CODING VS. PERSONALIZATION – INNOVATIVE APPROACHES REFERRING TO THE INTEGRATION OF KNOWLEDGE MANAGEMENT IN THE BUSINESS STRATEGIES

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ABSTRACT

In this paper, we focused on the analysis of the strategic challenge: coding vs. personalization, discussed by the professionals from Knowledge Management domain. Coding and personalization represent two strategic options taken into account by the innovative companies, as they increasingly rely on building and creating knowledge as a necessary condition to survive on their competitive markets. We consider that our personal contribution was materialized in an original approach regarding the answers offered to typical strategic questions from knowledge coding vs. personalization perspective. We also analyzed the role played by the managers in the KM processes based on the challenge: coding vs. personalization, based on knowledge sharing techniques which assure the gain of competitive advantages on markets.

KEYWORDS: *knowledge management, coding, personalization, strategy, knowledge sharing*

1. Introduction

If we are looking from a practical perspective, knowledge management requires certain organizing principles – a general framework – which will help us to classify different activities types and functions, which are needed to the work implying knowledge, both inside and outside of an organization.

These general frameworks are to be found in form of theorie and models for knowledge management. We can find in the specialised literature many models regarding knowlededge management. From all these models we identified some that we think can be very well applied in almost any type of economical organization.

The choice we have made was based on the identification and analysis of many perspectives regarding basic concepts concerning coding and personalization.

2. Adaptive models of knowledge management concerning the strategic approach: coding vs. personalization

The ICAS (**I**ntelligent **C**omplex **A**daptive **S**ystems) theory sees organization as an adaptive, complex system. These models contains series of functions which ensures the viability of any living system in general and of organizations, in particular.

ICAS systems are based on cybernetics principles, which are using communications and control mechanisms in order to understand, describe and predict what should do a viable organization.

Adaptive systems contains lots of independent agents which are interacting. Their behaviour makes possible the appearance of some complex phenomenon's of adaptation.

There is no general authority to manage the way in which these agents should work. A general model of a complex behavior will be the result of all the interactions.

Bennet describes an approach of knowledge management using ICAS systems as a starting point.

It is considered that traditional bureaucracies are not enough to provide the necessary cohesion for the survival of the organization. It was proposed a new model(Bennet) in which the organization is perceived as a system found in a symbiotic relation with its environment. Bennet model is based on a number of subsystems which interacts and evolves in order to generate an advanced and intelligent technological company.

Inside the adaptive model, the intelligent components are made of people which are self organized, but who can remain as a part of general hierarchies of the organizations. The challenge is to use the advantage given by the force of the people when they cooperates, keeping a global sense of unity.

The organizations solves problems by creating options, using resources both internal and external which can add value over the initial input. So, the knowledge became the most valuable resource because it is the only one who can help in the context where uncertainty exists. This is one of the criteria by which we can distinguish between information management(predictable reactions to known situations and anticipated situations) from knowledge management(using new reactions for un-anticipated situations). We can syntethize key processes in Bennet model regarding coding and personalization challenge as being the following:

1. Understanding
2. Creation of new ideas
3. Problem solving
4. Decision taking
5. Following actions to obtain the desired results.

According to this model, in order to survive, an organization needs eight characteristics: organizational intelligence, shared purposes, selectivity, optimum complexity, open borders, knowledge centering, optimum streams, multidimensionality

▪ The organizational intelligence represent the company capacity to inovate, to aquire knowledge and to apply it for relevant situations. In the context of ICAS models, this property reveals the capacity of the organization to perceive, interpret and respond to the environment in such a way that will allow to reach the desired purposes.

▪ Optimum complexity is represented by the correct equilibrium between internal complexity and external environment

▪ Selectivity refers to the content evolution, one characteristic that is opposed to the approach based on data warehouses. To be selectives means to filter the input information coming from external environment. A good filtering requires a deep understanding of the organization, specific knowledge on clients and a very good understanding of the strategic objectives.

▪ Knowledge centering leads to the information aggregation after self-organizing, collaboration and strategic alignement. Informational streams will activate the knowledge development and will facilitate the connections and necessary continuity to keep the unity and the coherence of the organizational intelligence.

▪ Open borders represents a very important aspect, if we want free movement for the ideas

▪ Multidimensionality brings organizational flexibility which ensures the fact the the staff has the competencies, the perspectives and the cognitive abilities to solve problems.
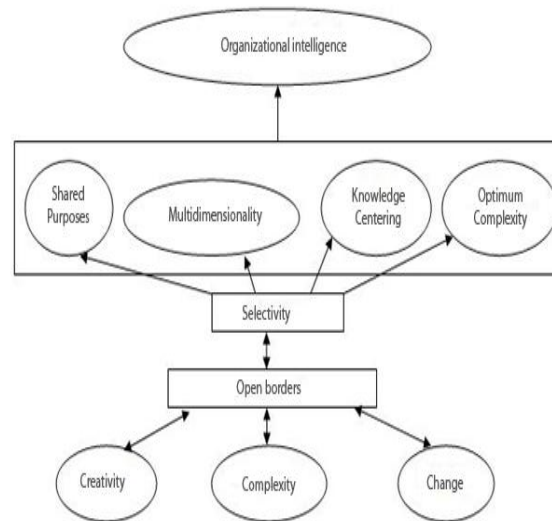

Figure 1: Bennet Model concerning the strategic approach: coding vs. personalization

It is important to understand that in the world of KM strategy there needs to be emphasis on both Personalization and Codification (typically it can be seen that successful strategies provide emphasis on a blended approach that may for example, be seen as 80% one and 20% the other). And it is quite understandable that what may be most appropriate in one part of the organization might not be most effective everywhere -- so implementing these strategies requires an inherent amount of flexibility and extensibility to address both current and future requirements, with an eye toward the balance of prioritization and meeting localized needs[1].

Consultants do not take a uniform approach to managing knowledge. The consulting business employs two very different knowledge management strategies. In some companies, the strategy centers on the computer. Knowledge is carefully codified and stored in databases, where it can be accessed and used easily by anyone in the company. We call this the *codification strategy*. In other companies, knowledge is closely tied to the person who developed it and is shared mainly through direct person-to-person contacts. The chief purpose of computers at such companies is to help people communicate knowledge, not to store it. We call this the *personalization strategy*. A company's choice of strategy is far from arbitrary—it depends on the way the company serves its clients, the economics of its business, and the people it hires. Emphasizing the wrong strategy or trying to pursue both at the same time can, as some consulting firms have found, quickly undermine a business.

The two strategies are not unique to consulting. When we looked beyond that business and analyzed computer companies and health care providers, we found the same two strategies at work. In fact, we believe that the choice between codification and personalization is the central one facing virtually all companies in the area of knowledge

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[1] "What's Your Strategy for Managing Knowledge", Morten T. Hansen, Nitin Nohria, and Thomas Tierney, Harvard Business Review (1999).

management. By better understanding the two strategies and their strengths and weaknesses, chief executives will be able to make more surefooted decisions about knowledge management and their investments in it.

3. Coding vs. personalization –strategic options regarding the integration of KM in the business strategies

Knowledge Management discovers and provides opportunities associated to the processes which facilitate the conversion of the basic data into information that can be explored from Business Intelligence point of view.

There are two approaches referring to KM: **coding** and **personalization**; both of them are required in order to realize a balance and the weight of each approach is different.

The personalization is focused on the connection of the persons involved in KM by the means of networks and is recommended to the companies that confront with problems which depend more by the implicit knowledge and expertise than the explicit knowledge.

The coding strategy is centered on technologies that allow the storing, indexing, searching, exploring and using the information for decision making support. This strategy is recommended to the organizations which are confronted with the same type of problems and decisions.

The main differences between coding and personalization are revealed in the table 1.

Strategic questions regarding coding vs. personalization in KM approach

Table 1

Strategic questions	Coding	Personalization
In what type of business is the company involved?	*Providing high quality services that are efficient from costs point of view.*	*Providing creative products or services, characterized by a high level of adaptability.*
What is the competition model used in KM approach?	*Competition based on price.*	*Competition based on experience, allowing price skimming strategy.*
What is the main role of IT in the business processes?	*The objective of IT is to connect distributed systems by the means of the knowledge codified in reusable reports.*	*IT is used especially for communications based on web applications.*
What are the principles for the reward strategy?	*The employees are rewarded for the contributions to the specific databases developed for professional discussions.*	*The employees are rewarded for the direct knowledge sharing between the employees involved in groupware projects.*
What is the knowledge transferred?	*The knowledge is transferred by the means of databases or other specialized technical structures*	*The knowledge is transferred from a person to another. The social network encourages the implicit knowledge sharing.*
How the KM influences the strategy?	*The efficient use of the existent knowledge and experience in order to solve the new decisional problems and to complete the new projects*	*The experts on different business activities are considered the main resource of the company as they share their experience in groupware projects.*

A database management system is a technology tool enabler to support a codification strategy. If the organization's strategy is to develop a more robust way to get

workers to collaborate and to capture tacit knowledge, such a system may not be the best approach or the best investment. In reality, most KM systems require both, which can be termed an integrated strategy. Understanding the enterprise needs makes the development of performance measures easier and the implementation of the measures becomes a way to reinforce and clearly communicate the KM strategy

4. Conclusions

KM systems are connected to the organizational culture values; in this context, we appreciate that the audit of KM must be focused on employees, taking into account their individual expertise level. The strategies concerning the two options (coding and personalization) can develop knowledge which will create opportunities for the organizations. With a knowledge strategy, the pressure on impact measurements for KM is released, since sense and need for the KM program is understood and it is driven by the management.

We consider that a business based on competitive intelligence can improve its strategic information, winning competitive advantages. In view to connect their strategies to e-business, the organizations replaced "to do" principle with a new one: "to think". In this approach, the staff specialized in Business Intelligence (BI) and Knowledge Management succeeds to implement IT infrastructures which allow an efficient management of competitive intelligence based knowledge.

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