Preface

In the past two decades, studying, education and human resources (HR) developments have become determinative factors in the area of HR management. People not only talk about the revaluation of roles in relation to studying and knowledge, but these expressions also mean much more than previously. Addressing studying at a relatively high level has become a strategic question, as well as a dominant source of competitiveness at the same time.

Why do studying and knowledge have a strategic role? The origins of this issue come from a very simple connection. For the most part, knowledge – especially non-formalized (tacit) knowledge – is acquired and accumulated over a long period of time inside any organization and this type of knowledge can be copied and adapted, albeit with more difficulties, than any other types of sources (Davenport & Prusak, 2001; Sveiby, 2001; Prahalad & Hamel, 1990). The aforementioned two features ensure that knowledge should be a source of long-term competitiveness from the viewpoint of strategy. Through knowledge accumulation and stocking, in terms of an input, companies can realize a long-term competitive factor in relation to the other companies. This is why the adaptation of a knowledge management system (KMS) is spreading widely among company systems. It is not only true in terms of a theoretical focus, but also in the practical life of companies as well. A committed expert perceives with pleasure that companies and organizations handle the operation of a KMS in a natural way as part of their strategies. Multinational companies create new positions for knowledge management (KM) experts and leaders in their hierarchy at a higher and higher level. Several case studies confirm that there are advantages and profit opportunities for companies that have focused their attention on human capital.

While multinational and other large companies deliver KM processes as a part of their everyday operations, small- and medium-sized enterprises (SMEs) feel disadvantaged because of the lack of sources and chances. That said, research has shown that SMEs can also be competitive and enjoy advantages similar to larger competitors, provided that they identify gaps in the market in which they can exploit the distinctiveness of their culture, leadership style and workplace atmosphere. This book was created by the authors because they wished to prove the existence of a way of thinking, which discloses the possibilities for adapting a KMS within SMEs. The ensuing chapters provide every reader with the help and experience needed to build and operate a KMS in this particular enterprise context.

THE CHALLENGES

At the level of the national economy, there are two basic strategies in the competitive market. Firstly, there is the conventional strategy known as the ‘cost-competing strategy’, which aims to produce and serve
at the lowest cost (Csath, 2008). The other, which was created by the European Union, is an ‘economic growth strategy’ founded on the basis of knowledge. This strategy is based on the idea that knowledge value added is also a resource, which can be maintained for a long time. International research shows that knowledge, innovation and creativity are needed to sustain development, while the economy can become too volatile and vulnerable due to the cost reduction strategy.

How do these two strategies appear within companies?

The answer is based on Porter’s classical strategy model, which separates three basic strategies (Porter, 1980). In Porter’s strategies, the two above-mentioned strategic directions can be identified. In the case of companies, ‘low-cost leadership’ is the same as the ‘cost-competing strategy’ in the case of the national economy. ‘Differentiation strategy’ and ‘focused strategy’ often go hand in hand with knowledge-based strategies. In this case, the source of competitive advantages can be knowledge capital. Against the background of differentiation and focused strategies, knowledge capital as a precondition appears to be closely connected with the role of education and training.

The question is, do Hungarian SMEs have any knowledge-based strategies? If the answer is yes, what kind of HR policy supports these features? Our book investigates this special segment from different aspects in different cultures and economic environments. This segment does not typically focus on investigations, although their significant role in knowledge-based sectors is well-known within the international literature. The actors in this segment are characterized by very different ways of thinking, attitudes and features in the global market economy. The challenge is meaningful because HR management and the activities of leaders, which support studying and training, concentrate on the so-called soft features (they are difficult to measure), such as quality of leadership and expected personal characters of employees. Whether it is possible to estimate them is disputed among professionals, primarily because they cannot be expressed numerically.

SEARCHING FOR A SOLUTION

Education and training – as a function of HR management - have a specific role in the realization of knowledge-based strategies. Within companies, education and training appear to be a necessity, although they can sometimes be realized only in an implicit form.

According to the classical definition of knowledge capital, three core types have been differentiated: customer capital, structural capital and intellectual capital.

These three types of capital have become interlocked hierarchically and formed a value chain. At the bottom, there is structural capital, which is a foundation stone of human capital. It makes a connection in the direction of customer capital.

Previous research projects have led to the construction of a theoretical model, which incorporates the most important factors that are significant in the learning processes of SMEs. Two different study types are to be found. On the one hand, knowledge and information can be acquired from the outside environment. Typical examples are connections with higher education, professional organizations, chambers etc. On the other hand, there is an acutely different form that uses the internal resources of companies, namely, team and individual learning. These two categories are built on knowledge sharing, knowledge transfer and knowledge multiplying, which can be developed by teamwork, mentor systems and spontaneous collaborations (practical community). Within the SME sector, there is a requirement for such
companies to operate an organization or to create and adopt a KMS successfully by applying one of the above-mentioned knowledge-based strategies.

From the viewpoint of a knowledge-based economy, there is an important criterion: companies should be able to meet the challenges of the future. In a traditional context, studying, training and education – meaning the acquisition of acquire internal knowledge – fall into the background in the case of SMEs for the time being. In a wider sense, studying – which also encompasses the viewpoint of KM – in the SME sector is in a good state. Proper interpersonal relationships and a democratic leadership style – which is based on the small organizational size of SMEs - promote knowledge sharing and knowledge creation, which is a new paradigm of modern economic life.

Out of the two different types, strategic types of studying - as mentioned above - can be completed by two additional ones. There are organizations where none of their strategies is characteristic. The opposite type for SMEs is where both studying types – traditional- and external- based – are involved. Additionally, there are some SMEs where only a KM-based strategy is used, while there are other SMEs where only the internal studying type is characteristic.

Overall, researchers can say that SMEs have deficiencies in the view of traditional education and teaching, but they also have competitive advantages in the area of informal knowledge transfer, knowledge sharing and knowledge creation. Indeed, it is worth exploiting the advantages and use them against their competitors, which are large or multinational companies. Readers can see that many strategic questions come to mind in connection with learning, studying, knowledge and KMSs. The upcoming book chapters highlight the different sides of these questions. In these chapters, the authors guide the readers through the necessary theoretical basis and explore important areas, such as effective methods, tools, conditions of the learning organization, a suitable culture and IT systems. Previous research findings and examples from practical experience can be read in the chapters about the relationships between a KMS and the different professional areas of companies.

**ORGANIZATION OF THE BOOK**

The book is organized into three main parts, which are in turn divided into 17 chapters. These chapters present the possibilities for SMEs, both theoretically and practically, from different viewpoints. A brief description of each is to be found below:

**Theoretical Basics of a KMS and the Connection with Enterprises'/Companies' Processes**

Chapter 1: This chapter briefly covers the basics and definitions of knowledge and KM, the connection between KM and communication, recent developments and trends in Hungary and internationally, and the so-called KM generations. The chapter’s goal is to show how and why the support and appreciation of knowledge (which has existed virtually since the beginning of humankind) developed into a system. The successful management of companies using KM systems foreground new types of organizational operating models using intelligent solutions, which are manifold, may be structured in variable ways and are specifically unique in the light of these knowledge-intensive services.

Chapter 2: The Nobel Memorial Prize in Economic Sciences has been awarded twice so far to researchers in the area of decision-making. In spite of this, courses on decision-making in business schools and
schools of economics focus on the decision tools found within applied operations research. James March argues that, within organizations, decisions simply happen, as opposed to people making them. Authors argue that, within the global village, the decision taker’s role is wearing off, while the decision maker’s role is changing. Given that a great deal of knowledge is freely available, a new possibility is opening up for a new type of thinking together. In this chapter, the authors take a closer look at thinking together.

Chapter 3: This chapter explores the prospect of organizational learning and its connections with other processes of an enterprise; these include: organizational learning and networks, organizational innovation and transformational leadership, absorptive capacity, open innovation and information technology, organizational learning and training, organizational learning capability and enterprise resource planning. Organizational learning is an important method by which organizations develop, enhance and manage knowledge within their organizational functions, as well as improve their efficiency by making better use of the wide range of skills of their employees. Regarding organizational learning, organizations improve the ability to respond to various business situations and enhance competitive performance through generating new knowledge. This chapter argues that encouraging organizational learning has the potential to improve organizational performance and gain sustainable competitive advantage in the workplace.

Chapter 4: The aim of this theoretical study is to show how KMS and innovation models work together and how their relationship reinforces the chances for success. Relying on a secondary data analysis and a literature review, the authors prove that the classical innovation model can be a part of this relationship, together with organizational innovation in which HR comes to focus. The logic of KM system building emphasizes that the path leads from the attainment of innovation knowledge to the evaluation of utilization. This study reviews the steps of the two business models and highlights the most important relationships in a new model linking the appropriate phases. The second part of this chapter shows the connection between frugal innovation and KM, as well as their theoretical significance and practical adaptability.

Chapter 5: Building up a KMS is a common challenge in managing organizations. Leaders need to change their leadership style in order for their organization to be successful in line with the requirements of building and operating a KMS. The aim of this chapter is to highlight the necessity for the change and the appropriate behaviour of leaders. The author shows the relationships residing in the background of those elements that are in close connection with a suitable leadership style: EQ, competence, organizational culture, trust, communication, and employees’ commitment and satisfaction. In the course of this chapter, readers will be guided logically through the connections of the above-mentioned elements, with a figure summarizing the connections closing the chapter.

Chapter 6: This chapter focuses on the presentation of the interrelationship between corporate strategy and the KMS, as well as consider whether the requirements and tasks related to the latter may be derived from the former, and not separately and for its own sake, in order to facilitate the implementation of the strategy. It contemplates the system approach and KM operating as a system. A fundamental methodological belief of the authors is that a KMS, which is adapted to a corporate strategy, necessitates harmonization with various dimensions. In view of the focal points of a corporate strategy, and on the ground of an actual knowledge map, determination of new competencies and knowledge elements are necessitated by the strategy to be implemented. This could be followed by the elaboration of a KM strategy whose main dimensions are as follows: HR allocation (people dimension), inclusion of KM into the expeditiously re-engineered new corporate processes (process dimension), and the deployment of information technologies, which are adequate for the processes and ultimately meet the specific knowledge demand (technology dimension).
Best Practice (Models, Methods and Tools)

Chapter 7: This chapter focuses on an experience-based presentation of the parameters that determine organizational culture, as well as the impact that basic interrelationships among such parametric factors exercise on the elaboration of KM. Also considered are the timing and the nature of the KM structure, whether the configuration is feasible enough to allow for KM to be an approved and successful management function within a corporate structure, the possibility and the proper timing of the elaboration of KM through a corporate strategic approach, i.e., starting from above (decision of the senior management), and the efficiency of a solution initiated from below (by the members of the organization). This chapter will describe some practice-proven solutions, such as the application of the problem-solution method known as action research, which could be expedient in the implementation of KM in certain cases, as well as those times and situations where the application of the ‘sandwich method’ could be expedient. In addition, this chapter describes knowledge transfer experiences that facilitate the recognition of the ‘capillary model’, its substance and scope of utilization.

Chapter 8: The aim of this chapter is to define a framework in which to manage those kinds of data need to overcome the actual issues of the meaningless and the unstructured nature of generated information. To this end, a KM platform is proposed, both to store product information with semantic enrichment and to retrieve product information by means of a new similarity index. Such a platform is based on a non-relational data management system on the one hand, and on a set of manufacturing ontologies on the other hand. An example of the potentiality of the proposed framework is shown in the context of telecommunication filter manufacturing.

Chapter 9: This chapter deals with KM principles and their implication for knowledge in management, as represented by contemporary sophisticated management tools and systems. Further research results are presented concerning management tool knowledge within contemporary enterprises in terms of the impact on the need for education and knowledge transfer in responsible management positions. In the last part of this chapter, a model of a KMS applicable to SMEs is suggested. The purpose of the chapter is to make the reader familiar with some of the most important management tools, methods and systems, as well as suggest principles for a simple and effective KMS in the enterprise.

Chapter 10: This chapter provides a survey of methods, utilizing the human capital that helps to either identify the talents or the shortage of it, specify the developmental dynamics of a skill or competence, and support the prognosis of successful assessment forms by following development progress. The authors suggest best practices that seek to find and complete the best possible mission for SMEs and employees, as well as taking into consideration the progressive tools of KM. The chapter introduces the methods of measuring talent and capability existence or shortage, the measurement possibilities of hidden potentials and the utilization of these within SMEs’ routine. The authors pay special attention to employees’ maturation progress at higher levels of working experience, where the talent possibly manifests itself as utilized knowledge. Methods will be introduced that offer the best practices for assessment with a better predictability.

Chapter 11: A software development organization (SDO) is a kind of business based on knowledge-intensive process, where knowledge is the raw material and the intellectual capital constitutes the major asset. That said, what is the KM challenge in an SDO? The current environment of SDOs is one of increasing diversity and complexity in software development projects. Due to this environment, the software development process involves multidisciplinary teams, given that an individual member of a
team can no longer be expected to have all the necessary knowledge. Based on the literature review, the authors aim to identify the best practices for achieving the most effective response to this challenge.

**Practical Experience (Research Results and Case Studies)**

Chapter 12: The chapter is dedicated to KM, with the focus on the transfer of relevant knowledge in an intercultural team. The purpose of this study was to empirically examine how an intercultural team deals with the cultural diversity of its members and how it influences knowledge transfer. The research object was the intercultural team of the research institute Science-to-Business Marketing Research Centre at the Münster University of Applied Sciences (MUAS) in Germany. Ten guided interviews were conducted with 10 employees of 10 different nationalities. As the investigation has shown, the processes of knowledge transfer within the team at MUAS are not standardized. The team’s cultural diversity not only enables the transfer but also the generation of new knowledge. Intercultural competence in a provided framework is the crucial factor for successful cross-cultural knowledge transfer.

Chapter 13: This chapter introduces the possible differences revealed by the applied methods in knowledge sharing based on generational differences. In addition, the chapter investigates the relationship between knowledge sharing and competencies, emotional intelligence and social media tools, as well as presents the outcomes of research carried out between 2006 and 2015. The aim of this chapter is to enable companies, especially SMEs, to learn from these research outcomes and develop strategies to activate knowledge sharing among different generations regarding vital competencies, emotional intelligence and social media tools.

Chapter 14: In this chapter, a summary of the role that family businesses play in the economy will be presented, along with one of the main issues faced by family businesses in Hungary, namely, succession. Innovation as one of the most important factors behind successful family businesses and organizational cultures in this context that support innovation will also be analysed. Some of the most relevant findings of a research study conducted in Hungary in 2015 will be given. The most significant components of knowledge sharing in SMEs, especially in family businesses, have been identified. The research results are based on over 300 questionnaires. The following questions have been answered:

- What is the most decisive factor of choosing between cooperation and competition?
- Is it possible that family businesses are able to respond to changes and are they innovative as a result?
- Is the organizational culture necessary for tacit knowledge sharing present in family businesses?

Chapter 15: Personal knowledge is the construction of the individual. It is the context of factual knowledge and experience. This chapter provides the framework and praxis of the plural management of collective knowledge, which facilitates the attainment of the approach and thinking that are found therein. Following an overview of the adopted systemic, pluralistic approach, the chapter then gives an insight into the VID Group’s systemically, corporally, corporately and textually ordered architecture for the management and control praxes of collective knowledge, as well as presents the business group’s principles, tasks, networks, their functional ordering and connections.

Chapter 16: This chapter deals with mentoring as one of the most popular forms of knowledge sharing nowadays. On the one hand, the authors present a theoretical introduction to the protocol, the types, and the participants involved in mentoring, as well as its realization. On the other hand, some results from
a complex research project are also presented. The research was carried out with the participation of Hungarian companies and employees, in both a qualitative and a quantitative way. In light of the results, it can be stated that the respondents essentially consider this form of knowledge sharing to be useful because it provides a good basis and support for the operation of a consistent KMS, while mentoring should represent positive values and practice in this process.

Chapter 17: This chapter explores the relations and tensions between academia and business in the course of discussing the increased relevance of knowledge transfer. The ideas of Ludwik Fleck, the intellectual precursor of the social studies of science and technology, contribute to the understanding of the difficulties in communication between different collectives, their styles of thought and the importance of 'marginal individuals' when connecting different institutional spheres. Based on a qualitative approach to the case study of a Portuguese university, which attempted to build bridges with the business world, the chapter illustrates the differences between 'academic science' and the business world, the recent institutionalization of commercialized research, and the implications for policy-making and the management of knowledge transfer activities.

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REFERENCES


