

Luminita-Maria GOGAN
Dan Cristian DURAN
Politehnica University Timisoara, Romania

INTELLECTUAL CAPITAL MANAGEMENT – A NEW MODEL

Theoretical
articles

Keywords

Intellectual Capital Management
Intangible assets
Managing
Steps
Model

JEL Classification
O32, O34

Abstract

In order to gain competitive advantage organizations need more efficient use of intellectual capital. Therefore, management of intellectual capital has become one of the functions of growth in companies today. Focus on managing intellectual capital is due to the role intellectual competencies and knowledge in contemporary business which is significant. The most common terms for intellectual capital management functions at the organizational level are competence management and competence development. Managers conduct activities to manage intellectual capital in the need for knowledge on personnel competencies and their development in operative functions. The literature presents a series of intellectual capital management models, most belonging to the researchers in the Nordic countries. The aim of this paper is to develop a new model of managing intellectual capital that improve the existing models. Thus, by using the proposed model is expected that the relationship between intellectual capital management and strategy of a company should intensify on medium term.

1. Introduction

Intellectual capital management is a new and unique concept, called “the most important source of competitive advantage”, the goal of achieving a model of structural relationships between indicators of knowledge management (Sveiby, 1997). This occurred in the context of private organizations and enables them to identify efficiency with which resources available locally increased intangible and tangible resources. The lines of action are closely related to the category of resources and changes to be made to create value for the organization. Intellectual capital management has its origins in Scandinavia, where traditionally, businesses have a greater time horizon and where there is a strong inclination “engineering” to research and innovation (Barney, 2001). This type of management is used mainly in Sweden, Finland, Norway, Denmark, Holland, Japan, China, Taiwan, Canada, and to a lesser extent in Austria, Israel, Italy, Spain and Australia. Organizations use performance management of intellectual capital, in one way or another, realizing or guessing its role in achieving competitive advantage. In summary, management of intellectual capital is a set of management tools that enable the organization to access the knowledge they have, but they do not operate effectively. A rigorous approach to the identification and use of intellectual capital to create economic value of a company, including the management of intellectual assets, human capital and intellectual property, along with structural capital and customer capital and alliances. Intellectual capital management gives executives a way to turn the phrase “people are the most important assets” from words into reality (Senyucel, 2009). This paper is organized in five sections. Section 2 presented the concept and importance of intellectual capital management from the perspective of various specialists. Section 3 the most important models for managing intellectual capital at the organizational level. Section 4 is devoted to the description of intellectual capital management model. Section 5 presents the preliminary conclusions. The paper ends with a list of the relevant bibliography for the intellectual capital management.

2. Theoretical aspects of the intellectual capital management

2.1. Definition of intellectual capital management

Over the years, a many of researchers have proposed a lot of interpretations of the concept intellectual capital management. Intellectual capital management is a concept used to describe a new approach that refers to managing the intellectual capital. Increasingly more support specialists argued that intellectual capital is an essential element in achieving an organization's

profitability. It is therefore important to define the term intellectual capital management. Over the years, many researchers have tried to offer a more complete definition of this concept. However there is no universally accepted definition of scientists. Edvinsson (1997) says that intellectual capital management is “leveraging human capital and structural capital together. The goal of the intellectual capital management is to improve the company's value generating capabilities through identifying, capturing, leveraging and recycling intellectual capital. This includes both value creation and value extraction”. In the same vein, Marr et al. (2003) define the concept as a series of actions that occur within the organization aimed at creating and extracting value. According to Wiig (1997) intellectual capital management refers on creating and governing intellectual capital from strategic and organization governance perspectives with focus on renewing and maximising the value of the intangible assets. Sullivan (1999) says that concept is about balancing and alignment of intellectual capital of the firm to the organization's strategy. And Jelcic (2007) believes that intellectual capital management means focusing all organization activities towards the future - strengthening the firm abilities, while initiating an action plan to eliminate weaknesses, and in such way continuously improving business operation. In summary, intellectual capital management is a cyclic and continuous process that is coordinating the activities to identify, evaluate, and initiate action plan and report intangible assets in order to achieve sustainable competitive advantage.

2.2. The importance of the intellectual capital management

Success and future value creation in the new economy depend on the ownership and appropriate management of intellectual capital. The importance of intellectual capital management as an enabler of future performance is now generally accepted among executives across the world. Many organizations that have implemented a model of intellectual capital management reported a large number of beneficial aspects that can be derived from real processes drawn (Ding & Li, 2010):

- Managing intellectual capital across hierarchical levels increases understanding about the functioning of an organization. Manager receives a feedback about what is happening in operational activities. This leads to improved coordination gaps and future goals, favoring the adoption of permanent decisions;
- Covering and defining the most important influential factors make it possible to find a common language to avoid misunderstandings and promotes constructive discussions;

- Agreeing in advance with several influential factors and knowledge of the contribution that they produced over results is easier to centralize improved learning and activities;
- Questioning and reflecting on processes and procedures in place is an important starting point for layout and process improvement;
- Discussing the factors of influence on leaders initiated into groups and create operational synergies and striving for innovative atmosphere;
- Focusing on customers and their needs knowledge enables better orientation towards added value and competitive advantages to;
- A holistic view of the organization and the links between employees, structures and business success not least, make it clear individual status and influence factors are necessary to prioritize activities and measures;
- An open and honest discussion of strengths and weaknesses, as well as sound, accurate measuring intellectual capital, creates transparency and trust between employees, organizational units and functions.

Thus, the role of intellectual capital management is determined by the organization according to its vision, strategies and implemented according to the value that can be created or extracted based on intangible assets.

3. The review of the models of intellectual capital management

So far, there is a general approach to manage intellectual capital that has been accepted, but over time researchers have developed many models of managing intellectual capital. However, a lot of companies still lack practical skills, tools, and techniques to identify measure and manage intellectual capital seen like a vital performance driver. A model of managing intellectual capital of a organization encourages knowing the invisible wealth and gives insight into the hidden value of a company. The most common models for managing intellectual capital at the organizaion level are:

- Management Accounting Guideline (MAG);
- Comprehensive Intellectual Capital Management (CICM).

Management Accounting Guideline was developed by Bernard Marr in 2008. This guide can be used by individuals who possess extensive knowledge in the management of intellectual capital (finance and accounting professionals in business), who are responsible for implementing or improving the

management, measurement and reporting of intellectual capital in their organizations or individuals looking for a general introduction and an overview of key ideas and challenges of measuring, managing and reporting intangible and want to better understand how to manage intellectual capital.

This model outlines five key steps for successfully managing intellectual capital presented in Figure 1, namely:

- Identifying the intellectual capital – this step requires identifying the intellectual capital that exists in the organization. Identification of intellectual capital of the company can be done by focus group interviews, workshops, by mail or online questionnaire. In this model the methods used for knowledge intellectual capital were interviews and questionnaires online. Then individual responses to surveys or interviews are analyzed and compiled a list of intangible resources. This model proposes a specific terminology (human capital, relational capital, structural capital, physical capital and financial capital) to describe the intangible assets identified, but not mandatory and suggests the use of a commonly used language in the organization (Marr, 2004).
- Mapping the intellectual capital value drivers - at this stage is evaluated the relevance of intellectual capital by mapping the strategy into a strategic map. This map is an overview of the organizations and has two main functions (Marr & Moustaghfir, 2005). The first function is to ensure that the strategy of the intellectual capital is integrated and coherent. The second function is to establish an easy communication strategy (it derives from the role and importance of intellectual capital). A strategic map includes three key elements of a strategy for the organization, namely its core activities, its value proposition, and its strategic elements. These three components are linked by cause - effect relationship and create a complete, integrated and coherent strategy (Marr, 2008). Such strategic map illustrates the most important cause-effect relationships between intangible assets. This type of strategic map is helpful to managers, thereby promoting a comprehensive understanding of the role and importance of intellectual capital, but there is a danger to add elements of intellectual capital that have no real impact on performance.
- Measuring intellectual capital – on this stage is extracted useful management

information by measuring the intellectual capital. Measuring intellectual capital provides relevant information that helps managers to reduce uncertainties related to intangible assets and in making informed decisions that enable to improve the organization performance (Roos & Roos, 1997). To measure intellectual capital uses one of the methods on the market or develop a new method.

- Managing intellectual capital - After measuring intellectual capital necessary manages any potential risks. Risks manage considering each component of intellectual capital (human capital, structural capital and relational capital). Risk assessment then is a highly significant factor in managing intellectual capital in today's business environment (Leitner, 2005). The first step in measuring risk is to review all the elements of the value creation map to identify potential risks. After getting concrete information about these risks, it made their prioritization by the relative importance. In conclusion, companies need to assess potential risk factors for parts of their organization, classify them, and then decide which are most important to manage them.
- Reporting intellectual capital – on this step is presented an external report with the purpose to communicate the value of intellectual capital to internal and external stakeholders (Mouritsen et al., 2001). Reporting intellectual capital to the stakeholders is made for various reasons (investors want to know with the aim to make better informed investment decisions, employees want to understand the health and the organization has an interest in communicating its position to partners, suppliers, the wider public and position of their organization.

Comprehensive Intellectual Capital Management (CICM) is a concept developed by Nermien Al-Ali and refers to a comprehensive framework developed for managing all forms of intellectual capital of a company. This model involves the the following stages (Figure 2):

- Knowledge management - is the process of transforming information and intellectual property in order to create value, known as the raw knowledge. Kumar et al. (2007) define the knowledge management is “a deliberate effort to expand, grow and apply available knowledge in ways that add value to the entity”. The goal of this stage is to ensure that the organization has the requisite

resources to enable production, innovation, and effective decision making and to support the critical business processes and operations in order to attain the desired competitive position. Resources used in this stage are composed primarily of human capital and the structural assets.

- Innovation management - represents the process of extracting the value created in the first stage by transforming knowledge into marketable products. Innovation, in this era of knowledge is considered the core of determining whether an organization is on track, being a complex process of obtaining new products (Basu & Sengupta, 2007). The purpose of this step is to convert ideas into new or improved products, services, solutions, or processes, gaining competitive advantage in the market by building the innovation portfolio that enables the organization to position itself in the respective markets and grow. The assets intangible used in this stage are composed of structural capital and customer capital relating to business processes.
- Intellectual property management - under this stage value is further maximized by legally protecting the intangible assets like copyright, trademark, patents, designs, and other types of information. Intellectual property refers to ideas, concepts, insignias, symbols, various technologies, products, processes, methods, publications and other works that are unique and original to the owner (Burrone, 2005). In this stage, intellectual capital is composed of customer capital and structural capital relating to licensing of intellectual property.

The models and approaches used until now for managing intellectual capital and its economic effects form a good basis for further development.

4. The proposed model of intellectual capital model

In striving to gain a better position as the market requires managerial practices established by innovative generation. Based on the literature review, it is proposed a new model and an associated methodology, which help the companies to managing intellectual capital in order to gain competitive advantage (Figure 3). This model is based on the five steps:

- Planning - before intangible assets to be identified, evaluated and reported, must be developed a plan or strategy. This plan involves defining the activities to be carried out by authorized persons in the

schedule. Planning is part of the base of intellectual capital management (strategy development and documentation organized and interactive compression of intellectual capital management's determination of the methods to be used in intellectual capital management strategy and adequate resource planning). Intellectual capital planning is iterative and includes scheduling activities and processes of evaluation, management and reporting. The result of this action is called intellectual capital management plan.

- Identification intellectual capital - it is a stage in which intangible assets are determined and described that may have an impact on organizational performance. These can be identified at an organizational level and at the department level. Identification of intangible resources is done using online questionnaires, focus groups or interviews. Data collection is done by the person skilled in the art called internal auditors.
- Evaluation of intellectual capital - this step is done as a result of the identification intangible assets within the organization or department and is established to what extent every resource influence performance of the company. Each intangible element is assigned an implementation level in order to be classified and evaluated according to the impact on organization performance. A result of identifying of intangible assets they can be grouped according to their importance (leader or led).
- Initiating action plan - this category involves the treatment of the results obtained in the previous stage. Initiating action plan is a process of developing options and determining the actions that lead to intensification of operations and reducing the risks associated intellectual capital. The effectiveness of this step contributes to the achievement/failure of the organization's objectives directly.
- Report - at this stage are presented the results of the evaluation (total score) as a footprint of the intellectual capital

This model will be tested in two companies operating in the field of public water and sanitation in Romania.

5. Conclusions

The importance of managing intellectual capital consists in providing timely information which enables them to modify their intellectual capital strategy accordingly for their sustainable

competitive advantage by acquiring and using data. It is important for managers to understand that not all identified intangible assets bring added value to the company immediately. Intellectual capital management enables identification of effectiveness with which the company has developed intangible and tangible resources. Directions are closely related to the strategic logic of the company and therefore the type of resources and changes that are fundamental to creating value within the organization, and hence competitive advantage.

Acknowledgements

This work was partially supported by the strategic grant POSDRU/159/1.5/S/137070 (2014) of the Ministry of National Education, Romania, co-financed by the European Social Fund – Investing in People, within the Sectoral Operational Programme Human Resources Development 2007-2013.

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Appendices

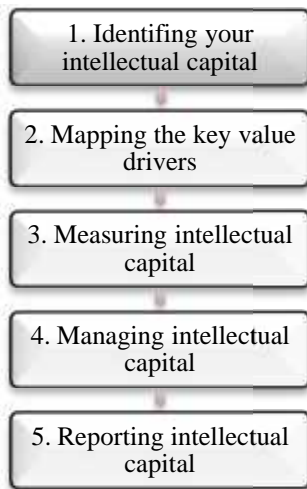


Figure 1 Management Accounting Guideline (MAG)

Source: Marr, B. (2008). *Impacting future value: How to manage your intellectual capital*, CMA: Canada

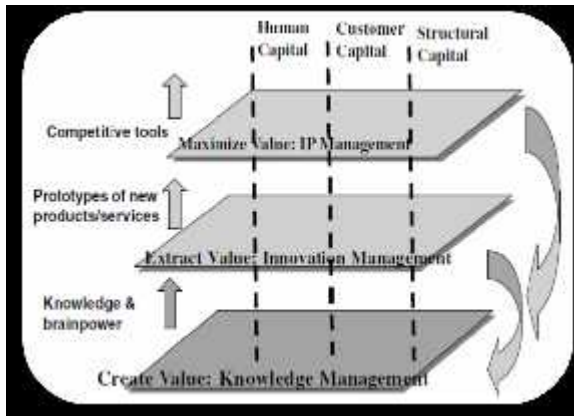


Figure 2 Comprehensive Intellectual Capital Management (CICM)

Source: Al-Ali, N. (2003). *Comprehensive Intellectual Capital management: Step-by-step*. Concord: New Hampshire.

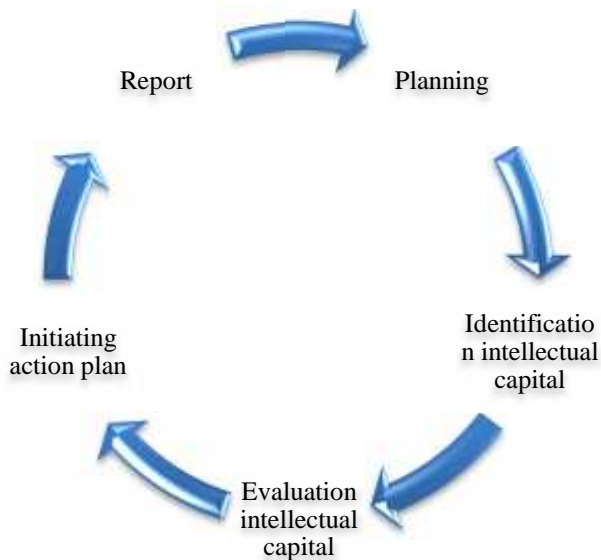


Figure 3 The proposed model

