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Role of E-Knowledge Management in Sustainable Competitive Advantage

**Rasha Abbas Abood¹, Ahmed Muhammadridha Abdulrasool², Hasan Mahdi Saleh³,
Ahmed Abdullah Amanah⁴, Mohammed Faez Hasan⁵**

¹Ph.D in Human Resources, Associate Professor, Business Administration Dept., University of Babylon, IRAQ, bus238.rasha.abbas@uobabylon.edu.iq , <https://orcid.org/0009-0007-6023-4772>

²Ph.D in Marketing Management, Faculty of Physical Education & Sports Sciences, Management Kerbala, IRAQ, ahmed.mohammed@uokerbala.edu.iq , <https://orcid.org/0000-0001-6217-4565>

³MAS. in Marketing Management, Business Administration Dept., University of Kerbala, IRAQ, hasan.mahdi@uokerbala.edu.iq

⁴Ph.D in Strategic Management, Professor, Business Administration Dept., University of Kerbala, IRAQ, Ahmed.a@uokerbala.edu.iq , <https://orcid.org/0000-0001-5092-391X>

⁵Ph.D in Financial Management, Associate Professor, Financial & Banking Sciences Dept., University of Kerbala, IRAQ, Mohammed.faiz@uokerbala.edu.iq , <https://orcid.org/0000-0002-4579-3214>

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Abstract: The research aimed to explore the relationship between E-knowledge management and achieving sustainable competitive advantage for Iraqi financial institutions. The intellectual problem of the research was represented in the main question (Does E-knowledge management have an impact on the sustainability of the competitive advantage of Iraqi banks?). On the basis of this, sub-questions were raised through which appropriate solutions can be found for the banks in the research community. The

importance of the research was evident from the importance of the field of application, which now needs to provide various solutions to advance and develop the reality of the Iraqi banking sector. The research sample was a purposive sample of senior and middle managers of Iraqi banks of various types (governmental, private, investment and Islamic) in the Middle Euphrates region in Iraq, which amounted to (160) respondent. The descriptive analytical approach was adopted by preparing a questionnaire prepared for this purpose according to the five-point scale. A set of statistical methods were used to analyze the data, including the Cronbach Alpha test for the validity and reliability of the research scale, a set of descriptive statistical tests, and simple effect tests using the statistical software SPSS. V. 25. The research reached a set of results, the most important of which is the presence of a significant impact of E-knowledge management processes in sustaining the competitive advantage of banks in the research community. The research concluded by presenting a set of recommendations to the managements of these banks, the most prominent of which was the necessity of activating E-knowledge management processes within the operations, departments and branches of banks in the field of research, as well as benefiting from and developing E-knowledge management to be a barrier to the surrounding environmental changes and providing creative solutions to solve problems in a way that It contributes to achieving and sustaining the competitive advantage of those banking institutions operating in Iraq.

Keywords: E-Knowledge Management, Sustainable Competitive Advantage, Iraqi Banks.

Introduction

The entry into the information age had a profound impact on the emergence of the information society with its activities, resources, measures, and practices related to information production, organization, dissemination, and investment. The aforementioned interconnection between these fields was an incentive and encouragement to study and research their philosophical fields, and work to study the mechanism of linking links, relationships and their implications, which brought together electronic knowledge management as an important tributary that contributes to creating competitive advantage, which will be the future direction for the management of the organizations in which the study is to be conducted.

The intellectual debate raised by this research falls within the issue of benefiting from the field of knowledge management in order to create a competitive advantage in financial organizations in general and commercial banks in particular, which are the basic pillar of the financial system through which the economy can perform its functions in any country.

Especially in light of the rapid and successive developments witnessed by the banking sector, its work is no longer limited to the role of intermediation, but rather has extended to comprehensive banking, which requires the Iraqi banking industry in particular to have the ability to keep pace with developments, and to exercise the role assigned to it through a precise scientific study of what Iraqi banks can adopt methods to develop their financial resources. Iraqi banks are full of knowledge, whether that is embodied throughout the history of banking in the form of procedures, programs, policies, and work manuals, or that knowledge that is in the form of experiences, talents, and trends. What Iraqi banks lack is adopting and innovating new ideas that It finds that it increases its readiness for application, in addition to the inadequacy of current methods for investing this knowledge. Therefore, it is in dire need of adopting the foundations of electronic knowledge management and achieving the process of improving the level of its banking services. This, in general, was the starting point for conducting the current study, which aimed to achieve a number of goals, the most important of which is building a cognitive framework for the philosophy of its topics, rooting the new knowledge contained in its variables, describing its interpretive trends, and classifying the opinions of theorists regarding it.

Methodology

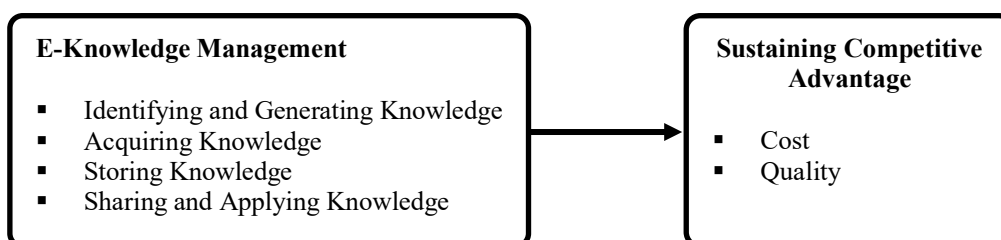
Study Problem and Questions: The problem of the current study requires a cognitive and practical diagnosis of the interactive relationship between (electronic knowledge management in its dimensions with the sustainability of competitive advantage) through which the general study problem is determined, which can be viewed from two parts: The first: is represented in the problem of the intellectual study, which is determined in light of the intellectual debate and the weakness of the researchers' conceptual agreement on its variables, as well as the weakness of rooting the interactive relationship between cognitive variables. The second: which is the most important, is represented in the problem of the field study, which included the extent of the need of banks (the study sample) to apply a cognitive approach to achieve advantages at the level of the Iraqi banking environment in the field and the need for managers to realize the influential relationship between the variables in the field, and thus the problem of the study was diagnosed by answering the following main field question: (What is the role of electronic knowledge management in the sustainability of the competitive advantage of Iraqi banking institutions?).

Study Methodology: The descriptive method is based on identifying the characteristics of the phenomenon and describing its environment quantitatively and qualitatively, and determining the type of relationship between its variables, causes, trends, and other aspects revolving around diagnosing a specific problem or phenomenon and identifying its reality on the ground (Malham, 2002). Some researchers believe that (the descriptive method) includes all other methods, especially the survey method, the case study method, and the content analysis method, with the exception of the historical and experimental methods (Al-Sarihi et al., 2008). Because the process of describing and analyzing the phenomena studied is almost a common issue and present in most types of scientific research, the descriptive method depends on interpreting the current situation and determining the relationships between the variables, and the (descriptive method) goes beyond merely collecting descriptive data about the phenomenon to analyzing and interpreting this data, classifying and measuring it, and extracting results from it (Hafez, 2012). Accordingly, the descriptive-analytical method was adopted in this study.

Study model and its hypotheses: After conducting a broad review of recent studies in this field, the study model was developed to reflect the nature of the influential relationships between the main and sub-variables, supporting the study problem, achieving its goal, and depicting its hypotheses as well as its philosophical foundations, which stipulated the influential role of electronic knowledge management in sustaining competitive advantage at the level of financial institutions in general and Iraqi banks in particular. Figure (1) shows the study model.

Figure 1

Study Model



Main research hypothesis: There is a significant impact of E-knowledge management in its dimensions on the sustainability of competitive advantage of financial institutions. Four sub-hypotheses emerged from it:

1. There is a significant impact of identifying and generating knowledge electronically on the sustainability of the competitive advantage of financial institutions.

2. There is a significant impact of acquiring knowledge electronically on the sustainability of the competitive advantage of financial institutions.
3. There is a significant impact of storing knowledge electronically on the sustainability of the competitive advantage of financial institutions.
4. There is a significant impact of sharing and applying knowledge electronically on the sustainability of the competitive advantage of financial institutions.

Study sample: The current study sample, which is represented by financial institutions in all their forms, whether governmental or private, with their various types, Islamic, commercial, industrial and agricultural. (230) questionnaires were distributed, (160) of which were returned, all of which were subject to analysis, i.e. a response rate of more than (70%). After identifying the individuals to whom the questionnaire was directed, we chose a regular intentional sample of the banks, the study sample, represented by managers and heads of departments and divisions of governmental and private banks, relying on their selection on the opinions of experts in banking work according to the criterion of the impact of each of them in drawing the strategy of the bank in which they work, in addition to their extensive experience in the field of banking work, as the researchers sought to determine an accurate scientific description of each individual through some of the measures that were included with the questionnaire, The (five-point Likert) test will be relied upon, the average of the measuring tool for which in this study is a hypothetical average of (3).

Literature Review

In this paragraph, we will answer the following intellectual question: Is there a role for electronic knowledge management in achieving competitive advantage and enhancing its sustainability? To answer this question, specialized literature confirms that it has identified many features in this regard, the most important of which are:

1. Knowledge management works as a strategy for balancing the (external environment) of the organization with its internal capabilities in a way that contributes to and affects raising organizational efficiency rates, and leads to improving rates of (competitive advantages) by providing the required information about environmental, economic, demographic and technological factors, which gives it a clear idea about (new goods and services, alternatives to raw materials and their uses, methods and techniques of production and marketing, the disappearance of certain goods and the emergence of alternative goods to current goods) (Maier & Remus, 2001).
2. The application of electronic knowledge management programs contributes to expanding the resources that the organization can obtain through the application of (IT) and forming an organizational culture based on improving the process of interaction and interconnection through dealing and integration between technological capabilities and organizational capabilities that will be in a good position to participate in the application of knowledge. The effective application of knowledge works to innovate solutions to the problems that the organization faces in addition to reducing time and cost, and then achieving the competitive advantage and its sustainability and the market position that the organization aims for (Hitt, 2001).
3. Electronic knowledge management contributes to diversifying competitors' strategies through the ideas it generates and the unique solutions it innovates. Facts indicate that the company (Du Peer) succeeded in the soft drink industry by achieving synchronization between the actual knowledge of the company's strengths with a good analysis of the industry to find a superior strategy based on an advertising attack in which it focused on the uniqueness of its drink's flavor. This aspect has led to the consolidation of its distinctive relationship identity and to increasing customer attachment to it, giving it an absolute advantage over major competitors and achieving costs (AI Power).
4. Electronic knowledge management works as a network fabric linking organizational elements and variables (strategy, culture, technology, resources, inputs, quality, operations), which contributes to the

flow of organizational knowledge between those seeking it and knowledge resources, in addition to assessing the extent to which electronic knowledge management practices are integrated into the core business processes.

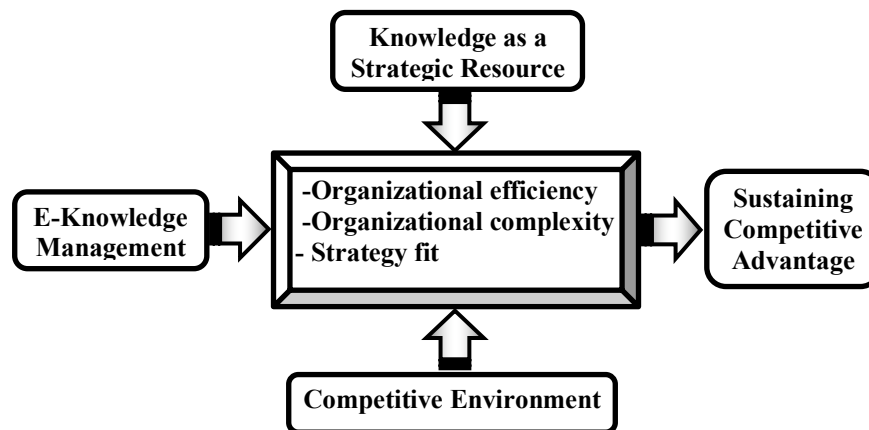
5. Electronic knowledge management contributes to creating successful organizations by continuously producing new knowledge. This knowledge is the sure source of competitive advantage, especially when markets change, technologies and the number of competitors increase, and products become obsolete quickly (Nonaka, 1991).

6. Electronic knowledge management achieves the possibility of survival and competition in order to confront (environmental variables) through effective data linkage and the ability to process information in a timely manner. (Maier & Remus, 2001)

7. Organizations today use electronic knowledge management programs to ensure the achievement of competitive advantage, given that organizations realize that they no longer expect that the products and services that made them successful in the past will make them so in the future. Unless you constantly seek to learn and know (Mershel,2000). Figure (2) clearly shows the previous concept.

Figure 2

E-Knowledge Management and Sustainability of Competitive Advantage



Results

Measuring the validity and reliability of the research scale

In order to verify the validity and reliability of the study scale, the researcher will use the alpha correlation coefficient (Cronbach's alpha coefficient) (Malhotra & Briks, 2000: 307) to determine the accuracy of the answers of the study sample members. The values of the Cronbach's alpha coefficient are statistically acceptable when these values are equal to or greater than (0.70), specifically in administrative and behavioral research

Table 1

Cronbach's Alpha Coefficient For Study Variables

Reliability Statistics		
Variables	No. of Items	Cronbach's Alpha
E-Knowledge Management	20	.919
Sustaining Competitive Advantage	11	.815

Description and Diagnosis of Study Variables and Their Dimensions

Table (2) indicates the frequency distributions, arithmetic means, standard deviations, coefficients of variation, and calculated (t) values for the dimensions of electronic knowledge management and competitive advantage, as the weighted arithmetic mean for them reached (4.185; 4.350) respectively,

which is greater than the hypothetical arithmetic mean of (3), and their standard deviation was (0.816; 0.961), and their coefficient of variation was (0.195; 0.158) and the calculated (t) value for them was (11.203; 8.325), which is greater than its tabular value (1.99). These results indicate that the sample members have sufficient awareness of the study variables and their dimensions within Iraqi banking institutions.

Table 2

Results of Test Describing and Diagnosing Study Variables

Dimensions	M.	S.D.	Co.V.	T-Value
Knowledge Identification	4.280	0.726	0.170	10.034
Knowledge Generation	4.380	0.617	0.141	12.775
Knowledge Storage	4.550	0.697	0.153	12.369
Knowledge Distribution And Application	4.316	0.758	0.176	9.882
E-Knowledge Management	4.350	0.691	0.158	11.203
Cost	4.210	0.856	0.205	7.96
Quality	4.160	0.777	0.186	8.691
Competitive Advantage	4.185	0.816	0.195	8.325

Study Hypotheses Testing

Testing the main hypothesis that states that there is a significant impact of electronic knowledge management in its dimensions on the sustainability of the competitive advantage of banking institutions. In order to accept the main hypothesis or not, the significance of the simple linear regression model was tested, using the (F) test, to determine the significance of the model for the purpose of determining the extent of the impact of electronic knowledge management (X) in its dimensions (x1-x4) on the sustainability of the competitive advantage (Y). In order to give an accurate decision on the validity of the main hypothesis or not, the sub-hypotheses emanating from it must be tested, as follows:

Table 3

Results of Effect Hypothesis Test for Study Variables

IND. VAR, (X) / DEP. VAR. (Y)	CONSTANT	E-Knowledge Management (X) In Its Dimensions	VALUE (F)		R ²	BETA
	A	B	CALCULATED	SCHEDULE (5%)		
Competitive Advantage (Y)	1.962	0.514	98.625	3.111	0.683	0.862
	1.988	0.655	82.210	3.111	0.736	0.753
	2.132	0.589	67.075	3.111	0.587	0.752
	2.460	0.475	56.452	3.111	0.613	0.812
	2.585	0.394	66.254	3.111	0.710	0.785

Table (3) indicates the estimation of the simple linear regression model, which shows the parameters of the regression model used in the measurement according to the simple model. Therefore, the interpretation of the relationship will be as follows:

1. The value of the regression coefficient (β) amounting to (0.514) means that any increase in the independent variable e-knowledge management (X) by one unit will lead to the sustainability of the competitive advantage by (51.4%).
2. The calculated value of (F) measures the significance of the simple regression model, as it reached (98.625), which is greater than its tabular value of (3.111) at a significance level of 5%, which means that there is a significant effect between the variables and thus the hypothesis is accepted.
3. The value of the interpretation coefficient (R^2) reached (0.683), meaning that the percentage of what the electronic knowledge management variable (X) explains of the changes that occur in the sustainability of competitive advantage (Y) is (68.3%), while the remaining percentage, which is (31.7%), is due to the contribution of other variables not included in the current study model.

Conclusions

1. The literature showed a remarkable agreement on the necessity of showing the vital and strategic role of electronic knowledge management in relation to the sustainability of competitive advantage as one of the contemporary issues in administrative thought.

2. It became clear through the study that there is a connection and relationship between electronic knowledge management through its dimensions in the sustainability of competitive advantage.
3. Electronic knowledge management is an administrative philosophy concerned with managing the intangible resources of the organization, internally and externally for its benefit for the purpose of its success and survival.
4. Competitive advantage is a complex concept that requires understanding its essence and being convinced of the capabilities it offers in the field of competition.
5. The main axis in the new management thought is the sustainability of competitive advantage and that effective electronic knowledge management is the pillar and foundation of this advantage.
6. Competitive advantage is a complex concept that requires understanding its essence and being convinced of the capabilities it offers in the field of competition.
7. Most other studies focused largely on the experiences of developed countries. There is a scarcity of research related to electronic knowledge management and competitive advantage in developing countries (including Iraq), especially in the banking sector. Therefore, examining and exploring the impact of electronic knowledge management and competitive advantage has become the driving force behind this study.

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