

Table Of Content

Journal Cover	2
Author[s] Statement	3
Editorial Team	4
Article information	5
Check this article update (crossmark)	5
Check this article impact	5
Cite this article	5
Title page	6
Article Title	6
Author information	6
Abstract	6
Article content.....	8

ISSN (ONLINE) 2598 9928



Website

INDONESIAN JOURNAL OF LAW AND ECONOMIC

PUBLISHED BY
UNIVERSITAS MUHAMMADIYAH SIDOARJO

Originality Statement

The author[s] declare that this article is their own work and to the best of their knowledge it contains no materials previously published or written by another person, or substantial proportions of material which have been accepted for the published of any other published materials, except where due acknowledgement is made in the article. Any contribution made to the research by others, with whom author[s] have work, is explicitly acknowledged in the article.

Conflict of Interest Statement

The author[s] declare that this article was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Copyright Statement

Copyright  Author(s). This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at <http://creativecommons.org/licenses/by/4.0/legalcode>

EDITORIAL TEAM

Editor in Chief

Dr. Wisnu Panggah Setiyono, Universitas Muhammadiyah Sidoarjo, Indonesia ([Scopus](#)) ([Sinta](#))

Managing Editor

Rifqi Ridlo Phahlevy , Universitas Muhammadiyah Sidoarjo, Indonesia ([Scopus](#)) ([ORCID](#))

Editors

Noor Fatimah Mediawati, Universitas Muhammadiyah Sidoarjo, Indonesia ([Sinta](#))

Faizal Kurniawan, Universitas Airlangga, Indonesia ([Scopus](#))

M. Zulfa Aulia, Universitas Jambi, Indonesia ([Sinta](#))

Sri Budi Purwaningsih, Universitas Muhammadiyah Sidoarjo, Indonesia ([Sinta](#))

Emy Rosnawati, Universitas Muhammadiyah Sidoarjo, Indonesia ([Sinta](#))

Totok Wahyu Abadi, Universitas Muhammadiyah Sidoarjo, Indonesia ([Scopus](#))

Complete list of editorial team ([link](#))

Complete list of indexing services for this journal ([link](#))

How to submit to this journal ([link](#))

Article information

Check this article update (crossmark)



Check this article impact ^(*)



Save this article to Mendeley



^(*) Time for indexing process is various, depends on indexing database platform

Integrated Accounting System Performance under Electronic Payment Operations in Public Universities

Ammar Ghazi Ibrahim Al-Ezzi, ammar.ezzi82@uodiyala.edu.iq, (1)

Presidency of Diyala University, Baqubah, Diyala Governorate, Iraq

Ali AbdulQader Majeed Al -Obaida, aliabdalkadeer1982@gmail.com (2)

General Directorate of Education in Nineveh, Mosul, Nineveh Governorate, Iraq

Qusay Burhan Dawood, Qusaiburhan9999@gmail.com, (3)

Diyala University, College Islamic Sciences

Marwa Ibrahim Fadhel, Marwa.ibrahim@uodiyala.edu.iq, (4)

Presidency of Diyala University, Baqubah, Diyala Governorate, Iraq

⁽¹⁾ Corresponding author

Abstract

General Background: Digital transformation has intensified the use of electronic payment operations within public sector accounting systems. **Specific Background:** Iraqi public universities, including the University of Diyala, are required to apply electronic payment platforms under an integrated accounting system. **Knowledge Gap:** Empirical evidence on accounting treatments and practical challenges arising from this adoption remains limited. **Aims:** This study examines accounting treatments and identifies challenges associated with electronic payment operations in Iraqi universities. **Results:** The findings show that electronic payments significantly affect the integrated accounting system, with limited impact on bank reconciliation and revenue accuracy, alongside weaknesses in electronic literacy. **Novelty:** The study offers empirical evidence from an Iraqi university context. **Implications:** Integrated legal, technical, and capacity-building strategies are essential to strengthen accounting reliability and digital financial transformation.

Keywords : Electronic Payment Systems, Accounting Treatments, Integrated Accounting System, Iraqi Public Universities, Digital Financial Transformation.

Highlight :

- Electronic payment positively impacts unified accounting systems with 56% correlation strength.
- Accountants face settlement reconciliation problems due to bank statement timing delays.
- Electronic literacy deficiency among Iraqi citizens significantly hinders payment system adoption.

Published date: 2026-01-11 00:00:00

Introduction

All areas of science and knowledge, as well as the day-to-day operations of various economic units, government agencies, and entities (including Iraqi public universities as a research community), have undergone a digital transformation process as a result of the swift and accelerating developments in the business and finance sectors during the first two and a half decades of the third millennium, which led to the global transformation of the commodity and service economy into a digital economy. This includes the practice and provision of financial services, which now have a digital character, framework, and content. With the incapacity of traditional payment methods, such as cash instruments or issuing bank checks, to keep up with the demands of digital transformation, the increasing and widespread use of artificial intelligence applications, and the systematic digitization of accounting, financial, and banking operations, it is necessary for various economic units, government agencies, and even private sector institutions to adopt modern methods for financial and banking transactions based on digital foundations. This new development has been presented to political and economic decision-makers in Iraq, represented by the directives of the Iraqi Council of Ministers obligating all government agencies, including Iraqi public universities, and even urging and encouraging private entities to adopt the electronic payment platform, particularly with regard to collecting daily revenues (whether from organizations and other institutions or from ordinary individuals) using some of the electronic payment tools and methods available in Iraq, which are gradually expanding on several levels, including: 1) An increase in the number of electronic payment platforms, 2) An increase in the number of individuals and institutions dealing with the electronic payment platform, 3) A significant and tangible increase in the amounts collected using electronic payment platforms, 4) An increase in the demand of private sector projects and companies to adopt the government's electronic payment program, 5) An increase in modern payment tools and methods, 6) An increase in the amounts paid using mobile phones.

1.1. Research Problem

The problem of the study can be summed up by responding to the following primary question in terms of self-financing, how are the accounting treatment of settlements arising from Iraqi public universities' adoption of the electronic payment program, which is directed by the use of the integrated accounting system? This main question gives rise to the following sub-questions:

1. Does the University of Diyala implement the electronic payment program for expenditure and purchase payments, as well as revenue collection?
2. Has the implementation of electronic payment operations created accounting challenges due to the mismatch between the bank account and the statement sent by the bank?
3. Do accountants at the University of Diyala and its colleges suffer from accounting settlement problems, particularly with regard to calculating revenues resulting from the implementation of the electronic payment process?

1.2. Research Hypothesis

The researchers designed a negative (null) basic hypothesis, which is:

The main null hypothesis: There is no negative impact of implementing the electronic payment program on the implementation of the unified accounting system in Iraqi public universities. This main hypothesis leads to the following sub-hypotheses:

1. There is no negative impact of implementing the electronic payment program on monthly reconciliation with the bank statement in light of the implementation of the unified accounting system in Iraqi public universities.
2. There is no negative impact of implementing the electronic payment program on verifying the accuracy of the accounting of revenues received through the electronic payment platform in light of the implementation of the unified accounting system in Iraqi public universities.

1.3. Research Outline

This section includes a main theme: the research outline and methodology, discussing its various elements below, related to the topic of our research entitled "The Impact of Using Electronic Payment Processing (EPP) on Addressing Accounting Challenges in Light of the Implementation of the Unified Accounting System in Iraqi Public Universities" (an applied study at the University of Diyala).

1.4. Aims of the Research

The researchers seek to achieve the following aims:

1. Providing scientific and professional accounting solutions and treatments for the settlements resulting from the implementation of the government program for electronic payment transactions.
2. Attempting to overcome the obstacles and difficulties facing accountants working in public universities in light of the implementation of the unified accounting system.
3. Working to avoid delays in implementing the government program for electronic payment, on the one hand, and to avoid negatively impacting the submission of the required financial reports to the Board of Supreme Audit, the Ministry of Higher Education and Scientific Research, and the president of the relevant university, on the required time and quality.
4. Training courses may be held for accounting staff at other universities, whether public or private, to benefit from the University of Diyala's experience regarding accounting settlements when implementing electronic payment.

1.5. The Significance of the Research

The research has significant aspects, which we summarize as follows:

Scientific Importance: With scientific and objective dimensions and frameworks that support accountants working in public universities that rely on self-financing through the implementation of the unified accounting system, it is undeniable that providing

accounting solutions for some practical problems lends moral significance to the system's implementation. We can say that this importance and the expected benefit of providing solutions are not limited to accountants working in public universities alone, but will also benefit their colleagues working in private universities and colleges. This will help them address the practical problems they face when implementing the government program for electronic payment.

Practical Importance: The practical application of offering workable solutions to the accounting issues of settlements resulting from the execution of the government program for electronic payment will demonstrate the genuine and immediate benefit of the research findings. It is worth noting that these problems related to central financing have been addressed by the ministerial order issued by the Decentralized Accounting Department at the Ministry of Finance in the Republic of Iraq.

1.6. Research Variables

Two primary factors are included in the study: the dependent variable, accounting treatments, and the independent variable, the electronic payment procedure, which is the outcome of Iraqi public universities using a unified accounting system.

METHODOLOGY

This research relied on two basic approaches in scientific research: the deductive approach, which relies on a descriptive and analytical approach for the theoretical aspect, relying on scientific references and sources, international peer-reviewed periodicals and journals, and websites. The inductive approach also covered the practical aspect by obtaining ministerial decisions and orders issued by the relevant authorities in Iraqi Republic regarding the implementation of the government program for the electronic payment platform. In addition, it studied the opinions of the research sample, represented by accountants working at the University of Diyala as a field authority for practical application and identifying the accounting problems they faced in light of the implementation of the electronic payment program.

2.1. Research Community and Sample

The majority of the research participants were accountants employed by public universities that use both the integrated accounting system and the government accounting system. The research sample was limited to accountants working at the University of Diyala, who were distributed a questionnaire.

2.2. Data Collection

Research data was collected from two primary sources: the primary data source, which was obtained through ministerial orders and directives issued by the Council of Ministers, the Ministry of Finance, the Central Bank of Iraq, the Ministry of Higher Education, and the Presidency of Diyala University regarding the implementation of the government program to activate the electronic payment platform, in addition to all applied data obtained from the accounting departments at University of Diyala and its colleges, as the subject of the research and study. The secondary data source was obtained from academic literature, including books, references, scientific journals, and proceedings of local and international conferences related to the research topic, in addition to obtaining a vast amount of research, studies, and conferences published on the Internet and other secondary sources.

2.3. Research Tool

The researchers designed a questionnaire to study the two research variables, entitled the electronic payment process and accounting treatments under the integrated accounting system. They also collected the opinions of accountants working at the University of Diyala. questionnaire was distributed to (35) accountants working at the University of Diyala. Responses were obtained from all respondents, and all distributed questionnaires were accepted and subjected to the well-known Statistical Analysis Program for the Social Sciences (SPSS). The results of the statistical analysis were used to verify or reject the hypotheses formulated by the researchers.

2.4. Research Limitations

1. Time Limits: (2023 – 2025), which represent the period during which the government program to activate the electronic payment platform was launched, with a greater focus on accounting issues that became more widespread in 2024.
2. Spatial Limits: Diyala Governorate, Iraq.
3. Qualitative Limits: University of Diyala.

2.5. The Emergence and Development of Electronic Payment

The use of the traditional payment system started when the system of trade, which served as the foundation for economic transaction, declined and vanished after money first appeared in Greek society in 600 BC. For a long time, cash was used in a variety of ways and was seen as a tool for measurement, payment, and trade. However, a new pattern of international commercial exchanges using the Internet's technologies represented by the system of electronic commerce and marketing developed quickly as a result of both qualitative and quantitative advancements in information technology as well as the growth of regional and international communication networks. This formed the fundamental basis and created the objective prerequisites for the emergence and development of electronic payment systems at the international and regional levels. The transition of many nations' economies to a digital economy and the growth of electronic payments and exchanges have sped up this development. This has made a substantial contribution to the growth and use of numerous advanced techniques and instruments for electronic payment operations. As an objective result, this has accelerated the spread of electronic payment systems among the following entities:

Organizations and the government, individuals and the government, organizations with each other organizations, organizations and individuals, and vice versa. This allows for the payment or receipt of commercial commodity exchanges, the acquisition of services, the payment of various fees and expenses, and the collection of various forms of taxation that take place between the three aforementioned circles: the government, organizations, and individuals, both in terms of giving and receiving.

[ISSN 2598 9928 \(online\)](https://ijler.umsida.ac.id), <https://ijler.umsida.ac.id>, published by [Universitas Muhammadiyah Sidoarjo](https://ijler.umsida.ac.id)

Copyright © Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). To view a copy of this license, visit <https://creativecommons.org/licenses/by/4.0/>.

2.6. The Concept of the Electronic Payment Process

The implementation of electronic payment has been of great importance to those practicing various forms of e-commerce and e-marketing. Throughout the first three decades of the third century, online commercial transactions have grown at extremely high volumes and rates due to their strategic potential for expanding sales and distribution activities at the local, regional, global, and interregional levels. Interest in and adoption of financial inclusion, financial digitization, and the steady shift to digital economy methods and approaches have not lagged behind in the majority of Arab nations. Iraq, albeit somewhat late, has joined other countries in the region in adopting this digital trend.

What is electronic payment? Researchers have not agreed on a specific and comprehensive definition of the concept of electronic payment. Several definitions have been issued by professional bodies and organizations, as well as by legal legislation in some countries, to define the concept of electronic payment. We will attempt to present some of them below:

A special committee formed by the United Nations issued a definition of electronic payment in 1962, which states: "It is the set of operations that begin with a payment order issued by ordering the transfer value to be placed at the disposal of the beneficiary" (Majid Bouskrane, Soufiane Azzouk, 2018: p. 7).

Electronic payment is "a method for conducting financial transactions, paying bills, and collecting money online through an electronic medium without using checks or cash." (Hussein Redha Mahdi, 2024: p. 2). One researcher defined it as "the process of transferring the price of a good or service electronically using one of the electronic payment methods, used as an alternative payment tool to traditional payment methods such as cash and checks. This involves settling and disbursing financial obligations to others electronically via a system provided by banking and financial institutions to make the payment process secure." (Hamid, Sultani, 2022: p. 18).

The Tunisian legislator defined electronic payment as "the means that enables its owner to make direct payments remotely via public communications networks." (Fatima, Musaffah, & Zeina, Ait Ali, 2022: p. 44).

While the American legislator defined it as "an electrical, digital, magnetic, optical, electromagnetic or any other form of technology, which includes capabilities similar to that technology" (Fatima, Musaffah & Zeina, Ait Ali, 2022: p. 46). The Iraqi legislator defined the electronic payment system as "a set of means, procedures and rules specific to the process of transferring funds between participants within the system, provided that the transfer of funds occurs through the use of the payment systems infrastructure." (Regulation No. 3 of 2014 "Electronic Money Payment Services System in Iraq").

Table 1. Comparisons between electronic payment methods and traditional payment methods

No:	Comparison criteria	Electronic Payment Methods	Traditional Payment Methods
1	Secrecy and Confidentiality	High Degree of Confidentiality and Secrecy	Low Degree of Confidentiality and Secrecy
2	Security and Data Breach Prevention	Information and Network Security	Weak Information and Network Security
3	Speed	Payment Transactions are Completed Quickly	Longer Transaction Time Required
4	Accuracy	Payment Processes are Highly Accurate	Poor Data Accuracy
5	Objectivity	High Degree Of Objectivity is Achieved	Less Objectivity Achieved
6	Cost	Payment Transactions are Done At Lower Costs	Higher Transaction Costs
7	Type of money	Electronic money	Cash money and checks
8	Environmental Impact	Has Positive Environmental Impacts	Have Negative Environmental Impacts
9	Geographical Dimension	Achieved Internationally	Achieved Locally
10	Its Impact on Addressing Corruption	Contributes to Reducing Financial Corruption	Facilitated The Spread of Financial Corruption

*Prepared by the researchers, adapted from the source: (Ziqim, Sarah: 2015: pp. 18-19).

The world of banking, economic activity, and the financial and commercial environment is evolving, and as a result, new methods are emerging to keep up with the changes. Over the last five years, beginning in October 2019, when the COVID-19 pandemic initially surfaced in China and quickly expanded around the world, we have seen this. This led to a significant reduction in economic activity and contributed significantly to the transition to the expansion of electronic payment methods.

2.7. Challenges and Problems Arising from Implementing an Electronic Payment Program

The forms and elements of restrictions imposed when implementing an electronic payment program vary, and they are accompanied by some specific challenges and obstacles that can be classified as follows: (Nasrat, 2020: pp. 22-23)

1. Technological, structural, logistical, infrastructure, and internet speed challenges, which facilitate efficient implementation.
2. Actual challenges at the Iraqi level, represented by the major and ongoing lack of regular electricity supply in the appropriate quantity, quality, time, and place, thus preventing the implementation of the electronic payment program.
3. Legislative challenges and compliance with laws that ensure data security and integrity and prevent hacking of communications networks.
4. Accounting challenges, which require accountants to provide solutions and accounting treatments for settlements resulting from the implementation of the electronic payment program, helping overcome accounting problems during practical implementation.
5. Challenges related to human resources and their qualifications to develop technological awareness and work to eradicate electronic illiteracy among employees in light of the digital transformation in the financial and business sectors, banks, and other institutions, including public universities.
6. Actual challenges related to extortion, fraud, deception, and electronic forgery, which are difficult to detect in the absence of strict laws and deterrent penalties against fraudulent users of electronic payment transactions.
7. Financial challenges facing public funds due to the emergence of various forms of tax evasion practiced by some local and foreign companies, given the unreliability of financial statements used electronically.

The commonly accepted and globally used electronic payment methods are:

1. The world's most famous credit cards are:
 - A. MasterCard, headquartered in New York.
 - B. Visa Credit Card, introduced in 1958 in Los Angeles, California.
 - C. American Express Credit Card, introduced in 1841.
 - D. Thomas Cook Credit Card, headquartered in London.
 - E. Diners Club, an American company that emerged in Chicago in the 1950s.
2. Debit cards, issued by banks, large stores, gas stations, and other retail establishments. Even large restaurants issue their own cards.
3. Cell-Phone Wallet Cards, which include tools such as:
 - A. PayPal Payment.
 - B. Google Pay Payments, both globally and locally.
 - C. Apple Pay Payments, both globally and locally.
4. Electronic transfers between accounts inside and outside the country, within the same bank and its various branches, or through other local and international banks. The spread and expansion of e-commerce has contributed to the widespread use of this method.
5. Email Transfer.
6. Electronic commercial papers, which are subject to the same terms and conditions as traditional commercial papers regarding payment and fines.
7. Smart Card.
8. Prepaid Card.
9. Monthly Debit Card, also known as Charge Card.
10. Q-Card, widely used in Iraq, particularly for paying retirees' salaries.

2.8. Electronic Payment Process in Iraq

Iraq's 2003 political transition gave rise to elements that have contributed to and still contribute to the lack of security stability, which has directly and negatively impacted social and economic advancement in the 20 years since the occupation. The Council of Ministers is striving to achieve some form of economic development, despite the significant obstacles that are difficult to overcome at the structural, technical, security, political, regional, and international levels. Among the positive steps is its proposal to activate the electronic payment platform as part of the economic, financial, and monetary reform program, despite the fact that it is, firstly, still an attempt that is not consistent with the size of Iraq's economy regionally and internationally, and secondly, it is significantly late compared to other Arab countries in general and the countries of the region in particular.

In order to create an advanced infrastructure that meets the demands of the digital transformation of the Iraqi economy, this trend necessitates operating at a quick speed of technological improvement, the transition to digitizing the financial and banking process, and achieving financial inclusion. Despite these major challenges facing the Iraqi economy, the current Iraqi government has been making rapid strides toward a digital economy, issuing firm and serious directives to government agencies and even the private sector, including the use of electronic payment platforms for financial transactions, settlement of obligations, and collection of revenues, in accordance with the electronic payment tools and means currently available in Iraq. Statistics from the Central Bank of Iraq indicate that the number of electronic payment companies in Iraq reached 16 in 2022, and that there are (6) million Iraqi employees and retirees using digital services (Al-Yafei and Walid, 2022: p. 16). However, we are confident that these statistics have developed significantly by the end of 2024, reflecting the success of the experiment, despite its stumbling blocks due to various existing obstacles and challenges, including some accounting challenges at the practical level.

2.9. The Importance of Electronic Payment in Iraq

The extensive use of information and communications technology (ICT) and the notable rise in the number of Iraqis with mobile phones, especially smartphones, and Internet access are important positive developments that have occurred in the country since 2003. This has opened the door to the digitization of finance, business, marketing, and banking activities at the local and international levels, including the implementation of electronic payment processes.

The advantages of using these digital banking and financial services have improved the comfort of the average person, sped up work procedures, advanced the digital economy, and increased e-commerce freedom. This has led to the inclusion of many Iraqi government and private banks in adopting electronic payment platforms in their daily transactions.

[ISSN 2598 9928 \(online\)](https://ijler.umsida.ac.id), <https://ijler.umsida.ac.id>, published by [Universitas Muhammadiyah Sidoarjo](https://ijler.umsida.ac.id)

Copyright © Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). To view a copy of this license, visit <https://creativecommons.org/licenses/by/4.0/>.

The Importance of Electronic Payment in Iraq Is Evident in The Following

1. Reducing the effort and time required to complete electronic payment transactions.
2. Eliminating, or even eliminating, geographical distances between parties involved in transfers, payments, collections, and the completion of transactions electronically.
3. Reducing the financial and administrative costs of electronic payment transactions.
4. Gradual transition to a green economy, the emergence and development of green banks, and the expansion of green accounting.
5. Expanding the scope of e-commerce and expanding the horizons of e-marketing for the exchange of goods and services.
6. Growing opportunities for Iraq to join the World Trade Organization, given the rational and judicious utilization of available resources.
7. Helping to create a scientific-professional foundation and practical application for the Iraqi economy's transformation into a digital economy.

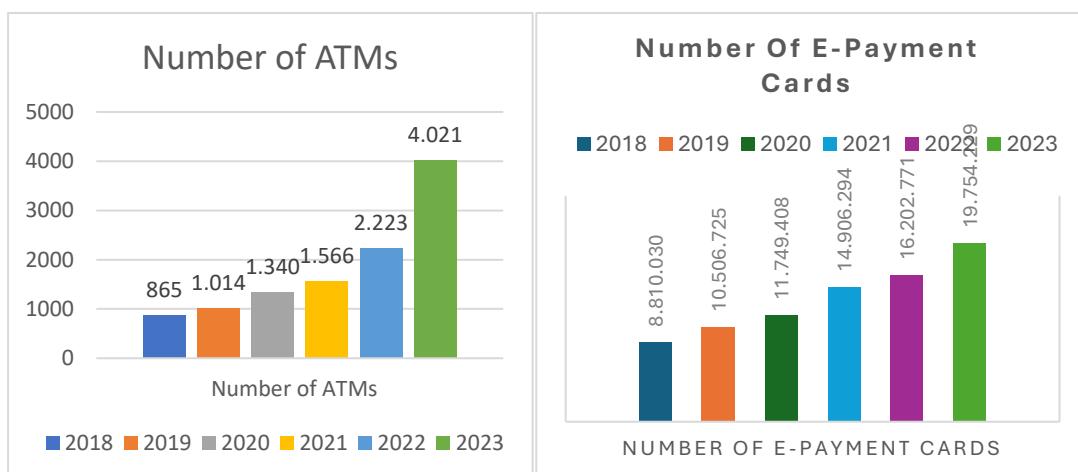
Indicators of The Development of Requirements for The Successful Implementation of the Electronic Payment Process

We can review some indicators measuring the development of the electronic payment process in Iraq during the period from 2018 to 2023:

Table 2. Indicators of the development of electronic payment devices, cards, and points of sale

Years	ATM Machines		E-Payment Cards		Point of Sale (POS)	
	Qty.	%	Qty.	%	Qty.	%
2018	865	%100	8,810,030	100%	2200	100%
2019	1014	%118	10,506,725	119%	2226	101%
2020	1340	%155	11,749,408	130%	7540	343%
2021	1566	%181	14,906,294	169%	8329	379%
2022	2233	%250	16,202,771	184%	10718	487%
2023	4021	460%	19,754,229	220%	23066	1048%

**Prepared by the researchers, with some modifications, based on data from the Central Bank of Iraq's statistical website.



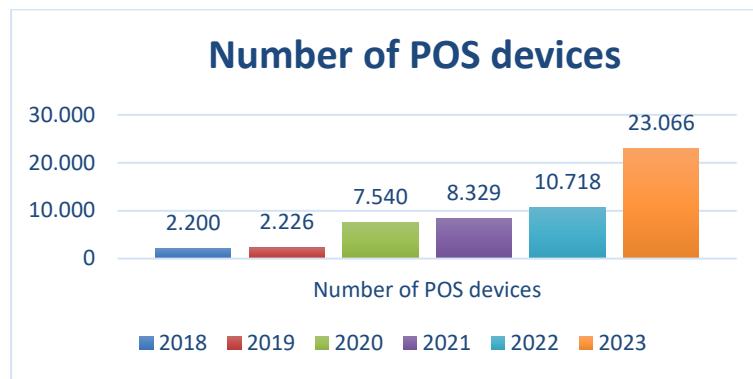
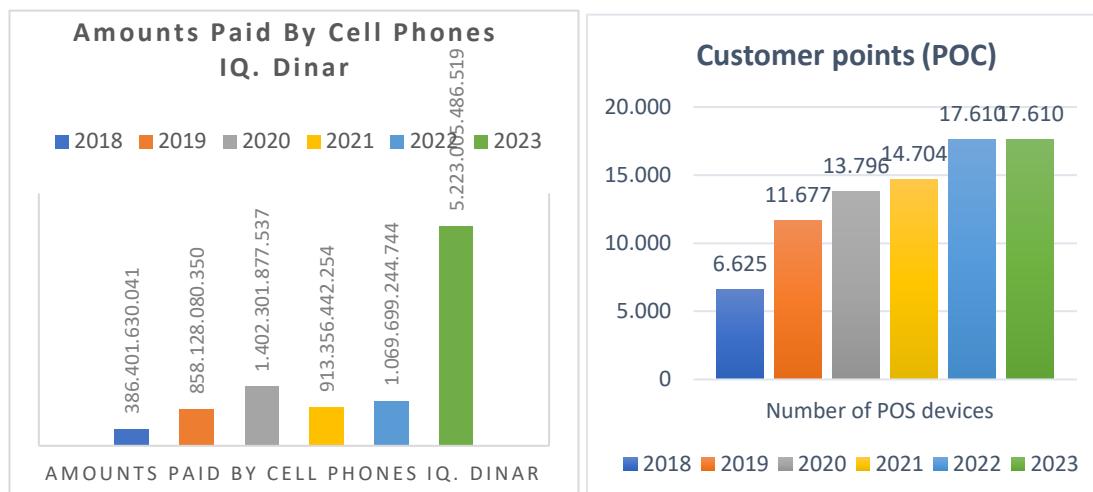
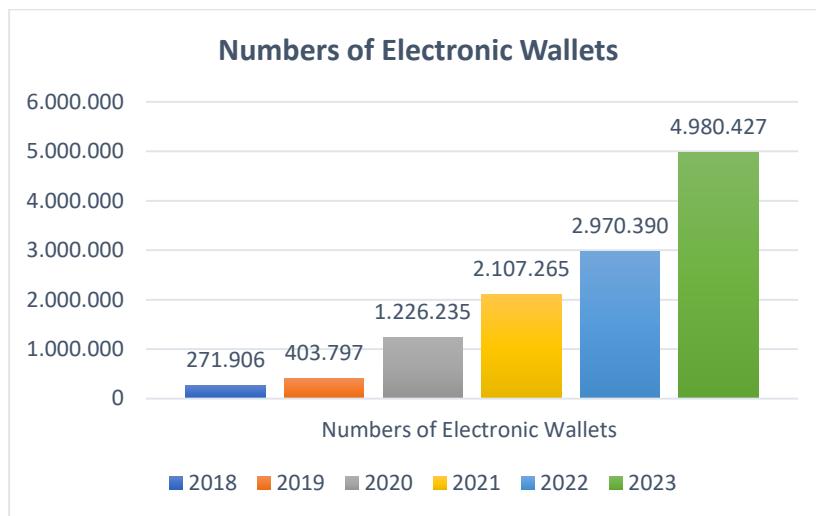


Table 3. Indicators of the development of customer points, electronic wallets, and the value of amounts paid using mobile phones

Year	Amounts paid by cell phones IQ. Dinar		Customer points POC		Electronic Wallets E-Portfolios	
	Value	The Percentage %	Qty	%	Qty	%
2018	386,401,630,041	100%	6625	100%	271,906	100%
2019	858,128,080,350	222%	11677	176%	403,797	149%
2020	1,402,301,877,537	363%	13796	200%	1,226,235	451%
2021	913,356,442,254	237%	14704	222%	2,107,265	775%
2022	1,069,699,244,744	277%	17610	266%	2,970,390	1092%
2023	5,223,005,486,519	1351%	17610	266%	4980427	1831%

**Prepared by the researchers, with some modifications, based on data from the Central Bank of Iraq's statistical website.





An analysis of the six indicators mentioned above in Tables 3 and 4, namely: 1) the number of ATMs, 2) the number of electronic payment cards, 3) the number of points of sale, 4) the number of customer points, 5) the number of electronic wallets, and 6) the value of amounts paid using mobile phones, gives a positive and encouraging impression and indicator of the growing future prospects for the expansion of electronic payment operations in Iraq in general, and in the capital, Baghdad, in particular. It is worth noting that the Iraqi state's directives, issued in November 2024, called for the need to expand the requirements for implementing electronic payment operations across all governorates and not to concentrate these services primarily in the capital, Baghdad. We can compare the base year, 2018, with the final year, 2023, for the six indicators above. We find that the relative growth rate was as follows: 460%, 220%, 1048%, 1351%, 266%, and 1831% for the six indicators above, respectively. The percentages were very large and showed an upward trend over the five years under study for the five indicators, with the exception of the Points of Customer (POC) indicator, which relates to the value of amounts paid through POC. The percentage in 2022 was 266%, and it remained unchanged in 2023, at 266%. The researchers estimate this is due to the Iraqi government's directives to reduce cash payments and use point-of-sale (POS) services, in addition to the increase in ATMs. The shift to these devices has led to a reduction in the increase in POC's payments. The fact that Iraq, the banking sector, and electronic payment platforms possess the latest equipment, electronic devices, and advanced computer software related to the electronic payment process has tangibly contributed to this development in electronic payment operations. This resulted in adopting a supportive, encouraging and encouraging stance towards the five parties involved in the electronic payment process, namely the state, represented by the Central Bank of Iraq and the Ministry of Finance, on the one hand, the banking sector (governmental and private), in general, on the other hand, organizations, bodies, governmental entities and private companies, on the third hand, individuals, on the fourth hand, and finally society in general and stakeholders in particular, on the fifth hand.

Government Support and Legal Framework for Activating Electronic Payments in Iraq

In line with the Council of Ministers' belief in the need to keep pace with the global digital transformation, the Council of Ministers held its third regular session on January 17, 2023, to discuss the possibility of adopting some digital transformation methods and technologies in Iraq. This meeting resulted in the issuance of a decision that included the following: (Hussein Redha Mahdi, 2024: p. 8).

1. The necessity of adopting a new mechanism to activate electronic payment platforms.
2. The Central Bank of Iraq was directed to facilitate the procedures for granting licenses for collecting bank cards using point-of-sale (POS) terminals.
3. Reducing bank fees and encouraging entities that adopt the philosophy of electronic payment.
4. Requiring all government sector agencies, private sector companies, and civil society organizations to open bank accounts.
5. Granting customs facilities and providing some exemptions to government and private entities that import requirements for implementing the electronic payment program to expand points of sale and increase the number of ATMs. These exemptions and facilities will be included in the state's general budget for 2023 and beyond.
6. To encourage and motivate entities that use electronic payment, they will be exempt from annual taxes during the years in which the electronic payment program is implemented and activated.
7. It is noteworthy that the Cabinet's decision regarding the transitional phase of implementing the electronic payment program allows for continued payment and collection in direct cash until the full transition to the new program is completed by the beginning of July 2025, leading to full implementation.
8. The decision gives government entities a period of more than four months to prepare for the actual implementation, starting on June 1, 2023. This will help these entities prepare to develop the capabilities needed to implement this electronic payment program.

Obstacles to the Spread of Electronic Payment in Iraq:

[ISSN 2598 9928 \(online\)](https://ijler.umsida.ac.id), <https://ijler.umsida.ac.id>, published by [Universitas Muhammadiyah Sidoarjo](https://ijler.umsida.ac.id)

Copyright © Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). To view a copy of this license, visit <https://creativecommons.org/licenses/by/4.0/>.

Indonesian Journal of Law and Economics Review

Vol 21 No 1 (2026): February

DOI: <https://doi.org/10.21070/ijler.v21i1.1479>

Unfortunately, Iraq still suffers from the lack of many laws and legislation regulating changes in local and international economic life, including laws regulating e-commerce, marketing, and electronic payment. Obstacles and obstacles to the development of electronic payment in Iraq include the following:

- 1) The lack of data security and exchange, the insufficient confidentiality of some customers' electronic information, and even electronic banking records themselves have not been free of repeated breaches, manipulation, and even electronic theft, as occurred in the 2017 data breach of a telecommunications company in Iraq, which resulted in significant tampering with the data of some citizens and companies.
- 2) The inadequacy of national companies specializing in the supply chain, its rational management, and securing the logistical aspects of import operations from abroad, including the shipping, insurance, transportation, ports, and everything related to the delivery of raw materials, production requirements, goods, and even various types of imported fixed assets. This has contributed to hindering the development of e-commerce.
- 3) The infrastructure is not adequately developed to facilitate the development of the electronic payment process in a better form than currently available.
- 4) The prevalence of electronic illiteracy among Iraqi citizens in general, which requires spreading the culture of electronic development.
- 5) The lack of training courses and programs for those working on digitizing financial and banking operations.
- 6) One of the most intractable problems is the major irregularity in the availability of electrical power needed to operate internet networks.

Practical Accounting Problems When Implementing the Electronic Payment Platform:

It is necessary to first identify the accounting problems faced by public universities when implementing the unified accounting system.

These problems can be summarized as follows:

1. The growing problem of mismatch between bank statements sent to universities and even colleges and the bank account balances in the accounting books and records of those universities and colleges. This results in the following regressive problems:
 - A. The failure to transparently display all revenues collected from paying parties through the electronic payment platform.
 - B. The emergence of cases requiring the recording of settlement entries and the reconciliation of monthly bank statements between the bank account balances in the university's general journal and the university's account balance at the relevant bank.
2. The lack of qualification of accounting personnel in public universities for the requirements of implementing the electronic payment platform.
3. The lack of electronic awareness among the general Iraqi population significantly hinders their preference for traditional payment processes for financial and banking transactions.
4. Lack of trust and credibility in accepting electronic payments by broad segments of Iraqi society.

Practical aspect: Study of the statistical characteristics of the research sample:

Some descriptive statistical characteristics of the study sample are presented, classified by gender, age, years of service, degree, and specialization.

Table 4. Some statistical indicators of the gender variable for the research sample

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	24	68.6	68.6	68.6
	Female	11	31.4	31.4	100.0
	Total	35	100.0	100.0	

It is noted from the table above that the majority of the sample was male, representing 68.6% of the total sample, totaling 24 individuals.

Table 5. Some statistical indicators for the age group variable for the research sample

Age Group					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	25-30	4	11.4	11.4	11.4
	31-40	12	34.3	34.3	45.7
	41-50	9	25.7	25.7	71.4
	50 & Above	10	28.6	28.6	100.0

Indonesian Journal of Law and Economics Review

Vol 21 No 1 (2026): February
 DOI: <https://doi.org/10.21070/ijler.v21i1.1479>

	Total	35	100.0	100.0	
--	-------	----	-------	-------	--

The table above shows that the highest percentage is for the age group of 31 to 40 years, with 12 of them, representing 34.3% of the total.

Table 6. Some statistical indicators for the variable of years of service for the research sample

Years of service					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less Than 5 Years	8	22.9	22.9	22.9
	5-10	3	8.6	8.6	31.4
	11-15	12	34.3	34.3	65.7
	16-20	5	14.3	14.3	80.0
	21-25	4	11.4	11.4	91.4
	26 and More	3	8.6	8.6	100.0
	Total	35	100.0	100.0	

It is noted from the table above that the highest category of years of service was 11-15 years, with a number of 12, representing 34.3%.

Table 7. shows some statistical indicators for the certificate variable for the research sample.

Qualification					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Diploma	10	28.6	28.6	28.6
	Bachelor	15	42.9	42.9	71.4
	Master	5	14.3	14.3	85.7
	Ph.D.	5	14.3	14.3	100.0
	Total	35	100.0	100.0	

It is noted from the table above that the highest percentage were those with a bachelor's degree, as their number reached 15, representing 42.9%:

Table 8. shows some statistical indicators for the specialization variable for the research sample:

Specialization					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Accounting	17	48.6	48.6	48.6
	Financial	3	8.6	8.6	57.1
	Banking	9	25.7	25.7	82.9
	administration	3	8.6	8.6	91.4
	Economy	3	8.6	8.6	100.0
	Total	35	100.0	100.0	

It is noted from the table above that the highest percentage of those in the specialization are those in the accounting specialization, with 17 students, representing 48.6%:

Confirmatory factor analysis of the study tool. The following figure shows the structural model of the electronic payment scale and its impact on the unified accounting system:

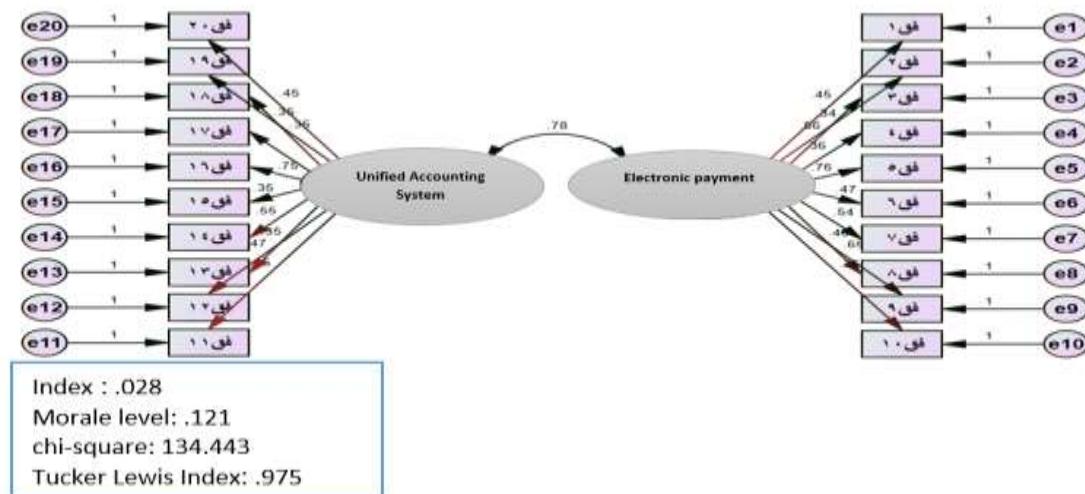


Figure 1. shows the structural model of the scale used in the factor analysis.

It is noted from the figure above that the scale is characterized by confirmatory validity, as the indicators fall within the permissible limits, as the Ramsey index has a value of less than 5%, the Tucker-Lewis index has a value close to one, and the significance level is greater than 5%. Therefore, the hypothesis stating that there is no significant difference between the structural model and the theoretical model is accepted.

Analysis of the responses of the research sample:

Table 9. shows the indicators for analyzing the response of the research sample regarding the electronic payment variable.

No.	Question Content	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Arithmetic Mean	Standard Deviation	Coefficient Of Variation	Relative Importance	Sort By Relative Importance
1	Item 1		8	12.7	9	14.3	19	30.2	27	42.9	4.0317
2	Item 2			13	20.6	22	34.9	28	44.4	4.2381	0.77697
3	Item 3		2	3.2	10	15.9	20	31.7	31	49.2	4.2698
4	Item 4		1	1.6	8	12.7	14	22.2	40	63.5	4.4762
5	Item 5			7	11.1	23	36.5	33	52.4	4.4127	0.68709
6	Item 6			17	27	21	33.3	25	39.7	4.127	0.81304
7	Item 7	2	3.2	9.5	14	22.2	20	31.7	21	33.3	3.8254
8	Item 8	2	3.2	1	1.6	9	14.3	10	15.9	41	65.1
9	Item 9	5	7.9	2	3.2	10	15.9	23	36.5	23	36.5
10	Item 10			1	1.6	5	7.9	29	46	28	44.4
Total									4.2448	1.0333	

It is noted from the table above that item 4, which is (The university's communication network and internet service are fast and help in executing financial transactions through POS devices), ranked first in terms of relative importance with an arithmetic mean of 4.4762 and a standard deviation of 0.7793, as its relative importance reached 89.524. As for item 7, which is) The application of the electronic payment process helps in raising the degree of reliability in accounting information (ranked last in terms of relative importance, as its importance reached 76.508 with an arithmetic mean of 3.8254, and the total axis reached an average of 4.2448 with a standard deviation of 1.0333.

No.	Question Content	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree	Arithmetic Mean	Standard Deviation	Relative Importance	Sort By Relative Importance

11	Item 11	6	9.5	17	27	15	23.8	16	25.4	9	14.3	4.2698	0.84637	19.82224	7
12	Item 12	6	9.5	9	14.3	17	27	19	30.2	12	19	4.4762	0.77993	17.42393	9
13	Item 13	6	9.5	13	20.6	19	30.2	16	25.4	9	14.3	4.4127	0.68709	15.57074	10
14	Item 14	5	7.9	13	20.6	25	39.7	14	22.2	6	9.5	4.127	0.81304	19.70051	8
15	Item 15	2	3.2	2	3.2	26	41.3	22	34.9	11	17.5	3.8254	1.10044	28.76666	4
16	Item 16	2	3.2	6	9.5	26	41.3	19	30.2	10	15.9	4.381	1.00689	22.98311	6
17	Item 17	7	11.1	14	22.2	15	23.8	22	34.9	5	7.9	3.0635	1.16221	37.93733	1
18	Item 18	1	1.6	8	12.7	22	34.9	21	33.3	11	17.5	3.5238	0.98139	27.85033	5
19	Item 19	1	1.6	10	15.9	15	23.8	24	38.1	13	20.6	3.6032	1.04016	28.86767	3
20	Item 20	6	9.5	9	14.3	20	31.7	16	25.4	12	19	3.3016	1.2133	36.74885	2
Total												4.113	1.213		

It is noted from the table above that Item 17, which concerns the delay in preparing daily settlements for amounts collected through electronic payment devices by the relevant banks and the non-appearance of the amounts received in bank accounts, has caused confusion in daily and monthly reconciliations. It ranked first in terms of relative importance, with an arithmetic mean of 3.0635 and a standard deviation of 1.16221, and its relative importance reached 37.93733. Item 13, which concerns the collection of daily collections using the traditional method and electronic payment devices, combined, has caused confusion for cashiers in the process of issuing receipts and posting them to the daily receipts book, ranked last in terms of relative importance, with an importance of 15.57074, with an arithmetic mean of 4.4127, and the total axis averaged 4.113 with a standard deviation of 1.213.

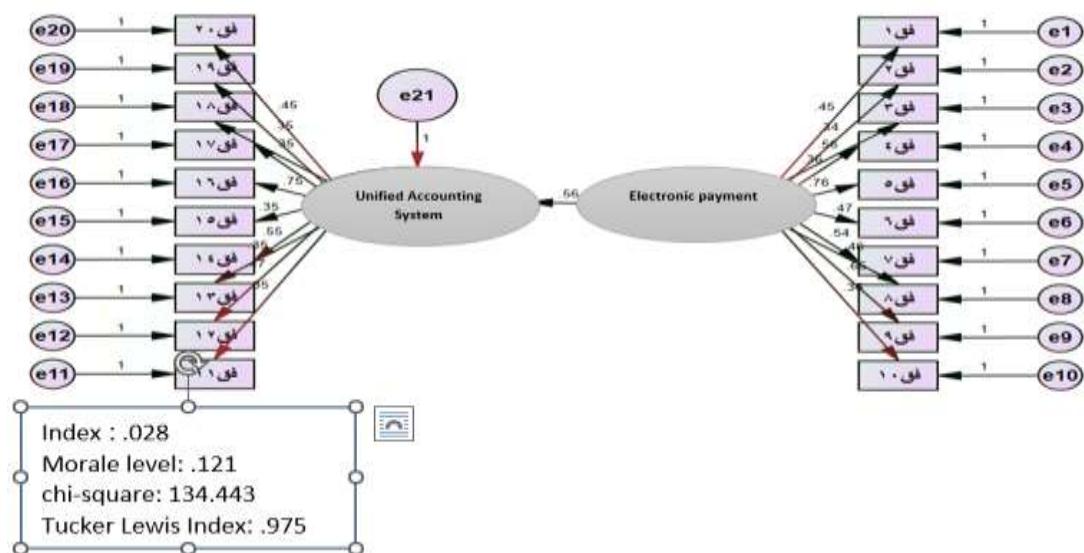


Figure 2. shows the structural model for measuring the results of the impact of electronic payment on the unified accounting system.

It is noted from the figure above that electronic payment has an impact of 0.56. This means that a 100% increase in the level of electronic payment leads to a 56% increase in the level of the unified accounting system.

Hypothesis Testing: This section tested the following main hypothesis: There is no negative impact of implementing the electronic payment program on the implementation of the unified accounting system in Iraqi public universities.

As shown in the following table:

	Coefficient Value	Test T.	Explanatory Power	F. Test
E-Payment	0.56	2.8	79%	**13.65
Probability Value		0.003		0.001

It is noted from the table above that the variable (E-Payment) has a significant impact on the variable (integrated accounting system), as the test's probability value of 0.001 is less than the 5% significance level.

This section tested the following sub-hypothesis: There is no negative impact of implementing the electronic payment program on

monthly reconciliation with the bank statement under the implementation of the integrated accounting system in Iraqi public universities.

As shown in the following table:

	Coefficient Value	T. Test	Explanatory Power	F. Test
E-Payment	0.33	0.2	24%	1.54
Probability Value		0.35		0.32

From the table above, it is noted that electronic payment has no significant effect on the monthly reconciliation with the bank statement, as the test's probability value of 0.32 is greater than the 5% significance level.

This section tested the following main hypothesis: There is no negative impact of implementing an electronic payment program on verifying the accuracy of revenue accounts received through the electronic payment platform, given the implementation of the unified accounting system in Iraqi public universities.

As shown in the following table:

	Coefficient Value	T. Test	Explanatory Power	F. Test	
E-Payment	0.46	6.6**	75%	**5.98	
Probability Value		0.002		0.001	

From the table above, it is noted that electronic payment has a significant impact on the revenue account, as the probability value of the test, which is 0.001, is less than the 5% significance level.

Conclusions And Recommendations

Conclusions

From the findings obtained, the researchers formulated the following conclusions:

The model is characterized by confirmatory validity.

1. The electronic payment variable has a significant impact on the unified accounting system.
2. The electronic payment variable has a positive and insignificant impact on monthly reconciliation.
3. The electronic payment variable has a positive and insignificant impact on revenue accounting.
4. E-commerce and the practice of various types of e-marketing are the objective basis for the development of electronic payment mechanisms locally and globally.
5. The major shortcomings in local legislation to ensure the security of data, networks, and electronic payment platforms.
6. The significant weakness in electronic culture and awareness among Iraqi citizens, particularly those engaged in trade, workshops, and small and medium-sized enterprises.

Future studies may focus on expanding the model to other Iraqi universities

Recommendations

In light of the above findings, the researchers recommend the following:

1. It is necessary to localize the salaries of all employees of organizations and economic units in the private sector, as has been the case over the past two years for employees in the government sector, in line with recent Cabinet directives.
2. It is necessary to expand the support and incentives available to government agencies, the private sector, and even individuals who contribute to the dissemination and adoption of the electronic payment approach, including reducing fees and taxes.
3. The relevant government agencies, primarily the Ministry of Electricity, are required to work according to a specific program and a clearly defined work methodology to address the significant disruption of power outages and irregularities, so as not to impede the availability of internet service.
4. Licenses to practice professions, establish and register new companies, or renew licenses for existing companies should not be granted except through electronic payment transactions.
5. Payment of utility bills, such as water, electricity, internet services, telephones, rental services, education, hospitals, pharmacies, restaurants, and hotels classified as touristic, should be made through electronic payment mechanisms.
6. Encouraging marketing centers, other than banks, to issue credit cards without the need for cash or checks.
7. The implementation of the electronic payment system in Iraq must be viewed as an integrated system that includes legislation and laws, the necessary hardware and equipment to implement the program, qualified human resources trained for effective implementation, raising awareness and disseminating e-commerce culture among citizens, and securing computer programs and accounting applications that enable efficient implementation, not just quantitative and qualitative aspects, but, more importantly, qualitative ones.
8. Activating cards (MasterCard) to increase confidence in the payment system.
9. The necessity of communication and interaction between company employees and students.

Indonesian Journal of Law and Economics Review

Vol 21 No 1 (2026): February

DOI: <https://doi.org/10.21070/ijler.v21i1.1479>

Holding awareness workshops on the importance of working with the electronic payment system.

References

1. Al-Yafei, W., "The Importance of Electronic Payment in Iraq: Four Obstacles Limiting Its Development," Fatora Blog, Oct. 12, 2022. [Online]. Available: [\[https://fatora.io/blog/electronic-payment-in-iraq/\]\(https://fatora.io/blog/electronic-payment-in-iraq/\)](https://fatora.io/blog/electronic-payment-in-iraq/)
2. Central Bank of Iraq, "The Development of Electronic Payment in Iraq," Banking Supervision Department, Baghdad, Iraq, 2024. [Online]. Available: [\[https://cbiraq.org.iq\]\(https://cbiraq.org.iq\)](https://cbiraq.org.iq)
3. Fatima, M., and Ait Ali, Z., "The Concept of Electronic Payment and Its Distinction from Traditional Payment," Journal of Legal and Political Research and Studies, vol. 11, no. 2, pp. 40–55, 2022.
4. Hamid, S., "The Concept of Electronic Payment and Prospects for Its Development in Algeria," Journal of Legal and Political Research and Studies, vol. 11, no. 2, pp. 15–30, 2022.
5. Judy, N., and Zakaria, S., The Role of Electronic Payment Systems in Improving Banking Transactions: A Case Study on Al-Salem Bank, Ouargla Branch, Master's thesis, University of Kasdi Merbah, Ouargla, Algeria, 2022.
6. Khadija, S., Replacing Traditional Payment Methods with Electronic Methods: A Case Study at the Bank of Agriculture and Rural Development in the Biskra Agency, Master's thesis, University of Mohamed Lakhider, Biskra, Algeria, 2013.
7. Lalaoui, M., and Tairi, D., The Legal System of Electronic Payment Methods, Master's thesis, Faculty of Law and Political Science, University of Mohamed Bachir El Ibrahimi, Bordj Bou Arreridj, Algeria, 2023.
8. Majid, B., and Azzouk, S., Development of Electronic Payment Methods in Algerian Banks, Master's thesis, Mouloud Mammeri University, Tizi Ouzou, Algeria, 2018.
9. Nasr, M., Farrage, M., and Nasr, M., "E-Payment Systems Risks, Opportunities, and Challenges for Improved Results in E-Business," International Journal of Intelligent Computing and Information Science, vol. 20, no. 1, pp. 1–15, 2020. [\[https://doi.org/10.21608/ijicis.2020.82041\]\(https://doi.org/10.21608/ijicis.2020.82041\)](https://doi.org/10.21608/ijicis.2020.82041)
10. Republic of Iraq, Regulation No. 3 of 2014: Electronic Money Payment Services System in Iraq, Baghdad, Iraq, 2014.
11. Settani, K., Replacing Traditional Payment Methods with Electronic Methods: A Case Study at the Bank of Agriculture and Rural Development in Biskra, Master's thesis, University of Mohamed Lakhider, Biskra, Algeria, 2013.
12. Zekim, S., The Role of Electronic Payment Methods in Improving the Quality of Banking Services: A Case Study at Gulf Bank in Algeria, Master's thesis, University of Mohamed Lakhider, Biskra, Algeria, 2015.
13. Wuit, "Electronic Payment in Iraq," Wuit Blog, 2023. [Online]. Available: [\[https://wuit.com/blog/ar/\]\(https://wuit.com/blog/ar/\)](https://wuit.com/blog/ar/)
14. Tut, D., "FinTech and the COVID-19 Pandemic: Evidence From Electronic Payment Systems," Emerging Markets Review, vol. 54, p. 100999, Jan. 2023. <https://doi.org/10.1016/j.ememar.2023.100999>
15. Opuni-Frimpong, J., Dzorka, M., and Akomaning, J. O., "The Adoption of Digital Payments in Emerging Economies: Challenges and Policy Responses," Journal of Central Banking Theory and Practice, vol. 2, pp. 5–28, 2025. <https://doi.org/10.2478/jcbtp-2025-0011>