

# ANALYZING THE USE OF TAM MODEL WITH CUSTOMER SATISFACTION AND SECURITY RISK IN JORDANIAN BANKS

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	induction technological acceptance developed in a western culture.

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## INTRODUCTION

Jordan, like many other developing nations, has a low internet penetration rate, which has given banks possibilities to reach a larger consumer base. However, a lot of people prefer the conventional methods (human contact) to obtain financial services when conducting business, which could explain why online banking has a low acceptance rate. As a result, in order to increase usage rates, banks must better manage the factors that influence online banking adoption among consumers (Alboqami, 2018), as well as draw in new customers (Anouze & Alamro, 2019; Gaith, Mutia, Haitham, & Ghaith, 2022; Giovanis, Assimakopoulos, & Sarmaniotis, 2019; Tabrani, Amin, & Nizam, 2018) by improving the usability, appeal, and utility of their e-services. Bank managers are likely to continue to struggle and squander time, money, and other resources if they are unaware of the most important variables. In order for clients to use E-banking services—which are totally new to them—they must be made aware of them and feel secure and at ease doing so. For bankers and regulators to develop effective strategies that will ensure successful implementation and adoption of E-banking and enhance E-banking adoption rates, it is crucial to understand customers' decisions to adopt E-banking (Al-Sharafi A, Arshah, Herzallah AT, & Abu-Shanab, 2018; Gokmenoglu & Hesami, 2020). In order to develop strategies to increase the uptake of online banking, bank management must therefore understand the elements that can either restrict or facilitate the adoption and usage of E-banking (Jehan & Ansari, 2018).

In fact, research already conducted have shown that over 50% of technology adoption attempts fail, including E-banking (Mohamed Samir Hussein & Mourad, 2014). This results from the fact that e-banking channels are rife with difficulties and that the technology's application hasn't lived up to the expectations of the early adopters (Mohamed Samir Hussein & Mourad, 2014). Therefore, existing research have examined the relationship between E-banking adoption and its factors in an effort to identify better solutions to the low adoption issue; yet, there is still dispute regarding how this technology may be accepted efficiently (Al-Majali, 2011; Malik & Bani, 2017; Nso, 2018). One explanation for this is the discrepancies in the results of earlier studies, which show that the research on the adoption of e-banking is still preliminary, especially in developing nations (AbuShanab, Pearson, & Setterstrom, 2010; Nso, 2018).

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According to several research, Arabs are still hesitant to embrace and use E-banking services due to a variety of social, cultural, and economic factors (Ahmad, Ayyash, & Al-Qudah, 2018; Al-Dmour, Dawood, Al-Dmour, & Masa'deh, 2020; Anouze & Alamro, 2019). Therefore, it's critical to comprehend the fundamental elements that influence the uptake and utilization of E-banking services offered by Jordanian banks. The majority of TAMs, however, have clearly undergone considerable testing in industrialized nations, and as a result, their conclusions and ramifications only apply to conditions in those nations. As a result, it is decided that this study is worthwhile, especially given the dearth of thorough research in the context of this particular country. The results of this study on the elements that can affect Jordanians' intentions to use electronic banking are also thought to offer helpful insights for other developing nations where research on E-banking usage and intentions is woefully inadequate and need more attention from academics.

#### LITERATURE REVIEW E-Banking Intention

Intention is defined by Ajzen and Fishbein (1975), as a person's position on a subjective probability dimension including a relationship between himself and an action. They also claim that attitude and subjective norms foreshadow intention. When the individual controls the conduct, the intention can anticipate actual behavior with a high degree of accuracy. However, this does not imply that there is a perfect correlation between the measure of intention and conduct (Ajzen & Fishbein, 1975).

People have a significant tendency to overestimate the likelihood of engaging in desired behavior and underestimate the likelihood of refraining from it. Inconsistencies between intention and actual conduct may result from these overestimates and underestimates (I. Ajzen & Fishbein, 2004). Albaity and Rahman (2019), claim that the decision to use Islamic house financing was made with process in mind prior to implementation, and that this will show in future behavior.

### **Customer Satisfaction**

Customer satisfaction is a crucial and extensively researched marketing term (DAM & DAM, 2021; Ghaith, Junoh, & Aseel, 2016; Otto, Szymanski, & Varadarajan, 2020). On the correct definition of consumer satisfaction, academia is divided. Customer satisfaction is defined as "the consumer's response to the evaluation of the apparent mismatch between prior expectation and the actual performance of the product as viewed after its consumption" by Tse and Wilton (1988) and Association (2015) According to Giese and Cote (2000) model, a response (cognitive or affective) that relates to a specific focus (such as a buying experience and/or the associated product) and takes place at a specific period (such as post-purchase, post-consumption) is a sign of customer satisfaction.

The gap between consumer expectations and performance as perceived by customers leads to a general concept of customer pleasure or discontent (Crittenden, 2015; H. Li, Liu, Tan, & Hu, 2020). The conclusion that can be drawn from the various definitions of customer satisfaction that have been studied and defined by marketing experts is that it is a behavioral response of consumers in the form of post-purchase evaluation of the performance of the goods or services compared to consumer expectations (Mutia & Ghaith, 2018; Suchánek & Králová, 2018; Vasić, Kilibarda, & Kaurin, 2019).

# **Perceived Usefulness**

The phrase "degree to which a person believes that utilizing a certain technology would boost his or her job performance" refers to perceived usefulness (PU) (F. D. Davis, 1989). As a result, in the context of using mobile services, a service with a high perceived usefulness is one that is thought to produce favorable results when used. The use of ICT is directly influenced by perceived utility, according to numerous earlier studies. Since they will utilize the service if they find it useful, many users believe that this will result in their intention to use the service. Perceived utility is the key factor influencing service acceptance and intention to use, according to earlier studies utilizing the Technology Acceptance Model (AL-Nawafleh, ALSheikh, Abdulllah, & Tambi, 2019; A. Enas, Abdul Malek, Abdul Aziz, Ghaith, & Puspa, 2018). According to Suki (2011), PU does have a big impact on how people accept and use services.

The phrase "the degree to which a person believes that using a technology would be straightforward" refers to perceived ease of use (PEOU) (F. D. Davis, 1989). In other words, simplicity and trouble-free operation are synonymous with ease of use (Durodolu, Lawal, & Adebayo, 2012; A.-N. Enas, Ghaith, Abdulllah, & bin A. Tambi, 2019). PEOU is frequently used to analyze user acceptability of technology (Venkatesh & Davis, 2000). However, it is less obvious what impact PEOU has on TAM. In some instances, PEOU has been proven to have both a direct and an indirect impact on attitude (through PU), but not always (F. D. Davis, Bagozzi, & Warshaw, 1989). In spite of the utility of the service, the direct effect implies that PEOU could enhance attitude toward adoption. Contrarily, the indirect effect results from the circumstance where, other things being equal, the more beneficial a technology is seen to be, the more favorable one's attitude and intention toward employing the technology (F. D. Davis et al., 1989). In the context of the workplace, tests on both direct and indirect impacts have found them to be significant and favorable (F. D. Davis et al., 1989). **Security Risk** 

The most detrimental aspect of services with concerns about external infringement results in the money taken from the accounts and the details of personal financial examination is security risk (Jha & Lee, 2018). When it comes to internet banking, the security risk is the possibility of fraud or hackers accessing the bank systems (Jansen & Van Schaik, 2018). T According to earlier research by Chen (2013), Aldás-Manzano, Lassala-Navarré, Ruiz-Mafé, and SanzBlas (2009), as well as Yang, Pang, Liu, Yen, and Tarn (2015) security risk has an effect on the adoption of online banking.

A important factor in people's desire to use online services is security (Y. Li & Shang, 2020; Merhi, Hone, & Tarhini, 2019), Security-related incidents, such as privacy revelation or financial loss, may result in harm to people, making them less inclined to use online services. In this situation, boosting security for the services offered by online service providers would be beneficial to lowering perceived risk (Park, Amendah, Lee, & Hyun, 2019), reducing service uncertainties, and even raising adoption rates (Kaur & Arora, 2020; Namahoot & Laohavichien, 2018).

### **Empirical Studies and Research Gaps**

According to TAM, PU is believed as a key determinant of technology followed by PEOU (A.-N. Enas et al., 2019; Igbaria & Iivari, 1995). Both PEOU and PU influence the attitude of an individual towards the intention to utilize a technology and in this case, banking (Rauniar, Rawski, Yang, & Johnson, 2014). According to F. Davis (1993), PU is highly associated with the customer intention. However, even PU considered as one of important and significant positive determinant of intention in most of the previous researches, but at the same time some prior researchers also have found that statistically insignificant influence of PU on intention (Almahamid & Rub, 2011; A.-N. Enas et al., 2019; Hung, Yang, & Hsieh, 2012; Shiau & Chau, 2016).

Despite a large number of studies on switching behavior, there are research gaps that need to be addressed. For example, Wang, Ngai, and Wei (2012) claimed that for future research many variables that explained the phenomenon of customer intention in the banking context remained undetected. They claimed that additional factors that explain intention and especially technology acceptance behavior were necessary to examine the relationship in order to advance research on this critical sector of the economy (Guner & Acarturk, 2020; Lim, 2018; Pittalis, 2021). Therefore, we found it possible to add some additional unexplored variables to the original TAM model of ease of use, and perceived usefulness, to examine their effect on intention. Akhlaq and Ahmed (2013); Adiwijaya, Kaihatu, Nugroho, and Kartika (2017); Maqableh, Hmoud, and Jaradat (2021); Rehman, Bhatti, Mohamed, and Ayoup (2019); and Tran (2020) suggested that factors such as the security risk and trust could further explain customer's intention when satisfaction mediates.

According to the literature mentioned above, as customer satisfaction and retention are largely influenced by how customers perceive risk, businesses must have robust strategies in place to minimize these consequences (Ghotbabadi, Feiz, & Baharun, 2016). The probability of a customer losing money while pursuing the desired effects of using IB might be characterized as risk (Featherman & Pavlou, 2003). The topic of perceived risk has received particular focus in a number of research (Curran & Meuter, 2005; Flavián, Guinaliu, & Torres, 2006). In fact, elements of perceived risk have long been viewed as significant deterrents to customers' intents and IB adoption (Baabdullah, Nasseef, & Alalwan, 2016; Gan, Clemes, Limsombunchai, & Weng, 2006; Gerrard, Barton, & Devlin, 2006; Laukkanen, Sinkkonen, & Laukkanen, 2008). Due to the high levels of uncertainty, intangibility, heterogeneity, and ambiguity that define the banking industry as well as the lack of human connection, these factors are of special relevance (Al-Gahtani, 2011; Curran & Meuter, 2005; Kesharwani & Singh Bisht, 2012; Martins, Oliveira, & Popovič, 2014). After showed the justification to use this variable and the problems in Jordan, the researchers developed this model as shown in figure 1.

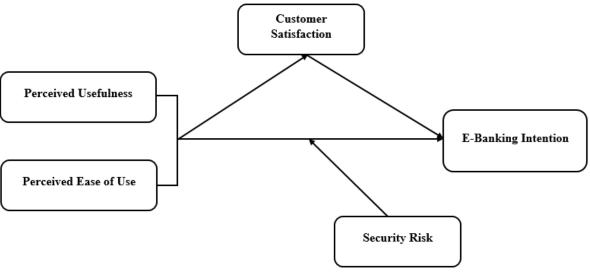


Figure 1: Theoretical Framework

This study investigates the ongoing development of e-banking from the viewpoint of individual consumers. In summary, the research examined both historical and modern information system and service marketing literature, which resulted in the creation of a research model to gauge Jordanian consumers' intentions to use e-banking. Both the information system literature and the body of knowledge in services marketing have benefited from this research in various ways.

## DISCUSSION

Information technology has advanced in the banking sector to support both internal and external business activities. In fact, one of the most important issues in the banking industry is the acceptability of e-banking by users. Because of this, the use of e-banking services will be advantageous for banks and give them a chance to please their consumers. Last but not least, past research has asserted that the most crucial factors influencing whether or not e-banking intention is accepted are perceived usefulness and considered simplicity of use. This study has shown that the main elements that improve perceived usefulness and perceived ease of use towards an intention to adopt e-banking are customer satisfaction and security risk. These earlier research show how well the suggested integrated model accomplishes the study's goal. Adding moderating characteristics like age, gender, experience, and voluntariness of use to the research model could broaden it in future studies. According to earlier research, customer satisfaction played a substantial mediating function in influencing people's perceptions of and intentions for using e - banking. As a result, research into moderating factors like security risk and usage voluntariness may produce fresh results.

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