

Knowledge Management and the performance of the universities in UAE: Theoretical perspective

Khalid Buafra

Department of Technology Management, Faculty of Technology Management & Business,
Universiti Tun Hussein Onn Malaysia, 86400 Batu Pahat, Johor, Malaysia

hp160125@siswa.uthm.edu.my

Shahrul Salahudin

Department of Technology Management, Faculty of Technology Management & Business,
Universiti Tun Hussein Onn Malaysia, 86400 Batu Pahat, Johor, Malaysia

[Corresponding Author: shahrulns@uthm.edu.my](mailto:shahrulns@uthm.edu.my)

Nagwan Alqershi

Department of Technology Management, Faculty of Technology Management & Business,
Universiti Tun Hussein Onn Malaysia, 86400 Batu Pahat, Johor, Malaysia

Abstract

Despite their role in knowledge formation, growth and communication, knowledge management (KM) is not well understood in institutions of higher education (HEIs). There is a comparatively limited lack of theory and analysis to educate universities and those in advanced education in and outside its operational sense. information is established, cultivated and communicated. For their administrators, academicians and teachers, this has significant consequences. The KM thesis on HEIs encourages researchers and experts to recognise crucial success drivers for sound KM in (and likely beyond) academia. The aim of this research is to identify the impact of Critical Influential Factors of Knowledge Management and Innovation Management on UAE Universities Performance. The findings are expected to show that proper implementation of KM practices and initiatives in UAE stems from a complex interplay of factors and behaviours related to the knowledge environment. The expected implication of this research, it could enhance the knowledge management innovation factors towards UAE public universities performance.

Keywords

Knowledge Management, universities performance, UAE, Theoretical perspective

1. Introduction

Knowledge, not just the data or details and the use of knowledge are commonly recognised as important tools for constant growth and the key to sustained competitive advantage (Iqbal et al, 2019), particularly when circumstances are complicated and unpredictable [1,2]. It is undeniably important to learn how to address the importance of information of better corporate competence within the ever-changing environment of rising global competitiveness (Abubakar et al, 2019). There is no exaggeration to say what consumers know, how they use what they know and how soon they are to know something different provides an enduring market benefit in today's information intense climate (Bolisani et al, 2018). Knowledge management is one of the contemporary administrative concepts in which literature has grown in quantity and quality. The past years have witnessed a growing interest in the part of organizations towards adopting a concept of knowledge management (Mardani et al, 2018). Knowledge more

efficiently Engagement and dialogue between individuals and communities is also integrated with IT, and transnational leadership must be invested by organisations that embody leadership and organisational culture, the arrangement of organisations (Iqbal et al, 2019). These organizations have participated in laying the foundations for knowledge management, with much emphasis given to the technological, social and organizational aspects (Santoro et al, 2018).

Knowledge management is becoming increasingly important in light of the major challenges that organizations faces. This is reinforced by the ever-increasing importance of cognitive objectives that focus on knowledge management, and therefore, leading to enhanced productivity, efficiency and effectiveness in any organization (Abubakar et al, 2019). In order to achieve the desired benefit of adopting the knowledge management approach in organizations, the role of the organization's management should focus on the effective use of this approach and employing it towards attaining the strategic goals and operational objectives of the organizations, thus, enhancing the organization's various capabilities and skills towards achieving development, improvement and sustainability of its' capacities and skills (Di Vaio et al, 2021). The management of the organization should focus on directing knowledge management processes towards institutionalization. Emphasis should be placed on the implementation of a knowledge strategy that ensures that knowledge management operations across all units are effectively integrated (Yemini et al, 2019). In recent decades knowledge management (KM) has proven itself to be a modern discipline that attracts a growing research population worldwide and not a fashionable research phenomenon. A new and influential methodology in the management science has been considered. KM is a new source of sustainable competitive advantage which redefines business strategies for organisations all over the world. Research demonstrates that KM is a history and the base for organisational creativity (Di Vaio et al, 2021). Established literature notes that KM systems, including development, procurement, distribution, usage (Yemini et al, 2019), include supervisory, management, policies, correspondence, knowledge security, strategy KM, knowledge-based learning, recruiting, performance evaluations, rewards, learning system, information technology, etc. practise (Mardani et al, 2018).

Wang and Chan 2013 have creative consequences, on the other hand, for knowledge-based assets such as man, institutional and relational capital. However, there are only a few empirical studies based on the relationship between KM and innovation in academic circles, especially in institutions of higher education. This research wants to provide objective proof of how KM drives creativity in UAE public universities to address this void in current literature. The objective of this study is to enhance the awareness of HEIs in terms of improving their operational innovation through KM activities. Further, the research adds to the literature on KM and innovation management by explore the influence of KM on UAE HEI innovation. The research presents the theoretical principles of KM and creativity, and examines empirically the correlation with 2 innovation components, including administrative and technological development, with three KM components, including information accumulation, knowledge dissemination and the usage of knowledge. The collection of data obtained by a standardised survey was performed by the three main public universities in UAE areas, SPSS 22.0 and AMOS 23.0.

2. Literature review

The prominence of the notion of competitiveness has increased rapidly and globally in recent years, which is surrounded by issues that made it empirically and theoretically complex (Schniederjans et al, 2020). The competition among nations ranges from political to the economics of production of industries within countries. Institutions are seen as the drivers of increasing competitiveness of countries, if they are strong, the countries stand out of many within continents and regions of the world (Oktari et al, 2010). Middle Eastern countries competitiveness is vested in their advantage of availability of natural resources, specifically oil (Pisarevskaya et al, 2020). The need to focus on regions, nations and to reflect those entities that compete to attract investments and knowledge transfer is overwhelming.

"World Competitiveness Index of Regions (WCIR) showcases those regions and countries that are more competitive than others. According to the WCIR (2014) report indicated that some among the 20 top emergent competitive regions include; San Jose-Sunnyvale-Santa Clara, CA USA; Bruxelles-Capitale, Belgium; Tokyo, Japan down to Singapore and Nenets Autonomous Okrug, Russia. These regions index using a mean average of 100 is 359.98, 328.50, 307.02, 287.91 and 250.93 respectively. Unfortunately, none of the countries or regions from the Middle Eastern nations appeared in the first 20 nations on the index. However, among the most competitive Middle Eastern regions are shown on Table 1.

Table 1: Top 10 Most competitive Middle Eastern Regions

Middle East Rank	Region	Nation	WCIR score	WCIR rank
1	Israel	Israel	168.75	111
2	Qatar	Qatar	142.33	181
3	Kuwait	Kuwait	114.95	244
4	Abu Dhabi	UAE	66.44	320
5	Al-Riyadh	Saudi Arabia	65.43	327
6	Eastern Region	Saudi Arabia	58.95	335
7	Istanbul	Turkey	55.48	347
8	Al-Qaseem	Saudi Arabia	55.40	349
9	East Marmara	Turkey	52.22	358
10	Dubai	UAE	50.40	363

Source: WCIR (2014)

On the table are two regions from the UAE – Abu Dhabi and Dubai in the most competitive regions in the Middle East, whom were ranked 320 in the global ranking. This is a clear indication that competitiveness has come to stay in the UAE, hence the need to study such competitiveness in the universities in the country. The basis to which the competitiveness is been measured according WCIR, were stocks or investments in knowledge, innovative capacity, ICT infrastructure, financial capital, and so on, to mention a few.

At the international arena, success in these bases of competitiveness equates to a wanton race, necessitating stable and enduring effort. As the recent economic crisis has revealed, with a lot of plain clarity, no country can afford to rest on its successes. According to Lingam et al (2019) the biggest competitiveness challenge and opportunity in the UAE is to create further synergies between the revenues created by oil and the emerging innovation-driven sectors of the economy. This would serve as a means of increasing the size of the domestic private sector market.

In an increasingly competitive world as explained above, the importance of building an information system that supports the process of growth and development is paramount. This system is a pillar for ensuring the continuity of institutional efforts aimed at sharing ideas and knowledge among the members of the institution or between the institution and its counterparts abroad. This preserves the competitiveness of the institution. One of the greatest challenges that face the institution today is its ability to adapt to changes resulting from a combination of environmental, technological, economic and market forces.

If many countries of the world have undergone the transformations imposed by the age of knowledge and knowledge societies, which have had repercussions on the city as an urban entity, the Arab city is facing great challenges, which is a cumulative lack of knowledge, which has become increasingly acute with the spread of modern communications and information technologies such as the Internet .It is now believed that knowledge is qualified to be the main source of wealth in the world, and this application is not only for companies and individuals but for communities and nations. Just as individuals and organizations struggle to compete in the global economy today, more than the same advanced technology is needed where there must also be in support of national and community structures to help them manage the continued and sustained demand for new knowledge. This knowledge - asset-intensive includes value, creating business networks, community applications, advisory committees and finally training and education resources.

There is a growing realization that a successful technological flow in support of technology transfer ensures continuity of the competitive advantage of an enterprise relying on the capacity that generates knowledge and is categorized and shared within the organization. The existence of a culture of cooperation is a prerequisite or prerequisite for the transfer of knowledge between individuals and groups. Without the appropriate mechanism to encourage such cooperation as well as technological and structural interventions to facilitate the transfer of knowledge, knowledge transfer may not be successful. As knowledge becomes increasingly important, the need to view and manage knowledge as an independent field needs to be addressed with a clear scientific methodology and

the perception of knowledge - though often intangible - has become increasingly important as a strategic principle (Lingam et al, 2019)

The interest in knowledge as a strategic factor of value - in increasing the competitive advantage of the organizations – has been augmented by the explosion of knowledge that accompanied globalization with its technological, economic, social, political and civilization powerful impacts and the rapid changes in these impacts, beside the decrease in the number of workers in companies, the increase in the number of organizations, the geographical expansion accompanying the globalization of markets and the emergence of organizational structures that accompanied the emergence of organization networks and the emergence of knowledge-intensive commodities and services as well as the revolution in information technology and communications[4].

1. knowledge management principles

Knowledge as a critical and effective aspect of a durable competitive advantage is generally accepted. In several areas around the world, including Saudi Arabia and Australia, proper implementation of KM has been observed [1,4]. During the last decades, organisations have attempted to exploit their information capital in a competitive yet challenging and unpredictable contemporary world in complete and in good time. This lead to the invention of a new definition named KM. Since late 20th century, researchers and managers have become increasingly involved in the growth oorganisational information (CP) (Nonaka, Von Krogh & Voelpel 2006; Omerzel, Biloslavo & Trnavcevic 2011; Wing Chu 2016; Yeh, YMC 2017). Studies with the words KM in the title only started, according to Wilson (2002), until 1997, when the definition of KM was developed in the mid 80's.

2. Knowledge Management Stages

Knowledge management is a continuous and interactive process that takes place through several stages of acquisition, creation, storage, transfer and application of knowledge. Knowledge Acquisition: knowledge is acquired from different sources (experts, specialists, competitors, clients, databases, or through the organization's archive) using reference, conference and workshop attendance, expert use, periodicals, publications, e-mail, individual learning. (Ali, 2014). Figure 1 presents knowledge management stages.

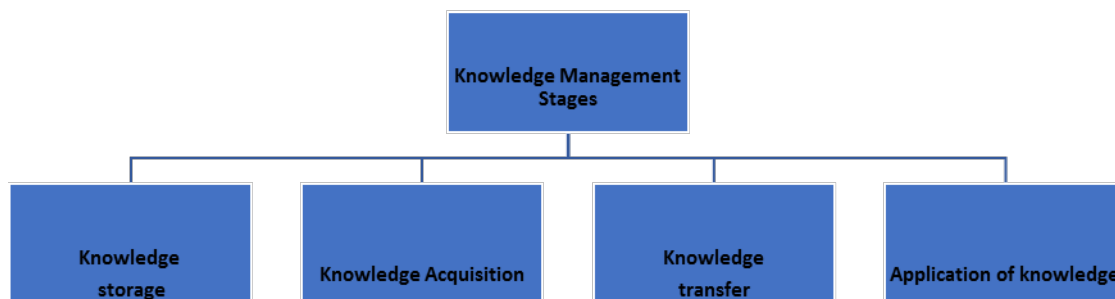


Figure 1: knowledge management stages

Accordingly, it must be borne in mind that learning or acquiring knowledge in organizations is not always intentional. Knowledge is obtained by accident and useful and important to the organization. It is up to the Organization to recognize the importance of this knowledge, then to store and retrieve it best. On the other hand, the process of acquiring knowledge varies from organization to organization. Each organization acquires knowledge and understanding in its own way. Thus, knowledge stored in the organization is influenced by the organization's own culture (Abubakar et al, 2019). Knowledge storage: After the acquisition of knowledge, are stored through several methods of the most important. Every person in the organization to record everything that happens to him and any new information in a particular place, whether in ordinary files or in the computer network, so that they are available to all members of the organization, if they want to see them. The responsible person to collect information and store it accurately and in a way that is easy to use by all, without interest in the analysis and purification of knowledge or dissemination and circulation in an effective manner (Mardani et al, 2018). All individuals present their knowledge to a particular person or department. This agency analyzes and purifies this knowledge, then stores it in the best and most accurate form, so that it can be circulated by the organization in a convenient and easy way. Collecting knowledge in a systematic and positive manner, analyzed and refined, then arranged, coordinated and segmented, to be stored in the best image, taking into account that they are easily traded, published and extracted accurately and conveniently by the members of the organization

(Yemini et al, 2019). Knowledge transfer: Knowledge transfer is the third link in knowledge management workshops and is dependent on the existence of formal and informal mechanisms and methods. The official methods are: reports, letters, correspondence, internal conferences and symposia of the organization, periodic reviews of the organization's position, internal publications, video and audio conversations, training and learning through the direct president. Informal methods include: changing the function within or outside the organization, working together, and teams (Schneiderjans et al, 2020). A range of factors affect the transfer of knowledge in organizations such as cost, especially when purchasing devices or using technology or holding conferences and seminars. Knowledge transfer is also affected by the possibility of changing content, especially in the hierarchical structure.

3. Conceptual model

Similarly, studies have identified the identify the impact of knowledge management practices on organizational performance. Previous studies identified the impact of knowledge management practices e.g. Knowledge acquisition, knowledge conversion, knowledge application and knowledge protection on organizational performance. the study revealed that knowledge management activities i.e. knowledge acquisition, knowledge conversion, knowledge application and knowledge protection result in provision of quality services to customers, high customer satisfaction, efficiency in resource utilization, more profits and overall improved organizational performance. For practitioner's implication of the research is that it will provide a guide to implement knowledge management activities within the organization for organizational performance improvement as shown in Figure 2. Also, the findings demonstrate that information knowledge management exercises improve the performance of an organization. So, if businesses need to enhance their performance they ought to improve information administration exercises inside of the association which will bring about upgrade of development capacity of a firm and in addition performance. Without information administration associations are continually rethinking the wheel while learning administration guarantees that associations influence their current learning resources for be imaginative and market pioneer.

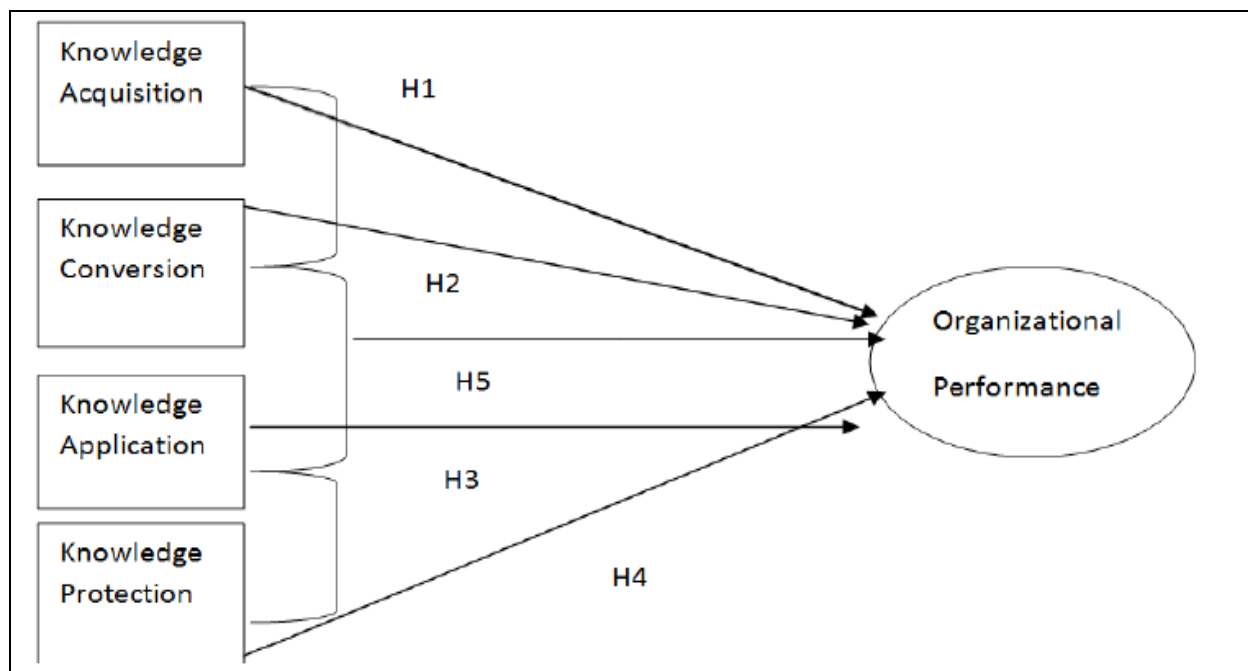


Figure 2: research model

"From another perspective, the research framework is based on "factor analysis" and is concentrated on the extraction and the identification of critical factors affecting the adoption of KM and its influence on innovation performance. With factor analysis, future and further studies can take place in using the data, first to identify the separate factors of the structure, and then to determine the extent to which each variable is explained by each factor. Once these factors and the explanation of each variable are determined, a correlation analysis can be run in order to

measure the relation between the two main determinants of the research: Knowledge Management and Innovation Performance. The goal is to find if and in which magnitude the CSF of KM are related to Innovation Performance. Finally, this article makes a contribution in providing a single CSF Model that can be considered for the companies when implementing KM. The importance in understanding how organizations create new knowledge and the way this knowledge is managed is also quite important. A more fundamental need is to understand how knowledge enhances innovation in the organizations. This On this basis, several hypotheses are formulated in order to validate the CSF model proposed in this research. Figure 3 shows the conceptual research model.

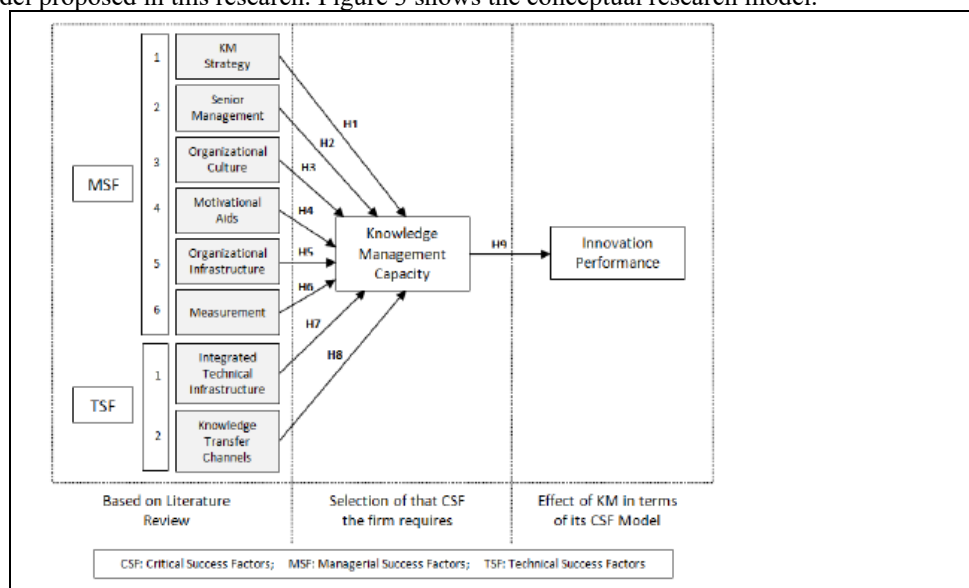


Figure 3: research model

"The study made attempt to appraise relevant empirical studies that had found these factors to have a causal effect of Knowledge Management and Innovation on organization performance. The framework formulated in this study believed that any government programme geared towards eradicating Knowledge Management and Innovation in educational institutions.

4. Adopted conceptual frameworks in this study

"As a matter of fact, the literature reviewed indicated that there is no definite or suitable conceptual framework for evaluating the factors that influence of Knowledge Management and Innovation on organization performance. Nevertheless, as this study moves toward realism, use of the logical framework is imperative. Such a framework needs to show the effects of influential factors related to of Knowledge Management and Innovation on organization performance variables. As there was no exact model in the literature the evaluated integrated of Knowledge Management and Innovation on organization performance in educational institution in particular. Development of this study conceptual framework requires conceptualising the model. To address this need, a conceptual framework was developed (Figure 4) based on the of dimension of the Knowledge Management and Innovation on organization performance. This is adopted because the study utilises a realistic approach, which is objective-oriented. The use of realistic evaluation was necessary as the conceptual framework is based on logical reasoning and its influence on organization performance.

Hence, the reason for adopting a conceptual framework for this research firstly, to have a clear focus to this study based on previous research theories and frameworks conducted on educational institutions and its influence on its performance. Secondly, to provide a medium of comparison and measurement of this research findings, reliability and validity, to justify their relevance in relation to previously developed theories for further development. Thirdly, to provide a means for prediction of possible future performance of the organization in the area of universities of UAE. Fourthly, to comprehensively set up the relationship between the influential factors related to of Knowledge Management and Innovation on organization performance. Fifthly, to organize generally available knowledge on factors that influence Universities performance. Sixthly, to serve as a compass that provides a systematic view of different variables in education sector toward Universities performance. Finally, to develop a prevailing approach that to enhancing the of Knowledge Management and Innovation on UAE universities. A conceptual framework is the researchers 'perceived flow of relationship among the postulated study variables

depicted on a diagram. The conceptual framework is a deduction made from the research theoretical framework and reviewed literature on the subject matter under investigation. It is a clear explanation on the linkages and relationship that shows the hypothesis postulated for readers understanding without being bordered to read through the whole document. A conceptual framework is a summary of how the variables of the study are connected to each other.

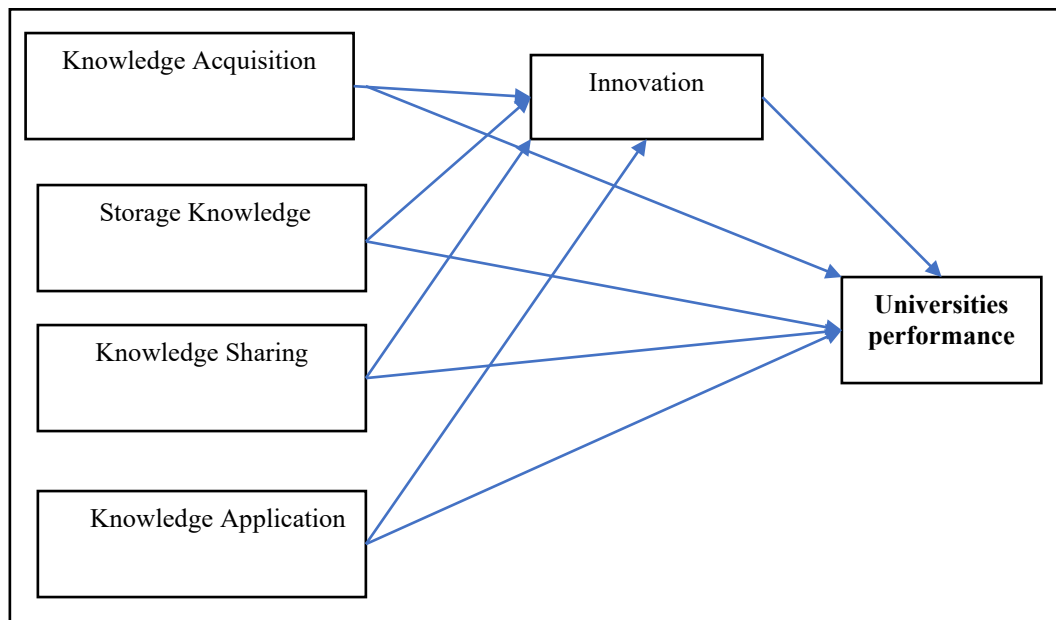


Figure 4: Research Framework

Having a suitable KM that help address business problems automatically creates innovative products or services that would enhance customer relationships, in the end lead to organizational growth .KM practices are said to play intermediary role towards OI. To improve the relationship between ability to retrieve and use knowledge (knowledge inertia), is argued that Organizational Learning (OL) and OI would play a role in improving problem-solving capabilities, depending on the type of organization stated that humanist approach to KM significantly and positively influence innovation performance when compared to IT-focused KM approach.

Chaston (2012) held that KM influence open innovation practices in government institutions by enhancing the way they work and relates to partners. The regular effect of KM was found to have enhanced organization's ability to produce and improve competitive, efficient, and effective products or services continuously. KM practices are established to boost the ongoing interaction of individuals and groups in creating, capturing and sharing knowledge while turning it into new services and profitable products. Currently, innovation management emerges as feasible concepts that would lead to organizational competitiveness through better performance by improving cultural creativity .This means that, with appropriate cultural communication knowledge transfer can be facilitated to broaden organizational learning that would lead to organization innovation. KM is seen as way of building capacity of the organization for the compilation of experiences, connecting patterns of yesterday, today and tomorrow, this enhances the ability of the organization to speed up creative processes to generate OI. Some cultural practices like interpersonal trust, communication between staff, information systems availability, coordination, adaptability, responsiveness, organization structure and rewards are found to have positive effect on KM and OI. The effect of KM results are positive, hence it triggers OI, from maximization of utilized resources, creating better government capacity to delivering value added services which eventually inspires more open culture that increases good governance. If this happen then improving the image of the government institutions can be an achievable task and this would raise the pride of civil servants, possibly leading to a culture of continuous improvement.

As shown on the above diagram, the independent variables are knowledge management, edge Storage knowledge, and knowledge sharing and knowledge application. While there are two mediating variables in this study, innovation and another mediating are learning. Dependent variable of this study is competitiveness which can be measure by level of qualification of the providers of educational services, Teaching-methodological and

innovations, Scientific Research, Financial and economic, speed of response to changes in customer demand and reputation. In the diagram also, the lines linking the variables shows the five main hypotheses of the study. Below are the hypotheses postulated in this study.

H1: There is a substantial and direct effect between Knowledge Acquisition and Innovation and Learning. ""

H2: There is a substantial and direct effect between StorageKnowledge and Innovation and Learning.

H3: There is a substantial and direct effect between Knowledge Sharing and Innovation and Learning.

H4: There is a substantial and direct effect between Knowledge Application and Innovation and Learning.

H5: There is a substantial and direct effect between Knowledge Application and Innovation and Learning

H6: There is a substantial and direct effect between Knowledge Acquisition and Universities performance

H7: There is a substantial and direct effect between StorageKnowledge and Universities performance

H8: There is a substantial and direct effect between Knowledge Sharing and Universities performance

H9: There is a substantial and direct effect between Knowledge Application and Universities performance

H10: There is a substantial and direct effect between Knowledge Application and Universities performance

H11: There is a substantial and direct effect between Innovation and Learning and Universities performance

5. Conclusion

In the higher education institutions, knowledge management (KM) is not well understood despite its position in knowledge creation, development and communication (HEIs). The philosophy and study of the curriculum of universities and others in advanced education in and without the operational context is comparatively limited. It defines, produces and communicates knowledge. Information. This has crucial implications for their managers, students and instructors. The KM thesis on HEIs helps researchers and specialists to consider key factors of sound KM performance in (and potentially beyond) academia. The objective of this research is to identify the impact on UAE University Performance of critical influential knowledge and innovative management factors. The results are expected to demonstrate that a complex interplay of the factors and behaviours related to the knowledge environment results in the proper implementation of KM practises and initiatives in the UAE. The expected impact on the performance of the public universities of the UAE could increase the factors of knowledge management innovation.

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Biographies

KHALID BUAFRA: is an Administrative Manager in the Ministry of Defense in UAE. He earned his MBA in Business Administration from Institution of Technology Management University and his BBA in Business Administration from University of Modern Science. He has work experience around 14 years in government sector.

Shahrul Salahudin: lecturer in department of technology management and business Universiti Tun Hussein Onn Malaysia.

Nagwan Alqershi: lecturer in department of technology management and business Universiti Tun Hussein Onn Malaysia