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Research Paper

Unveiling Digital Wallets Adoption in Developing countries: A Dual-Factor Approach of Enablers and Inhibitors Impacting User Intentions

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Abstract

Digital wallets are widely adopted across many countries due to the numerous advantages they offer, particularly in terms of speed, convenience, and online payment capabilities. However, despite these benefits, existing literature indicates that their adoption in Iraq remains limited. The existing study investigates the important factors impacting individuals' intention to adopt digital wallets by proposing a framework incorporating both motivational and inhibitory factors. The motivational factors are derived from the (UTAUT), in addition to trust, perceived security, and perceived privacy each supported by relevant literature. The inhibitory factors include regret avoidance, drawn from the SQB theory, and technology anxiety, identified in previous studies. The proposed framework was tested using a quantitative research methodology. Data were collected via a structured questionnaire distributed to a sample of 605 individuals in Iraq. Structural Equation Modeling (SEM) was employed for data analysis using AMOS software. The findings indicate that performance expectancy, effort expectancy, social influence, perceived privacy, perceived security, and trust all have a significant impact on the intention regarding the adoption of digital wallets. In contrast, regret avoidance and technology anxiety were determined to have no significant negative effects. Based on these results, several recommendations are proposed to enhance digital wallet adoption in Iraq. These include increasing public awareness and education, reinforcing the importance of security and privacy, fostering positive social influence.

Keywords:
E-payment, Digital Wallet, UTAUT, SQB, Privacy, Technology Anxiety

ورقة بحثية

تبني المحافظ الرقمية في البلدان النامية: مدخل ثنائي العوامل للمؤثرات المحفزة والمثبطة لنوايا المستخدمين

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المستخلص

تُعتمد المحافظ الرقمية على نطاق واسع في العديد من دول العالم نظرًا للمزايا العديدة التي تقدمها، ولا سيما من حيث السرعة، والسهولة، وإمكانيات الدفع عبر الإنترنت. ومع ذلك، وعلى الرغم من هذه الفوائد، تُشير الأدبيات الحالية إلى أن تبني المحافظ الرقمية في العراق لا يزال محدودًا. وتهدف هذه الدراسة إلى استكشاف العوامل التي تؤثر في نية الأفراد لتبني المحافظ الرقمية، من خلال اقتراح إطار عمل يتضمن عوامل تحفيزية وأخرى تثبيطية. استُمدت العوامل التحفيزية من نظرية التقبل الموحد لاستخدام التكنولوجيا (UTAUT)، والتي تشمل التوقعات المتعلقة بالأداء، والجهد المتوقع، والتأثير الاجتماعي، فضلاً عن الثقة، والأمان المُتصوَّر، والخصوصية المُتصوَّرة، وكلها مدعومة من الأدبيات ذات الصلة. أما العوامل التثبيطية، فتشمل تجنب الندم المستمد من نظرية SQB، والقلق التكنولوجي الذي حُدد في دراسات سابقة. تم اختبار الإطار المقترح باستخدام منهجية بحث كمية، حيث جُمعت البيانات من خلال استبيان منظم تم توزيعه على عينة مكونة من 605 أفراد في العراق. وقد تم استخدام نمذجة المعادلات الهيكلية (SEM) لتحليل البيانات باستخدام برنامج AMOS. تشير النتائج إلى أن كلًا من توقعات الأداء، والجهد المتوقع، والتأثير الاجتماعي، والأمان المُتصوَّر، والخصوصية المُتصوَّرة، والثقة لها تأثير إيجابي ومعنوي على نية تبني المحافظ الرقمية. في المقابل، لم يظهر أن عاملي تجنب الندم والقلق التكنولوجي لهما تأثير سلبي معنوي على نية التبني. استنادًا إلى هذه النتائج، تقترح الدراسة عددًا من التوصيات لتعزيز تبني المحافظ الرقمية في العراق، منها زيادة الوعي العام والتثقيف، وتعزيز أهمية الأمان والخصوصية، وتشجيع التأثير الاجتماعي الإيجابي.

الكلمات الافتتاحية:

الدفع الإلكتروني، المحفظة الرقمية، نظرية UTAUT، نظرية SQB، الخصوصية، قلق التكنولوجيا

مجلة

تنمية الرافدين

***(TANRA):* مجلة علمية، فصلية، دولية، مفتوحة الوصول، محكمة.**

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1. Introduction

The technological revolution in the 21st century has brought about significant changes across various business fields, including electronic money transfer and payment. One of the considerably important developments in this area is the emergence and coming of age of the "digital wallet" as an efficient tool for performing "financial transactions" electronically (Dharmawan et al., 2024). The digital wallet is a modern technology that facilitates and accelerates electronic payment and money transfers. It is widely used worldwide. (Madugoda Gunaratnege et al., 2022). Despite the numerous benefits digital wallets offer individuals and businesses, their usage remains relatively limited in some countries, including Iraq. (Ali et al., 2023). Additionally, there are approximately 36 million phone users in Iraq, and close to 19 million people use the internet. Although few of them use digital wallet payments (De Luna et al., 2019; Jawad et al., 2022; Singh et al., 2020).

The study problem lies in the restricted use of digital wallets in Iraq compared to other countries. According to that, the study seeks to answer the subsequent question: What factors impact the adoption of digital wallets in Iraq? The study aims to propose a model that considers the significant factors that impact the adoption of both enablers and inhibitors of digital wallets. The proposed model will be examined according to the users' perspective in Iraq, as well as how these factors impact the intention of individuals to usage the digital wallets. To fulfil this objective, the study adopts several motivational and inhibitory factors. The driving factors are extracted from the UTAUT: social influence, effort expectancy, and performance expectancy. Further, perceived privacy, perceived security, and trust were investigated based on relevant literature. On the other hand, the inhibitory factors contain regret avoidance, which is derived from the SQB theory, and technology anxiety, which is derived from related literature. The rest of the study is organised into four main sections. Second addresses the relevant studies literature, while the third presents the theoretical background. The fourth section presents the proposed research framework and hyposthesis fourmulation, the fifth describe the research method. The six review and discuss the results., and Finally, the study discusses its implications, limitations, and conclusions, and offers suggestions for future research projects.

2. Related Studies

The current section presents and discusses the relevant studies on adopting digital wallets.. It focuses on theoretical aspects, findings, and gaps in existing research, especially within the developing countries' context, such as Iraq. Fang et al. (2023) examined the factors impacting the digital wallets usage among students at the Malaysia Kelantan University campus by use ine of the common IS technology adoption such as Technology Acceptance Model (TAM). The study applied a quantitative approach and tested several variables, including perceived ease of use, privacy, social influence, speed, and intention to use. According to the findings, digital wallets are considered very secure as most of them utilize encryption in order to restrict potential risks. As digital wallets make transactions quicker, easier, and more secure, this aspect of security is a central motivation for consumers using them. Sulaiman (2023) explored factors that affect individuals' adoption of digital wallets in the Kurdistan Region of Iraq. Perceived utility, ease of use,

perceived security, and trust were the most covered topics of the study. The study emphasized the relevance of promoting the use of digital wallets in Iraq by incorporating additional features into the interface that individuals use, such as discounts and cash-back, to activate more users. The survey also clarified how important it is for Kurdistan Region digital wallet providers to strengthen the privacy and security of their wallet applications. Samuel & Widjaja (2022) examined the determinants of West Jakarta's adoption of the DANA digital wallet. Quantitatively, they established that subjective norms, perceived usefulness, and perceived legitimacy significantly determined the users' decision to adopt the app. Productivity improvement, faith in data security, and social influence all motivated users. The Furinto et al. (2022) study aimed to test the continuance intention to use digital wallets based on an extended Expectation-Confirmation Model (ECM). In addition to other variables like promotion, mobility, and saving cost, the introduced model incorporated the determinants of satisfaction, confirmation, and perceived usefulness.

The results showed that the additional factors of cost savings, convenience, and promotion all had positive impacts on long-term digital wallet use. Thus, for Indonesia, our findings confirms the primary factors influencing the intention to keep using digital wallets.

The study of Rathore's (2016) main goals were to understand consumers' attitudes toward digital wallets and determine the determinants of their adoption. It also took into account the risks and challenges for the users of digital wallets. Brand loyalty, perceived value of digital wallets, and convenience of buying products online are the three dominant drivers of customer take-up, the survey claims.

Ali et al. (2023) research work aimed to empirically examine the determinants of mobile wallet facility adoption in Iraq using the UTAUT2 model. Using a quantitative study, the study examined how performance expectancy, facilitating conditions, habit, privacy, price value, and effort expectancy drive behavioural intention to accept digital wallets in Iraq. The findings validated that habit, facilitating conditions, performance expectancy, and privacy positively influenced users' intention to use a digital wallet. Price value and effort expectancy did not have any significant influence on users' intention to use digital wallets. Alsamman et al.(2022) studied the factors impacting the adoption of digital wallets in Iraq. It examines the correlation between the constructs of UTAUT2 and the intention to use digital wallets, as well as actual adoption. Additionally, the findings emphasised the significance of the selected factors in influencing individuals' use and adoption of digital wallets. Additionally, the findings emphasised the significance of the selected factors in impacting individuals' use and adoption of digital wallets. The current study builds upon previous research efforts, as most studies have focused on testing the motivating factors influencing the intention to adopt or use digital wallets. In contrast, the present research distinguishes itself by examining the factors influencing the intention to adopt digital wallets and the inhibitory factors that may hinder adoption. This dual approach aims to contribute to offering a more comprehensive understanding of individuals' behaviour toward digital wallet technology.

3. Theoretical Background

3.1. The Concept of Digital Wallet

Smartphones have gained significant importance in individuals' daily lives. Their use is no longer limited to making calls; they enable users to conduct financial transactions. Following substantial technological advancements, smartphone users can shop online and transfer money through their devices. In other words, smartphones have started functioning like traditional wallets used to store cash, except these wallets are now called digital wallets. (Intarot & Beokhaimook, 2018). Recently, the dominant method for making electronic payments and shopping online was through companies that provide electronic payment services, offering bank accounts linked to electronic payment cards such as Visa and MasterCard. These cards are associated with four parties: the issuer, customers, buyers, and merchants. However, smartphones facilitate the growth of e-commerce by making the payment system simple and easy, eliminating the need for the parties involved in Visa and MasterCard transactions. (Rathore, 2016). Through a digital wallet, users can open an account to store money linked to their mobile phone without opening a bank account. Funds can be deposited into the digital wallet through authorized offices licensed by the telecom companies providing the digital wallet service, or through the main offices of the telecom companies. (Sait et al., 2024).Digital wallet services, which belong under the electronic payments, have been a primary method for transferring money at a low cost. Despite their several benefits, their usage remains limited in developing countries like Iraq (Ali et al., 2023). Some telecom companies have provided the ability to link electronic payment cards to the digital wallet service to facilitate transactions and financial operations through digital wallets. This service is defined as a digital wallet due to its capacity to store digital money, which is represented by specific numbers. This contrasts with the traditional wallet, which contains physical cash of various denominations and values, represented by the numbers on each banknote (Al-Saies & Safaa, 2020). The earlier adopted payment method was through traditional money transfers, and later via credit cards such as MasterCard. Innovations surrounding digital wallets have arisen, leading to increased digital wallet models and solutions to enhance consumer comfort, reduce time, offer promotions, leverage data, or lower payment costs. (Shetu et al., 2022). Finally, a digital wallet functions as an application on a smartphone, allowing users to carry out online transactions and payment activities. (Farida & Ardiansyah, 2022).

3.2. Unified Theory of Acceptance and Use of Technology (UTAUT)

The UTAUT was developed by Venkatesh *et al* to assess the intention of users towards the acceptance and use of technology (Venkatesh et al., 2003). It includes four contracts, performance and effort expectancy, facilitating conditions and social influence (Xue et al., 2024). Performance expectancy focuses on the individual's expectation of improvement in their productivity through the use of the technology. Effort Expectancy focuses on the user's expectation of ease of use of the technology as well as ease of learning to utilise it (Williams et al., 2015). Concerning social influence, researchers believe that the perception

that important others, such as supervisors, peers, and the public, use the technology is a significant determinant of the adoption decision. In addition, intention to use technology is affected by differences in experience, age , gender, and degree of voluntariness in using the system (J. Chen et al., 2023; Oyewole, 2018; Rahi & Abd. Ghani, 2019),

3.3. Status Quo Bias(SQB)

Status quo bias is a type of cognitive bias in which people prefer to preserve things as they are or maintain their current state (Samuelson & Zeckhauser, 1988). The theory explains people's personal decisions and preferences in light of the circumstan ces. According to Samuelson and Zeckhauser's research, younger workers were more likely to sign up for health insurance policies with better deductibles and premiums. In contrast, older workers were more likely to remain with their current coverage despite having a lower mortality rate. People are more inclined to select the course of action that preserves the status quo when forced to make a significant decision. Although this trend decreases perceived risk of change, it can also create opportunities lost that can be larger than the risks (Dowling & Lucey, 2010). Even if the potential gain is greater than the potential loss, people will be more likely to consider what they stand to lose when weighing decisions and not what they might gain. Most research that has examined individuals' preference for their situation and reluctance to embrace or use new technology innovation has utilised the status quo bias theory (Hsieh, 2015; Niranga et al., 2022; Shankar & Kumari, 2019) .

4. Research Framework

This section introduces the research model proposed and discusses the factors employed in its construction. It also lays out the hypotheses developed based on the relevant studies.

4.1. Performance Expectancy

Performance expectancy is the degree to which a person thinks the usage a certain technology will improve their performance (Nikolopoulou et al., 2021; Sewandono et al., 2023) Duong et al. (2024) Argued that individuals' performance is enhanced when using particular technology; hence, performance expectancy is considered a central aspect in clarifying individuals' behaviour toward new technologies. According to Intarot & Beokhaimook (2018) Performance expectancy positively influences individuals' adoption of digital wallets. Similarly, (Yuliantie, 2024) Confirmed that the performance realised from using digital wallets increases users' willingness to adopt and use them. Aaccording to the above, the present study proposes, *H1: "Performance expectancy has a significant positive effect on the intention of individuals to adopt digital wallets".*

4.2. Effort Expectancy

Effort expectancy is defined as the degree of ease associated with utilising a certain technology (Venkatesh et al., 2012). It has been affirmed that effort expectancy in the context of digital wallet usage substantially impacts the behavioral intention to adopt such technology, as users strongly expect the digital wallet interface to be user-friendly and simple in design. Similarly, Tusyanah et al., (2021) emphasised that the more inferior the

effort required to utilise a digital wallet, the more likely individuals are to adopt and utilise it. According to the above the present study proposes, *H2: "Effort expectancy has a significant positive effect on the intention of individuals in the study sample to adopt digital wallets".*

4.3. Social Influence:

Social influence refers to how individuals perceive that important others, such as friends, supervisors, peers, colleagues, or family members, consider that they should use a particular system(Venkatesh et al., 2012). The findings of Bhukya & Paul (2023) It has been confirmed that individuals often wish to align themselves with their friends or peers; for example, if a friend uses a digital wallet, the individual is highly likely to adopt it as well, since friends tend to influence each other either directly or indirectly. Similarly, Tusyanah et al., (2021) based on their study's results, they emphasised that social influence has a noteworthy role in adopting digital wallets. According to the above the present study proposes, *H3: "Social influence has a significant positive effect on the intention of individuals in the study sample to adopt digital wallets".*

4.4. Trust

Trust is closely associated with adopting information systems and technologies, as it can significantly influence individuals' behavior or intention toward a particular technology (Choudhury & Shamszare, 2023). According to Senali et al.(2023), individuals differ in the trust they place in systems and emerging information technologies, mainly due to their varying knowledge levels about these technological products. When individuals decide to use a new system, they assess its trustworthiness. Thus, the inclination to adopt or use a new technology or system is strongly linked to trust as one of the key determinants of usage (Senali et al., 2023). Phuong et al. (2020) also emphasised that trust in technological innovations plays a vital role in shaping individuals' behaviour toward their adoption. According to the above discussion, the present study proposes, *H4: "Trust has a significant positive effect on the intention of individuals in the study sample to adopt digital wallets".*

4.5. Security

Perceived security is one's impression concerning a provider's ability or willingness to protect his/her data in utilizing a digital or technological product. It portrays the sense of certainty or doubtfulness a person has when utilizing the technology. Sincerity in doing transactions using a digital wallet is fundamental in facilitating an individual's acceptance(Oliveira et al., 2016). Soodan et al. (2020), such an effect on the utilise of digital wallets is exerted by the perception that financial transactions through digital wallets are safe. Phuong et al. (2020) Further underscored the role of perceived security during transactions in that it has a important effect on customers' trust for digital wallets, a view further supported by Ali et al. (2023). Depending on the above, the present study proposes, *H5: "Perceived security has a significant positive effect on enhancing the trust of individuals in the study sample in adopting digital wallets".*

4.6. Privacy

Privacy means an individual's capability to manage information regarding oneself, and it is a fundamental attribute that everyone understands. According to Ali *et al.* (2023) affirm that privacy is one of the attributes influencing the utilization of digital wallets. Studies by Amoroso & Magnier-Watanabe (2012), L. Chen (2008) , and Ali *et al*. (2023) Phuong et al. have shown that digital wallet privacy keeps users' information secure without unauthorized access. This indicates that privacy plays a significant role in increasing users' trust in digital wallets. Similarly, Yousoof et al. (2024) confirmed that users cannot trust digital wallets without being assured of their transactions and personal information privacy. In other words, the more privacy a digital wallet provides, the greater the trust users place in it. According to the above, the present study proposes, *H6: "Perceived privacy has a significant positive effect on enhancing the trust of individuals in the study sample in adopting digital wallets".*

4.7. Regret

Avoidance: Unpleasant and undesirable outcomes of past decisions generate feelings of regret. As a result, individuals tend to avoid repeating poor decisions and prefer to think more carefully when facing similar choices in the future (Polites & Karahanna, 2012). Users often find themselves in distressing situations marked by regret over unfavorable outcomes of past decisions. These experiences teach them to avoid unforeseen consequences (Polites & Karahanna, 2012). Users tend to feel stronger regret for adverse outcomes from using new technologies compared to similar adverse outcomes associated with the status quo. Therefore, regret avoidance is possible to affect resistance to usage directly. Sutticherchart & Rakthin (2023), regret avoidance significantly influences consumers' rejection of any new system or technology.

According to the above: *H7: "Regret avoidance significantly negatively affects the intention of individuals in the study sample to adopt digital wallets".*

4.8. Technology Anxiety

Technology anxiety refers to the state of fear, tension, or discomfort experienced by individuals when using technological systems or innovations, or even when considering their use. Interaction with technology or technological devices represents a negative emotional state or perception. This form of anxiety is expected to have a direct impact on the adoption of new technological innovations, Thanigan et al., (2021) . According to Elsotouhy et al., (2024)Technology anxiety stems from an individual's belief that they cannot handle new technologies. As such, technology anxiety is considered a fundamental and critical factor that hinders the use of new technologies, which is why it has received significant attention from researchers. According to the above:

H8: "Technology anxiety significantly negatively affects the intention of individuals in the study sample to adopt digital wallets".

4.9. Behavioral Intention

Behavioral intention implies to an individual's intention to utilize technological innovations in the future (Venkatesh et al., 2003). The concept of behavioral intention plays a central role in most theories that examine the adoption or use of new technological innovations, including the TAM and UTAUT models. It predicts individuals' behavior toward technology or their usage of new technologies. (Shen et al., 2012).

Depending on the discussion of the factors influencing the adoption of digital wallets, several enablers have been taken from the UTAUT theory: effort expectancy, performance expectancy, and social influence. In addition, other motivating factors have been adopted from relevant literature, including perceived security, perceived trust, and perceived privacy. On the other hand, the study also considers two inhibiting factors to digital wallet adoption: regret avoidance, which is derived from the SQB theory, and technology anxiety, which has been adopted based on the relevant literature. Figure 1 shows the proposed research model for the study.

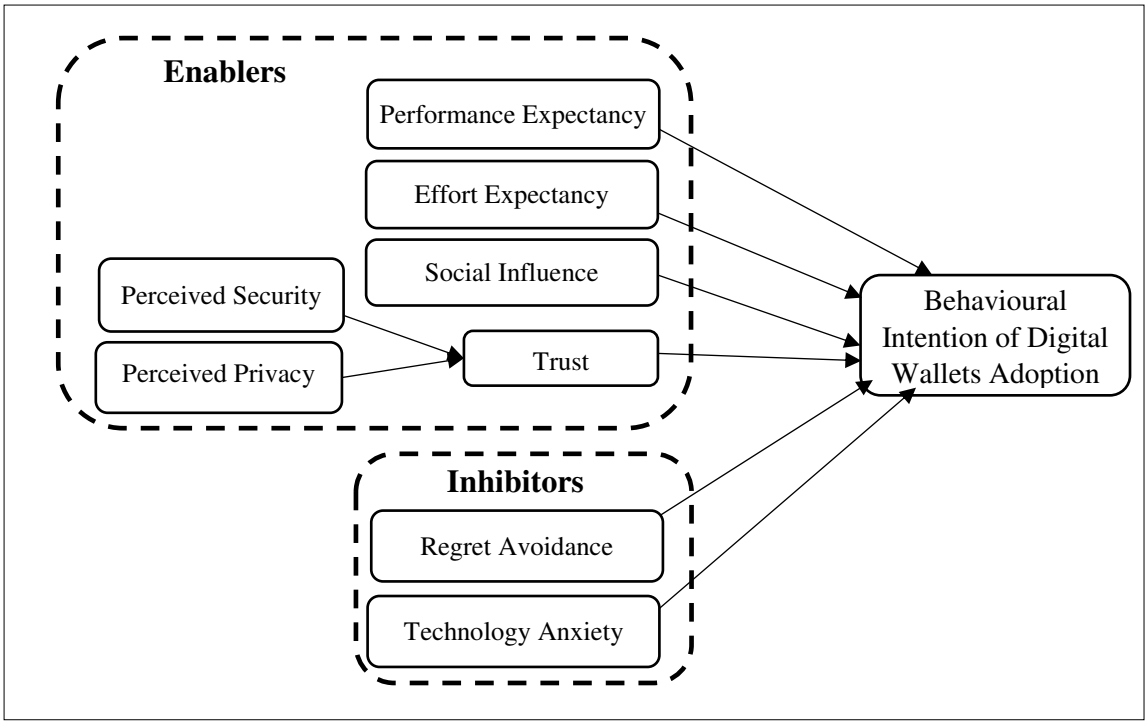


Figure (1). The Proposed Research Model

5. Research Methods

The study investigates the impact of inhibitor and driver factors on individuals' intentions to utilise digital wallets. To explore the impact of these factors, the study adopted a two-factor framework founded on inhibitors and enablers. The survey approach has been utilised for data collection. Proper statistical tools were utilised to analyse the collected data.

5.1. Questionnaire Design and Source of Data

A survey in Iraq was also conducted. The sample group chosen was guaranteed that their identities would be kept confidential, and the results of the research would be reported in an aggregated form only. The convenience sampling method was adopted as the survey instrument. The convenience sampling method is a cost-effective method widely used in IS Research. A total of 605 valid questionnaires were received. All of them were analysed. SEM using AMOS tool was employed to test the proposed model components and hypotheses. Table 1 presents the constructs of the proposed model with Measurement items.

Table (1). Research model constructs and Measurement items

Factors	References
Performance Expectancy	(Venkatesh *et al.*,2012; Ali *et al.*, 2023)
Effort Expectancy	(Venkatesh and *et al.*,2012;Ali *et al.*, 2023)
Social Influence	(Venkatesh *et al.*,2012; Ali *et al.*, 2023)
Trust	(Abebe & Lessa, 2020)
Perceived Security	(Abebe & Lessa, 2020;Parakh *et al.*, 2020)
Perceived Privacy	(Parakh *et al.*, 2020; Ali *et al.*, 2023)
Regret Avoidance	(Jana, 2022)
Technology Anxiety	(Hsieh *et al.*,2016)
Behavioural Intention of Digital Wallets Adoption	(Venkatesh *et al.*,2012; Ali *et al.*, 2023)

5.2. Statistical Methods

The causal relationships between the factors in the measurement model were assessed using SEM. SEM enables the analysis of single and multiple linear regressions, while simultaneously examining multiple equations. It allows for distinguishing measurement and structural models, considering measurement errors. The AMOS tool was employed for the analysis.

6. Empirical analysis

6.1. Descriptive Statistics

This section discusses the description of the study variables based on the respondents' opinions, including means and standard deviations. Table 2 presents descriptive statistics of the research model measurements.

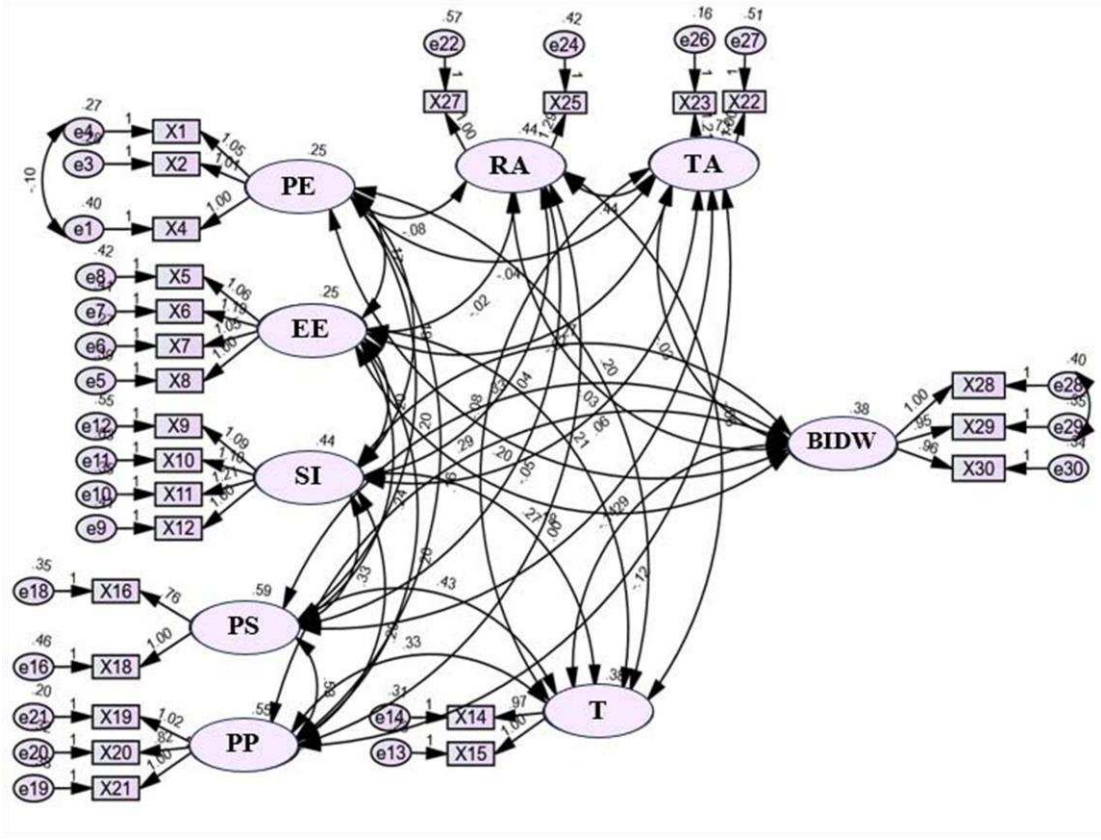
Table (2). Mean and Standard Deviations for the research model's measurements

Construct	Measures	Mean	Standard Deviation
Performance Expectancy	I believe using a digital wallet is very beneficial in my daily life.	4.0821	0.738
	Paying through the digital wallet allows me to make my financial transactions more quickly.	4.194	0.734
	Using the digital wallet enables me to complete my financial transactions anytime.	4.113	0.774
	The digital wallet gives me multiple options for making electronic or traditional purchases.	4.006	0.812
		4.098	0.764
Effort Expectancy	I believe that learning to use the digital wallet is easy for me	3.933	0.834
	Learning to use the digital wallet requires less effort than other payment technologies.	3.908	0.871
	It is easy for me to become skilled at using the digital wallet and making payments.	4.001	0.732
	Paying through the digital wallet requires less effort compared to other payment methods.	4.013	0.801
		3.963	0.809
Social Influence	People like family or friends encourage me to complete my financial transactions through the digital wallet.	3.339	1.027
	I believe that many people in my community use digital wallets.	3.195	1.073
	Most people whose opinions I trust prefer conducting financial transactions through the digital wallet.	3.483	0.991
	Individuals who influence my behavior believe I must use the digital wallet to carry out my financial transactions.	3.554	0.919
		3.392	1.002
Trust	The digital wallet will enable me to perform all my financial transactions without issues.	3.817	0.878
	I will have greater confidence in completing my financial transactions using the digital wallet.	3.852	0.817
	Based on my perceptions of the digital wallet, I believe it is trustworthy for financial transactions.	3.879	0.780
		3.849	0.825
Perceived Security	Digital wallets have a good reputation as a secure means for conducting financial transactions.	3.888	0.831
	I believe that any information I provide during financial transactions via the digital wallet will not be tampered with or exploited.	3.829	0.876
	The digital wallet has sufficient security measures to prevent anyone from accessing my account.	3.803	1.024
		3.84	0.910

Perceived Privacy	I trust the personal information I provide in the digital wallet will be secure.	3.831	0.887
	Unauthorized individuals will not be able to view my personal information.	4.025	0.830
	I trust that the information about my financial transactions through the digital wallet will not be leaked to any party.	3.734	0.970
		3.863	0.895
Regret Avoidance	I will not change my traditional methods of transferring my money because I fear I will regret it if the digital wallet does not meet my needs.	3.068	1.078
	I will not use the digital wallet because I fear technical issues that could disrupt my work, leading me to regret using it.	3.156	1.087
	I will not use the digital wallet because I fear losing my information	3.277	1.009
		3.167	1.058
Technology Anxiety	I feel anxious or fearful when making financial transactions through the digital wallet.	3.040	1.117
	I feel tense when completing financial transactions via the digital wallet.	2.940	1.113
	I avoid using the digital wallet because technical issues may interrupt my payment transactions.	3.176	1.083
		3.052	1.104
Behavioural Intention	I genuinely need to complete my financial transactions through the digital wallet.	3.690	0.884
	I intend to perform my financial transactions via the digital wallet instead of using any other payment method.	3.734	0.834
	I generally have a positive attitude toward completing financial transactions via digital wallets.	3.895	0.824
	I believe using a digital wallet for financial transactions is an experience worth pursuing.	4.227	0.757
		3.886	0.824

6.2. Confirmatory Factor Analysis for

Confirmatory Factor Analysis (CFA) is a statistical method used in Structural Equation Modeling (SEM), which serves as an analytical framework for various models, including CFA. SEM tests multivariate models in terms of the direction of correlations and relationships between variables of a phenomenon or a set of phenomena. The model's goodness of fit to the data is determined using a set of indicators called fit indices. CFA was applied to test the study model's objectivity and reliability. Goodness-of-fit indices and their acceptable values were identified. The study model changed to arrive at its final version, where the goodness-of-fit indicators are within acceptable bounds. Specifically, seven observed variables within the dependent variable were removed, namely, x21, x25, x23, x3, x17, x13, and x31. Additionally, a relationship between variables x28 and x29 and x1 and x4 was established. After these changes, the final model design for the study is shown in Figure 2.



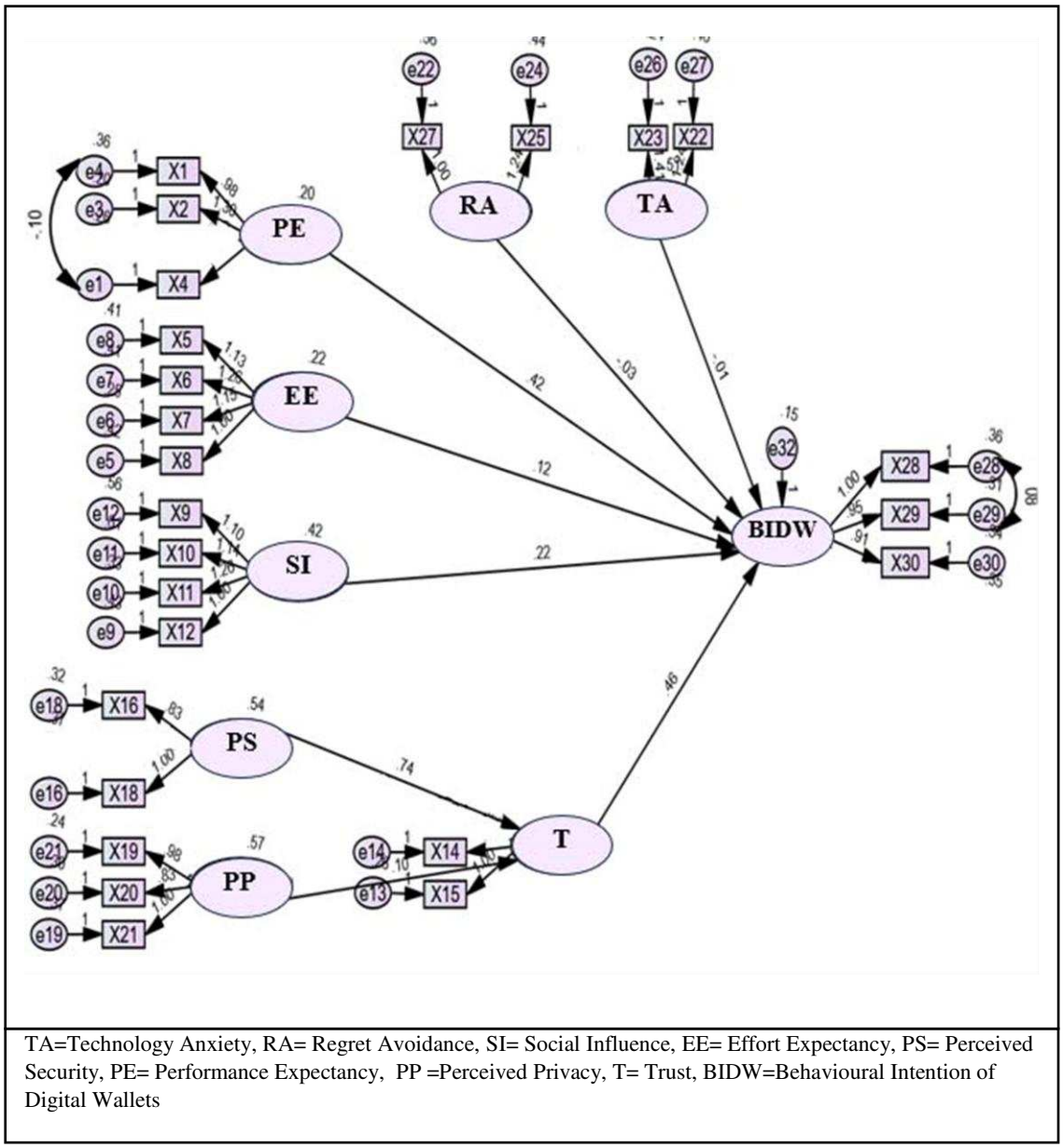
TA=Technology Anxiety, RA= Regret Avoidance, PE= Performance Expectancy, EE= Effort Expectancy, SI= Social Influence, PS= Perceived Security, PP =Perceived Privacy, T= Trust, BIDW=Behavioural Intention of Digital Wallets

Figure (2). Measurement model

All indicators point to a good fit of the existing study model, and the results are within acceptable thresholds. The chi-square ratio (CMIN/df) is 1.9, which is less than 2, indicating an acceptable level of model fit. The Goodness of Fit Index (GFI) is (.941), which is considered acceptable, and the Adjusted Goodness of Fit Index (AGFI) also falls within acceptable limits at (.919). These indicators reflect the model's acceptability, quality of fit, and accuracy in representing its components. The Comparative Fit Index (CFI) is also reported at (.961). The analysis also shows a Root Mean Square Error of Approximation (RMSEA) value of .042, indicating low accumulated variance among the items within the overall model. The Tucker-Lewis Index (TLI) appears at (.951), suggesting a reasonable match of the hypothetical model. Moreover, the Root Mean Square Residual (RMR) value is (.028), which is less than 0.05, indicating a good fit.

6.3. Hypothesis Testing

After confirming the quality of the current study model through confirmatory factor analysis, the hypotheses will be tested accordingly. The current section presents the hypothesis testing: Figure 3 illustrates the structural model's impact relationship between the independent and dependent variables.



TA=Technology Anxiety, RA= Regret Avoidance, SI= Social Influence, EE= Effort Expectancy, PS= Perceived Security, PE= Performance Expectancy, PP =Perceived Privacy, T= Trust, BIDW=Behavioural Intention of Digital Wallets

Figure 3. Structural Model

Table 3. The Results of Hypothesis Test

		Estimate	S.E.	P-value	Decision
H1	PE -> BIDW	.420	.066	***	Supported
H2	EE -> BIDW	.121	.054	.025	Supported
H3	SI -> BIDW	.217	.040	***	Supported
H4	PS -> BIDW	.739	.025	***	Supported
H5	PP -> BIDW	.102	.046	***	Supported
H6	T -> BIDW	.461	.052	***	Supported
H7	RA -> BIDW	.025	.035	.474	Not-supported
H8	TA -> BIDW	.005	.033	.874	Not-supported

TA=Technology Anxiety, RA= Regret Avoidance, PE= Performance Expectancy, EE= Effort Expectancy, SI= Social Influence, PS= Perceived Security, PP =Perceived Privacy, T= Trust, BIDW=Behavioural Intention of Digital Wallets

The findings of the hypothesis test, which are presented in Table 3, will be used to discuss the acceptance or rejection of the study hypotheses.

H1: Performance expectancy positively influences the wallet adoption by the individuals in the study sample. The findings presented in Table 3 indicate that performance expectancy has a positive and significant influence on the adoption of the wallet, as indicated by the p-value (***), which is lower than 0.05. Therefore, the hypothesis is accepted. This indicates that individuals' expected performance from using this technology motivates them to adopt it.

H 2: Effort expectancy positively impacts the digital wallet adoption. According to the results in Table 3, it is evident that there is a strong positive effect of social influence on the adoption of the digital wallet by individuals in the study population, as indicated by the P-value (***), which is lower than 0.05. The hypothesis is therefore accepted. This means that people are more possible to embrace and adopt such technology when they get good news from members of society.

H3: Social influence plays a positive role in the adoption of the digital wallet. As per the results in Table 3, it can be noticed that social influence greatly affects the adoption of the digital wallet in the individuals in the study sample, indicated by the P-value (***), which is <0.05. The hypothesis is therefore accepted. This means that good messages from members of society towards this technology increase the people's adoption of it and encourage them to use it.

H 4: erceived security enhances the trust of the people in the digital wallet significantly. Depending on the results from Table 3, it is evident that perceived security enhances the trust of the people in the digital wallet significantly as indicated by the reported p-value

(***), which is less than 0.05. The hypothesis is therefore accepted. This may mean that safety is a determinant factor in the use of digital wallets. Individuals who think that digital wallets are safe and reliable are most likely to use them without fear. Trust arises because individuals are convinced that their data will not be hacked and that they can transact digitally without encountering threats. This can also be utilized as an alternative motive for adoption because they are more prone to gain by enjoying the benefits that the digital wallet offers with confidence.

H5: Perceived privacy positively improves the trust of the study sample in the digital wallet. According to Table 3, perceived privacy has a positive and significant influence on enhancing the trust of the sample in the digital wallet, as shown by the p-value (***), which is less than 0.05. When the digital wallet provider highlights its commitment to high privacy standards, individuals can trust the provider and its concern for the safety of their information. Perceived privacy reduces individuals' concerns regarding the use of the digital wallet.

H6: Trust positively affects the adoption of digital wallets by the study sample individuals. By observing the results of Table 3, we find a positive and significant effect of trust between the study sample individuals and the digital wallet, as indicated by the p-value (***), which is less than 0.05. Therefore, the hypothesis is accepted. When individuals feel confident using the digital wallet, it helps alleviate concerns and anxiety associated with adopting and using it for online financial transactions.

H 7: Regret avoidance hurts the adoption of digital wallets by the study sample individuals. By observing the results of Table 3, we find that regret avoidance does not hurt the adoption of digital wallets by the study sample individuals, as indicated by the p-value (.474), which is greater than 0.05. Therefore, the hypothesis is rejected. Individuals will not fear regretting their decision to adopt the digital wallet; thus, they will likely adopt it.

H8: Technology anxiety hurts the adoption of digital wallets by the study sample individuals. By observing the results of Table 3, we find that technology anxiety does not hurt the adoption of digital wallets by the study sample individuals, as indicated by the p-value (.874), which is greater than 0.05. Therefore, the hypothesis is rejected. This means the study sample individuals do not feel technological anxiety regarding using the digital wallet.

7. Implications

The study offers a set of practical implications in Iraq and developing countries. First, attention should be focused on awareness and education campaigns to enhance users' understanding of the actual benefits of digital wallets. Second, enhancing trust by ensuring security and privacy is crucial in increasing adoption rates, which calls for legislation and policies that protect user data. Third, it is recommended to encourage social impact by offering usage-based rewards and incentives, which assist to diffuse their pleasant experiences to others.

8. Limitations

Although the noteworthy study findings, some limitations should be taken into account. In the first place, the research was conducted on the basis of a quantitative approach where a questionnaire was employed, which was unable to capture the qualitative strength in observing the user's behaviour. Second, the size of sample was small compared to the whole population, which may determine generalizability of the study findings to other developing countries with different digital cultures. Third, the study did not control for contextual variables, such as education or income, that may influence adoption intention. Future studies are advised to use mixed methods, such as interviews or contextual analysis, to further build knowledge of the determinants influencing digital wallet adoption.

9. Conclusion

The current study aimed to examine the intention of individuals to use digital wallets in Iraq according to a dual-factor model that includes drivers and Inhibitors. Using structural equation modeling, the research found that drivers such as performance expectations, effort expectations, social influence, trust, perceived security, and perceived privacy significantly and positively influenced behavioural intention to use digital wallets. On the contrary, preventions such as techno-anxiety and regret avoidance did not present any significant adverse effects. These results underscore that the adoption of digital wallets in the Iraqi context depends to a large extent on perceived benefits and trust, among other concerns of interest regarding risk. Thus, enhancing trust, security, and convenience could be rather effective in promoting digital transformation in digital payments.

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