THE INFLUENCE OF KNOWLEDGE MANAGEMENT ON INCREASING INNOVATION AND COMPETITIVE ADVANTAGE IN THE PRIVATE UNIVERSITY SECTOR IN KUWAIT

Abstract

The main aim of current study is to examine the influence of knowledge management KM (Knowledge Creation, Knowledge acquisition, Knowledge sharing, Knowledge storage, Knowledge dissemination, Knowledge utilization, Knowledge retention) in increasing innovation capability IC and competitive advantage CA within private universities sector in the state of Kuwait. The study launched its aim through the aid of resource-based view theory which states that non-tangible assists of an organization help in supporting its journey to competitiveness and innovation. Through depending on quantitative methodology, a questionnaire was distributed on a sample of (303) respondents from private universities sector in the state of Kuwait. SPSS was used to deal with primary data depending on multiple regression and Pearson correlation. Results indicated the acceptance of the fact that KM has the ability to increase innovative abilities and competitive advantage within private universities sector in the state of Kuwait. Influence of KM on innovation capability appeared to be higher with a variance of 94.9% compared to competitive advantage which was also influenced by KM with a variance of 92.3%. Results also indicated that there was a correlation between variables of KM and both variables of competitive advantage and innovation capability. The highest relationship was between Knowledge sharing and Innovation Capability; whereas the highest relationship was between Knowledge storage and Competitive Advantage. Study recommended organizations should focus more on training and development in the field of knowledge storing and retaining so employees can have more awareness of how to deal with knowledge through their daily tasks.

Keywords: knowledge management, Innovation Capabilities, Competitive Advantage

1. Introduction

Many previous studies such as Azeem et al. (2021), Zhang and Lu (2020), and Hanaysha et al. (2022) indicated that the promotion of an organizational culture that encourages the sharing and exploitation of knowledge is a very positive thing at the level of the organization in terms of innovation and the acquisition of competitive advantages. Arias-Pérez et al. (2021) emphasized the same idea, pointing out that sharing knowledge, exploiting it, storing it, and employing it in an innovative and intelligent way helps motivate employees to utilize their experiences, knowledge, and skills for the benefit of the organization. Saunila (2020) endorsed it on the same idea, pointing out that the employee engagement and involvement in sharing, transferring, storing and organizing knowledge contributes to creating a culture of innovation based on learning and continuous improvement, which allows it to develop new products, services and processes that distinguish it from its competitors.

2. Literature Review

2.1. Knowledge Management (KM)

El-Emran et al. (2019) define knowledge management as management practices related to intangible organizational resources, which include experiences, talents, knowledge, and data that flow to the organization as a result of its continuous operations. Alavie and Leidner (2019) confirm that knowledge management practices have a significant impact on innovation and competitive advantage in the organization based on the idea that knowledge management is able to arrange and organize organizational knowledge and transform it into means that the organization can employ in order to make the appropriate decision.

What distinguishes knowledge management is its great ability to deal with organizational knowledge in terms of creating, organizing, retaining and using knowledge, that is, it tries to deal with the knowledge assets of the organization in order to create a source of innovation and a new competitive advantage (Aljumaili and Al-Zoubi, 2019; Al Duwailah & Hashem, 2019; Hashem,2023).

2.2. Dimensions of Knowledge Management

Knowledge Management (KM) is an organizational process that is based on the systematic creation, acquisition, sharing, storage, dissemination, utilization, and retention of knowledge and information within the organization (Andriessen, 2019). Bhatt and Kumar (2019), Chiaroni et al. (2019), Dalkir (2019), Gao and Li(2019), Ghosh and

Choudhary (2019) and Chong et al. (2019) argued that KM is based on a group of practices "dimensions" which an organization has to put into perspective when managing knowledge. Such dimensions are interrelated and comprehensive in their application and include:

Knowledge Creation: This dimension refers to the process of generating new knowledge and insights through research and experiment. Knowledge creation focuses on processing and analyzing information and data available in the organization in order to reach new theories and frameworks that would be of benefit when applied on organizational practices.

Knowledge acquisition: This dimension focuses on the process of attaining knowledge from different resources including the theoretical resources like books, articles, reports and experts. In addition to the practical knowledge which include previous practices from the organization, experiments of other organizations, and results of adopted decisions. Source of knowledge acquisition can vary and it involves analyzing and reporting, in addition to attending conferences, seminars and hold workshops for the sake of gaining more insights.

Knowledge sharing: It refers to the process of distributing knowledge among the organization and in between teams, employees and workers through gatherings and meetings. Knowledge sharing can be done through technological means including social media platforms and online conferences and seminars.

Knowledge storage: It is important to have a decent access to knowledge, and that is what knowledge storing does. It mainly organizes knowledge and information in a way that makes it accessible and attainable for the organization. Storing knowledge as KM dimension includes the use of databases, clouds, filing, and systems.

Knowledge dissemination: This dimension is somewhat close to knowledge sharing but it takes place on a larger scale. Knowledge dissemination is the process of sharing knowledge outside the walls of the organization and sharing it with other organizations, stakeholders, customers, partners and general public. This can be done through various means including marketing campaigns, ads, public speaking, websites and events.

Knowledge utilization: Utilizing knowledge means to make use of the knowledge attained, organized and stored. In addition to apply this knowledge on the daily operations and practices of the organization. This dimension can be applied in different forms including prototyping, or implementation.

Knowledge retention: Retaining knowledge in the process of maintaining information and knowledge that are available in the organization through the team members, management, and community. It is mainly retained for the sake of future usage through documentation, mentoring, and training.

2.3. Innovation Capabilities

According to Chesbrough and Davis (2020) and Kim and Mauborgne (2020) innovation capabilities are the organization's ability to generate and innovatively implement new and cutting-edge ideas and products. Lin et al. (2020) argued that innovative capabilities include the possibility of introducing new products, developing existing products, enhancing the way they are put on the market, and the possibility of improving production processes in an innovative and inexpensive way.

Innovation capabilities are critical for organizations to adapt and continue to thrive in a rapidly changing business environment (Hashem,2016). As for Conte and Vivacqua (2020) indicated that effective innovation capabilities require a strong and supportive organizational culture, in addition to influential leadership, and effective practices for knowledge management.

The idea of having strong innovative capabilities managed to deliver many organizations to the shore of success and competition. Such organization with innovation capabilities included (Podolny and Hansen, 2020; Gawer, 2021; Tou et al., 2019; Thomas and Maine, 2019):

a) Apple used its innovative capabilities in order to present iPhone, iPad, and Apple Watch
b) Google is also innovative in terms of presenting Google Maps which made wonders in supporting navigation service in the world, not to mention Google Drive which is now the number 1 knowledge storing drive in the world
c) The innovation capabilities of Amazon helped to be the number one retailer in the world with its cloud computing and logistics
d) Tesla appeared with its innovative capabilities in electric cars and advanced driving technologies

e) Procter & Gamble used their innovation capabilities in terms of product development and marketing approaches

2.4. Competitive Advantage

Competitive advantage according to Barl and Regmi (2020) and Porter (2021) refer to a terms that focuses on advantages an organization obtain over its competitors including customer service, profit, strategic objectives achievements and reputation. Competitive advantage is achieved by the establishment of a customer connection that is founded upon principles of innovation, quality, discussion, and learning (Hashem & Alqirem , 2019). Damanpour and Aravind (2020) noted that competitive advantages include all variables which can give an organization superiority over its competitors which include the usage of technologies, tools, devices and plans which have the ability to increase performance of the organization on the long term.

There are number of factors that compose the basic idea of competitive advantage which include as according to Duan and Qiao (2021), Hitt et al. (2020), Li et al. (2020), Al Qudah and Hashem (2018) and Kautonen et al. (2020):

- **Quality** is a major issue in competitive advantage as it provides a high-quality products and services which makes the organization superior to its competitors. Having a competitive advantage means to have higher quality and lower cost in production operations. An organization that have a competitive cost means that an organization is bale to present high quality with costs that are less than other competitors.
- **Innovation** is an active factor in competitive advantage, an organization which have an innovative thinking is more able to beat its competitors with innovative ideas and services which makes the organization more able to take a place within business environment.
- **Reputation** plays an important role in formalizing the basics of competitive advantage. On that idea Gao and Li (2020) argued that reputation of an organization can be considered as a competitive advantage since it can be recognized easily by either customers of competitors.
- The role of **customer service** can be strongly considered as a competitive advantage. Most customers tend to be loyal for organization which give them priority and care. From that point, being a competitor means to have a strong customer service that is able to serve all clients in the best way possible under the condition that this service would never change in quality or approach(Hashem & Hamdan,2017; Hashem,2015).

2.5. KM according to RBV Theory

According to Chua et al. (2020) and Grant (2021), resource-based view theory RBV is defined as a theory that stems from the framework of strategic management and focuses on the idea that the organization's resources are one of the motives that enhance its competitive advantage and innovative thinking, and thus improve its performance in the long term. Dalkir (2020) added that RBV suggests that the organization has tangible assets such as financial and material resources, equipment and tools, in addition to intangible assets such as knowledge, talents, skills, experience and reputation, and all of these are difficult to imitate or replace.

The relationship between knowledge management and RBV theory stems from the fact that the organization can employ knowledge management through the employment of organizational knowledge assets, in the interest of the organization and its employees. This process starts from three points, including De Bellis and Ferrucci (2020); Jang and Kim (2020); Lee and Kim (2020); Wang et al. (2020) and Delgado-Ceballos et al. (2020) and Foss and Saebi (2020):

- Creating new knowledge and ideas that can be applied in the organization through the development of new and innovative products and services that enhance organizational performance and increase the level of competitive advantage.
- Knowledge management can transfer organizational knowledge, expertise, skills, and information in order to improve internal processes and direct them in a way that enhances external processes, which finally is in the interest of the organization in terms of competitiveness.
- Using resources in a more effective way, and this comes through focusing on organizational resources and improving the mechanism of dealing with them and employing them in their place in order to be able to support organizational practices in the decision-making process.

2.6. Hypotheses Development

According to Lam et al. (2021), there is a strong positive relationship between **knowledge management and innovation capabilities** in organizations. As the effective knowledge management practices would lead the organization to create innovative capabilities based on new knowledge and thus enhance innovation among the high individuals in the organization. On the other hand, the researchers reported that the organizational culture that supports knowledge management could help synthesize innovation as one of the constants of the organization, up to open innovation, which can be an effective strategy to benefit from external knowledge to support innovation.

Ganguly et al. (2019) agreed on the same idea arguing that **knowledge management practices** such as sharing knowledge of all kinds can **facilitate the organization's path to innovation**. The researchers also add that the sharing of "tacit" knowledge specifically, which is difficult to express, is particularly important for achieving innovative thinking in the organization. From another perspective, Inków (2020) added that high-quality, accurate and relevant knowledge contributes to achieving excellent knowledge management for the organization and thus developing innovative ideas and practices that lead to a higher competitive advantage, especially when combined with working capital.

Gloet and Samson (2020) argued in their study that **knowledge management practices are capable of creating what is known as "organizational innovation"**, which means the organization's ability to generate innovative and new ideas and products that are capable of appearing clearly and observantly in the market. The researchers also emphasized that knowledge management practices would arrange and organize knowledge, and then write it down, transfer it, and share it. Together, these practices constitute the starting point for learning and support for experimentation and innovation, thus ensuring access to a high level of excellence in performance.

Le et al. (2019) argued regarding the concept of knowledge sharing – as a dimension of KM – authors argue that **effective knowledge sharing can pave the way towards innovative orientation** by developing an organization's capabilities for innovative thinking. They added that when an organization invest in knowledge sharing, it is more likely that it would benefit greatly from all its operational practices and employ them for its own good.

Arias-Pérez et al. (2021) in their study argued that there is a positive relationship between **knowledge acquisition and innovation capabilities in organizations**. The researchers confirm that knowledge management and acquisition practices, especially tacit knowledge, can enhance the innovative capabilities of the organization, which are later employed in order to develop services and products in an innovative manner.

Mahdi et al. (2019) found that there is a positive relationship that cannot be overlooked between **knowledge management and competitive advantage**; given that knowledge management would arm the organization with empowerment through knowledge. Here, the organization is fully aware of the nature of its internal and external environment and proceeds from it in making decisions that contribute to its interest is to rely on knowledge management, which gives it a strong competitive advantage among other organizations.

Novianti (2019) emphasized that the relationship between **knowledge management and competitive advantage** is the main source of employing knowledge management to enable the organization to benefit from its intangible assets, including knowledge. The researchers also add that the competitive advantage, which is based on knowledge, is usually based on the knowledge-based view theory, which emphasizes the effectiveness of knowledge in arming the organization with a set of practices aimed at employing existing knowledge in the right place and thus achieving a higher competitive advantage.

Syahchari et al. (2020) argued that the relationship between **knowledge management and competitive advantage** could not be overlooked, as the researchers emphasized the idea that optimal utilization of knowledge in the organization in all its sources is an important factor in employing decision-making processes in the right direction. when knowledge management and advanced modern technology are combined, the organization will be able to access and exploit many opportunities and threats and try to address them. This is enough to achieve a competitive advantage at a high level of influence within the organization's external environment.

It has been observed through previous studies that there is an increasing interest in the concept of knowledge management and its impact on innovation and competitive advantage within various sectors. It was also found through previous studies that there is a need for more empirical research on the relationship between the three variables (knowledge management, innovation and competitive advantage). As the three variables together, contribute significantly to influencing the general outputs of the organization in terms of performance, in addition to increasing the organization's ability to employ its various skills for improving its competitive level in its external environment.

With regard to the literary gap in the current study, it is no secret that many previous studies have been reviewed in order to understand the mechanisms of employing knowledge management to serve innovation on the one hand, and competitive advantage on the other hand. It has been proven that there are studies that emphasized the positive relationship between knowledge management and innovation, and other studies that focused on the positive relationship between knowledge management and competitive advantages.

Many studies focused on specific aspects of knowledge management, such as knowledge exchange or knowledge creation, and did not take into account other variables related to knowledge management, such as knowledge storage, classification of knowledge, and other variables related to knowledge management. In addition, it was noted that there were no studies that had dealt with the different aspects of knowledge management, but they did not fully examine the different domains of knowledge management that could affect innovation and competitive advantage together.

Based on this research gap, the current research aspires to identify the concept of knowledge management (Knowledge creation, Knowledge acquisition, Knowledge sharing, Knowledge storage, Knowledge dissemination, Knowledge utilization, Knowledge retention) in improving the ability of the organization to reach innovative capabilities and competitive advantages within private universities sector in the state of Kuwait for the year 2021-2022.

In general, the current research focuses on examining the comprehensive impact of knowledge management on the concepts of innovation and competitive advantage, taking into account all the variables of knowledge management and their interrelationships with innovation and competitive advantage. The study hypotheses were developed based on allegations which were presented and analyzed earlier including *Lam et al. (2021); Ganguly et al. (2019); Gloet and Samson (2020); Le et al. (2019); Arias-Pérez et al. (2021)* on the relationship between KM and innovation capabilities. And *Mahdi et al. (2019); Novianti (2019); Syahchari et al. (2020)* on the relationship between KM and competitive advantage. According to what was mentioned earlier, researcher was able to formulate a study model from which hypotheses will be extracted:

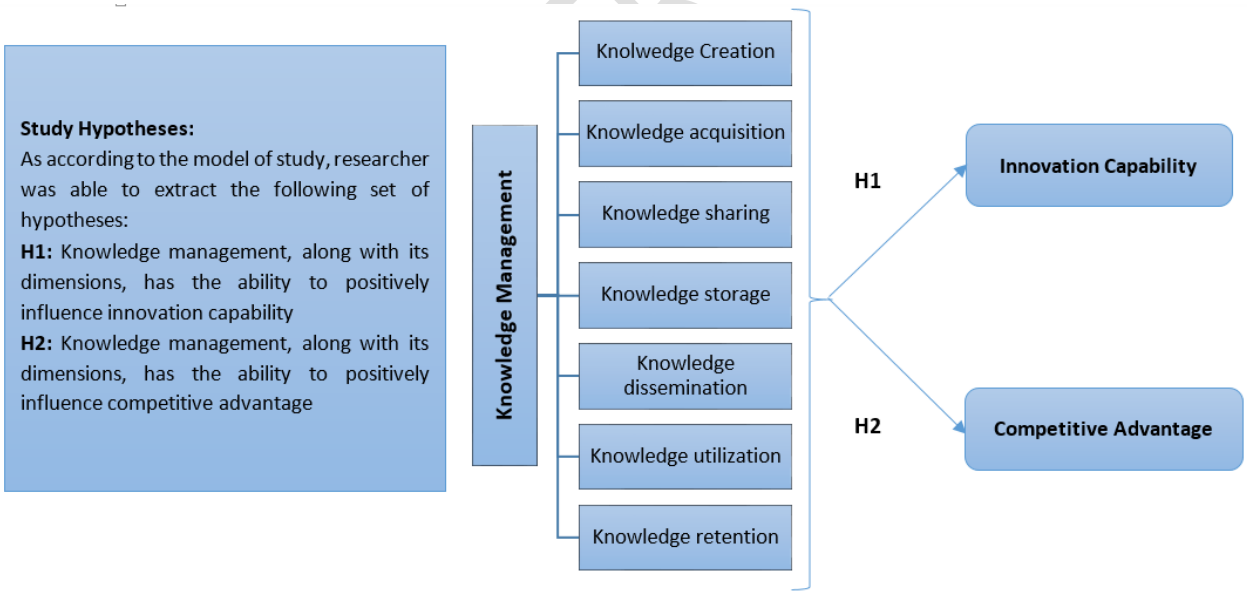

Figure 1. Study Model (Kordab et al, 2020; Nair and Munusami, 2020; Arsawan et al. 2022; Azeem et al. 2021)

Launching from the above model, following hypotheses were extracted:

Ho1: There Is No Influence of Knowledge Management in Increasing Innovation Capability within Private Universities Sector in the State of Kuwait

Ho2: There Is No Influence of Knowledge Management in Increasing Competitive Advantage within Private Universities Sector in the State of Kuwait

The current study employs knowledge management and its impact on innovation and competitive advantage launching from **Resource Based View Theory (RBV)**. This theory assumes that an organization's resources are one

of the main determinants of competitive advantage and innovative performance (Lubis, 2022). In other words, Assensoh-Kodua (2019) indicates that RBV theory is based on the idea that the organization is based on tangible resources and intangible resources. Tangibles include the organization's physical assets such as capital, tools, equipment, and machinery. As for the intangible resources - and what is meant in the current study -, they are the sum of knowledge, experience, organizational culture, reputation and intellectual property. It is expected that the current research will constitute an entrance to provide valuable insights that will serve educational organizations that are trying to reach a stage where they can fully benefit from knowledge management. In addition to having a desire to enhance its internal capabilities by employing the huge amount of existing knowledge in the interests of the organization and its employees.

3. Methods

3.1. Methodological Approach

Quantitative methodology was employed in order to collect primary data and reach the main aim of study. The reason for choosing the quantitative approach is attributed to the fact that its results are more generalizable and there is a pace to take a larger sample size. According to Lu et al. (2021), quantitative methodology is a research approach or method in which quantitative data is collected and analyzed numerically and statistical calculations are performed. The quantitative approach aims to understand phenomena and relationships by relying on numbers and quantitative measures (Humble, 2020).

3.2. Tool of Study

A questionnaire was developed by researcher and through the aid of previous studies like Lam et al. (2021); Ganguly et al. (2019); Gloet and Samson (2020); Le et al. (2019); Arias-Pérez et al. (2021); Mahdi et al. (2019); Novianti (2019); Syahchari et al. (2020). Herr et al. (2021) noted that a questionnaire is a research tool used to collect data from individuals by asking a series of specific questions. The questionnaire aims to collect information, opinions, beliefs, behaviors and personal characteristics from the participating individuals (Jagodzinski et al., 2023).

The questionnaire consisted of two main sections; the first took into perspective demographics of study sample (age, gender, qualification and experience). While the other section contained statements related to variables of study (KM/ Knowledge Creation, Knowledge acquisition, Knowledge sharing, Knowledge storage, Knowledge dissemination, Knowledge utilization, Knowledge retention, IC and CA). The questionnaire was built on liker 5-point scale and was distributed online in order to reach as much respondents as possible.

3.3. Population and Sampling

Population of study consisted of operational and production managers within private universities sector in the state of Kuwait. A convenient sample of (350) was chosen to represent the population of the study. After application process; researcher was able to retrieve (303) properly filled questionnaire which indicated a response rate of (86.5%) as statistically accepted.

3.4. Statistical Processing

Statistical package for social sciences SPSS was chosen to deal with the primary data. Cronbach's Alpha was chosen to test the reliability and consistency of study tool and alpha value indicated that all variable scored higher than 0.700. This meant that the tool was reliable and consistence as in table below:

Table 1. Alpha Value

variable	Alpha value
Knowledge creation	0.779
Knowledge acquisition	0.827
Knowledge sharing	0.766
Knowledge storage	0.812
Knowledge dissemination	0.737
Knowledge utilization	0.804
Knowledge retention	0.788
Innovation Capability	0.709
Competitive Advantage	0.826

4. Results

4.1. Demographic Results

Frequency and percentages were calculated for demographics of respondents. Table 2 below indicated that majority of sample held MA degree forming (65.3%). In addition to that, majority of respondents had an experience in the field that ranged between 6– 11 years forming (38.9%) of the sample.

Table 2. Sample Statistics

	f	%
Education		
Bachelor's	38	12.5
Master's	198	65.3
Doctor of Philosophy	67	22.1
Experience		
Less than 5 years	42	13.9
6-11	118	38.9
12-17	112	37.0
+18 years	31	10.2
Total	**303**	**100.0**

4.2. Multicollinearity Test

When Variance inflationary factor (VIF) and Tolerance calculations were done on the independent variables to check for multicollinearity, the results were observed as in table 3 below. The fact that the Variance inflationary factor values in the preceding table were all less than 10 and the Tolerance values were all greater than 0.10 indicated the lack of multicollinearity (Gujarati & Porter, 2009).

Table 3. Multicollinearity

variable	Tolerance	VIF
Knowledge creation	.408	2.454
Knowledge acquisition	.300	3.331
Knowledge sharing	.273	3.661
Knowledge storage	.434	2.303
Knowledge dissemination	.392	2.551
utilization	.579	1.728
Knowledge retention	.204	4.892

4.3. Questionnaire Analysis

Mean and standard deviation were calculated for respondents' answers to questionnaire statements. It was seen that all statements and variables scored a mean that was higher than mean of scale 3.00 indicating that they were positively received by respondents. The highest variable scored a mean of 4.22/5.00 and was (Innovation Capability) compared to the lowest mean which was (Knowledge utilization) and scored a mean of 4.02/5.00 but still positive as it scored higher than mean of scale.

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Table 4. Descriptive Statistics

Statement	Mean	Std. Deviation
Knowledge creation has the ability to generate innovative ideas that – when applied – can boost competitive advantage	4.06	.88
When knowledge is created, new products and services might come to the service may appear that enhance the organization's competitiveness.	3.49	1.35
Knowledge creation through R&D lead to better adaptation to changing market conditions.	4.19	.84
Lack of knowledge creation may lead to stagnation and a lack of innovation	4.18	.94
Knowledge creation can lead to collaboration which leads to facilitate knowledge competitiveness	4.22	.96
Knowledge creation	**4.03**	**.74**
Obtaining knowledge means to gather information from external and internal environment which supports knowledge management	3.83	1.14
Knowledge acquisition means to obtain knowledge from external sources such as market, customers and competitors	4.23	.87
Acquiring knowledge means having more knowledge about market trends, customer needs, and competitor strategies	4.11	.89
Acquiring knowledge is known to be more effective in terms of innovation and responsiveness to market changes	4.22	.82
For an organization to acquire knowledge, it has to be more proactive with a strong relationships with external stakeholders.	4.11	.89
Knowledge acquisition	**4.10**	**.72**
Sharing knowledge means to transfer knowledge within organization	4.18	.92
Sharing knowledge can lead to better decision making and problem solving innovatively	4.32	1.06
An innovative culture is most likely to share knowledge for better competitive advantage	4.14	.92
Reaching innovativeness and competitiveness means to have a culture that shares knowledge	4.26	.83
Knowledge sharing can lead to trust and transparency which supports innovation and competiveness	4.06	.85
Knowledge sharing	**4.19**	**.60**
Innovative organizations often use cloud computing and AI in their dealing with knowledge	3.89	.90
Knowledge storage is based on categorizing and organizing organizational knowledge	4.00	.94
Knowledge storage guarantees easy access to the needed information in less time and efforts	4.03	.82
Organizations that are depending on centralized knowledge storage tend to be more innovative and competitive	4.31	.72
Knowledge storage is based on choosing the appropriate database and technologies	4.28	.73
Knowledge storage	**4.10**	**.62**
Knowledge dissemination is all about distributing knowledge effectively	4.18	.97

Knowledge dissemination guarantees reaching relevant knowledge to accelerate innovation and decision-making	4.29	.83
Knowledge dissemination ensure that there is a structure approach for communication between organizational efforts	4.22	.82
An organization that disseminate knowledge are more able to adapt to market changes	4.22	.80
The lack of knowledge dissemination means that the organization lacks the ability to reach for the relevant knowledge	4.18	.89
Knowledge dissemination	**4.22**	**.60**
Utilizing knowledge means that the organization can depend on available information for decision making and problem solving	4.06	.92
Utilizing knowledge correctly can lead to innovation by leveraging the knowledge and expertise of employees.	3.47	1.36
An organization that utilize knowledge correctly is more able to be innovative and have an adaptation to the changing conditions of the market	4.17	.91
Lack of knowledge utilization may lead the organization to a failure to seize opportunities and chances	4.19	.98
Knowledge utilization means the use of AI and expert systems for decision making support	4.21	.99
Knowledge utilization	**4.02**	**.78**
Knowledge retention means to keep the data in the organization for future use	3.92	1.14
Knowledge retention means that the organization is aware of valuable the information it has is	4.34	.79
Knowledge retention guarantees access to the organization for innovation and enhances performance	4.21	.83
With knowledge retention, organizations are more able to adapt to the changing conditions of the market	4.31	.75
The lack of knowledge retention means that the organization misses on the value and expertise that are available with knowledge	4.21	.83
Knowledge retention	**4.20**	**.65**
KM supports innovation capabilities by capturing, storing, and disseminating of knowledge as an asset	4.19	.93
KM has the ability to better communication and collaboration among employees which make them more innovative	4.34	1.06
KM is bale to facilitate a learning culture in the organization which supports innovative attitude	4.20	.85
Efficiency and effectiveness are enhanced through KM and increases innovation	4.30	.79
KM supports factors that influence innovation like cost, quality, customer service, and brand reputation	4.07	.85
Innovation Capability	**4.22**	**.61**
KM support competitive advantage by leveraging knowledge to create value for operational practices	3.93	.91
With KM practices, the organization is more able to face and deal with the changing market making it more competitive	4.05	.92

Supporting competitive advantage means to be aware of trends and market opportunities through KM	4.04	.84
Through KM, relations with customers and stakeholders are kept in the highest which supports competitive advantage	4.34	.71
KM presents chances of continuous improvement which supports competitive advantage	4.31	.71
Competitive Advantage	**4.13**	**.63**

4.4. Hypotheses Testing

Multiple regression was used to test the H01, and it is determined that F value = 789.351 was statistically significant at the 0.05 level, indicating that there was an Influence of Knowledge Management in Increasing Innovation Capability within private universities sector in the state of Kuwait. In addition, correlation (r) =0.974 indicated a high level of correlation, and the independent variables account for **94.9%** of the variance in the dependent variable.

Table 5. Ho1 Testing

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients				
		B	Std. Error	Beta	t	Sig.	R	R Square
1	(Constant)	.072	.065		1.111	.268	.974[a]	.949
	Knowledge creation	.013	.017	.016	.769	.442		
	Knowledge acquisition	-.099	.021	-.115	-4.822	.000		
	Knowledge sharing	.806	.026	.791	31.527	.000		
	Knowledge storage	.002	.020	.002	.080	.937		
	Knowledge dissemination	-.052	.021	-.051	-2.458	.015		
	utilization	.054	.013	.069	4.029	.000		
	Knowledge retention	.266	.027	.281	9.695	.000		

Ho1: There Is No INFLUENCE OF KNOWLEDGE MANAGEMENT IN INCREASING INNOVATION CAPABILITY WITHIN PRIVATE UNIVERSITIES SECTOR IN THE STATE OF KUWAIT

Multiple regression was used to test the Ho2, and it was determined that F value = 503.012 was statistically significant at the 0.05 level, indicating that there was an Influence of Knowledge Management in Increasing Competitive Advantage within private universities sector in the state of Kuwait. In addition, correlation (r) =0.961 indicated a high level of correlation, and the independent variables account for **92.3%** of the variance in the dependent variable.

Table 6. Ho2 Testing

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients				
		B	Std. Error	Beta	t	Sig.	R	R Sqaure
1	(Constant)	.131	.082		1.589	.113	.961[a]	.923
	Knowledge creation	-.005	.022	-.006	-.243	.808		
	Knowledge acquisition	-.125	.026	-.142	-4.790	.000		
	Knowledge sharing	-.158	.032	-.151	-4.875	.000		
	Knowledge storage	.924	.025	.915	37.238	.000		
	Knowledge dissemination	-.027	.027	-.025	-.985	.325		
	Knowledge utilization	.063	.017	.079	3.697	.000		
	Knowledge retention	.301	.035	.309	8.644	.000		
HO2 : THERE IS NO INFLUENCE OF KNOWLEDGE MANAGEMENT IN INCREASING COMPETITIVE ADVANTAGE WITHIN PRIVATE UNIVERSITIES SECTOR IN THE STATE OF KUWAIT								

Pearson correlation was used to test the relationship between each independent variable and Innovation Capability and Competitive Advantage. It was found that there was a significant relationship as shown in the above matrix. The **highest correlation was between Knowledge sharing and Innovation Capability**. Whereas the **lowest correlation was between Knowledge storage and Competitive Advantage**.

Table 7. Pearson Correlation

		Knowledge creation	Knowledge acquisition	Knowledge sharing	Knowledge storage	Knowledge dissemination	utilization	Knowledge retention
Innovation Capability	Pearson Correlation	.602**	.635**	.963**	.606**	.624**	.549**	.870**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	303	303	303	303	303	303	303
Competitive Advantage	Pearson Correlation	.435**	.458**	.608**	.947**	.694**	.407**	.651**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	303	303	303	303	303	303	303

5. Discussion

Current research aimed at examining the role of knowledge management (KM) in increasing innovation capabilities and competitive advantage among a sample of operation and marketing managers within private universities sector in the state of Kuwait. Quantitative methodology was adopted, and a questionnaire was distributed on a sample of (303) individuals working within private universities sector in the state of Kuwait. SPSS was employed to deal with primary data. Results of study reached following findings:

- Respondents within private universities sector in the state of Kuwait seemed to have a good level of awareness regarding knowledge management and its importance in the organization.
- Respondents were able to deal with the questionnaire with minimal help from researcher which indicated their full understanding of the concepts
- All variables of KM appeared to have the ability to influence both competitive advantage and innovation capability
- The highest correlation was between Knowledge sharing and Innovation Capability.
- The lowest correlation was between Knowledge storage and Competitive Advantage.

There is an Impact of KM on Innovation Capabilities

Results of study accepted the hypothesis which argued that KM along with its dimensions has the ability to increase innovation capabilities in organizations. This was seen to be taken by granted, as knowledge will increase the acquisition of awareness and cognitive skills within the organization. Through KM, the organization will be able to dive into the knowledge it has and employ it in a way that can be of benefits for achieving it organizational strategies. This was agreed on by Ganguly et al. (2019) and Gloet and Samson (2020) who argued that KM, and specifically the dimensions of knowledge sharing and dissemination will help the organization build more skilled and trained work force. The trained and skilled workforce will eventually support the organizational efforts to reach excellence through thinking innovatively including coming up with new ideas, innovative marketing campaigns, new thoughts and orientation on reaching cost effective strategies that will eventually be of help for the organization. In addition to that, current study supported what came along with Lam et al. (2021) when they argued that KM can support innovative thinking and through sharing knowledge and retaining it there would be employees who are more skilled and more aware of the best and most cost effective ways to serve their organization and as a results achieve excellence.

There is an Impact of KM on Competitive Advantage

Study was able to accept the hypothesis arguing that KM has the ability to support competitive advantage. Results of study indicated that KM and through knowledge creation can help the organization create new knowledge through the process of research and development. In addition to that, the organization can encourage the culture of exploiting knowledge for the benefit of its operations which supports its journey to reach excellence in performance. As for acquiring knowledge, the organization now realizes the importance of knowledge, from that, it begins to attract experiences, talents and abilities in order to support its way towards forming a cement base for its innovation. This leads to reaching a high level of quality and innovation which in turn can be considered as a competitive advantage that the organization has against its competitors. This agreed before with Mahdi et al. (2019) who argued that gaining knowledge and knowing its worth means the organization now will excel in employing and utilizing it. Not to mention what was also agreed on by Novianti (2019) that being ware of knowledge worth and retaining it will increase the organizational efforts to storing and sharing the knowledge it has among its internal and external environment. Syahchari et al. (2020) also agreed with the same idea. The idea of taking extreme measures in order to deal with the knowledge and organization has will lead it to develop competitive advantages that will secure its place within the external environment.

6. Conclusion

Statistical processing of study indicated the acceptance of hypotheses as according to the statistical tables presented, it was seen that H01 accounted for 94.9% of the variance in the dependent variable, while H02 accounted for 92.3% of the variance in the dependent variable. In addition to that, Pearson correlation approved that there is a significant relationship between Knowledge sharing and Innovation Capability, the lowest correlation was between Knowledge storage and Competitive Advantage.

Through the study, the idea of knowledge management serves the organization through its connection with the RBV theory, which views knowledge as assets that the organization must take advantage of in order to reach the forefront in terms of competitive advantage and innovative performance. The study also found that knowledge management and its dimensions support the organization in the process of exploiting knowledge, experimentation, learning and creating an organizational culture capable of supporting innovative practices in it. Employing knowledge management in the interests of the organization is able to enable it to remain in the forefront by increasing competitive capabilities and pushing the organization towards success and growth by regaining its intangible resources that will improve the exploitation of the organization's materials and increase its competitive advantage.

6.1. Practical and Theoretical Implications

Current study was carried out as an approach to determine the influence of KM on innovation capabilities and competitive advantage of private universities in Kuwait. The theoretical implication of current study launches itself from its relationship to resource-based view theory which focuses on the advantages of organizational intangible resource (data, information, experiences, knowledge, talents, and reputation) and the approach to employ such knowledge for the benefit of the organization.

From a practical point of view, this current study may represent an agenda for organization to start increasing their interest in investing more in the organizational knowledge whether it was internal or external knowledge. In addition to that, it highlight the importance of the knowledge management along with its dimensions (Knowledge Creation, Knowledge acquisition, Knowledge sharing, Knowledge storage, Knowledge dissemination, Knowledge utilization, Knowledge retention) and how it can be used in order to manage the knowledge in the organization.

6.2. Recommendations

Based on the previously presented results and conclusion, researcher recommended the following:

- Organizations should focus more on training and development in the field of knowledge storing and retaining so employees can have more awareness of how to deal with knowledge through their daily tasks.
- IT department in each organization should follow regular checkup routine in order to make sure that the organization is fully equipped with tools and devices that supports KM
- The organizations should invest more in employees development in terms of skills and talents related to innovation.
- Providing training and development opportunities, as well as creating a supportive work environment that encourages learning and growth.

6.3. Limitations of Study

Current study was limited to private universities sector in the state of Kuwait which through the academic year 2021-2022. In addition, current study was limited to marketing and operations managers within the organizations under study.

6.4. Future Studies

Launching from results and conclusion of current study, researcher suggested the following future research:

- Explore the influence of IT vigilance on dimensions of KM within educational organizations
- Carry out a research that examines the role of big data analytics BDA as an AI tool in organizing and better presenting organizational knowledge.

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