

# **The effect of the financial knowledge management system on the financial innovation system (Exploratory research for some private commercial banks in the province of Najaf)**

**Dr. Firas Adnan Abbas**

*College of Administration and Economics - Al-Qadisiyah University, Iraq.*

**Akram Shani Hassan**

*College of Administration and Economics - Al-Qadisiyah University, Iraq,  
akrmshani77@gmail.com*

## **Abstract**

This research aims to conceptually frame the concept of the financial knowledge management system and the financial innovation system and study the relationship of correlation and influence between them, And the application was done on a random sample of employees of some private commercial banks in the province of Najaf, As (75) questionnaires were distributed, and the number of questionnaires valid for statistical analysis was (63) questionnaires, The questionnaire was analyzed and the research hypotheses were tested using the spss v.25 program, Results were reached, the most important of which is the existence of a correlation and influence between the financial knowledge management system and the financial innovation system, The research also put forward a number of recommendations, the most important of which is that organizations should pay attention to the financial knowledge management system and the financial innovation system because of their positive impact on the development of banks.

**Keywords:** *financial knowledge management system, financial innovation system.*

## **INTRODUCTION**

This research aims to conceptually frame the concept of the financial knowledge management system and the financial innovation system and study the relationship of correlation and influence between them, And the application was done on a random sample of employees of some private commercial banks in the province of Najaf, As (75) questionnaires were distributed, and the number of questionnaires valid for statistical analysis was (63) questionnaires, The questionnaire was analyzed and the research hypotheses were tested using the spss v.25 program, Results were reached, the most important of which is the existence of a

correlation and influence between the financial knowledge management system and the financial innovation system, The research also put forward a number of recommendations, the most important of which is that organizations should pay attention to the financial knowledge management system and the financial innovation system because of their positive impact on the development of banks.

## **Research Methodology:**

First: The research problem: The research problem was derived in determining the effect of the financial knowledge management system on the financial innovation system in some private commercial banks in the

province of Najaf, in which the research was conducted.

Therefore, the problem arises through the following questions:

1- What is the concept of financial knowledge management system and what are its dimensions?

2 - Is there a correlation between the financial knowledge management system and the financial innovation system in some private commercial banks in Najaf Governorate?

3- Is there an effect between the financial knowledge management system and the financial innovation system in some private commercial banks in Najaf Governorate?

Second: the importance of research

1 - Paying attention to the financial knowledge management system in some private commercial banks in the province of Najaf is very important, As it contributes to strengthening the role of the financial innovation system represented by (leaders of senior and middle management in some private commercial banks).

2 - Clarifying the relationship between the financial knowledge management system and the financial innovation system in some commercial banks in Najaf Governorate.

3 - Enhancing the role of the financial innovation system (leaders of senior and middle management in some private

commercial banks) In some private commercial banks in the province of Najaf in the face of constantly changing environmental conditions through the employment of financial knowledge management system and its components.

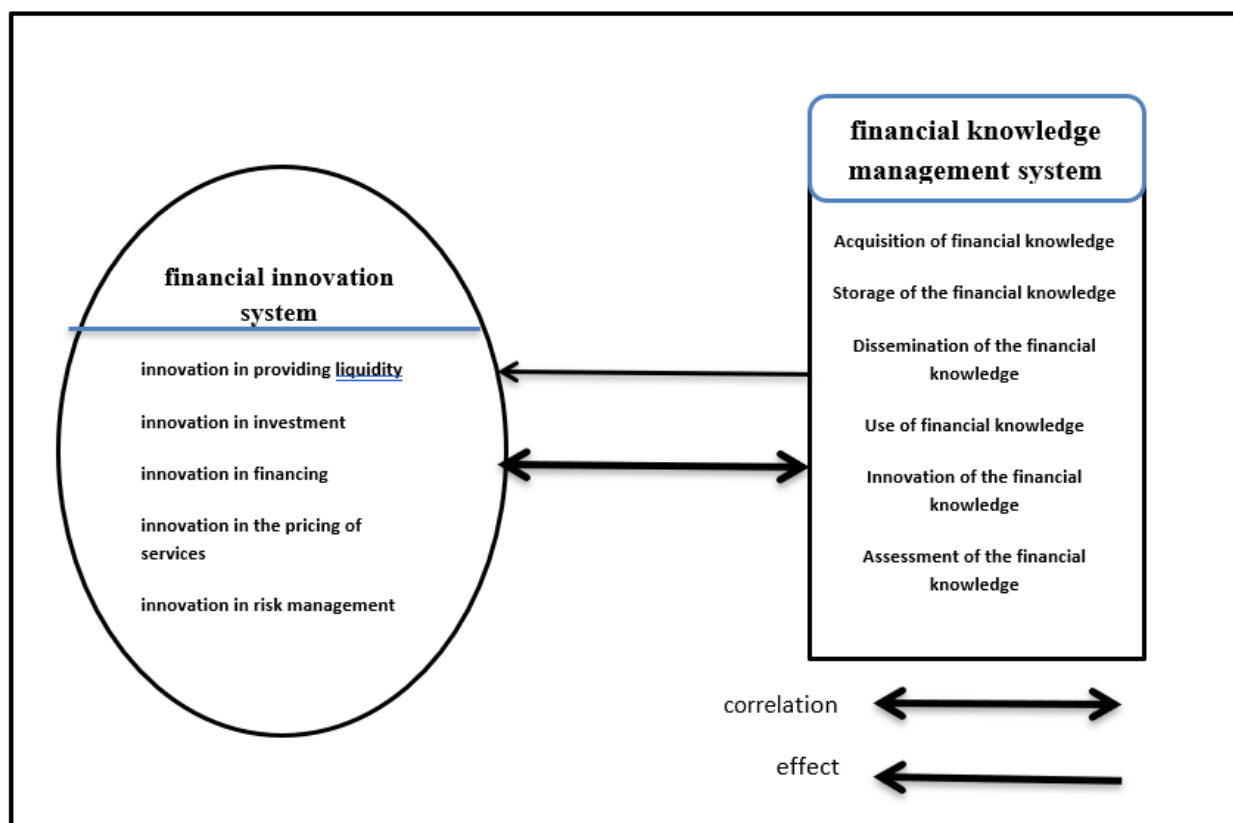
Third: Research objectives

1- Developing a conceptual framework for the concept of the financial knowledge management system and the financial innovation system.

2 - Clarifying the importance of the financial knowledge management system and its components and its impact on enhancing the financial innovation system (leaders of senior and middle management in some private commercial banks) And highlighting the role of variables and identifying them in a group of private commercial banks in Al-Najaf Governorate, as well as knowing the correlation and influence relationships between the variables.

3 - Reaching a set of results that can help in strengthening and improving the financial innovation system to achieve its goals and survive in the world of competition in light of a constantly changing contemporary environment.

Fourth: the hypothetical scheme of the research

**Figure (1) The hypothetical outline of the research**

Fifth: the research hypothesis

A: The correlation hypothesis

The first main hypothesis: "There is a statistically significant correlation between the financial knowledge management system represented by (acquiring financial knowledge, storing financial knowledge, disseminating financial knowledge, using financial knowledge, innovation financial knowledge, evaluating financial knowledge) and the financial innovation system represented by (innovation in Providing liquidity, innovation in investment, innovation in financing, innovation in pricing services, innovation in risk management) "from which the following sub-hypotheses emerge:

First: There is a statistically significant correlation between the acquisition of

financial knowledge and the financial innovation system.

Second: There is a statistically significant correlation between storing financial knowledge and the financial innovation system.

Third: There is a statistically significant correlation between the dissemination of financial knowledge and the financial innovation system.

Fourth: There is a statistically significant correlation between the use of financial knowledge and the financial innovation system.

Fifth: There is a statistically significant correlation between the innovation of financial knowledge and the financial innovation system.

Sixth: There is a statistically significant correlation between the assessment of financial knowledge and the financial innovation system.

#### B: effect hypothesis

The second main hypothesis: "There is a statistically significant effect of sharing digital knowledge represented by (acquiring financial knowledge, storing financial knowledge, disseminating financial knowledge, using financial knowledge, creating financial knowledge, evaluating financial knowledge) in the financial innovation system represented by (innovation in providing liquidity , innovation in investment, innovation in financing, innovation in pricing services, innovation in risk management) "from which the following sub-hypotheses emerge.

First: There is a statistically significant effect of acquiring financial knowledge in the financial innovation system.

Second: There is a statistically significant effect of storing financial knowledge in the financial innovation system.

Third: There is a statistically significant effect of spreading financial knowledge in the financial innovation system.

Fourth: There is a statistically significant effect of the use of financial knowledge in the financial innovation system.

Fifth: There is a statistically significant effect of financial knowledge innovation in the financial innovation system.

Sixth: There is a statistically significant effect of assessing financial knowledge in the financial innovation system.

Sixth: The research community and sample: The target sample in the current research is the

random sample, as the research community consisted of (80) individuals consisting of the leaders of the senior and middle management of some private commercial banks in the province of Najaf, and the researcher distributed (75) questionnaires The valid questionnaires for statistical analysis were (63) questionnaires, and the non-retrievable (12) questionnaires.

**Table No. (1) Some private commercial banks in the province of Najaf**

N	Bank name	Number questionnaires
1	National Bank of Iraq	5
2	Baghdad Bank	5
3	Union Bank	5
4	Al-Taif Islamic Bank	5
5	Mansour Bank	5
6	Middle East Investment Bank	5
7	Gulf Bank	5
8	International Development Bank	5
9	Iraqi Investment Bank	4
10	Southern Islamic Bank	4
11	Bank of Babylon	4
12	United Bank	4
the total		56

One of the justifications for choosing these banks over other private banks was due to their distinguished commercial activity and their good reputation in dealing with their customers and providing their services as required.

Seventh: Research scale: The following scales were adopted for the independent and dependent variable, as follows:

1 - The independent variable: It is represented by the financial knowledge management system and was measured through two dimensions: (acquisition of financial knowledge, storage of financial knowledge, dissemination of financial knowledge, use of financial knowledge, innovation of financial knowledge, evaluation of financial knowledge) scale was adopted (Du, M. , 2011: 1241-1242).

2 - The dependent variable is represented by the financial innovation system, and it was measured through five dimensions: (innovation in providing liquidity, innovation in investment, innovation in financing, innovation in pricing services, innovation in risk management), and a scale was adopted (Llewellyn, 2009, 5-7), (Błach, J. ,2011:24):

The second topic:

financial knowledge management system

First: the concept:

Financial management, the backbone of the organization's management, is a link to the economic activities in the organization to meet the needs of knowledge management. Theories and methods of knowledge management were presented in financial management, and the financial knowledge management system was established in the organization. In this system there are six main dimensions, such as financial knowledge acquisition, storage, dissemination, use, creation and evaluation. In general, this model can lead the financial management to adapt to knowledge management (Du, M. , 2011: 1241-1242). It has been known as a prototype for

the knowledge management environment intended for financial research purposes. With it, knowledge workers can freely extract a set of financial and economic data, Analyzing data using various decision support units, and finally disseminating value-added information (knowledge) through middleware or the Internet to remote clients. In this regard, it is clear (Cheng, H., Lu, Y. C., & Sheu, C. , 2009 : 3614) The Financial Knowledge Management System is a prototype of a knowledge management environment intended for financial research purposes. What environment generation innovations are sets of knowledge with strings of data, models, parameters, and reports.

: Dimensions of the financial knowledge management system                      Second

There are six dimensions of the financial knowledge management system as follows (Du, M. , 2011: 1241-1242):

1 - Acquisition of financial knowledge

The purchase or acquisition includes various sources of information related to cash flows. Primarily knowledge can be obtained from the following aspects. One is that the collection of current explicit knowledge, for example, the collection of current financial information, customer information, etc. to innovation electronic documents for entry into the knowledge repository; The other is the exploration and acquisition of tacit knowledge. Data warehouse, integration must be used for users to use knowledge effectively.

2 - Storage of the financial knowledge

In financial knowledge management, knowledge storage includes a large number that can be summarized in three parts. The knowledge base of the organization is mainly used to realize the organization's culture, work

rules and systems, relevant laws and regulations, professional basic knowledge, and to introduce and issue general knowledge such as new technologies and other new businesses, and classification presentations, which can facilitate the old and new employees to inquire and learn knowledge in a timely manner. The knowledge base of the financial sector, which relates to the typical commands and cases in the following, such as the group of jobs in the sector, responsibilities, workflow, knowledge to adapt to jobs and skills, financial data analysis, financial vigilance, investment management, financing management, working capital management and profit distribution, etc. Provides a platform for members within the department to pool financial knowledge and share learning. Personal knowledge base, which is used to store the financial work experience of financial staff, learning experiences, proposals to rationalize financial systems, financial theory, accounting standards and tax laws. Through the use of the personal knowledge management center, the personal knowledge can be disseminated into the knowledge base of the sector or the knowledge base of the organization, and the basic areas of organizational, managerial and personal knowledge collection are formed. In this position, others are allowed to renovate and evaluate it.

### 3 - Dissemination of the financial knowledge

In the functional sectors of the organization, the knowledge and skills required are relatively high in the financial sector. Therefore, the dissemination of knowledge, especially financial knowledge, is strongly affected by the psychological state and the will to share with other financial workers, as it is a more intractable problem than others in knowledge management. Thus, to achieve financial knowledge sharing, the financial

sector can rely on the corporate network for knowledge dissemination. Through the following methods, such as establishing an effective incentive mechanism, electronic newsletter, financial training network, exchange of experience, etc., the professional attainment and the relative skill level of employees can be enhanced.

### 4 - Use of financial knowledge

The goal of financial knowledge management is wealth creation. Its purpose is to reduce financing costs and risks, and to improve capital efficiency and effectiveness by making decisions, such as investment, profit allocation, and working capital, so that the financial knowledge management process is scientific and accurate. In general, it can also be achieved through collaborative work, knowledge seeking, and knowledge maps.

### 5 - Innovation of the financial knowledge

Only through practice can financial knowledge innovation true value. At the same time, only when financial knowledge has been tested in practice can it be constantly updated. Online conferences and community forums are a good place to test knowledge, update it, share it, and innovation it.

### 6 - Assessment of the financial knowledge

The evaluation aims to determine the effectiveness, efficiency and value of the use of financial knowledge. It includes the application platform for knowledge management, system functions, knowledge source, operation method, and applied efficiency. A proper assessment will encourage finance professionals to share their knowledge with others within the organization. At the same time, developing measures to motivate workers to contribute their knowledge is a quantitative criterion.

Organizational knowledge management systems are a multi-functional system that integrates various knowledge management technologies, and can support all major knowledge management and processing activities, including knowledge acquisition, knowledge organization, knowledge classification and understanding, error correction and editing, search and retrieval, dissemination, transfer and sharing of knowledge.

The third topic:

First: the concept of financial innovation

Concept:

Financial innovation refers to innovation in financial products to improve financial risk management, risk transfer, and effective credit and liquidity management (Chishti, M. Z., & Sinha, A., 2022:7), Financial innovation broadly refers to any change in the financial system that improves a new product (i.e. a physical good or service), process, or marketing method (Akileng, G., Lawino, G. M., & Nzibonera, E., 2018: 55). (Tufano, 2002) believes that financial innovation is the creation or design of new and better practical financial products, effective systems and institutional alliances. It also entails continuous improvement of the current products and activities of financial institutions in order to meet the emerging needs of stakeholders (Mugo, J. G., 2012:2).

**Table (2) shows the concept of financial innovation according to the opinions of a group of researchers:**

N	Researcher and year	Concept
1	(Boot & Thakor ,1987 : 1125)	Financial innovation can be seen as a way to deal with the diversification of risk, to

		provide an advantage in terms of taxation along with its aspect of enhancing information sensitivity in a broad sense.
2	(Juhkam, A., 2003, 3).	It is positive changes in financial intermediation or the financial system: in financial institutions (commercial banks, insurance companies, investment funds, pension and investment banks) and in financial markets (stock market, debt instruments market and derivatives market)
3	(Frame & White, 2004:118)	Something new that reduces costs, reduces risks, or provides an improved product-service-tool that better meets the demands of participants in the financial system.
4	(Lerner & Tufano,2011:6)	“Innovation and then popularize new financial instruments, as well as new financial technologies, institutions, and markets.”
5	(Mugo, J. G. ,2012:2)	Financial innovation can be described as a financial revolution in terms of tools, institutional structure, and processing systems to address market inefficiencies and earning capacity constraints.
6	(Ekpu, V. ,2015:4).	Financial innovation is the process of creating and then popularizing new financial instruments as well as new financial technologies, institutions and markets.
7	(Ibekwe, A. O. ,2021: 164)	The process of creating and then promoting new financial instruments as well as new financial technologies,

		institutions and markets.
8	(Ibekwe, A. O. ,2021: 164)	Financial innovation is one of the most important competitive weapons and is generally seen as a company's core value capability

## Second: Drivers of Financial Innovation?

There are a number of factors responsible for the pace of financial innovation around the world today. These factors include: financial globalization, liberalization of capital flows, deregulation, increased competition and technological progress (Ekpu, V., 2015:4-5).

### 1. Financial Globalization

The rapid transformation and diversification of financial markets has led to increasingly innovative financial products and services. Financial globalization can be defined as “the increasing integration of national economies, as a result of the development of trade and the increase of financial flows” (Sokolowska, 2014,10). As the global financial markets (credit markets, money markets, and foreign exchange markets) become more and more intertwined, opportunities are innovationd to invest financial surpluses across borders (Zabielski, 1999). With the increase in economic activities globally among institutional investors (such as mutual funds, insurance companies, and pension funds), the search for return and additional profits will cause investors to take risks deliberately. The rapid transfer of capital and the emergence of new risks at the macro level tend to foster financial innovation.

### 2 - Capital Flow Liberalization

One of the enabling elements of financial globalization is the liberalization of international capital flows (Janicka, 2008) The

liberalization of capital flows means the free movement of capital between countries and the removal of restrictions on financial transactions across borders. The free flow of money can bring significant benefits to the local economy, Including increasing the rate of savings, increasing savings and investment opportunities, greater diversification of the risks of a particular country, and improving the efficiency of financial intermediation (Janicka, 2008). However, one of the main drawbacks to financial integration is the potential for capital inflows to destabilize the domestic financial system, often giving rise to currency crises. (Sokolowska, 2014).

### 3 - Deregulation & Increased Competition

Another factor that innovations financial innovation is deregulation, that is, the removal of regulatory interference in financial markets, particularly with regard to product pricing. Deregulation also includes removing administrative and legal bottlenecks to financial transactions. Deregulation increases competition between local and foreign financial service providers, forcing local players to increase efficiency by adopting international standards of quality and management. Deregulation also improves overall economic efficiency and productivity through better capital allocation.

### 4 - Technical & Technological Progress

The development of modern technology and communications contributes to the integration of financial markets. Since the advent of the Internet and other electronic communications, information technology has continued to shape the landscape of financial services, leading to the development of new financial products and services. Studies on the role of technology in generating financial innovation were conducted by (Berger, 2003). As well as



(Frame & White (2009) the use of modern technology has changed the process of financial intermediation. This has led to the development of credit risk modeling tools (such as credit rating) used to identify potential good or bad credit risks. The Internet has also changed the competitive landscape in the industry Financial services. In fact, many of the services traditionally provided by banks are now provided by other entities via online marketplaces. Moreover, technology has also transformed financial markets. It no longer needs to be tied to a physical location. As a result, systems for trading stocks, loans, bonds and forex have become global.

Third: the dimensions of financial innovation

There are a number of dimensions of financial innovation, as follows: (Llewellyn, 2009, p. 5-7): Blach, J., 2011:24.

#### 1 - Innovation in providing liquidity

1 - Innovation in providing liquidity Banking liquidity is meant as the ability of the bank or company to meet the monetary demand for its policy and the contract it maintains with minimal or no loss (Bank, 2004). Liquidity is also defined as a stock of funds that management can easily access in order to meet financing requirements and business opportunities. Liquidity is also the bank's ability to finance increases in assets and meet liabilities when they fall due, without incurring unacceptable losses.

The viability and efficiency of a bank is greatly affected by the availability of liquidity in sufficient quantities at all times. Banks must fulfill their due obligations and make payments on the day they are due, otherwise banks run the risk of being declared illiquid (Crocket, 2008). Traditionally, banks act mainly as financial intermediaries and collect

points of financing for different groups within the society. Therefore, banks are expected to maintain sufficient liquidity in order to efficiently perform their day-to-day obligations such as meeting depositor requests or withdrawals, settling wholesale obligations and saving money when borrowers draw down on committed credit facilities (Sekoni, A., 2015: 1-3))

#### 2 - Innovation in investment

Investment, according to the financial perspective, means that it is the capital that is used in the production of commodities that will be used in production in the future. Or it is an investment of funds in feasible investment opportunities (Hardan, 1993: 13).

Investments are the basic foundation for the development of economic units, and they play a very important role, especially in valuing and improving the available resources. In the meantime, investments represent the "engine" to launch the process of economic growth that secures workflow within the normal standards of the national economy as well as improving and developing the volume of production, providing material support, and professions in the social and cultural field. Being, in the meantime, the main factor to increase the quality of life of the community.

Financial acceptability describes investments through the viewpoint of the trade-offs between the availability of funds at a given moment and the future possibility of increasing cash liquidity, thus emphasizing what is called opportunity cost. Thus, the investments represent the amounts distributed at the present time that would generate the occurrence of future financial effects, higher than those that were resorted to at the beginning, to be consumed over a long period of time (URSACHE, A., 2015: 50-51).

### 3 - Innovation in financing

Finance means that it is the financial system that is based on managing money and directing it efficiently and effectively, through studying ideas and the possibility of applying them in target markets, and it is classified as one of the branches of applied economics, and includes financing, loans, investment, financial plans, budgets and other topics related to money management.

Funding is the management and follow-up of funds and drawing up the necessary plans in order to achieve the goals set by using the necessary economic tools, and not the process of providing projects with the necessary financing. His mission goes beyond this matter.

It can also be said that financing is studying the project before its implementation and tracking it during implementation and evaluating it from time to time. Finance is also concerned with the dangers that could pose a threat to the activities of the project or investment. The financing department provides the necessary solutions, as it is a group of administrative functions working in parallel. With each other .

Funding also determines and achieves the state's policy in achieving development, through:

1- Attracting capital in order to realize beneficial projects through:

A - Providing and creating job opportunities for the unemployed by providing the cadres with the positions needed by the project.

B - Achieving the economic development goals of the country on which the projects are being built.

C - Compatibility of the objectives of the subject with the policy of the state in its plans for development.

2 - The importance of financing for individuals is very great by achieving the well-being of individuals and improving the living situation.

### 4 - Innovation in pricing services

The price represents to the customer the monetary value of the good or service as determined in the market, that is, the price represents the cash value that the consumer is willing to bear in exchange for the benefit that he obtains, and the price is also seen as the purchasing power that the customer shows to obtain the required service, and the banking price indicates It refers to the interest rate on deposits, loans, fees and other expenses incurred by the bank in return for providing the banking services it receives as a result of providing services to others.

(Al-Bijani, 1999: 5) defines price as the art of translating the value at a specific time and place of the goods and services offered into monetary value according to the currency in circulation in the community, taking into consideration the internal conditions of the community.

As for (Maalla, 1994: 153), the bank rate is defined as referring to the interest rate on deposits, loans, fees and other expenses incurred by the bank in exchange for providing banking services or the commissions that the bank receives as a result of providing services to others.

### 5 - Innovation in risk management.

Risk can be defined as the possibility of exposure to loss, damage or risk, and thus

includes the occurrence of undesirable events (brigham & Ehrhardt, 2005: 145).

(peter, 2003: 2-3) believes that the goal of financial organizations in risk management is to avoid the biggest risk that any financial organization may face, which is bankruptcy and its direct and indirect costs, which are mostly large and well-known. The view of bankruptcy in the future as an unusual possibility for the organization leads to restructure or close.

#### Fourth: Swift system

The SWIFT system is one of the systems that allow for bank settlements between banks and financial institutions in the world. It is a global financial system that allows for the smooth and rapid movement of money across borders. . It has replaced the telex in the old banking transactions. It provides the greatest degree of data protection in addition to the speed it enjoys in completing and ending financial and banking transactions between banks and financial institutions. This system provides financial services with high efficiency and an appropriate cost. This system aims to provide advanced scientific means in the field of exchanging information and messages between the global financial markets through specific banks that are responsible for implementing this service among the various participating countries. SWIFT is just a channel for transmitting financial messages. This means that once you send the financial instructions, Banks (not SWIFT) are responsible for settling the transaction via the clearinghouse (Kozolchyk, 1992), (Khadjimamedov, A., & Kizi, K. M. ,2021:52).

The fourth topic

The practical side of research

First: descriptive analysis and data examination

#### 1- Normal distribution

The normal distribution test is one of the necessary tests, especially in the parametric statistical tests that require that the data distribution be normal. The results to be reached. And through the use of the SPSS program, the skewness, skewness and Kurtosis test was performed for the purpose of testing the normal distribution of the data, as the acceptable values for them are when they range between 1.98 + and - 1.98 according to (Hair et al., 2017, p. 76), and in The following are the results of the normal distribution test for the variables of the research scale:

A- The normal distribution of the financial knowledge management system variable: The results of the skew and kurtosis test using the SPSS program for the financial knowledge management system variable, the results showed that the financial knowledge management system variable and its dimensions achieved the accepted values of the normal distribution as shown in Table (2), and this is what reinforces To reach accurate statistical results.

B- The normal distribution of the financial innovation system variable: The results of the skew and kurtosis test using the SPSS program for the financial innovation system variable showed that the financial innovation system variable and its dimensions achieved the accepted values of the normal distribution, as shown in Table (3), and this is what reinforces the results. Accurate statistic.

**Table (3) the results of the distribution test and the reliability test for the research variables**

Variable	coding	Skewness	Kurtosis	Alpha Cronbach
financial knowledge management system	X	-.804-	-.027-	.714
Acquisition of financial knowledge	X1	.180	-.769-	.704
Storage of the financial knowledge	X2	-.201-	-.593-	.727
Dissemination of the financial knowledge	X3	-.040-	-1.220-	.706
Use of financial knowledge	X4	-.252-	-.019-	.708
Innovation of the financial knowledge	X5	-.377-	-.269-	.713
Assessment of the financial knowledge	X6	-.744-	.285	.712
Financial innovation	Y	-.387-	.248	.703
Innovation in providing liquidity	Y1	-.099-	-.419-	.700
Innovation in investment	Y2	-.360-	-.823-	.704
Innovation in finance	Y3	-1.622-	.823	.700
Innovation in pricing services	Y4	-.745-	.631	.706
Innovation in risk management	Y5	-.024-	-.147-	.704

## 2- Reliability test

In order to identify the validity and reliability of the questionnaire, Cronbach's alpha analysis was performed, in order to reach the results and compare them with the accepted ratio. Table (3) reflected the values of the coefficients and it became clear that they are within the permissible limits, which is (0.7), meaning that the questionnaire has high stability and can be relied upon.

## 3 - Descriptive analysis of research variables

A - The descriptive analysis of the variable of the financial knowledge management system: Through the use of the SPSS program, the results of the descriptive analysis of the variable of the financial knowledge management system were reached, which are reviewed by Table (4), as the results of the arithmetic mean showed that all items of the scale exceeded the hypothetical mean of (3) (at Inclusion of the five-point Likert scale) and thus, this indicates the spread of all items in

the researched organization, in addition to that, the results of the descriptive analysis showed relatively low values for the standard deviation, and this indicates the consistency of the respondents' responses.

**Table (4) the descriptive analysis of the variable of financial knowledge management system**

Paragr aph	Questions	Mean	Standard deviation
<b>X financial knowledge management system</b>		<b>3.4293</b>	<b>.86385</b>
X11	The bank's management emphasizes that acquiring financial knowledge from the Swift system is linked to cash flows.	<b>3.2698</b>	<b>.99416</b>
X12	Bank management can acquire financial knowledge related to SWIFT system by collecting current explicit knowledge, such as collecting current financial information, and customer information.	<b>3.2222</b>	<b>.95625</b>
X13	The bank management can acquire knowledge related to the Swift system through exploration and capture of the tacit knowledge of the system (data warehouse).	<b>3.6825</b>	<b>.91912</b>
X14	The bank's management can enable its employees to acquire financial knowledge through the effective use of the Swift system.	<b>3.4921</b>	<b>.99795</b>
X15	The bank's management believes that the successful knowledge acquisition process of employees who use the SWIFT system is key to the perfect SWIFT system for the bank.	<b>3.3492</b>	<b>.92176</b>
X16	Today, the bank's management believes that in light of the rapidly changing business environment, it must constantly try to acquire new knowledge for its employees who use the Swift system and integrate it into the existing knowledge base of the system.	<b>3.6508</b>	<b>.99484</b>
X17	The bank's management seeks to acquire the knowledge of its employees in a manner that reflects its capabilities, directly and indirectly, in supporting and creating the SWIFT system.	<b>3.0317</b>	<b>.93160</b>
<b>X1 Acquisition of financial knowledge</b>		<b>3.3855</b>	<b>.92214</b>
X21	The bank's management believes that the bank's knowledge base is mainly used to support the SWIFT system, which contributes to developing employee performance, supporting work rules and systems, relevant laws and regulations, and basic professional knowledge.	<b>3.2063</b>	<b>.97202</b>
X22	The bank's management confirms that the knowledge base of the Swift system is linked to a set of functions in the system, responsibilities, workflow, and knowledge to adapt to other jobs and skills.	<b>3.0524</b>	<b>.91909</b>
X23	The bank's management believes that storing financial knowledge provides a platform for the SWIFT system to collect financial knowledge.	<b>3.2222</b>	<b>.99737</b>
X24	The bank's management confirms that the knowledge base of the SWIFT system is used to store the financial work experience of the financial	<b>3.7619</b>	<b>.91752</b>

The effect of the financial knowledge management system on the financial innovation system (Exploratory research for some private commercial banks in the province of Najaf)

	workers and the learning experiences.		
X25	The bank's management believes that the knowledge base of the Swift system can facilitate the old and new employees to inquire and learn knowledge in a timely manner.	<b>4.0635</b>	<b>.98965</b>
X26	The bank's management confirms that personal knowledge can be published in the knowledge base of the Swift system or in the knowledge base of the bank.	<b>3.0095</b>	<b>.94249</b>
X27	The bank's management believes that storing financial knowledge of the SWIFT system contributes to the development of the innovation capabilities of employees.	<b>3.0794</b>	<b>.99890</b>
<b>X2 Storage of the financial knowledge</b>		<b>3.5993</b>	<b>.98256</b>
X31	The bank's management believes that under the use of the SWIFT system, the knowledge and skills required for workers are relatively high in the financial sector.	<b>3.0508</b>	<b>.99351</b>
X32	The bank's management believes that by achieving financial knowledge sharing, the SWIFT system can rely on the bank's network to spread knowledge.	<b>3.0143</b>	<b>.90689</b>
X33	The bank's management encourages the adoption of modern methods such as the SWIFT system for sharing financial knowledge, such as establishing an effective incentive mechanism, the electronic newsletter, the financial training network, and the exchange of experiences.	<b>3.0000</b>	<b>.90483</b>
X34	The bank's management confirms that its employees who use the Swift system are compatible with their digital work environment.	<b>3.4143</b>	<b>.95603</b>
X35	The bank's management believes that the dissemination of financial knowledge to workers on the Swift system is strongly affected by the psychological state and the will to share with other financial workers.	<b>3.0254</b>	<b>.97143</b>
X36	The bank's management believes that spreading financial knowledge among its employees who use the Swift system will contribute to gaining more knowledge and experience with them.	<b>3.0889</b>	<b>.96424</b>
X37	The bank's management confirms that spreading financial knowledge among its employees who use the Swift system will contribute to attracting more customers and achieving their satisfaction.	<b>3.1905</b>	<b>.92944</b>
<b>X3 Dissemination of the financial knowledge</b>		<b>3.0977</b>	<b>.91347</b>
X41	The management of the bank, which uses the Swift system, seeks to achieve the goal of managing financial knowledge, which is represented by generating value for the customer and achieving his satisfaction in addition to creating wealth and reducing financing costs and risks.	<b>3.0365</b>	<b>.98965</b>
X42	The management of the bank, which uses the Swift system, believes that generating value for the customer and achieving his satisfaction can be achieved through collaborative work, the search for knowledge and knowledge maps.	<b>3.4286</b>	<b>.97335</b>

X43	The management of the bank, which uses the Swift system, confirms that the correct use of financial knowledge contributes to enhancing customers' confidence in the bank and loyalty to it.	<b>3.6349</b>	<b>.96815</b>
X44	The management of the bank, which uses the Swift system, believes that the use of its employees for financial knowledge and their endeavor to satisfy customers contributes to gaining and attracting the largest possible number of customers to the bank.	<b>3.3810</b>	<b>.92380</b>
X45	The management of the bank that uses the Swift system believes that the use of financial knowledge affects the creation of sustainable competitive advantages due to its ambiguity and uniqueness for the bank and the fact that knowledge becomes an integral part of the operations within the bank.	<b>3.6032</b>	<b>.94356</b>
X46	The management of the bank that uses the SWIFT system confirms that the bank, which has an advanced ability to use financial knowledge, is quick to respond to any signals it receives, and the capabilities of using knowledge show how the bank can effectively exploit the knowledge gained in the form of new and improved services.	<b>3.8413</b>	<b>.97064</b>
X47	The management of the bank that uses the Swift system believes that one of the vital benefits of using financial knowledge is innovation.	<b>3.4762</b>	<b>.98084</b>
<b>X4 Use of financial knowledge</b>		<b>3.4717</b>	<b>.93516</b>
X51	The management of the bank, which uses the Swift system, believes that its employees can excel in their work by sharing knowledge among them, as well as by holding training courses for them.	<b>3.1746</b>	<b>.95132</b>
X52	The bank's management, which uses the Swift system, believes that electronic conferences and community forums are a good place to test knowledge, update it, share it, and innovation it.	<b>3.8571</b>	<b>.99769</b>
X53	The management of the bank, which uses the Swift system, confirms that the financial knowledge possessed by the individuals working in the bank will contribute to increasing the bank's financial liquidity and increasing its profits.	<b>4.0000</b>	<b>.95038</b>
X54	The bank's management believes that the most innovative banks that operate on the Swift system can achieve large profits compared to other banks.	<b>3.7143</b>	<b>.91055</b>
X55	The bank's management believes that its employees who use the Swift system and who have innovation financial knowledge can attract the largest possible number of new customers.	<b>3.8730</b>	<b>.84383</b>
X56	The management of the bank, whose employees use the Swift system, believes that innovation in financial knowledge can contribute to reducing the bank's financial costs, internally and externally. It also reduces risk. It also better meets the needs of customers.	<b>3.0476</b>	<b>.65365</b>
X57	The management of the bank, whose employees use the SWIFT system, believes that financial innovation is one of the most important competitive weapons, which is seen as the bank's core value capability.	<b>4.0476</b>	<b>.76385</b>

<b>X5 Innovation of the financial knowledge</b>		<b>3.6735</b>	<b>.79383</b>
X61	The bank's management believes that the evaluation aims to determine the effectiveness, efficiency and value of using financial knowledge of the SWIFT system.	<b>3.0317</b>	<b>.96354</b>
X62	The bank's management believes that the evaluation aims to determine the effectiveness, efficiency and value of using financial knowledge of the SWIFT system.	<b>3.6984</b>	<b>.94490</b>
X63	The management of the bank, whose employees use the Swift system, confirms that the knowledge management system of the bank is a multi-functional system that integrates various knowledge management technologies, and can support all knowledge management activities and their main processing.	<b>3.6032</b>	<b>.92453</b>
X64	The bank's management believes that its employees who use the Swift system seek constructive participation in the change process.	<b>4.0000</b>	<b>.91581</b>
X65	The bank's management is committed to constantly evaluating the performance of its employees who use the Swift system and to enhance their capabilities.	<b>3.9524</b>	<b>.97432</b>
X66	The management of the bank, whose employees use the Swift system, always emphasizes the conduct of training courses related to financial knowledge for its employees.	<b>3.9841</b>	<b>.85179</b>
X67	The bank's management believes that assessing the financial knowledge of its members who use the Swift system contributes to enhancing their performance and improves the performance of the bank.	<b>3.9683</b>	<b>.90440</b>
<b>X6 Assessment of the financial knowledge</b>		<b>3.7483</b>	<b>.86731</b>

B - The descriptive analysis of the variable of the financial innovation system: Through the use of the SPSS program, the results of the descriptive analysis of the financial innovation system were reached, which are presented in Table (5). The triple) and therefore, this

indicates the spread of all paragraphs in the researched organization, in addition to that, the results of the descriptive analysis showed relatively low values for the standard deviation, and this indicates the consistency of the respondents' responses.

**Table (5) the descriptive analysis of the financial innovation system variable:**

Paragr aph	Questions	Mean	Standard deviation
<b>Y Financial Innovation System</b>		<b>3.4762</b>	<b>.78032</b>
Y11	The bank's management confirms that the financial innovation of employees who use the Swift system enables the bank to provide sufficient liquidity and	<b>3.2857</b>	<b>.99074</b>



	thus enhance its ability to fulfill its financial obligations.		
Y12	The bank's management believes that through the financial innovation of the employees who use the Swift system, the bank's senior management can meet depositors' requests to withdraw from deposits, and borrowers' requests are met to meet the needs of society.	<b>4.1429</b>	<b>.98139</b>
Y13	The bank's management believes that the financial innovation of the employees who use the Swift system contributes to providing and increasing the necessary liquidity and addressing the lack of liquidity, which could lead to the bank's failure and collapse.	<b>3.8571</b>	<b>.95540</b>
Y14	The bank's management confirms that the financial innovation of the employees who use the Swift system has a great and important role in meeting the needs of customers.	<b>4.1111</b>	<b>.97929</b>
Y15	The management of the Central Bank believes that a bank whose members are distinguished by financial innovation is that one of the most important tasks in relation to its performance is measuring and meeting its liquidity needs.	<b>3.0794</b>	<b>.99694</b>
Y16	The bank's management believes that the financial innovation of employees who use the Swift system has a major role in providing sufficient liquidity for the bank, which enables it to finance increases in assets and fulfill liabilities when they fall due, without incurring unacceptable losses.	<b>3.1429</b>	<b>.85868</b>
Y17	The bank's management confirms that the feasibility and efficiency of the bank that uses the Swift system is greatly affected by the availability of liquidity in sufficient quantities at all times.	<b>3.1746</b>	<b>.9550</b>
<b>Y1 Innovation in providing liquidity</b>		<b>3.2562</b>	<b>.82593</b>
Y21	The bank's management believes that the financial innovation of employees who use the Swift system has a major role in employing resources, including cash, in order to achieve future returns.	<b>3.0667</b>	<b>.98374</b>
Y22	The bank's management confirms that increasing the effectiveness of the operations and achievements of the bank whose employees use the Swift system requires maximum innovation and knowledge of financial markets.	<b>3.4317</b>	<b>.97716</b>
Y23	The bank's management believes that the financial innovation of employees who use the Swift system contributes greatly to reaching sound and effective investment decisions.	<b>3.7937</b>	<b>.93339</b>
Y24	The bank's management believes that the employees who use the Swift system have the ability and ability to invest the money to the fullest.	<b>3.8254</b>	<b>.97684</b>
Y25	The bank's management confirms that it is fully prepared to sacrifice its resources, which it uses in investment at the present time, for the purpose of obtaining future revenues.	<b>3.9048</b>	<b>.92852</b>
Y26	The bank's management believes that investments represent the "engine" to launch the process of economic growth that secures workflow in accordance with the natural standards of the national economy, as well as improving and	<b>3.0889</b>	<b>.76435</b>

The effect of the financial knowledge management system on the financial innovation system (Exploratory research for some private commercial banks in the province of Najaf)

	developing the volume of production, providing material support, and professions in the social and cultural field.		
Y27	The bank's management believes that innovation in investment enables the bank to invest its money in viable investment opportunities	<b>3.0651</b>	<b>.82894</b>
<b>Y2 Innovation in investing</b>		<b>3.2109</b>	<b>.45165</b>
Y31	The management of the bank, through its employees who work with the Swift system, aims to provide the necessary financial resources to establish investment projects or to form new capital for the purpose of business continuity and customer retention.	<b>3.3492</b>	<b>.96985</b>
Y32	The bank's management believes that the efforts through which the workers are characterized by financial innovation who work in the Swift system have a major role in providing the necessary funds and financing investment projects for its customers.	<b>3.6698</b>	<b>.93497</b>
Y33	The management of the bank, through which the employees are characterized by financial innovation, who work with the Swift system, seeks to finance many projects proposed by customers	<b>3.6270</b>	<b>.99177</b>
Y34	The bank's management believes that through financing, the bank can survive and continue in the world of competition, as financing contributes to providing the necessary funds for customers	<b>4.1905</b>	<b>.97579</b>
Y35	The management of the bank believes that innovation in financing is the management and follow-up of funds by the bank and the drawing up of the necessary plans in order to achieve the set goals.	<b>3.0635</b>	<b>.89574</b>
Y36	The bank's management believes that innovation in financing is of great importance to the working individuals who work with the Swift system, as well as to customers through achieving well-being and improving living.	<b>3.0889</b>	<b>.91776</b>
Y37	The management of the bank seeks, through innovation in financing for workers who use the Swift system, to provide and innovation job opportunities for the unemployed by providing the cadres with the positions needed by the project.	<b>3.0000</b>	<b>.90483</b>
<b>Y3 Innovation in Finance</b>		<b>3.5556</b>	<b>.71749</b>
Y41	The bank's management confirms that the bank, whose employees who use the Swift system are characterized by financial innovation, cares about the price because it represents, for the customer, that cash value.	<b>3.2540</b>	<b>.96208</b>
Y42	The bank's management believes that the bank is characterized by its employees who use the Swift system with financial innovation, as it has a major role in generating value for the customer, achieving his satisfaction, and providing him with the best services.	<b>4.1746</b>	<b>.91500</b>
Y43	The management of the bank, through its employees who use the Swift system, seeks to attract and retain customers and achieve their satisfaction as	<b>3.9841</b>	<b>.98447</b>

	part of the bank.		
Y44	The bank's management believes that customer satisfaction with the services provided to them is one of the main tasks of the bank's management.	<b>3.8730</b>	<b>.99801</b>
Y45	The bank's management sees innovation in the price that makes the consumer willing to bear the cash value he pays for the benefit he gets.	<b>3.8635</b>	<b>.96221</b>
Y46	The bank's management believes that pricing is setting appropriate prices that are sufficient to cover costs and obtain profits on the one hand, and attract customers on the other hand. And that optimal pricing is a great strategy that must take into account all marketing objectives during the marketing process.	<b>3.0095</b>	<b>.90508</b>
Y47	The management of the bank confirms that the success of the bank depends on determining the prices of its banking services in a way that innovations a balance between the value of the service and the benefits that the customer expects from this service. On the other hand, the price is a basic determinant of the bank's profitability.	<b>3.0635</b>	<b>.90531</b>
<b>Y4 Innovation in pricing services</b>		<b>3.6032</b>	<b>.81803</b>
Y51	The management of the bank believes that the bank whose work of its employees who use the Swift system is characterized by financial innovation has the ability to limit or eliminate the losses or damages that the bank is exposed to.	<b>3.2063</b>	<b>.96497</b>
Y52	The bank's management believes that the bank has a forward-looking role in planning for the future and facing the unexpected circumstances that it may be exposed to.	<b>4.1270</b>	<b>.92378</b>
Y53	The bank's management confirms that the innovation management has the ability to avoid the bank's exposure to unexpected and unplanned losses.	<b>4.0317</b>	<b>.92118</b>
Y54	The management of the bank believes that the bank, whose employees who use the Swift system are characterized by financial innovation, is less vulnerable than others to the risks that may occur.	<b>3.5238</b>	<b>.87726</b>
Y55	The bank's management confirms that the aim of risk management in financial organizations is to avoid the biggest risk that any financial organization may face, which is bankruptcy.	<b>3.5873</b>	<b>.89145</b>
Y56	The bank's management believes that innovation in risk management is represented in risk planning, through the use of appropriate tools for the purpose of determining the degree of certainty and uncertainty, as well as organizing and classifying these risks according to specific classifications agreed upon in the bank.	<b>3.7619</b>	<b>.89288</b>
Y57	The bank's management believes that innovation in risk management is a general systemic process that contributes to decision-making for the purpose of identifying, analyzing, evaluating and addressing risks at the internal and external levels of the bank.	<b>4.0476</b>	<b>.95763</b>

Y5 Innovation in risk management	3.7551	.81988
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## Second: Testing research hypotheses

After completing the step of calculating the research variables, as well as the descriptive analysis of the research variables, the current step is to test the hypotheses, and at the beginning the correlation hypothesis will be tested, and then the influence hypothesis will be tested and knowledge of the correlation and influence between the independent variable, which is financial knowledge management system and the dependent variable It is the financial innovation system, as follows:

1- Testing the correlation hypothesis: the social statistical program spss v.25 was used to measure the correlation between the research variables through the Pearson correlation coefficient for quantitative variables, as follows:

Testing the first main hypothesis:

Which states that (there is a significant correlation between financial knowledge management system and the financial innovation system), the results of which appeared as shown in the following table:

**Table (6) Results of testing the first sub-hypothesis of the correlation**

Item	R	P	Sig type	Result
x---→y	.574**	.000	Sig	Acceptable

The results of testing the first main hypothesis indicate that there is a significant correlation between financial knowledge management

**Table (7) Results of testing the second main hypothesis of impact:**

Item	A	B	R <sup>2</sup>	T		F		Sig type	Result
				Calculated	Tabular	Calculated	Tabular		
x→y	1.385	.574	.329	3.616	2. 021	29.959	4. 03	Sig	Acceptable

system and the financial innovation system, if the value of the correlation coefficient is (.574), with a significant level less than (0.05) which is (.000), and thus accepting the first main hypothesis.

## 2- Testing impact hypotheses

The research hypotheses of the effect will be tested by the program spss v.25 by means of the simple regression equation, and the significance of the estimated function will be tested based on the value of the (f) test, and the significance of the parameters will be tested through the (t) test, according to the following:

$$Y = \alpha + \beta x + U_i$$

Y: the dependent variable, A: the fixed term in the regression equation, or the cut off part of the y axis

b : the slope of the regression line, or the amount of change that occurs in the dependent variable when the independent variable is changed by one unit. X: the independent variable, U<sub>i</sub>: the random variable.

Testing the second main hypothesis: which states that (financial knowledge management system has a significant effect on the financial innovation system, and after it was tested using simple regression, its results were as in the following table:

The results of Table (7) indicate that there is a significant effect relationship between financial knowledge management system and the dependent variable of the financial innovation system, which was indicated by the results of the (T) test and the (F) test if the calculated values were higher than the tabular at a significant level (0.05), then The calculated (t) value was (3.616), which is higher than the tabular one, which is (2.021), while the calculated (f) value was (29.959), and therefore it is higher than the tabular one (4.03).

The simple regression model is estimated as follows:

$$Y = A + B X_1 + u$$

$$\text{financial knowledge management system} = 1.385 + .574 \text{financial innovation system}$$

If the value of (B) indicates an amount of (.574) and this means that if the sharing of digital knowledge increases by (1) one unit, then the dependent variable of the financial innovation system will increase by (.574), while (R<sup>2</sup>), whose value indicates an amount (42.6%) it means that the independent variable digital knowledge sharing explains the value of (42.6%) of the changes that occur in the dependent variable of the financial innovation system, and based on the above results, the second main hypothesis is accepted.

### Conclusions and Recommendations:

#### Conclusions:

1 - Bank management can acquire financial knowledge related to SWIFT system by collecting current explicit knowledge, such as collecting current financial information, and customer information.

2 - The bank's management believes that storing financial knowledge of the SWIFT

system contributes to the development of the innovation capabilities of employees.

3 - The bank's management encourages the adoption of modern methods such as the SWIFT system for sharing financial knowledge, such as establishing an effective incentive mechanism, the electronic newsletter, the financial training network, and the exchange of experiences.

4 - The management of the bank that uses the SWIFT system confirms that the bank, which has an advanced ability to use financial knowledge, is quick to respond to any signals it receives, and the capabilities of using knowledge show how the bank can effectively exploit the knowledge gained in the form of new and improved services.

5 - The bank's management believes that through the financial innovation of the employees who use the Swift system, the bank's senior management can meet depositors' requests to withdraw from deposits, and borrowers' requests are met to meet the needs of society.

6 - The bank's management believes that the financial innovation of employees who use the Swift system has a major role in employing resources, including cash, in order to achieve future returns.

7 - The management of the bank, through its employees who work with the Swift system, aims to provide the necessary financial resources to establish investment projects or to form new capital for the purpose of business continuity and customer retention.

8 - The bank's management believes that the bank is characterized by its employees who use the Swift system with financial innovation, as it has a major role in generating value for

the customer, achieving his satisfaction, and providing him with the best services.

#### Recommendations:

1 - Expanding the use and application of the financial knowledge management system, represented by its dimensions, because of its significant impact on the management and leadership of the senior and middle management of the bank gaining experience and knowledge, which enables them to be creative in performing the tasks assigned to them.

2 - The senior management of the bank should use modern technological methods for the purpose of improving the performance of the leadership of the senior and middle management in the bank, which in turn contributes to improving and strengthening the bank's ability to keep pace with modern technological developments and increase its creativity.

3 - The effective contribution of the bank's management to the financial knowledge management system helps the leaders of senior and middle management in the bank to know what they should possess in the future, such as knowledge, skills and experience.

4 - Work on conducting many studies and field research and expanding the study of the financial knowledge management system variable, as the results showed the lack and limitedness of studies that dealt with this variable in its dimensions.

5 - Striving to provide a safe, encouraging and supportive environment to develop the capabilities and skills of senior and middle management leaders within the bank, by conducting training courses to share digital knowledge inside and outside the bank.

6 - Work on conducting many studies and field research and expanding the study of the financial innovation system variable, as the results showed the lack and limitedness of studies that dealt with this variable in its dimensions.

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