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# THE RESPONSE OF ACCOUNTING INFORMATION SYSTEMS TO THE DEVELOPMENT OF ELECTRONIC PAYMENT SYSTEMS

#### ALI HUSSEIN MAHOUSH

Middle Technical University, Technical Institute- Kut, IRAQ Email: <a href="mailto:suhad.ameer.idi@atu.edu.iq">suhad.ameer.idi@atu.edu.iq</a>

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#### **ABSTRACT**

The evaluation of the government and private sector electronic accounting information system aims, through studying and evaluating the availability of the basic components of the electronic accounting information system, Evaluating the availability of characteristics related to the quality of electronic accounting information systems, and the ability of the system to meet the needs of users for accounting information in light of the adoption of electronic payment systems. The research found that electronic payment helps in ensuring the validity of financial transactions, which is an indication that those who deal with public government funds in various ministries will ensure accurate and appropriate recording of accounting information. The study recommends increasing and developing banking awareness among customers by providing more banking facilities, and developing and maintaining facilities related to electronic payment operations.

**KEYWORDS**: - Accounting information systems, electronic payments systems

#### **INTRODUCTION**

The study of electronic accounting information systems is considered necessary in various business units, and in the government sector in particular, as the world is moving towards using and applying electronic systems in various economic units, which has necessitated the government sector to develop accounting systems towards using information technology and moving towards e-government to benefit from the advantages of electronic systems in speed and accuracy and providing appropriate information for government financial management, as electronic systems in government accounting contribute to saving time in completing transactions in addition to achieving accuracy in completing transactions. Provides appropriate information in preparing the general budget, In implementing and supervising its implementation, in addition to contributing to the formulation of the state's general policies, To achieve the desired benefit from electronic systems, the financial sector is considered one of the most important fields that have benefited from the technological revolution that the world is witnessing today. The Internet, computers, and various software have played a major role in

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facilitating financial transfer transactions of all kinds. This is after it was necessary to go to the bank to transfer money and even has to transfer it personally, but today with the development of electronic payment systems, Billions of dollars in financial transactions are now being carried out through phones and computers, and with acceptable fees too. Electronic payment systems come in many forms and methods, If you would like to choose one of these methods for your company or for yourself personally, Or even if you want to invest in one of the companies that provide these services, it is necessary to know everything about these systems, how they work, and the amount of security and reliability they provide.

# First axis: Research methodology

<u>First: The research problem:</u> The research problem stems from the need to know the impact of electronic payment systems on the development of accounting systems. Hence, the research problem emerges in the main question (What is the degree of response of accounting information systems to development through electronic payment systems?).

**Second: The importance of research:** The importance of the study lies in the following points:

- 1- This study contributes to clarifying the extent of availability of quality characteristics in electronic accounting information systems in the electronic information system.
- 2- Statement of the availability of the basic components of electronic accounting information systems in the accounting information system.
- 3- The study demonstrates the ability of electronic government accounting information systems to meet the desires of financial management.

<u>Third: Research objective:</u> The study aimed to evaluate the electronic government and private sector accounting information system. By studying and evaluating the availability of the basic components of the electronic accounting information system, Evaluating the availability of characteristics related to the quality of electronic accounting information systems, The ability and system to meet users' needs for accounting information in light of the adoption of electronic payment systems.

Fourth: Research hypothesis: To achieve the objectives of this research and answer its questions, the following hypothesis was formulated: (There is a statistically significant effect of the response of accounting information systems to development through electronic payment systems),

#### **Second axis: Accounting Information Systems**

**<u>First: AIS concept</u>**: Man lives in the midst of a group of systems that provide him with the data and information necessary for him to practice his daily activity. He lives under a specific family

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system and receives his teachings according to specific educational, religious, social and political systems. Therefore, we can define the system as a group of elements and components that are linked according to a specific structure or a specific means of communication that work together to achieve general goals. This is a general point of view. However, if we want to know accounting information systems (1).

We can say that it consists of a group of interconnected human and material components, tangible and intangible, which interact together according to certain accounting concepts, procedures and principles, with the aim of collecting the incoming data and converting it into financial information, as well as preparing other information obtained as a result of collecting and preparing various transactions, then making this information or outputs available to external parties on the one hand, and for internal administrative levels to use all the outputs in practicing the functions of planning, control and decision-making (2).

The accounting information system operates in an independent legal unit with its own legal personality that interacts with internal parties such as owners and employees and external parties such as the government, customers, and others. The accounting information system can be defined as: "A set of data and processing procedures that produce information necessary for its users," and it is also "an information system that collects, stores, processes, and prepares information reports related to the financial operations of the organization (3).

Effective integration of accounting applications enhances the flexibility of information generation, improves the quality of financial reporting, and provides timely and reliable information to support planning and decision-making within the organization. Successful implementation of an accounting information system in organizations positively affects the methods of data collection, processing and dissemination to intended users. The successful application of accounting information systems generates three levels of integration at the company level, namely information integration, Which states that the data collected or information produced is managed under a unified database, operational integration, Which involves linking business activities across the organization's various operational units, time integration, This allows different units to execute operations simultaneously, which enables organizations to obtain a clear picture of events in the value chain process (4).

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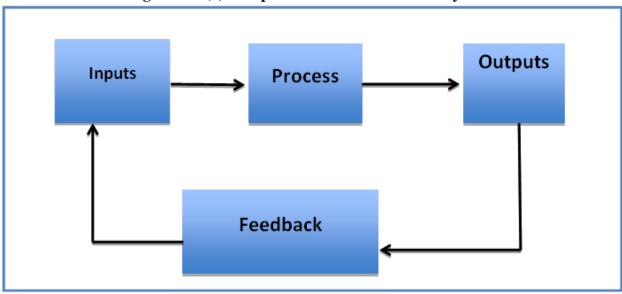


Figure No. (1) Components of the information system

There are characteristics of the accounting system, which are: (5)

- 1- Comprehensiveness: The accounting information system is comprehensive as it extends to every activity of the economic unit and provides useful information to managers at all administrative levels.
- 2- Overlapping of the accounting information system: The accounting information system overlaps and interacts with all other subsystems that may exist in the administrative information system, such as: the production system, marketing, individuals, finance, etc.
- 3- Users of accounting information and its uses: Users of accounting information and its uses can be divided into two groups:

The first group: relates to internal users and internal uses of accounting information, which are the organization's management, and they use it in planning, control, and decision-making.

**The second group**: relates to external users and external uses of accounting information, who are related to the economic unit, such as investors, current lenders, government agencies, customers, and labor unions.

## The third axis: digital payment systems

# First: The concept of digital payment systems:

Digital payment systems have spread widely in recent decades due to the increasing spread of banking services and online marketing in the world to a greater extent in the field of technology development. We can see the emergence of electronic payment systems and payment processing

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devices. With this increase, improvement and provision of more secure online payment transactions than ever before, the percentage of network use and cash transactions will decrease. So let us learn in this research about digital payment systems, what are the most prominent of them, and also what these systems offer to entrepreneurs. (6)

#### **Second: The nature of digital payment systems:**

Electronic payment methods are a way to conduct transactions or pay for goods and services via an electronic medium without using checks or money. It is also a system provided by financial institutions that makes the payment process easier and safer. These institutions are also subject to laws to ensure protection and security. Digital payment is closely linked to e-commerce, as the emergence of the term e-commerce was linked to the emergence of more than one method of electronic payment and information and communications technology, which facilitates the procedures of e-commerce, such as buying and selling. (7)

## Third: Types of digital payment systems:

The most common forms of payment on the Internet are credit cards and debit cards. In addition, there are also alternative payment methods such as bank transfers, electronic wallets, smart cards, or Bitcoin wallets. Electronic payment systems can be classified into two areas: credit payment systems and cash payment systems.

#### 1- - Payment systems:

- a- A- Credit card: It is a form of electronic payment system that requires the use of a card issued by a financial institute to the cardholder to make payments over the Internet or via an electronic device without using cash.
- b- Electronic wallet: It is a form of prepaid account that stores the user's financial data such as debit and credit card information to facilitate an online transaction (8).
- c- T Smart Card: It is a plastic card that contains a microprocessor that can be loaded with money to make transactions. It is also called a smart chip.

#### 2- - Cash payment systems:

- a- A Direct Debit: A financial transaction in which the account holder requests the bank to electronically withdraw a specific amount of money from his or her account to pay for goods or services.
- b- Check-E: A digital copy of an old check. It is an electronic transfer from a bank account, usually done without the use of a paper check.
- c- Electronic Cash: This is a form of electronic payment system in which a specific amount of money is stored on the customer's device and can be accessed for transactions over the Internet.

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d- Stored value card: It is a card with a specific amount of money that can be used for a transaction at the issuer's store. Examples of stored value cards are gift cards.(9)

#### Fourth, the importance of digital payment systems for entrepreneurs:

Electronic payment methods are the key to success for entrepreneurs as they interact with their customers through electronic payments as they automatically accept electronic payments from them and, in addition, pay suppliers, taxes and other parties electronically. Payment systems also help to increase efficiency and increase profits as entrepreneurs can better track their daily sales through digital payments. In addition, they can participate in e-commerce by expanding their base of customers who work with entrepreneurs and increase the visibility of these entrepreneurs, paving the way for the growth of their activities beyond simply covering costs: (10)

## Fifth: Benefits of digital payments:

- 1- **Saves time:** Transferring money between virtual accounts usually takes a few minutes, while a bank or postal transfer can take several days. Plus, you don't waste your time waiting in queues at the bank or post office.
- 2- **Monitor expenses:** Even if someone is interested in controlling payments, he must be patient enough to write down all the small expenses, which often make up a significant part of the total bank amounts. The virtual account contains the history of all transactions that point to saving and the amount you spent on them, and you can check it at any time.
- 3- Low risk of loss and theft: You cannot forget your virtual wallet somewhere and it cannot be stolen by thieves. Although there are many scammers in cyberspace, you can make your e-currency account safe.
- 4- **Ease of use:** Each service is usually designed to reach the widest possible audience, so it has an intuitively understandable interface. In addition, there is always the opportunity to send a question to the support team, which often works 24 hours a day, 7 days a week, and all transfers anytime and anywhere. It is enough to have access to the Internet.(11)

#### Sixth: Electronic payments in Iraq and the obstacles limiting its development:

For example, the electronic payment system in Iraq lags behind the same system in the Gulf States because Iraq does not have advanced internet and communications technology. In addition, the Iraqi economy is still suffering from severe crises that prevent its growth. Electronic payment services in Iraq are still weak and timid given the skills and qualifications available in the country. However, the Iraqi government attempted to use various measures to restrict trading in securities and gradually switch to a digital money payment system.

A few years ago, Iraq took its first steps towards the electronic system by localizing the salaries of workers, whose number is estimated at more than 3 million according to the Ministry of

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Planning, which prompted the private sector to take the same government step. The Iraqi government wants to withdraw, through electronic payments, the amount of cash circulating in Iraq, which amounts to more than 84 trillion dinars, and use it to finance investment projects and infrastructure projects.

Therefore, it was necessary to take advantage of these technologies and introduce them into financial transactions and economic systems in order to provide citizens with a better atmosphere of comfort and security and to pave the way for freedom of trade, movement and exchange of resources between different countries of the world without significant restrictions. Nowadays, there are many banks in Iraq that use electronic payment services to provide better services to citizens, and the number of such companies is gradually increasing due to the increasing need for such digital services. So, electronic payment is the mechanism that can be used to collect money in a digital way, and to complete financial transactions and commercial transactions quickly and securely. It also outperforms traditional payment methods because it transcends all distances. (12)

## Seventh: Obstacles to the spread of electronic payment systems in Iraq

The lack of a clear legal text that defines and regulates e-commerce in the local environment and works towards creating an ideal atmosphere that encourages electronic payments is what is holding Iraqis back from this technology in the first place and therefore there can be no real opportunity to benefit from this service in addition to (6):

- 1- **Cyber insecurity:** Iraq is considered one of the countries where electronic security is inadequate. The country suffers from a clear security and information breach, which is why the data of Iraqi customers stored by banks is very vulnerable to theft, as happened in 2017 as a result of the hacker attack of an Iraqi telecommunications company.
- 2- **Restrictions on shipping and delivery services:** In fact, there are no companies or shipping offices in Iraq that could absorb the enormous amounts of resources that could flow when the e-commerce system is activated, because restrictions have been imposed on the Iraqi economic system that prevent the access of many materials markets.
- 3- **Population culture:** The culture and experience of the population in Iraq with the benefits of electronic payments is almost non-existent, as Iraqis largely rely on traditional payment systems in all aspects of their lives and do not trust digital payments for fear of fraudulent transactions that accompany them.
- 4- Weak qualifications and infrastructure: Iraq does not have a strong and appropriate foundation to expand electronic commerce and transform itself into a digital economy in which securities disappear completely. In addition, the communication networks and the Internet are very weak and cannot withstand the pressure that the digital payment system can impose.(13)

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# The third topic

# The relationship of digital payment systems with accounting information systems

Electronic payments allow anyone from anywhere in the world to transfer money and make purchases without leaving their homes. With the advent of the concept of electronic commerce, the urgent need for electronic payment systems arose in record time. Nowadays, the idea of electronic payment is present in many areas, ranging from paying salaries and bills to purchasing in electronic stores or physical stores and the emergence of so-called independent digital electronic wallets (14).

# First, payment of salaries, wages and bills:

Methods of paying traditional salaries and wages and their preparation by the accounting department of the economic entity, which draws up the salaries of its employees manually, starting with calculating the employee's entitlement and the amounts deducted from him, as well as determining the net and payment term for him, and then draw up the final payout lists and issue a check to collect the amounts from the bank with which you do business and distribute them to its employees. This work is associated with a high level of complexity, especially when the number of employees is large, and there is a high probability of errors, delays and receiving inaccurate information about salaries and wages, as well as the possibility of fraud, manipulation, etc., which, without proper preparation, can lead to embezzlement.

As for the modern methods of digital accounting (electronic accounting of salaries and wages), which are attributed to computer and network technology, the term digital refers to numbers or figures, although in the dictionary of computer science this word refers to information that represents zero and one (1, 0) that can be read and written by machines. Digital accounting and electronic accounting refer to the representation of accounting information in digital form, where it can be processed electronically and subsequently transmitted or sent. It is an art and science of measuring business performance that develops with information technology through databases. The electronic programs used to calculate salaries and wages are more accurate and safer, and are characterized by fewer errors. In addition, they reduce the effort, time and cost of preparing salaries in economic units, especially in large units. The commodity accountant enters the employee's salary elements into the program, which is based on an algorithm that electronically calculates the salary from entitlement and deduction and extracts the net assets for each employee individually or for all employees, in addition to monthly statements with all salary details and summaries of employees' salaries. It is also possible to extract annual statements for each employee.(15)

The introduction of technology into accounting work brings many benefits including data entry mechanisms, data storage and processing mechanisms, financial statements, internal control,

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audit trails and a set of accounting skills that have been constantly changing over the past decades. Historical roots of digital accounting.

As for the payment of the employee's salary and wage claims, the disbursement of the net salary to be paid shall be made electronically on a compact disc (CD) in a format called (CSV), an encrypted format compatible with the requirements of the electronic payment program of the Central Bank of Iraq in the localization of salaries, in accordance with Cabinet Resolution No. 313 of 2016 entitled Reform of the Mechanism for the Payment of Salaries to State and Private Employees through Electronic Payment of Employees' Salaries. (16)

What is meant by the salary localization system is that it opens a current account for any employee of the bank who wishes to localize his salary, after being selected and contracted by the economic entity according to certain criteria, and that these banks have the ability to do so and the possibility of issuing international cards (Visa Card and MasterCard) linked to that bank account. The cardholder may conduct cash withdrawal or purchase transactions through ATM machines or through point of sale (POS) of the same bank or other banks in all governorates without being restricted to the bank in which the money was deposited, as shown in Figure (2):



Figure No. (2) MasterCard

The figure above shows the MasterCard held by the beneficiary, which is valid for three years. It is indicated on the card, as well as the card number and the beneficiary's account number,

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through which he can transfer amounts to and from the card. Initially, there were some errors in withdrawing from ATMs due to the complexity or... The lack of knowledge and culture of some beneficiaries, as well as the great dynamism in ATMs due to the lack of sufficient equipment spread in sufficiently geographical locations To meet the real needs of the beneficiary, MasterCard also offers the beneficiary the possibility of obtaining an account statement for the period he wants, by installing programs or through any branch of the home bank. (17)



Figure No. (3) ATM device

The ATM machine shown in Figure (3) is an electronic device provided to customers in public places. It represents an alternative for the employee to perform any operation after the beneficiary has entered the MasterCard card and its secret code. This ATM enabled customers to carry out some banking transactions without having to enter the bank and wait for the employees to fulfill their requirements, such as cash amounts, bank statements, etc. It also provides banks with accurate information about financial transfers, clearing, etc. and withdrawal of the cash amounts belonging to each customer electronically, saving effort, time and accuracy in the work of the bank. (18)

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Figure (4) POS device

The POS device or so-called points of sale is one of the most important and widely used systems in the local environment through which payments are processed to holders of a Key Card or Master Card. It is also used by economic entities of all kinds, whether in the service or commercial sector. It is a group of devices and associated programs that serve to quickly generate invoices in the data. The programs in POS systems contain shortcuts and quick access to quickly prepare transactions. through which the payment for the purchase of a product or service is made through an electronic card and the use of this system can provide the following features: (19)

- 1- Speed and effectiveness: It can increase the speed of payment transactions, reduce waiting times for customers and facilitate their processes by using their card.
- 2- Improve customer experience: Using it allows you to avoid handling cash, which provides convenience and makes the shopping process smoother and more convenient.
- 3- Time and effort saving: It also enables other operations such as printing receipts and daily and monthly reports, saving time and effort and eliminating the need for paper receipts and monthly statements.

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- 4- Safer transactions: Encryption of financial information and transactions is considered more secure to ensure their confidentiality and protect customers from fraud and unauthorized use.
- 5- Financial transaction tool: The POS device provides information about the completed financial transactions, including the amount paid, the place of payment and the remaining balance on the card, through messages that reach the customer's phone, reducing possible errors. (20)

## The fourth section is the applied aspect

First: description of the questionnaire and sample: The questionnaire was prepared by the researcher based on the theoretical and intellectual references available to him on the topics of current research. The study was concerned with examining the extent to which accounting information systems respond to the development brought about by electronic payment systems. The data was distributed electronically and the data were collected from a sample of (84) people including academics and professionals. The questionnaire comprised two sections. The first dealt with the factors related to accounting information systems which were measured by (8) statements: While the second section of the questionnaire dealt with the factors related to electronic payment systems which were measured by (6) statements, a five-point Likert scale was used comprising five options namely (strongly agree, agree, neutral, disagree, strongly disagree) and weighted with the weights (5, 4, 3, 2, 1) respectively. Table (1) shows the theoretical sources used in constructing the questionnaire.

Table (1): The theoretical sources used in the preparation of the questionnaire items

| The factors                               | Number of phrases | Reliable sources |
|---|-------------------|------------------|
| Related to accounting information systems | 8                 | researcher       |
| Related to electronic payment systems     | 6                 | researcher       |

Source: Prepared by the researcher from questionnaire data

Second: Description of questionnaire items: The current paragraph is devoted to the description of questionnaire items by adopting descriptive measures represented by percentages, arithmetic means and standard deviations. As follows:

- 1- Description of the elements (phrases) of the factors related to accounting information systems: Table (5) shows the results of the description of the phrases used in measuring the factors related to accounting information systems, which can be interpreted as follows:
  - a- Description of paragraph (1): It was found that the research sample agreed (strongly agree and agree) with the content of the statement (X1) (electronic accounting information systems respond to developments in electronic payment methods) at

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a rate of (82.2%) compared to a percentage of disagreement (strongly disagree or disagree) (10.6%), while the neutral percentage was equal to (7.2%). These values came with an arithmetic mean (4.50) and standard deviation (0.983), which shows the researcher that the sample members agree that the accounting systems present in the economic entities respond to the changes and developments taking place in the means and methods of electronic payment in accordance with the policies of the Central Bank of Iraq.

- b- Description of paragraph (2): It was found that the research sample agreed with the content of the statement (X2) (**The electronic accounting information system monitors information that facilitates the electronic payment process**) with a rate of (77.7% compared to a percentage of disagreement (I strongly disagree or agree) with a percentage of (4.4%), while the percentage of neutral was the same (17.9%). These values came with an arithmetic mean (5.86) and a standard deviation (0.797) which indicates to the researcher that the sample members agree that further improvements are needed to respond to the demands of electronic payment.
- c- Description of paragraph (3): It was found that the research sample agreed (strongly agree and agree) with the content of the statement (X3) (**The electronic accounting information system provides immediate information on electronic payment transactions**) at a rate of (78.8%) compared to a percentage of disagreement (neither agree nor disagree) by (7.6%) while the neutral percentage was equal to (13.6%). These values came with an arithmetic mean of (4.72) and a standard deviation of (1.207), which shows the researcher that the sample members agree on the need for an information system that provides information on electronic payment transactions immediately in order to audit and protect them from electronic violations.
- d- Description of paragraph (4): It was found that the research sample agreed with the content of statement (X4) (**The accounting information system helps in reducing the risks of electronic payment methods**) with a rate of (81.7% compared to a percentage of disagreement (I neither fully agree nor agree) with a percentage of (5.8%) while the percentage of neutral was equal to (12.5%). These values came with an arithmetic mean of (4.84) and a standard deviation of (0.881), which shows the researcher that the sample members agree on the need for the approved accounting information system to support electronic payment methods and processes to ensure the security of electronic information in order to avoid the risks of electronic payment transactions.
- e- Description of paragraph (5): It was found that the research sample agreed (strongly agreed and agreed) with the content of the statement (X5) (**The electronic accounting system applied is considered flexible in that it reflects an immediate picture of all changes in electronic payment methods**) with a percentage of (77%),

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- compared to a percentage of non-compliance (I strongly disagree and disagree) with a percentage of (4.1%), while the percentage of neutral was (21.6%). The values were provided with an arithmetic mean of (3.89) and a standard deviation of (0.769), which shows the researcher that the sample members agree on the need to implement flexible accounting information systems in the work environment and respond to these changes, including changes in electronic payment operations.
- f- Description of paragraph (6): It was found that the research sample agreed (strongly agreed and agreed) with the content of the statement (X6) (the electronic accounting system regularly checks all violations to which electronic payment transactions are exposed) with a percentage of (77%) compared to a percentage of disagreement (strongly disagree) with a percentage of (9.5%), while the percentage of neutrality was (13.5%), with an arithmetic mean of (3.85) and a standard deviation of (0.871), which shows the researcher that the sample members agree that electronic payment processes are affected by many security risks, so the approved accounting system must be able to address and manage external risks to which electronic payment transactions may be exposed.
- g- Description of paragraph (7): It was found that the research sample agreed with the content of statement (X7) (the electronic accounting information system continuously reflects the policies of the electronic payment process) at a rate of (67.5% compared to a percentage of non-compliance (I neither agree nor disagree) of (9.5%), while the neutral percentage was equal to (23%). These values gave an arithmetic mean of (3.78) and a standard deviation of (0.926), which shows the researcher that the sample members agree on the need to develop accounting information systems and respond to changes in payment policies.
- h- Description of paragraph (8): It was found that the research sample agreed (strongly agreed and agreed) with the content of the statement (X8) (The accounting information system includes control procedures that support risk management in achieving the objectives of electronic payment operations in accordance with the requirements of regulatory standards) by (83.3%) versus The percentage of non-compliance (strongly disagree or disagree) was (6.2%), while the percentage of neutrality was (10.5%) with an arithmetic mean of (3.92) and a standard deviation of (0.872), which shows the researcher that the sample members agree on the need to develop accounting information and include control procedures that contribute to the security of electronic payment operations in accordance with the requirements of approved regulatory standards.

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Table(2) Description of the accounting information system instructions

| ъ.         | Strongly | I      | NT / 10/ | I         | strongly  | Arithmetic | Standard  |
|------------|----------|--------|----------|-----------|-----------|------------|-----------|
| Paragranns | % agree  | agree% | Neutral% | disagree% | disagree% | mean       | deviation |
| X1         | 24.2     | 58     | 7.2      | 4.6       | 5         | 4.50       | 0.983     |
| X2         | 25.5     | 52.2   | 17.9     | 4.4       | 0         | 5.86       | .0796     |
| X3         | 15.3     | 63.5   | 13.6     | 3.6       | 4         | 4.72       | 1.207     |
| X4         | 12.4     | 69.3   | 12.5     | 2.3       | 3.5       | 4.84       | 0.881     |
| X5         | 27       | 50     | 21.6     | 3.1       | 1         | 3.89       | 0.769     |
| X6         | 25       | 52     | 13.5     | 5         | 4.5       | 3.85       | 0.871     |
| X7         | 21       | 45.5   | 23       | 5.25      | 4.25      | 3.78       | 0.926     |
| X8         | 20.2     | 43.1   | 3.92     | 6.5       | 4         | 3.92       | 0.872     |
| Average    | 21.325   | 54.2   | 314.15   | 4.34375   | 3.28125   | 4.42       | 100.3136  |

Source: Prepared by the researcher from the results of SPSS V. 26.

From Table (2), it is clear that the sample members agreed with the statements of the factors related to the overall accounting information system at a rate of (75.525%) compared to a disagreement rate of (7.625%). The average agreement percentage indicates that the sample members believe that the factors related to the accounting information system is one of the important factors in facilitating electronic payment transactions in Iraq, as the reality of the situation indicates a high percentage of agreement, which is much higher than the percentage of disagreement and in line with the opinions of the respondents.

- 2- Description of the elements (phrases) of the factors related to electronic payment: Table () shows the results of the description of the phrases used to measure the factors related to electronic payment, which can be interpreted as follows:
  - a- Description of paragraph (9): It was found that the research sample agreed (strongly agree and agree) with the content of the statement (X9) (electronic trading decisions in money circulation is a civilized and developed phenomenon) with a rate of (strongly agree and agree) (82%) compared to a percentage of disagreement (strongly disagree or disagree) (10.9%) while the neutral percentage was the same (7.1%). These values came with an arithmetic mean (3.79) and a standard deviation (0.935), which shows the researcher that the sample members agree that students are not informed and guided about the importance and seriousness of the auditor's examination process when obtaining an auditor's license.
  - b- Description of paragraph (10): It was found that the research sample agreed (strongly agree and agree) with the content of the statement (X10) (dealing with electronic payment will increase public banking awareness and obtain related information) with a percentage (I strongly agree and agree) of (85%) compared to a percentage of disagreement (I strongly disagree and disagree) with a percentage of (12%) while the percentage of neutrality was the same (3%). These values came with an arithmetic

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- mean (4.02) and a standard deviation (0.906) which shows the researcher that the members of the research sample agree that the use of electronic payments in daily transactions will lead to... increasing public awareness and culture of the banking services offered.
- c- Description of paragraph (11): It was found that the research sample agreed (strongly agreed and agreed) with the content of the statement (X11) (the modernity of electronic payment methods in the provision of services to customers contributes to increasing the security and speed of using the service) with a rate of (85.1%), compared with a rejection rate (I strongly disagree and disagree) with a rate of (2.8%), while the rate of neutrals was (12.1%). The values were obtained with an arithmetic mean of (4.00) and a standard deviation of (0.702), which shows the researcher that the sample members agree that the use of electronic payment methods contributes to increasing the security and speed of using the service.
- d- Description of paragraph (12): It was found that the research sample agreed (strongly agree and agree) with the content of the statement (X12) (**The ease of use of electronic payment methods helps customers to obtain the information and services they need**) with a percentage of (84.8%) compared to a percentage of disagreement (strongly disagree and disagree) with a percentage of (5.5%), while the percentage of neutrality was (9.7%) with an arithmetic mean of (3.65) and a standard deviation of (0.763), which shows the researcher that the sample members agree that the electronic payment methods are easier and more understandable for customers, in providing the services they need, and there was a great demand for their use.
- e- Description of Paragraph (13): It was found that the research sample agreed (strongly agree and agree) with the content of the statement (X13) ("The variety of banking services provided through electronic means contributes to the provision of the services that customers need) with a percentage of (83%) compared to a percentage of disagreement (No, I strongly agree and disagree) with a rate of (8.8%) while the percentage of neutrality was at (8.2%) with an arithmetic mean of (3.82) and a standard deviation of (0.834), which shows the researcher that the sample members agree that diversity in banking services for electronic payments contributes to increasing customer satisfaction.
- f- Description of paragraph (14): It was found that the survey participants agreed (strongly agree and agree) on the content of the statement (X14) (the prompt response of banking departments to customers' electronic needs by providing information suitable for these needs) with a percentage of (88%) compared to a percentage of disagreement (I neither strongly agree nor disagree) with a percentage of (8%), while the percentage of neutrality was (4%) with an arithmetic mean of (4.82) and a standard deviation of (0.912), which shows the researcher that the sample

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members agreed that banks have perfectly responded to the special needs of customers and provided them with the necessary information There is an increased demand for the adoption of electronic payment methods to facilitate their daily operations.

| - water (e) = exemplation of energy ment purposes |            |            |          |           |           |            |           |
|---|------------|------------|----------|-----------|-----------|------------|-----------|
| Paragranhs  | Strongly   | I agree%   | Neutral% | I         | strongly  | Arithmetic | Standard  |
|   | % agree    |            |          | disagree% | disagree% | mean       | deviation |
| <b>X9</b>   | <b>%12</b> | <b>%70</b> | 7.1      | %6.9      | %4        | 3.79       | 0.935     |
| X10   | %11        | %74        | %3       | %7        | %5        | 4.02       | 0.906     |
| X11   | %15.1      | <b>%70</b> | %12.1    | %2.8      | 0         | 4.00       | 0.702     |
| X12   | %9.8       | %75        | %9.7     | %3        | %2.5      | 3.65       | 0.763     |
| X13   | %12        | %71        | %8.2     | %5.8      | %3        | 3.82       | 0.834     |
| X14   | %18        | %70        | %4       | %6        | %2        | 4.82       | 0.912     |
| Average   | %12.983    | %71.667    | %7.35    | %5.25     | %2.75     | 4.017      | 0.842     |

**Table (3) Description of electronic payment phrases** 

Source: Prepared by the researcher from the results of SPSS V. 26.

From Figure (3) it is clear that the sample members agreed with the statements of all factors related to electronic payment at a rate of (84.65%) compared to a disagreement rate of (8%), while the percentage of neutrals was (Thus, from the average agreement rates, it is clear that the sample members believe that the related factors electronic payment is one of the factors that hamper the operations of banks in Iraq, as the reality indicates a high rate of agreement according to the opinions of the respondents, which is much higher than the disagreement rate. Third: Testing the research hypothesis: To test the research hypothesis, a simple regression test

Third: Testing the research hypothesis: To test the research hypothesis, a simple regression test was applied, and the results of this test were as follows: This hypothesis (there is a statistically significant effect of the response of accounting information systems to development through electronic payment systems) as the results in Table () indicate the following:

- a- There is a significant and statistically significant effect of the response of accounting information systems to the development of electronic payment systems based on the estimated value of (F) which amounted to (458.716), higher than its estimated value (3.974) and with degrees of freedom (1, 72). This result was confirmed by the value of (P) which is less than (0.05), the standard value for the search.
- b- It was found that the explanatory coefficient (R2) had an estimated value of (0.872), indicating that electronic payment methods account for (87.2%) of the changes in accounting information systems, which in turn confirms the validity of the researcher's instructions regarding the quality of the selection of statements to measure these factors.

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Based on the results of the impact analysis of these factors, it can be indicated that the first research hypothesis is correct, which states that (there is a statistically significant impact of the response of accounting information systems to development through electronic payment systems).

Table (4) evaluates the impact of electronic payment systems on the development of accounting information systems

|                  | Standard<br>beta<br>value | Estimated<br>F value | Critical F<br>value | $\mathbb{R}^2$ | degrees of<br>freedom | P-Value |
|------------------|---------------------------|----------------------|---------------------|----------------|-----------------------|---------|
| Constant         | 0.398                     | -                    | -                   | -              | 1                     | -       |
| Regression model | 0.934                     | 458.716              | 3.974               | 0.872          | 72                    | 0.000   |

Source: Prepared by the researcher from the results of SPSS V. 26.

#### **Conclusions:**

- 1- Electronic payments help ensure the validity of financial transactions and this is an indication that those working with public funds in various ministries will ensure accurate and adequate recording of accounting information.
- 2- There are many challenges in introducing electronic payments in all areas of life, including the provision of electronic payment facilities and poor maintenance of available facilities.
- 3- Electronic payments help in the development of accounting systems by focusing on accurate and rapid recording of financial transactions.
- 4- Maintaining the security and confidentiality of accounting information through the use of secure electronic means for electronic payment transactions.
- 5- The lack of modernity of electronic payment methods used by banks, which is reflected in the development of accounting information systems and the achievement of customer satisfaction.

#### **Recommendations:**

- 1- The e-payment adoption project requires a sophisticated leadership team, as this project is very different from traditional banking.
- 2- Increasing and developing banking awareness among customers by providing more banking facilities, and developing and maintaining facilities related to electronic payment operations.
- 3- Developing accounting information systems in line with developments in electronic operations to provide appropriate and timely information to customers using this service.

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4- Developing accounting information systems methods and procedures alongside developing electronic payment methods to maintain the confidentiality and security of accounting information.

#### REFERENCES

- 1. Zwaid JG. Green Supply Chain Systems and Technology and Their Impact on the Performance of Economic Units in the Oil Sector.
- 2. Masoud B, Qinan, Kawthar. Contribution of information systems auditing to improving the quality of accounting information: Ibn Khaldoun University-Tiaret; 2023.
- 3. Benghazi Dhamamkaj. The relationship between accounting information systems and the adequacy of information used in making users' decisions: A case study. Journal of Economic Studies. 2023;6(1):1-17.
- 4. Jawad KK, Alyaseri NHA, Alwan SA, Hussein EK, Subhi KA, Sharaf HK, et al. Contingency in Engineering Problem Solving Understanding its Role and Implications: Focusing on the sports Machine. Revista iberoamericana de psicología del ejercicio y el deporte. 2023;18(3):334-7.
- 5. Lahouari M.D., Sultan M.D. The role of accounting information systems in internal control and reducing accounting fraud. Surman Journal of Science and Technology. 2024;6(1):042-53.
- 6. Lounici. The impact of the use of electronic money on the performance and effectiveness of the central bank in managing monetary policy: University of Algiers 3: Faculty of Economics, Business and Management Sciences; 2024.
- 7. Mohamed Mohamed Ahmed Al-Ajry M. The proposed (Injaz) strategy for digital transformation in Egyptian universities as a starting point that qualifies the entire university for institutional academic accreditation. Journal of Specific Education Research. 2022;2022(67):777-822.
- 8. Aboelezz N. The impact of applying financial digital technology on financial inclusion in the banking sector in African countries. Journal of Politics and Economics. 2021;11(Issue (10) April 2021):1-31.
- 9. Saudi Ramma, Saudi Ramma. A comparative study of some foreign and Arab digital universities and the possibility of benefiting from them in the Arab Republic of Egypt. Journal of the Faculty of Education in Educational Sciences. 2019;43(4):447-615.
- 10. Abed RA, Kareem AH, Jabbar AK, Zwaid JG, Hasan HF. THE IMPLEMENTATION OF ACCOUNTING INFORMATION SYSTEMS ON THE STOCK RETURN AND FINANCIAL PERFORMANCE BASED ON INFORMATION TECHNOLOGY (IT). Eastern-European Journal of Enterprise Technologies. 2023;125(13).
- 11. Khamaishiya and Radhia S. Office activation and creativity in the digital environment 2021.

ISSN: 3049-3552

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- 12. Gamal El-Din El-Azab H. Political Science between the Impact of Artificial Intelligence Technologies and Reviewing the Pillars and Functions of the Concept of the State and the Structure of the Global System. Journal of the Faculty of Economics and Political Science. 2022;23(1):103-50.
- 13. Khamis M. The Security Future of American Power in the Horizon of 2025: Arab Center for Research and Policy Studies; 2019.
- 14. Sultan Mohamed Abdel Hamid R. The Effect of Using Blockchain Technology on The Accounting Environment in Egypt (Field Theoretical study). Egyptian Journal of Business Studies. 2023;47(2):227-62.
- 15. Sultan Mohammed Abdul Hamid R. The Role of Forensic Investigative Accounting Techniques in Developing the Role of the Local Government and Oversight Sector in Combating Corruption: A Field Study. Egyptian Journal of Business Studies. 2022;46(1):77-150.
- 16. Zwaid JG, Bari AHA, Rashed RN. The role of financial statements in predicting the changes of prices and production cost of oil. Economic Annals-XXI/Ekonomičnij Časopis-XXI. 2021;193.
- 17. Mohamed Fawzy Khashaba N, Naji, Saleh Ham, Amira. Banking governance and its role in improving banking performance, a field study on the Iraqi banking system. Egyptian Journal of Business Studies. 2022;46(4):397-434.
- 18. Mahmoud Ma'an. Investing in the academic knowledge production of faculty members as an approach to achieving competitive advantage for Benha University (a proposed vision). Journal of the Faculty of Education (Assiut). 2024;40(5):1-96.
- 19. Mahmoud Abdullah Mahmoud W. Investing in the academic knowledge production of faculty members for Competetive Advantage to Benha University (a proposed Perspective). Journal of Faculty of Education-Assiut University. 2024;40(5):1-96.
- 20. Zwaid JG, Kareem HB, Abed RA, Fatima K. IMPLEMENTATION OF ACCOUNTING INFORMATION SYSTEMS AND INFORMATION TECHNOLOGY (IT) IN THE SUSTAINABILITY OF THE DEVELOPED ECONOMIC UNITS. Eastern-European Journal of Enterprise Technologies. 2023;124(13).