An Empirical Study on Predicting Employees' Acceptance of E-Banking in Iraq

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In the past few years, Iraqi employees have become increasingly ambitious to constantly use electronic financial transactions. The government Iraq has been seeking to apply electronic systems in government departments. Therefore, most employees' salaries have started to become electronic. However, this rapid shift from the manual processes to electronic methods has caused a number of problems. These include salary delay, hardware failure and employee fear of theft. This has led to a lack of confidence in the use of electronic transactions. Therefore, the motivation of this study is to find reasons for the problem of why some employers use electronic banking systems, while others do not. This empirical study sought to extend the technology acceptance model to determine the key factors that hamper the full application of electronic financial transaction methods in Iraq. For this purpose, the data was gathered from the employees in the Ministry of Higher Education and Scientific Research as well as Ministry of Education, who have experience in online transactions and ATMs. The findings revealed that four out of eleven hypotheses show no significant impact on e-banking services' acceptance. In summation, factors such as accessibility, usefulness, trust and ease of use will enhance electronic banking services' acceptance.

Key words: *SEM-PLS, e-banking services, ATM, acceptance.*

Introduction

In the present era, the Information Technology (IT) is turning into a significant factor in the future of banking development. It influences banks' marketing and business strategies. Lustsik (2003) argued that e-developments are progressing rapidly in every aspect of financial markets and financial intermediation, such as e-brokering, e-banking, e-money, e-exchange, e-finance, e-supervision and even e-insurance. Dhandayuthapani and Selvachandra (2013) indicated that along with the introduction of new ideal business plans, IT is progressively improving the banking industry's services. Therefore, the banking sector has started to invest in IT in order to achieve cost savings and enhance customer satisfaction (Adewoye, 2013).

Electronic banking was established in the mid-1990s and became more important (Allen, McAndrews, & Strahan, 2002). Recently, in the financial services organisations, electronic banking has evolved into one of the significant tools of information distribution. The term electronic banking refers to *'the delivery of banks' information and services by banks to customers via different delivery platforms that can be used with different terminal devices, such as personal computers and mobile phones with browser or desktop software, telephones or digital televisions'*(Daniel, 1999). Besides, banks have also invested in the Automated Teller Machine (ATM) (Ajayi & Enitilo, 2016). Automatic Teller Machines (ATMs) are widely adopted by banks all over the world. They offering extensive benefits to both depositors and banks. ATMs provide convenience to the depositors to withdraw money outside of banking hours (Olatokun & Igbinedion, 2009).

Motivation of the Study

In the past few years, the income of Iraqi citizens has increased dramatically due to the high price of oil and increased productivity. This increment encouraged local and international banks to invest in Iraq, enhance their services and delivery good, quality services for their customers. Until 2016, most of the banks in Iraq did not exploit modern technologies by implementing electronic services for their customers (Riyadh, Sukoharsono, & Baridwan, 2016). Recently, the government encouraged citizens to use electronic means in their daily dealings, including banking operations. Therefore, banks, whether they are in the private sector or the government, sought to develop their services by taking advantage of modern technology by providing their services electronically. When the Iraqi government turned all the salaries of their employees to banks, it helped exploit these techniques in banks.
However, there were many problems during the implementation of electronic banking services. Examples include, delayed salaries, malfunctioning ATMs, lack of sufficient money in ATMs and fear of theft. These and other issues may make many government institutions and citizens uncomfortable when using or continuing to use electronic methods in day-to-day

transactions. Furthermore, there are no empirical studies investigating factors that may hinder citizens, especially employees, from continuing to use electronic methods, such as electronic banking, in their daily lives. This may lead to the failure of e-banking systems. Many provinces in Iraq have experiences with failure and resistance to the use of modern technologies by their employees (Al-khafaji, 2016).

This area is importance to the economy of the government. There are few studies in Iraq that have focused on the determining factors that may lead to failure or success in the application or adoption of electronic banking among the government employees. Therefore, the current study seeks to scrutinise the Technology Acceptance Model (TAM) through the investigation of issues leading to the adoption of electronic banking in Iraq.

Related Works

A. *Definition of electronic banking*
Electronic banking has been defined in many ways. Daniel (1999) defined it as the electronic services that are delivered by banks to their customers through several available electronic platforms, for instance, mobile phones and personal computers. In the same context, Pikkarainen, Pikkarainen, Karjaluoto and Pahnila (2004) stated a general definition of the electronic banking: ' an internet portal through which customers can use different kinds of banking services ranging from bill payment to making investments'. In general, electronic banking refers to the use of telecommunications and computers for transactions, rather than human interactions (Nimako, Gyamfi, & Wandaogou, 2013). Banks around the world use electronic banking as a one of the cheapest channels to deliver banking services.

Online banking services empower the banks to establish and enhance their customer relationships (Robinson, 2000). From the bank's perspective, the main benefits of electronic banking services are the enhanced responsiveness and better branding in the market. Other benefits are measurable in monetary terms. From the customer's perspective, the introduction of an easy tool for money management and time saving through the automation of banking services has significant benefits (Baten & Kamil, 2010).

B. *Electronic banking studies*
Since the nineties, the emergence of electronic banking into a significant channel for customers and banks has become more interesting area in the research context. Thus, researchers across the world have different perspectives. For instance, Liébana-Cabanillas, Muñoz-Leiva and Rejón-Guardia (2013) investigated electronic banking services as a determinant of customer satisfaction. They determined that all the factors (such as ease of use, trust, usefulness and accessibility) affect customer satisfaction in using e-banking services. In a similar study, Ahmad and Al-Zu'bi (2011) found that adoption of e-banking

services (involving speed, privacy, security, fees and charges, convenience and accessibility) positively influence the word of mouth (WOM), customer loyalty and customer satisfaction of Jordanian commercial banks. Toor, Hunain, Hussain, Ali and Shahid (2016) asserted the significance of customer satisfaction for the survival of organisations in the world. In their empirical research on the determinants of customer satisfaction in Pakistani banks, they found that service quality is a substantial determinant of customer satisfaction. Their findings suggested that offering better-quality services leads to gains and competitive advances.

Another study also focused on e-banking but was based on the perspective of bank staff. This study was conducted by Riyadh et al. (2016), who investigated crucial factors. These factors included perceived IT beliefs, perceived usefulness, perceived ease of use, attitudes and intentions and task technology fit in the acceptance of information technology in Iraqi Banks. The study found that these factors were not affected by the employees' perspectives of acceptance for the use of information technology in the bank. In the same context, Samar, Ghani and Alnaser (2017) determine that perceived ease of use, perceived usefulness and attitudes are the key determinants of promoting e-banking and significant factors that influence customers' intentions to adopt electronic banking in Pakistan.

Moreover, the study of Ajayi and Enitilo (2016) examined the influence of electronic banking on bank performance. They found that electronic banking components, such as internet banking, mobile banking and automated teller machines, influenced bank performance. Skvarciany and Jurevičienė (2018) also concentrated on e-banking in relation to trust. They found that trust significantly determines the adoption of information and communication technology. Their study explores which factors lead customers to trust e-banking. Additionally, Odumeru (2012), realising the lack of popularity of e-banking in developing countries, conducted a practical study in Nigeria to determine the important factors of e-banking acceptance. The results revealed that acceptance of e-banking in Nigeria is strongly influenced by the perceived risk, perceived ease of use, perceived benefits, perceived enjoyment, educational background, age and income. As stated earlier, scarcity of empirical studies focusing the adoption of the e-banking in developing countries, including Iraq, necessitates the conduction of research. Thus, the present study aims to fill the gap and contribute to the existing field of knowledge through investigation of relationships between several factors and customer adoption of e-banking in Iraq.

C. Technology acceptance model

Though information technology and communication have grown and integrated into professional and users' lives, there is still an open question regarding its acceptance or rejection (Marangunić & Granić, 2015). In recent decades, to address this question, several researchers have developed theories for the effective use of the Technology Acceptance Model (TAM). A quarter of a century ago, the TAM model was introduced by Fred Davis.

TAM is widely adopted by researchers in determining the factors of users' technology acceptance. Through TAM, two variables called perceived usefulness and ease of use assume a mediating role in the complex relationship between potential system usage and system characteristics (external variables) (Davis, 1987).

TAM successfully predicts and explains several aspects of IS adoption and user acceptance. However, researchers did not find it to be without weaknesses. Ma, Andersson and Streith (2005) found TAM inadequate in determining the relationship between users' acceptance and information system technology. This is because of the fact that perceived ease of use and perceived usefulness are considered explanatory factors. Therefore, the present study attempted to extend the TAM model for e-banking in Iraqi context.

Research Model and Hypotheses

The main objective of this study is to determine the factors that influence the acceptance of electronic banking services in the local provinces of Iraq. The literature discovered several factors affecting the acceptance and use of e-services, such as e-banking and e-government. This research considered four factors: perceived credibility, accessibility, trust, computer self-efficacy. Fig 1 depicts the developed research model.

Figure 1
Research Model
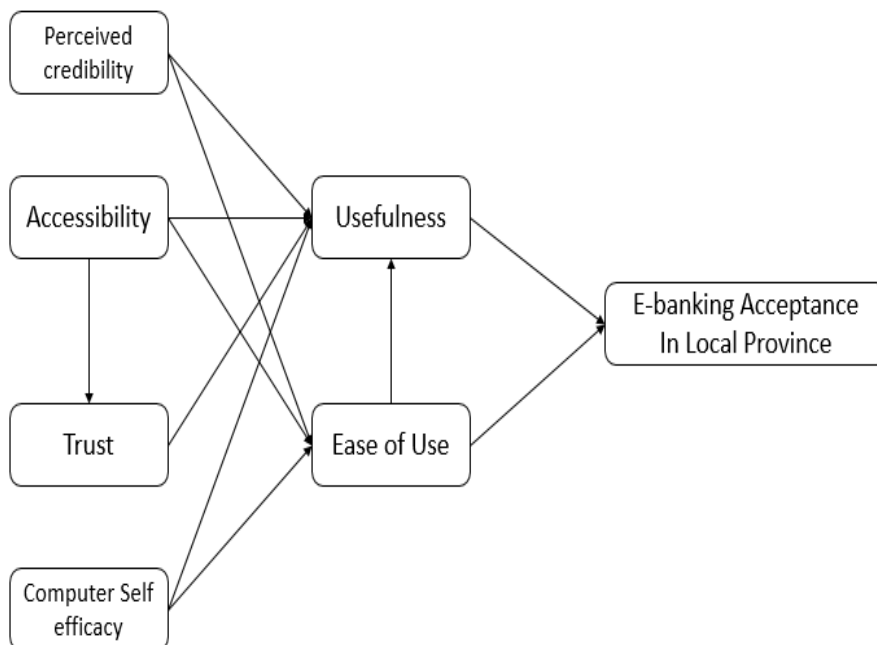
A. Theory factors: perceived usefulness and perceived ease of use

Several researchers in the information system field have consensus on the validity of TAM in predicting users' acceptance in several systems (Doll, Hendrickson, & Deng, 1998). Researchers have explored perceived ease of use and perceived usefulness and found that they positively influence the behavioural intention to use the system (Chin & Todd, 1995; Doll et al., 1998). Furthermore, perceived ease of use positively influences perceived usefulness (Lee, 2006). In the TAM field, several researchers have tested the hypotheses for perceived ease of use and perceived usefulness (Srite, 2006). Thus, the following hypotheses are developed:

Hypothesis 1: perceived usefulness significantly influences government employees' acceptance of e-banking services.
Hypothesis 2: perceived ease of use significantly influences government employees' acceptance of e-banking services.
Hypothesis 3: perceived ease of use significantly influences government employees' perceived usefulness of e-banking services.

B. Hypotheses on factors influencing perceived ease of use and perceived usefulness

1) Computer self-effect

Academicians and researchers defined computer self-efficacy as a person's ability to use the computer for the sake of information technology use (Compeau & Higgins, 1995; Hill, Smith, & Mann, 1986). In fact, computer self-efficacy is not related to the individuals' past actions, but to the judgements of their future actions (Hayashi, Chen, Ryan, & Wu, 2004). Furthermore, computer self-efficacy is found to not be directly related to several computer skills, such as document formatting, diskette formatting and entering formulas into spreadsheets. Relatively, it involves the judgements involved in the individual's capabilities to apply skills to complex tasks at broader level.

Davis (1987) proposed the relationship between perceived ease of use and computer self-efficacy based on theoretical argument. Literature has also provided evidence for the existence of a causal link between perceived use and computer self-efficacy (Amin, 1970) (Agarwal & Prasad, 1999). In Malaysia, Hanudin found that computer self-efficacy positively influences both perceived ease of use and usefulness of internet banking among young intellectuals. In Nigeria, Oni and Ayo (2010) found that computer self-efficacy positively influences perceived ease of use and perceived usefulness of e-banking. Thus, literature has revealed the critical role of computer self-efficacy in terms of its influence on perceived ease of use and perceived usefulness (Amin, 1970; Oni & Ayo, 2010). Thus, the following hypotheses are developed:

Hypothesis 4: Computer self-efficacy significantly influences an employee's perceptions of usefulness when using e-banking services in the province.

Hypothesis 5: Computer self-efficacy significantly influences an employee's perceptions of ease when using e-banking services in the province.

2) *Perceived credibility*

This study considers perceived credibility of the perception of protection of users' personal data and transaction details against illegal entrance. (Amin) argued that perceived credibility refers to the privacy and security as key indicators of behavioural intentions to use information systems. By definition, security refers to the protection of information systems from illegal outflows or instructions. Privacy is the protection of data collected without the users' consent during their interactions with the internet. Oni and Ayo empirically proved that perceived credibility positively influence perceived usefulness and ease of use (Novak, Hoffman, & Peralta, 1999). Additionally, Rabaai, Zogheib, AlShatti and AlJamal (2017) discovered the positive relationship between perceived credibility and both perceived usefulness and perceived ease of use. Therefore, to investigate the relationship between users' acceptance of e-banking services, this study makes the following hypotheses:

Hypothesis 6: Perceived credibility significantly influences the employee's perceptions of usefulness when using e-banking services in the province.

Hypothesis 7: Perceived credibility will significantly influence an employee's perceptions of the ease of using e-banking services in the province.

3) *Trust*

In the field of marketing research, researchers have underlined the significance of trust among the parties as an instrument favouring the endurance of the relationship. This is an issue of great concern in the business environment (Bigne & Blesa, 2003).

In an online marketplace, trust is a belief that an organisation will complete its responsibilities without getting any benefit from them (Ranaweera, McDougall, & Bansal, 2005). Perceived lack of trust increases on the internet, particularly in financial transactions (Gefen, 2000; Pitta, Franzak, & Fowler, 2006). Therefore, financial institutions must consider this issue in order to reduce user uncertainty and generate positive beliefs about the organisation's behaviour (Bart, Shankar, Sultan, & Urban, 2005; Ganesan, 1994). Past research discovered the positive relationship between trust and perceived usefulness of e-commerce (Gefen, Karahanna, & Straub, 2003; Shin, 2008). Moreover, the more the users' trust in a website, the more time effective its use. Users will undertake cognitive efforts to examine the website's details and information quality (Munoz-Leiva, Hernández-Méndez, &

Sánchez-Fernández, 2012). Previous studies have provided evidence for the effect of trust on usefulness (Sun, 2010; Yoon, 2009; Zhou, 2011). Therefore, the present study establish the following hypothesis:

Hypothesis 8: Trust will significantly influence an employee's perceptions of usefulness of e-banking services in the province.

4) Accessibility

Different authors define the acceptability in different dimensions. For instance, Rice and Shook (Rice & Shook, 1988) define accessibility in four dimensions: system reliability, access to information, accessibility of computer equipment and ease in learning the language of use. According to Karahanna and Straub (1999), accessibility encompasses the physical dimension related to system usability and accessibility. Other studies used ease of access for disabled persons, such as the hearing impaired and blind etc.

This study understands the accessibility of the information in view of ease of access to e-banking applications as well as accessibility to transactions. Authors stated different points of view. Some stated that usability determines perceived trust and broadens the concept of accessibility (Christine Roy, Dewit, & Aubert, 2001). Saeednia and Abdollahi (2012) revealed the positive and direct relationship between usability and trust. This implies differences in the relationship based on the ease of access levels that users perceive regarding electronic banking services. Thus, the following hypothesis is developed:

Hypothesis 9: Accessibility will significantly influence an employee's perceptions of trust when using e-banking services in the province.

Numerous studies have provided evidence that better accessibility to information leads to increased ease of use and information usage (Lin & Lu, 2000; Wyer & Srull, 1986). In addition, Tan and Teo (2000), Wixom and Todd (2005) and Poon (2007) revealed that users that have higher accessibility to electronic banking have higher ease of use and adopt the technological innovations early. Cyr's model emphasised the significance of navigation systems that can help the users' access to electronic systems (Cyr, 2008). Thus, this study develops the following hypothesis:

Hypothesis 10: Accessibility will significantly influence an employee's perceptions of ease of use of e-banking services in the province.

Moreover, Fonchamnyo (2013) found that higher accessibility to electronic banking services results in high perceived usefulness and high usage of services. Therefore, this study proposes following hypothesis:

Hypothesis 11: Accessibility will significantly influence an employee's perceptions of usefulness of e-banking services in the province.

In conclusion, Table I summarises the above hypothesis and the relationships between the endogenous and exogenous variables in the path model.

Table 1
Hypotheses to analyse

Hypothesis No	Relationship
H1	Usefulness → E-banking acceptance in the province
H2	Ease of use → E-banking acceptance in the province
H3	Ease of Use → Usefulness
H4	Computer Self-efficacy → Usefulness
H5	Computer Self-efficacy → Ease of use
H6	Credibility → Usefulness
H7	Credibility → Ease of use
H8	Trust → Usefulness
H9	Accessibility → Trust
H10	Accessibility → Ese of use
H11	Accessibility → Usefulness

5) Data collection and research variables

This study selected a sample of employees who work in two main educational institutions (Technical Institute and Thi-Qar University) in Thi-Qar province. These educational institutions are among the first agencies in the province to transfer staff salaries electronically. One hundred and fifty-one self-administrative questionnaires were distributed randomly among these two institutions. This study developed survey instruments by using the validated items of electronic banking from past research to access the theoretical constructs of the extended TAM model. This was done by using scales of acceptance, perceived ease of use and perceived usefulness from Davis (Davis, 1987). Scales measuring credibility were developed using the measurement of Yang (2007). Scales used for measuring computer self-efficacy were adopted from the measurement proposed by Al-Ammary (2011) and Lee (2006). Scales used for measuring accessibility were developed using the measures of Liébana-Cabanillas et al. (2013). Finally, scales used for measuring trust were also adopted from the measurement proposed by (Liébana-Cabanillas et al., 2013).

6) Data analysis and results

This study used Smart-PLS 3.0 and applied the Partial Least Square (PLS) to test the model. PLS is a structure equation modelling technique to analyse the items loaded on the constructs by estimating all the paths (Chiu, Hsu, Sun, Lin, & Sun, 2005). Data analysis is processed in two steps. The first step was the evaluation of measurement model to validate the constructs' validity and reliability. In second step, the hypotheses testing was done to test the path of coefficients.

A. Assessing the measurement model

According to Hair et al. (Hair, Risher, Sarstedt, & Ringle, 2019), the first step in evaluating PLS-SEM results involves examining the measurement models, where the model strength is measured by its validity and reliability. In the assessment of the reflective measurement model, the first step involves examining the indicator loadings, as referred to by Hair et al.(Hair Jr, Hult, Ringle, & Sarstedt, 2016). Loadings above 0.7 are recommended, as they indicate that the construct explains more than 50 percent of the indicator's variance, thus providing acceptable item reliability. As shown in Fig 2, all the items in the proposed model above are equal to the threshold that is recommended by Hair et al. (2014).

Figure 2

E-banking measurement model
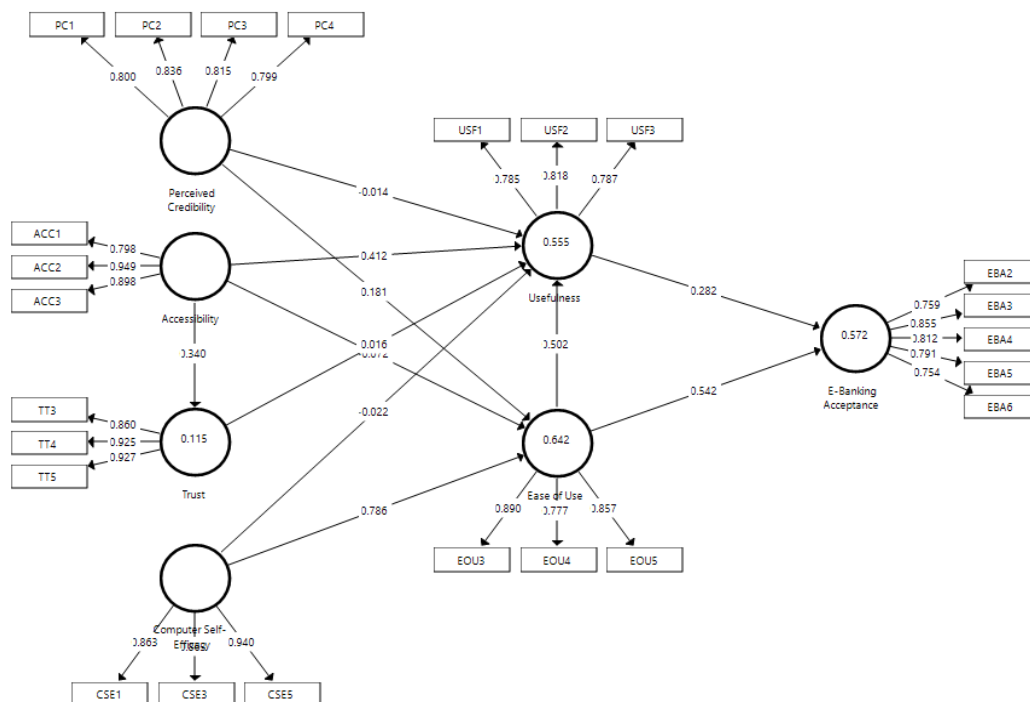
The second step involves the assessment of internal consistency reliability using Joreskog's (1971) reliability. The composite reliability of the different measures ranged from 0.840 to

0.931. This exceed the recommended cut-off value of 0.7 for each construct. Cronbach's alpha is one of the measures of consistent internal reliability, producing lower values than composite reliability and assuming similar thresholds (Hair et al., 2019). In this study, all Cronbach's alpha values for the exogenous and endogenous constructs are higher than 0.7, as demonstrated in Table II.

Table 2

Constructs of reliability and validity

Construct	Cronbach's alpha	Composite reliability	Average variance extracted (AVE)
Accessibility	0.858	0.914	0.781
Computer self-efficacy	0.867	0.919	0.791
E-banking acceptance	0.854	0.895	0.632
Ease of use	0.794	0.880	0.711
Perceived credibility	0.832	0.886	0.660
Trust	0.888	0.931	0.818
Usefulness	0.718	0.840	0.636

In the third step, the reflective measurement model assessment involves the convergent validity of each construct's measure. In convergent validity, a construct explains the variance of its items. The average variance extracted (AVE) metrically evaluates the constructs' convergent validity for all items of constructs. Table II shows that AVE values range from 0.632 to 0.818. This is above the recommended range (0.50), thereby establishing convergent validity for each construct.

B. Assessing the structural model

The satisfactory measurement model assessment leads to the assessment of structural models in the evaluation of PLS-SEM results (Hair et al., 2019). Standard assessment criteria include the coefficient of determination (R^2), the blindfolding-based cross-validated redundancy measure (Q^2) and the statistical significance and relevance of the path coefficients. Moreover, Al-khafaji, Azeez, Alwan and Al-Shaher (2018) stated that the structural model was used to estimate and evaluate the formulated hypotheses. Results in Table III demonstrated that four hypotheses out of eleven were not supported.

Table 3

Hypotheses Results

Hypothesis	Relationship	t-value	p-value	Decision
H1	Usefulness → E-banking acceptance in province	3.526	0.000	Supported
H2	Ease of use → E-banking acceptance in province	7.331	0.000	Supported
H3	Ease of use → Usefulness	3.448	0.001	Supported
H4	Computer self-efficacy → Usefulness	0.162	0.872	Not supported
H5	Computer self-efficacy → Ease of use	51.618	0.000	Supported
H6	Credibility → Usefulness	0.166	0.868	Not supported
H7	Credibility → ease of use	2.064	0.040	Supported
H8	Trust → Usefulness	0.269	0.788	Not supported
H9	Accessibility → Trust	3.783	0.000	Supported
H10	Accessibility → Ease of use	0.788	0.431	Not supported
H11	Accessibility → Usefulness	4.258	0.000	Supported

Specific hypotheses

H4 (t-value, 0.162), H6 (t-value, 0.166), H8 (t-value, 0.269) and H10 (t-value, 0.788) are not supported. The outcome for analysis phases also indicated that usefulness and ease of use regarding e-banking acceptance are supported. This result is also supported by Al-Ammary (2011), who stated that perceived ease of use and perceived usefulness strongly influence the acceptance of new technologies. On the other hand, trust was directly influenced by accessibility. Thus, H9 is supported. Furthermore, the results show that ease of use was directly influenced by credibility and computer self-efficacy, while accessibility has no effect on this factor. The value of R^2 explains an acceptable prediction level for endogenous variables, such as e-banking, ease of use, trust and usefulness. The R^2 of a chief target construct of the current empirical study (e-banking acceptance in a local province) has an acceptable value of 0.572. Meanwhile, the R^2 for values for ease of use, trust and usefulness

were 0.642,0.115 and 0.555 respectively. This study supports the findings of previous studies using the Q square predictive relevancy measure, as indicated in Table IV.

Table 4
Evaluating effect size

Path	Constructs	R^2	Q^2	f^2	Decision
	E-banking	0.527	0.324		
	Ease of use	0.642	0.425		
	Trust	0.115	0.086		
	Usefulness	0.555	0.267		
H1	Usefulness → E-banking acceptance in province			0.109	Small
H2	Ease of use → E-banking acceptance in province			0.402	Large
H3	Ease of use → Usefulness			0.197	Medium
H4	Computer self-efficacy → Usefulness			0.000	Rejected
H5	Computer self-efficacy → Ease of use			1.371	Large
H6	Credibility → Usefulness			0.000	Rejected
H7	Credibility → Ease of use			0.058	Small
H8	Trust → Usefulness			0.000	Rejected
H9	Accessibility → Trust			0.130	Small
H10	Accessibility → Ese of use			0.008	Rejected
H11	Accessibility → Usefulness			0.200	Medium

Based on Hair et al. (2019), the last step in path model assessment is to obtain Q^2 and f^2 values. In smart PLS software, we get Q^2 via executing a blindfolding procedure. Omission distance (D) = 7 for e-banking (0.324), trust (0.086), usefulness (0.267) and ease of use (0.425). PLS scholars state that Q^2 values above zero indicate the predictive significance in

the path model. Researchers also assessed the effect size of (f^2) based on thresholds suggested by (Cohen, 2013). Table III shows that hypothesis H1, H7 and H9 are small while H3 and H11 showed medium degrees of effect. H2 and H5 depicted large degrees of effect.

Discussion and Conclusion

Most Iraqi financial institutions offer electronic banking services to their customers without knowing whether or not users will accept these new services. This may hinder the implementation of e-banking services and continuity when applying them. This raises a great need to identify the factors affecting e-banking acceptance. The current research contributes to the knowledge field through the investigation of the impact of several factors on user acceptance of new e-banking services. Specifically, this study determines the factors of e-banking acceptance. Several researchers have determined the factors of acceptance of new innovation, including e-banking. In continuation, this study extended the existing Technology Acceptance Model (TAM) by adding credibility, computer self-efficacy, trust and accessibility as determinants of the acceptance of e-banking. The findings revealed that four out of eleven hypotheses have no significant impact on e-banking services' acceptance. In sum up, factors such as trust, usefulness, ease of use and accessibility will enhance electronic banking services' acceptance. This study makes contributions for both managers and academics alike. Academically, this work draws attention to the neglected areas of marketing and information technology of Iraqi banking services. Currently, in the Iraq, there is a distinct lack of research studies. Unlike other countries, Iraq is one of the new countries concerning the application of e-banking services.

Along with electronic banking use, there is a need for several other reforms. These include the equal distribution of ATMs within and between Iraqi provinces to provide more accessibility for clients. In addition, there is still a need for more e-channels, such as e-transactions, credit card transactions and online utility bill payments. Banks are required to set up problem management systems to resolve transaction related issues. The current Iraqi infrastructure is insufficient to fulfil the e-banking technology requirements in the whole country. Therefore, the new government is required to play the major role in promoting basic infrastructure to promote e-banking. This may include the supply of the latest information and communication technology as well as electricity. In addition, legislation is required to protect e-transactions.

The current study has several limitations and potential areas for future study. This study ignores the influence of socio-cultural factors and gender on the acceptance of e-banking. It only focuses on one Iraqi province (Thai-Qar). Therefore, future studies may focus on other areas of Iraqi provinces. To increase the accuracy of findings, researchers can increase the number of samples. Future studies can gather data from other parts of the world.

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