# THE THEORETICAL BASES OF KNOWLEDGE MANAGEMENT

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**Absztrakt**

A XX. század második felére a tudás a termelés meghatározó tényezőjévé vált, ezzel együtt az oktatás és a képzés szerepe is megnőtt. A folyamatban lévő gazdasági és társadalmi változásoknak köszönhetően a tudás felértékelődésének folyamata napjainkban is tart, ennél fogva világszerte előtérbe került a tudásmenedzsment jelentősége.

A tudásmenedzsment definíciói a tartalmi elemek felsorolása mellett a funkcionalitást helyezik előtérbe, közös sajátosságuk, hogy a tudást a tőke egy formájaként tekintik. A tudásmenedzsment a szervezeti kultúra, a szervezeti kommunikáció, és az egyéni munkavállalói beállítódás és szokások függvénye. Emellett szervezeten belül is eltéréseket mutathat, ennek okai a gender szempontokban, a munkavállalók életkori sajátosságaiban, valamint a különböző részlegekre jellemző eltérő vezetési stílusokban keresendő.

A tudásmenedzsment a vállalati élet számos fontos területével, dimenziójával érintkezik, ilyenek a szervezeti kultúra, szervezeti kommunikáció, az innováció, képzés, valamint a vezetés. A tudásmenedzsment gyakorlata ennek megfelelően egy célszerűen rendezett komplex tevékenységi láncot jelenít meg.

A munkavállalók tapasztalati és gyakorlati tudásának kezelése, ezek visszacsatolódása, továbbfejlesztése a szervezetet alkotó teljes közösség érdeke. Ennek színterei a tapasztalati közösségek, mint a szervezeti tanulás eredményesebbé tételének, a szervezeti kompetenciák növelésének, és a szervezet teljesítménye növelésének eszközei. A munkavállalókkal való megfelelő törődés, az emberi erőforrások fejlesztése elengedhetetlen a tudásmenedzsment megfelelő gyakorlatához. A vezetés dolga a tudásmenedzsment megfelelő, a tapasztalati közösségek működését lehetővé tévő kontextusainak kialakítása.

**Kulcsszavak:** tudás, innováció, tudásmenedzsment, kommunikációs audit, konzultatív-participatív vezetői stílus, szervezeti kultúra, tapasztalati közösségek

## Introduction

As Schultz states in his study called *Investment in Human Capital* (Schultz, T.W., 1961, 1983) employers can become capital owners by acquisition of economically valuable knowledge and skills. In Schultz's understanding education and training is an investment that results into the development of a special kind of capital called human capital.

S. Rosen (Rosen, 1977) points out that human capital comprises the abilities and productive knowledge of individuals. Consequently, the yield of investment into

human capital comes from the development of the individual's knowledge, skills, thus the capacity to generate income and increase the effectiveness of economic decision making.

Due to major contemporary economic and social changes the role of education and training, and thus the role of knowledge management has become foregrounded worldwide. In the second half of 20th Century knowledge has become an essential factor of production and its significance is constantly growing. The increased significance is represented in expressions such as *knowledge society, information society, network society* as well as *knowledge management*, which is in the focus of our publication.

Hayek, the economist and philosopher asserts that the available knowledge of modernism is characterised by *fragmentation*, thus one person owns only small parts of the total necessary knowledge. In addition, this knowledge is not always expressed explicitly, but sometimes *unspoken,* it is a result of *practice* and *experience* and in addition to this it is only local. The major part of knowledge and skills are not acquired in the course of formal training or education, we learn them through production. (Thurow, quoted by Nyíri,1998). Thus in several cases the knowledge of the employees is without reflections and remains unstructured, or it is difficult to pass on. The distribution, mediation, transfer, organisation, standardisation and reception became problematic. Hayek believed that market is the force that can coordinate and collectivise pieces of local knowledge. (Nyíri, 2005) It is positive that partial and fragmented nature of knowledge can lead to strong urge to cooperate, especially when this cooperation is motivated by strong and permanent interest. As a relatively new effect in knowledge management, the globalisation process requires flexibility and network-orientedness in the course of cooperation. It is important to note though that knowledge management became a privileged means of cooperation and teamwork within the enterprise but also of the competition of enterprises. Pieces of knowledge are regarded as the monopoly of the chosen group, this is necessarily brought forth by business life.

Knowledge management is inseparable from innovation: without knowledge management there is no guarantee that the results of creative thinking will be properly utilised. This way the enterprise can suffer losses repeatedly and it can lead to serious setback in competition. It is necessary to set the directions, support the new ideas, regard mistakes as sources of learning, evaluate and appreciate accomplishments. Innovation as a process strongly relies on revealing unspoken and experience-based knowledge. (Borsi, 2009)

Based on the above presented introductory thoughts the following main questions arise in the topic of knowledge management: What is the role of knowledge management in the operation of organisations? What are the actions, structures, processes that can be directly connected to knowledge management within a given enterprise? How can knowledge management be incorporated in organisational culture? What are those networks of relations by which knowledge management can be applied within organisations?

Beside the definition of knowledge management in our study we relied on keywords such as information, communication, trust, knowledge and intelligence, organisational culture, organisational communication, innovation, technology, training and management.

**Theoretical approaches: knowledge management**

In addition to the list of components, the majority of definitions for knowledge management focus on functionality. In these definitions we consider knowledge as a form of capital. (Hughes, Holbrook, 1998)

As one of the definitions points out *knowledge management* is the transfer of relevant knowledge to the appropriate persons in proper time in order to improve the efficiency of the enterprise by means of different actions carried out by using information (such as searching, recording, comparison, assessment, distribution, transformation, etc.). (Stewart, 2001). McDermott (1999) expresses his doubts about this definition, stating that applying the guidelines and methods of *information management* for designing the systems of *knowledge management* leads to contradiction, since information is not equal to knowledge. 'Knowledge is experience, everything else is merely information' cites McDermott Albert Einstein's idea.

In general sense *knowledge* means the possession of cognitive knowledge and the ability of understanding in a given situation, which can be individually very different in quality and quantity. *Intelligence* is the ability to accommodate to the environment as much as possible. This ability means integrated use of knowledge in a given situation. *Information* is a consolidated set of facts, measurement results, calculations and analyses carried out in a given situation, time and conditions. *Information* by itself is merely an order of signs that can be interpreted as a message. Information has an impact on the dynamic structure, environment, in which it appears: it can change the state of the system. Information as a possibility is not equal to knowledge.

By means of the *interpreting activity* information transforms into knowledge in the context that enables and fosters interpretation. This transformation is essential in knowledge management. When constructing knowledge we examine information: we evaluate it, attribute meaning to it and we define the new knowledge we acquired through the received information and we place it into the structure of our total knowledge. We perform actions with the received meta-data (the data characteristic of our data) and we select the appropriate framework of interpretation from the possible contexts. Finally, based on the new knowledge, we make decisions or suggestions.

Knowledge is the result of human action, which is always tied to a given moment (it is recalled, created, renewed), it is connected to and goes round in human communities. The new knowledge develops always at the border area of old knowledge and the handling of knowledge is based on the specific cooperation of information and human systems. Communities share information, reflect to their own experience, get intuitions and by means of these they solve the arising problems. (McDermott, 1999) Stewart (2001) states that transformation of information into knowledge is a critical step in value creation, which determines what kind of advantage an enterprise has in competition.

Knowledge developed from information and it is preserved by the enterprise. Willis (2005) argues that the most important rules of information management are as follows: transparence; accountability and reliability; proper process control; adherence to laws and regulations, protection of personal and corporate information from unauthorized people.

As opposed to the point of view described in the widely known transactive theory, the flow of information is not equal to communication. *Communication* means a state when *pieces of knowledge* that are necessary for problem solving are accessible. (Horányi, 2007) This participation theory of communication focuses on the goal directed, problem-solving nature of knowledge.

It is an important and specific characteristics of human (social) communication on one hand, that the majority of our sign systems are based on consensus, in other words they have symbolic nature. On the other hand the use of communication channels changes flexibly, the scenes of communication and the sign systems themselves change and improve constantly. This flexibility is based on the *digital* (enabling free communication) aspects of sign systems.

As a result, in the case of communication the harmony of *human cooperation* and *interpretation* become foregrounded. Thus pieces of knowledge that are necessary for problem solving also change flexibly, the developments enable more and more adaptive, progressive knowledge-acquiring, knowledge-gaining, knowledge-creating, knowledge-storing strategies.

*Communication audit* is a thorough examination of the importance, structure and practice of communication in a given organisation. (Hogard, 2007, 178). The most important questions of communication audit are as follows: Do each affected person within the organisation receive all the knowledge necessary for problem solving and for supporting the constant development? What communication structures they develop, what processes the participants organize and what barriers they have to cope with? Is the expropriation or unidirectionality of communication an existing problem, is it difficult to select relevant information from the multitude of data? Is each affected person prepared for the participation in communication process, are they ready to record, interpret, place and share information? Is it clear to everybody how to handle a certain kind of information in the organisation?
The questions listed above refer directly to those processes and activities by which the information becomes knowledge.

The questionnaire of ICA (International Communication Association) that comprises 134 items was compiled in the 70's. It is still used when carrying out communication audits. (Thomas, Zolin and Hartman, 2009; Hogard, 2007). This questionnaire examines 8 main areas or topics in the organisation (the ninth is the collection of main demographic data)

1. How much information do we need to receive about a given topic, and how much do we actually get?
2. How much information do we need to send to others about a given topic, and how much do we actually send?
3. How much follow-up is carried out and how much actually happens about the information sent to others?
4. How much information do we receive from a certain source and how much do we actually need to get from these sources?
5. In what extent informations arrive in time from sources of key importance?
6. How much information do we receive through certain channels, and how much do we actually need from these channels?
7. How can human relations between communicators be charactarised?
8. To what extent are affected persons are content with the most important achievements of the organisation?
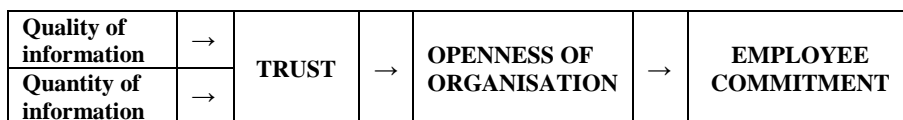
<div align="right">(Hogard, 2007)</div>

Knowledge management works in communication networks. It is a widespread theory of technocracy that implementation of modern IT communication equipment is a solution for the problems of knowledge management. Innovation of information technology has numerous positive effects: it strengthens the organisational norms of handling information, documentation, and fosters the further development of networks. Knowledge management depends on organisational culture, organisational communication and individual attitude and habit of employees. *The implementation of information technology by itself does not create proper work relationships and innovation-friendly organisational culture. Additionally it does not solve the problem of not sharing ideas and knowledge with each other and does not motivate the employees to share these*. (McDermott, 1999)

In their paper published in 2009 Thomas, Zolin and Hartmann revealed that although connection between communication and trust has been examined by several scholars but they have rarely examined the correspondence of factors like the quality or quantity of information and the openness of the organisation, as well as the changes of the employee's commitment and performance. This examination is in accordance with recommendations on knowledge management according to which the development of knowledge management practice is possible by the improvement of employee communities. The communities must offer opportunity to share information and think collectively.This way sharing information becomes an integrated part of work process. (McDermott, 1999)

Examinations carried out on trust discovered a connection between trust and the effectiveness of the management and the organisation, as well as employees´ performance, satisfaction with work, commitment and cooperation with the organisation. Trust fosters the increase of social capital, since it facilitates the sharing of knowledge among employees. Communication is essential to develop and maintain trust. In their theoretical model the authors represent this connection as follows (Figure 1.).

*Trust* develops in existing relationships and *enables participants to behave in a tolerant and cooperative manner even in risky situations.*The employee trusts in the supervisor if he or she can count on fair treatment, the employer provides opportunities for development, proper equipment and resources are available for effective work and besides this he or she is managed appropriately.

### Figure 1.Communication, trust, commitment

| Quality of information | → | **TRUST** | → | **OPENNESS OF ORGANISATION** | → | **EMPLOYEE COMMITMENT** |
|---|---|---|---|---|---|---|
| Quantity of information | → | | | | | |

*Source: Thomas, Zolin and Hartman, 2009.*

When the employee loses trust he or she will concentrate on self-defense by finding and being aware of the possible points of insult and questioning the superior's instructions. The employee will spend time and energy on this activity, which is wasting time from the firm's point of view. Consequently the employee uses the knowledge in a way which is useless for the organisation. In this situation the parties

focus on maintaining power structures instead of developing knowledge. In the end the employee might look for another job.

Trust is based on suppositions that develop in the course of communication with others. These suppositions are constantly changing. *The quantity and the quality of information* can be a determining factor. Quality in this case equals to precision, good timing and relevance. This sort of information decreases insecurity. The quantity of information is more difficult to define; literature is more diverse in this matter. Based on the latest research the development of trust is the result of the quantity of information that decreases insecurity. Thomas and his team carried out an empiric examination and found that the information quality has a horizontal role; it determines employee relations that develop the atmosphere of trust. Both the quality and quantity of information are important factors for the leaders.

It is obvious from the review above that knowledge management is in connection with numerous important areas and dimensions of corporate life such as organisational culture, organisational communication, innovation, training or management. The practice of knowledge management accordingly represents a practically organized complex chain of activities.

Bixler (2002, Mathi, sr 2004) argues that the success of knowledge management is determined by four basic factors and all areas must be examined for proper operation. These are as follows: leadership, organisation, technology, learning.

*Leadership* is effective when it is able to develop business and operational strategies to get appropriate positions for success in today's dynamic market environment. To attain this it is necessary to have key personalities who are suitable for this task, as well as common future plan which is in correspondence with but at the same time beyond the strategies, and additionally the value of knowledge management must be underlined. It is essential that best practice of knowledge management should be operating well on each level of the organisation. The role of *technológy* is to enable the infrastructure to provide tools for knowledge management. Mathi (2004) identifies the technologies discovered by Gartner Group as follows: coding; storage; searching; retrieving; possibility to send critical information (to individuals or groups); structuring; navigation; sharing; collaboration; synthesis; personalizing; recommendation; solution; integration with business applications; maintenance.

Other researchers, such as Davenport & Probst (2002) identify the following important factors of knowledge management practice: leadership, measuring the performance, organisational procedure, acquisition and sharing the knowledge, trainings, structure of information systems, quality assurance.

As a summary of his own empiric research and in accordance with McDermott's recommendations Mathi (2004) asserts that in accordance with the goals of the organisation it is reasonable to *develop an organisational culture that encourages sharing knowledge* or in other words: transforms competitive strategies to cooperative strategies within the organisation. It is a problem of several organisations that employees are reluctant to share information with each other. Successful organisations motivate employees to share information by *rewarding* these efforts. The leaders of the organisation facilitate the process as models, they talk straightforwardly about successes and failures, initiating all affected employees into communication.

The leadership of organisations that employ knowledge management effectively is characterised by definite future plan and clear strategy, the leader is able to initiate changes (whenever it is necessary) and clarifies how knowledge management promotes the attainment of corporate goals. It is essential to have a proper technology that supports innovation and the availability of knowledge. This should include the capacity to handle certain kinds of information as a routine and the development of appropriate, modern electronic and social communication networks. The process of knowledge management has to be evaluated constantly and it is also important to systematically record and communicate the achievements.

Based on a possible categorisation, when examining knowledge management we take account of facts, reasons and individuals (www.stratosz.hu).

Hughes and Hoolbrook (1998) focus on the following components of knowledge management:

- *Knowledge production*: This basic attribute of organisations is in connection with core competencies. Authors point out that it is essential to investigate the efforts taken at a given organisation to produce knowledge.
- *Leadership:* There are many opinions on the appropriate management style for knowledge management (from laissez-faire to more structured ones). Nevertheless, experts agree that it is necessary to have a single, high-level manager responsible for innnovation.
- *Performance Measurement:* Any considerable effort must be justified, and this holds true for knowledge management. It is important to link knowledge management with accomplishments („innovation audit").
- *Competitive Intelligence:* developing awareness on the competitors the organisation has to cope with and comparing the capacity of the organisation with their rivals. It does not mean corporate spying but a thorough, multi-aspect exploration of the firm's environment.
- *Strategic alliances*: the collection of knowledge about strategic partners
- *Strategic forecasting*: primarily it means the awareness of long term trends
- *Human resource development*: knowledge resides in the heads of the firm's employees, consequently it is critical that employees be properly nurtured.

McDermott (1999) underlines the *role of corporate communities* in knowledge management, as well as the persons who function as coordinators in these communities having a key role in the improvement of community relationships. He suggests the improvement of knowledge that is important for the business and for the judgement of corporate community. Sharing information is not enough, it is essential to establish the possible forums to think together. These forums cannot function within separated units, it is necessary to make them open and available for the whole enterprise. Similarly, possible reforms affecting the organisational culture can only be effective by initiating the whole community. It is important that sharing knowledge should be an organic part of work process in the developing new context. For this reason the questions of knowledge management need to be communicated between the leadership and employees in a language known by the whole enterprise, based on an accepted terminology.

According to a summary presented by McDermott (1999) the four important aspects of knowledge management are as follows:

- Technical side: it is necessary to design and operate *IT communication systems* that facilitate thinking together.

- Social aspects: The *cooperation of communities* is important but this cooperation should not entail homogenization. *Diversity is an important source of development* for the enterprise, provided alternative opinions and thoughts are respected and their potentional developing and progressive strength is realized.
- Management: the development of *organisational culture* and its control by leadership that acknowledges sharing of knowledge with each other.
- *Personal dimension*: the employee is receptive to the opinion of others and is ready to share knowledge with others.

Literature seems to agree that – since *knowledge is in the head of the employees* – nurturing the employee properly by the *development of human resources* is essential for the proper practice of knowledge management.

**Knowledge management and gender aspects**

Numerous researches have elaborated on characteristic communication strategies of female leaders (summary: Schleicher, 2007). According to an approach female leaders in general are less status- and more relation-oriented and most of them foreground solidarity. This attitude calls forth different strategies in knowledge management. For instance, it is more difficult to identify a person who is the only responsible leader for innovation but at the same time sharing of knowledge is less problematic.

*Table 1. Differences within organisation according to departments*

| Marketing | Department | Operation |
|---|---|---|
| symbols | object of work operations | data |
| flexible, late start | working time | tied, early start |
| „american" type room | work environment | „socialistic" work environment |
| „young" (average: 34) | age | older (average: 42) |
| higher wage, mobile phone, company car | allowances | lower wage, no other allowances |
| university degree, mainly multilingual | qualification | mainly with secondary school degree |
| mainly single | family status | mainly have family |
| dynamic | rhythm | static |
| many, open interaction | connection with management | few and closed interaction |
| future-oriented, optimistic, career-building | time focus | past and present; no plans |
| toward leaders | image-protection | toward employees |
| easy-going, lively | mood | quiet, frustrated |
| egalitarian | management style | autocratic |

The results of Nóra Schleicher communication researcher encourage us to perform a more deliberate and careful examination of the question: she is convinced that further significant differences are caused by differences of rank, age and the level of socialization in organisational culture. Her qualitative research was performed by

triangular approach, employing several methods: observation, shadowing, questionnaires and interviews. The results discover significant differences in the organisational culture of two distinct units of the same organisation: while marketing department is characterised by modern work planning, work environment and attitude of Western-European enterprises, employees of the operation department work in a socialistic atmosphere, in which the typically different male and female communication strategies are not utilised. Consequently there is no common organisational culture and management style within an enterprise, there are significant differences that are summarized in Table 1.

As an addition to this, Schleicher (2007) examined the operation department that is characterised by autocratic management attitude, the lack of cooperative elements of leadership. Although this attitude is regarded "manly" by the interviewed, Schleicher underlines that it results into an internal conflict of the manager: he does not identify himself with these strategies and in spite of this he employs them as they turn out to be effective. As a result of this internal conflict fellow employees do not accept, like and trust their leader.

**Correlations of handling knowledge and employee age**

As a part of our discussion on knowledge management we touch upon the significance of employee age. We examine this problem based on the PhD thesis of Szászvári (2011), who analysed the stereotypes associated with older employees. An extreme and negative manifestation of these stereotypes is ageism, the negative discrimination of older employees based on the supposition that they are capable of lower competence and work performance than their younger fellow workers. The prejudices originate in the general attitude of modern societies towards ageing, the cult of youth and novelty, the labour market, the presupposition on expected productivity as well as the results of certain research carried out on older population living in retirement or nursing homes.

The stereotypes comprise four main dimensions, which are as follows: *performance* (productivity, creativity, effectivity) *ability to develop* (learning ability, versatility, ambition), *stability* (premeditation, bonds, endurance), and *interpersonal skills* (team-work, thoughtfulness). According to a stereotype-survey older employees are trustworthy, reliable and hard-working; they work effectively, think before they act, they are loyal to the organisation, have good interpersonal skills and are not careless. They are good teamworkers and accept being controlled by management. Younger employees on the other hand are ready to accept new ideas, accommodate to changes and new technologies more easily, they learn more quickly and willing to take part in further education. HR specialists in Hungary generally have a more negative attitude towards older employees than younger ones: they consider young employees more productive and performance-oriented. Disadvantages of this negative attitude affect mainly employees around their fifties.

Women face heavier age-related discrimination at any age than men since it adds to gender-related discrimination and intensifies their effect.

It is important to note that stereotypes work not only as hetero- but also as autostereotypes: they undermine the self-esteem and effectiveness.

There are real differences between the performance of younger and older employees but in case of normal ageing without any illness they do not correspond with the stereotypes detailed above. This contrast originates in the difference

between fluid and crystallized intelligence; through the organized operation of these two the real knowledge of the individual can be defined. Younger age groups have advantage in fluid intelligence and perform better in tasks like information-reception, visual and motor memory tasks, simple discrimination and categorization. This kind of intelligence does not involve knowledge or content and is subject to decay due to ageing. Crystallized intelligence, on the other hand, comprises knowledge and content, refers to human relations and correspondences of the surrounding world, it is culture-dependent, experience-based, problem-solving oriented and ideally – in case of normal ageing – is constantly improving as the individual is getting older. Older employees have better performance in tasks in which life experience, aggregation of knowledge and less explicit, sophisticated approach is required. Tacit knowledge (intuition) of older employees is more developed.

This is not an attribute of every older employee though: it requires a great amount of experience in life situations and human conditions. Practice is essential and motivation that maintains actions of knowledge acquisition is required. The factors of successful ageing at the workplace are as follows: accommodation and health, positive relations, professional development and personal security.

According to a classification in stable work environment older employees perform well in those activities in which experience has a greater role (for instance interpersonal skills, the acquisition of social knowledge and consecutive experiences). There is no significant difference between employees of different age in simple, well-practiced, routine-like activities. Experience successfully compensates the decay of skills in certain situations and when performing complex tasks, consequently in these cases difference in performance is not noticeable. Constantly and rapidly changing information and situations in which knowledge can become out-of-date quickly do not favour older employees. Thus older employees experience disadvantage as opposed to younger ones in computer tasks. (Szászvári, 2011)

The following excerpt underlines that older employees have a privileged role in developing organisational culture, which is an important factor of knowledge management. Their performance is better along dimensions that are in indirect but substantial correlation with the management of knowledge, such as reliability in several senses of meaning.

> „Ng and Feldman (2008) intended to discover the correlation between age and work performance by means of an extended meta-analysis. They argued that in work performance analyses of earlier research details were not taken into account as thoroughly as they should have been. As a result of this they focus on factors of work performance in their analysis and examined ten different dimensions of work performance: core task performance, creativity, performance in training programs, organisational citizenship behaviour (OCB), safety performance, counterproductive behaviour, workplace aggression, substance abuse, tardiness, absenteeism. According to their findings in most of the cases age does not affect core task performance, creativity and performance in training programs but it has an effect on the other seven performance dimensions. The research revealed significant positive correlations in OCB and safety performance, while significant negative correlation was found in the case of general counterproductive behaviour and specific counterproductive behaviours

(aggression, substance abuse, tardiness, absenteeism). The results support the theory according to which older employees contribute effectively to those components of work performance that are beyond task accomplishment. Meta-analysis, for instance, reveals that older employees prove to be better in OCB and safety-related behaviour. On the other hand older employees are characterised by less counterproductive behaviour in general, as well as less aggression, substance abuse, tardiness and absenteeism. These data prove either that older employees are as motivated as younger ones in contribution to organisation performance, or they employ these distinguished behaviours more consciously in order to be able to compensate even the smallest changes in their work performance-related technical skills. In general older employees are more obedient, they are able to control their emotions more effectively at the workplace and less likely to show counterproductive behaviour. It seems that stereotypes of older employees, namely that they are dull and less appreciated by others, are totally groundless. In addition to this authors pointed out that age has only a minor effect on core task performance and creativity and has a slightly negative impact on performance in training programs. (Ng and Feldman, 2008, p. 403.)"

*Source: Szászvári, 2011, p. 57-58)*

**Wenger's knowledge management model: communities of practice**

Empirical knowledge accumulates on two sides of Wenger's well-known doughnut-metaphor, thus knowledge-based decisions have to be taken by these knowledge communities. Wenger states that corporate community actions link strategy with performance: employees tell stories about questions and problems to be solved, create heuristics, share experiences and findings, work out solutions. Through this process they teach one another and learn from each other, in other words the entire employee community that produces and employs knowledge can be regarded the trustee of knowledge management.

Corporate support and participative-consultative management (Juhász, 2007) are essential: appropriate time and required infrastructure (flow of information, documentation) are assigned to these activities on management level and the leaders provide acceptance within the organisation. Essentially it is the task of the management to develop the context for knowledge management in which communities of practice can operate.

The basic elements of Wenger's model are as follows:
- *Domain:* Area of knowledge along which the given knowledge community is organized, provides its identity and determines the main areas that the community has to deal with.
- *Community*: The community of practice is not merely a personal network but a purpose-oriented group determined by the domain, in other words the field related to which knowledge has to be managed. Community is characterised by the quality of its internal relations, as well as its internal and external borders. Problem solving determines the development of their relations.

- *Practice*: The entire knowledge of community members: methods, tools, technologies, cases, stories, documents, etc. Community of practice is not merely a community of interest, but it consists of people who get initiated and become committed to a certain activity.

Knowledge management comprises these three elements. As it turns out from the figure below, Wenger considers knowledge management a strategy-based activity, as it starts and ends with strategy, which is linked to performance through knowledge. Wenger underlines that the model is not unidirectional: it has to comprise upward and downward processes.

*Figure 2. Wenger's doughnut model of knowledge management*



*Source: http://www.blog.klpnow.com/KMdoughnut.html, id. Donnan, 2008.*

The sponsorship of Communities of Practice means the following:
- Strategic needs have to be transformed into knowledge-centered organisational future plan.
- The work of the communities needs to be legitimised according to strategic priorities.
- Appropriate sources must be assigned to their activities.
- The communities have to be given adequate role, their suggestions must be considered and they need to be able to influence the operation of the organisation.
- Sharing of knowledge, participation in community and community leadership need to be acknowledged.

CoP's are regarded as means to make organisational learning more effective, increase organisational competences and improve organisational performance. In 2002 Wenger and his fellow researches identified seven basic principles of developing CoP's:
- Design for evolution.
- Open a dialogue between inside and outside perspectives.
- Invite different levels of participation.

- Develop both public and private community spaces.
- Focus on value.
- Combine familiarity and excitement.
- Create a rhythm for the community.

*(Wenger, McDermott and Snyder, 2002, p. 51. id. Donnan, 2008)*

One of the most important messages of Wenger's model (2004) is that *a successfully operating enterprise must not neglect knowledge that develops on the periphery*, since periphery is the primary area where experience and practice can be collected. Feedback and further development of these is the interest of the whole community in the organisation.

**Summary**

As a summary we can conclude that organisational culture contains several values that facilitate the development of high level knowledge management.

Human capital and organisational capital of organisations originates in knowledge, abilities, skills and competences. Human capital as knowledge capital of organisations becomes improveable and usable in the course of education, training, retraining and innovation initiatives. Accordingly, the performance, effectiveness, productivity and competitiveness of enterprises can primarily be improved by integrating more and higher level of knowledge in their products and services through the processes of production and value generation. Thus the prerequisite of improving knowledge capital is the constant training of employees, research and innovation. Effective use of knowledge is not possible without the employment of adequate management, organisational and motivation methods. .

Knowledge management within the organisation is necessary for flexibility, which means the use of a kind of integrated knowledge: analysing the correspondences of knowledge, behaviour, environment and motivation within the same context.

Implemening the practice of innovation audit is an essential method of knowledge management, which means connecting developments to other processes and actions of knowledge management in a way that it reveals the relationship between knowledge and innovation to everybody. In addition to this, another important area to improve within the organisation is the so-called competitive intelligence: this means making employees more conscious of the competition that takes place in the external environment. In addition to other advantages this might result in stronger internal cooperation.

In terms of management the enforcement of consultative-participative management style might help to form the entire employee community into knowledge and experience community. It is important for leaders to be conscious about their role as a coordinator of the community: this is essential for the development of knowledge community.

All recommendations in literature agree that since knowledge is owned by the employee the concern for employees should be foregrounded; the technological measures are important but do not compensate efforts made on the development of personal and collective knowledge of the employees. In this context knowledge that is primarily important both for the business and for the employee has to be

discovered. As a result of this, both familiar and exciting new elements of knowledge can be present in the practice of knowledge management.

Creating formal and informal forums of collective thinking fosters the development of the organisation's future plan. Besides these other sources might be needed. It is a major priority though to encourage the employee community to take part actively in the practice of knowledge management. This way the accumulated empirical knowledge can work as the collective capital of the enterprise (organisational capital), employees become more committed because they are aware that they can contribute personally to the accumulation and development of knowledge.

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# A SZERVEZETI TUDÁSMENEDZSMENT ELMÉLETI ALAPJAI

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## Összefoglalás

A napjainkat meghatározó gazdasági és társadalmi változások miatt egyre jobban előtérbe került az oktatás, a képzés és ennél fogva a tudásmenedzsment szerepe világszerte. A XX. század második felére a tudás a termelés meghatározó tényezőjévé vált, és jelentősége folyamatosan növekszik.

A szervezetekben a humán tőke és a szervezeti tőke a dolgozók tudásaiból, képességeiből, jártasságaiból, kompetenciáiból adódik. A humán tőke, mint szervezeti tudástőke az oktatás, képzés, átképzés, valamint az innovációs kezdeményezések során válik továbbfejleszthetővé és hasznosíthatóvá. Ennek megfelelően a vállalkozások teljesítménye, hatékonysága, eredményessége és versenyképessége leginkább az által növelhető, ha minél több és magasabb szintű

tudást tudnak a termelés, az értékképzés folyamataiban a termékeikbe és a szolgáltatásaikba beépíteni. A tudástőke növelésének feltétele tehát a munkavállalók folyamatos továbbképzése és a kutatás-fejlesztés, valamint innováció. A tudás hatékony hasznosítása pedig nem képzelhető el megfelelő vezetési, szervezési és ösztönzési módszerek alkalmazása nélkül.

A szervezeti keretek között folytatott tudásmenedzsment az alkalmazkodóképesség záloga, amely egyfajta integrált tudás alkalmazását jelenti: azonos kontextusban elemzi a tudás, a viselkedés, a környezet és a saját motiváció összefüggéseit.

A tudásmenedzsment alkalmazásának egyik elengedhetetlen eszköze az innovációs audit gyakorlatának bevezetése, azaz a fejlesztések olyan módon való összekapcsolása a tudásmenedzsment tárgykörébe tartozó más folyamatokkal, tevékenységekkel, hogy mindenki számára világossá, átláthatóvá váljék a tudások és az innováció közötti kapcsolat. Emellett fontos fejleszthető terület lehet a szervezeten belül az ún. kompetitív intelligencia: a külső környezetben zajló verseny jobb tudatosítása a dolgozók körében – egyéb haszon mellett - erősebb belső együttműködést eredményezhet.

A vezetés kérdéskörét tekintve, a konzultatív-participatív vezetői stílus vezetői munkában való érvényre juttatása segíthet a teljes munkavállalói közösség tudásközösséggé, tapasztalati közösséggé formálásában. Fontos, hogy a vezetők tudatosítsák magukban közösségi koordinátori szerepüket, ami a tudásközösségek kialakításához elengedhetetlen.

Minden szakirodalmi ajánlás egyetért abban, hogy mivel a tudás a munkavállalók sajátja, a munkavállalókkal való törődést kell előtérbe helyezni, a technológiai lépések fontosak, de nem pótolják a személyes és közösségi munkavállalói tudás fejlesztésére tett erőfeszítéseket. Ezzel összefüggésben fel kell fedezni, melyek azok a tudások, amelyek üzleti szempontból és a munkavállalók számára is elsődlegesek: így a tudásmenedzsment gyakorlatában optimálisan ötvözhetjük az ismerős és az izgalmas, új tudás-elemeket.

A tapasztalati közösségeket úgy tartják számon, mint a szervezeti tanulás eredményesebbé tételének, a szervezeti kompetenciák növelésének, és a szervezet teljesítménye növelésének eszközeit. A sikeres vállalkozás nem mondhat le a munkavállalók tapasztalati tudásáról, ezek visszacsatolódása, továbbfejlesztése a szervezetet alkotó teljes közösség érdeke. A vezetés dolga a tudásmenedzsment megfelelő, a tapasztalati közösségek működését lehetővé tévő kontextusainak kialakítása.

A közös gondolkodás formális és informális fórumainak megteremtése elősegíti a szervezeti jövőkép formálódását. Emellett egyéb forrásokra is szükség lehet. Legfontosabb azonban, hogy a munkavállalói közösség bátorítást, megerősítést kapjon arra nézve, hogy a tudásmenedzsment gyakorlatának aktív részesévé váljon. Így az összegyűlt tapasztalati tudás a vállalkozás közös tőkéjeként (szervezeti tőke) tud működni, a munkavállalók pedig elkötelezettebbé válnak, mert érzékelik, hogy személyesen is hozzájárulhatnak a közös tudások felhalmozásához és fejlesztéséhez.

**Kulcsszavak:** tudás, innováció, tudásmenedzsment, kommunikációs audit, konzultatív-participatív vezetői stílus, szervezeti kultúra, tapasztalati közösségek