
Satellite Meeting - Knowledge Management Section

New Directions in Knowledge Management

The future of knowledge management

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Abstract:

In many publications, researchers have confirmed that the source of competitive advantage is the knowledge assets and benefits that organizations get from implementing knowledge management practices. Knowledge is a crucial resource that enables organizations to adopt and learn. It plays a critical role in competitiveness, efficiency, and productivity of organizations.

The purpose of the publication will be presenting the idea for future research in the area of knowledge management linked with librarian science, economy, philosophy, sociology, psychology, information systems and management on the basis of the literature review. The importance of knowledge management in science will be emphasized and the new directions will be indicated. In addition, gaps in the current body of knowledge, which justify proposed future research directions will be identified.

Keywords: knowledge management, future of knowledge management, definition of knowledge management

Introduction

Knowledge is one of the key assets that needs to be properly managed. Many researchers and practitioners emphasize the value of knowledge management (Jantz, 2001) as a critical source of organizations' long-term sustainability (Nonaka, 1991; Nonaka and Takeuchi, 1995, Wiig, 1997). Knowledge management enables continuous learning of organization (Malhotra, 1998), acting more intelligently (Gupta et al., 2000), wise using other organizational resources (Argote and Miron-Spektor, 2011). Knowledge has become the most important strategic factor, which is associated with organizations' capabilities to achieve a competitive advantage (Teece, 2001; Koohang, et al., 2017).

The past decades has seen extensive research on knowledge and knowledge management (Ma and Kuo-Hsun Y., 2010). Knowledge management has become an independent academic field, but this subject has a high degree of interactions with other disciplines like the economics, psychology, sociology and further research are needed not only in knowledge management field but also taking into consideration the linkage with other disciplines.

The aim of the paper is to present the idea for future research in the area of knowledge management on the basis of literature review. The proposition of future research in knowledge management is identified in the area of librarian science, economy, philosophy, sociology, psychology and information systems, and management.

In the first part of the article the different definition of knowledge management are presented and at the second part the gaps in the current body of knowledge are presented and the future directions are described. The conclusions end the publication.

Knowledge management definitions

Defining the concept of knowledge management is difficult. Perez, (1999) underlined that it involves capturing the knowledge, wisdom and added value experiences of members of the organization, making it easy to find again. Knapp (1998, p. 3) defined knowledge management as “a set of processes for transferring intellectual capital to value”. For Bukowitz and Williams (1999), knowledge management is "the process by which the organization generates wealth from its intellectual or knowledge-based assets". Davenport and Prusak (1998) defined knowledge management as a systematic process for acquiring, organizing, sustaining, applying, sharing, and renewing both tacit and explicit knowledge from employees to improve organizational performance and create value. Holsapple and Joshi (2004, p. 596) defined knowledge management as “... an entity’s systematic and deliberate efforts to expand, cultivate and apply available knowledge in ways that add value to the entity, in the sense of positive results in accomplishing its objectives or fulfilling its purpose”. Schwarzwald (1999) argues that knowledge management processes are valuable to help organizations to use what they already know and to work smarter and more quickly and to make more money. Chong et al. (2000) have identified knowledge management as a process of leveraging and articulating skills and expertise of employees, supported by information technology.

The interdisciplinary nature of knowledge management – proposition of future research

Library Sciences

Knowledge management plays important role in librarians work (Malhotra, 2000; Shanhong, 2000; Syed and Mahmood, 2013) especially in managing codified or recorded knowledge (Roknuzzaman and Umamoto, 2009). The using and sharing of knowledge can improve the quality of the service (Jantz, 2001) as well as the creation and maintenance of a learning culture. According to Yi (2008), the research should be made merging the knowledge management and strategic planning, for example applying knowledge management systems to strategic planning and developing new strategic planning models in combination with knowledge management models. It can improve the quality of library strategic planning. There is a gap in the digital library project management literature in making research related to the role of knowledge management in digital library management (Cervone, 2011). Since knowledge management focuses more on human issues like tacit knowledge, intuition management, a new set of skills and competencies are needed for library practitioners to work in knowledge management environment (Roknuzzaman and Umamoto, 2009). They should promote knowledge-sharing culture by the initiation of communities of practice, organizational learning, change management, collaboration, management of best practices, and use of appropriate knowledge-sharing technologies. Further research is needed to check the effectiveness of these approaches. The new challenges for librarian are related to the development of mobile applications, social media. It is needed to educate the library managers in this area (Matteson, et al., 2013). The librarians have to acquire skills to keep themselves updated so as to cope effectively, intelligently and objectively with the knowledge management in libraries and use information

and communication technologies to equipped libraries to provide better, faster and pinpointed services to its users (Patel, 2015).

Economy

The concept of “knowledge economy” started to appear in the early 1960s, and was credited to economist Machlup (1962). From this time a lot of researchers and practitioners was trying to identified and explain the logic and mechanism behind economy in which knowledge has become very important (Drucker, 1993; World Bank, 1999; Davenport and Prusak, 1997; Dang and Umemoto, 2009; Roberts, 2009; Cardoso, et al., 2012; Melnikas, 2012). Case studies of national economies evolving into the knowledge economy are needed in future research to understand and explain it better (Dang and Umemoto, 2009). A better understanding of critical factors that can facilitate the hinder successful development of knowledge economy is needed. The research is needed in the area of knowledge transfer from emerging economies to more cost-effective locations (Johansen, 2007) also the connection between knowledge transfer and transactional costs should be researched. Another important issue, which is worth to study can be to discern if the balance between globalization and localization relates to balanced culture and how the balance between globalization and localization influences transfer of knowledge (Luu, 2012).

Philosophy

One of the main concerns of philosophy has been to define what can we know (Blosch, 2001). In this scientific area, it is important to develop “cognitive maps” of the organization. These maps can help managers to understand the organization and the environments. It can help also to locate information and knowledge (Blosch, 2001). Another important issue is ethics. Ethics is described by Rechberg and Syed (2013) as behavioural codes that are regarded as good and right by individuals and the society at large. Ethical standards are rooted in teleology (Hume, 1750/1967; Smith, 1759/2002), deontology (Kant, 1785) and Aristotle’s Nicomachean Ethics (350BC). But ethics is not only a philosophical abstract theory but also a critical guideline in the collective or personal practice (Tseng and Fan, 2011). Members of the organization should respect the collective ethical norms. Where favouritism rules, individuals are likely to punish the unfair member, e.g. by refraining from transfer knowledge. Fairness is practiced when the needs of both individuals and organisations are treated as equally important and members of the organization are treated as equals. Ethical issues are very important and further research is needed, especially in the area of trust building, fairness, organizational justice, ethical organizational climate. A deeper study related to ethical aspects of knowledge management may focus on the power of managers over individuals (Rechberg and Syed, 2013). Another future research direction is to study the relationships between conceptualizations of ethical knowledge (as tacit knowledge and as explicit knowledge) and moral development (Seow, 2012).

Sociology

The sociology of scientific knowledge has gained some recognition among sociologists. The research which could be interested can connect social capital and knowledge management (Hoffman, et al., 2005). According to Coleman (1988), social capital constitutes some aspect of the social structure and facilitates the actions of members of organization within the structure. Social capital consists of three dimensions (Chen and Lovvorn, 2011): the structural dimension, the relational dimension, and the cognitive dimension. The structural dimension is related to the overall pattern of connections between actors (who can influence others). The relational

dimension focuses on relations people have (trust, respect, friendship). The cognitive dimension is related to cultural and societal norms. All of these dimensions are very important in knowledge management especially in sharing of knowledge and future research is needed to expand knowledge about this. Another important aspect related to sociology and knowledge management is working in the groups and teams. Davenport and Grover (2001) stated that it is very important to develop knowledge-oriented cultures in which the transfer of knowledge among individuals is provided. One option to create and develop a knowledge-oriented culture is through the use of groups, teams, and communities of practice within the organization (Turner, et al., 2012). This aspect also needs further research. The knowledge in an organization is produced collectively (Lynch, Bogen, 1997). Usually, many intellectual tasks cannot be executed by a single individual, instead, they require the collaboration of multiple persons (team work) (Cronin and Weingart, 2007). This means that knowledge management is becoming more and more a social activity (Kimmerle, et al., 2008). More research is needed which will link sociology and knowledge management.

Psychology

The study in the area of psychology should explicate the complexity of knowledge transfer behavior. Researchers have emphasized how individual differences are important in the organization environment (e.g. Hertz and Donovan, 2000; Judge et al., 2002), but there is a need to expand the research related to the effect of individual characteristics (personality traits) or individual dispositions in knowledge sharing (Wang and Noe 2010). For example, Cabrera et al. (2006) found that openness to experience positively correlates with individuals' knowledge sharing, but also individual learning orientation can be an important aspect in predicting individual knowledge sharing activities. Some researchers (Swift, et al., 2010) have proved that knowledge sharing can foster and enhance learning. There is a gap in the research in this area. Another interesting topic can be related to investigating how individual characteristics can interact with contextual factors to predict knowledge sharing (Lee, et al., 2015). This kind of study will connect trait activation perspectives and interactional psychology (Schneider, 1983; Tett and Burnett, 2003). It would be good also to investigate why and when people hide knowledge. According to He (2013) to decrease knowledge hiding, managers should focus on practices that can reduce employees' self-perception of possession of knowledge and territoriality and that can increase the strength of employees' psychological ownership for organizations, but further research is needed in this area. Another interesting topic is to check the relation between the propensity to trust and knowledge sharing. As the role of knowledge is very important, advances in knowledge sharing will contribute to the success of organizations, individuals, and the development of academic theory (Lee, et al., 2015).

Information Systems

The development of information systems is giving a lot of new possibilities to develop knowledge management. The number of ways people can communicate increased. Social media, which become the part of the life gave a lot of new possibilities to transfer information and knowledge (Hocevar, et al., 2014). The research is needed in the area of using social media for organizational purposes like localization, acquiring, development, transfer, using and coding of knowledge. Social media became a place for communication, networking and content sharing (Paliszkievicz and Koohang, 2016). It is important to use this as a way to develop knowledge management. The development of social media has also created some problems related to privacy issue for example: cyberstalking & location disclosure, social profiling & third party disclosure, and invasive privacy agreement. This area is also worth to research. Information systems security has become a major concern for organizations. According to research successful security management mainly depends on the involvement of users in active

defending of information systems, but most users do not have appropriate knowledge about it (Belsis, et al., 2005; Lyu and Zhang, 2015). Security tools and mechanisms have a limited effectiveness for the reason that security depends on users (Hinde, 2003). Designers of knowledge management systems can introduce levels of security for different types of knowledge that reside within the organization (Randeree, 2006). There exists a general lack of focus on the protection and security in the knowledge management systems – both in a research setting and in practical applications (Manhart and Thalmann, 2015). Knowledge is different from data and information and needs special consideration in the organization (Randeree, 2006). The concept of secure knowledge management and protecting organizational knowledge needs more attention.

Management

The better understanding of tacit knowledge is needed and the ability to apply this knowledge in the process of work to solve and identify complex problems in organizations (Blackler, 1993; Nonaka and Takeuchi, 1995). Venkitachalam and Busch (2012) identified the following gaps in the existing literature in this area: the organizational benefits to tacit knowledge transfer; the role of tacit knowledge in organizational learning and development; the influence of tacit knowledge in intellectual capital; the transfer of tacit know-how and its use in communities of practice; and the role of information communication technology with regard to sharing tacit knowledge. Another problem is how to effectively manage workers who own the organization's knowledge assets (Paton, 2013). The challenges which still exists are related to identifying, developing and evaluating knowledge workers to maximize their effectiveness and the quality of work. The knowledge workers possess higher levels of both tacit and explicit knowledge are engaged in more complex, less routine tasks involving greater levels of original work, creativity, and problem solving (Paton, 2013). More research is needed to increase the possibility and quality of more effective management of knowledge workers. Also the area of knowledge protection is important, for example: the prevention of unwanted knowledge spillovers, which focus on leakage of knowledge to non-authorized people (Ahmed et al., 2014), the prevention of knowledge loss which focuses on unavailable employees, e.g. those leaving or retiring (Jennex and Durcikova, 2013). One major issue for organizations is finding a balance between sharing and protecting knowledge (Manhart and Thalmann, 2015). This issue also needs further research.

Summary

In this publication, different approaches about how knowledge management may evolve are presented. There are a lot of publications, which have tended to focus on processes and structures within organizations, such as leadership, organizational culture and learning, and technologies for knowledge storage and transfer to enhance productivity, quality and sales, reduce cost, or increase innovation (Paliszkievicz, 2007; Jashapara, 2011). Also, the subject of knowledge management implementation was relatively widely examined (Durst and Edvardsson, 2012).

The review of empirical studies has brought about a number of possible research directions, for example, the role of knowledge management in digital library management, transfer of knowledge and globalization, ethical issues and sharing of knowledge, shaping social capital for creating collective knowledge, personality characteristic and knowledge sharing, protection, and security of knowledge.

Besides, the author sees general areas that need more attention and development:

1. Country comparison – more studies are needed that take into consideration country differences and development of knowledge economy.

2. Cultural comparison - more studies are needed that take into consideration cultural differences
3. Long-term studies – it could enable to observe how knowledge management has changed over time in organizations or countries.
4. Mix-methods approach– using a different kind of methods combine qualitative and quantitative measures to get a better view of knowledge management processes.

The present study has some limitations. By restricting itself to the ProQuest database this publication may not have allowed complete coverage of all empirical studies in the field, but it was possible to observe the main trends.

The review of literature conducted reveals that the body of knowledge regarding knowledge management is still limited. Existing literature provides only fragmented insights into knowledge management and further interdisciplinary research is needed. It is believed that knowledge management field will become a more prominent academic field, when more is learned about current paradigms and key research themes in knowledge management studies, how they relate, and what they stand for.

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