The structural model of the relations between knowledge management and the competitive advantage of the employees of Bupa Arabia for Cooperative Insurance Company in Jeddah

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Abstract: The study aimed at identifying the role that knowledge management processes play in competitive advantage by determining the nature of the direct impact of knowledge management processes (knowledge diagnosis, knowledge generation, knowledge storage, knowledge sharing, knowledge application, knowledge investment) on competitive advantage (cost leadership strategy, excellence strategy, focus strategy, and organizational creativity) among the employees of Bupa Arabia for Cooperative Insurance Company in Jeddah, Saudi Arabia. The sample consists of 243 employees of Bupa Arabia for Cooperative Insurance Company in Jeddah. A questionnaire was prepared including 37 items to measure knowledge management processes and 25 items to measure the dimensions of competitive advantage. The data was analyzed using the structural equation model through the MPLUS program (7). The results showed that there is a direct positive effect (β=0.94) of knowledge management processes on competitive advantage, and this indicates the importance of providing knowledge management processes in developing and strengthening competitive advantage in cooperative insurance companies. The results were discussed in light of previous studies.

Key words: Knowledge management - competitive advantage - structural equation model.

Introduction:

The future of business organizations today depends on the extent of awareness and optimal investment in their resources to increase their products and services and try to provide them in a better way, making them longer lasting and distinguished by their competitive capabilities. In this regard, one of the strategic goals of the organization is to focus on intellectual assets as a basic investment in their prosperity and progress, which necessitated that there should be procedures for the attraction and development of human elements, as they are the ones who manage and develop the various resources of organizations.

Moreover, one of the most important resources that organizations rely on today is knowledge. Indeed, knowledge today constitutes one of the most important assets of organizations, which mainly contribute to determining the nature of their performance. Knowledge is created in the human mind and increases and is generated as a result of its sharing with others and its dissemination (Nasimi et al., 2013). The current knowledge depends in its construction on previous knowledge, as it is built as a result of the information and experiences that a person acquires that are organized and analyzed to form knowledge that helps in decision-making and in taking measures to develop work and improve production processes (Mohajan, 2016).

Study Problem:

With the rapid development in the business world, knowledge management has emerged as one of the modern administrative concepts that have increased interest in business organizations in light of the shift towards knowledge economies confirming that the source of wealth is not "the capital" but rather "knowledge." Therefore, investment in knowledge has gained the attention of various institutions. This prompted business leaders to reconsider their strategic priorities. Since the new economies of knowledge will affect the forms of competition between companies, the administrative leader has become aware that the application of the knowledge management approach in the modern organization provides it with new capabilities and distinct competitive capabilities.

In addition, and because of the information acceleration that occurred in the world and its related changes, knowledge is considered as the cornerstone component in the building of the competitive advantage of organizations.

Furthermore, knowledge management effectively affects the organizational performance of the employees at all administrative levels. Its impact extends not only to the nature of production in productive organizations but also to services in service organizations. This leads to an impact on the quality of goods and services and thus an impact on the satisfaction of customers who form the main influential nerve on the success of all kinds of business in light of the technical development in communications and information technology, which led to the information revolution that led to a wave of change facing organizations in the public and private sectors.

And given the importance of knowledge management and the need of the public and private sectors for it due to the difficulties they face in competition between sectors, organizations aim at gaining customer satisfaction by improving the services provided (goods or services) and raising their level. As well, since health insurance companies are one of the private sector organizations that seek to improve their services to achieve a competitive advantage and leadership, both researchers decided to prepare this study to shed light on the role of knowledge management in achieving competitive advantage in business organizations in Bupa Arabia for Cooperative Insurance, which operates in the city of Jeddah. The study problem could be posed as follows:

What role do knowledge management processes play on the dimensions of competitive advantage for a sample of employees in Bupa Arabia for Cooperative Insurance Company in Jeddah, Saudi Arabia?

Study objectives:

The current study aimed to achieve the following objectives:

- Determining the correlational relationships between knowledge management processes and strategies for competitive advantage among employees of Bupa Arabia for Cooperative Insurance in Jeddah, Saudi Arabia.

- Determining the role of knowledge management processes (as an independent variable) in achieving competitive advantage (as a dependent variable) among employees of Bupa Arabia for Cooperative Insurance Company in Jeddah, Saudi Arabia.

Study importance:

The importance of the study stems from the following:

• The importance of the topic stems from dealing with the study of business organizations. It presents a new and modern applied study (as far as the researchers know).

- That enables the organization under study to improve its competitive advantage in light of the knowledge management processes that have the most impact on it.

• Highlighting the importance of knowledge management and its role in improving the competitive advantage of business organizations.

• Studying the current status of knowledge management and the competitive advantage of the insurance sector under study. In fact, during the last five years, the insurance sector has witnessed strong growth and great support through the improvement of its organizational environment, the introduction of a number of insurance products, the application of compulsory insurance on vehicles, and the cooperative health insurance. All this led to raising the value of this sector to be one of the necessary sectors in the development of the economy in the Kingdom of Saudi Arabia.

Study questions:

In this study, which deals with the role that knowledge management processes play in competitive advantage by determining the nature of the direct impact of knowledge management processes on competitive advantage, the main questions can be formulated as follows:

• Are there any correlations between knowledge management processes and competitive advantage among a sample of workers in Bupa Arabia for Cooperative Insurance in Jeddah, Saudi Arabia?

• Is there a direct causal effect of knowledge management processes in achieving competitive advantage among employees of Bupa Arabia for Cooperative Insurance Company in Jeddah, Saudi Arabia?

Study variables:

The study variables include:

• **Independent variable**: Knowledge management processes include a set of processes that include Knowledge diagnosis, knowledge generation, knowledge storage, knowledge sharing, knowledge application, and knowledge investment.

• **Dependent variable**: competitive advantage strategies namely cost leadership strategy, excellence strategy, focus strategy) and organizational creativity.

Previous studies:

The review of the literature related to the subject of the study covered the period between 2010 and 2020.

The study of (Nguyen, 2010), entitled "Knowledge Management Capacity and Competitive Advantage: A Field Study of Vietnamese Enterprises", aimed at identifying the basic dimensions (knowledge acquisition, transfer and application processes and protection) of knowledge management capacity and competitive advantage among Vietnamese companies. The study adopted the mixed approach as a research methodology, using quantitative and qualitative methods, where questionnaires and interviews were developed as a tool for collecting the necessary data. The research community consists of senior managers in Vietnamese companies. (1000) of them were selected as a sample, and questionnaires were distributed to them, of which (362) were retrieved, valid for the statistical analysis process. The results of the study indicated that knowledge management is a multi-dimensional structure consisting of the capacity of the infrastructure for social knowledge management, the capacity of the technical infrastructure for knowledge management, and the capacity of the knowledge management process. Three dimensions determine social knowledge management capacity: organizational culture, organizational structure, and individuals. While four dimensions define the capacity of the knowledge management process: knowledge acquisition, transfer, application, and protection processes. Whereas, the capabilities of the social and technical knowledge management infrastructure are closely related to each other. The study recommends the need to develop a comprehensive approach to start developing the infrastructure for social and technical knowledge management, which in turn will provide the necessary platform to increase the effectiveness and efficiency of knowledge management processes.

The study of (Mundra et al., 2011) entitled "Achieving a competitive advantage through knowledge management and innovation: empirical evidence from the Indian information technology sector" aimed at identifying the factors that provide an innovative and competitive advantage of knowledge management in global organizations and comparing them to the Indian sector. The study adopted the descriptive analytical approach, through questionnaires distributed

to employees working in technology companies in India. The results of the study indicated the close relationship between the knowledge management process and the processes of organizational innovation and creativity.

The study of (Rahimli, 2012) entitled "Knowledge Management and Competitive Advantage", aimed to identify the importance of knowledge management to achieve competitive advantage. The study adopted the descriptive approach, by reviewing the relevant literature and studies. The results of the study indicated that the objectives of the organization could be achieved through strategic management. The study also showed that to obtain a sustainable competitive advantage, the organization must realize how to create, distribute and use knowledge and link it to the organizational process. In addition, it's very crucial that the administration realizes the type of knowledge that it should seek to enhance its organizational activity to obtain a sustainable competitive advantage.

The study of (Sheng & Chang, 2013) entitled "Barriers of knowledge, knowledge transfer and the competitive advantage of innovation in healthcare settings", aimed to study the mediating role of information and communication technology (ICT) competencies in promoting knowledge transfer and mitigating the effects of two main knowledge barriers, namely Cognitive stickiness and cognitive ambiguity. This would lead to increasing the competitive advantage of the company's innovation. The study adopted the descriptive analytical approach, where a questionnaire was developed as a main tool for collecting the necessary data. The study community consists of employees of administrative bodies in hospitals in Taiwan, a total of (160) questionnaires were distributed, (112) of which were retrieved, valid for statistical analysis. The results of the study indicated that ICT competencies enhance knowledge transfer within hospitals. Despite the negative impact of both cognitive stickiness and knowledge ambiguity on the knowledge transfer process, these effects can be mitigated by specific ICT competencies in terms of competencies in Computer-assisted education, interactive video conferencing, and manual technology. The study recommended the necessity of applying models based on information technology competencies to enhance the role of knowledge management in achieving competitive advantage.

The study of (Gichuki, 2014) entitled "Achieving competitive advantage through knowledge management practices by hotels in the coastal region of Kenya" aimed to identify the knowledge management practices adopted by hotels in the coastal region of Kenya in achieving competitive advantage and the factors that affect the adoption of knowledge management for the competitive advantage of hotels. In order to achieve this goal, the study adopted the descriptive analytical approach, where the necessary data were collected through a questionnaire specifically developed to achieve the study's objectives. The research community consists of general managers and human resource managers in (47) hotels located in the coastal region of Kenya. The results of the study indicated that hotels adopt knowledge management practices in the areas of knowledge creation, knowledge acquisition, knowledge filtering, knowledge storage and presentation, knowledge application, distribution, and exchange. The study also showed that hotels have a comprehensive and sufficient database available to all employees and that these hotels document problems and their solutions for future benefits. On the other hand, the study showed that in order to ensure the application of knowledge, hotels have a follow-up program to ensure that subordinates use and apply the techniques acquired during training. The study also showed that in knowledge distribution and exchange practices, hotels maintain a database that includes a list of the names and addresses of experts to call for consultations, and employees use e-mail to share and exchange knowledge with others in addition to using the intranet. The study also found that the factors affecting the adoption of knowledge management practices in hotels are organizational culture, organizational structure, information technology, institutional capacity and level of training. The study demonstrated that knowledge management is important to help hotels develop innovative products and reduce the loss of valuable knowledge. The study recommends the need for governments to develop relevant policies that support the culture and awareness of owners and employees of various hotels about the importance of adopting knowledge management.

The study of (Abdul Rauf, 2016) entitled "Achieving a competitive advantage through knowledge sharing: Inferring the determinants of knowledge sharing towards a new concentric model: a review" aimed at deducing all potential factors or determinants of knowledge sharing, by adopting the descriptive approach and reviewing relevant literature. The results of the research indicated four types of factors that affect knowledge sharing, which are individual factors, group factors and level of interaction, organizational culture, and practices and institutional strategies.

The study of (Xue, 2017) entitled "Examination and criticism of the use of knowledge management in achieving competitive advantage and sustainability in business, "aimed at examining and criticizing the use of knowledge management in achieving competitive advantage and sustainability in business and applying it to British Airways, where knowledge management was used in strategic planning, communication, and customer experience. The study adopted the descriptive analytical approach through the British Airways case study. The results of the study indicated that there is a strong correlation between knowledge and innovation, which has become a long-term driving force for the success of organizations. When new knowledge is created and incorporated into the organizations' innovative new products, competitive advantages will be built and the advantages of knowledge management will be realized.

(Kołton, 2018) presented an article entitled "Knowledge Management in Achieving a Competitive Advantage in the Tax Consulting Market". The study aimed to clarify the concept of knowledge management in creating a competitive advantage for enterprises, especially in the tax consultancy industry. The article adopted the descriptive approach by reviewing the relevant literature and studies. The results of the study indicated that knowledge management based on continuous improvement, knowledge sharing at all levels of the project team, and its organization, contributes to increasing the quality of services provided, and works to create a competitive advantage by maintaining the confidence of existing and new clients.

The study of (Novianti, 2019) entitled "Achieving a competitive advantage through knowledge management practices: a knowledge-based vision (KBV) strategy for the electricity sector in Indonesia" had the aim of analyzing knowledge management practices through knowledge-based presentation (KBV) to gain a competitive advantage in the electricity sector in Indonesia rather than resource-based competitiveness. The study adopted the qualitative approach through the case study method, where interviews and observational processes were used as tools for collecting the necessary data. The results of the study indicated that the competitive advantage is achieved through the processes of sharing and exchanging knowledge, and that the company in question has improved individual and organizational performance by enhancing the role of knowledge management processes. The challenges that the company faced in the knowledge management process were namely knowing the internal and external sources of knowledge, the lack of sufficient transfer and exchange of knowledge, and the difficulty of choosing sound knowledge transfer methods.

In the study of (Tumonglo et al., 2020) entitled "The Impact of Innovation, Market Orientation and Knowledge Management on Competitive Advantage and PT Performance," the researchers aimed to determine the impact of innovation, market orientation and knowledge management on the company's performance with competitive advantage as a mediating variable. The study adopted the analytical descriptive approach, whereby a questionnaire was developed as a main tool for collecting the necessary data. The study community consists of (PT) employees located in Jakarta, where (73) were selected as a sample for the study. The results indicated that innovation and market orientation have a positive but not strong impact on Competitive advantage. Knowledge management has a positive and significant impact on the competitive advantage. Innovation has a positive and important impact on the company's performance. Market orientation has a positive and not strong impact on the company's performance. Knowledge management has a positive and important impact on the company's performance. Competitive advantage has a positive and not strong impact on Company performance. Innovation indirectly has a positive and not strong impact on the company's performance through competitive advantage. Market orientation has a positive and not strong impact on the company's performance through competitive advantage. Finally, knowledge management indirectly has a positive and insignificant impact on the company's performance through competitive advantage.

The previous studies commentary:

All studies sought to find the link between knowledge management processes and competitive advantage, which is consistent with the main objective of the current study. Previous studies differ from the current study in the methodology used, where the studies of (Rahimli, 2012; Abdul Rauf, 2016; Kołton, 2018) used the descriptive approach by reviewing the relevant literature and studies, while the study of (Novianti, 2019) used the descriptive approach through case study and interview preparation. As for the studies of (Nguyen, 2010; Mundra, Gulati, & Vashisth, 2011; Sheng & Chang, 2013; Gichuki, 2014; Tumonglo, Alam, & Sobarsyah, 2020) the descriptive-analytical approach was conducted through the questionnaire tool. The study of (Xue) , 2017) employed the case study method to achieve its goals. Accordingly, the current study is unique in using the structural modeling method. With

regard to the research community, most studies agree with the selection of business organizations and companies, except for the study of (Gichuki, 2014), which relied on hotels as a research community, while the study of (Sheng & Chang, 2013) took hospitals as a research community.

The study approach and procedures:

Both researchers devoted this part of the study to the methodological procedures that were applied to achieve its objectives. The researchers dealt with the study method used in addition to the total community of the study, a description of the participants who were relied on in the study, the steps for preparing the questionnaire, and the psychometric verification steps of the stability and validity of the construction or concept of the questionnaire and a presentation of the procedures that they followed in collecting data from the targeted individuals, and finally a presentation of the statistical analysis strategy to answer the study questions.

The study Approach:

The study relied on the descriptive approach through applying the case study method, through the application of study tools and data collection of employees of Bupa Arabia for Cooperative Insurance Company in Jeddah to study the relationships between the six dimensions of knowledge management and the four dimensions of competitive advantage. The Structural Equation Modeling (SEM) method was used through the MPLUS program, in order to gain familiarity with the various aspects of the subject, analyze its dimensions and determine the nature of the structural relations between the operations of management Knowledge and the dimensions of competitive advantage by introducing a hypothetical structural model. In the light of previous studies such as (Abdul Rauf, 2016), (Novianti, 2019) , (Xue, 2017), and (Gichuki, 2014) and the theoretical theses, the structural equation model can be put forward as follows:

It deals with studying the causal impact of the components of knowledge management processes as a whole on the components of the dimensions of competitive advantage as a whole.

This theoretical model has been proposed, which represents the relationships shown in Figure (1) below, in light of the structural equation model employed in the study:

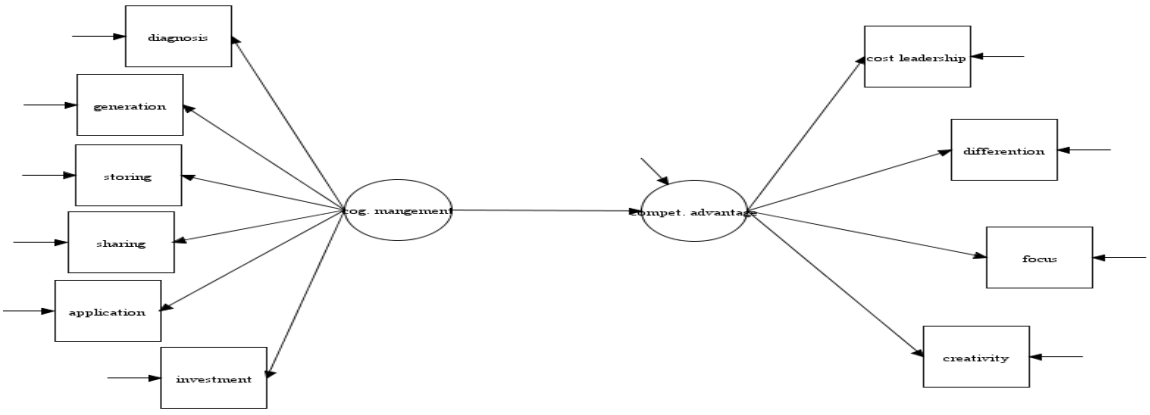

Figure 1: The hypothetical structural equation model for the impact of knowledge management processes on competitive advantage.

The total study community:

The study community consists of the employees of the upper and middle administration of Bupa Arabia for Cooperative Insurance Company in Jeddah. Their number is (586) male and female employees (Reem Bahabil: Senior Manager of Benefits and Compensation - Human Resources - Bupa Arabia for Cooperative Insurance Company, phone call , 06/16/2021 AD).

Participants: The target community is the employees of Bupa Arabia for Cooperative Insurance in the Kingdom of Saudi Arabia. However, the study relied on the number of individuals available at Bupa Arabia for Cooperative Insurance in Jeddah, and the size of the participants was 243 from high and middle administrations (first, second and third levels) from Bupa Arabia for Cooperative Insurance Company in Jeddah, Saudi Arabia. They were distributed to 167 males, at a rate of 68.7%, and 67 females, at a rate of 31.3%. Both researchers were keen to provide a minimum number of participants in the study, with a sample size of no less than 200 individuals, according to what most researchers agreed upon when using the structural equation modeling. (Barrett, 2007) mentioned that specialized journals in several fields did not accept to publish any study using the structural equation modeling method with a sample size of less than 200 individuals, as most researchers who advocate the use of structural equation modeling agree on that. Based on the foregoing, the researchers were keen to provide the necessary conditions for conducting the study.

Tools:

Study tool: To achieve the objectives of the research and to answer its questions and to refer to the literature and previous studies related to the topic of the research, the questionnaire was designed to reveal the role of knowledge management in achieving competitive advantage in business organizations: an applied study on Bupa Arabia for Cooperative Insurance in Jeddah. The questionnaire was presented to a number of arbitrators. After taking their comments, the final design of the questionnaire was approved in both Arabic and English, and then it was created through the forms of Google service provider. It was sent with a link to the target group through e-mail through the internal communication department of Bupa Arabia for Cooperative Insurance Company in Jeddah from July 11 (2021) until August 27 of the same year. The study relied on the descriptive approach by applying the study tools to a sample of employees of the upper and middle administration (first, second and third levels) at Bupa Arabia for Cooperative Insurance in Jeddah, Saudi Arabia. It also relied on the correlative approach to verify the hypothetical structural equation modeling effects between the two variables of the study, namely knowledge management and competitive advantage.

The questionnaire, in its final form, consisted of three main sections:

The first section: included the demographic information of the study sample members (gender, age group, educational qualification, languages, years of experience, administration or department, title (position).

The second section: included (37) items of standardizing the reality of knowledge management (knowledge management operations), and included six axes, namely: knowledge diagnosis (6) items, knowledge generation (7) items, knowledge storage (6) items, and knowledge sharing (6) items, Knowledge Application (6) items, and Knowledge Exploitation (6) items.

The third section: included (25) paragraphs of standardizing the role of the dimensions of competitive advantage in business organizations and included four axes, namely, cost leadership strategy (7) paragraphs, excellence strategy (6) paragraphs, focus strategy (6) paragraphs, and organizational creativity (6) paragraphs.

A five-graded Likert scale was used to correct the questionnaire according to the following scores chosen by the respondents: (a score of (1) expresses strongly disagree, a score of (2) expresses disagreement, a score of (3) expresses neutral, a score of (4) expresses agreement, and a score of (5) expresses strongly agree.

Validity **procedures:**

Arbitrators' validity: (Explicit validity)

After preparing the questionnaire in its initial form, it was presented to the supervisor and reviewed, and then its validity was verified and presented to a group of arbitrators from professors specialized in the fields of management, information science and business administration, who have sufficient experience and knowledge to assess the suitability of the questionnaire to tackle the subject of the study. Their number reached (8) as well as (2) employees of the senior management of the Bupa Arabia Company for Cooperative Insurance in Jeddah, where the total of arbitrators reached (10) in order to express their observations about the questionnaire's phrases. They expressed their opinions about the correctness of the linguistic formulation of the questionnaire's phrases, and the suitability of the questionnaire's vocabulary to the sample of the study, as well as about the validity of each statement to measure what it was designed to measure. The researchers took the opinions and directions of the arbitrators, where they deleted and added some paragraphs, and made some modifications according to their observations and directions, and put the tool in its final form according to the arbitrators' modifications and their opinions, after the supervisor's reviewing and checking. The statement that the coefficient of agreement increases by more than 80% was relied upon, and the coefficients of agreement ranged between arbitrators.

Structural or conceptual validity:

The validity of the concept or construction of the axes of the knowledge management questionnaire was verified using confirmatory factor analysis to verify the assumed structure of knowledge management.

Confirmatory factor analysis:

Both researchers assumed the confirmatory factor analysis of the six-dimensional structure in the light of the theory and previous studies.

The structural validity of the six-axis frame was verified in the MPLUS program, and the Likert data was dealt with on the basis that it is categorical, ordinal, and not related, and this is the most appropriate to deal with the data generated from the five-point Likert scales. The weighted least square of mean and variance (WLSMV) method was used. The good fit for this model is as follows:

Table (1): Indicators of good fit for the confirmatory factor analysis model for the knowledge management questionnaire (N=243)

Indicator	Value
Chi- squared	1056.189, df=613,
$\chi^2(p)$	(p=0.00)
RMSEA	0.055
RMR	0.00
NNFI	1.0
CFI	0.978

The results in Table No. (1) above show that the model is in good agreement with the data, where the value of the RMSEA index was below 0.07 and the value of the CFI and NNFI indicators were above 0.95, but the value of the chi-squared statistic is statistically significant as a result of the large sample size and not as a result of poor matching of the model.

The following are the standard divergences of the confirmatory factor analysis model for the assumed frame of the knowledge management architecture:

Table (2): Divergences, standard errors and T-values for knowledge management questionnaire expressions in confirmatory factor analysis (N=243)

Statement	Diagnostic (saturation) (Standard error) (T-value)	Generation (saturation) (Standard error) (T-value)	Storing (saturation) (Standard error) (T-value)	Sharing (saturation) (Standard error) (T-value)	Applying (saturation) (Standard error) (T-value)	Investing (saturation) (Standard error) (T-value)
A1	0.83 (0.027) 30.88					
A2	090 (0.018) 50.14					
A3	0.79 (0.031) 25.56					
A4	0.86 (0.023) 37.90					
A5	0.89 (0.02) 45,12					
A6	0.79 (0.03) 25.95					
A7		0.80 (0.028) 28.44				
A8		0.82 (0.024) 33.52				
A9		0.87 (0.021) 42.25				
A10		0.73 (0.033) 22.45				
A11		0.89 (0.019) 47.72				
A12		0.82 (0.026) 31.68				
A13		0.8 8(0.020)				

		43.36				
A14			0.87 (0.024) 36.79			
A15			0.81 (0.028) 28.40			
A16			0.80 (0.028) 29.17			
A17			0.88 (0.024) 36.63			
A18			0.85 (0.023) 37.71			
A19			0.92 (0.024) 38.55			
A20				0.83 (0.024) 35.08		
A21				0.88 (0.018) 49.64		
A22				0.79 (0.027) 29.09		
A23				0.84 (0.023) 36.78		
A24				0.84 (0.023) 36.64		
A25				0.81 (0.025) 33.166		
A26					0.83 (0.024) 34.62	
A27					0.88 (0.017) 50.97	
A28					0.92 (0.014) 64.31	
A29					0.89	

					(0.017) 54.04	
A30					0.82 (0.023) 35.11	
A31					0.77 (0.03) 25.73	
A32						0.83 (0.025) 33.82
A33						0.85 (0.22) 38.96
A34						0.85 (0.021) 40.04
A35						0.92 (0.014) 65.41
A36						0.90 (0.018) 49.78
A37						0.82 (0.026) 31.24

The results in Table No. (2) above show that the standard divergences of all the expressions with the factors specified on them are very high, as most of them exceeded 0.80 and that the corresponding T-values for all divergences were more than 1.96 for a statistical significance level of 0.05, and also the T-value for all divergences with factors exceeded 2.58 for a statistical significance level of 0.01. This provides strong evidence of the structure validity of the knowledge management axes statements and their validity for use in the study.

Stability analysis for the dimensions of knowledge management:

The stability of the internal consistency was estimated using the Alpha Cronbach coefficient for expressions for the knowledge diagnosis axis ((K=6): its value was 0.902, for the knowledge generation axis (K=7): its value was 0.91, for the knowledge storage axis (K=6:) its value was 0.884, for the knowledge sharing axis (K=6): its value was 0.884, for the knowledge application axis: (K=6), its value was 0.90, and for the knowledge investment axis (K=6) with a value of 0.91. Accordingly, the expressions of the axes or dimensions of knowledge management have a satisfactory degree of internal consistency.

Structural validity of the competitive advantage questionnaire:

Structural validity was verified using the confirmatory factor analysis of the structure consisting of four axes or dimensions that the researchers assumed in the light of the theory and previous studies. The confirmatory factor analysis was verified using the WLSMV method in the MPLUS program (7), and the Likert data were dealt with on the basis that it is an ordinal classification and not of a continuum structure, and this is the most appropriate to deal with the ordinal data generated from the five-year Likert scales. The Weighted least square of mean and variance method was used. (WLSMV) Indicators of good fit for this model were as follows:

Table (3): Indicators of good fit for the confirmatory factor analysis model for the identification of competitive advantage (N=243).

Indicator	Value
Chi- squared $\chi^2(p)$	868.23, df=264, (p=0.00)
RMSEA	0.10
SRMR	0.00
NNFI	0.95
CFI	0.960

It is clear that the model matches the data to an acceptable degree, where the value of the RMSEA index didn't exceed 0.1 and the value of the CFI and NNFI indices were 0.95 or more, but the value of the chi-squared statistic is statistically significant as a result of the large sample size and not as a result of poor matching of the model.

The following is the path form of the confirmatory factor analysis model for the standard divergences of the expressions with their specific factors for the concept of competitive advantage:

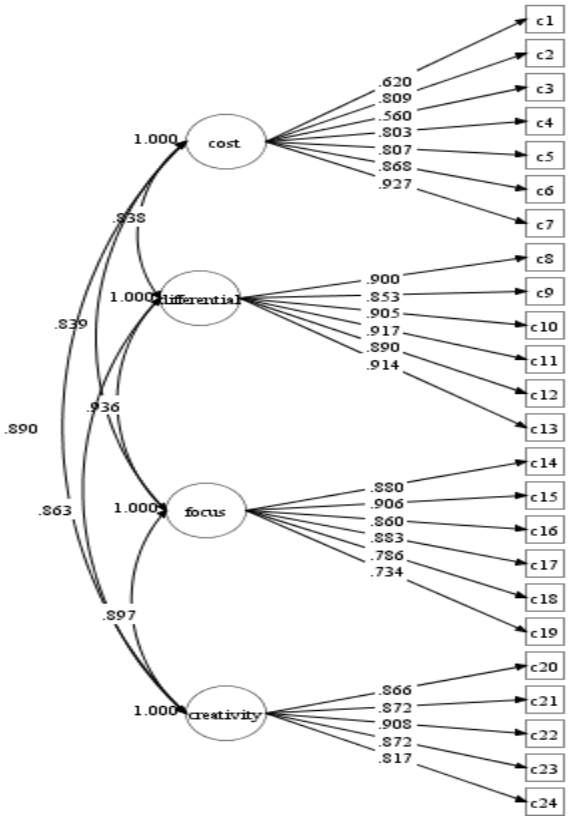

Figure (2): The confirmatory path shape of the standard factor analysis model for the competitive advantage the expressions of questionnaire with its statistically significant divergences.

It is clear from Figure (2) above that the standard divergences of all expressions with factors are very high and statistically significant. The corresponding T value for each divergence increased more than 1.96 for the level of statistical significance 0.05 and also the T value for all the divergences with the factors increased more than 2.58 for the level of statistical significance 0.01. This provides strong evidence of the structure expressions validity of the dimensions of competitive advantage and their validity for use in the study.

Stability analysis for the dimensions of competitive advantage:

The internal consistency coefficient Alpha Cronbach was estimated for the axes of the competitive advantage questionnaire, which is the axis of the cost leadership strategy ((K=7): its value was 0.866, the axis of the excellence strategy (K=6), its value was 0.93, the focus strategy axis (K=6) its value was 0.89, the organizational creativity axis (K=6): the value of alpha is 0.87, and the phrase "the company's employees use unfamiliar and traditional methods in performing their job duties" has been excluded from the axis and its value is 0.89. Therefore, the questionnaire has a satisfactory degree of internal consistency, which indicates the validity in the statistical analyzes of the study.

Procedures: The questionnaire was applied to an electronic link in both Arabic and English in addition to the basic data, through a link on Google Drive, and the respondents were warned that the data was confidential to be used just for scientific research purposes. The questionnaire measures knowledge management and competitive advantage in Bupa Arabia for Cooperative Insurance Company in Jeddah, Saudi Arabia, in the period from 07/11/2021 AD to 08/27/2021 AD, and the Excel data file was converted to an SPSS file.

Statistical processing methods: The data were analyzed using the Statistical Analysis Program of the Statistical Package for the Social Sciences (SPSS), and the stability of internal consistency was estimated using the Alpha Cronbach questionnaire included in the study. It was taken into account that the stability of the axis statements is not less than 0.70 (Nunnally & Bernstien, 1994).

The MPLUS (7) program was used to perform the confirmatory factor analysis and the structural equation model, where it was used:

1. Estimation method: The confirmatory factor analysis model was verified for the assumed structure of the study tools using weighted least square of mean and variance (WLSMV). Likert data was treated as rank-order responses. It relied on the maximum probability method to verify the structural equations model among the factors in the study.

2. Good Matching Indicators: The program gives many indicators of conformity, the most important of which are square χ^2, TLI index (NNFI), CFI index, and residual indexes RMSEA and SRMR. The researchers relied on the criteria reached by Hu & Bentler (1998; 1999) to determine the appropriate and good match, which is for the CFI and NNFI indicators, good fit is greater than 0.95 and acceptable or suitable fit is from 0.90 to 0.94. For the RMSEA indicators, 0.05 to 0.08 is a suitable fit and less than 0.05 is a good fit. For the RMR and SRMR indicators a value of 0.08 and less indicates a good fit, and the value in the range from 0.09 to 0.10 indicates an acceptable fit. For χ^2, if it is not a statistical function, the model is identical with the data, and if it is a function, the model does not match (Amer, 2018).

The researchers used the confirmatory factor analysis to verify the structural validity of the questionnaire. It relied on the structural equation modeling to verify the assumed causal structural model among the study variables. The structural equation model was verified through the two-step approach:

The first step: Verify the measurement model through the confirmatory factor analysis method for the underlying factors between knowledge management and the competitive advantage with its indicator.

The second step: Verify the structural model of the causal relationships between the latent variables or factors represented in knowledge management and competitive advantage.

Results and discussion:

The first question: Are there correlations between the dimensions or processes of knowledge management (diagnosis, generation, storage, sharing, application, and investment) and competitive advantage?

To answer this question, the Pearson correlation coefficient was estimated as follows:

The following are the correlations between the six pillars of knowledge management and competitive advantage:

Table (4): Correlation relationships between the six axes of knowledge management and competitive advantage.

	Diagnosis	Generation	Storage	Sharing	Application	Investment
Competitive advantage	0.81**	0.81**	0.73**	0.83**	0.84**	0.86**

** Statistically significant at a level of statistical significance 0.01 .

The results in Table No. (4) above showed that there is a strong positive correlation and a statistical function of 0.01 between all the six components of knowledge management and competitive advantage. This indicates the importance of the role of knowledge management processes for the competitive advantage of the company, that is, the greater the presence of knowledge management processes in the company are, the greater the competitive advantage in the labor market is .

The second question: Do knowledge management processes affect the achievement of competitive advantage from the point of view of employees of Bupa Arabia for Cooperative Insurance Company in Jeddah, Saudi Arabia?

In light of previous studies and theoretical theses, the hypothesis could be formulated as follows:

Knowledge management processes play an essential role in increasing the competitive advantage of a sample of employees of Bupa Arabia for Cooperative Insurance Company in Jeddah, Saudi Arabia.

Before verifying this hypothesis, it is necessary to present the postulates of using the structural equation model:

First: Descriptive statistics for the study variables:

Table (5): Means, standard deviations, skewness and kurtosis of the study variables:

	Mean	Standard deviation	Skewness	Kurtosis
knowledge diagnosis	**26.00**	**3.91**	**-1.49**	**3.76**
knowledge generation	**29.53**	**4.89**	**-0.99**	**1.53**
knowledge storage	**26.33**	**3.78**	**-1.38**	**3.67**
knowledge sharing	**25.32**	**4.27**	**-1.02**	**1.61**
Knowledge application	**24.78**	**4.57**	**-0.83**	**0.70**
knowledge investment	**25.11**	**4.46**	**-1.12**	**1.93**
cost leadership strategy	**28.44**	**4.84**	**-0.82**	**1.83**
Excellence Strategy	**26.44**	**3.86**	**-1.28**	**2.64**
focus strategy	**26.03**	**3.96**	**-1.41**	**3.46**
organizational creativity	**20.77**	**3.78**	**-1.15**	**2.48**

The results in Table No. (5) above showed that the skewness values did not exceed 1.5 and the kurtosis values did not exceed 7. Therefore, the moderation of the data of the variables is meduim, and therefore they are suitable for analysis in the structural equation model.

Second: the matrix of correlations between study variables

Table (6): Correlation Matrix between Study Variables (N=243)

Variables	Knowledge Diagnosis	Knowledge Generation	Knowledge Storage	Knowledge Sharing	Knowledge Application	Knowledge Investment	Cost leading Strategy	Excellence Strategy	Focus Strategy	Organizational Creativity
knowledge diagnosis	1.0									
knowledge generation	0.78**	1.00								

knowledge storage	0.76**	0.77**	1.00							
knowledge sharing	0.80**	0.83**	0.81**	1.00						
Knowledge application	0.75**	0.85**	0.72**	0.84**	1.00					
knowledge investment	0.81**	0.82**	0.76**	0.86**	0.86**	1.00				
cost leadership strategy	0.67**	0.70**	0.63**	0.74**	0.74**	0.76**	1.00			
Excellence Strategy	0.75**	0.73**	0.70**	0.75**	0.73**	0.76**	0.66**	1.00		
focus strategy	0.76**	0.70**	0.63**	0.74**	0.73**	0.75**	0.70**	0.83**	1.00	
organizational creativity	0.74**	0.79**	0.69**	0.76**	0.82**	0.83**	0.76**	0.75**	0.80**	1.00

**Statistically significant at 0.01

The results in Table No. (6) above showed the existence of positive, strong, and statistically significant correlational relationships between the dimensions of knowledge management on the one hand, and the dimensions of competitive advantage on the other hand. However, strong correlations appeared between the independent variables, but to avoid the collinearity issue, all the independent variables, which are knowledge management processes, were collected in a general factor and the structural equation model was used(the structural model was previously presented.)

In order to verify this model, a two-step approach was made to make the structural equation model as follows:

First step: Verify the Confirmatory factor analysis model:

The confirmatory factor analysis model was verified using the ML method, and the matching indicators were as follows:

Table (7): Indicators of good fit for the confirmatory factor analysis model for knowledge management and competitive advantage (N=243)

Indicator	Value
Chi- squared $\chi^2(p)$	147.26, df=34, (p=0.00)
RMSEA	0.10
SRMR	0.027
CFI	0.96
TLI	0.94

The results in Table No. (7) above showed that the model matches to an acceptable degree with the data, as the value of the RMSEA index did not exceed 0.1 and the value of the CFI and NNFI indices were 0.95 or more, but the value of the chi-squared statistic is statistically significant as a result of the large sample size and not as a result of poor matching of the model. This indicates that the scalar model of the structural equation model matches the data to an appropriate degree.

Here are the standard divergences:

Table (8): Standard divergences, standard errors, and T-values of the confirmatory factor analysis model for knowledge management and competitive advantage

	Knowledge Management	**Competitive Advantage factor**
knowledge diagnosis	**0.72(0.032) 22.52**	-
knowledge generation	**0.78(0.028) 28.04**	-
knowledge storage	**0.81(0.024) 34.63**	-
knowledge sharing	**0.87(0.018) 47.30**	-
Knowledge application	**0.85(0.020) 41.92**	-
knowledge investment	**0.74(0.031) 24.10**	-
cost leadership strategy	-	**0.81(0.024) 33.64**
Excellence Strategy	-	**0.86(0.019) 44.76**
focus strategy	-	**0.89(0.017) 52.27**
organizational creativity	-	**0.91(0.014) 63.84**

The results in Table No. (8) above showed that the knowledge management indicators were saturated with their own factor, and the dimensions of competitive advantage were saturated with their own dimensions, where the value of T exceeded 1.96.

The second step is to verify the causal structural model:

The structural equation model was verified using the ML method, and the matching indicators were as follows:

Table (9) : Indicators of good fit of the structural equation model for the relationships between knowledge management and competitive advantage (N=243).

Indicator	Value
Chi- squared $\chi^2(p)$	151.26, df=34, (p=0.00)
RMSEA	0.10
SRMR	0.026
CFI	0.960
TLI	0.950

The results in Table No. (9) above showed that the model matched to an appropriate degree with the data, where the value of the RMSEA index did not exceed 0.1 and the value of the CFI and TLI indicators were approximately 0.95 or more, but the value of the chi-squared statistic is statistically significant as a result of the large sample size and not as a result of poor matching of the model. This indicates that the structural model matches the sample data.

The following is the direct causal effect from knowledge management to competitive advantage:

Table (10):The direct effect, standard error, and T-value of the effect of knowledge management on competitive advantage.

	Causal effect
Knowledge management on competitive advantage	**0.94** **(0.011)** **82.75**

The results in Table No. (10) above showed that there is a direct, positive and strong causal effect from knowledge management to competitive advantage, meaning the more knowledge management processes in the company increase, the more competitive advantage it has, from the point of view of its employees, and this is supported by the studies of (Mundra et al., 2011) and (Tumonglo et al., 2020). Rather, knowledge management processes explained 89.5% of the variance of competitive advantage that is a large impact size, and this shows the effective and essential role of knowledge management processes in developing competitive advantage.

The following is the shape of the path with its statistically significant effects:

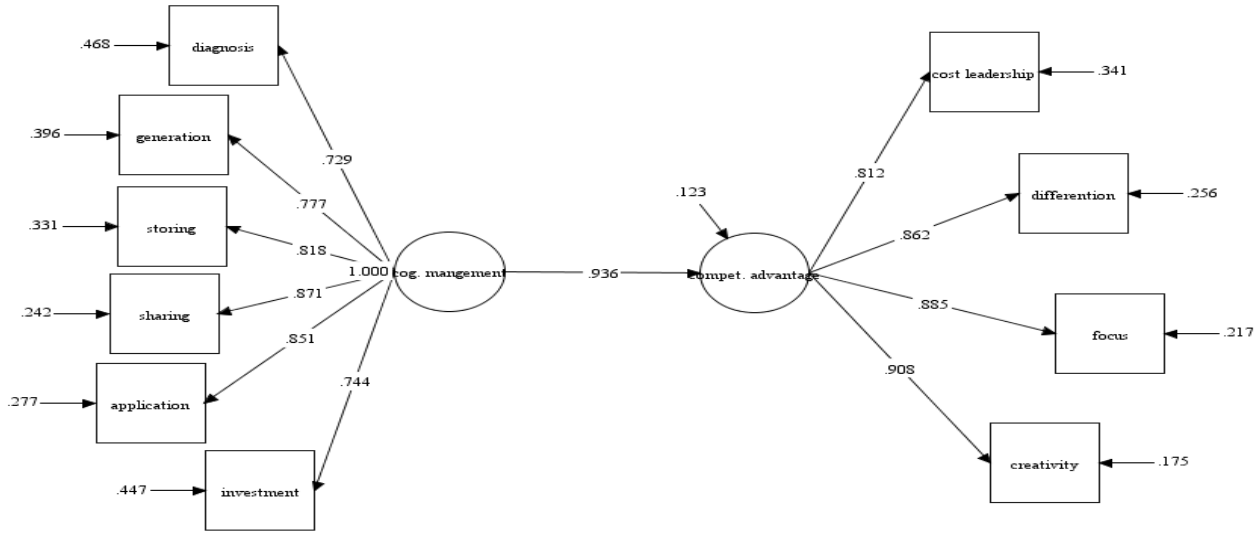

Figure 3: The path shape of the structural equation model for knowledge management and competitive advantage with its statistically significant normative effects.

Discussion and commentary:

The study aimed to shed light on the cooperative insurance companies in the Kingdom of Saudi Arabia. The focus was on Bupa Arabia for Cooperative Insurance in Jeddah as the inspection unit at the level of the Kingdom. Knowledge management processes were identified in the light of six processes and four strategies for competitive advantage, in the light of previous studies and theoretical theses in that matter. The study aimed to identify the role that knowledge management processes play in competitive advantage by determining the nature of the direct impact of knowledge management processes on the competitive advantage of employees at Bupa Arabia for Cooperative Insurance in Jeddah, Saudi Arabia. The study dealt with the impact of knowledge management processes on the dimensions of competitive advantage from an overall point of view. In this regard, the related previous studies dealt with them either from the point of view of philosophical theoretical theses or from the viewpoint of correlational studies. However, the current study followed the methodology of the structural equation model because of its advantages that outweigh the classic simple analytical methods, as it shows its ability in studying the infrastructure of the concepts used in the study, excluding measurement errors, and addressing the phenomenon from a total rather than a partial point of view. In this regard, the study supported the theoretical propositions that emphasize the great role that knowledge management processes play in competitive advantage, as the increase of one standard unit of knowledge management increases the competitive advantage by 0.94 standard units and this is a very large impact size. Certainly, this highlights the importance of strengthening, developing and availability of knowledge management processes in cooperative insurance companies, and the professional experience of the company, which is reflected positively on the job satisfaction of its employees. These results are consistent In agreement with the study of (Mundra et al., 2011), which indicates the close relationship between the knowledge management process and the processes of innovation and organizational creativity. It also agreed with the study of (Tumonglo et al., 2020), which aims at showing the impact of innovation, market orientation and knowledge management on competitive advantage and company performance of PT ". The researchers aimed through which to determine the impact of innovation, market orientation and knowledge management on the company's performance with competitive advantage as an intermediary variable, in agreement with the current study, knowledge management has a positive and important impact on the competitive advantage by improving the company's performance,

Recommendations:

- The necessity of removing all obstacles and difficulties for the application of knowledge management in cooperative insurance companies so that they can perform their work in a manner that is positively reflected on the service owners.

- The need to increase interest in investment, application and sharing of knowledge because of their prominent role on competitive advantage.

- The necessity of developing a comprehensive approach to start developing the infrastructure for social and technical knowledge management which in turn will provide the platform needed to increase the effectiveness and efficiency of knowledge management processes.

- The company must use devices to store information.

- The study recommended that more attention should be given to motivating all company employees to present their innovations and new knowledge.

- The necessity of encouraging the company to exchange information among its employees at all levels.

Suggested Studies:

- Conducting more studies to highlight the role of knowledge management processes along with other technological or social variables on the competitive advantage.

- Conducting a national study that includes all cooperative insurance companies to reach a common vision that includes aspects of improvement, identifying difficulties and obstacles, and avoiding and solving them.

- Conducting studies on other insurance companies in the Kingdom of Saudi Arabia to ensure the dissemination of the results of the cross-validation study.

- Conducting studies on the obstacles to the application of knowledge management in business organizations.

- Conducting studies to highlight the requirements for the application of knowledge management in business organizations.

- Conducting studies on job polarization and its relationship to competitive advantage in business organizations.

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