The Effect of Individual Factors on the Adoption of Mobile Banking Within Banks in Iraq

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The business of banking has dramatically changed during the past decade. Swift technological progress has impacted the banking sector worldwide. The m-banking system is among the greatest technological developments in the banking sector. In the context of banking, the adoption and decision to utilise m-banking is influenced by a number of individual determinants. In spite of the wide-ranging availability of academic writing, studies pertaining to the individual circumstances of developing countries is inadequate. Iraqi m-banking is in its formative phase, hence this study offers important directions for banks in Iraq to substantively improve their technological services by understanding critical individual factors. Therefore, this study aims to design and develop an m-banking model using individual circumstances. In order to obtain the objectives of this current research, the researcher employed a quantitative method. A autonomously managed survey questionnaire was carried out on 210 chosen banks employees in Iraq. This study utilises the SPSS as an instrument to analyse the study. The core determinants ascertained to have a marked favourable part in the adoption of m-banking adoption entail: Knowledge and Skills, Attitude Towards, Trust, and Motivation. The outcomes possess significant consequences and are immensely valuable for the researchers in the Academia and banking sector professionals.

Key words: *M-banking, Individual Context, mobile banking adoption, Iraqi banks.*

Introduction

The continuous improvements in computer technological innovation have motivated numerous enterprises to employ innovative techniques of connecting with their clients in order to improve their services, to lower expenditures, in addition to maintaining advantaged edge. The constant and ongoing quest by the banking industry for the means of utilising technology towards achieving the aforementioned objectives, in addition to the development of improved suitable techniques of banking for the clients. Swift technological progress has impacted the banking sector worldwide. The inception of m-banking as an impactful technological invention in the banking industry entails the "type of execution of financial services which the customer uses mobile communication techniques in conjunction with mobile devices" (Pousttchi & Schurig, 2004).

The emergence of mobile banking serves as a conduit for autonomous online banking transaction service delivery for banks, assists the presentation of data by banks, in addition to providing solutions for bank customers in relation to customer convenience via internet services technology. However, the m-banking adoption in Iraq is still in its infancy. The objective of this study is to examine the present condition of m-banking practice in Iraq using individual context, to extend TOE framework by identifying the crucial determinants which assist in the acceptance of m-banking, and to propose a model of m-banking to adopt within the banking industry of Iraq.

Despite the fact that information technology possesses significant influence in the economical condition and business markets worldwide, there remains certain nations that do not possess m-banking system, and Iraq is one of these countries. Establishments such as the banking and financial sectors promote the utilisation of the mobile phones to their clients in their banking transactions. However, the adverse effects on the the popularity of banking service innovation has made it important to present variables that motivate the adoption of m-banking services in developed and developing countries (Hanafizadeh, Behboudi, Koshksaray, & Tabar, 2014).

The utilisation of m-banking within banks in Iraq needs financial funding in addition to further research initiatives, to inject significant transformation to almost all of the constituents of banking (Chaouali, Souiden, & Ladhari, 2017). Moreover, the perceived views regarding the utilisation of mobile banking applications might vary among the banking professionals' community, adding to the complexity of utilising the innovative creation within a diverse banking scheme (Govender & Sihlali, 2014). Therefore, the possibility of the clients of banks to remain oblivious of m-banking, and not employ it fully is probable. Obviously, the realisation of the level of m-banking adoption by banks, and the study of motivational aspects influencing the intention to utilise it for financial processes is essential.

An Overview of M-Banking in Iraq

Iraq is among the developing countries in the Middle East of Western Asia, and has encountered different crises in the last few decades. Some of its crises include the first and second Gulf Wars, U.S. occupations of Iraq (2003 to 2011), and various economic sanctions. All these issues have negatively affected the infrastructural development of the country with respect to education, electricity, oil and gas, banking and telecommunications (Yousif Al-Hakim & Hassan, 2013).

Escalating wireless technology utilisation illustrates that Iraqis are often encouraged to utilise mobile technological knowledge. The Economics (2013) announced that there were 18,611,300 mobile and fixed-line telephone customers in Iraq in 2008. The telephone customers comprise of mobile and fixed-line customers. Iraq is a community that arose after conflicts events. The internet and mobile phone gadgets are extensively utilised by the youth. The rising availability of mobile gadgets alongside internet services users have resulted m-banking becoming conventional in Iraq.

 Hence, it is essential for Iraqi businesses to engage in investing in this field and transform the user purchasing attitude for the purpose of exploring this new marketplace.
The Ministry of Communications in Iraq was initially responsible for the function of seeing to the affairs of internet and telecommunications services. However, the ministry encountered several challenges due to the crises that erupted in Iraq from 1991 to 2002. The efforts of the Ministry to revive the information technology and telecommunications sector however, proved abortive since many of the foreign companies were not willing to go against the sanctions that had been imposed on Iraq. By the end of 2002, the telecommunications sector and information technology were regarded to be the weakest of all the sectors in the Middle East (Al-Azzawi, 2011; Yousif Al-Hakim & Hassan, 2013).

The Director of the Commercial Banks of Iraq, Hamdia Aljaff, indicated that the banking system in Iraq is still in its infancy, and there is a need to adopt ICT to implement Internet usage in the banking sector (Iraqdirectory, 2012). In fact, there has been a lack of application of IT within the development of businesses generally, and with banking in particular in Iraq. This has adversely affected the satisfactory relationship between the banks and their local and foreign customers (US Department of Defense, 2010). Apart from this, the Central Bank of Iraq (CBI) has been advocating for a drastic reduction in the use of physical cash due to geographical distances and inherent problems with regards to security that often leads to complications and hazardous situations in transferring money nationwide. Thus, the primary objective of Iraqi online banking is to assist in automating the checks honouring system, in

addition to wages payment, activation of internet banking activities and electronic cards for the purpose of making bank accounts liquid and the ease movement of large funds without time and place restrictions (CBI, 2013).

However, the Iraqi government has made several efforts in the past to upgrade the internet facilities, and other telecommunications infrastructure by allocating USD 500 million without achieving the desired objectives due to the continuous external conflicts and economic sanctions (Heshmati & Al-Hammadany, 2014; Mawtani, 2011). Additionally, the government has also put a lot of initiatives in place so as to facilitate easy connection of Iraqi people to the rest of the world through high speed internet, voice over internet protocol (VOIP) and other new internet services in order to simplify and make businesses more efficient (Heshmati & Al-Hammadany, 2014). Moreover, the government of Iraqi has also tried to ensure that the internet banking sector is actively working since the sector is considered to be one of the main private sectors that is driving the economy of the country (Cabinet, 2012). The government of Iraq has equally asserted that, with the assistance of international companies like Microsoft, Internet banking transactions could be developed faster. This assertion was made since Microsoft has expressed its intention to help Iraq develop its electronic banking system (Alsabaah, 2012; Alsumarianews, 2013).

In simple words, due to lack of infrastructures and high costs of the wireless internet and low-speed internet of mobile phone, and lack of permanent connection to the internet in Iraq, mobile banking has been facing substantial problems. At the same time, there are people who challenge the adoption of new technologies due to reasons such as lack of familiarity, uncertainty, and lack of security and the costs relating to banking transactions. Unfortunately, in Iraq the speed of the adoption of electronic services is less than that in other countries. In m-banking, the client does not just perform bank transactions, but additionally interacts along with the bank databases, data files, records and other means to obtain appropriate details. Since the data at the client's end and the database at the server's end is highly sensitive, and the mobile phones are weak to risks and attacks, security is the main area of concern (He, Chan, & Guizani, 2015). In addition, this study also attempts to ascertain the determinants which affect the m-banking adoption between the banks in Iraq.

Banking Industry in Iraq

The banking sector is Iraqi's major financial system. A huge amount of currency is held by the sector, and managed by different banking and private institutions as well as the government. The banking industry assets is worth approximately 329 trillion Iraqi dinars, which represents 318 percent of the entire GDP of Iraq. Iraqi private banks satisfy the levels of need with their

services offered to the society. Iraqi banking history dates back to the 1930s, a time when the currency board of Iraq was established in London. The responsibility of the board was to pass on the note issuance, while maintaining the Iraq dinar. A huge number of private and foreign banks began operation in Iraq during the mid-1930s, and thirty years later, the banks and even the insurance organisations were all nationalised by the Iraqi government.

The Rafidain bank, (a major bank in Iraq) was also nationalised as well as the Rashid bank. Both banks enjoyed large profits when financial control was overseen by the government . The profitable period was amid the 1980s. There was later a need for these profits in 1990, amid the sanctions of the UN over Iraq. The government controlled and supervised the banking system from 1990 to the end of the authority of the Baath party. The sanction period, which was the early 1990s was when the government attempted to provide support to businesses in the private sector, through permitting local private banking to be a part of the banking sector. This was necessary for assisting in offsetting the impact of the economic boycott. During the second Gulf War (between year 2002 and 2003), the banking industry situation grew worse. The Baghdad stock exchange, Ministry of Finance, both Rashid bank and Rafidain bank as well as CBI were all relegated. Their financial condition almost collapsed. In 2003, the United States army invaded Iraq, which caused the collapse of the government, resulting in the urgent need for a new banking system.

The Coalition Provisional Authority, popularly known as CPA, observed the difference between the Iraq banking system and other countries. It was difficult to consider an Iraqi bank recovery based just on liquidity-driven profits. There was a high interest rate at 17 percent which CBI confirmed. The credit demand was very huge, and the major banking income source was just loans. Many Islamic banks went through terrible situations compared to other traditional banks. There were few banking experts, as just one Islamic bank existed in Iraq, which was the "Iraqi Islamic Bank for Development & Investment." There are different services provided by Iraqi banks, like banking associated with real estate as well as Real-Estate bank services. More services include:

- Savings accounts
- Time deposit
- Current accounts
- Short-term overdraft and bills facilities
- Advance payment and performance bonds
- Short-term loans and advances

Mobile Banking

Mobile Banking entails the transaction of banking services through the utilisation of mobile devices and phones. Banking services include balance checks, money transfers, payments, account transactions, and other services. M-banking is perceived to be an increment of currently present banking framework to increase its reach to consumers of the bank services (Krugel, 2007). M-banking has grown in popularity globally since it requires minimum to no framework. Mobile banking is equally prevalent where a large portion of the inhabitants in a country are without banks in their areas. In such locations, the locations of banks are situated mainly in the urban areas. This requires the clients to spend a huge amount of time traveling to reach the bank branch. In Kenya, Zain company has launched its own money transfer business, ZAP, and several additional African nations in 2009 did the same. EASYPAISA is also a money transfer service that was launched in Pakistan with the cooperation of Taameer Bank in Q4 2009. The state bank of India provides different services through mobile banking. These services include: access to opening accounts in banks, withdrawal and remittance, micro-finance, micro insurance (Tam & Oliveira, 2017).

Mobile Banking Adoption

There is an escalatin in the adoption of m-banking because of the dramatic technological improvement that the mobile industry has seen in the last decade (Shaikh & Karjaluoto, 2015). The amount of population worldwide that uses mobile phones is around two billion. This number is on the rise. The mobile phone has had a pervasive effect on individual's lifestyle. There has also been an important effect economically. This influence is about twice as large in the developed countries (Kones, 2014). Mobile Banking adoption means the employment of m-banking services solution to facilitate micropayments in electronic and mobile commerce transaction and point of sale. Mobile banking and m-commerce are very much related to each other, to be more precise, researchers suggest that mobile banking is part of m-commerce. The number of mobile devices users can be deducted from the number of customers using it. Dahlberg et al, (2002) concluded that the key elements which affect the satisfaction of customers were risk, perceived usefulness and trust. Poverty alleviation has been a major objective in several applications. This is how pervasive the effect of mobile phones in developed countries has been.

Any bank must be able to support different business strategies. The objective of those adopted strategies are to strengthen the services for customers, adopt different technologies and provide their services to the customers. A training time is required for the customers to adopt new technologies which is dependent upon the reliability, user friendliness and convenience of the

implemented technology. Customer information protection and confidentiality are the most effective attributes that directly impact mobile banking utilisation by customers. The performance of a bank is measured by the level of trust and reliability of services available to customers.

Individual factors that explain and decide the acceptance and implementation of m-banking has been studied using different models such as, Theory of Planned Behavior (TPB), model of diffusion innovation and the Technology Acceptance Model (TAM) alongside other relevant models. This research adopts TAM for that purpose because it is considered as one of the most utilised acceptance model in the studies related to m-banking (Chung & Kwon, 2009), Shaikh and Karjaluoto (2015). According to (Venkatesh & Davis, 2000) TAM is able to highlight 40% of the studied variances. TAM does not consider factors such as subjective norms and demographic. This research extends to the factor that TAM includes gender, education, age, subjective norms and income. Extensions to the TAM model was documented in works by Luarn and Lin (2005), they used TAM2 and included: the perception on self-efficacy, the perception on financial cost and the perception on credibility in studying the acceptance of m-banking.

Based on work by (Davis, 1989; Venkatesh, Morris, Davis, & Davis, 2003), the individual behavior towards an IS is measured by the system's user friendliness and usefulness. TAM generated a great amount of research. Some researchers believe that this model has reached the level of saturation, arguing that it is possible to build new models on the constructs of TAM (Ahmed, Almotairi, Ullah, & Alam, 2014; Tam & Oliveira, 2016).

Although literature showcases this model repeatedly, there are still inadequate studies in past research which examine user acceptance over different stages of technology adoption. Having a substantive understanding prior to and after the employment, can allow researchers to understand how attitudes of end users can be affected and changed. Therefore, more research in this area is needed. Where the TAM model can be applied in the different phases of IT adoption is to be included in the main phases of this research. Many studies have shown that the use of a technology acceptance model helps encourage user acceptance of m-banking (Albashrawi & Motiwalla, 2017; Cruz, Barretto Filgueiras Neto, Munoz-Gallego, & Laukkanen, 2010). Hence, TAM model is more suited towards the analysis aspect of technology adoption.

Factors Affecting M-Banking Adoption

Encompassed in the Individual setting 4 determinants constitute the impact of the adoption of m-banking systems. They entail: Knowledge and skills, Attitude toward, Trust, and Motivation.

Attitude Toward

An understanding of the behaviour of consumers pertaining m-banking adoption is essential to overcome the obstacles, in addition to obtaining an extensive adoption of progressive m-banking technologies. The ranking allocated by consumers on their convictions and behaviour towards the obstacles established the m-banking services. The schema in terms of the sameness of and differences in viewpoint terminated into utilising m-banking system, that ultimately led to plan of measures for the employment of action to keep the risks minimal. The absolute objective of the current research is to facilitate and promote dissemination of m-banking technology in the banking sector. The behaviours related to new technologies are constantly disregarded as an initial concerns for banks. The group responsible for the carrying out the adoption have been known to ignore the concerns of the system consumers, partially due to the limitations of time, in addition to the rigorous operationalisation due dates and time. Caused by the utilisation of m-banking in past endeavours, many banks have established prejudices opposing the adoption of m-banking (Nair & Fasal, 2017). Traditionally, it is believed that the behaviour will change in line with the changes in people's attitudes to motivate them to use these kind of systems. Therefore, the lack of personal interaction while performing m-banking transactions is a major concern for most users (Nor & Pearson, 2008), and this has actually created doubts in respect to the correct processing of their transactions. Hence, it is hypothesized that:

H1: Attitude towards will have a positive effect on the adoption m-banking within banks in Iraq.

Knowledge and Skills

Knowledge development and skills are significant constituents in the enhancement of the technology implementation process. The deferment of m-banking system utilisation is caused by the dearth or insufficiency of mobile competency amongst the bank's employees and users; lack of mobile phones ease of use, in addition to ignorance in m-banking applications. Low mobile proficiencies among users in the banks, inadequate latest hardware, in addition to the insufficient ability to use software and inferior knowledge about the new applications have on the whole added to the postponement of m-banking adoption. Regrettably, there are individuals

who are opposing the modernisation, and choose to remain in the traditional antiquated methods of implementation due to their inability or rejection in learning innovative matter, their reasoning is that they are extremely complicated or difficult or perplexing. Additionally, interfacing usability is considered a huge challenge that requires solutions in order for the actualisation of improvement to be obtained for the fruition of comprehensive m-banking scheme in Iraq. Therefore, m-banking applications should be user friendly for employees and the users in general to make it more effective (Alghamdi, 2015).

In addition, many of the users still lack confidence about the usage of internet for banking transactions, and are quite unaware of the benefits and importance of m-banking system. Importantly, they still regard m-banking as complex and are unwilling to utilise this advanced technological financial systems (Iraqdirectory, 2012; Mohsen, 2010). For as long as the internet business is based on individual knowledge and skills using high technology transactions that are not tangible (Al-majali, 2011), it will remain an issue in Iraq. Ezzi, (2014) in this regard asserts that there is every tendency that m-banking services in Gulf countries typically, and specifically in the Republic of Iraq, may continue to dwindle due to poor perceptions of m-banking users and/or due to lack of adequate skills in utilising technology to address their banking requirements. Hence, it is hypothesised that:

H2: Knowledge and skills will have a positive influence on the adoption of mobile banking within banks in Iraq.

Motivation

The term motivation originates from the Latin lexical item *movere*, signifying move or to drive. It is the power which consistently drives and implement actions. A more realistic denotation of motivation recommended by Demirci, (2007) "Motivation is a drive that holds one to act because human behavior is directed toward some goal". Numerous researchers contribute an independent determinant or objective oriented focus to this denotation (Hellriegel, Slocum, & Joyce, 1976). Hence motivation entails psychological processes which stimulate the excitement, orientation, and perseverance of objectively oriented endeavours. Motivation also entails the m-banking in comparison to conventional banking as discussed by Martins et al., (2014), this emphasizes the significance of individual trust as a crucial preliminary stage in forecasting M-banking utilisation. The development of customer trust in the m-banking technology is essential, and sustained via comprehension and alleviation of the real and conceived hazards. The extent of consumer trust in the face of security and privacy issues is reliant on a few determinants. Furthermore, Hanafizadeh et al. (2014) discovered trust as a significant preliminary indicator in explicating the adoption of m-banking. In the current study, trust is integrated into the model for forecasting objectives.

The absence of trust in m-banking is an issue for banks particularly in Iraq where the m-banking adoption is at its minimal (Alsumarianews, 2013). This is quite obvious because evidence has shown that despite the fact that the number of online users have increased in recent times, the majority of them are still hesitant to release their personal information through internet banking sites (Al-Ajam & Md Nor, 2015). Apart from this, the fear of hacking, phishing and news about online fraud have continued to intimidate users of internet banking (Shendi, 2011). In the Iraqi context for instance, a recent hacking incident, where hackers of Nigerian nationality had defrauded 12 Iraqi citizens to the tune of USD 2 million during correspondence via the Internet (Iraqi presidency, 2012) is an example of such risk, and this continues to pose threats to Iraqi people. Therefore, it is imperative to study trust as a construct, as it affects the level of attitude towards building greater confidence in   m-banking adoption. Thus, Hypothesis 4 which is developed entails:

H4: Trust will have a positive influence on the adoption of mobile banking within banks in Iraq.

Figure 1. Framework to Adopt M-Banking in Iraq
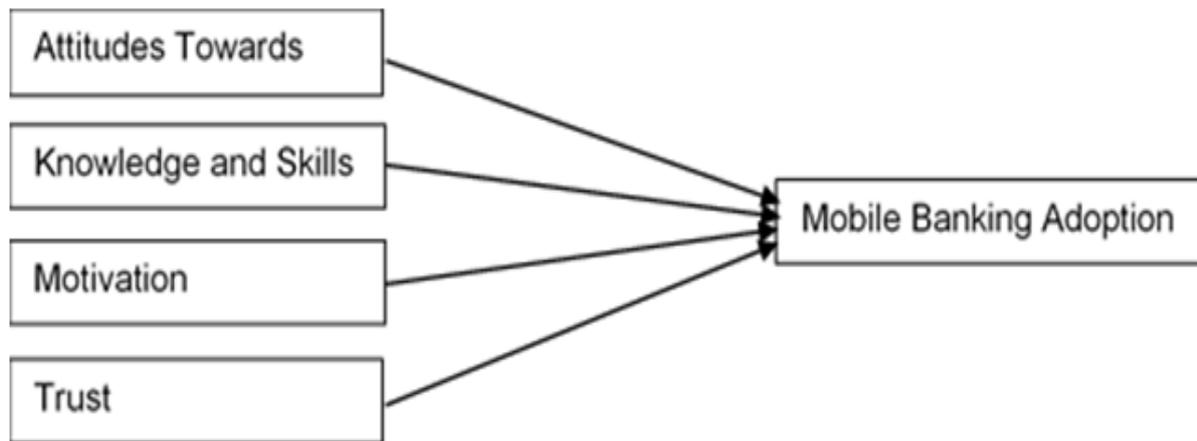
Methodology

The Survey method designed for the research was chosen for the investigation of the major determinants related with m-banking adoption in Iraqi banks. The entire items were adapted from past studies that are based on each factor's contents. Table 1 shows the operation of items and factors. The Five likert scale was utilised in this study to determine the level of agreement among the cohort of participants. The questionnaire was distributed among users of mobile banks services in three private banks in Iraq (International Development Bank, National Bank

of Iraq and Bank of Baghdad). A total of 210 responses has been received, and this is considered appropriate for any study. The questionnaire validity was assessed by taking some steps prior to the last distribution so as to ensure that all questions or particulars are flawless and correct. These steps involved sending the questionnaire to seven experts in the field. The experts were instructors in the Iraqi universities that have had experience using mobile banking systems. The questionnaire was evaluated for clarity, duplication, language, or contradiction. Before the distribution, some recommendations and comments were made, accompanied by the application of suitable modifications.

Table 1. Cronbach's Alpha and Number of Items

Factor	No. of items	Cronbach's Alpha	Reference
Attitude Towards	7	0724	(Deb, 2017) (Nicholas,2016)
Knowledge and Skills	5	0817	(Nicholas,2016)
Motivation	7	0716	(Deb,2017)
Trust	6	0727	[(Deb,2017) (Zhou,2015)

Results

For the analysis of the data, the statistical package for the social sciences (SPSS) was utilised. There were three demographic factors engaged in the data compilation. Table 2 below illustrates the descriptive statistics for individual demographic factor in the current research.

Table 2: Demographic of Respondents

Factors	Questions	Percent
Gender	Male	76.2%
	Female	23.8%
Age	18-25	12.9%
	26-30	13.3%
	31-35	36.7%
	36-40	35.2%
	Above 41	1.9%
Education	Diploma	16.2%
	Bachelor	67.1%
	Master Degree	16.2%
	PhD	.5%

Table 3: Correlations Analysis

		AT	KAS	MO	TR	MBA
AT	Pearson Correlation	1	.352**	.256**	.215**	.329**
	Sig. (2-tailed)		.000	.000	.002	.000
	N	210	210	210	210	210
KAS	Pearson Correlation	.352**	1	.197**	.124	.361**
	Sig. (2-tailed)	.000		.004	.073	.000
	N	210	210	210	210	210
MO	Pearson Correlation	.256**	.197**	1	.216**	.333**
	Sig. (2-tailed)	.000	.004		.002	.000
	N	210	210	210	210	210
TR	Pearson Correlation	.215**	.124	.216**	1	.425**
	Sig. (2-tailed)	.002	.073	.002		.000
	N	210	210	210	210	210
MBA	Pearson Correlation	.329**	.361**	.333**	.425**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	210	210	210	210	210

**. Correlation is significant at the 0.01 level (2-tailed).

Discussion

Iraq is one of the developing countries in the Middle East and has encountered different crises in the last few decades. Some of its crises include the first and second Gulf Wars, U.S. occupations of Iraq (2003 to 2011), and various economic sanctions. All these issues have negatively affected the infrastructural development of the country in respect to education, electricity, oil and gas, banking and telecommunications (Yousif Al-Hakim & Hassan, 2013). Aligned with past researches such as those conducted by (Ahmed, Almotairi, Ullah, & Alam, 2014; Chawla & Joshi, 2017; Sharma, Govindaluri, Al-Muharrami, & Tarhini, 2017), the multi-regression research findings illustrated that attitude toward possesses a favourable and important impact for adopting of m-banking with $\beta = .329$, and $p < 0.00$ 1. Hence, the outcomes substantiated Hypothesis H1 "Attitude towards will possess a favourable effect towards the adoption m-banking within banks in Iraq". Hence, the assurance that consumers utilising m-banking system must be integrated in the stage prior to execution is crucial, for their interests, concerns and also obstacles could be determined and corrected prior to when the new m-banking system is employed. If the people involved are ready for adopting the m-banking system, they will enhance the success of the system tremendously.

In order to achieve nationwide interoperability and obtain the benefits that m-banking system can offer, there is a need to significantly increase customer's adoption rates. However, it is also important to implement the right system in the correct manner in order to ensure the success of the project and protect the safety of the users. Customers who are part of such practices and who possess adequate skills and technical knowledge are better suited to use and implement m-banking system compared to customers who do not have skills and knowledge with such a system. It is vital to have training for skills and knowledge development, not only for the initial adoption and implementation of environmental practices but also for the continued operation and maintenance of such practices (Mullan et al., 2017). Hypothesis H2 studied the effects of skills and knowledge in adopting m-banking systems in Iraqi banks. In particular, it was suggested by the hypothesis that skills and knowledge would positively affect m-banking adoption. The analysis showed a statistically significant β coefficient (0. 361) having an acceptable significance level (P <0.001) in terms of the hypothesised direction. Thus, the results supported this hypothesis.

Motivation to use m-banking system has been highlighted as an important factor for m-banking adoption (Boonsiritomachai & Pitchayadejanant, 2017; Glavee-Geo et al., 2017; Sharma et al., 2017). The multi regression outcomes of this study indicated that Motivation has a positive and significant effect on m-banking adoption with β = .333, and p < 0.001. Thus, the results supported Hypothesis 3: "Motivation will have a positive effect on the adoption of m-banking within banks in Iraq." Motivation will positively affect m-banking adoption by banks. Therefore, motivated customers that are cognisant of the functions and facilities that m-banking offers through advertising and that distinguish the use of m-banking system compared with the traditional system. Furthermore, providing training and support such as call centres and 24 hours' services are highly important, because if customers value the benefits of technology in the financial field, they will reap the benefits of using of m-banking and facilitate its system.

Hypothesis H4 studied how Trust influences m-banking system adoption in Iraqi banks. In particular, it was suggested by the hypothesis that Trust positively affect m-banking adoption in Iraqi banks. The analysis showed a statistically significant β coefficient (0. 425) having an acceptable significance level (P <0.001) along the hypothesized direction. Thus, the results were in support of this hypothesis. Trust has been also demonstrated to be a significant factor in many studies (Ahmadi et al., 2016; Burucuoglu & Erdogan, 2016; Oliveira, Faria et al., 2014). Martins et al., (2014) also underline the importance of individual trust as a key antecedent in predicting M-banking usage. Customer trust in m-banking technology needs to be developed and maintained through a deeper understanding and the mitigation of actual and perceived risks. Thus, analysing this variable and its impact on the adoption of m-banking system appeared essential.

Conclusion

The objective of the current research was to analyse the individual determinants impacting on the m-banking service systems in the Iraqi banks. A questionnaire designed was based on previous studies that examined the proposed factors. Meanwhile, a survey study was carried out for the analysis of each influencing factor, as well as testing the reliability of the questionnaire. Based on the results, all hypotheses were proven to be significant. Thus, this study contributed to the fact that the individual factors are critical, and have significant impact on the m-banking adoption effect in Iraqi settings. With these findings, service providers and policy makers may be able to improve strategies and policies for future development, especially in mobile banking. This can also be a key reason behind the reason why a few bank customers are not ready to accept the mobile banking. With no obvious knowledge of the utilisation of m-banking, it is essential that banks exert additional efforts towards the improvement of their online banking services. This will likewise assist the bank officials to develop innovative ways which will probably impact their customers. For greater adoption, the banks have to leverage the competitiveness of the establishment within the market sector. Additionally, when these antecedents are being ascertained, the banks can develop and enhance the relationships they wish to create with their customers. Future studies can be applied with other contexts, such as communication, for the adoption of this new technology. Moreover, the significance of this study model is that it can be used to extend the TOE framework for the adoption of the m-banking system.

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