

## Knowledge and innovation as value drivers in professional services firms: an empirical research in Central and Eastern Europe

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### Abstract

The purpose of this study was to investigate empirically the role of knowledge and innovation within Central and Eastern Europe's changing economy. We applied qualitative research methods, and focused only on professional services firms within the region. The connection between knowledge and innovation as well as knowledge and competitiveness was analyzed by top managers and senior industry experts.

Our findings revealed that knowledge might be a real value driver for professional services firms. These companies can significantly contribute to the development of modern economies through the dissemination of their internal best practices in knowledge management.

We found three factors that might influence the effectiveness of knowledge management. These three factors are the involvement of international knowledge networks, the investments in human capital, and focus on critical resources. These issues proved to be essential to maximize the potential of knowledge and to leverage this into increased business performance.

**Keywords:** Knowledge management, professional services, innovation, competitiveness, Central and Eastern Europe

### 1. Introduction

#### 1.1. Knowledge

Knowledge is essential to a firm's ability to create value and develop a competitive advantage (Kirkman, 2011). Knowledge has emerged as the primary resource and most valuable asset in this fast-paced, ever-changing environment because the effective management of both tacit and explicit knowledge can provide excellent returns to an organization (Cline et al, 2012). It is essential to differentiate tacit and explicit knowledge because current business challenges might be handled more efficiently by focusing on tacit knowledge (Perlitz et al, 2010). Tacit (implicit) knowledge resides in the minds of individuals and is difficult to duplicate or transfer (Szulanski, 1996). It is mostly in connection with human abilities and skills. Codified (explicit) knowledge is revealed by its communication (Grant, 1996) and can be formalized easily.

Concerning individual responsibilities of knowledge generation different interpretations may occur. Some authors argue that the knowledge work has to be done by specialized knowledge workers, while others argue that everyone within the organization should be involved in knowledge-generating activities (Gao et al, 2008).

Measuring knowledge in both situations is a significant challenge (Mertins et al, 2003). Even if it is not easy to measure and control organizational knowledge, it is necessary to manage it on a day-by-day basis. Managers need to estimate the value of their virtual assets. The company's Intellectual Capital should be divided into Human Capital (know-how, education, spirit, abilities), Structural Capital (intellectual properties, information systems, management philosophy, corporate culture), and Customer Capital (brands, distribution channels, client relations, contracts, customer loyalty) (Guthire, 2001).

Knowledge Management is the deliberate design of processes, tools and structures, with the intent to increase, renew, share, or improve the use of knowledge represented in any of the three elements of intellectual capital (Seemann et

al, 1999).

Managing knowledge is even more challenging in a changing economic environment when flexibility and pace (reaction time, time to market etc.) are essential. In these circumstances creative thinkers and in-house experts can shape the professional services sector organizations' command & control style to collaboration & communication style (Gurteen, 2008). This transformation can contribute significantly to the overall competitiveness of organizations (Nonaka 1994, Nonaka et al 1995). Therefore knowledge became an essential resource, which should be managed with responsibility in order to make it productive and generate financial returns to the firm (Drucker, 1993).

### *1.2. Innovation*

Knowledge fosters innovation and creates a sustainable competitive advantage for the company (Davenport and Prusak, 2003). That is the reason why firms have to find a way how to involve the human element into the modern information technology to support the innovation process (Schwartz, 2006). To bridge the gap between people and computers, firms need a tool, which is collective intelligence. This tool creates an intelligent system by connecting people to the system in order to generate added value (Svobodová et al, 2011). In this context we can conclude that business success might be related to innovation, which is primarily based on knowledge.

Knowledge appears on the input side of innovation. Its outcome can be measured by profits, revenue growth, productivity and market capitalization. In order to increase competitiveness, it is essential to pro-actively manage innovation. Non-technological forms of innovation and their contribution to productivity and business performance are in focus, especially in those countries, where industrial specialization and structure limit the scope for technology-based R&D activities (Rogers, 1998).

### *1.3. Knowledge and innovation in professional services firms (PSFs)*

The classic industrial economics based theories of corporate strategy (Porter, 1980) focus on the characteristics of the industry in which a firm competes. The resource-based view (RBV) highlights that competitive advantage can emerge from resources that are valuable, rare, difficult to imitate and provide high added value to clients (Barney, 1991; Teece et al., 1997). PSFs are generating and providing customers knowledge regarding both industry competitiveness and internal resource management (Siboni, 2007).

In order to generate more knowledge and enhance competitiveness, PSFs should have an increased focus themselves of knowledge and knowledge management. The employees play an essential role in transforming information into knowledge and this involves a level of understanding obtained via experience, familiarity and personal learning (Davenport and Prusak, 2003). As a result, PSFs are increasingly intensifying their search for ways to transfer knowledge among their employees and prevent the loss of organizational knowledge (Bou-Llusar and Segarra-Ciprés, 2006).

According to RBV, a firm's competitive advantage depends on resources and capabilities that are intangible and inimitable (Amit and Schoemaker, 1993; Grant, 1996; Petaraf and Bergen, 2003). The intangible forms of capital, which are generally not found on the balance sheet are gaining more focus versus the intangible assets, which are recognized on the balance sheet. That means the traditional production factors like land, labor and capital (money) aren't anymore the most important elements regarding business success. The difference comes from the wealth gaining ability of factors, like intellectual capital which has a vital role in generating economic value added by leveraging and utilizing the knowledge piled up in the firm (Issac et al, 2010).

But not every organization has the knowledge required to successfully deploy and maintain enterprise systems, that is why corporations might ask the support of PFSs (Dong-Gil Ko, 2010). The ambition of customers to cut their costs while making investments in knowledge isn't easy (Gulati et al, 2010). PSFs aim to generate new management tools, create new organizational solutions, project future trends and restructure the organization if needed.

To perform well, PSFs need to equip their employees with advanced knowledge, innovative thinking, and critical approach. PSFs have a critical impact on organizations and whole market segment through their ability to generate and reallocate knowledge and intensify innovation. As a consequence, knowledge-intensive companies would play a

key role in shaping the country's economy (Hipp and Grupp, 2005). PSFs should engage in a dual activity: these firms have to both highly innovate themselves, meanwhile induce innovation in other sectors, as well (Den Hertog and Bilderbeek, 1997).

PSFs can manage their knowledge through codification. This is an ICT oriented approach when knowledge flows from-people-to-documents. Codification tries to connect people with codified knowledge by focusing on reuse. By contrast, personalization is a less ICT oriented approach when knowledge flows from-person-to-person. Its goal is to support conversation and the exchange of tacit knowledge by focusing on sharing (Hansen et al, 1999).

#### *1.4. Central and Eastern European (CEE) knowledge environment*

The competitiveness of companies and even countries, or regions has increasingly been recognized to stem from their human resources and people management strategies (Porter 1990; Pucik 1992). Organizations operating within CEE knowledge environment have also realized that human resource management is not just an administrative support, it is rather a strategic function to the organization (Karoliny et al, 2009).

The last few years brought significant macroeconomic changes for CEE countries. These changes are strongly connected to global financial crisis. These changes call for a need to adopt a more interdisciplinary approach in generating solutions for economic, social and political challenges (Tharchen, 2011). Organizations need to deal with knowledge and innovation and use them as opportunities for sustainable growth and profitability (Bower et al, 2011).

As a result of literature overview we developed a model (Figure 1.) in which we would like to demonstrate the importance of knowledge within CEE countries. The model illustrates a transformation zone, which turns negative factors into positive outcomes, PSFs having key roles in taking the initiative.

## **2. Research methodology**

We applied qualitative research methods. We have undertaken semi-structured, in-depth interviews with CEOs, board members and chief knowledge officers (CKOs) of PSFs. Each interview session typically lasted from 50 to 70 minutes. Afterwards, the data was analyzed, and results have been further evaluated during critical discussions with academic staff, industry experts and practicing consultants.

Wherever available, we collected knowledge management strategies, business reports and other relevant documentations as a supplementation for the interviews. We used these archive data to crosscheck the relevant information and verify the reliability of data obtained via interviews.

The research was conducted among five international PSFs, with local offices within CEE countries. Each PSF involved had more than 90 employees within the country.

Due to non-disclosure agreements with the enrolled PSFs in our research, we simply refer to the organizations as PSFs, without revealing their identity.

## **3. Research findings**

### *3.1. The power of international knowledge networks*

We have found, that knowledge, especially tacit knowledge stands in the center of competitiveness and effective problem solving. Due to the quick environmental changes, an increased pressure is observable on managers to cope with a very wide range of knowledge. The source of this wide range of knowledge cannot be based anymore on the individual experience. Its sources are the knowledge networks (KN).

Usually, local PSFs operate as subsidiaries of international companies; they are building their local operations as integral part of intensive global knowledge networks. Every single subsidiary is connected to the network all over the world, and each of the network members uses the same knowledge-sharing platform for data exchange or knowledge transfer.

PSFs deeply believe that KNs enhance their competitiveness; KN members are able to engage in projects abroad while applying the experience gained in a different country. The background is provided by an advanced knowledge

management system in which every consultant is listed. The individual experience and relevant abilities are gathered and shared across subsidiaries and business lines.

### *3.2. Senior management support*

According to our research, two major abilities have outlined to be important for the analyzed companies: flexibility and the ability to act quickly. Managers should handle knowledge along these objectives. In order to increase competitiveness, managers should switch from a command & control style to collaboration & communication. Most of the interviewees have mentioned that the autocratic leadership style doesn't encourage knowledge sharing and efficient knowledge management.

In successful PSFs managers set a relatively high degree of creative freedom within the work processes. This freedom is, however, not one without any limits, it is a "freedom within a framework", focusing on knowledge sharing.

### *3.3. Knowledge management related benefits*

KM has significant benefits, but also may imply high costs. Both sides should be considered before setting up a KM strategy.

Based on our research, the benefits of knowledge investments are, as follows:

#### *3.3.1. Cut costs*

By investing in human resources through knowledge management systems, PSFs can actually cut training costs. Trainings provided through knowledge management systems are more practical, focused and efficient.

#### *3.3.2. Create a more innovative organizational culture*

Knowledge, that a certain company can identify, collect, share and spread can promote a more innovative thinking among the employees. Knowledge has a unique relationship with innovation because collective organizational knowledge could stimulate innovation. The more knowledge circulates inside the company the greater innovative capacity it has.

#### *3.3.3. Learning organization*

The result of an advanced learning process inside the organization can lead to better understanding of problems, which could facilitate innovation. The innovative culture and the available knowledge content could be turned into shorter new product development cycles, cutting costs in service delivery, communication and coordination.

#### *3.3.4. Shape the company's reputation*

When an organization can demonstrate its ability to innovate or to show cutting-edge solutions, this could significantly contribute to strengthening the company's reputation by organizing workshops, publishing in professional magazines, holding university courses, publishing books, reports etc.

Intelligent, motivated, balanced and open-minded people attract new clients, partners, alliances and new workforce.

#### *3.3.5. Fast information distribution by networking*

An increased professional network connectivity inside the organization results in a better understanding of each other. Information is distributed much faster along informal knowledge networks. The reinvention of processes, redundant work can be significantly decreased.

#### *3.3.6. Knowledge retention*

By using KM systems within the organization, the individual tacit knowledge related to a small number of employees won't be disappearing. The individual knowledge is going to infiltrate into the common codified knowledge and becoming a company-wide property. Preservation of intellectual capital can play a key role when a very experienced person within a niche area leaves the company.

Our interviewees argued that PSFs can realize these benefits if they involve in knowledge management each levels of the company. If they do so, firms will be more innovative, will add new values to its existing intellectual capital and

will achieve a higher organization performance.

### 3.4. Knowledge management related costs

#### 3.4.1. Time

The biggest resource what KM requires is time, including management time. The time allocated to knowledge management initiatives could take time from project deliveries, business development or operations. The management has to build a well-structured organization in order to efficiently operate a KM system and to ensure the suitable operating conditions, where there is a well-defined division of tasks and responsibilities.

#### 3.4.2. Infrastructure

A proper ICT platform is a must to support databases, intranet interfaces, wikis, blogs, data mining tools, etc. Besides the development costs of a knowledge management system, significant maintenance and operations costs occur.

#### 3.4.3. System and technology updates

Because of technology developments a continuous improvement of the technology used for the knowledge management system is needed, as well as customized trainings and further developmental activities.

### 3.5. Adequate local regulatory environment

Across CEE countries PSFs face a regulatory environment that might imply bureaucratic procedures to run a business, deal with various permits, trade across borders and pay taxes. A less business-friendly regulatory environment also means weaker legal protections of minority shareholders and weaker collateral laws and institutions such as courts, credit bureaus and collateral registries.

Our research showed that the CEE region is split into two parts. One part is the Northern region (NR) included Poland, Check Republic and Slovakia, the other part is the Southern region (SR), represented by Hungary, Romania, Croatia and Serbia. The recession is not equal in the Northern and the Southern countries, because we can recognize structural differences between these regions. In NR the macroeconomic conditions are far more satisfactory than in SR, while the SR is suffering from unsatisfactory macroeconomic conditions, the overspending population and the political risk constantly keep the FDI away from these countries.

According to our research, the way out of the recession is innovation and knowledge management. Local regulators should encourage innovative behavior of companies with policies that induce innovation and knowledge management. PSFs could share their best practices, supporting policy-makers with their international experience in knowledge management.

## 4. Conclusion

Based on our research findings, we would define knowledge management as a technology supported business philosophy in which disseminated internal and external information are transformed into practical knowledge. This knowledge is generated through human interactions and assures optimal decision-making and innovative thinking. The heart of knowledge management is tacit knowledge, which has an outstanding contribution to the organization's performance, in case it is managed well.

Our research has shown, that:

- **Local knowledge usually might not be enough to maximize the competitiveness of the company.** The real power of local knowledge is manifested when it is combined with international knowledge. Local and international knowledge can reach a higher level of competitiveness by exploiting network synergies.
- **Human capital investments are essential to overcome the recession.** Investing in people is a key success factor in times of global economic slowdown.
- **The management of knowledge is related to critical resources, which have significant impact on business success.** The direct aim of knowledge management is to transform individual knowledge into a collective knowledge. The indirect aim of knowledge management is to increase the organization's

incoming cash flow and maximize its shareholder value.

We sum up our findings in a model below (Figure 2.). The model represents the process of how can knowledge be a value driver for PSFs. Knowledge can be maximized through international networks, senior management support and encouraging regulatory environment. As a consequence, the company is going to gain new abilities that would drive efficient business development, project delivery and operations. This might result in significant increase of profits, company reputation and create an innovative culture.

Knowledge management might contribute to a better business performance. We found that PSFs could be the disseminators of best practices in CEE region. We have to emphasize, though, some limitations of knowledge management, as well: not every culture, strategy and business environment is satisfactory to capitalize the hidden potential of knowledge.

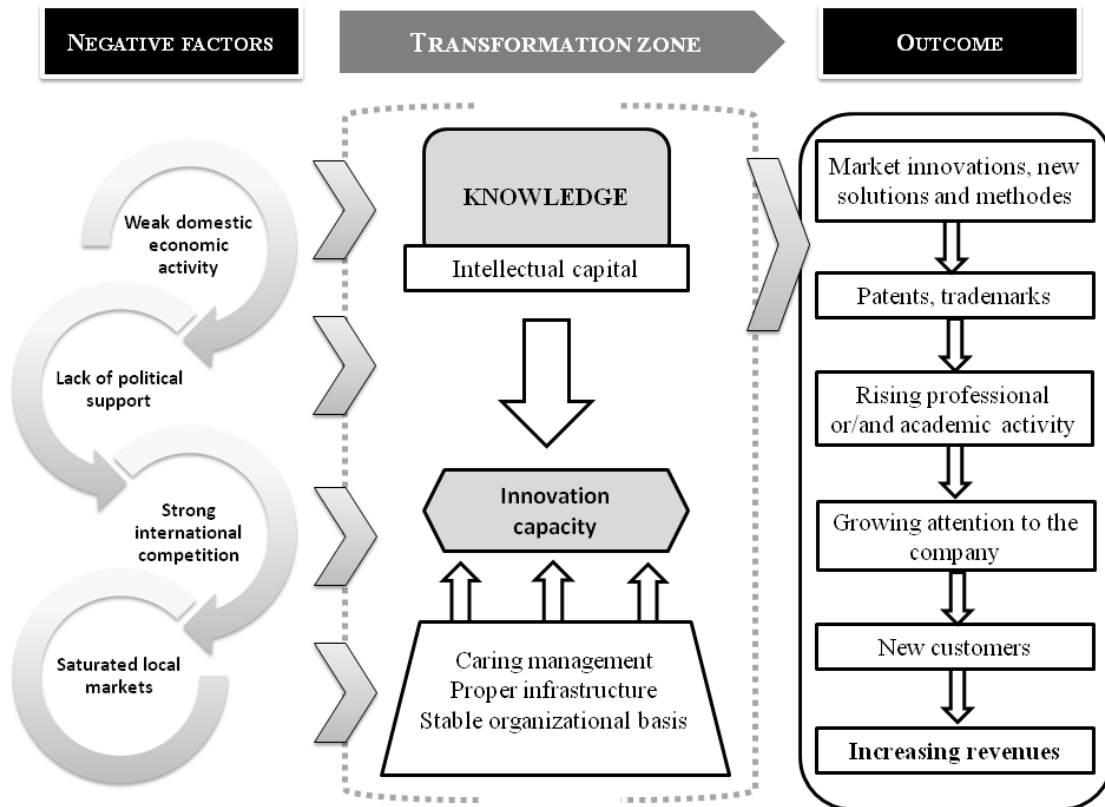
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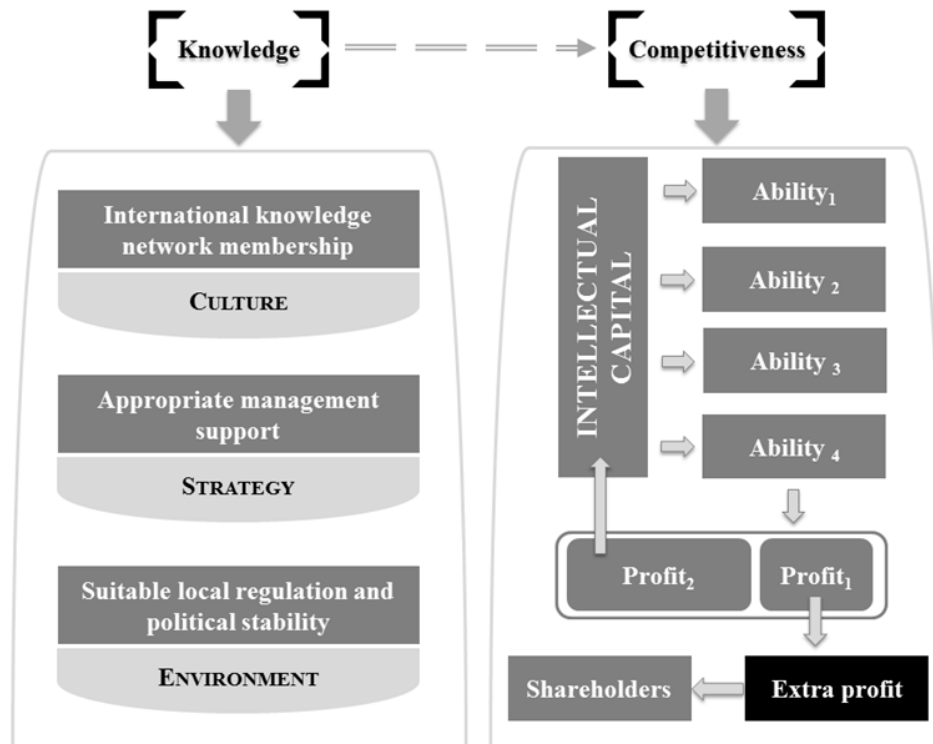
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**Notes**



1. Figure Knowledge based solutions in transition period





2. Figure Knowledge as value driver in PSFs

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