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DETERMINING CRITICAL SUCCESS FACTORS OF MOBILE BANKING ADOPTION IN IRAQ

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Abstract:

The purpose behind using Mobile banking (M-banking) may be described as one of the services offered by a bank or other financial organization that enables its clients to do a range of banking activities using a mobile device, like a tablet, personal digital assistant or smart phone . Identifying the elements influencing the uptake of mobile banking is the aim of this article. An expanded Technology Acceptance Model was used to build a conceptual model that would help achieve the aforementioned goal (TAM). The study recruited 300 m-banking users in Iraq who participated in a questionnaire survey as respondents. Using SPSS, the basic data gathered were examined. According to the study, there is empirical support for a favorable association between perceived utility, simplicity of use, perceived credibility, and consumer awareness of E-banking. To improve service delivery and increase receptivity to mobile banking services, it is advised that banks in Iraq make a significant investment in mobile banking.

Keywords: Mobile banking, m-banking, extended TAM, mobile banking adoption, consumers, Iraq

INTRODUCTION

The term "M-banking" describes the adoption of a mobile or other cellular technology, like a tablet or Personal Digital Assistant (PDA), to conduct online banking operations anywhere and anytime. There are three common ways for mobile banking to function across all major mobile providers: SMS messaging, mobile web, or apps. The easiest is developed mobile SMS text and alert, which enables users to view account details or transfer funds by text message. The other mobile banking method is mobile web, which works similarly to online account access from a personal computer. With this option, users may check account balances, pay bills, and transfer money by simply connecting into their accounts using a mobile web browser. For comprehensive banking capability without needing to utilize a mobile browser, Android, iPhone, and Blackberry mobile banking programs link the user directly to the bank server. (2015) Mashhour and Saleh Notwithstanding the advantages that mobile banking provides, its uptake is still in its infancy, and internet banking remains the dominant electronic banking channel. [1]. Several banks in Indonesia struggle with the poor adoption of mobile banking because there are more mobile phone subscribers than there are people. In 2013, just 16.5 million of Indonesia's 100 million bank clients used mobile or text banking, according to a poll by Shared Vision, an ICT research organization in the country. This indicates that less than 16.5% of people utilize mobile banking services overall, text banking users excluded. The adoption rate and transaction value of mobile banking are significantly lower than those of online banking, according to a preliminary study on three Indonesian banks.(Sitorus, et al,2016).

Most of previous research focused on the positive effects of various socio-psychological factors (perceived ease of use, perceived behavior control, subjective norm, attitude, confidence, performance expectancy, perceived usefulness, ubiquity) and the negative effects of various perceived risks (security and privacy risk, financial risk, functional risk, time risk, psychological risk) on the intention to adopt mobile banking. (Shaikh &Karjaluoto, 2015). Nonetheless, the majority of customers switch to mobile banking to save time and effort while utilizing other service delivery channels, like physical division banking (Beauchamp and Ponder, 2010). Due to their increased time constraints, today's banking customers frequently utilize m-banking, allowing them to cut the amount of time needed to complete banking tasks. Thus, it seems that convenience is an incentive for m-banking uptake and usage based on the debate that has come before it. Financial service providers have challenges due to a lack of knowledge on how customer use of E-service delivery channels, like m-banking, is impacted by online ease. To increase m-banking usage while providing financial services via the m-banking platform, banks are keen on learning how they may enhance E-convenience via m-banking

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platforms. Yet, little research has been done to examine how convenience aspects using behavior would play out in the context of mobile banking (Lee, 2015). By studying how internet comfort influences m-banking use behavior, this research adds to the literature.(Jebarajakirthy & Shankar,2021).

2. REVIEW OF LITERATURE

2.1 Mobile Banking

Customers may undertake basic banking transactions, like balance checks and cash transfers, as well as more complex ones, including stock trading and portfolio management services, using mobile devices thanks to a subset of mobile commerce software called mobile banking (Lin,2013). The use of mobile banking is different in at minimum two ways from that of e - banking services (or non-mobile Internet banking). First, e - banking refers to client access to the services of the bank over the Internet, whereas m-banking refers to consumer access to banking services via a mobile device. Financial institutions are paving the way into the newest area of technology as e - banking becomes more and more commonplace in banking services: mobile access. M-banking has spread widely, which has a significant impact on retail banks' operations in terms of cost savings and improved client convenience. Second, the rate of evolution is different between mobile and electronic banking, with mobile banking evolving significantly more quickly than electronic banking (T. Laukkanen& Internetvs,2007). M-banking services create value for the consumer since they are naturally independent of time and place and include labor-saving features. Accordinly, m-banking has evolved into the delivery method for self-service that allows banks to more conveniently give data and services to their consumers via mobile devices.

2.2 Mobile Banking Adoption

Mobile financial services were the topic of much research over the past ten years. The majority of these investigations utilised established research frameworks and models from the IS literature (Hoehle & Huff, 2009). "The Technology Acceptance Model" (TAM) (Davis, 1989), which was derived from the Theory of Reasoned Action (TRA) (Ajzen & Fishbein, 1980), seems to be the paradigm that information systems researchers are most in agreement with. The TAM states that the customer's desire to use a raw data system, driven by the user's opinion about the system, determines that customer's use of the system. The TAM further contends that beliefs utility and perceived simplicity play a key role in elucidating the variation in users' intents. Future studies on technology acceptance must examine the effects of other factors on utility, usability, and user acceptability, as emphasized by Davis (1989). A search for other characteristics that can more accurately predict the use of mobile banking is therefore necessary since perceived ease of use and perceived usefulness may not adequately describe behavioral intentions to using the mobile banking.

Due to the limited use of mobile banking, current research has focused on pinpointing the variables influencing user behavior. Theoretical foundations for information systems are frequently drawn from the IDT, TTF, UTAUT, and information systems success model. Lin (2011) looked at how knowledge-based trust and innovation qualities affected the behavior of mobile banking users. According to these research, customer's use of mobile banking is their major focus; seldom have they looked at users' transitions from internet banking to mobile banking. This study aims to close the knowledge gap and offers a thorough insight of how people utilize mobile banking (Zhou, 2018).

3.RESEARCH MODEL AND HYPOTHESIS

3.1 Perceived usefulness

Perceived usefulness (PU), according to Davis et al. (1989), is the "subjective probability that utilizing technology would boost the individual's performance." Using Thmobile internet and M-services, for instance, is positively impacted by PU since it has been discovered to have a strong favorable relationship with both aim and attitude. (Chiu et al., 2005; Nysveen et al., 2005). This feature is crucial for mobile marketing as well as the use of computing and information systems (Venkatesh and Davis, 1996; Venkatesh and Morris, 2000). (Wang et al., 2006). TAM defines PU as the extent to which a given system will improve a person's ability to accomplish their work (Al-Gahtani,2001; Davis, 1993; Mathwick et al., 2001). External elements like effectiveness and efficiency are referred to as PU (Ramayah, 2007). Tan and Teo (2000) assert that PU has a significant role in deciding how quickly ideas are adopted. According to Bhattacherjee's findings from 2002, a person's propensity to utilize a certain system for their transactions relies on how they see it being used. According to research by Koenig Lewis et al. (2010), there is a positive correlation among the intention of using M-banking and perceived risk. According to research conducted by Venkatesh and Davis (2000) and Agarwal and Karahanna (2000), perceived utility and simplicity of using directly and indirectly impact on behavioral intention. Szajna (1996) demonstrated that ease of using indirectly influences usage intention by perceived usefulness, whereas perceived usefulness directly influences intention of use. According to Chen et al findings from 2003, perceived usefulness directly influences intention of use. Consequently, perceived utility may be viewed as a powerful component in M-

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banking. In this regard, the following hypothesis is formulated:.

PU has impact on using M-banking.

3.2 Perceived ease of use

One of the TAM's key elements is the sense of usability. It is described as the conviction that a person develops regarding the lack of effort required to learn how to use a new technology. Consumers will have a more favorable view about the technology if they believe that mobile banking is easier to use than they do. Users may find it challenging to utilize m-banking services if service providers fail to provide them with a proper interface due to limitations on mobile devices, like small touchscreen, for instance. An intuitive, user-friendly m-banking software would show the skill and generosity of service providers, which would impact customer's confidence. A straightforward mobile banking system would also decrease the time needed for users to learn how to utilize the service and give them a greater sense of control over the program. This will enhance the customer's experience by allowing them to concentrate on the essential task, which is to conduct financial transactions. Prior research supported the impact of perceived usability on trust. (BENAMATI et al., 2010; VANCE; CHRISTOPHE; STRAUB, 2008., Ramos et al, 2018) . Thus:

Perceived ease of use has impact on using M-banking.

3.3 Perceived credibility

Credibility is another aspect that influences how IT services are adopted. Credibility is the capability for a system to communicate information and conduct transactions, as well as its ability to be trusted (Erdem and Swait, 2004). Credibility is described by Wang et al. (2003) as "the degree to which a person thinks that the usage of M-banking would have no security or privacy issues." Users fear that their financial and special information may be given to a 3rd party because financial service providers lack the necessary credibility, according to Luarn and Lin's (2005) research. Using M-banking has a substantial association with perceived trustworthiness, according to recent research in the field. In other words, a lack of trust makes adoption less likely (Luarn and Lin, 2005; Wang et al., 2006, 2003). Credibility, according to Koenig-Lewis et al. (2010), has a major negative impact on risk and, as a result, on the decision to utilize mobile banking. The lesser the risk related to a novel technology, like M-banking, and the greater the desire of people to utilize it, the higher its trust. According to Wang et al 2003, perceived credibility and E-banking services have a substantial positive association. Moreover, Luarn and Lin (2005) note a favorable correlation between credibility and M-banking use (Hanafizadeh & Tabar 2014). As a result, in this regard, the below hypothesis is formulated:

Perceived credibility has impact on using M-banking.

3.4 Customer awareness

For Lee et al. (2007), awareness stands for how well-informed a consumer is about E-banking channels. Low awareness is discovered to be a possible obstacle in their adoption and a key factor in their resistance to embracing MB because it is a novel experience for the majority of bank clients. According to (Chen, 2013), awareness is a key component influencing attitude and ultimately encouraging MB adoption. (Hanafizadeh and Khedmatgozar, 2012) In their investigation on the role that person's awareness of E-banking services plays in lowering the adverse impact of their perceived risk, researchers discovered that awareness of E-banking lowers all aspects of perceived risk. Customers are more likely to see MB as a helpful and simple service if they are more aware of its benefits, advantages, and usefulness.

Customer's awareness has effect on using M-banking.

Proposed theoretical framework and hypothesis proposition:

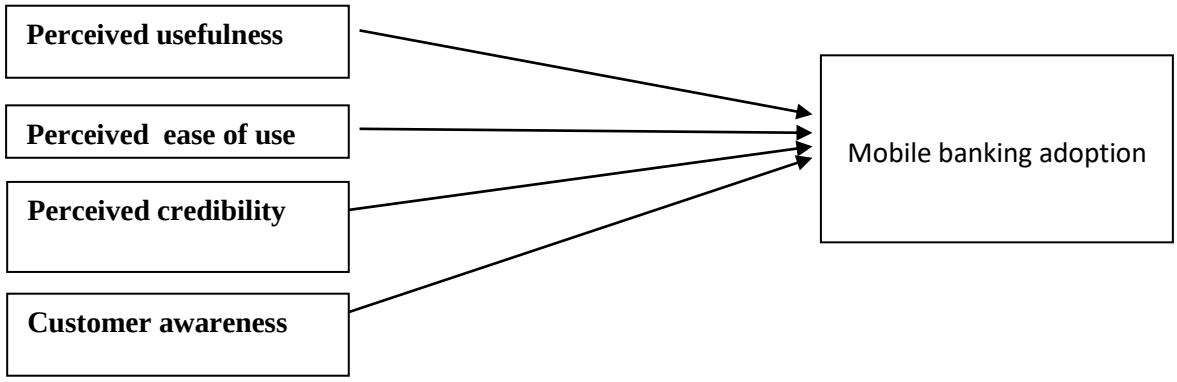

Fig proposal research model

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4. METHODOLOGY

The survey method was chosen in the research design to investigate the main determinants related to the adoption of mobile banking services in Iraqi banks. The elements were fully adapted from previous studies based on the contents of each factor. The action of the components and factors is shown in Table 1. In this study, the Five Likert scale was employed to gauge the degree of agreement among the participants. Users using mobile banking services at three private banks in Iraq (Credit Bank of Iraq, Commercial Bank of Iraq, and Bank of Baghdad) were given the questionnaire). 300 replies were obtained in total, which is regarded as sufficient for any study. By performing certain actions before the final distribution to guarantee that the questions or the entirety of the details were perfect and accurate, the validity of the questionnaire was evaluated. These are the stages that entail distributing the questionnaire to seven subject-matter experts. The specialists are professors from Iraqi institutions who have practical knowledge of mobile banking platforms. The questionnaire's clarity, duplicity, language, and consistency were assessed. I provided some suggestions and comments before the distribution and then made the necessary improvements

Table 1: Cronbach Alpha and Number of Items

Factor	**No. of items**	**Cronbach Alpha**
Perceived usefulness	7	0898
Ease of use	5	0947
Credibility	7	0951
Awareness	6	0938

5. RESULT

For data analysis, SPSS, a statistical program for social sciences, was utilized. The statistics were compiled using four demographic parameters. The descriptive data for each demographic component in the current study are displayed in Table 2 below.

Table 2: Demographic of Respondents

Factors	**Questions**	**Percent**
Gender	Male	75 %
	Female	25 %
Age	18-25	13%
	26-30	12.3%
	31-35	35.3%
	36-40	36.3%
	Above 41	3%
Education	Diploma	13.7%
	Bachelor	68.3%
	Master Degree	17.7.2%
	PhD	.3%
Income	500,001-1000000	4.7%
	1000,001-2000000	55. %
	2000001-5000000	33.3%
	Over 5000000	7.0%

The correlation analysis is shown in Table 3 below for variables. For the first hypothesis, the correlation analysis showed that usefulness is positively and significantly associated with mobile banking adoption ($r = .304$, $p < 0.01$).For the second hypothesis, correlation analysis showed that ease of use is favorably and significantly associated with mobile banking adoption ($r = .342$, $p < 0.01$). For the third hypothesis, the correlation analysis showed that credibility is positively and significantly associated with

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mobile banking adoption (r = .392, p < 0.01). For the fourth hypothesis, the correlation analysis showed that customer awareness is positively and significantly associated with mobile banking adoption (r = .432, p < 0.01). All of the hypotheses were shown to be significant by the findings.

Table 3: Correlations Analysis

		PU	PEOU	PC	Awa	MBA
PU	Pearson Correlation	1	.308**	.326**	.176**	.304**
	Sig. (2-tailed)		.000	.000	.002	.000
	N	300	300	300	300	300
PEOU	Pearson Correlation	.308**	1	.201**	.157**	.342**
	Sig. (2-tailed)	.000		.000	.006	.000
	N	300	300	300	300	300
PC	Pearson Correlation	.326**	.201**	1	.217**	.392**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	300	300	300	300	300
Awa	Pearson Correlation	.176**	.157**	.217**	1	.432**
	Sig. (2-tailed)	.002	.006	.000		.000
	N	300	300	300	300	300
MBA	Pearson Correlation	.304**	.342**	.392**	.432**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	300	300	300	300	300

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

7. DISCUSSION

Iraq is one of the Middle East's emerging nations and has seen several crises over the past few decades. The first and second Gulf Wars, the US occupation of Iraq (from 2003 to 2011), and severe economic sanctions are only a few of its issues. According to Yousif Al-Hakim and Hassan (2013), all of these problems have had a detrimental impact on the growth of the nation's infrastructure in the areas of banking, telecommunications, oil and gas, education, and power. It is consistent with earlier studies like the one he carried out (Ahmed, Almotairi, Ullah, & Alam, 2014; Chawla & Joshi, 2017; Sharma, Govindaluri, Al-Muharrami, & Tarhini, 2017). With =.304 and p 0.001, the findings of the multiple regression study showed that interest has a favorable and substantial impact on the uptake of mobile banking services. Thus, the findings supporting Hypothesis H1 "The interest will have a positive effect towards the adoption of mobile banking services within banks in Iraq". Since their interests, concerns, and obstacles can be identified now and resolved before the time when using the new mobile banking system, it is crucial to emphasize the need to include consumers who use the mobile banking system in the pre-implementation phase. The success of the system will be substantially increased if the participants are willing to use the mobile banking system. Customer adoption rates must drastically rise in order to achieve countrywide interoperability and reap the benefits that a mobile banking system can provide. To guarantee the project's success and preserve user safety, it is crucial to deploy the suitable system in the proper manner. In comparison to consumers who are not a part of these activities and who lack the necessary technological knowledge and abilities, these customers find it easier to utilize and deploy a mobile banking system. Training is crucial for the development of knowledge and skills, not only for the initial accreditation and implementation of environmental practices but also for their ongoing use and upkeep.(Mullan et al., 2017). The H2 hypothesis looked at how user friendliness affected the uptake of mobile banking systems in Iraqi banks. The idea that knowledge and skills will impact the adoption of mobile banking in particular is put forth. The research revealed that, in terms of the expected trend, a statistically significant coefficient (0.342) has an acceptable degree of significance (P 0.001). Thus, the findings are consistent with this theory. According to several studies (Boonsiritomachai & Pitchayadejanant, 2017; Glavee-Geo et al., 2017; Sharma et al., 2017), the dependability of the mobile banking system was cited as a key element in the adoption of mobile banking. The results of this study's multi regression analysis showed that motivation has a favorable and substantial impact on the adoption of mobile banking, with a p-value of 0.001 and a =.392. As a consequence, the findings are consistent with Hypothesis 3: "Credibility will positively influence the adoption of mobile banking services within banks in Iraq." Credibility will impact banks'

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adoption of mobile banking in a favorable way. Therefore, encourage the clients who are aware of the features and amenities offered by mobile banking services through promotions and marketing that highlight the advantages of using the latter over the former. Furthermore, it's crucial to offer education and assistance like call centers and round-the-clock services because if people understand how mobile banking works, they will benefit from it and make it easier for others to use. In Iraqi banks, Hypothesis H4 looked at how customer awareness affects adoption of the mobile banking system. In particular, it is suggested that consumer awareness promotes the uptake of mobile banking services in Iraqi banks in a beneficial way. The research revealed that the expected direction was followed by a statistically significant coefficient (0.432) with an acceptable level of significance (P 0.001). Thus, the findings are consistent with this theory. Numerous studies (Ahmadi et al., 2016; Burucuoglu & Erdogan, 2016; Oliveira, Faria et al., 2014; Martins et al., 2014) have shown confidence to be a significant factor. He also stressed the significance of personal confidence as a crucial factor in forecasting the adoption of mobile banking. The development and maintenance of customer confidence in mobile banking technologies requires a greater comprehension of and mitigation of real and perceived hazards. Therefore, it seemed necessary to analyze this variable and how it affects the uptake of mobile banking.

8. CONCLUSION

The aim of the current research is to analyze the individual determinants that affect mobile Financial support systems at banks in Iraq. Based on earlier research that looked at the suggested criteria, a questionnaire was created. To examine each influential aspect and assess the reliability of the questionnaire, a survey was also carried out. All of the hypotheses were shown to be significant by the findings. Thus, this study helped to show that specific factors matter a lot and have a big impact on whether mobile banking services are used in Iraqi environments. With the help of these insights, service providers and policy makers may be able to establish more effective plans and regulations for the future, particularly for mobile banking. This may also be a significant factor in the lack of acceptance of mobile banking among bank clients. Banks must work harder to enhance their online banking offerings because there is no indication that customers are utilizing mobile banking. This will aid bank executives in coming up with novel ideas that would affect their clients. Banks must take use of their organization's competitiveness within the market sector to encourage wider adoption. Additionally, banks can build and improve the relationships they want to have with their customers when these precedents are examined. Future research may be used in several circumstances, including communication in the adoption of this new technology. In addition. The relevance of this sample research also lies in its potential to expand the TOE framework for the adoption of mobile banking systems.

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