Journal of Knowledge Management Application and Practice
An International Journal

http://dx.doi.org/10.18576/jkmap/010104

Why Knowledge Management Fails?

Natalia Khazieva, [1*] *Eduardo Tomé* [2] *and Dagmar Caganova* [1].

[1] Institute of Industrial Engineering and Management, Faculty of Materials Science and Technology STU Trnava, Slovakia.
[2] Eduardo Tomé, Universidade Europeia, Lisboa, Portugal.

Received: 22 Oct. 2018, Revised: 30 Oct. 2018, Accepted: 4 Dec 2018.

Published online:1 Jan. 2019.

Abstract: Intellectual capital creates new ideas how to use the restricted resources in the best way to gain the competitive advantages and be profitable. Knowledge management helps to establish an environment of creation, development, transfer and share intellectual capital. At the same time, some companies and enterprises do not use the latest theoretical and practical achievements in the fields of knowledge management and intellectual capital.
Purpose - to study the objective reasons of knowledge management failure in companies in general analyzing case studies of failure and present a framework in which the failure factors are linked to the different stages in the cycle of KM implementation (provided by P. Akhavan and A. Pezeshkan).
Design/methodology/approach – Data for research was collected from authors own working experience in a real business. After a detailed study – applying grounded theory method – the results categorized and analyzed in precise stages of implementing KM systems indicating the main failure factors.
Findings – Through analysis of case studies, two main results were achieved. First, the main critical failure factors of KM projects were identified. Second, identified factors were traced along the KM implementation cycle showing how different failure factors may effect in each specific stage of the KM cycle.
Originality/value – Due to the fact the organizations do not publish proper reports of failure in their projects because of their policies, the image of their organization, and privacy, we provide and analyze the real examples of Knowledge Management Implementation.
Keywords: Applied knowledge management, Knowledge management success factors, Knowledge management, Knowledge management failure, Knowledge management cycle, Critical failure factor.

1 Introduction

The theme of Knowledge Management (KM) remains popular and discussed among scientific community where often emphasize its role in Human Resource Development, Innovations process, company's prosperity and nation's welfare as whole. The impact of KM is so obvious and indisputable that we have to see it elsewhere. KM seems like a universal tool to solve all internal company's problems and to improve profitability. Unfortunately, it's not enough because products and services have to absolutely meet the needs of today's progressively demanding customer.

Scholars (Tulkova, 2014) emphasize that current company's competitive advantage is determined not only by the quantity and quality of tangible resources that company possesses but its intangible recourses that are unique and difficult to imitate. Intangible assets such as trademarks, companies' reputation and skills pertaining to employees' know-how, and the corporate culture are recognized as the core of competitive advantage (Riege, 2005; Jafari et *al.*, 2008). If knowledge is considered as a key resource for the organization, then it has to be exploited to create value for the firm (Desouza, 2003). For this purpose, many approaches have been suggested to manage company's knowledge so that organizations can utilize their knowledge to improve their competitiveness in business markets (Jafari et *al.*, 2010). Knowledge management (KM) has been defined as the identification, optimization and active management of intellectual assets, either in the form of explicit knowledge held in objects or as tacit knowledge possessed by individuals or communities (Snowden,

*Corresponding author e-mail: nathalie.tyulkova@gmail.com

2000; Akhavan et *al.*, 2009a). The successful application of KM systems is important for organizations to be competitive in knowledge-based economy and to avoid wasting organizational resources.

At the same time, employees are often faced with poor management and companies struggle with outdated knowledge and lack of necessary skills. This means that KM fails starting from the personal level till macro level. Although, the history of successful implementation of KM systems can be found in relevant papers (Jafari et *al.*, 2009), the examples and case stories of failure to implement KM systems are also informative and useful. Thus, research question is what are the failure factors of KM in general?

2 Research Methodology

Research methodology is constructed on two aspects. First, literature review helps us to dive into the issues of Knowledge Management and Intellectual Capital. Then, using the concept of Grounded theory we analyze several cases to identify the failure factors of KM. Later, based on authors' own estimations and thoughts about provided cases we propose some ways to overcome failure factors.
Grounded theory (GT) – a qualitative research method – has been used as a research methodology due to the available rich data that could be used to facilitate the generation of theoretical results (Locke, 2001). The data used in this paper is a set of failure cases in the field of KM from authors' work experience. These cases were selected based on whether they offered necessary information about the complete failure process of KM in which KM projects had not been fully implemented, had been abandoned after a while, or they illustrated some important and noticeable factors that had led KM projects to failure.

To deeply analyze data in this research, researchers had identified some failure factors, then reviewed and occasionally adapted them to have more equal categorizations. After that, through the process of categorizing main concepts were identified and their characteristics were established. Distinguishing the relationships between concepts and axial and selective coding are the next stages of this step (Goulding,

2002, 2005). Open coding and following selective coding were done for each case to explore the main features and foundation of the KM failure process in the company and to analyze the arrangement of relationships among the conceptual categories.

3 Literature Review: KM and IC Failures

The management of intellectual capital and knowledge has become increasingly important in the knowledge-based society. Both commercial and public organizations identify the importance of being effective learning organizations.

Knowledge management creates a new working environment where knowledge and experience can easily be shared and also enables information and knowledge to emerge and flow to the right people at the right time so they can act more efficiently and effectively (Smith, 2001).

Knowledge management is also known as a systematic, goal oriented application of measures to steer and control the tangible and intangible knowledge assets of organizations, with the aim of using existing knowledge inside and outside of these organizations to enable the creation of new knowledge, and generate value, innovation and improvement out of it (Wunram, 2000; pp.2-13).

However, in practice, managers and employees often face knowledge management failure. Malhotra (2004) cites that: "...Prior discussion has highlighted that knowledge management systems fail because of two broad reasons. First, knowledge management systems are often defined in terms of inputs such as data, information technology, best practices, etc., that by themselves may be inadequate for effective business performance. For these inputs to result in business performance, the influence of intervening and moderating variables such as attention, motivation, commitment, creativity, and innovation, has to be better understood and accounted for in design of business models. Secondly, the efficacy of inputs and how they are strategically deployed are important issues often left unquestioned as 'expected' performance outcomes are achieved, but the value of such performance outcomes may be eroded by the dynamic shifts in the business and competitive environments...".

We know about knowledge management failures from papers and case stories of people who have took part in knowledge management initiatives (Chan and Chau, 2005; Pettersson, 2009; Chua and Lam, 2005; Pukkila, 2009) but there is no a

global systematic research of knowledge management failures, how they differ from country to country, from industry to industry, how society and specific national features may influence, and so on. This seems a white spot in science but not an aim of our paper.

Through literature review about knowledge management failure factors P. Guptara (1999) highlights 5 things that can prompt the demise of KM:

- Time. Many organizations are simply too busy to make KM work. Workers often complain that their workloads are greater than ever before. It's better to clearly identify what should do and what the results are expected from any implemented KM initiatives.

- Power. Knowledge-hoarding is often rewarded with success, promoting the "knowledge is power" notion. Though, the quantity and quality of KM increase when information flows freely across individual, divisional, regional and hierarchical boundaries.

- Structure. Inflexible hierarchical structure works against the free- flow of knowledge because of the lack of the trust among individuals (Tulkova, 2014). Trust is the cornerstone of KM and only genuinely relationship-oriented companies will survive.

- Measurement systems. Measurement can only be of use if the right things are evaluated. For knowledge management to benefit from the metrics companies should assess contribution to and utilization of company knowledge in pursuit of profitability versus that of the competitors. Rewards may push knowledge-sharing process, but it is important to also cultivate an unselfish culture that shares knowledge willingly.

- Culture. A collaborative culture must be cultivated. Organizational culture vitiates the possibility of success with KM in contemporary organizations. There are many things that create an organization's unspoken rules and ways of doing things. For example, the gossip and the informal communication among employees about "How things get done around here." that is really impossible to make in principles and algorithms.

4 Implementation Knowledge Management System and Intellectual Capital Reports

City Manager Project in Scartel (Tulkova, 2014) – Case 1
Scartel is a company that operates in the telecommunication's sphere and develops technology LTE – Long Term Evolution (access to Internet in Russia). CEO launched the project City Manager in 2011. This project was complicated because it included several Regional Managers (RM) who were responsible for the construction and development of 4G net (LTE) and financial results of exploiting this net in one particular region, and additionally City Managers (CM). The position of RM was permanent and payable rather than the position of CM that was temporary and non-payable. Each employee in the company may become CM. The individual needed to choose the city (and RM) where a company had or wanted to construct a net for 4G' technology. Then depending on his or her background and knowledge of technology and work experience pass through a study process (one, two or more months) by RM. Finally, he or she was responsible for the construction and development of a 4G net and the financial results in one city.

The main idea of this project was to provide the opportunity for employees to learn something new, to develop their personal and professional skills such as project management, negotiations, financial models and financial results, and so on, to enlarge their professional sphere, and to involve it into their working process.

After 15-16 months, we understood that this project was not successful enough and did not reach all goals. The significant problems were:

- the future motivation of employees (monetary and non-monetary) who were responsible not only of their main functions but also CM function;
- wider career opportunities in the company. Untreated systems of career ladder and advancement of employees have broken the project and, as result, the exchange of knowledge has stopped.
- obscure rights and rules in the decision-making process;
- the shrinking of RMs because of lack of motivation to share knowledge and skills.

Implementation new managerial system in TVCH – Case 2

One of the bad examples of implementation KM is case of TVCH. TVCH ZAO 1HDTV is a Russian TV company specialized in creating channels for satellite and cable transmission. The company was founded in 2007.
There are over 770,000 subscribers of TVCH channels in the Moscow and the Moscow Region and more than 210,000 viewers in St. Petersburg and the Leningrad Region. All over Russia TVCH has more than 6,200,000 subscribers.

Company has the rolling (continuous) planning system for main activity meaning that each three months economists prepare the budget for the next 12 months and collect information about sales, revenues, costs and so on and provides reports for the financial results of previous three months. This helps to be more flexible in the decision-making process and control in-depth operational activity. To provide these corporate reports and prepare budget for next period of planning an employee uses several accounting systems, non-financial reports, and intermediate estimations in Microsoft Excel. As a result, some difficulties appear:

- the budget planning and financial reports take a lot of time;
- only one employee knows all principles, rules and exceptions for this process;
- inaccuracy and mistakes in provided data:
- difficult to estimate the real situation in company.

After noticeable problems, TVCH decided to launch the KM initiative on a new managerial system that would collect all necessary data from accounting systems, transform them, trace them and present financial reports, dynamics and differences of different stages of the budgeting process based on certain written rules and

Procedures. Finally, the KM initiative was run officially in January 2017. However, there was no positive feedback from the initiative in TVCH and after 15 months from start, managers found that nothing was made. Only three meetings were made during this period of time. The main factors of KM failure were:

-There was a lack of appropriate planning for the initiative.
-There was not written zones of responsibilities.
-Top managers did not interest in constant real involvement in the initiative or enough support.
-The reward system was not planned neither was it controlled efficiently.
-The employees did not have enough IT and other KM instrument skills.
-Unwillingness to share knowledge.
-Required relationships among workers were not established.
-Inappropriate organizational culture.

5 Frameworks of Crucial Failure Factors in KM Projects

For a better understanding of factors leading to failure in KM efforts, this research is going to trace each individual factor in the KM process to clarify its role in KM failure. P. Akhavan and A. Pezeshkan, (2014) have analyzed 10 failure cases of implemented KM and allocated crucial failure factors of KM implementation that play more often. In Table 1 we match factors that seem in our cases.
Adopted by authors based on P. Akhavan and A.Pezeshkan, (2014).

Akhavan et al. (2009b) suggested a framework for the KM cycle and identified seven stages for this cycle. This framework has been demonstrated in Figure 1.
Based on the stages of the cycle illustrated in Figure 1, P. Akhavan and A. Pezeshkan, (2014) emphasize stages at which failure factors may appear (see Table 2).Preparation and infrastructures are a central stage in KM cycle in which the foundation of the KM process is built. The main tools, information technology, conditions, budget and project costs, team, time schedule and planning are made in this step. In our cases, factors such as separated budget and improper infrastructure emerged in this stage. Because the KM team is formed at the beginning of the initiatives, the failure factors related to it such as inappropriate KM team member and lack of commitment and support of top management for KM showed in this stage. If the top managers are not interested in KM initiatives or do not support them, it's not possible to create a suitable organizational structure and atmosphere to ensure free flow of knowledge and share an experience.

Organizing and sharing stages of KM cycle have the greatest number of failure factors. Behavioral and managerial aspects such as organizational structure and culture, resistance against change, lack of conflict management, and reward system will potentially lead to failure factors. If top managers do not pay enough attention to the issues most of which are related to the workers, their needs and expectations, employees will militate against developing of KM initiatives. CFFs.

There are several reasons when the system will become outdated and users will gradually ignore it:

- KM system is not estimated,
- feedback from employees about KM system is not gathered and analyzed,
- weaknesses of system are not eliminated after the implementation.

Having no plan for evaluating the result in this stage stems from the lack of top managers' commitment to the KM. Lack of efficient strategy for development and rollout and neglecting the evaluation of the KM project result are failure factors in this stage of KM cycle (P. Akhavan and A. Pezeshkan, 2014).
These failure factors appear at the different stages of KM implementation process for different companies depending on the availability of resource endowments and organizational structure. Having limited resources, the small entrepreneurial firms are weaker in early stages of the KM implementation process where they need to allocate resources to it while they may not have sufficient resources. At the same time in early stages of KM they may confront different risks, entrepreneurial firms, because of their organizational culture and small size which enhance the team working in such firms (Knockaert et al., 2011), are expected to have successful knowledge sharing practices and also because of the team work culture and smaller number of knowledge workers the evaluation of the KM initiatives will be easier and more effective in these firms (Akhavan and Pezeshkan, 2014).

However, incumbent firms are resourceful and have distinctive slack resources (Rosenbusch et al., 2011) which enhance their chance of providing sufficient infrastructure and technological assets and requirements. Therefore, these firms would not have the problems smaller firms face in early stages. But the large number of employees and having complex multidivisional structure make the knowledge sharing more complicated and increase the hazard of the opportunistic behaviors among the workers which hinder them from knowledge sharing to maintain their monopoly over what they know (Kapoor and Adner, 2012). Therefore, the main problems start from the knowledge sharing stage for big firms (Akhavan and Pezeshkan, 2014).

Table 1: Main crucial failure factors.

Critical failure factors	Case 1	Case 2
Lack of top managers familiarity with aspects of KM projects	✓	✓
Inappropriate members of KM team		✓
Lack of detailed planning and timing for KM project	✓	✓
Lack of separate and sufficient budget for KM	✓	✓
Lack of KM-oriented culture in organization		✓
Lack of commitment and support of top management for KM	✓	✓
Nonconformities between current systems and new systems	✓	✓
Improper technical infrastructure		
Resistance against the change in organization	✓	
Inability of KM team for distinguishing organizational relations		✓
Overreliance on technology		
Project cost		✓
Lack of knowledge sharing because of knowledge speculation		✓
Wrong perceived image of KM	✓	
Inappropriate knowledge structure		✓
Irrelevant knowledge with inappropriate flow and stream		✓
Lack of sufficient involvement of workers		✓
Lack of conflict management	✓	
Lack of efficient strategy for development and rollout		✓
Inefficient reward system	✓	✓
Unfamiliarity of workers with KM tools	✓	✓
Not measuring and evaluating the KM project results		
Lack of required relation to routine tasks		
Weak usability of KM system		✓
External consultants' weakness in business knowledge and organizational relation		

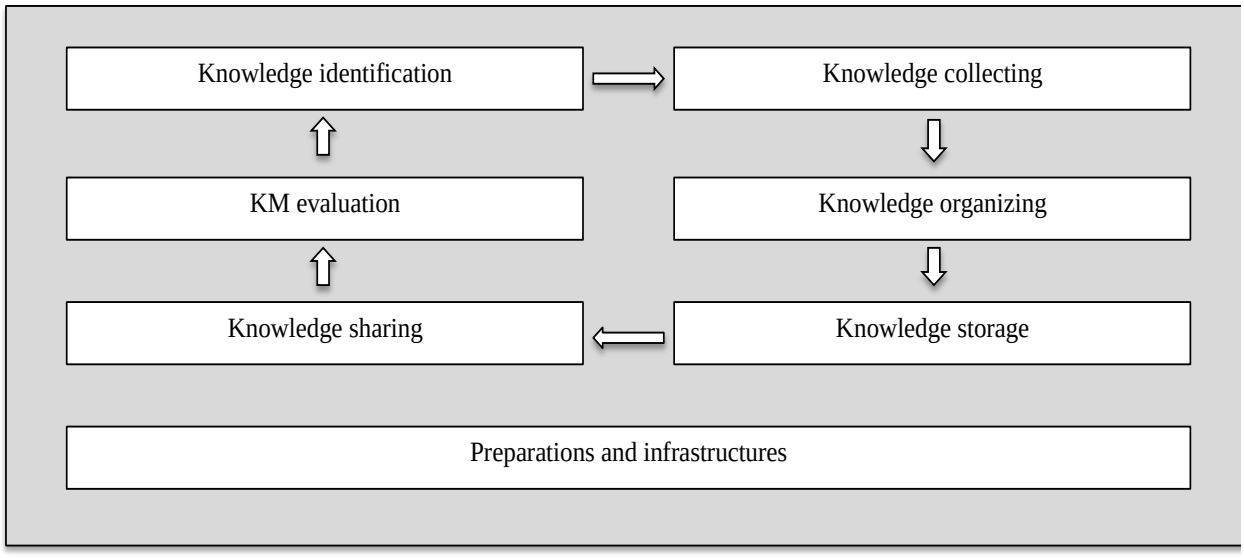

Fig .1: KM cycle

Source: Akhavan et al. (2009b)

Table 2: Main crucial failure factors based on LM cycle.

Critical failure factors	Infrastructure and preparation	Identification	Collecting	Organizing	Storage	Sharing	Evaluation
Lack of top managers familiarity with aspects of KM projects	✓						
Inappropriate members of KM team	✓						
Lack of detailed planning and timing for KM project	✓						
Lack of separate and sufficient budget for KM	✓						
Lack of KM-oriented culture in organization						✓	
Lack of commitment and support of top management for KM	✓						✓

Nonconformities between current systems and new systems			✓	✓	✓		
Improper technical infrastructure	✓						
Resistance against the change in organization						✓	
Inability of KM team for distinguishing organizational relations				✓			
Overreliance on technology						✓	
Project cost	✓						
Lack of knowledge sharing because of knowledge speculation						✓	
Wrong perceived image of KM						✓	
Inappropriate knowledge structure			✓	✓	✓		
Irrelevant knowledge with inappropriate flow and stream				✓			
Lack of sufficient involvement of workers		✓				✓	
Lack of conflict management						✓	
Lack of efficient strategy for development and rollout							✓
Inefficient reward system						✓	

Unfamiliarity of workers with KM tools						✓	
Not measuring and evaluating the KM project results							✓
Lack of required relation to routine tasks						✓	
Not clarifying the KN result relation to routine tasks						✓	
Weak usability of KM system			✓	✓	✓		
External consultants' weakness in business knowledge and organizational relation		✓		✓			

6 Conclusions

Knowledge management can play a significant role for recombinations into new and innovative ideas. Knowledge management provides the tools, processes and platforms to ensure knowledge availability and accessibility, e.g. through structuring of the knowledge base.

It's obvious that the discussions about the role and influence of knowledge and knowledge management do not subside. At the same time, not all KM initiatives and projects reach goals are successful. In this connection; understanding and knowing the potential reasons of failure can help decrease embezzlement of organizational resources.

This paper uses a grounded theory method to come up with its results. Detailed described cases from authors' work experience explain the process of the failure of KM implementation projects and initiatives. After analysis of each case, the stage(s) in which failure factors emerged was determined. Then, different failure factors were traced to the appropriate stage of the KM cycle. A remarkable point is that most of the potential failure factors can arise in the preparation phase. KM team, budget, time planning, workers' involvement are very important in the initial stage.

Most reasons of KM failures are clearly visible in the sharing stage of KM implementation. Workers should be motivated to become involved in sharing the knowledge and the results of their attempts should be evaluated and rewarded. Also, lack of KM-oriented culture, worker resistance, and conflict management may demise KM initiatives.

Similar to any other research, this study has some limitation that is necessary to mention. The results of the research are based on authors' work experience and a new case study should be conducted to enrich the sample and capture possible missed reasons of KM failure. At the same time, answering the following questions could expand current

research:

1) KM fails because we use old methods;
2) KM fails because we use new methods;
3) KM fails because we use both old and new methods

Talking about practical and theoretical implementation, this framework helps managers and practitioners to recognize the potential failure factors in each stage of the KM cycle and avoid them. Surely, most important is the willingness and opportunity of top managers to implement KM initiatives and to finish KM projects. For researchers, the Knowledge Management could not be a panacea for all problems in company, society and so on. KM is hard work of implementation and developing with unpredictable results.

References

[1] Adams, G.L. and Lamont, B.T. (2003) "Knowledge management systems and developing sustainable competitive advantage", Journal of Knowledge Management.,**7(2)**, 142-54, 2003.

[2] Akhavan, P., Hosnavi, R. and Sanjaghi, M. (2009) "Identification of knowledge management critical success factors in Iranian academic research centers", Education, Business and Society: Contemporary Middle Eastern Issues, **2(4)**, 276-288, 2009.

[3] Akhavan P., and Pezeshkan, A. (2014) "Knowledge management crucial failure factors: a multi-case study", The journal of information and knowledge management systems., **44(1)**,22-41, 2014.

[4] Cardinal, L.B., Allessandri, T.M. and Turner, S.F. (2001) "Knowledge codifiability, resources, and science based innovation", Journal of Knowledge Management., **5(2)**, 195-204, 2001.

[5] Chan, I. and Chau, P.Y.K. (2005) "Getting knowledge management right: lessons from failure", International Journal of Knowledge Management, Vol. 1 No. 3, pp 40-54.

[6] Chua, A. and Lam, W. (2005) "Why KM projects fail: a multi-case analysis", Journal of Knowledge Management., **9(3)**, 6-17, 2005.

[7] Darroch, J. and McNaughton, R. (2002) "Examining the link between knowledge management practices and types of innovation", Journal of Intellectual Capital., **3(3)** ,210-22, 2002.

[8] Desouza, K.C. (2003) "Knowledge management barriers: why the technology imperative seldom works", Business Horizons.,**46(1)**, 25-29, 2003.

[9] Goulding, C. (2002) Grounded Theory: A Practical Guide for Management, Business and Market Researchers, Sage, London.

[10] Goulding, C. (2005) "Grounded theory, ethnography and phenomenology: a comparative analysis of three qualitative strategies for marketing research", European Journal of Marketing., **39(3/4)**, 294-308, 2005.

[11] Guptara, P. (1999) "Why Knowledge Management fails", Knowledge Management Review., **(9)**, 26-29, 1999.

[12] Jafari, M., Fathian, M., Jahani, A. and Akhavan, P. (2008) "Exploring the contextual dimensions of organization from knowledge management perspective", Vine: The journal of information and knowledge management systems., **38(1)**, 53-71, 2008.

[13] Jafari, M., Akhavan, P. and Mortezaei, A. (2009) "A review on knowledge management discipline", Journal of Knowledge Management Practice., **10(1)**,1-23, 2009.

[14] Jafari, M., Rezaeenour, J., Akhavan, P. and Fesharaki, M.N. (2010) "Strategic knowledge management in aerospace industries: a case study", Aircraft Engineering and Aerospace Technology: An International Journal, **82(1)**, 60-74, 2010.

[15] Knockaert, M., Ucbasaran, D., Wright, M. and Clarysse, B. (2011) "The relationship between knowledge transfer, top management team composition, and performance: the case of science-based entrepreneurial firms", Entrepreneurship Theory and Practice.,**35(2)**, 777-803, 2011.

[16] Locke, K. (2001) Grounded Theory in Management Research, Sage, Thousand Oaks, CA.

[17] Malhotra, Yogesh (2004) "Why knowledge management system fail? Enablers and constraints of knowledge in human enterprise", www.yogeshmalhotra.com

[18] Pettersson, U. (2009) "Success and failure factors for KM: the utilization of knowledge in the Swedish Armed Forces", Journal of Universal Computer Science, **15(8)**, 1735-1743, 2009.

[19] Pukkila, J. (2009) "Critical success and failure factors of knowledge management implementation in a large multinational company", Master thesis, Lappeenranta University of Technology, Lappeenranta.

[20] Pyka, A. (2002) "Innovation networks in economics: from the incentive-based to the knowledge based approaches", European Journal of Innovation Management, 5(3), 152-163, 2002.

[21] Riege, A. (2005) "Three-dozen knowledge-sharing barriers managers must consider", Journal of Knowledge Management., **9(3)**, 18-35, 2005.

[22] Shani, A.B., Sena, J.A. and Olin, T. (2003) "Knowledge management and new product development: a study of two companies", European Journal of Innovation Management, **6(3)**, 137-49, 2003.

[23] Smith, R. (2001) "A Roadmap for Knowledge Management", http://www2.gca.org/knowledgetechnologies/ 2001/proceedings

[24] Snowden, D. (2000) "Liberating knowledge", in Joanna, R. (Ed.), Liberating Knowledge, Caspian Publishing, London, 6-19, 2000.

[25] Storey, J. and Barnett, E. (2000) "Knowledge management initiatives: learning from failure", Journal of Knowledge Management.,4(2), 145-156, 2000.

[26] Tulkova, N. (2014) "A Flexible Organizational Structure as a way of Knowledge Management in SME", Proceedings of the 11th International Conference on Intellectual Capital, Knowledge Management and Organizational Learning, 549-557, 2014.

[27] Wunram, M. (2000) "Concepts of the CORMA knowledge management model", IST project No 1999-12685, CORMA consortium.