the structure needed for proper evaluation and visualisation of indicator which will be used for measurement of knowledge management initiatives and gained results.

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