PalArch's Journal of Archaeology of Egypt / Egyptology

CRISIS MANAGEMENT STRATEGY IN LIGHT OF JUST IN TIME – KNOWLEDGE MANAGEMENT (JIT-KM): CASE STUDY IN THE CENTRAL BANK OF IRAQ

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Dr. Areej Saad Hassan Abu Naila, Dr. Anwar Mustafa Hasan, Crisis management strategy in light of Just In Time – Knowledge Management (JIT-KM): Case study in the Central Bank of Iraq-- Palarch's Journal Of Archaeology Of Egypt/Egyptology 18(1). ISSN 1567-214x

Keywords: Crisis management, Just In Time - knowledge Management.

Abstract

The current research included an intellectual framework about two variables, namely the strategy of crisis management and JIT-KM. The importance was to try to link these two variables to arouse the interest choosing a crisis management strategy through JIT-KM. The research aims to study the effect of JIT-KM in choosing a crisis management strategy. The research sample was a number of managers working in the Central Bank of Iraq. The questionnaire was used as a tool to collect data related to the research. The results showed acceptance of the main hypothesis of the research, that is, there is a significant statistically effect of knowledge management at the time specified in the crisis management strategy, so recommendations were presented, the most important of which is the necessity of the CBI's directors to rely on multiple knowledge sources by reviewing the latest scientific research developments published in international magazines as well as trying to obtain knowledge through the Internet.

1. Introduction

The crisis is considered a critical subject related to the of the administrative entity that is afflicted with it and a problem that represents difficulty for the decision-maker, which, so any decision he makes becoming uncertainty, lack of knowledge, mixing the causes with the results and successive association that increases the degree of the unknown in the developments of what may result from the crisis. Also, the crisis expresses a position and a situation that the decision-maker faces in one of the administrative entities of a state, institution, project or family in which events happen. The causes are intertwined with the causes and the decision maker loses his ability to control it or its future directions, as the crisis is considered a challenge and a conflict between the decision-maker and the manufacturing forces .The

crisis is accompanied by anxiety or pressure forces which threatens the security of the administrative entity, and for this it was necessary for the organizations to have a system that provides them with the knowledge that the decision maker needs to reach strategies by which he faces the crises .The organization may be exposed to achieve the important purpose Which must reach in the right time (JIT-Knowledge management) .

2. Research problem

Most organizations in Iraq suffer from this kind of problems that result from the crises that the country is exposed to. The Central Bank of Iraq is one of these organizations that are affected by these crises, including unstable security situations, economic and political fluctuations that affect the workflow of the bank, and for this organization needs ability to face these crises through the scientific, administrative method so knowledge management achieves in a specific time, because it provides through the decision-maker which can reach the best solutions to deal with these crises. The research problem is that many of the crises in the country occur suddenly and quickly, which decision makers in the Central Bank of Iraq may not be able to obtain knowledge at the appointed time so that he can face the crises and not make them affect the flow of his work. So that several questions were raised:

- 1. Is a specific and appropriate strategy to confront crises followed by managers at the Central Bank of Iraq?
- 2. What extent are the dimensions of JIT-KM which is available in the Central Bank of Iraq?
- 3. Is there a significant impact relationship between crisis and strategies of JIT-KM?

3. Importance of the research

The importance of the research is to try to link two variables, which are the strategies of crisis management and JIT-KM to study the influence of the relationship between them, and the research derives its importance from the importance of the organization in which it is applied except the Iraqi Central Bank because of its importance in the Iraqi economy.

4. Research objectives

The objectives of this research can be determined by the following:

- 1. Knowing whether managers in the Central Bank of Iraq departments use specific strategies in the face of crises.
- 2. Try to motive managers in the Central Bank of Iraq departments can get the JIT-knowledge.
- 3. Study the relationship between JIT-KM and crisis management strategies.

5. Main Hypothesis:

"There is a statistically significant effect of knowledge management on time in crisis management strategies"

Then it divided to the two secondary hypotheses as follows:

H1: There is a significant statistically significant effect of techniques on crisis management strategies

H2: There is a significant statistical effect of the domains in crisis management strategies.

6. Research methodology

The study adopted the descriptive analytical approach, during the descriptive approach; some of scientific sources and research were used for Arab and foreign magazines, as well as reliance on the Internet. As for the analytical method, the data were collected through the questionnaire using a Likert scale and statistical methods to obtain the results.

7. Scope of Research

The Researcherselected the Central Bank of Iraq as a case study and used the questionnaire which distributed to the (30) manager as the sample of the study from many departments in the Bank.

8. Literature Review

8.1 Crisis Management Strategy

- **8.1.1 Concept of crisis:** the crisis in the Arabic language means: distress (ALfairoos Abbadi, 2006). A crisis is a critical period or an unstable state that results in an influential outcome, involves quick events and a threat to the values and goals that affected by the crisis effect in it (Janis, 1989; Al-Sakarna 2015). The crisis means an administrative situation or event in which the organization goes away from the usual thing, this situation includes a threat and surprise in the event and timing, as well as an event that managers and stakeholders believe as very prominent and unexpected threatening the goals of the organization which profound implications for the organization's relationship with its internal and external environment (Milburn, Schuler & Watman, 1983; Al-Alawi, 2019).
- 8.1.2 Crisis management: It means how to overcome the crisis with different scientific and administrative tools and avoid its negatives effects, as well as benefit from its positives (Brief & Motowidlo, 1986; Al-Khudairi, 1993). which is the process of planning and preparing for bad events and disasters, how to deal with them (Howell & Shamir, 2005: 96). It also means detecting early warning signals to effectively reduce the incidence of a crisis and thus avoid trouble by responding appropriately (Bernsten & Bonafede, 2011). It can also be defined as a series of measures aimed at controlling crises and limiting their aggravation before they get out of control, which may lead to conflict. Thus, the wise management of the crisis will be those that preserve and protect the vital interests of the state (Jacobs, Witteloostuijn & Christe-Zeyse, 2013; Hahn, 1990; Johansson, 2017).

8.1.3 The Time range of the emergence and impact of the crisis: This depends on the life of the crisis, and in this context, there are two types of crises (Mihelcic, et al., 2003; Al-Sakarna, 2015).

1. Rapid explosive crisis: It usually occurs suddenly and quickly, and it also disappears quickly. The results of these crises depend on the efficiency

in managing the crisis and learning from it, such as a fire in a chemical production factory (Humphrey, Loft & Woods, 2009).

- 2. The slow long crisis: This crisis develops gradually and appears despite the many signs issued by it (Afrazeh & Zarinozv, 2010), but the officials were unable to absorb the implications of these signs and deal with them, and this crisis does not disappear quickly, but it may threaten society for several days, and from here it is necessary to amend the existing plan to confront The crisis or a new plan and dealing with the crisis quickly, decisively without hesitation, each minute has value, and in the minute will be facing challenges and pressures that may be an opportunity to test the extent of the crisis team's ability to act (Dent, 2003; Thompson & Thompson, 2004).
- **8.1.4** Crisis management strategies: There are several strategies for dealing with crises, we summarize some of them (Handzic, 2004; Flayyih, Ali & Mohammed, 2018):
- 1. Non-Growth Strategy: This strategy aims to focus on accepting reality and exerting effort to prevent its deterioration (Flayyih, 2015). while seeking to reduce the degree of the impact of the crisis and not reach the point which become more difficult, this strategy is used in the case of dealing with issues of public opinion and strikes, so we must listen to the forces of the crisis and make some concessions to meet some of the requirements in order to create the conditions for direct negotiation and crisis resolution (Al-Sakarneh, 2015). This strategy focuses on encircling and confining the crisis for limiting it to the first stage that it reached. So, we must understand the real causes of it and absorbing dealing with it in a positive. (Maher, 2009).
- 2.Teamwork strategy: It is the most used strategy at the present time, where a team of experts from different disciplines is formed to be able to find a solution to get out of the crisis by discussing all aspects and factors surrounding this crisis. Crisis management team is assigned by the crisis management in order to deal with the crisis and its forces, work to address it and reduce the risks with negative effects resulting from it. And this is the one of the modern methods in managing any crisis facing the organization that helps it in providing administrative and technical advice to deal with it and manage it efficiently and effectively (Abu Fara, 2009).
- 3. Violence strategy: This strategy is used with the unknown crisis for which insufficient information is not available, and it is also used with crises related to principles and values with crises that spread in several directions. It is also possible to blockade the elements that cause the crisis and cut off the sources of its supply (Flayyih, Al-Mufraji & Alhelle, 2019; Al-Sakarna 2015). In the event that knowledge of the crisis is not available, and it is one of the most difficult modern methods, this method is adopted when the organization does not find the alternative option to deal with the crisis or the options are not feasible due to a lack of information or when dealing with devastating and dangerous crises (Shaalan 2002; Al-Taie, Flayyih & Talab, 2017).
- 4. Strategy of stopping the ideas of making of the crisis: It is an unconventional strategy that is used to end the crisis through knowing its

content and its causes, whether it is economic, political, or environmental, and dialogue until the completion of the reasons (Al-Khudairi, 2003; Tamimi & Flayyih, 2017). The thought behind the crisis in the form of certain trends severely affects the strength of the crisis and this strategy focuses on influencing this thought and weakening the foundations on which it is based, where some powers go away, and the crisis weakens. And cause division (Al Sakarana, 2015; Sahbat et al., 2018).

8.2 JIT-KM:

8.2.1 Concept of knowledge: It is a cumulative process of information and expertise for individuals and organizations that it already owns and creative ideas, which are of two types, apparent and implicit (Lee & Fink, 2013). That is, they are everything implied or apparently invoked by individuals to perform their actions or to make good decisions (Al-Kubaisi, 2014). It is a form of intellectual production of a person over time and is the balance that is formed from the outcome of scientific research, thinking, field studies and the development of creative projects (Al-Alawi, 2019; Talab, Flayyih & Ali,2018).

8.2.2 Concept of knowledge management: Knowledge management is the systematic process for directing the balance of knowledge and achieving its leverage in the organization, as it refers in this sense to knowledge about doing things effectively and efficiently, so that other organizations cannot imitate or reproduce them to be the main source of profit (Najm, 2008). They are the use of planning methods that make the organization able to choose efficient expertise that can transform important information into knowledge and help to disseminate it and use it in making effective decisions to solve problems (Kamhawi, 2012). This term is considered to include all efforts to manage the workforce knowledge in the organization, which can be achieved through a wide range of direct methods such as the use of certain types of information and communications technology (Bosua & Venkitachalam, 2013; Mohammed, Flayyih, Mohammed & Abbood, 2019).

8.2.3JIT-KM: This term was first used by Davenport & Glaser in a study published in the Harvard University Journal in 2002, and Kershberg & Jeong (2005) presented a study called (Just in Time). Knowledge Management it was divided into three sections that included sources of knowledge, knowledge management, creation and presentation of knowledge, as well as clarifying the concept of JIT-KM and providing the correct information that must be provided to the right person at the right time and the right place. (Steyn, 2007) The concept of JIT-KM is similar to the concept of JIT- supply chain management which it is related to providing the knowledge that the organization needs and providing the necessary support to it in terms of the ability to determine the correct information, and the party that receives the information and the correct format of information that reaches decision makers (Steyn, 2005; Sukumaran, Wee Hoongb & Kumarc, 2010). This concept also contributes to overcoming the problem of overloading information that leads to wasting time, resources and retrieving knowledge in a less efficient way, and obtaining information at the right time in the appropriate quantities contributes to effective decision-making (Conth & Forgionne, 2006; Afrazeh & Zarinozv, 2010).

8.2.4 JIT-KM Techniques:

- 1. Withdrawal Technology: It is that the system is linked to the real demand for knowledge and from various sources such as the Internet, books, curricula, colleagues, and related institutions, that is, obtaining new knowledge the system needs to use and this is the most important characteristic of this technology. Therefore, the drawing technology is called as the knowledge flows during the operations, and operation or supply orders are sent for the required amount of knowledge to the previous stages in case of need, where the information is accurate, clear and in real time for the use process, meaning that the withdrawal technology works according to the request of the beneficiary in the organization Which in turn depends on technological components such as work flow (Eraut, 2004), open management systems and the organization's information approach. This technology makes the cognitive repository better in terms of quality, accuracy and clarity, which leads to faster problem solving, less decision-making time and a smoother transfer of knowledge (Krstic, 2012; Mohamed, 2004).
- 2. Payment Technology: In this technology, knowledge is transferred proactively to the decision-maker and by relying on electronic databases and records, and is used to alert (Handzic, 2004), warn and draw attention to a specific situation, i.e. existing knowledge in the organization where knowledge was pushed through the research and development process in response to the decision-maker's need That was determined in advance, that is, this technology is characterized by reducing risks as well as maintaining a stock of knowledge and the ability to sense demand and supply knowledge in a timely manner (Barnett, 2006). We can consider email and social media as an example of this technology.
- **9. Previous studies:** The following are some of the previous studies that dealt with the current research variables:
- 9.1 The Studies which related to the variable of crisis management strategy

AL-Naji Study (2012)					
Title of the study	The impact of modern crisis management strategies on marketing performance (a field study on human pharmaceutical companies in the major city of Amman				
The aim of the study	identify the impact of modern crisis management strategies on the marketing performance of human pharmaceutical industrial companies in the greater Amman city				
Study Sample	The study sample consisted of (190) managers and their assistants				
Results of the study The presence of a statistically significant effect of mod crisis management strategies on the market performance of human pharmaceutical industries in Greater Amman City					
	Gamal Study (2012)				
Title of the study Title of the study Title of the study The type of crisis, knowledge and their impact on definiture crisis management strategies / an exploratory sof the opinions of a sample of workers at the Kadhimiya threshold					
The aim of the study Identify the impact of the type of crisis and the type knowledge in strategies for responding to future crisis with what methods are used by decision-makers in crisis.					
Study Sample	The study sample consisted of (65) officials in the Shiite Endowment Office and the holy Kadhimiya threshold				
Results of the study Decision-makers do not have strategies to face crises, at this leads to a multiplication of its negative effects					

9.2 The Studies which related to the variable of JIT-KM

Abbas Afrazrh (2010)				
	A Problem-solving method for customer knowledge			
Title of the study	management maturity Case Study in Some Iranian oil			
	companies			
The aim of the study	Using the JIT-KM to manage customer related issues			
Study Sample	The study sample consisted of (235) workers, who were			
Study Sample	chosen from (3) oil companies			
The results of the study	The application of JIT-KM leads to the efficient			
	implementation of business through the application of			
	JIT-KM techniques			
	Al-Fadhli (2017)			
	The effect of JIT-KM in designing the process, an			
Title of the study	exploratory study of a sample of government hospitals			
	in Baghdad			
The aim of the study	Know the level of influence of JIT-KM in the process			
The ann of the study	design stages and the type of knowledge hospitals need			
Study Sampla	The study sample consisted of (69) doctors in Baghdad			
Study Sample	hospitals			
Desults of the study	There is no big gap between JIT-KM and what is			
Results of the study	available to decision-makers in hospitals in Baghdad			

10. Methodology

10.1 Data collection method:

- 1. The theoretical side: Many Arab and foreign sources have been relied upon, from letters, theses, books, research, and the Internet.
- 2. The practical side: the researcher relied on the questionnaire to obtain the data, as it included (14) items to measure the variable of crisis management strategies and (14) items to measure the variable of JIT-KM.
- **10.2 Data analysis methods:** The researcher adopted a set of statistical methods to test the research hypotheses, namely:

- 1.Arithmetic mean: A value that gives a primary indication of the nature of the data and follows to determine the level of responses of the sample members to the questionnaire elements.
- 2. The standard deviation: to measure the extent of dispersion of the responses of the sample to find its mean.
- 3.Determination coefficient: depends on the percentage of the independent variable's interpretation of the dependent variable.
- 4.F test: to measure the significance of the regression model.

11. Results and Discussion

The researcher documents the reliability of the data obtained from the managers working at the Central Bank of Iraq through the stability factor (Cronbach's Alpha), and confirms the truthfulness of the twenty-eight paragraphs of the questionnaire in representing (crisis management strategy in light of JIT- knowledge management) in the best way using the constructive honesty analysis through a method Confirmatory Factor Analysis, and the researcher used a descriptive analysis of the level of responses of the sample individuals by weighted mean, standard deviation and the relative importance for each study variables. Then describe the Structural Modeling according to the data of the Amos v25 statistical program to show the impact of knowledge management on time in the crisis management strategy.

11.1 Test of Reliability

From table 1the Reacher diagnoses form the questionnaire the value of the stability parameter (Cronbach's Alpha) reached (0.878), and it confirms the presence of high stability in the overall questionnaire paragraphs.

Table 1 Results of Reliability

Variables		Stability value	Comments	
	Non Growth Strategy	0.815	There is high stability in the paragrap the Non Growth Strategy	
Dependent Variable	Team Strategy	0.725 There is high consistency in the of the Team Strategy		
	Crisis management strategies	0.806	There is a high level of stability i paragraphs of crisis management strat	
	Technologies	0.701	High reliability in the vertebra techniques	
Independent Variable	Domains	0.740	There is high stability in the paragra of domains	
	JIT- Knowledge management	0.771	There is a high level of stability i knowledge management paragraphs	
Total Resolution		0.878	There is high stability in the resol paragraphs	

The researchers show in table 2 and figure 1 the confirmatory factor analysis method after verifying the availability of conditions for applying the data analysis that the seven paragraphs assigned to the first dimension of the independent variable represents the techniques are best represented, and the analysis also confirms that the seven paragraphs which related with

the second dimension in JIT-Knowledge management represents the fields, thus ensuring that the fourteen paragraphs which related with the independent variable of JIT-knowledge management are represented was the best represented.

Table 2 Results of the Confirmatory Factor Analysis

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	Indictor				
Correspond indictors	JIT- Knowledge management	Crisis management strategies	Comments		
The Relative Chi- Square	1.746	2.076			
Good of Fit Index (GFI)	0.921	0.917	All results of empirical factor		
Root Mean Square Error of Approximation (RMSEA)	0.071	0.064	analysis were significant, and thus, the validity of the representation of the 28 paragraphs in the questionnaire for the search variables was confirmed.		
Normed Fit Index (NFI)	0.609	0.640			
Comparative Fit Index (CFI)	0.861	0.735			
Incremental Fit Index (IFI)	0.847	0.772			
Tucker-Lewis Index (TLI)	0.734	0.644			

Source: Preparing the researcher according to the data of the V25 Amos program

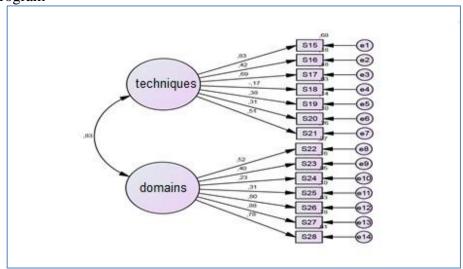


Figure 1 Confirmatory factor analysis chart (according to Amos data) JIT-Management knowledge

Table 2 and Figure 2 also indicate that the seven paragraphs devoted to the first dimension in the dependent variable represent a strategy to stop growth is the best representation, and the analysis also confirms that the six paragraphs devoted to the second dimension in crisis management

strategies represent the strategy of the work teams, and thus to ensure the sincerity of the representation The fourteen paragraphs devoted to the variable of crisis management strategies are best represented.

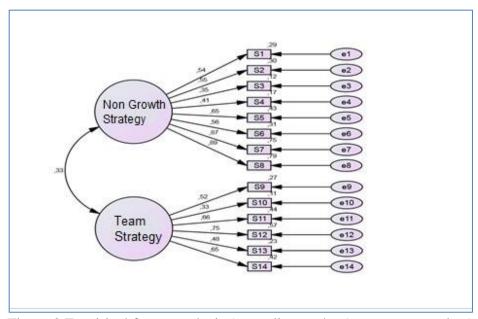


Figure 2 Empirical factor analysis (according to the Amos program data) for the crisis management strategies variable

11.2 A descriptive analysis of the level of respondents' responses to the knowledge management paragraphs on time and crisis management strategies:

The researcher started from the response strength matrix in the process of analyzing and interpreting the level of the respondent's responses on the questionnaire and each of the independent variable expressing JIT-knowledge management with its two dimensions (techniques and fields) and the dependent variable that expresses crisis management strategies in two dimensions (Non growth strategy and work strategy) As in Table 3 as the following:

Table 3 The Matrix of Response Force for the questioner

weighted mean value	categories	strength of	response
weighted mean value	categories	response	levels
From 1 to less than 1.8	First	disagreement	very low
From 1.8 to less than 2.6	Second	lack of agreement	Low
From 2.6 to less than 3.4	Third	Mild	Neutral
From 3.4 to less than 4.2	Fourth	Agreement	High
From 4.2 to 5	Fifth	Severity	very high

We show from Table 4 that the value of the weighted arithmetic mean for JIT-knowledge management has been recorded (4.0881), indicating that the level of importance of the responses of managers working in the Central Bank of Iraq of the independent variable has tended towards agreement and a high level of response, as the value of the weighted average The independent variable has inhabited within the category (from 3.4 to less

than 4.2) in the response strength matrix, with a standard deviation of (0.4277), which indicates the presence of consistency in the sample responses regarding JIT-knowledge management elements, so that the relative importance become (81.77%). And these results indicate that most of the study sample agreed with elements of the independent variable. After that, JIT-knowledge management was distributed between the highest level of response for the domains, with an average of (4.1238) and a standard deviation of (0.45753), and relative importance was (82.48%) against the lowest level of answer has been done by the techniques.

In Table 4 we see also the value of the weighted arithmetic mean for the whole elements of crisis management strategies amounted (4.1216), which confirms that the level of responses of the managers working in the Central Bank of Iraq on the elements of the dependent variable has agree with the high level of response, especially as it resided within the category stage from 3.4 to less than 4.2 in the response strength matrix, with a standard deviation of (0.5100), which indicates the existence of consistency in the sample responses regarding the paragraphs of crisis management strategies, so that the relative importance reaches (82.43%). The crisis management strategies have been distributed among the highest level of his answer was for the teams work strategies with an average of (4.2889) and a standard deviation of (0.42420). The relative importance was (85.78%) against the lowest level of response achieved by the non-growth strategy, as shown in Table 4 as the following:

Table 4 The level of responses of the managers in the Central Bank of Iraq to the elements of the two search variables

to the distinction of the two section (whiteless						
The	Variables and	Weighted	Standard	Relative	Response	
Symbol	Dimensions	Mean	Deviation	Importance	Level	
X1	Technologies	4,0524	0,39789	81,05%	High	
X2	Domains	4,1238	0,45753	82,48%	High	
X	JIT-Knowledge management	4,0881	0,4277	81.77%	High	
Y1	Growth Stopping Strategy	3,9542	0.59586	79.08%	High	
Y2	Team Strategy	4,2889	0,42420	85.78%	very high	
Y	Crisis management strategy	4,1216	0.5100	82.43%	High	

Source: Preparing the researcher according to the data of the Amos V25 program

11.3 Testing the impact of JIT-knowledge management in a crisis strategy

In this stage of the analysis, the researcher explains the results of the impact of JIT-knowledge management, with its dimension in the crisis management strategy, by testing the following hypotheses:

Main Hypothesis:

"There is a statistically significant effect of knowledge management on time in crisis management strategies"

Then it divided to the two secondary hypotheses as follows:

H1: There is a significant statistically significant effect of techniques on crisis management strategies

H2: There is a significant statistical effect of the domains in crisis management strategies

From Table 5 we see the acceptance of the first and second secondary assumptions with a confidence rate (95%), as the calculated F values for each of them (21.714, 25.452) and both of them were significant, because they are greater than the tabular value of F (4.1709) at a significant level (0.05), In particular, the level of significance (probability value) corresponding to the calculated F values was (0.00), thus establishing the presence of a noticeable effect of technologies as one of the dimensions of knowledge management in crisis management strategies., there is a noticeable impact of the fields as one of the dimensions of knowledge management in crisis management strategies.

Table 5 results of hypothesis testing

Tuble 3 leading of hypothesis testing						
	Variables			Statistical test		
Hypothesis	Independent	Dependent	R^2	F-Table	F- value	Comments
H1	Techniques		43.7%	21.714	0.00	Accept the hypothesis with 95% confidence
H2	domains	Crisis Management Strategies	47.6%	25.452	0.00	Accept the hypothesis with 95% confidence
The Standard Hypothesis	JIT- Knowledge management		57%	17.872	0.00	Accept the hypothesis with 95% confidence

We see in Table 5 according to the data of structural modeling and the V25 Amos program, accepting the main hypothesis and with a confidence rate (95%), especially that the value of F calculated for both dimensions of JIT-knowledge management together reached (17.872) which is significant, because it is greater than the F- Table (3.3158) at the level of significance (0.05) that is mean there is a noticeable effect of technologies and fields combined in crisis management strategies amounted (57%) as it's in Figure 3. But Figure 4 show the elements according to the data of structural modeling and the V25 Amos program, that the combined effect of the two dimensions of knowledge management in the non-growth strategy which reached (38%), and effect of the two dimensions of knowledge management in the teams work strategy are reached (37%).

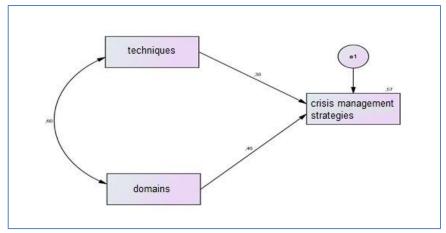


Figure 3 a chart indicating the crisis management strategy in light of JIT-knowledge management (According to Amos data)

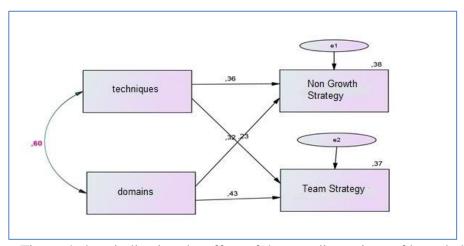


Figure 4 chart indicating the effect of the two dimensions of knowledge management on both dimensions of the crisis management strategy (According to the Amos data).

12. Conclusions and Recommendations

12.1 Conclusions

Through the results of the statistical analysis of the research, these are the following conclusions:

- 1. The managers of the Central Bank of Iraq need a long time to make decisions because they do not use knowledge management techniques at the appointed time, whether withdrawal technology or payment technology in a wide manner, meaning that they depend on what can be provided from appropriate information for decision-making not on the proactive information that is conveyed to the decision-maker.
- 2. The managers of the Central Bank of Iraq rely on forming working teams to help provide information about the nature of the crisis, and then take the appropriate decision about it more than it relies on other sources to provide that information such as organizations related to this information or books, references, scientific research or the Internet.

- 3.The managers of the Central Bank of Iraq rely on the strategy of the work teams to deal with crises with a collective bearing of responsibility, rather than their reliance on a strategy to stop the growth of the crisis and try to limit it to a specific scope through negotiation, for example, with the parties responsible for the crisis.
- 4. There is a significant impact of knowledge management on time in the crisis management strategy

12.2 Recommendations

Through the findings, the researcher reached to the following recommendations:

- 1.The necessity of the Directors of Central Bank of Iraq to rely on multiple knowledge sources by looking at the latest developments in scientific research published in international journals as well as trying to obtain knowledge through the Internet.
- 2. The necessity of relying on knowledge management techniques on time in order to provide data and information proactively to the decision maker.
- 3.Reinforcement of the strategy of the work teams in crisis management, but at the same time it is necessary to move towards other strategies such as the strategy to stop growth through negotiation with the bodies that cause crises and create the appropriate conditions in order to contain the crises and lose their strength.
- 4. Working on a continuous update of the information used by the decision-maker, in partnership with information networks and specialized centers, in order for him to be able to make his decision regarding the crises in a timely manner before their exacerbation.

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