

West-Hungarian University
Faculty of Economics

**THE ROLE OF KNOWLEDGE MANAGEMENT
IN BUSINESS MANAGEMENT**

Doctoral (PhD) thesis

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Sopron
2013.

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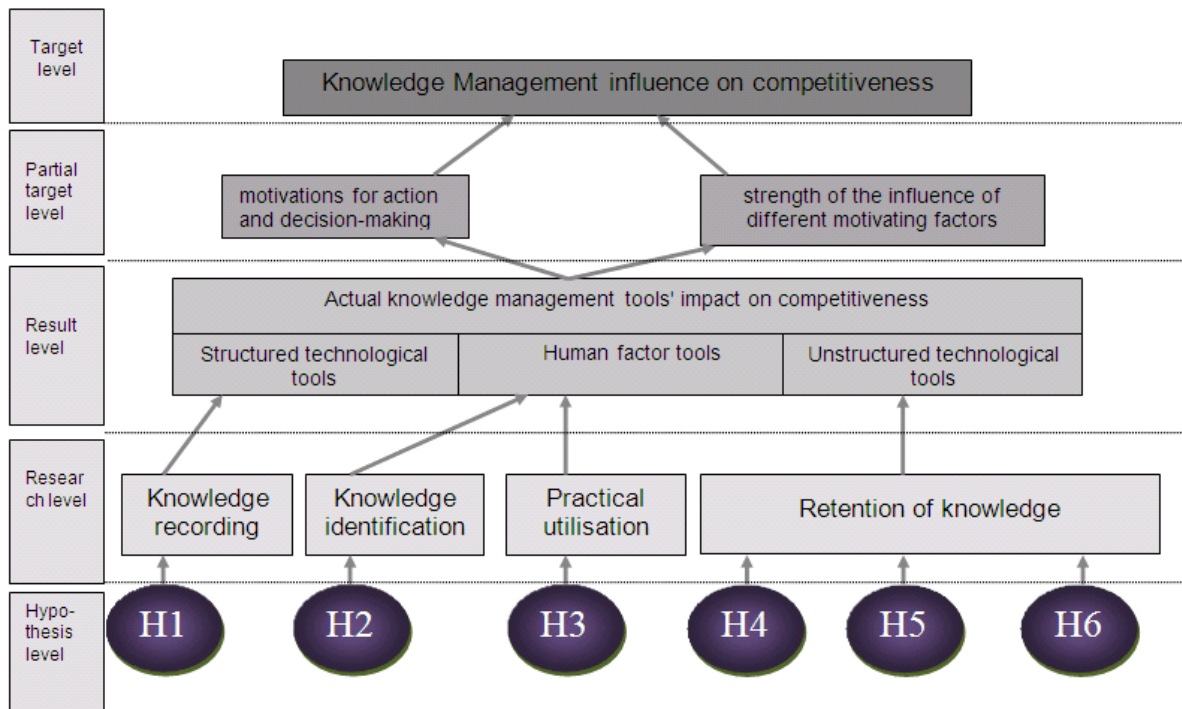
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Signature of Supervisors

1. Objectives and hypothesis

There is a wide and common understanding in the European Union about the fact, that quality of intellectual capital is one of the major factors for economic growth. In terms of these findings the aim of this study is to define the role of management and employers in the competitiveness. Knowledge management is in the focus in this research, integrated with other disciplines, examples and practical experiences.

Knowledge management supports corporate for better usage of employee’s intellectual capital, handling it, also getting their experiences implement to reach companies targets. During decision making process the right knowledge and timing is requested at same time, therefore the lack of the adequate documenting is considered as a general risk.



1. Figure Presentation of the aim of the study on target-tree

Author demonstrates the theoretical basis, tools and its connections in a complex way, also the key factors of conscious corporate. Additionally, the study analyzes the Hungarian businesses' practice, their relationship to this issue, motivation of their actions and its intensity.

Hungarian enterprises long term efficiency supports improvement of the Hungarian economies. Author – working as a financial manager – believes, that theoretical knowledge and practical usage sometimes would need more development. During the searching for potential subject of study, Author target was to find the way for success of management, so knowledge management has come to her range of his interest. A wide research was realized by the Author on the identification, documenting and usage of corporate knowledge.

The primer research Author used the following hypothesizes.

H1 Main factors for quality and success of knowledge management: usability of knowledge base and IT support.

H2 Corporate leaders make decisions without taking into consideration the corporate culture and values.

H3 The state of development of knowledge management is in strong correlations to the size of the corporate. The bigger the corporate are the more improved knowledge system it has, also has more supporting tools.

H4 The lack of trust has negative impacts on knowledge transfer willingness.

H5 Migration of qualified employees phenomenon has direct impact on Hungarian enterprises knowledge base, and -as a consequence- has impact on competitiveness.

H6 Knowledge created or acquired by employees at corporate, is considered ad corporate property.

2. Content, Methods and Reason of the Research

The study is based on researches, made by quantitative (or hard analyze) and qualitative (or soft analyze) methods. The quantitative method gives the basic to be able to stay objective and avoiding the generalization, also supported by qualitative results.

Author chooses the following main principle as a basic for the research: knowledge is measurable, therefore could be analyzed by statistical methods. As a consequence of this principle, a research made on sufficient number of survey could show a proven result, even not being representative. Author has chosen the “snowball” type from non-probability sampling techniques – all, who has filled the survey has been asked to send forward around the survey to his/her contacts within the given target audience. The target audience was defined as member of Hungarian private sector, both local and multinational enterprises. 210 surveys were filled in from the 350 sent out; 39 should be excluded due to unsatisfying filling; 171 surveys were finally the basic of the research.

Survey request was submitted via e-mails or personally. The survey was implemented by web-based solution, on www.kerdoivem.hu site. It has a clear, well organized outlook, including the general aim of the research and also the deadline. The survey consisted open and close questions, drop-down boxes, and multivariable and free-text questions.

Qualitative research was implemented by depth interviews; also the last section of the web survey was a free-text box, where all submitter were asked to add her/his own opinion. The depth interview was targeting to collect more details, considering also subjective factors. The 7 depth interview takes 40-70 minutes, which provided enough time to fully understand the interviewers own opinion, situation, experience, way of thinking and motivation.

By combining these two types of research the Author targeted to get most trustworthy and prompt research. All depth interviews were recorded, later documented by typing. Depth interviews were managed to happen as two-way communication, where interviewee both replying on questions and telling their opinions detailed.

3. Research Results

The survey has generally proved the basic hypothesis of this study, as there is a multi-layered connection between knowledge management, competitiveness and corporate culture. Enterprises responses to market challenges are to increase the local knowledge content, focusing on R&D and innovation.

In case a corporate does not follow or react too slowly on market challenges, most time it causes market disadvantages. Continuously changing economic situations and unused market culture creates new for companies, which would like to keep up their ability for business, would like to reach on market movements, also would like to react on requirements from their customers. Knowledge management systems are a tool supporting these activities, providing an integrated solution for more complex tasks in a flexible way.

Enterprises needs right knowledge management to maintain its market positions, proper usage of existing knowledge, also to prove knowledge support. Author's opinion that for long term knowledge management it is a mandatory to establish knowledge systems, employee's motivation, knowledge share and its integration into daily routine. Knowledge system is considered as whole employes, corporates processes, corporates culture, applicative technology and knowledge content supporting them.

Assessment of new scientific result of the study could be summarized as follows:

T1. Main factors for quality and success of knowledge management: usability of knowledge base and its IT support. The analysis of questioner clearly proves, that if there is a kind of knowledge management system deployed at a given corporate, the real usability is mainly determined by its customer-friendliness, structuring and systematization. Employees are suffering permanently from lack of time - they are willing to use knowledge management systems for their professional purpose only if they could get answer on their question in real time and the received information is valid and relevant. Statistical analysis of survey evinces, that main blocking point for effective using of knowledge manage system is the lack of time of employees (chi square test, $p < 0,01$) and in relation the not proper information system. Hypothesis is considered as **proved**.

T2. Corporate managers are taking into consideration the corporate culture and values during their decision making process. The survey shows median of 4 at this answer, which means that responders believes, that managers are taking consideration the corporate culture during their decision making process - therefore the original thesis was rejected and had been worded in a different way. It has been found independent from the size of the corporate (number of employees) nor the nation of mother company. Responders from company size 100..500 employees rather believes, that there is obvious prove for that (median is 3). Based on mother company nation groups, data shows that - based on employees feelings and experience - (category 4 and 5 represent 54% total), that leaders made their decisions knowing the corporate culture.

T3. Size of enterprises and development level of their knowledge base shows close relationship. The study separately considered the size of the corporate based

on number of employees and yearly turnover. The result shows, that “existing knowledge management” with “knowledge management implementation in progress” categories are quite stationary with low statistical deviation in all segment, only the actual status of knowledge managements are different: smaller enterprises have less fully implemented and more development in progress, although the relatively bigger enterprises has more fully implemented and less development in progress knowledge management systems. Big majority of enterprises has already realized the necessity of implementation of knowledge management systems, and already made some actions in this field, but some - presumably due to lack of proper resources - are delayed so far. Adopting this presumption the correlation to enterprise size becomes even more obvious (chi square independence test, $p=0,0044$). Other interpretation of the original hypothesis is based on the yearly turnover of given enterprises - in this case, the chin square test has the result of $p=0,0002$. Statistically analyze of charts it could be noted: there is significant correlation between the existence of knowledge management systems and corporate’ yearly turnover. Considering the two sub-analyze, it could be stated: the existence of knowledge management (including the fully implemented and under development ones) shows a **significant correlation** with both numbers of corporate and yearly turnover, so practically to the size of the enterprise.

T4. The lack of trust within corporates has negative impacts on knowledge transfer willingness: Referring to survey, the employees are asking their direct colleagues or managers with same scale. Choosing the right counterpart for a question is clearly the reliability of the source. There could be several methods how the form corporate knowledge from the corporate members accumulated and owned private knowledge. These methods could be based on internal or external

resources, also designed or self-deploying. An unexpected result: responders' big majority is believe these actions should come from outside, as expecting an external professional to be involved to synthesize the accumulated corporate knowledge, rather than internal - planned or self-deploying - ones, like master-servant trainees. As a consequence, we can state the original presumption is **proved**.

T5. Migration of qualified employees phenomenon recently has no direct impact Hungarian enterprises knowledge base, and -as a consequence - has no impact on competitiveness, exception majority of multinational companies located in most developed regions of Hungary. Majority of companies (103 and 21 out of total 171) stated “no significant impact of migration to competitiveness” or “recently no significant impact, but I expect soon the presence and then could risk competitiveness”. These two reactions shows total of 73%, therefore corporate actually do not consider as bigger risk the migration to competitiveness. Chi square test for fit to uniform distribution shows, that there is different between negative answer (“There is no significant impact of migration on competitiveness”) and positive answer (“There is no significant impact of migration on competitiveness” actually, but I expect soon to become a risk”, “Significant impact, but actually not risking competitiveness” and “Competitiveness is actually at risk”); $p=0,007$. Based on this statistic analyzes, the hypothesis is partially proved, as the migration of qualified employees is an existing phenomenon within Hungarian enterprises (including the multinational companies active in Hungary), which has impact on their knowledge base and thereby their competitiveness, too.

T6 Knowledge created or acquired by employees at corporate, is owned by corporate. Knowledge created or created at companies shows a significant

correlation with enterprise size. Author chooses the method of calculation average to analyze results. Documenting of knowledge are typical at multinational companies, and partially due to more developed corporate culture the question of ownership of acquired knowledge is specified already in work contracts. Due to the fact that the survey could not prove clearly the presumption above, the hypothesis is **rejected** by the author.

In case the management can realize the importance of intellectual resources, they could provide effective support to reach their targets by better utilization of that, and maintain their competitiveness. Innovation activities of companies need to start immediate changes, where the corporate culture, innovation and knowledge management plays a key role. The main target is having competitive companies with innovative employees within global markets. To maintain overall competitiveness, companies needs to have high level of knowledge in more and more fields, and these needs to be implemented in new, marketable products and services. If the leaders of changes realizes these key factors, Hungary could become a player in the global market with innovative, a knowledge-intensive activities with higher level of added values.

3.1. New Scientific Results

The main, new scientific result of the study: the non-representative survey demonstrate own opinion, motivation and experiences of 171 members of Hungarian Economy. These companies represent the whole spectrum of local economy sector, split into 5 category starting from 100 million HUF yearly turnover to 5+ billion HUF.

New scientific results of Author's research in the knowledge management topic could be summarized as follows:

- The proper quality knowledge base – as a documented base of knowledge management – integrated with customer friend and effective IT background could compensate the decreasing of competitiveness caused by missing or limited resources (specially the lack of time) within corporate,
- Corporate leaders are taking account corporate culture' actual development level during decision making process,
- Development level and corporate sizes has close correlation,
- Knowledge transfer is most frequent between direct colleagues, based on its reliability. Missing or lack of trust between colleagues – knowledge-jealous or professional jealousy- could degrade the level of knowledge transfer,
- Migration of qualified employees symptom could be already observed in the Hungarian economy, but actually has no direct negative impact on competitiveness,
- Knowledge created or acquired by employees at corporate is considered ad

property of employee, independently from development level of corporate culture.

4. Conclusions and Suggestions

Author puts in focus during this study both to investigate experimental knowledge management tools usage, also –starting from actual situations – to define new opportunities and methods for better utilization of corporate already collected and stored knowledge.

This study is showing, that one of the most effective way to increase Hungarian companies' competitiveness is better/optimized usage of its human resources. One of the easiest and most promising approach is the development of knowledge bases.

The real and wide use of knowledge management it is necessary a state-of-art, innovative and real customer friendly IT background and management support. The most effective factor to improve the efficiency of knowledge base usage is to improve the IT solutions. A proper, customized to company profile IT solutions needs typically huge investment, but it could be considered a short payback time investment due to the competitiveness gain by its usage.

Corporate leaders has to be fully realize the actual development state of their corporate, also they have to set as target is continues improvement. Before changing corporate culture, there always should be a detailed research and analysis, including the leading functions research. After defending the areas on development, next step should be the defining and wide public of common values, also decision making process based on these common values. In a long term, companies with an inadequate corporate culture could be improved.

Even smaller sized companies' leaders should aspire for creating knowledge

management system, also using knowledge management tools. Innovative, highest efficiency companies could motivate common employees to reach and also keep longer period significant performance. Soul-stirring and motivating atmosphere is important.

Management should put the following basic values into the focus: quality, innovation, customer-focus and human factor. Critical persons, their competencies should be identified and continuously developed for value creations. Regard, motivation, team-buildings, carrier path planning could increase efficiency of human resources.

Migration of qualified employees symptom could be already observed within Hungarian economy, actually has no direct negative on competitiveness, but expected to have in near future. Companies could decrease of this negative impact by right preparation and planning. Management has to analyze the risks to be able to choose the right strategy.

5. List of publications related to dissertation

Foreign languages articles, published in lectured periodicals

- Boga-Pohl, P.-Posch, R.: The knowledge-based prevention of workplace burnout, e-Studies Komarno, <http://www.selyeuni.sk/gtk/e-studies/> 2011/02 pp 1-7 ISSN 1338-1598
- Boga-Pohl, P: Monitoring of knowledge-capital in logistic processes
The Second International Conference for PhD Candidates
“Economics, Management and Tourism” Neofit Rilsky 2011 pp 212-217 ISSN 1314-3557

Foreign languages articles, published in conference book:

- Boga-Pohl, P. - Markó, G.: Role of knowledge audits in companies competitive advantage evaluation III. Medzinárodná vedecká konferencia UJS „Veda a vzdelávanie na podporu vzdelanostnej spoločnosti“ Komarno, 2011.09.06 pp 787-795 ISBN 978-80-8122-017-3
- Boga-Pohl P. - Bácsi J.: Potential use of corporate culture identifying and conscious usage in Hungarian enterprise sector
INTERNATIONAL SCIENTIFIC CORRESPONDENCE
CONFERENCE EAEP 2012 Economics and Economic practice – analysis and trends" University of Prešov 2012.11.26 ISBN 978-80-555-0655-5

Hungarian language periodicals:

- Boga-Pohl, P: A tudástőke jelenlétének vizsgálata a logisztikai folyamatokban Korunk Folyóirat, Kolozsvár III. Folyam 2011. június pp 91-97 ISSN 1222-8338
- Boga-Pohl, P- Markó, G:A szellemi tőke és a tudásaudit jelentősége a vállalati versenyelőny megítélésében Humánpolitikai Szemle 2011.december pp 3-8 ISSN 0865-7009
- Markó, G -Boga-Pohl, P: A tudásaudit és a szellemi tőke relevanciája a vállalatok versenyelőnyében Minőség és Megbízhatóság 2012.04 pp 187-191 ISSN 0580-4485
- Bacsi J.- Boga-Pohl, P.: A szellemi tőke és az innováció kapcsolata – a tudásmenedzsment szerepe a versenyképességben Virtuális Intézet Közép-Európa Kutatására Közleményei IV évfolyam 5. Szám pp 95-104 ISSN 2062-1396

Hungarian language conference book:

- Boga-Pohl, P- Markó, G: Tudásaudit a szellemi tőke tükrében NYME AK Kincs, ami van – Fókuszban az Egészségturizmus Konferencia Győr, 2011 (Társszerző: Markó Gabriella) pp 787-794 2011. október ISBN 963-9296-96-1
- Boga-Pohl, P- Herczeg, L.: Változásmenedzsment a vállalkozások szolgálatában, különös tekintettel a projektek során felmerülő kihívásokra Tavasz Szél Konferencia, Piliscsaba 2011. pp 35-44 ISBN 978-615-501-33-8

- Boga-Pohl, P- Posch, R.: A stressz okozta munkahelyi kiégés megelőzése a tudásalapú társadalomban VI. Kheops Tudományos Konferencia CD-kiadványa, Mór 2011. pp 235-244 ISBN 978-963-87553-8-4
- Boga-Pohl, P: A tudás menedzselésének története és jelentősége a vállalati versenyképességben Változó környezet - Innovatív Stratégiák Nemzetközi Konferencia Sopron, 2011. november pp 1142-1149 ISBN 978-963-9883-84-0
- Boga-Pohl, P: A tudásmenedzsment jelenléte valamint hatása az arab térség gazdaságára „Tehetség és kreativitás a tudományban” Konferencia Sopron 2012. május pp 78-85 ISBN 978-963-9883-92-5

Foreign language conference presentations:

- Role of knowledge audits in companies competitive advantage evaluation III. Medzinárodná vedecká konferencia UJS „Veda a vzdelávanie na podporu vzdelanostnej spoločnosti“ Komárno, 2011.szeptember 6.

Hungarian language conference presentations:

- Tudásaudit a szellemi tőke tükrében NYME AK Konferencia Győr, 2011. április 11.
- Változásmenedzsment a vállalkozások szolgálatában, különös tekintettel a projektek során felmerülő kihívásokra Tavasz Szél Konferencia, DOSZ, Piliscsaba 2011. április 17
- A stressz okozta munkahelyi kiégés megelőzése a tudásalapú társadalomban Kheopsz Konferencia Mór 2011. május 18.
- A tudás menedzselésének története és jelentősége a vállalati versenyképességben Változó környezet - Innovatív Stratégiák Nemzetközi Konferencia Sopron, 2011 . november 2

- A szellemi tőke és az innováció kapcsolata – a tudásmenedzsment szerepe a versenyképességben 2. Vezetéstudományi konferencia „Vezetés és hatékonyság Taylor után 101 évvel” Szeged, 2012.06.01