



## The Importance of Knowledge Identification in Developing Organizational Core Competences

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### Abstract

The purpose of this study is to establish a more coherent and integrated framework of studying organizational core competences for both future academic research and business practice. Organizations need to take systematic approaches to create, develop, maintain, and revitalize their core competences. According to knowledge-base view, knowledge is a particularly important resource and capability since many types of knowledge are scarce, much of it is difficult to transfer, and complex forms of knowledge may be very difficult to replicate. Thus a better understanding of the linkage between knowledge identification and organizational core competences can help to build competitive advantage. The opportunities for building and managing knowledge-based organizational core competences should be systematically assessed. The developed process of this article integrates knowledge identification to a part of organizational core competence management. Finally, the discussion of potential benefits of a group decision supporting system for facilitating the core competence-based knowledge identification is also provided.

*Keywords:* Knowledge identification; Organizational core competences; Knowledge-based view

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### 1. Introduction

There continues to be much interest in the business and academic communities in the concept of core competences. Recently this movement has fragmented into a number of related fields with subtle differences in focus, including knowledge management, organizational learning, strategic management and innovation management (Tidd, 2006; Sapsed, 2005; Nonaka et al., 2005). Nevertheless, this kind of fragmentation and increasing specialization of academic research may be counterproductive and make it more difficult to provide clear guidance for managers on how to identify, build and exploit core competences. Therefore it is essential to establish a more coherent and integrated framework of studying core competences for both future academic research and business practice (Tidd, 2005).

Resources and capabilities are the fundamental building blocks of a firm's strategy (Barney, 1991; Grant, 2001). Resources are the inputs that firms use to create goods or services. Capabilities refer to a firm's skill in using its resources (both tangible and intangible) to create goods and services. Core competences are

those capabilities that are central to the main business operations of the firm; they are the capabilities that are common to the principle businesses of the firm and that enable the firm to generate new products and services in these businesses (Prahalad and Hamel, 1990; Probst et al., 2002). All these concepts are derived from the resource-based view (RVB), which is an economic theory that suggests that firm's performance is a function of the types of resources and capabilities firm control (Barney, 2001; Grant 1991).

Organizations need to take systematic approaches to core competences development – the need to create, develop, maintain, and revitalize core competences must be built into the design of management systems (Tidd, 2006; Hamel and Prahalad, 1994; Pettis, 1997; Leonard-Barton, 1992). Organizations often discover that the management systems that support existing core competences may be unsuitable for new ones. If organizations are to thrive, they must not only exploit their existing core competences, but also must invest in continually exploring new core competences as strategic options for future strategies and competitive advantage (Probst et al., 2002). In other words, core competences cannot remain static; only those firms that continue to invest and upgrade their competences are able to create new strategic growth alternatives. As such, the focus of this article is on dynamic core competences (Lei et al., 1996; Teece et al., 1997; Wang and Ahmed,

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2007; Carpenter and Sander, 2007).

During the past few years scholar's thinking about resources and capabilities and their management has been extended and reshaped by a surge of interest in knowledge management (KM) (Grant; 2006). Additionally, a knowledge-based view (KBV) has been developed recently. Therefore, knowledge is regarded as an important resource and capability that can be used as the most visible part in building and revitalizing core competences (Tidd, 2006). From the strategic view point, knowledge is a particularly interesting resource and capability: many types of knowledge are scarce, much of it is difficult to transfer, and complex forms of knowledge may be very difficult to replicate (Barney, 1991).

Analysis of the characteristics of knowledge and the processes through which it is created and deployed offers valuable insights into the principles and practices of core competence management (Hamel and Prahalad, 1994; Tidd, 2005). Given the scope of KM and the vast range of tools, techniques, and frameworks that have been developed, where does a firm begin to incorporate KM within its core competence management? A useful starting point is to identify the linkage between knowledge and the basis on which the firm creates value. Furthermore, many KM approaches have been developed with claim to guide organizations to use their knowledge, competences or shared memory in a more efficient way (Alavi and Leidner, 2001; Probst et al., 2002). However, a large number of KM initiatives in firms often lack a strategic perspective and do not sure that the firm is making the best investment of its resources or that it is managing the right knowledge in right way (Maier, 2002; Zack, 1999).

The purpose of this study is to provide a process which can be used to analyze and understand the linkage between the knowledge identification and organizational core competences. The opportunities for building and managing knowledge-based organizational competences should be systematically assessed. A better understanding of the linkage between knowledge identification and core competences can help to build competitive advantage. In this paper a process for the identification and management of important competences and their associated resources (esp. knowledge) is developed. The developed process integrates knowledge identification to a part of organizational core competence management. The evolution of KBV is first described and then theories of core competence management are reviewed in order to develop a pragmatic and systematic integrated process for knowledge-intensive organizations. In this paper, we blend the aspects of knowledge identification and core competence, and study the impacts that knowledge identification has on core competence management.

Knowledge identification can significantly influence the whole organization and its core competences, as well as people's working modes. However, many of the earlier developed methods do not give enough support to group work and communication (Yim et al., 2004). For this reason a wide and comprehensive group of experts should participate in the process of knowledge identification. This group should include all functions across the firm's strategic business units and representatives of the different hierarchy levels in the firm (Tiwana, 2002). People with different backgrounds must have a possibility to work effectively as a group for the identification of knowledge that will benefit the entire organization most. A potential tool to increase analytical communication between these experts and the total effectiveness of the group is a group decision support system (GDSS). In order to utilize the possibilities of the GDSS, the system should be applied for suitable areas and in a right way. The potential benefits of a GDSS for facilitating knowledge identification and core competences are also discussed.

## **2. The Evolution of the Knowledge-Based View of the Firm**

Classical strategy researches developed in the 1960s 1970s (e.g. Ansoff, 1965; Andrews, 1971; Hofer and Schendel, 1978) focus their analysis of the determinants of firm success on the interaction of factors both endogenous and exogenous. This approach illustrates the importance of the examination of both the strengths and weaknesses internal to the firm and the opportunities and threats present in the environment (i.e. SWOT analysis) and the aim is to deploy the internal strengths to capture the opportunities present in the external environment while neutralizing the external threats. Though this classical approach considers the internal characteristics of the firm, it fails to consider the mechanisms and logics governing firm existence, behavior and success (Li Destri & Dagnino, 2005). During the 1980s a significant part of strategy research is conducted in Structure-Conduct-Performance (SCP) paradigm, initially elaborated by Michael Porter (1980) on the basis of Industrial Organization Economics (IOE). According to this approach, it is the structural characteristics of the industry which determine the conduct and the performance of firms that operate within it (Scherer and Ross, 1990). These studies assume that firms can achieve competitive advantage via identification and acquisition or development of the resources necessary to compete within a specific industry. Strategy studies have concentrated on the exogenous competitive environment and overlooked the endogenous characteristics of firms for approximately a decade due to the widespread of this paradigm (Li Destri and Dagnino, 2005).

The development of the resource-based view (RBV) is at least partially a reaction to the dominant SCP paradigm and it identifies the determinants of firm competitive advantages in the endogenous characteristics (Faulkner and Campbell, 2003). This approach suggests that firm performance is a function of the types of resources and capabilities firms control and considers that some resources and capabilities may be heterogeneously distributed across competing firms and this heterogeneity may be long lasting (Barney, 1991; Barney and Hesterly, 2006). A dynamic approach to the RBV (i.e. dynamic capability) has recently emerged and focuses on the firm's ability to integrate, build and reconfigure internal and external competences to cope with rapidly changing environment (Teece et al., 1997). According to this perspective, firms can obtain superior performance by continuously creating a sequence of temporary strategic advantages (Eisenhardt and Martin, 2000), which requires firms to learn quickly to alter their resource configuration in adaptation to environmental changes.

A knowledge-based view (KBV) of the firm has emerged in the strategic management literature (Alavi & Leidner, 2001; Nonaka et al., 2006). The knowledge-based view of the firm stems from theorization of why firms have performance differences. According to Grover and Davenport (2001), debate on the "theory of the firm" originates from two viewpoints, one based in transaction cost economics, and the other in resource-based theory. While transaction cost economics posits that firms exist in lieu of markets due to their reduced potential for opportunism, resource-based theory asserts that long-run superior performance is associated with the possession of scarce, valuable, and inimitable firm-specific resources. The tenet is that knowledge as a focal resource creates unique advantages for governing economic activities through a logic that is very different from a market.

Initially, the KBV is an extension of RBV and considers the firm as an agent that develops superior capacities to protect knowledge (Porter-Liebeskind, 1996) or to integrate and deploy the knowledge possessed by single individuals (Grant, 1996). More recently, the KBV has evolved toward a dynamic perspective, beginning to assume a theoretical configuration more fit to the conceptualization of the firm according to value creation (Li Destri and Dagnino, 2005). The firm is considered as an institution for integrating knowledge and examines how the mechanisms for integration establish flexible response capabilities in hypercompetitive markets (Grover and Davenport, 2001). Krogh et al. (2001) and Nonaka et al. (2006), in particular, conceptualize the firm as a knowledge generator and incubator.

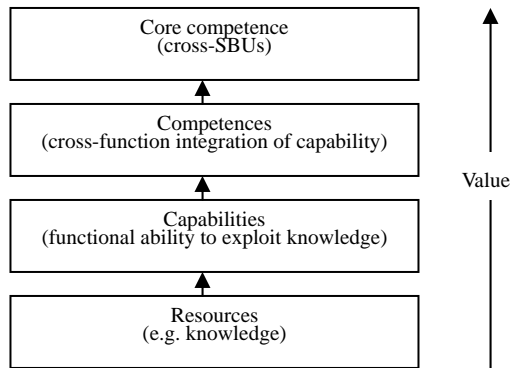
The knowledge-based view of the firm argues that the products and services produced by tangible

resources depend on how they are combined and applied, which is a function of the firm's know-how. This knowledge is embedded in and carried through individual employees as well as entities such as organization culture and identity, routines, policies, systems, and documents. The knowledge-based view of the firm posits that these knowledge assets may produce long-term sustainable competitive advantage for the organization because knowledge-based resources are socially complex to understand and difficult to imitate by another organization (Alavi and Leidner, 2001; Nonaka et al., 2006). The knowledge existing at any given time per se is not sufficient to form such a basis for long-term sustainable competitive advantage. The long-term sustainable competitive advantage comes from the firm's ability to effectively apply the existing knowledge to create new knowledge and to take action that forms the basis for achieving competitive advantage from knowledge-based assets.

Knowledge-based competitive advantage is also sustainable because the more a firm already knows, the more it can learn (Lei et al., 1996; Cohen and Levinthal, 1990). Learning opportunities for an organization that already has a knowledge advantage may be more valuable than for competitors having similar learning opportunities but starting off knowing less. Sustainability may also come from an organization already knowing something that uniquely complements newly acquired knowledge, which provides an opportunity for knowledge synergy not available to its competitors (Probst et al., 2002). New knowledge is integrated with existing knowledge to develop unique insights and create even more valuable knowledge. Organizations should thus seek areas of learning and experimentation that can potentially add value to their existing knowledge via synergistic combination (Zack, 1999; Probst et al., 2002).

### 3. Core Competence Management

The idea of using core competences in a company's strategy formulation has received increasing attention in recent years. The concept was originally introduced by Prahalad and Hamel (1990), who suggested that "core competences are the collective learning in the organization, especially how to coordinate diverse production skills and integrate multiple streams of technologies". They argued that a firm's core competences are the foundation from which competitive advantage can be built in the market. Since then, several researchers have tried to further clarify the definition of core competence or its close equivalent, core capability (Petts, 1997; Javidan, 1998; Carpenter and Sander, 2007).



**Figure 1.** Hierarchy of Competences

Figure 1. illustrates the hierarchy of core competences (Javidan, 1998). On the lowest level of this hierarchy are the resources, which are the building blocks of competences and inputs into the organization's value chain. Each company has various resources, but companies differ in how they leverage them. On the second level of the hierarchy are the capabilities, referring to the company's ability to exploit its resources. They consist of a series of business processes and routines that manage the interaction among the company's resources. A distinctive feature of capabilities is also that they are functionally based. Competency, the third level in the hierarchy, is a cross-functional integration and co-ordination of capabilities. Competences usually result from the interfaces and integration among the SBU's functional capabilities. Finally, on the highest level of the hierarchy are core competences. Core competences cross SBU boundaries and they result from interaction between different SBUs' competences. A core competence is thus a collection of competences across SBU boundaries (Javidan, 1998).

Since core competences are factors that hold together a portfolio of seemingly unrelated businesses, they can be used as a base for diversification strategies. Core competence-based diversification reduces risk and investments and it also increases the opportunities for transferring learning and best practice across business units (Hamel and Prahalad, 1994). Very (1993) also argues that the success of diversification is linked with the ability to exploit or strengthen competitive advantage through operational relatedness and core competences. According to Prahalad and Hamel (1990), core competences should have three traits: (1) they provide potential access to a wide variety of markets (2) they make a significant contribution to perceive customer benefits and (3) they are difficult for competitors to imitate. Drawing together the literature on core competence, more properties that transform generic corporate competences into the core competences can be identified. Tampoe (1994), for example, lists the following criteria that core competences must meet. They must be:

- essential to corporate survival in the short and long term
- invisible to competitors and difficult to imitate
- unique to the corporation and few in number
- a mix of skills, resources and processes
- a capability which the organization can sustain over time
- greater than the competence of an individual
- essential to the development of core products and eventually to end products
- essential to the implementation of the strategic vision of the corporation
- essential to strategic decisions: on diversification downsizing, rationalizing, making alliances and joint ventures and
- marketable and commercially valuable.

One approach to core competence management has been proposed by Hamel and Prahalad (1994), who argue that there are five key core competence management tasks. Five tasks in core competence management are: identifying core competences, establishing a core competence acquisition agenda, building new core competences, developing core competences, protecting and defending core competence leadership.

### 3.1 Identifying Core Competences

As mentioned above core competences are vital for formulating a company's strategy. Without core competences competitive advantage is not sustainable and strategic intent is not attainable. Therefore, full utilization of core competences and their development into competitive advantage is essential to the realization of the goals established by strategic intent (Hamilton et al., 1998). In short, core competences are corporations' fundamental strengths, i.e. things that companies do very well. Once these core competences are identified, the executives can examine possible opportunities for achieving new markets or making new products by leveraging valuable knowledge.

Javidan (1998) proposes a process for multi-business corporations to identify their capabilities, core competences and to examine their implications. The first step in the process is to determine who will participate in it. There are limits as to how many people and what parts of the company can be involved in this process. The optimal solution could therefore lie in a situation where people representing the key functions, all business units, important cross-SBU teams, and important projects are invited as part of the company's regular strategic planning exercise (Tiwana, 2002).

When the participants have been chosen and assigned to groups (of e.g. 5–6 people), they need to attend workshops. In these workshops the managers can begin the process by discussing the following eight

questions (Javidan, 1998):

1. What are the aspects of the value-chain where the company does a particularly good job?
2. Are these competences capabilities (functionally based), competences (SBU based) or core competences (cross-SBU)?
3. Are the corporation's capabilities and competences stronger than those of other companies' in the industry?
4. What kind of a link is there between competitive advantage and core competence?
5. How durable is the competitive advantage?
6. What are the key changes taking place in the industry?
7. Given the changes taking place in the industry. The following four questions are designed to encourage a strategic and dynamic discussion on competences and capabilities. They help managers focus on the implications of environmental changes for the company's present and future competences and also on how to better exploit the company's current assets.
  - which competences or capabilities will be obsolete or irrelevant
  - which competences or capabilities should be sustained?
  - How can we better leverage our existing resources, capabilities and competences?
  - What new competences or capabilities should be developed?
8. Where does the company go from here? At this stage the competence exercise must be fully connected with the strategic planning process.

The first five questions use a static approach and are designed to identify the firm's current and historical competences and capabilities. Questions 6-8 provide a dynamic view and they attempt to integrate this process with the company's strategic planning effort by linking the results of external and internal analyses. The process outlined here is designed to help companies develop and exploit their competences and capabilities.

### *3.2 Establishing a Core Competence Acquisition Agenda*

A company's competence-building agenda is mainly determined by its strategic architecture. Hamel and Prahalad (1994) provide a useful framework in setting specific competence acquisition and deployment goals. The framework helps to distinguish between the existing and new core competences, and between the existing and new product markets. It includes four categories: fill in the blanks, premier plus 10, white spaces, and mega-opportunities (Hamel and Prahalad, 1994).

Fill in the blanks, represents the company's existing portfolio of core competences and products or services. By mapping end-product markets supporting the competences, a company can identify opportunities to strengthen its position in a particular product market. This strengthening can be done by importing competences from elsewhere in the firm. Premier plus 10, poses another important question: What new core competences should be built today to ensure that the firm is regarded as the premiere provider by its customers in 5–10 years? The aim is to understand what new competences should be built to support and extend the company's franchise in its existing markets. There is also another question suggested here: What are the new competences that can replace or make obsolete the current competences? These are called obsolete competences.

White spaces, refers to opportunities that do not fall within the product market coverage of the existing business units. The aim is therefore to imagine opportunities to extend the existing core competences into new product markets. Mega-opportunities, overlaps neither the company's current market position nor its current competences. However, the firm may choose to pursue such opportunities if they are seen to be especially significant or attractive. The strategy choice here might be to make a series of small, targeted technology acquisitions through which the company can gain access to the required competences (Hamel and Prahalad, 1994).

### *3.3 Building New Core Competences*

The third task in core competence management is building new core competences. Building a world leadership in a core competence area takes years, so it requires consistency from the organization. This consistency depends firstly on consensus about which competences must be built and supported. Unless senior managers agree on these decisions, the company is likely to fragment its competence-building efforts, as various business units pursue their independent competence-building agendas. This means also that the company may fail to build these new competences. Secondly, the consistency depends on the stability of the management teams responsible for competence development. The consequent on-off support for research projects is a recipe for efficient competence development (Hamel and Prahalad, 1994).

### *3.4 Developing Core Competences*

Deploying core competences, the fourth task in core competence management, is often necessary to leverage a core competence across multiple businesses and into new markets. Many firms have several core competences and people with world class skills, but not the ability to deploy those individuals behind new

market opportunities. Therefore organizations that deploy their competences internally- from one division or SBU to another- usually get greater effective use out of them. The mobility of core competences can be increased through frequent meetings, where employees with particular competences exchange ideas and experience (Hamel and Prahalad, 1994).

### *3.5 Protecting and Defending Core Competence Leadership*

The final task in core competence management is protecting and defending them. Core competences may wither in many ways: they can become fragmented through divisionalization, they can be inadvertently surrendered to alliance partners, there maybe a lack of funding, etc. In order to protect core competences from this erosion the top management must be constantly alert and follow the health of those competences. There should be regular “competence review” meetings which focus on levels of investment, plans for strengthening constituent skills and knowledge, internal patterns of deployment, the impact of alliances, and outsourcing (Hamel and Prahalad, 1994).

## **4. Integrating Knowledge Identification to Core Competence Management**

Knowledge identification which carefully considers the firm’s core competences is very challenging because of many complex and long-acting linkages between knowledge identification and core competences. Managers must know the value and advantage of identified knowledge and know how to link them with the core competences of the firm. The organizational knowledge portfolio must be seen as a bundle of valuable knowledge which is critical for developing core competences (Probst et al., 2002; Tidd, 2005).The augmentation of understanding and exploiting a systematic knowledge identification process can be very helpful in order to manage core competences.

Many sequential steps are needed in the identification process. We have developed a six-phase process for the core competence-based knowledge identification. The process is depicted in Figure 2. which outlines the required phases and the input and output information of each phase. The goal in developing the process is to determine a compact amount of phases for a systematic identification process. The process aims to promote co-operation between different functions and SBUs to identify, assess and finally determine which knowledge should be incorporated into the development of organizational core competences.

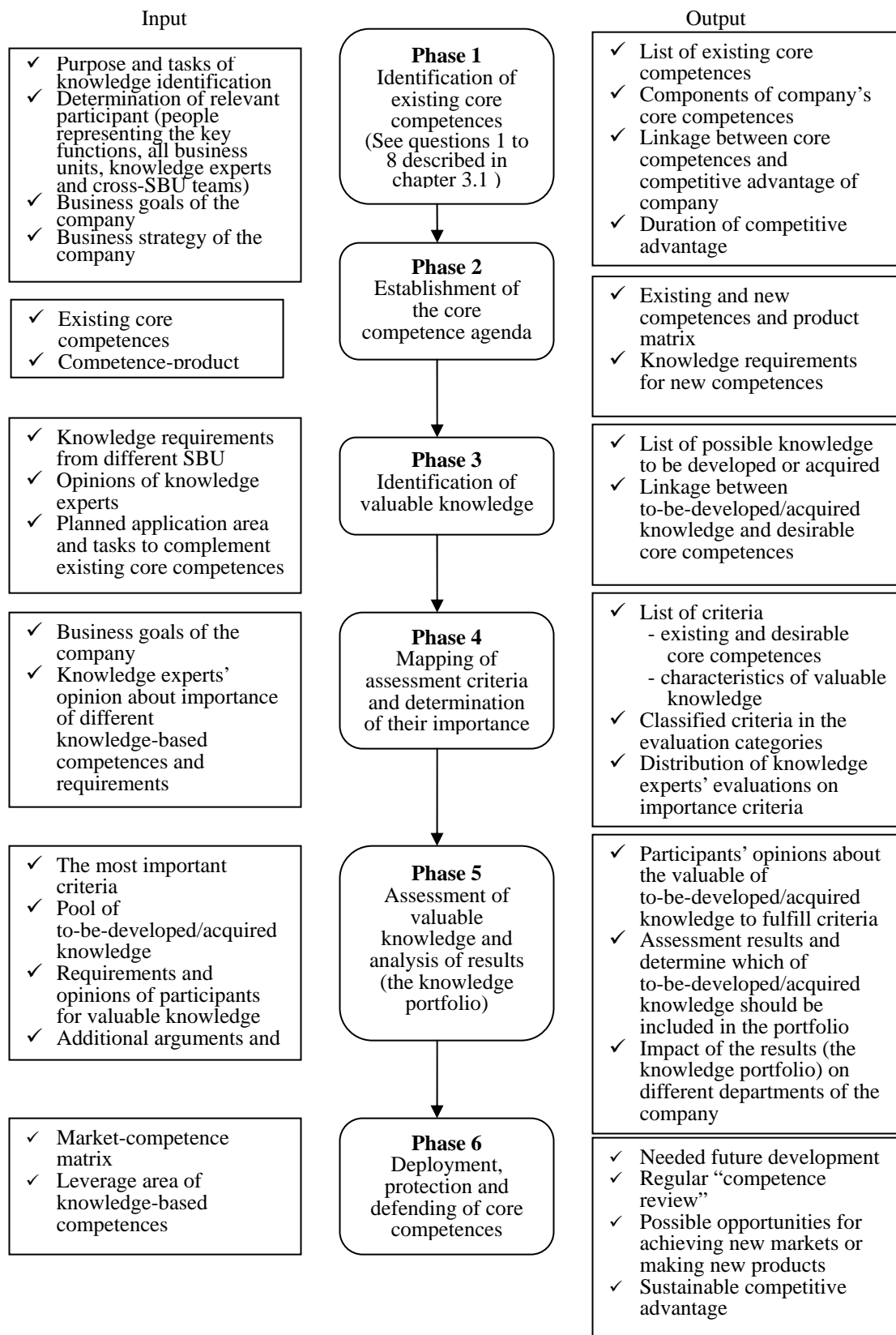
In general the process forms a successive task

chain, in which the former phase outputs serves as inputs for the latter phase. Also additional input information from different sources is needed in all the phases. This way the information is refined step by step and thus the purpose of identifying needed (valuable) knowledge for developing core competences is achieved.

The first phase of the process focuses on the identification of the existing core competences. The purpose of the first phase is to clarify the present situation and to aggregate information for the core competences agenda. The second phase, formulation of agenda acts as a basis for the third phase, which focuses on the identification of valuable knowledge (to-be-developed/acquired knowledge). The identified knowledge must complement organizational existing bundle of resources and capabilities to create new opportunities of new products or markets or even construct completely new competences.

After all sorts of possibly knowledge (to be developed or acquired) have been found, determination of their importance is carried out. Criteria have to be created for both the business goals of the firm (including existing and desirable core competences) and characteristics of valuable knowledge. The task in the fifth phase of the process is to assess/analyze the impacts of already found knowledge one by one and then decide which of them should be included in the organizational knowledge portfolio. Finally, the identified knowledge has to strengthen the competences in the best possible way and be as competitive as possible in the deployment of core competences, which are evaluated in the sixth phase of the process.

The objective is to have sustainable competitive advantage with the help of knowledge identification. The core competences of a firm must be redefined on a continuous basis, which makes the process iterative and continuous.



**Figure 2.** The Process of Integrating Knowledge Identification to Core Competence Management

## **5. A way to support Core Competence-Based Knowledge Identification**

Systematic evaluation of potentially helpful knowledge in core competences management requires a lot of information. To identify and assess knowledge, information from different experts working in different departments, positions and SBUs is needed. All key persons should have a possibility to participate in the definition and evaluation of criteria. For this reason it is important to support communication and the reaching of consensus. In the identification process, the firm's core competences, business goals, and requirements from different departments should be taken into consideration to ensure that the identified knowledge portfolio can benefit the organization the most.

The evaluation of different effects of all potentially useful knowledge in a group sets requirements both for the communication support and the assessment tool. Common goals and language among participants are very important for consensus and commitment to decisions. An effective way to promote the knowledge identification process is to increase analytic communication between the participants. A Group Decision Support System (GDSS) is very likely to be an effective tool for executing knowledge identification. Below we describe how the characteristics of the GDSS can respond to the requirements of knowledge identification and the development of core competences in general.

A GDSS is an interactive computer-based system that facilitates the solution for unstructured problems by a group of decision-makers (Morton et al., 2003). The functions of GDSS include providing managerial judgments, strategic analysis assistance, and strategic thinking in coping with uncertainty and fuzziness, and assisting firms to understand about factors affecting the strategy development (Li, 2000). GDSS supports group decision making by eliminating the barriers of communication, by offering different tools for the group and by leading the use of time and handling of items systematically. The components of a GDSS include hardware, software, people and procedures.

A GDSS can affect group productivity and effectiveness in several ways. It offers possible benefits when there are many factors in the studied problem, when a presence of a bigger group of people and consensus among them are needed. GDSS offers many characteristics to support a group in promoting its co-operation and effectiveness (Dennis et al., 1991; Yim et al., 2004). Some GDSS characteristics can be seen as very advantageous and appropriate to knowledge identification characteristics (see Table 1 below).

In order to utilize the possibilities of the GDSS, the system should be applied for suitable areas and in a right way. As we can observe from Table 1 above, the GDSS offers many potential benefits for supporting core competence-based knowledge identification.

## **6. Conclusions**

In this paper we have put forward a process for core competence-based knowledge identification. The process consists of six sequential phases and the description of needed inputs and outputs in each phase. All the defined phases are necessary in systematic knowledge identification integrated with core competence management.

The developed process demonstrates what a demanding and complex task the identification of valuable knowledge is. The assessment process helps to clarify the contribution of knowledge identification to core competences in a systematic way. The understanding of the contribution of knowledge identification to core competences can be used to help setting priorities between different technologies, products and markets, while also focusing attention on the long-acting relationship between knowledge identification and the core competences of the firm. The importance of knowledge identification can thus be more reliably demonstrated and more easily communicated to all the persons participating in core competence management.

This developed process can be modified to suit the requirements of different industrial companies. We will further develop the process as well as its inputs and outputs. The developed process seems to suit for identifying different types of knowledge, but this suitability needs to be studied further. An interesting future research topic is to test the GDSS in supporting the process of core competence-based knowledge identification. The process executed by the GDSS can support information gathering and make cooperation easier with different functions of the company and a cross SBUs. A GDSS seems to be one of the most potentially useful tools for executing the process of developing and managing organizational core competences.

**Table 1.** GDSS Features and Characteristics of Core Competence-Based Knowledge Identification

Characteristics of core competence-based knowledge identification	GDSS features that can be useful
<p>Synergy Collective learning Transferring learning and best practice across SBUs Benchmarking between SBUs Different SBUs must co-operate efficiently Organizational memory development</p>	<p>Automatic electronic documentation Anonymity Group memory Task support Exchange of comments Analyzing processes used Parallel and simultaneously communication among group members</p>
<p>Many people need to involve for broad scope of knowledge Employees with particular competences need exchange ideas and experience</p>	<p>Elimination of too big domination of participants in meetings Group work process support It is possible to find rapidly the agreed and disagreed opinions of group members</p>
<p>More understanding about effects of possibly useful knowledge Setting priorities among potentially useful knowledge</p>	<p>Voting (in anonymous way) commenting votes Equal and anonymous opportunity to contribute ideas and opinions</p>
<p>Consensus about which competences must be built and supported</p>	<p>It is possible to find rapidly the agreed and disagreed opinions of group members</p>
<p>Regular 'competence review' meetings Organizational core competences must be redefined on a continuous basis</p>	<p>Automatic electronic documentation Managing the schedule and agenda of the meeting</p>
<p>More objective evaluation</p>	<p>Anonymity e.g. in voting or commenting</p>

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