



The Role of Information Technology Applications in the Development of Financial Accounting Processes a Field Study in Banks

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Abstract:

The research aims to assess the actual impact of information technology applications in improving the efficiency, effectiveness and development of financial accounting processes in banks, as the researcher relied on the descriptive analytical approach and the formulation of a set of hypotheses was the most important statistically significant impact of the use of information technology applications on the development of financial accounting, which was statistically tested according to the statistical package (SPSS). As for the selected sample of bank workers, the researcher relied in collecting data on the questionnaire form, which consisted of 36 questions, which were divided into demographic data (4) questions, and objective data (32) questions, which were divided into two axes, the first axis dealt with information technology and consisted of five dimensions included each dimension (4) questions, and the second axis specialized in the development of financial accounting processes and be of three dimensions included each dimension (4) questions, and the researcher reached several conclusions, the most important of which was that the technology Information is an important tool to bridge the digital divide and facilitate the exchange of information at any time and anywhere and support knowledge sharing between members of business organizations and easy access to information and knowledge anywhere in the world at about the same moment, as for the recommendations, the most important of which was to raise the effectiveness and efficiency of information technology infrastructure in banks and provide them with modern devices and equipment necessary for digital transformation in the banking accounting business.

Keywords: Information technology, Financial Accounting, Accounting Processes and IT Applications.

Introduction

Although the need for accounting has been recognized since ancient times, the evolution of financial accounting has become more evident in modern times, starting as a tool for recording assets and liabilities in simple businesses and becoming a complex field covering many aspects, including financial reporting, tax planning and risk management. As we enter the digital age, technology plays a key role in the development of accounting. Artificial intelligence and big data are not just additions, they are key elements in making accounting an automated and predictable field, the development of financial accounting did not come by chance, but rather a response to the challenges and needs that business has faced over the years.

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First Theme: Research Methodology**Search problem:**

The research problem crystallizes in the statement of the direct impact of information technology applications in developing and improving the efficiency of financial accounting processes in banks.

Research hypotheses:

- There is a statistically significant impact of the use of information technology applications on the development of financial accounting
- There is a statistically significant relationship between the use of information technology applications and the development of financial accounting

Importance of Research:

- Provide the theoretical framework on the variables of the study in its dimensions, represented by (financial accounting) for management and employees in banks.
- Clarifying the concept and importance of the objectives of information technology, financial accounting, where it can be used in practice and this provides an opportunity for banks to continue to grow and avoid risks.

Research Objective:

1. The research aims to assess the actual impact of information technology applications in improving the efficiency, effectiveness and development of financial accounting processes in banks.
2. Assisting the banks under study by applying the practical framework of the variables of the current study in them to know the level of their orientation to apply these variables and then analyze the field reality to reach the results related to the development of the same orientation.
3. Presenting a set of proposals through the results of the field study, which gives a clear perception of the areas of applications within the banks under study in a way that achieves effectiveness and efficiency to the maximum extent possible, as well as proposals for future studies for researchers.

Human frameworks: Human cadres include employees in banks, including accountants and auditors, as well as managers, heads of departments, divisions, their assistants and employees in the banks under study, represented by their statistical community.

Spatial Frameworks: This framework included the spatial study of the scope of study of banks as a field of application.

Research Methods:

The research dealt with **the descriptive analytical approach through** this approach, the researcher tests the hypotheses of the research statistically in order to determine the validity of the hypotheses or not, by designing a questionnaire list prepared for this purpose to be distributed to managers, auditors and accountants in Banks under study.

Theoretical Framework for Information Technology Applications**First: the concept of information technology,**

The term information technology (IT) refers to the use, processing, storage, preservation, protection, and exchange of computers, storage, networks, other systems, and all forms of electronic data; information technology is usually used in a business context, as opposed to technology used for personal or recreational purposes.

The term information technology refers to technology that uses computer systems and equipment to access information. (Shahrbali and Dawood, 2017: 41) It includes all modern methods and techniques used for the purpose of simplifying certain activities and improving their performance. It includes a set of equipment related to the processing and distribution of information, such as computers, software, storage equipment, retrieval and electronic transmission, and this is done through all types of communications, whether wired or wireless, written, audio or visual. Its main purpose is to facilitate bilateral and intergroup communication through closed and open networks. (Azayzia, 2020: 3) (Sherif and Odeh, 2016: 179) Information technology is defined as a set of techniques represented by physical entities, software components, and human resources to efficiently manage data and information, as well as the procedures used to organize the work of these components.

From the above, it can be said that information technology is all the technology used by modern institutions in collecting the information they use to carry out their various activities with maximum efficiency and effectiveness leading to their excellence and success.

Second: The importance of information technology:

Modern institutions will not develop and upgrade except with advanced information systems based on integrated databases and data, and it requires the assimilation of information and communication technology, and its optimal use in knowledge management, today societies have become the focus of their progress is knowledge and scientific progress, Therefore, it is necessary to clarify the importance of information and communication technology in providing accurate information and data, processing and making them available in a timely manner to decision-makers, in addition to its role in informing individuals of what is happening around them and providing a continuous supply of information about the situation around them, the importance of information technology comes from the following aspects:

1- Information technology provides a powerful tool to overcome the development divide between rich and poor countries and accelerate efforts to defeat poverty, illiteracy, environmental degradation, hunger and disease, and ICT can deliver the benefits of literacy, education, and training to the most isolated regions, and can also spread messages to solve many problems related to people, organizations and others, technology has turned the world into a small village where it can Individuals communicate and exchange information easily, anytime and anywhere, due to its wide spread, speed of performance, ease of use, as well as the diversity of services, and the large volume of information transmitted.

2- Increasing the ability of individuals to communicate and exchange information and knowledge increases the chance of the world becoming a more peaceful and prosperous place for all its inhabitants and this trend is increasing as people are increasingly empowered to share and use this technology.

3- Information technology contributes to economic development by increasing productivity, promoting innovation and improving communication, the digital revolution has created new forms of social and economic interaction, unlike the industrial revolution in the last century, as the information and communication technology revolution is spreading very quickly and has the ability to affect the vitality of society, and this is due to the power of information and communication technology, as it allows people to access For information and knowledge found anywhere in the world at almost the same moment (Tinawi, 2019:33)

Third: IT Dimensions

Despite the multiplicity of components or dimensions of information technology, we will present the most important of them briefly as follows: (Mansour and Al-Shahrabli, 2021: 4) (Juma, 2018, 45) (Al-Taie, 2001)

- 1- Software components: A set of software components and applications that run on a computer, including a set of programs that the computer uses within a database management system (DBMS).
- 2- Communications: It is the connection between stations in different locations through an intermediary that allows participants to send and receive data and information.
- 3- Technical knowledge: It includes:
 - a) Familiarity with the means and methods of information technology.
 - b) Skills to use these tools.
 - c) Recognize when information technology can be used to solve problems or achieve specific goals.
- 4- Applications: They represent the practical aspects of technology, such as computers and networks, and techniques for collecting, processing, storing, disseminating and providing solutions to information.
- 5- Human resources: It is the force responsible for managing information technology so that technology can achieve its goals, as human resources and information technology work together to achieve the goals of the organization as well as providing human resources with the necessary competencies to manage technology, and information technology helps human resources perform their functions efficiently and effectively.

Financial Accounting Operations

First: Accounting from 1950 to the present:

Accounting has evolved into a complete information system and is no longer seen as just an art, but a science like any other social science. A number of accounting committees and standards have been established to provide clarifications on accounting concepts and standards in all countries with a view to harmonizing and harmonizing accounting methods and practices in Member States. In the seventies, it was recognized that enterprises have not only an economic impact, but also a social impact on employees, society, consumers and the environment. This has led to a development in accounting, where the focus shifted from revenue and cost accounting to cost-effectiveness budgeting, as well as accounting for human resources has evolved as part of measuring the social performance of institutions and has become a stand-alone branch, in the eighties, the use of computers revolutionized accounting systems and methods, and accounting has now become a multidimensional and systematic science. (Moot, 2017:5)

Second: The concept of financial accounting:

The idea of financial accounting is not a recent invention; it has its roots in ancient civilizations. Over the years, it has evolved from a simple method that dates back to a simple period of time to the high-tech process it is today. Initially, financial accounting was primarily aimed at tracking assets and liabilities, and helping companies and governments make informed decisions as trade and the economy grow. Financial accounting has become an important tool for solving complex financial problems, paving the way for regulatory frameworks and international standards such as International Financial Reporting Standards (IFRS). Its role has expanded to include financial reporting, tax planning and even risk management, making it the cornerstone of the financial world. (<https://www.wafeq.com/ar>).)

The idea that financial accounting is the most important is because financial accounting is concerned with recording, classifying, classifying and classifying operations during a certain accounting period and preparing the results of operations during that period, final accounts and financial reports, such as a statement of financial position at the end of the period. The

scope of financial accounting is the measurement of any type of economic or social activity. Financial accounting aims to serve its beneficiaries (internal and external users, investors, regulators, governments, creditors....)(Mashkour et al., 2013:13)

Third: The role of information technology in the development of financial accounting processes

How technological tools such as digital transformation, artificial intelligence, cloud computing and other tools can contribute to the development of financial accounting processes:

1- Digital Transformation

The term digital transformation has become very popular among managers, professionals and consultants involved in recent years due to its association with organizational changes brought about by technological developments. Digitalization refers to the use of technology to create value, transform business models, and change business fundamentals in the banking sector. Digital transformation is the foundation of business and service delivery effectively and efficiently, and is a prerequisite for all banks seeking to improve their business and services. (Al-Qaragholi, Hussein, 2024, 466) Technological developments have had a significant impact on the development of financial accounting, from simple periodicals to complex financial reports, as reliance on digital transformations has increased significantly, as tools such as artificial intelligence and big data have contributed to making financial accounting a simpler and less time-consuming task. <https://www.wafeq.com/ar>)

2- Artificial Intelligence:

AI algorithms can now sort out vast amounts of financial data in seconds and provide instant analysis. This not only speeds up the accounting process, but also reduces human errors. Automated systems can perform repetitive tasks such as managing invoices and payroll accounts, allowing accountants to focus on strategic activities. The main benefit of IT applications of financial accounting is to gain a competitive advantage, as the Internet plays an important role in providing banks with technological advantages. Banks can attract the attention of customers, investors and creditors by using information technology to provide real-time updates on their websites so that customers, investors and creditors have a clear picture of the bank's plans. (Shanawa and Al-Bakri, 4:2018)

3- Cloud Computing:

Cloud computing is changing the way modern technology is presented, turning it into a service that all economic units can benefit from. (Jameel and Jallow 2023: 29), cloud computing users can access resources, data, and applications anywhere, anytime by connecting to the Internet. (Maggie, Beige:2022, 1628)

Fourth: The positive aspect of information technology in the development of financial accounting processes in banks

The application of information technology in banks brings a number of benefits that can be used as indicators when determining financial accounting processes:.(Mohammed et al., 2013, 211)

- 1- Accuracy: Information technology contributes significantly to enhancing the accuracy of information, leading to more informed accounting decisions. Banks are increasingly relying on these technologies to facilitate their accounting processes, as electronic databases allow information to be continuously updated, ensuring that the latest changes in financial transactions are taken into account.
- 2- Simplicity: IT greatly facilitates data processing and transfer, making these tasks accessible to everyone and saving a lot of time and effort.

- 3- Speed: The use of information technology by banks can help speed up decision-making in financial accounting processes, as IT equipment, hardware and software perform many calculations and numerical operations in tenths of a second, compared to the effort and time it takes to do the same tasks manually.
- 4- Justice: The adoption of determining financial accounting operations in the light of specific mechanisms of laws, rules and procedures opens the door for the possibility of information technology to crystallize these laws, rules and procedures in electronic form and achieve justice in measuring income, in addition to the existence of more advanced communication networks within information technology to unify operations and integrate all changes that may occur to the bank.

Applied framework of the research:

First: Questionnaire Form Design:

The research in data collection relied on the questionnaire form, which consisted of 36 questions, which were divided into demographic data (4) questions, and objective data (32) questions, which were divided into two axes, the first axis was concerned with information technology and consisted of five dimensions, each dimension included (4) questions, and the second axis was concerned with the development of financial accounting processes and consisted of three dimensions, each dimension included (4) questions, and the answers were formulated according to the five-point Likert scale Table (1).

Table (1) Classification of the Likert pentameter used in the study

Classification	Strongly disagree	Disagree	neutral	I agree	Strongly agree
Grade	1	2	3	4	5
extent	1.00≤1.80	1.80≤2.60	2.60≤3.40	3.40≤4.20	4.20≤5.00

Second: Determining the size of the study sample:

The size of the study sample of bank employees , including accountants, auditors, managers, heads of departments, divisions and their assistants in the banks under study, was determined using the random sample method according to the following Herbert Erkin equation:

$n = \frac{p(1-p)}{(SE \div t) + p(1-p) \div N}$ Herbert Arkin's equation	
N	Community size
T	The standard score corresponding to the significance level of 0.95 is equal to 1.96.
SE	The error rate is equal to 0.05.
P	Neutrality, Availability Ratio 0.50

Source: Bamshani (2014, p. 90).

According to the previous equation, the size of the study sample should not be less than 45 items ($n \geq 45$) (Raouf, 2019, p. 98), and then 120 questionnaire forms were distributed, and after excluding 10 forms for incomplete data, the number of valid forms for statistical analysis reached 110 items.

Third: Data suitability tests for statistical analysis:**1- Stability and truthfulness of the questionnaire:****Table (2) Results of the stability coefficient (Alpha Cronbach) for the paragraphs of the questionnaire form**

Axis	Address	Number of paragraphs	Coefficient of stability	Honesty of internal consistency
The first	It	20	0.878	0.937
Second	Developing financial accounting processes	12	0.883	0.939
Total Questionnaire		32	0.880	0.938

Honesty of self-consistency = square reflux of the coefficient of stability.

Alpha Cronbach coefficient was used to test the stability of the scale for the questionnaire form, which consisted of (32) items, where it was shown from Table (2) that the value of the coefficient for the first axis related to information technology was 0.878, and the value of the coefficient for the second axis related to the development of financial accounting processes was 0.883, while the value of the coefficient for the total questionnaire was 0.880, which indicates the high degree of stability of the paragraphs of the questionnaire.

The self-consistency coefficient was also used to test the validity of the scale for the questionnaire form, and Table (2) shows that the value of the coefficient for the first axis related to information technology was 0.937, and the value of the coefficient for the second axis related to the development of financial accounting processes was 0.939, while the value of the coefficient for the total form was 0.938, which indicates a high degree of self-consistency.

For the paragraphs of the questionnaire form.

2 – Confirmatory Factor Analysis (CFA)

The confirmatory factor analysis test aims to reduce the variables to the least number of key factors by comparing the variable correlation using the method of principal components analysis, Table (3).

Table (3) Data Proficiency Test Results for Factor Analysis

Variable	Scale	Statistical value
Analysis Proficiency Test	Kaiser-Meyer-Olkin Measure	0.919
Significance Test Ka2	Bartlett's Test Chi-Square	6232.15
Statistical significance	Sig.	0.000

It is clear from Table (3) that the value of the Kaiser-Meyer-Olkin scale was 0.919, which is higher than the value of 0.7, which indicates the high efficiency of the data for factor analysis, and the value of statistical significance was 0.000, which is less than the level of 0.05, which indicates the significance of the data.

Table (4) Values of the main factors of the impact of information technology on the development of financial accounting

Factors	Value
The first factor: software components	
The bank has the necessary technological infrastructure to digitize financial accounting operations	0.772
IT software components improve accounting systems in banks	0.760
IT software components facilitate the process of storing and quickly accessing financial data and analysis	0.775
IT software components support improved accuracy, efficiency and effectiveness of accounting processes	0.805
Factor Two: Communication	
IT improves communication between management and financial organizational structures in the bank	0.725
Information technology provides an ideal tool to raise the efficiency of internal communications among employees in the bank	0.653
IT facilitates external communication with customers and suppliers	0.664
Information technology supports the speed of response to decisions between the top, middle and lower management levels	0.710
The third factor: technical knowledge	
Information technology contributes to making the right financial decisions at the right time	0.666
Information technology provides the necessary data and information to enable employees to complete accounting work	0.680
IT helps to detect accounting problems and quickly solve them	0.711
QIB provides training courses to raise the level of technical knowledge in the application of accounting information technology	0.751
Fourth Factor: Applications	
IT applications save time and effort in processing accounting financial statements	0.677
IT applications help reduce human errors and increase the accuracy of financial statements	0.615
IT applications speed up the completion of financial tasks automatically	0.687
IT applications reduce accounting costs and increase profits	0.640
Fifth Factor: Human Resources	
The Bank has the human resources skill in dealing with information technology	0.690
The bank is keen to attract and recruit competencies from accounting human resources	0.652
The bank is committed to the policy of retaining human resources that have experience in electronic accounting business	0.677
Incentives and promotions are linked to the efficiency of human resources in the use of accounting information technology	0.680

Table (5) Results of the Percentage of Variance Explained for the Factors of the Impact of Information Technology on the Development of Financial Accounting

boomer	Worker's Name	Total Value Total	Contrast % Variance	Cumulative % Cumulative
1	Software components	10.70	32.05	32.05
2	Communications	3.00	7.66	39.71
3	Technical knowledge	1.79	5.32	45.03
4	Applications	1.65	4.40	49.43
5	Human Resources	1.20	3.50	52.93

Variable	Response	Iteration	Percentage	Arithmetic mean
genre	Male	70	63.6	1.14
	Female	40	36.4	
lifetime	Less than 30 years old	25	22.7	3.10
	From 30 to less than 40 years old	41	37.4	
	From 40 to less than 50 years old	32	29.1	
	50 years and older	12	10.9	
Fully qualified School	Bachelor	96	87.3	1.05
	Master	10	9.1	
	Doctor	4	3.6	
Number of years Experience	Less than 5 years old	18	16.4	2.44
	From 5 to under 10 years old	41	37.4	
	From 10 to less than 15 years old	43	39.1	
	15 years and above	8	7.3	

Paragraph		Strongly agree non	I agree non	neutral	I agree	I agree Strongly	Arithmetic mean	Standard deviation
The first dimension: software components								
The bank has the structure Necessary technological infrastructure To digitize accounting operations Finance	Iteration	0	14	12	60	24	3.85	0.91
	%	0	12.7	10.9	54.6	21.8		
Software components work For IT on Improving accounting systems in banks	Iteration	0	2	18	60	30	4.07	0.71
	%	0	1.8	16.4	54.5	27.3		
Software components facilitate For Information Technology from operation Financial data storage and speed Access and analysis	Iteration	0	8	12	62	28	4.00	0.81
	%	0	7.3	10.9	56.4	25.4		
Supports software components IT Optimization Accuracy of accounting operations and increasing their efficiency and effectiveness	Iteration	0	0	14	56	40	4.23	0.66
	%	0	0	12.7	50.9	36.4		
Second Dimension: Communications								
IT improves communication between management and structures Financial Regulation at QIB	Iteration	0	0	16	46	48	4.29	0.71
	%	0	0	14.5	41.8	43.7		
IT Progress Tool Ideal for increasing communication efficiency Interior among	Iteration	0	0	4	62	44	4.36	0.55

employees in Bank	%	0	0	3.6	56.4	40.0		
IT facilitates external communication processes With customers and suppliers	Iteration	0	0	18	50	42	4.21	0.71
	%	0	0	16.4	45.5	38.1		
IT supports Speed of response to decisions between Top, middle and lower management levels	Iteration	0	8	22	60	20	3.83	0.81
	%	0	7.3	20.0	54.5	18.2		
Third Dimension: Technical Knowledge								
IT contributes to making the right financial decisions And in time	Iteration	0	4	12	64	30	4.09	0.72
	%	0	3.6	10.9	58.2	27.3		
Information technology provides the necessary data and information to enable employees to complete accounting work	Iteration	0	0	4	58	48	4.40	0.56
	%	0	0	3.6	52.7	43.7		
IT helps detect accounting issues and the speed of its solution	Iteration	0	0	38	44	28	3.90	0.77
	%	0	0	34.5	40.0	25.5		
QIB offers training courses To raise the level of technical knowledge in IT Application Accounting	Iteration	2	16	30	52	10	3.47	0.92
	%	1.8	14.5	27.3	47.3	9.1		
Fourth Dimension: Applications								
IT applications save time and effort in processing Accounting Financial Statements	Iteration	0	0	22	48	40	4.16	0.73
	%	0	0	20.0	43.6	36.4		
Help Applications Technology Information on reducing errors Humanity and increase data accuracy Finance	Iteration	0	2	10	58	40	4.23	0.69
	%	0	1.8	9.1	52.7	36.4		
Lead Technology Applications Information to speed completion Automatic financial tasks	Iteration	0	0	4	50	56	4.47	0.57
	%	0	0	3.6	45.5	50.9		
IT applications reduce accounting costs and increase profits	Iteration	0	0	2	56	52	4.45	0.53
	%	0	0	1.8	50.9	47.3		
Fifth Dimension: Human Resources								
The bank has the resources Human skill in dealing with information technology	Iteration	0	6	30	42	32	3.90	0.88
	%	0	5.5	27.3	38.2	29.0		

The bank is keen to Attracting and recruiting talent from Human Resources Accounting	Iteration	2	14	20	48	26	3.74	1.02
	%	1.8	12.7	18.2	43.6	23.7		
The bank is bound by a policy Retention of human resources that Experienced in electronic accounting & business	Iteration	0	0	4	46	60	4.50	0.57
	%	0	0	3.6	41.8	54.6		
Incentives and promotions are linked efficiently human resources in Use of accounting information technology	Iteration	6	36	46	14	8	2.83	0.97
	%	5.5	32.7	41.8	12.7	7.3		

om the analysis of tables (4) and (5) that there are five main factors that explain the impact of information technology on the development of financial accounting, where the first factor (software components) explains 32.05% of the impact of information technology on the development of financial accounting, the second factor (communications) explains 7.66% of the impact of information technology on the development of financial accounting, the third factor (technical knowledge) explains 5.32% of the impact of information technology on the development of financial accounting, and the fourth factor (applications) explains 4.40% of the impact of information technology on accounting development Finance, the fifth factor (human resources) explains 3.50% of the impact of information technology on the development of financial accounting, and then the five factors explain 52.93% of the impact of information technology on the development of financial accounting.

3 – Goodness of Fit Index (GFI) test

Table (6) Indicator Test (CFI) and (IFI)

IFI indicator	CFI Index	Prototype	
0.840	0.840	Hypothetical model	Default Model
1.000	1.000	Hy perform	Saturated Model
0.000	0.000	Independent model	Independence Model

Table (6) shows the total degree of compatibility of the calculated residue square of the estimated data relative to the calculated residue square of the actual data, where the index values range between (0-1), and it is calculated through the Comparative Fit Index (CFI) and Incremental Fit Index (IFI) where the value of the independent model was 0.000, which indicates the quality of data matching.

Fourth: Statistical analysis of the study variables:

1 - Descriptive statistics of demographic data:

Table (7) Results of Descriptive Statistics Analysis of Demographic Data

Table (7) shows the descriptive statistics of demographic data, where it was found that the number of male workers reached 70 individuals by 63.6%, the number of females reached 40 individuals by 36.4%, and the arithmetic average was 1.14, and it was also found that the prevailing age group is from 30 to less than 40 years with 41 individuals by 37.4%, while the age group from 40 to less than 50 years came in second place with 32 individuals by 29.1%, and the age group under 30 came in third place. years with 25 individuals by 22.7%, and came in fourth place the age group 50 years and over with 12 individuals by 10.9%, and the arithmetic average was 3.10, and in terms of academic qualification, the number of workers with a bachelor's qualification reached 96 individuals by 87.3%, and the number of workers with a master's degree reached 10 individuals by 9.1%, and the number of workers with a

doctorate reached 4 individuals by 3.6%, and the arithmetic average was 1.05%, and in terms of the number of years of experience came In first place from 10 to less than 15 years with 43 individuals (39.1%), came in second place from 5 to less than 10 years with 41 individuals (37.4%), came in third place under 5 years with 18 individuals (16.4%), and came in fourth place 15 years and over with 8 individuals (7.3%), and the arithmetic average was 2.44%.

2- Descriptive statistics of the variables of the study:

First Theme: Information Technology

Table (8) Results of Descriptive Statistics Analysis for Information Technology Pillar

Table (8) shows the views of the study sample on the dimensions of information technology as follows:

Paragraph		Non I agree Strongly	Non I agree	Neutral	I agree	I agree Strongly	Arithmetic mean	Standard deviation
The first dimension: digital transformation								
Digital transformation improves storage security Accounting data and speed of analysis and its circulation	Iteration	0	8	16	42	44	4.10	0.91
	%	0	7.3	14.5	38.2	40.0		
Digital transformation contributes to increased efficiency and the effectiveness of bank accounting performance	Iteration	0	0	4	46	60	4.50	0.57
	%	0	0	3.6	41.8	54.6		
Digital transformation improves the quality of banking accounting services	Iteration	0	2	18	60	30	4.07	0.71
	%	0	1.8	16.4	54.5	27.3		
Digital transformation helps to find Negation value of accounting operations and achieve customer satisfaction	Iteration	0	14	12	60	24	3.85	0.90
	%	0	12.7	10.9	54.5	21.8		
Second Dimension: Artificial Intelligence								
Artificial intelligence is an effective tool Research, forecasting and financial risk management	Iteration	0	0	10	52	48	4.34	0.64
	%	0	0	9.1	47.3	43.6		

Artificial intelligence performs tasks Recurring in the management of invoices and accounts Payroll allowing accountants to focus On strategic activities	Iteration	0	0	26	50	34	4.07	0.73
	%	0	0	23.6	45.5	30.9		
Artificial intelligence helps to analyze Big financial statements as soon as possible It's possible	Iteration	0	0	18	48	44	4.23	0.71
	%	0	0	16.4	43.6	40.0		
Reduces the use of artificial intelligence in Accounting operations from errors humanity which achieves a competitive advantage For Banks	Iteration	0	0	22	52	36	4.12	0.71
	%	0	0	20.0	47.3	32.7		
Third Dimension: Cloud Computing								
Cloud computing lowers costs Installation of accounting software and systems	Iteration	0	2	16	48	44	4.21	0.75
	%	0	1.8	14.5	43.6	40.0		
Cloud computing provides ease Automatic modernization of accounting systems	Iteration	0	2	14	56	38	4.18	0.71
	%	0	1.8	12.7	50.9	34.6		
Cloud computing helps connect Financial accounts between different bank branches	Iteration	0	4	10	68	28	4.09	0.69
	%	0	3.6	9.1	61.8	25.5		
Cloud computing contributes to the improvement of Financial planning flexibility and quality assurance Accounting processes and compliance with Global Standards	Iteration	2	4	22	62	20	3.85	0.82
	%	1.8	3.6	20.0	56.4	18.2		

In terms of software components, most of the opinions of the study sample came in the range strongly agreed to support the software components of information technology to improve the accuracy of accounting operations and increase their efficiency and effectiveness with an arithmetic average of 4.23 and a standard deviation of 0.66, while the opinions of the study sample came in the range agreed on the availability of the technological infrastructure necessary to digitize the bank's financial accounting operations with an arithmetic average of 3.85 and a standard deviation of 0.91, and on the work of the software components of information technology to improve accounting systems in banks

with an arithmetic average of 4.07 The standard deviation is 0.71, and to facilitate the software components of information technology from the process of storing financial statements and the speed of access and analysis with an arithmetic mean of 4.00 and a standard deviation of 0.81.

In terms of communications, most of the opinions of the study sample came in the range, it was strongly agreed to improve information technology from communications between the management and financial organizational structures in the bank with an arithmetic mean of 4.29 and a standard deviation of 0.71, and to provide information technology as an ideal tool to raise the efficiency of internal communications among employees in the bank with an arithmetic mean of 4.36 and a standard deviation of 0.55, and to facilitate information technology from external communication operations with customers and suppliers with an arithmetic mean of 4.21 and a standard deviation of 0.71, while the opinions of the study sample came in The range agreed to support information technology speed response to decisions between the top, middle and lower management levels with an arithmetic mean of 3.83 and a standard deviation of 0.81.

In terms of technical knowledge, most of the opinions of the study sample came in the range, strongly agreed to provide information technology with the necessary data and information to enable workers to complete accounting work with an arithmetic average of 4.40 and a standard deviation of 0.56, while the opinions of the study sample came in the range agreed on the contribution of information technology in making the right and timely financial decisions with an arithmetic average of 4.09, and a standard deviation of 0.72, and information technology helps to discover accounting problems and quickly solve them with an arithmetic mean of 3.90 and a standard deviation of 0.77, The Bank provided training courses to raise the level of technical knowledge in the application of accounting information technology with an arithmetic mean of 3.47, and a standard deviation of 0.92.

In terms of applications, most of the opinions of the study sample came in the range, strongly agreed to help information technology applications reduce human errors and increase the accuracy of financial statements with an arithmetic mean of 4.23 and a standard deviation of 0.69, and that information technology applications lead to the speed of completing financial tasks automatically with an arithmetic mean of 4.47 and a standard deviation of 0.57, and to reduce information technology applications from accounting costs and increase profits with an arithmetic mean of 4.45 and a standard deviation of 0.53, while the opinions of the study sample in the range agreed availability IT applications time and effort in processing accounting financial statements with an arithmetic mean of 4.16 and a standard deviation of 0.73.

In terms of human resources, most of the opinions of the study sample came in the range, it was strongly agreed on the bank's commitment to the policy of retaining human resources that have experience in electronic accounting business with an arithmetic average of 4.50 and a standard deviation of 0.57, while the opinions of the study sample came in the range It was agreed that the bank has human resources skills in dealing with information technology with an arithmetic average of 3.90, and a standard deviation of 0.88, and the bank is keen to attract and appoint competencies from accounting human resources with an arithmetic average of 3.74 and standard deviation 1.02, while the opinions were neutral on linking incentives and promotions to the efficiency of human resources in the use of accounting information technology with an arithmetic mean of 2.83, and a standard deviation of 0.97.

Second Theme: Developing Financial Accounting Processes

Table (9) Results of Descriptive Statistics Analysis of the Axis of Developing Financial Accounting Operations

Table (9) shows the opinions of the study sample on the dimensions of developing financial accounting processes as follows:

In terms of digital transformation, most of the opinions of the study sample came in the range, strongly agreed on the contribution of digital transformation in increasing the efficiency and effectiveness of banking accounting performance with an arithmetic mean of 4.50 and a standard deviation of 0.57, while the opinions of the study sample came in the range It was agreed to improve digital transformation from the security of storing accounting data and the speed of its analysis and circulation with an arithmetic mean of 4.10, and a standard deviation of 0.91, and digital transformation works to improve the quality of banking accounting services with an arithmetic mean of 4.07 and a standard deviation of 0.71, and help digital transformation To find the negative value of accounting operations and achieve customer satisfaction with an arithmetic mean of 3.85, and a standard deviation of 0.90.

In terms of artificial intelligence, most of the opinions of the study sample came in the range, strongly agreed that artificial intelligence represents an effective tool for research, forecasting and financial risk management with an arithmetic mean of 4.34 and a standard deviation of 0.64, and artificial intelligence helps to analyze huge financial data as quickly as possible with an arithmetic mean of 4.23, and a standard deviation of 0.71, while the opinions of the study sample came in the range It was agreed that artificial intelligence would carry out repetitive tasks in Managing invoices and payroll accounts, allowing accountants to focus on strategic activities with an arithmetic mean of 4.07, and a standard deviation of 0.73, and the use of artificial intelligence in accounting operations reduces human errors, which achieves a competitive advantage for banks with an arithmetic mean of 4.12 and a standard deviation of 0.71

In terms of cloud computing, most of the opinions of the study sample came in the range, strongly agreed to reduce cloud computing from the costs of installing programs and accounting systems with an arithmetic average of 4.21 and a standard deviation of 0.75, while the opinions of the study sample came in the range It was agreed to provide cloud computing Ease of automatic updating of accounting systems with an arithmetic average of 4.18, and a standard deviation of 0.71, and cloud computing helps to link financial accounts between different bank branches with an arithmetic mean of 4.09 and a standard deviation of 0.69, and cloud computing also contributes to Improve the flexibility of financial planning and ensure the quality of accounting operations and compliance with international standards with an arithmetic mean of 3.85, and a standard deviation of 0.82.

Fifth: Hypothesis Health Tests:

1- Testing the validity of the first hypothesis:

In testing the validity of the first hypothesis, the research used multiple linear regression analysis using SPSS, V.24 program.

Table (10) Results of simple linear regression analysis of the first hypothesis

Variables		Regression value (B)	Standard error
Variable Minion	Developing financial accounting processes	*0.103	0.045
Variable Independent	Software components	0.100	0.063
	Communications	0.002	0.046
	Technical knowledge	0.256	0.069
	Applications	0.513	0.049
	Human Resources	0.833	0.060
Calculated F value		242.37	
Calculated F significance level		0.000	
Correlation coefficient (R)		0.986	
Coefficient of determination (R ²)		0.973	
Standard error of estimation		0.133	

* Regression constant.

Variables	Software components	Communications	Knowledge Artistic	Applications	Resources Humanity	Transformation Digital	Artificial Intelligence	Cloud Computing
Ingredients Software	1.000							
Communications	0.677**	1.000						
Knowledge Artistic	0.774**	0.632**	1.000					
Applications	0.740**	0.627**	0.713	1.000				
Resources Humanity	0.633**	0.622	0.716	0.754**	1.000			
Transformation Digital	0.832**	0.702	0.606	0.739**	0.885**	1.000		
Wits Artificial	0.821**	0.652	0.616	0.740**	0.815**	0.802**	1.000	
Computing Cloud	0.835**	0.688	0.798	0.639**	0.825**	0.838**	0.772	1.000

The results of the regression in Table (10) showed the strong relationship between the dimensions of information technology and the development of financial accounting processes, where the value of the correlation coefficient was (0.986), and the explanatory value of the coefficient of determination was (0.973), which indicates that 97.3% of the changes in the development of financial accounting processes are explained by the dimensions of information technology.

The calculated value of (F) 242.37 came at the level of statistical significance (sig=0.000), which is smaller than the approved statistical significance level (0.05), which indicates a statistically significant impact of the dimensions of information technology on the development of financial accounting processes, and it is clear from the above to reject the null hypothesis, and accept the alternative hypothesis that: There is a statistically significant effect of using information technology applications on the development of financial accounting.

2- Testing the validity of the second hypothesis:

The study used to test the validity of the second hypothesis Pearson correlation coefficient using SPSS, V.24, where Table (11) shows the correlation matrix between the dimensions of information technology and the development of financial accounting processes

Table (11) Results of the analysis of the correlation matrix between the dimensions of the quality of educational services and student satisfaction

** The relationship is statistically significant at the level of 5%

Table (11) shows a strong direct correlation between software components and digital transformation (0.832), artificial intelligence (0.821), cloud computing (0.835), strong direct correlation between communications and digital transformation (0.702), artificial intelligence (0.652), cloud computing (0.688), strong direct correlation between technical knowledge and digital transformation (0.606), artificial intelligence (0.616), cloud computing (0.798), and a strong direct correlation between applications Digital transformation (0.739), artificial intelligence (0.740), cloud computing (0.639), in addition to a strong positive correlation between human resources and digital transformation (0.885), artificial intelligence (0.815), and cloud computing (0.825).

It is clear from the above to reject the nihilistic hypothesis and accept the alternative hypothesis that there is a statistically significant relationship between the use of information technology applications and the development of financial accounting.

Conclusions and recommendations:**Results:**

- Information technology is an important tool to bridge the digital divide, facilitate the exchange of information anytime, anywhere, support knowledge sharing among business organizations, and facilitate access to information and knowledge found anywhere in the world at almost the same moment.
- Information technology includes several dimensions including software components, communications, know-how, applications and human resources.
- Information technology is useful in preparing and interpreting accounting reports, managing financial resources, developing accounting information systems, and is also used in examination, auditing, auditing and administrative work.
- Technological tools contribute to the development of financial accounting processes through many applications, the most important of which are digital transformation, artificial intelligence, and cloud computing.
- The responses of the study sample were high about the software components used in accounting information technology, especially in improving the accuracy of accounting operations and increasing their efficiency and effectiveness.
- The responses of the study sample were high on communications, especially their use as an ideal tool to raise the efficiency of internal communications among bank employees.
- The responses of the study sample were high about technical knowledge, especially in enabling workers to complete accounting work.
- The responses of the study sample were high about applications, especially in the speed of completing financial tasks automatically.
- The responses of the study sample were high about human resources, especially the bank's commitment to the policy of retaining human resources that have experience in electronic accounting work.
- The responses of the study sample were high on digital transformation, especially in increasing the efficiency and effectiveness of banking accounting performance.
- The responses of the study sample were high on artificial intelligence, especially its use as an effective tool for research, forecasting and financial risk management.
- The responses of the study sample were high about cloud computing, especially reducing the costs of installing programs and accounting systems.
- It was found that there is a statistically significant impact of the dimensions of information technology (software components, communications, technical knowledge, applications and human resources) on the development of financial accounting.

Recommendations:

- Raising the efficiency of the information technology infrastructure in banks and providing them with modern devices and equipment necessary for digital transformation in the banking accounting business.
- Attracting skilled, experienced and competent human resources in the use of information technology in accounting work.
- Increase the empowerment of employees and delegate powers to speed up the completion of banking operations and achieve competitive advantage.

- Providing training courses for bank employees on the latest technological applications in banking accounting.
- Expanding the digital transformation processes of the accounting business to raise its efficiency and improve its ability to provide financial services with the required speed and accuracy.
- Providing the necessary applications and software to automate financial transactions in banks to increase market share and achieve profits.
- Providing financial and technical support for artificial intelligence applications in financial risk management and accounting reporting.
- Improve capabilities to use cloud computing technologies to facilitate data circulation, save costs and cyber connectivity between all bank branches.

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