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Knowledge Management Practices at the King Abdulaziz University to Achieve Sustainable Competitive Advantages in Light of the Modern University System & Saudi Arabia's Vision 2030

Fahad Mastoor Abdul Hadi Al-Olayani¹, Ibrahiem M.M. El Emary¹, Othman Musa Aqili¹

¹ Department of Information Science, King Abdulaziz University, Jeddah, SAUDI ARABIA. *Corresponding Author (Email: bafares@hotmail.com).

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Abstract

King Abdulaziz University is considered one of the local universities in Saudi Arabia, oriented towards development and creativity. university also seeks to achieve a set of goals, such as are to contribute to achieving the vision of Saudi Arabia 2030 and work on competitiveness with international universities. This study aimed at identifying the actual role of knowledge management practices at King Abdulaziz University in achieving a sustainable competitive advantage in light of the modern university system and the 2030 vision in Saudi Arabia. The researcher used the descriptive quantitative and qualitative approach and the questionnaire as the study tool. The study sample consisted of 726 members of the faculty and the administrative body at the university. In its results, the study reached the approval of the study sample individuals on the obstacles hindering developing knowledge management practices at King Abdulaziz University with a high degree. Moreover, the study sample individuals approved the requirements for developing knowledge management practices at King Abdulaziz University with a very high degree.

Disciplinary: Education Technology (Information Technology in Education), Higher Education & Educational Administration (Education for Sustainable Development).

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1 Introduction

In light of the rapid developments that the world is undergoing nowadays, most countries have tended to pay attention to the development of higher education, as it is the tributary that supplies society with its need for a trained workforce capable of homeland building and development.

The knowledge management approach is the most prominent approach used in developing the performance of organizations. Akter & Banik (2019) refer to knowledge management as a set of plans and strategies that help facilitate the creation, sharing, and application of knowledge to achieve institutional goals.

The importance of implementing the components of knowledge management in Saudi Arabia's universities has become evident due to its role in the improvement of efficiency and effectiveness in their university units, support of their research centers, and facilitating channels of obtaining knowledge through their electronic portals. This can be achieved by developing the elements of knowledge management appropriate to the future of Saudi Arabia's universities through its academic and research mission (Al-Harthi, 2012)

In fact, knowledge management leads to the development of the institution, its individualization, and distinction from other similar institutions, which gives it a sustainable competitive advantage. Nasr (2018) indicated that knowledge management is a major tool for managing the new century, with its processes that include possessing, transferring, and applying knowledge by individuals and institutions. This in its turn will lead to achieving sustainable competitive advantage for organizations. It has been evident that there is a link between knowledge management and sustainable competitive advantage.

Indeed, the sustainable competitive advantage is to maintain good standing and rankings among universities, build good relationships with multiple sectors, participate in university competitions, obtain accreditation from high standing institutions, preserve the university's name, develop curricula geared towards meeting the needs of the labor market, manage risks, appoint experienced and highly qualified faculty members, and enhanced university research productivity (De Silva & Chitraranjan, 2018).

In light of the global tendencies towards giving universities a competitive advantage, Saudi Arabia sought to issue a regulation of the modern universities system to improve universities' performance and give them a prominent position among international universities and a great competitive advantage. In this regard, the Ministry of Education (2019) indicates that Saudi Arabia has issued a regulation of the modern university system to organize higher education affairs and to enhance its scientific, research, and societal standing at the local, regional and international levels. This will result in improving the ranking of educational institutions and making 5 Saudi Arabia's universities among the top 200 global universities by the year 2030. Hence emerged the importance of building a proposed vision for developing knowledge management practices in King Abdulaziz

University (KAU) to achieve a sustainable competitive advantage in light of the modern university system and Saudi Arabia Vision 2030.

The study questions are focused on answering the following main question: What is the actual status of the roles, obstacles, requirements, and proposed vision of knowledge management practices in King Abdulaziz University in achieving sustainable competitive advantage in light of the modern university system and the 2030 vision in Saudi Arabia?

The theoretical importance of this study addresses the application of the knowledge management approach in light of its extreme importance in developing the performance of KAU. This study gains its importance from its discussion of the sustainable competitive advantage of King Abdulaziz University because of its great importance in developing the university outcomes.

This study is important as it provides a proposed vision for developing knowledge management practices at KAU to achieve a sustainable competitive advantage in light of modern Saudi Arabia's university system and Saudi Arabia's 2030 vision. This study's results and recommendations can be used in developing the employees' performance at King Abdulaziz University to achieve a competitive advantage. The results can be used to draw the attention of KAU and other leaders of Saudi Arabia's universities to the importance of achieving the requirements and addressing the obstacles to developing knowledge management practice in universities to achieve a competitive advantage.

2 Literature Review

Al-Jedaibi's (2020) study requirements for the application of knowledge management in higher education institutions in Saudi Arabia and its relationship to promoting sustainable development in Saudi Arabia according to Vision 2030. The researcher used the descriptive and analytical approach. The study concluded that the requirements for promoting sustainable development in Saudi Arabia in accordance with 2030 Vision got a high response degree and that there are no statistically significant differences regarding the requirements for promoting sustainable development due to the gender variable.

Tan & Gregar (2018) studied the effects of knowledge management on innovation in higher education institutions based on empirical evidence aimed to uncover the effects of knowledge management on innovation in universities in Vietnam. The study used the exploratory survey approach. It found that there is a significant direct impact of knowledge management on technical innovation in the academic environment.

Ghanbari & Dastranj's (2017) examined the effects of knowledge management on the performance of employees at Bandar Abbas Bayami Nur University in Iran. The study used the descriptive survey approach. It found a fruitful relationship between knowledge management and the performance of university employees.

Ali (2017) identified both the most important objectives of knowledge management and the most important causes of the decline in knowledge management. The researcher used the documentary approach. The study concluded that the most important objectives of knowledge

management are confirming the principle and concept of knowledge culture, simplifying operations and reducing costs, and creating an interactive environment for the collection, documentation, and transfer of accumulated experiences.

Kising'u et al. (2016) evaluated the roles of institutional innovation in the sustainable competitive advantage of universities in Kenya. It used the quantitative survey approach. The study found that institutional innovation including organizational and product innovation, management, and academic methods play a vital role in the sustainable competitive advantage in Kenyan universities.

Al-Harthi's (2012) used a field study to identify the level of practice of knowledge management processes in Saudi Arabia's universities from the point of view of the faculty members. The researcher used the descriptive approach as a method of study and used the questionnaire as a study tool. The study reached many results, the most important of which are:

- I. The level of practicing knowledge management processes in Saudi Arabia's universities came with a low response degree.
- II. Enabling the leaders of Saudi Arabia"s universities to build flexible university administrative models and structures that are consistent with modern administrative concepts, and the application of modern administrative models in Saudi universities.

The Similarities between this study and the previous studies:

- Some previous studies agreed with this study in the aim of knowledge management roles such as Al-Jedaibi (2020), Ali (2017), Ngoc & Gregar, (2018), Ghanbari & Dastranj (2017).
- Some previous studies agreed with this study in the aim of the competitive advantage such as Kising'u et al. (2016).
- Some previous studies agreed with this study in the study methodology which is the quantitative approach such as Kising'u et al. (2016).

The differences between this study and previous studies:

- Some previous studies differed from this study in the used methodology such as Al-Jedaibi (2020), Ghanbari and Dastranj (2017) used the descriptive method and Ali (2017) used the documentary approach.

The researchers benefited from previous studies in presenting the theoretical framework and in the references used and in supporting the theoretical framework with the results of studies and research on a proposed vision for developing knowledge management practices at KAU to achieve a sustainable competitive advantage in light of the modern university system and the vision of the Saudi Arabia 2030, and in choosing the study method and building the study tool. In addition, this study made its recommendations and proposals based on the results of the previous studies.

This study is distinguished from the previous studies as it is the only study to the best of the researchers' knowledge that dealt with a proposed vision for developing knowledge management practices in KAU to achieve a sustainable competitive advantage in light of the modern university system and the vision of Saudi Arabia 2030.

3 Methodology

This study is based on the use of both a quantitative and qualitative descriptive approach. These approaches depend on describing, analyzing, and interpreting the phenomenon under study. The quantitative side stands on analyzing the phenomenon and presenting it in a quantitative statistical form while the qualitative aspect analyzes it qualitatively.

This study community is represented by all employees at KAU in Jeddah from the academic and administrative staff numbering 17923 personnel. The study sample consisted of 726 members of the academic and administrative staff at King Abdulaziz University in Jeddah.

The study tool relied on a questionnaire to collect data from the study sample. It consisted of 5 axes, with a total of 60 statements. Frequencies, percentages, arithmetic averages, SD, and Cronbach-alpha reliability coefficient were used as statistical methods.

4 Results and Discussion

4.1 The First Axis: Roles of Knowledge Management Practices in KAU in Achieving a Sustainable Competitive Advantage in Light of the Modern University System and the Saudi Arabia's Vision 2030

Table1: The arithmetic average and standard deviation of the study sample responses about the role of knowledge management practices in King Abdulaziz University in achieving a sustainable competitive advantage in light of the modern university system and the vision of Saudi Arabia 2030:

#	Statement	Arithmetic average	Approval degree	SD	Ranking order
1	Knowledge management processes contribute to the speed at which problems are addressed.	4.14	high	0.7334	14
2	The knowledge generation process creates an environment that is conducive to learning and development.	4.29	Very high	0.7126	6
3	Interest in knowledge helps provide individuals with patterns of behavior that support competitiveness.	4.36	Very high	0.6380	10
4	Knowledge organization saves time spent searching for knowledge.	4.52	Very high	0.5767	1
5	Knowledge transfer helps improve communication processes within the university.	4.46	Very high	0.6974	4
6	Knowledge management processes participate in reducing the risk of losing valuable information to the university.	4.47	Very high	0.6509	3
7	Knowledge management processes help in developing the university's administrative processes.	4.43	Very high	0.6643	5
8	The possession of knowledge enhances the university's ability to influence the national economy.	4.40	Very high	0.8055	7
9	Knowledge management processes are in line with the goals of the Kingdom's Vision 2030.	4.26	Very high	0.7522	13
10	The application of knowledge enhances in linking the university with the requirements of the labor market.	4.37	Very high	0.7736	9
11	Knowledge management processes improve the quality of services provided to beneficiaries.	4.51	Very high	0.6339	2
12	Knowledge management processes participate in creating distinct partnerships with productive institutions in the country	4.36	Very high	0.6996	12
13	The knowledge application process helps in finding new and innovative sources of financing.	4.36	Very high	0.7747	11
14	Knowledge management processes create incomes that contribute to preserving distinguished human elements.	4.38	Very high	0.7695	8
	Total	4.38	Very high	0.70587	

The results in Table 1 indicated that the roles of knowledge management practices in King Abdulaziz University in achieving a sustainable competitive advantage in light of the modern university system and the vision of Saudi Arabia 2030 came with a degree of approval equal very high. This confirms that knowledge management practices have a clear role in achieving a sustainable competitive advantage due to the assistance it provides to the university in dealing with the problems it faces, in addition to encouraging learning and development and providing employees with behavioral patterns that support competitiveness and meet the requirements of the labor market.

On the other hand, the results of this axis are consistent with the results of the Bin Khalifa & Ali (2017) study which emphasized the role of knowledge management processes (knowledge diagnosis, knowledge acquisition, knowledge generation, knowledge storage, knowledge sharing, and knowledge application) in creating competitive advantage. It is also partly consistent with the results of the study of Ngoc-Tan & Gregar (2018) which emphasized the roles of knowledge management in achieving innovation contributing to enhancing competitive advantage, and the study of Ghanbari & Dastranj (2017) highlighted that knowledge management contributes to employees' performance improvement.

The most ranked practices that contribute to achieving a sustainable competitive advantage in light of the modern university system and the vision of Saudi Arabia 2030 were a knowledge organization contributes to saving time in the search for knowledge and knowledge management processes improve the quality of services provided to beneficiaries. This may be because time and quality are among the most important factors that affect the achievement of competitive advantage. In fact, achieving competitive advantages mean a quick and even proactive response to the requirements and expectations of the beneficiaries, in addition to the fact that the quality of services factor is one of the most important components of achieving a competitive advantage.

4.2 The Third Axis: Obstacles to Developing Knowledge Management Practices at King Abdulaziz University to Achieve a Sustainable Competitive Advantage in Light of the Modern University System and the Vision of Saudi Arabia 2030

The results in Table 2 show that studying the sample individuals emphasized that obstacles to developing knowledge management practices at King Abdulaziz University to achieve a sustainable competitive advantage in light of the modern university system and the vision of Saudi Arabia 2030 are largely present. These obstacles are linked to weak incentives for workers to participate in knowledge management processes as well as some organizational challenges affecting knowledge management processes and the difficulty of disclosing or sharing some information at lower administrative levels.

Table2: The arithmetic average and standard deviation of the study sample responses about obstacles to developing knowledge management practices King Abdulaziz University to achieve a sustainable competitive advantage in light of the modern university system and the vision of Saudi Arabia 2030

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#	Statement	Arithmetic average	Approval degree	SD	Ranking order			
1	Weak incentives that encourage faculty members to participate in knowledge management processes.	4.099	high	0.9691	1			
2	Unavailability of dedicated organizational units to support knowledge management processes	4.021	high	0.9238	2			
3	The low level of cooperation between the leadership levels in the university in the field of knowledge exchange	3.868	high	0.9536	4			
4	Confidentiality of some information in a way that is difficult to disclose or share	3.837	high	0.8935	6			
5	Ignoring the culture that supports and participates in knowledge exchange processes between individuals	3.764	high	1.0704	10			
6	Lax culture of creativity among individuals at different administrative levels.	3.876	high	1.0150	5			
7	Slowness in the university ability to build a system of diverse partnerships that enhance its ability to manage and benefit from knowledge	3.799	high	1.0229	9			
8	Employees' fear of losing their managerial positions when transferring their expertise to their colleagues	3.820	high	1.2303	8			
9	The university knowledge management plan is unclear to the employees.	4.000	high	0.9910	3			
10	Existing organizational structures make it difficult to activate knowledge-sharing processes	3.837	high	1.0177	7			
Total		3.892	high	1.00872				

The most ranked hinders to developing knowledge management practices at King Abdulaziz University to achieve a sustainable competitive advantage in light of the modern university system and the vision of Saudi Arabia 2030 were weak incentives that encourage faculty members to participate in knowledge management processes, and the lack of dedicated organizational units to support Knowledge management processes. This may be because knowledge management processes are mainly related to the human resource represented by the faculty members as knowledge management efforts and benefits are based on them. It is necessary to provide incentives that encourage faculty members to bear this burden in addition to the necessity of the existence of an independent organizational unit responsible for knowledge management processes.

4.3 Discussing the Results of the Fourth Axis: Requirements for Developing Knowledge Management Practices in King Abdulaziz University to Achieve a Sustainable Competitive Advantage in light of the Modern University System and the Vision of Saudi Arabia 2030

The results in Table 3 show that the study sample individuals agreed on the requirements for developing knowledge management practices at King Abdulaziz University to achieve a sustainable competitive advantage in light of the modern university system and the vision of Saudi Arabia 2030 with a very high degree as these requirements for developing knowledge management practices are

the basic structure for achieving competitive advantage. This appears in the availability of requirements for the smooth exchange of knowledge and its availability promptly the availability of distinguished human elements capable of serving knowledge management processes and motivating workers to participate in knowledge management processes which in its turn enhances the university ability to achieve competitive advantage.

Table 3: The arithmetic average and standard deviation of the study sample responses about the requirements for developing knowledge management practices in King Abdulaziz University to achieve a sustainable competitive advantage in light of the modern university system and the vision of Saudi Arabia 2030

#	Statement	Arithmetic average	Approval degree	SD	Ranking order
1	Providing the right knowledge to the right individuals at the right time.	4.47	Very high	0.576	5
2	Attracting the best human resources capable of transferring knowledge and applying the best practices of their administrative operations.	4.48	Very high	0.696	4
3	Developing a system to motivate workers to create and spread knowledge at the university	4.48	Very high	0.662	3
4	Optimized and accelerated employment of information technology to facilitate the university knowledge-sharing process.	4.51	Very high	0.664	2
5	Supporting senior management for knowledge management processes.	4.56	Very high	0.613	1
6	Emphasizing the culture of creativity in the university.	4.41	Very high	0.719	11
7	Diversity of methods of communication between faculty members and staff on the one hand, and academic leaders on the other hand.	4.42	Very high	0.714	7
8	Achieving an appropriate degree of flexibility by adopting appropriate organizational structures	4.42	Very high	0.748	8
9	Adopting a culture that encourages teamwork and promotes the exchange of ideas.	4.42	Very high	0.744	9
10	Utilizing knowledge to diversify the university financial resources	4.41	Very high	0.684	10
11	Create independent units to support knowledge management processes	4.32	Very high	0.773	12
12	Setting clear targets to take advantage of knowledge management processes to achieve a sustainable competitive advantage for the university.	4.43	Very high	0.730	6
	Total	4.440	Very high	0.6934	

This result is consistent with the results of Al-Jedaibi (2020) study which emphasized namely the necessity of meeting the requirements for the application of knowledge management in higher education institutions in Saudi Arabia in accordance with the vision 2030, the strengthening of the role of administrative development units in Saudi universities and the need for Saudi higher education institutions to have an independent unit for knowledge management in all Areas.

The most ranked requirements for developing knowledge management practices in King Abdulaziz University to achieve a sustainable competitive advantage in light of the modern university system and the vision of Saudi Arabia 2030 were support of the top management of knowledge management processes and optimal and accelerated employment of information technology to facilitate the process of knowledge sharing at the university. This is because all development efforts must start with the conviction of senior management that provides adequate support and provides it with the necessary requirements for its success.

5 Conclusion

This study reached that knowledge management practices have a clear role in achieving a sustainable competitive advantage by assisting the university in addressing the problems it faces,

in addition to encouraging learning and development and providing employees with behavioral patterns that support competitiveness. Knowledge management practices contribute to saving time and effort spent on searching for knowledge, improving communication processes, protecting information available to the university, and developing administrative processes.

Knowledge management practices enhance the university's ability to contribute to achieving the vision of Saudi Arabia 2030 by contributing to the improvement of the national economy and meeting the requirements of the labor market. The most important obstacles to the development of knowledge management practices at King Abdulaziz University are represented in the weak incentives offered to faculty members to participate in knowledge management processes, in addition to the lack of organizational units dedicated to supporting knowledge management processes. Many requirements must be met to develop knowledge management practices at King Abdulaziz University. These requirements are namely the smooth exchange of knowledge and its availability promptly, the availability of distinguished human elements capable of serving knowledge management processes, motivating workers to participate in knowledge management processes, the employment of modern technologies, the availability of organizational flexibility, the improvement of utilization of the financial resources of the university, and the existence of an appropriate organizational structure that allocates an independent organizational unit for knowledge management operations. Accurately identifying knowledge needs and working to generate a knowledge capital that serves the needs of the university, in addition to spreading the culture of knowledge at the university.

In light of the results obtained, this study recommends the following:

- Focus on the national goals that the vision of Saudi Arabia 2030 focused on in directing the efforts of knowledge management and achieving competitive advantage.
- II. Attention to developing the capabilities of human resources working at King Abdulaziz University through continuous training programs, with an emphasis on encouraging a culture of self-learning.
- III. Re-developing the incentives, wages, and evaluation system by linking these systems with the efforts of employees in knowledge management and presenting innovations and effective proposals.
- IV. Spreading the culture of the team and cooperative work and focusing on the multidisciplinary work team pattern, which contributes to the exchange of knowledge among employees.
- V. Working continuously to develop the university's organizational structure in line with the rapid changes that affect the functions and roles of the university.
- VI. Openness to international experiences, especially advanced universities that achieve good achievements in the investment of knowledge.
- VII.Paying attention to empowering employees and delegating authorities, which contributes to the transfer of field experiences to university employees, to prepare them for their future tasks.

6 Availability of Data and Material

All information is included in this study.

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Fahad M. Alolayani is a Ph.D. researcher in Knowledge Management at King Abdulaziz University, Jeddah, Saudi Arabia. His research focuses on the Roles of Knowledge Management in Achieving Digital Transformation at King Abdulaziz University.



Professor Dr.Ibrahim M. M. El Emary is a Professor at the Department of Computer Science and Systems, King Abdulaziz University, Jeddah, Saudi Arabia. His research encompasses Computer Networks, Artificial Intelligent, Expert Systems, Software Agents, Information Retrieval, E-learning, Case-Based Reasoning, Image Processing and Pattern Recognition and Robotic engineering, as well as Wireless Sensor Networks in the viewpoint of Enhancing its Algorithms of Congestion Control and Routing Protocols. He gets the prize of Who's Who for seven successive years (2013-2020). **Scopus ID**: https://www.scopus.com/authid/detail.uri?authorId=15135499400 **Google Sc. ID**: https://scholar.google.com/citations?user=gRtiJZgAAAAJ&hl=en



Dr.Othman Mousa Aqili is an Associate Professor and Head of the Department of Information Science, Faculty of Arts and Humanities, King Abdulaziz University. He got a Ph.D. in Knowledge Management. He is co-authored the book titled Knowledge Sharing (Theories and Practices) as well as different articles in Information Sciences and supervises many Master and Doctoral theses in the specialization.

Email: Alageeli @ hotmail.com