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# The Interaction between Humans and Knowledge Management Systems: Rethinking the Future

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**ABSTRACT**

In this workshop position paper, we propose a study to understand the importance of knowledge management systems among academics in Saudi higher education institutions, admitting that knowledge workers and Knowledge Management Systems are valuable organizational assets whose interaction should be improved. We intend to understand Saudi academics' perception toward using the knowledge management system to share their teaching experiences. Based on the findings, we investigate the major research trends in knowledge management systems and give some recommendations for future research.

**KEYWORDS**

knowledge management system; knowledge sharing, human behavior; human factors; teaching practices; higher education institutions

**INTRODUCTION**

The knowledge-based view of the firm [6] considers knowledge as a significant asset of competitive advantage and the primary driver of organizational goals achievement. In today's knowledge-based economy, Knowledge Management (KM) plays a significant role by facilitating the creation, storage, sharing and reuse of knowledge [1]. While KM has been implemented in a large number of sectors around the world [7], universities and the higher education sectors have not yet taken full advantage of the capabilities offered by KM, specifically in Saudi Arabia. In the last decade, a

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number of researchers have highlighted the potential benefits of implementing KM in universities [2, 4]. Teaching activities result in creating remarkable amounts of know-what and know-how expertise in teaching a specific subject [1]. The “know-what” knowledge represents the content knowledge about the actual subject matter that must be transferred to students to be learned, while the “know-how” is not transmitted to learners but consists of the strategies for delivering know-what knowledge. To effectively ensure the successful teaching and the delivery of learning in higher educational institutions, vital to develop tools that can capture, store, and share the know-how knowledge of instructors.

This research considers the application of knowledge management systems in Saudi Arabian universities. [8] stressed the importance of and the need for KM in the higher education institutions of Saudi Arabia due to many challenges facing the Saudi higher education system. Most Saudi universities are not geographically co-located as they have remote campuses in both rural and urban areas and that could lead expert academics to travel between these campuses to share their teaching experiences with others. Furthermore, Saudi Arabia is a religious country, and the religion of Islam reflects the practice of education and the structure of universities, in which male and female academics are segregated in separate campuses. It is required to transfer knowledge between instructors in different departments (male and female) and among different campuses. University teachers are involved in many responsibilities and tasks that prevent them from finding enough time for their continuing education and sharing their accumulated teaching-related knowledge and experience with other instructors via face-to-face communication. Consequently, the face-to-face mechanism is found to be less suitable for sharing knowledge because these mechanisms can reach only a limited number of people at a limited place and time.

It would be more valuable if know-how knowledge is recorded, organized, and shared in a way that encourages new teachers to reuse it. However, due to the lack of reliable systems for managing these resources among other academics who teach the same or different subject in the same department, faculty members are likely to spend extra time and effort recreating new teaching materials instead of spending more time on research and professional development [3].

Due to the noticeable recognition of the importance of KM in higher education as an enabler of an interactive environment, together with the challenges identified above that Saudi universities face, this research considers the importance of future research on the application of KM system amongst academics in Saudi Arabia universities.

#### **FUTURE TRENDS ABOUT KNOWLEDGE MANAGEMENT RESEARCH IN SAUDI ARABIA**

Although KM has been the research topic for more than 20 years, there is still much to study about the applicability of knowledge sharing artefact in Saudi Arabia higher education institutions. This section offers several important suggestions that have not been comprehensively studied

until now as future research directions.

- It has been noted that KM has been heavily studied in developed countries. Therefore, more studies can be conducted in developing countries such as Saudi Arabia. At the same time, little attention has been paid to the application of KM and knowledge sharing in the education sector. There is still an open door for further research to investigate the impact of KM in Saudi Arabia higher education institutions.
- By discussing and analyzing the state-of-the-art literature, future studies should consider examining the human factors that affect the use of knowledge management system, as it is important to develop understandings on what hinders the sharing of knowledge. For example, trust plays a key role in successful social interaction for knowledge sharing and more research is needed to identify and investigate the potential mechanisms through which trust may influence online knowledge sharing. Furthermore, although the role of motivation has been recognized in the knowledge sharing literature (e.g., [4, 5]), it is somewhat surprising that the influence of reputation and social presence on individuals' intention to share have not been explored enough in knowledge management system research.
- With the development of new technology, new and smart technology methods, such as social media and web 2.0 technological tools, will be widely used for designing the KM system. The role of social media and web 2.0 technologies for promoting knowledge sharing can be explored further. Future studies of KM can also be focused on smarter and more personalised intelligence application, such as recommender system. In recent years recommender systems have become increasingly popular. However, in the field of KM, specifically in the Arab context, there still lack of recommender systems that aim at providing knowledge recommendation by acquiring users' preferences and providing appropriate knowledge resources information based on these preferences.
- It has also been noted that there is a lack of research that studies the design of knowledge sharing systems based on Arab users' requirements. The current scholars are mainly focused on studying the adoption of knowledge management systems that have been developed in western culture, regardless of Arabs' characteristics. However, a 'one size fits all' approach is especially not appropriate for Saudi culture. The differences in the socio-cultural contexts lead to internal differences in knowledge sharing practices. Therefore, it appears worthwhile for future research to study the design of a knowledge management system by following a user-centred design process then evaluate the resulted system following user experience evaluation techniques to ensure that the designed features are usable and appropriate for Saudi users.

## CONCLUSIONS

For this research, a comprehensive review of KM is presented. The main goal of this paper is to provide some recommendation for future research of KM in Saudi Arabia. My goal of attending the workshop is to enrich the discussion regarding future research in the Arab world by providing the insights I gained from researching with Saudis.

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