

THE IMPACT OF SMART DIGITIZATION APPLICATIONS ON FINANCIAL DECISIONS BASED ON CLOUD COMPUTING - AN APPLIED STUDY IN A SAMPLE OF IRAQI BANKS

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Abstract

Business organizations seek to achieve their goals by building a sustainable organizational strategy that enables them to achieve what they aspire to by relying on clear-cut plans. It is best used to achieve the objectives set by the top management of the organization. Financial decisions are by their nature very complex, as poor organization and the increasing volume of data require scientific analysis, and smart systems and technologies are well suited to this type of challenge, including smart digitization techniques, and cloud processing in support of those decisions. The research problem is embodied in trying to find out whether the Iraqi private banks under study are already testing cloud solutions as a way to reduce information technology costs, and the suitability of smart digital applications represented by (smart digitization components, electronic payment systems, information systems applications, and digital archiving) for making financial decisions In the banking sector represented by the dimensions (finance, investment and dividend) with the presence of cloud computing represented by the dimensions (public, private, community and hybrid clouds). In this research, the descriptive analytical approach was adopted by employing the questionnaire as a tool for collecting information on the study sample, which consisted of (203) individuals working in the 12 Iraqi banks under study, where the statistical program was employed. (stata v.17) to extract the results. Among the most important conclusions obtained was the existence of a significant statistically significant correlation between smart digitization applications and financial decisions in banks with the presence of cloud computing, and the presence of a significant and statistically significant effect of smart digitization applications on financial decisions in the presence of cloud computing, and the majority of the target sample does not know Much about the concept of cloud computing, as its benefits and risks are vague and unknown to them, which indicates that Iraqi institutions still need a lot of time to educate their relevant employees about the benefits and risks of cloud computing and ways to apply them.

Keywords: smart digitization applications, financial decisions, cloud computing.

Introduction:

The financial system is witnessing a new era, new business models with concepts that are changing the financial culture, APIs, big data, financial technology, etc. This new world must be completely regulated to avoid abuse and systemic risks, thanks to the new developments in data technology and the adoption of Mobile Communications, a new wave of innovations in banking services is expected. The rapid progress in digital technology over the past several decades, which has shown its imprint on everything that humans can understand, has led to its

penetration in the field of banking services and a qualitative leap in banking business, and the increasing importance of banking technologies day after day, as it works to simplify the work process Credit institutions in several ways, make them faster and more reliable, create unified reporting models and provide data, and help create an efficient flow of documents and interaction between banking professionals, and digital banking refers to the use of technology to conduct banking transactions in a smooth manner, and therefore, it includes Internet banking , electronic banking, and mobile banking, which are the commonly used terms, as opposed to traditional banking.

Financial decisions are by their very complex nature, and the increasing volume of data requires scientific analysis, and smart systems and technologies are well suited to this type of challenge, including smart digitization techniques, and processing via cloud computing in support of those decisions, as the research focused on financial decisions as a dependent variable, As the state of decision-making prevalent in the world of business and finance is the state of risk, the manager in a company cannot predict the consequences of his decisions with complete accuracy because he cannot extrapolate what will happen in the future, and since the state of risk prevails in the world of finance and business, the Managers of companies and individuals make investments when their risks are calculated, and perhaps the best investment to face these risks is to rely on modern technology methods, including smart digitization applications, as well as relying on cloud computing solutions to retain huge amounts of data in the banking sector. In this research, we will discuss the suitability of the requirements used (smart digitization applications and cloud computing) in supporting financial decisions in the banking sector, as the descriptive analytical approach was relied on, and the questionnaire was used as a tool to collect information from the study sample and corroborate it with the data contained in the annual financial reports of the sample banks. In the study, the statistical program (STATA v.17) was also employed to extract the results.

The concept of smart digitization applications:

The researchers set out to build the intellectual and philosophical system for the term smart digitization applications from a variety of points of view, according to the different intellectual, administrative and financial schools that surround the concept. The concept of "smart applications" as a new model to enhance people's daily lives, by providing customized services, and this model relies on personal data that is closely related to daily business, and there are many challenges related to security and storage in smart application systems, for this reason the idea of data security aroused interest Many researchers (Benaich, et.al, 2022:248).

Digitization is one of the main trends that are changing business and society, as it is about transforming the essence of the use of digital tools and discovering and seizing new opportunities by digital means. And converting it into a computer language through microprocessors, and it can also be defined as the process of enhancing existing operations, finding new opportunities within existing business areas, or finding new opportunities outside current business areas. From a technical perspective, digitization can also be referred to as "the process of converting analog information into a digital format". In the corporate context,

digitization refers to the ability to “use digital technologies to generate, process, share and transact information” (Holtkemper, 2020: 11).

It is necessary to distinguish between two terms for digitization or digital transformation. The first term is digitalization, which is the process through which digital technologies are used to change the business model, business process or good service, and the second term is digitization, which is a basic and more information-oriented process, as it is often confused between the two terms. (Tardieu, et.al, 2020: 300)

Digital transformation represents a sustainable company-wide transformation through revised or newly established business processes and business models achieved through value-added digitization initiatives, ultimately improving profitability. Digital applications can also be used for purposes of careful prudential supervision to forecast bankruptcies And assessing the fluctuations in the credit risk of banks, as this is done through the use of (ML) algorithms, by linking a number of databases such as the central credit registry and balance sheet data of non-financial institutions, and other data (Monkiewicz & Monkiewicz, 2022:33).

In the past decades, banks have realized that digitization improves customer relationships and generates more competitiveness, which gives business efficiency, saves costs, increases accuracy, saves time and risk, enhances security and reduces fraud and money laundering, as digitization is of vital importance to data processing. storage and transmission, because it "allows the transmission of information of all kinds in all forms with the same efficiency". Unlike analog data, which usually suffers some quality loss every time it is copied or transmitted, digital data can be transmitted without any loss at all. (73. Holloway, 2017: 104). Digitization also increases the availability of data that affects management accounting due to the availability of more relevant data for decision support) and information and communication technology. Smart electronic forms are a new form of technology that transforms complex paperwork into digital forms in an enterprise environment, in the context of rapidly changing communication channels resulting from the move towards an environment of digital innovation in the financial industry (Pirogova, et.al, 2020: 3).

Banks that provide services through online digital channels can offer their customers more reasonable prices, as the cost is minimal in electronic channels, as well as the convenience of providing new products and services, as banks that use electronic channels can offer new products and services to their customers in the market More easily, banks can also provide services to third parties such as e-commerce, tax payments and bill payment more easily in digital banking, easier to collect customer information for banks and reduce operational risks. Therefore, banks can reduce operational risks in this way, and digital banking services allow the customer to conduct transactions in all circumstances regardless of time and place, and the possibility of increasing customer satisfaction (Centeno, 2004: 298)

Digitization has become one of the main trends in the global economy. Today, nearly half of the world's population is connected to the Internet, fifty years after its invention and thirty years since the creation of the World Wide Web, digital technology has become ubiquitous and a part of everyday life. Economic and stimulating scientific and technological progress in general, ultimately contributing to the formation of “smart”, sustainable and inclusive economic growth, and a well-functioning digital market can contribute well to the development

of the economy, however, like any dynamic process, digitization creates certain conditions. It requires a number of skills from a person to coordinate high-quality interaction, for example, the ability to work with information and communication technologies, to use new possibilities of the digital space for professional and personal needs, and to know which areas are developing faster, at what speed and how information technologies are spread in them, from it is necessary to find ways to reflect the readiness of the population to move to a new level of development. One of the most noticeable phenomena of the last decade is the transition to the next stage of globalization - digital transformation, which consists of a fundamental change in the structure of the global economy, and global virtualization due to the emergence of new forms of intersectionality. In this regard, measuring the impact of digitization on economic development has become a challenge great for researchers. (Sardana& Singhanian, 2018:30)

Dimensions of smart digitization applications:

The components of smart digitization, which enter, process, output and store data according to the instructions encoded in computer programs, are the first dimension of smart digitization applications. and users (Kenneth & Jane, 2021: 286). Electronic payment systems, which can be defined as a financial transaction carried out without the use of paper documents, are the second dimension of smart digitization applications, and the payment process is made through a number of electronic channels that enable innovations in the field of electronic payment forms, and depends on different technologies that represent the industry itself. Banks work through electronic payment to improve the ability of consumers to trade money and thus reduce the need for interaction between bank employees and customers, and thus they can reduce costs and improve the experience of their customers in the bank through payment via mobile applications, and users can easily conduct small financial transactions between their friends and their families through a number of electronic channels (Balkan, B. 2021: 35). The decision-making process depends on the correctness and timing of the decisions taken, and with the development of technology, it has become possible to transform the decision-making process into a science using mathematical research methods through (banking information systems applications), and to make competent decisions, it has become necessary to establish decision-making systems, most notably expert systems (ES) which is a good AI system for diagnosing (what is wrong) and heuristic problems (what to do), Neural Network Systems (NNS) which is an emerging AI technology that simulates the human brain on a computer, Genetic Algorithm Systems (GAS) systems that are based on community creation Solutions to the problem and then work to produce new generations of solutions that are better than the previous ones and through the reproduction of the best solutions, and because the survival of the best according to Darwin's principle, the good solutions are the ones that remain and exclude the bad solutions (Kenneth&Jane, 2021: 424). Banking digital archiving, which is special programs for storing important documents by organizing them according to accurate scientific methods that facilitate the process of storage, preservation and retrieval when needed, is the fourth dimension of smart digitization applications, and these basic resources that were created to use information are fragile and require maintenance and preservation of their availability. and accessibility In the future, preservation and management of this material depends on form and media, and digital collections are now combined to serve the single

purpose of identifying, manipulating and retaining the lasting value of digital materials (Udochukwu&Oraekwe, 2021:79).

Cloud computing concept.

Cloud computing can be defined as (a model for enabling ubiquitous and convenient network access and demand to a shared set of configurable computing resources, which can be provisioned and released quickly with minimal administrative effort or interaction with a service provider. Accessed through a network, the cloud resource usually owns and operates these resources in multiple data center locations, these devices can run any number of operating systems. The term (cloud computing) is popular today in most industries, as it represents a model that enables consumers to employ computing resources according to their requirements, through cloud computing, online resources can be used from anywhere in the world without being managed. Cloud computing includes both applications provided as online services and the means by which these services are provided, such as hardware components, servers, storage, and systems software in Data centers (Sen, 2015: 38). Cloud services are important because they can reduce the cost and complexity of owning and operating computers and other network resources. Some of the benefits include (low initial costs) and a fast return on investment. Cloud vendors with an expert in a particular field can move sophisticated services that a company might not be able to Developed on its own, the cloud is immutable, allowing access to software and documents from anywhere in the world, and is often traded effectively because it allows organizations to free up resources to emphasize improvement and development (Nayyar, 2019: 5). Cloud computing organizations can reduce costs associated with maintaining a large IT workforce, routine maintenance costs, energy consumption, costly upfront investment in hardware and software, as well as the hidden costs of unplanned system outages or natural disasters. Cloud companies focus on their core competencies rather than developing and managing technology infrastructure. Clouds aim to offer computing, storage, networking and software, or a combination of all of these as a service. Infrastructure, platform, and software as a service are the three most common abstraction-level designations for cloud computing services, which range from virtual servers to placing hosted applications. The primary purpose of cloud networks is to connect physical and virtual infrastructure resources, to the Internet, and the use of cloud networks can be taken into a popular model of cloud computing called infrastructure. (Ahmad, et.al, 2022: 3). Banks may have many reasons for moving to the cloud, but the main reason is likely to be applications, and the capital expenditure needed for new infrastructure has long been a major stumbling block to major investments in new technologies, and with cloud computing, financial institutions have to budget for operating expenses And paying for the services they use, this makes it easier and more cost-effective to test new applications on the cloud against existing, traditional infrastructures (Sriram, 2011: 9). As cloud computing is gaining wide acceptance among users, there is a need for cloud management to ensure proper functioning of cloud services. With its applications, cloud management software may need to deal with heterogeneous resources, and must monitor various tasks such as resource allocation, cloud management strategies include regular monitoring and audit services, initiation and management of disaster recovery plans, cloud management usually provides a gateway to clients, and provides authentication User,

encryption and budget management on behalf of different institutions, and cloud computing can be described as the offspring of the new information technology era, as many banking sectors use cloud computing technologies to achieve their various purposes by using cloud technologies, banks can create a smart and flexible banking environment that is able to respond quickly to business requirements. This is also a cost savings as financial institutions have to pay only for functional consumption and the services they use (Chandrasekaran, 2015:351).

Cloud computing dimensions:

The National Institute of Standards and Technology (NIST) of the US Department of Commerce, which is responsible for describing and describing standards in science and technology, has identified four cloud deployment models: (public clouds, private clouds, community clouds, and hybrid clouds). For where the deployment infrastructure is located and who controls that infrastructure, each cloud deployment model meets different organizational needs, and perhaps most important is the fact that each cloud deployment model has a different value proposition and different costs associated with it, as follows:

A. public cloud:

A deployment model whereby a cloud service provider owns and manages the cloud infrastructure (CSP) cloud service provider with plans to make it available for public use, and different tenants from multiple locations across the Internet can access the technology services in this infrastructure, and a major advantage of this model is that it is scalable It is less expensive to develop than other cloud models, and its disadvantages are that it is less secure than other deployment models. Since public cloud services and infrastructure are shared by a large number of users, this option offers the highest cost savings and is the most popular of the four options (Hossein, 2021: 362). However, it also has higher security and privacy risks, so it is more suitable for organizations that need scalability (the ability to add or drop resources), do collaborative projects across the web, or deliver standard web-based applications, such as email. Public clouds Amazon Elastic Compute Cloud (EC2), IBM Blue Cloud, and Google AppEngine (Aleem & Sprott, 2013: 7).

B. private cloud:

A private cloud consists of a private infrastructure that is available to a particular customer, and may be located in the organization's internal data center, and the customer is either responsible for the security of the infrastructure and is borne by the cloud service provider (CSP). Services and infrastructure run on a private network and of course this option provides higher security and privacy than a public cloud. Because the participating organization buys and maintains the same software and infrastructure, this option offers lower cost savings than a public cloud, and is recommended for organizations that operate on highly secure data. Compared to other models, a private cloud is more secure but requires support from technologists. Highly knowledgeable information to meet corporate security requirements (Arowolo, 2017: 49).

C. Community cloud:

A deployment model in which many organizations with common business needs cluster together to use cloud infrastructure, where cloud infrastructure is provided for the exclusive use of a particular community of consumers from organizations with common interests, which

may be owned, managed, and operated by one or more organizations in Community, with a community cloud, costs are spread across fewer users than a public cloud to achieve full cost savings potential (Zissis&Lekkas, 2012: 584).

D. Hybrid or Hybrid Cloud:

A configuration of two or more clouds (private, community, or public) that remain unique entities but are linked together by a standard or proprietary technology that enables portability of data and applications. The main advantage of this model is that it provides the platform for the organization to classify any of its technology assets can be located in the private sector, public sector, or shared ownership cloud. In turn, it benefits organizations that adopt these services by reducing the complexity and maintenance costs associated with operating a cloud infrastructure. Hence, this approach builds high potential for organizations to reduce their expenses and maximize their time without giving up the benefits of IT. (Moreno et.al, 2013: 20)

In a hybrid cloud environment, there are a variety of public and private options, with many service providers, an organization may run its sensitive data on a private cloud and its public information on a public cloud (with less security and privacy). The scalability and cost-effectiveness offered by a public cloud computing environment without exposing critical applications and data to the outside world, however, this option may require multiple security platforms, and it may be to ensure that all systems communicate with each other in an efficient manner (Hong, et.al, 2019: 6).

Concept of Financial Decisions:

Decision-making is one of the topics that have been linked to the nature of human behavior at all levels and since ancient times, as this phenomenon and how to take it was affected by the evolutionary stages of man in his daily life, which required him to develop decision-making mechanisms to interact and achieve adaptation with developments on the field arena. Financial decisions are among the most important decisions that the company relies on in its various activities, as it aims to maximize the market value of the company. These decisions include financing decisions, investment decisions and profit distribution decisions. The financial decision is the one that balances obtaining funds and owning assets.

The importance of decision-making stems from the importance of the organization's ability to anticipate the external and internal environment with the ability to identify the problems and challenges it faces and work to find quick solutions to prevent affecting the work and future of the organization. Business organization leaders often seek to cut a large part of their work and limit it to the process of making Decisions for the purpose of studying the problems they face and working to find organizational solutions that help them in one way or another to make some types of decisions related to the importance of performing routine tasks, which depend on the planning and organization process, and include issuing important decisions to distribute and organize organizational resources, so the decision-making process varies in terms of importance Relativity from one manager to another and from one leader to another, so the importance of fateful decisions stems from the importance of the leaders of organizations striving towards maximizing the efficiency and effectiveness of their productive organizations in order to achieve goals and address the problems facing organizations, so the

importance of this process depends to a large extent on the type of organizations and the nature of their tasks and scope Its work, as the process is often complex in giant organizations and transnational and multinational organizations (Truckers, 2003: 144). According to a number of studies, the main causes of business failure are lack of financial planning, limited access to finance, lack of capital, unplanned growth, low strategic and financial expectations, excessive investment in fixed assets and poor capital management. Challenges that can be successfully managed through financial strategies developed and implemented by commercial banks, yet the study of financial decisions was limited to large companies only (Nwude& Anyalechi, 2018: 299).

Types of Financial Decisions:

Financial decisions take into account the topics that occupy an important place in contemporary financial thought for their importance in achieving the objectives of financial management in business and finance in maximizing profits and maximizing and preserving the wealth of shareholders. The goal of companies is to maintain growth, survival and continuity, which is reflected in performance, and financial decisions are divided To each of: investment decisions, financing decisions, and dividend decisions.

A. Funding decisions:

Financing decisions are related to the financing alternatives taken by the company, and the process of choosing the source of funds that were used to finance the planned investment in the various alternative sources of funds available, in order to obtain the most effective spending mix. Loans and stocks are the sources of funds that come from outside the company, while profits Withheld Sources of funds that come from within the company. Financing includes types of decisions, how companies raise money from investors, how companies invest money in an effort to earn a profit, and how they decide whether to reinvest profits in the business or distribute them back to investors (Gitman et.al, 2015: 50).

Alternative sources of financing are an important topic for analysis, and companies need short, medium and long-term financing at different times to remain effective and profitable. Benefit. Sound financing decisions are fundamental to effective financial management, and this is evidenced by the fact that financial leverage is one of the performance levers through which managers seek to achieve competitive returns, and it is one of the main determinants of the company's sustainable growth rate, as the financing decision addresses the problems of the amount of capital that must be raised To finance a company's operations, and what is the best combination of financing, in the same way that a company can hold financial assets (such as investing in shares of other companies or lending to banks), it can also sell claims on its real assets, by issuing shares, and raising loans (Richard & Bill, 2006:6).

B. Investment Decisions:

An investment decision is defined as investing money for a specific period of time to obtain future cash flows in compensation for the current value of money and the risks of inflation and fluctuations in those flows. In a business to produce goods or services to meet consumer demand, real assets may be tangible (land, buildings, plant, equipment, and inventory) or intangible (patents, trademarks, "knowledge") and sometimes a company may invest in

financial assets outside the business, In the form of short-term securities and deposits (Eun, C. et.al, 2015: 56)

Investment is defined as sacrificing a current benefit that can be achieved from satisfying current consumption, with the aim of obtaining a greater future benefit that can be achieved from satisfying future consumption. There are two types of investment decisions:

Investment in short-term assets (current assets): Short-term assets are usually defined as assets with maturities of less than one year or less than one business cycle, in which case the money invested in short-term assets is expected to be recovered in The near future or less than one year immediately received. Investment decisions are perhaps the most important of the three types of financial decisions, because the result of these decisions determines the amount of cash flow in future periods, investment decisions relate to how the company uses its money and refer to short and long-term reallocations of corporate funds, short-term investment decisions focus on the level of current assets (cash, accounts receivable, and inventories) needed for day-to-day operations, and long-term investment decisions refer to purchases of fixed assets, mergers and acquisitions, and corporate reorganizations (Sherman, 2015: 9)

- Long-term investments (fixed assets): are assets with a maturity of more than one year, in this case, the money invested in long-term assets will be received again in more than a year and gradually returned, and long-term investments represent a huge expenditure of funds that The company commits to a certain course of action and therefore, the company needs procedures for analyzing and selecting its long-term investments, and capital budgeting is the process of evaluating and selecting long-term investments that align with the company's goal of maximizing the wealth of the owners, companies usually make a variety of long-term investments, but The most common are fixed assets, and these assets are often referred to as profitable assets, and generally provide the basis for the strength and value of a company's earnings (Gitman, et.al, 2015: 407).

C. Dividend Decision:

Dividend Distribution Policy A decision regarding the profits obtained by the company at the end of the year to be distributed to shareholders in the form of dividends or to be kept as retained earnings to be used again as investment financing in the future. Investors are increasingly trusting the company and potential investors are increasingly interested in investing their capital because the company shows good financial management conditions, as the dividend policy is mandated through the dividend payout ratio, which is a ratio that shows the comparison between dividends per share and profitability (Mauris & Nora, 2019:939)

The dividend policy that the company chooses is also the subject of analysis in financial management, as the dividend policy relates to how the company rewards its shareholders, and the four standard alternatives to dividends must be evaluated (fixed dividend policy, fixed payout ratio, moderate annual dividend increase, and dividend policy). Dividend distribution decision is defined as the amount that the company is willing to pay in exchange for distributing profits. Liquidity refers to the company's ability to pay its current bills and expenses, as well as the availability of cash and other assets to cover accounts payable, short-term debts and other liabilities (Olaifa, O. I. 2018: 124). In recent years, the buyback of a company's outstanding common stock has become an increasingly popular alternative to dividends as a way to achieve

additional management goals while making money available only to shareholders who wish to acquire it. The company's stock. To determine this, the analyst compares the effects of different policies on the company's valuation. The choice of dividend policy is a strategic decision, usually made by senior managers, with the final approval of the board of directors (Gitman & Joehnk, 2017: 330)

The relationship between smart digitization applications and financial decisions in the presence of cloud computing:

In the past two decades, there has been a growing interest among both practitioners and researchers in using techniques in the field of computational intelligence for modeling (genetic algorithms, support vector machines) to support financial decisions. Credit risk and value at risk assessment. The decision maker also uses several analytical methods to help him in the decision-making process, often called quantitative decision-making methods (Lahm & Sizemore, 2001: 16). The use of big data, artificial intelligence, and new information and communication technologies has led to sustainable developments and improved business competitiveness. Cloud services are categorized as requiring special system requirements for a business organization, and are represented by different cloud computing architecture layers such as infrastructure, platform or software as a service. As the IT services environment undergoes successive changes, companies have been asked to reconsider their business models and consider adopting a cloud computing system, which can deliver business achievements and development, as a result of their role in making financial decisions (Yoo & Kim, 2018)

An advanced mathematical decision model was also developed that supports the selection of cloud computing services in a multi-source scenario, which is to determine the selection of appropriate cloud computing services offered by different providers, taking into account the cost as well as the risk factors associated with the scope of the decision. As coordination costs, IT service costs, maintenance costs, and exposures are compared, the risks are modeled through three common security objectives: integrity, confidentiality, and availability. The decision model is typically implemented using a software tool and is checked with the help of a realistic simulation study and sensitivity analysis (Martens&Teuteberg, 2012). Cloud computing is an example of a promising technology model that has the potential to act as a catalyst to drive radical innovations in the development of the networked society, while some information and communication technology (ICT) providers have reaped the fruits by moving from provision of legacy devices and services to cloud-based service delivery methods It can serve as a lens for exploring how digital organizations can implement their core business model decisions along increasingly defined levels of decision-making, by taking the perspective of a large, typical provider of technology Information and Communication, in order to provide a new vision to facilitate the effectiveness of the business model from the supply side in cloud computing (Clohessy, et.al, 2018)

Application side:

The data for the research was obtained through a survey conducted by the researcher in 2022 AD. The questionnaire was distributed to a sample of private bank employees. The sample size was (250) respondents distributed randomly within (12) private banks, where (203) were retrieved. A valid form for analysis, with a response rate of 81.2%. The study sample

included heads of departments, administrative units, human resources, and information technology departments. Likewise, the five-factor scale was used in order to arrive at accurate answers and included three axes represented by the study variables and by (60) questions. The program (stata v.17) was used to examine the relationship between smart digital applications, financial decisions and cloud computing. First hypothesis: There is a significant statistically significant correlation between smart digitization applications and financial decisions in the presence of cloud computing. In order to identify the nature of the correlation between smart digitization applications and financial decisions in the presence of cloud computing, Spearman's rank correlation coefficients were calculated to examine the existence of the relationship, and a (t) test was conducted to test the significance of the relationship between dimensions, as shown in the following table (1):

Table (1) Spearman correlation coefficients and t-test for the dimensions of smart digitization applications and financial decisions in the presence of cloud computing

C loud Comp uting	Financial decisions in banks											
	public cloud			private cloud			community cloud			Hybrid cloud		
	r	t	Sig	r	t	Sig	r	t	Sig	r	t	Sig
S mart Digi tization Appli cation s	.33	3.31	.001	.35	3.79	.001	.36	3.83	.001	.34	3.59	.001
P ointer	r=0.323			t= 3.62						Sig= 0.001		

Source: The results of the statistical analysis of the questionnaire using the program stata v.17

From Table (1), we note that the value of Spearman's correlation coefficient between smart digitization applications and financial decisions in banks in the presence of the public cloud reached (0.33) and it is a significant correlation at a level of significance (0.01), while the value of the statistical laboratory (t) reached (3.31) and at a level of significance (0.001), which is significant at a level of significance (0.01), which indicates the significance of the correlation, and this means that there is a significant correlation between smart digitization applications and financial decisions in banks in the presence of the public cloud. We also note that the value of Spearman's correlation coefficient between smart digitization applications and financial decisions in banks in the presence of the private cloud reached (0.35), which is a significant correlation at a level of significance (0.01), while the value of the statistical laboratory (t) reached (3.79) with a level of significance (0.001) and it is significant at the level of significance (0.01), which indicates the significant correlation, and this means that there is a

significant correlation between smart digitization applications and financial decisions in banks in the presence of the private cloud. The value of Spearman's correlation coefficient between smart digitization applications and financial decisions in banks in the presence of the community cloud was (0.36), which is a significant correlation at a level of significance (0.01), while the value of the statistical laboratory (t) reached (3.83) and its significance level is (0.001) It is significant at the level of significance (0.01), which indicates the significance of the correlation, and this means that there is a significant correlation between smart digitization applications and financial decisions in banks in the presence of the community cloud. The value of Spearman's correlation coefficient between smart digitization applications and financial decisions in banks in the presence of the hybrid cloud was (0.34), which is a significant correlation at a level of significance (0.01), while the value of the statistical laboratory (t) reached (3.59) with a significance level of (0.001). It is significant at the level of significance (0.01), which indicates the significance of the correlation, and this means that there is a significant correlation between smart digitization applications and financial decisions in banks in the presence of the hybrid cloud. We also note that the value of Spearman's correlation coefficient between smart digitization applications and financial decisions in banks in the presence of cloud computing reached (0.323), which is a significant correlation at a level of significance (0.01), while the value of the statistical laboratory (t) reached (3.62), which is significant Significant at the level of significance (0.01), which means that there is a significant correlation between smart digitization applications and financial decisions in banks with the presence of cloud computing. The second hypothesis: There is a significant and statistically significant effect of smart digitization applications on financial decisions in the presence of cloud computing. To test whether there is a significant impact of smart digitization applications on financial decisions in the presence of cloud computing, the regression analysis method has been employed and the results are shown as in the following table (2):

Table (2) Results of the regression analysis of smart digitization applications on financial decisions in the presence of cloud computing

Cloud Computing		Financial decisions in banks												
		Finance				investment				Dividend				
s mart digi tatio n apps	s mart digi tization comp onents	F	2	F	β	ig	S	F	2	F	β	ig	S	
		68.	01.	13.	19.	1.8	05.	33.	01.	47.	03.	19.	03.	
		79.	02.	14.	05.	75.	02.	14.	05.	46.	01.	08.	23.	

nt systems													
banking information system applications	53.7	04.0	21.0	01.2	23.0	10.0	34.0	01.0	0.9	05.0	22.0	01.0	
Banking digital archiving	33.0	01.0	0.05	56.0	16.0	01.0	03.0	69.0	77.0	01.0	07.0	38.0	
Pointer	F=13.1 R ² =0.61				β =0.32				Sig=0.001				

Source: The results of the statistical analysis of the questionnaire using the program stata v.17

Table (2) shows the values of the Fisher test (F), the coefficient of determination (R²), the slope values of the regression equation (β) and the values of statistical significance, with regard to the impact of the components of smart digitization on financing in the presence of cloud computing, the value of the F-test amounted to (1.68) and at a level of significance (0.19), which is not significant at the level of significance (0.05), and the value of the coefficient of determination was (0.01), and the value of the coefficient (β) which amounted to (0.13) indicates that changing the components of smart digitization by one unit leads to a change in funding by (0.13) , that is, there is no significant effect of the components of smart digitization on finance in the presence of cloud computing. With regard to the impact of the components of smart digitization on investment in the presence of cloud computing, the F-test value reached (11.8) and the level of significance (0.01), which is significant at the level of significance (0.01), and the value of the coefficient of determination was (0.05), and the value of the coefficient (β) indicates Which amounted to (0.33) that changing the components of smart digitization by one unit leads to a change in investment by (0.18), that is, there is a significant effect of the components of smart digitization on investment in the presence of cloud computing. With regard to the effect of the components of smart digitization on the dividend in the presence of cloud computing, the value of the F-test amounted to (4.47) and the level of significance (0.03) and it is significant at the level of significance (0.05), and the value of the coefficient of determination reached (0.03), and the value of the coefficient (β) , which

amounted to (0.19) that changing the components of smart digitization by one unit leads to a change in the dividend divisor by (0.19), that is, there is a significant effect of the components of smart digitization on the dividend divisor in the presence of cloud computing. This indicates, in general, that the components of smart digitization have a significant impact on financial decisions in banks with the presence of cloud computing.

With regard to the impact of electronic payment systems on financing in the presence of cloud computing, the value of the F-test reached (3.79) and at the level of significance (0.05), which is significant at the level of significance (0.05), and the value of the coefficient of determination was (0.02), and the value of the coefficient (β) indicates Which amounted to (0.14) that changing electronic payment systems by one unit leads to a change in funding by (0.14), that is, there is a significant effect of electronic payment systems on financing with the presence of cloud computing. With regard to the impact of electronic payment systems on investment in the presence of cloud computing, the F-test value reached (3.57) and the level of significance (0.05), which is significant at the level of significance (0.01), and the value of the coefficient of determination reached (0.02), and the value of the coefficient (β) indicates Which amounted to (0.14) that changing the electronic payment systems by one unit leads to a change in investment by (0.14), that is, there is a significant effect of electronic payment systems on investment in the presence of cloud computing. With regard to the effect of electronic payment systems on the dividend in the presence of cloud computing, the value of the F-test reached (1.46) and at a level of significance (0.23), which is not significant at a level of significance (0.05), and the value of the coefficient of determination was (0.01), and the value of the coefficient (β), which amounted to (0.08) that changing the electronic payment systems by one unit leads to a change in the dividend divisor by (0.08), that is, there is no significant effect of electronic payment systems on the dividend in the presence of cloud computing. This indicates, in general, that electronic payment systems have a significant impact on financial decisions in banks with the presence of cloud computing.

With regard to the impact of banking information systems applications on finance in the presence of cloud computing, the F-test value reached (7.53) and the level of significance (0.01), which is significant at the level of significance (0.01), and the value of the coefficient of determination reached (0.04), and the value of the (β) coefficient indicates), which amounted to (0.21) that the change of banking information systems applications by one unit leads to a change of funding by (0.21), that is, there is a significant impact of the applications of banking information systems on financing in the presence of cloud computing. With regard to the impact of banking information systems applications on investment in the presence of cloud computing, the F-test value reached (22.3) and the level of significance (0.01), which is significant at the level of significance (0.01), and the value of the coefficient of determination was (0.10), and the value of the coefficient (β) indicates) which amounted to (0.34) that changing banking information systems applications by one unit leads to a change in investment by (0.34), that is, there is a significant effect of banking information systems applications on investment in the presence of cloud computing. With regard to the impact of banking information systems applications on the dividend in the presence of cloud computing, the F-test value reached (10.9) and the level of significance (0.01), which is not significant at the

level of significance (0.01), and the value of the coefficient of determination reached (0.05), and the value of the coefficient of determination indicates (β), which amounted to (0.22), indicates that the change of banking information system applications by one unit leads to a change in the dividend divisor by (0.22), that is, there is a significant effect of the applications of banking information systems on the dividend in the presence of cloud computing. This indicates, in general, that the applications of banking information systems have a significant impact on financial decisions in banks with the presence of cloud computing. With regard to the effect of banking digital archiving on finance in the presence of cloud computing, the F-test value reached (0.33) with a significance level of (0.56), which is not significant at a significant level (0.05), and the value of the coefficient of determination was (0.01), and the value of the (β) coefficient indicates, which amounted to (-0.05) indicating that the change of banking digital archiving by one unit leads to a change in funding by (-0.05), that is, there is no significant effect of banking digital archiving on financing in the presence of cloud computing. With regard to the effect of banking digital archiving on investment in the presence of cloud computing, the F-test value reached (0.16) and a significance level of (0.69), which is not significant at a significant level (0.05), and the value of the coefficient of determination was (0.01), and the value of the coefficient (β) indicates), which amounted to (0.03) that the change of banking digital archiving by one unit leads to a change in investment by (0.03), that is, there is no significant effect of banking digital archiving on investment in the presence of cloud computing. With regard to the effect of banking digital archiving on the dividend in the presence of cloud computing, the F-test value reached (0.77) and a significance level (0.38), which is not significant at a significant level (0.05), and the value of the coefficient of determination is (0.01), and the value of the coefficient (β), which amounted to (0.07), that changing the banking digital archiving by one unit leads to a change in the dividend divisor by (0.07), that is, there is no significant effect of banking digital archiving on the dividend divisor in the presence of cloud computing. This indicates, in general, that banking digital archiving has a weak impact on financial decisions in banks in the presence of cloud computing. We also note that the effect of the F-test value for the smart digitization applications axis on financial decisions in the presence of cloud computing amounted to (13.1), which is significant at the level of significance (0.01).) has reached (0.67), which means that the second research hypothesis is accepted, that is, there is a significant and statistically significant effect of smart digitization applications on financial decisions in the presence of cloud computing.

Conclusions:

1. That digital transformation represents the continuous development of a company, business model, idea or process that can be both strategic and tactical. Digitization has changed both business operations and the way business is done in banks as in all sectors by taking advantage of technology opportunities.
2. The cloud computing model provides access to an undefined, accessible and on-demand set of shared computing resources (network, servers, storage, applications and services) that can be quickly acquired and released. Cloud infrastructure enables banks to offer more competitive goods and services. It helps the banking industry expand computing capacity in

order to meet growing market demands, and enables banks to create more personalized services for their customers.

3. There is a significant correlation between smart digitization applications and financial decisions in banks with the presence of cloud computing.
4. There is a statistically significant impact of smart digitization applications on financial decisions in the presence of cloud computing.
5. After analyzing the results of the questionnaire, the study concluded that the majority of the target sample does not know much about the concept of cloud computing, as its benefits and risks are vague and unknown to them, which indicates that Iraqi institutions still need a lot of time to educate their relevant employees about the benefits and risks of cloud computing. and ways to apply it.

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