

# **Toward Enhancing Customer's Experience in Digital Banking**

*Completed Research*

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## **Abstract**

This paper will discuss the factors that enhance customer's experience in digital banking. It tests the use of electronic services provided by banks. As an emerging market in a developed country, the Jordanian market has been chosen to be in focus. Based on a conducted literature review, the study aims to extract the main factors that improve this use such as: user-friendliness, trustworthiness, security, self-service, improved services, attractiveness of design, quality of services, agreeableness, and ease of use, usefulness, and customer experience. Then, the paper analysis the relation among these factors, and their effects on the adaption of electronic banking services provided.

## **Keywords**

Customer experience, Digital banking, Online banking, Mobile banking.

## **Introduction**

For the past few years, banking sectors as all other industries has been affected by the digitization. In order to survive in this competitive world companies became conscious of the importance of online environment, being available online and enhancing their profiles [Alwi, et al, 2017], [Martinez, et al, 2010]. The process of providing facilities and information to the bank's clients using digital gadgets such as: personal computing devices, mobile phones and lots of other similar gadgets that are connected to the internet is known as digital banking [Levy, 2014]. Accordingly, nowadays most banks implemented digital banking to provide information and digital services. They are trying to shift all activities to a digital level as much as they can to reduce costs, speed information exchange, and facilitate client's transactions which will enhance customer experience and trust in the bank [Martinez, et al, 2010]. As service providers, banks are attempting to form a powerful long relationship with their clients and enhance it [Levy, 2014]. Nowadays, banks are concerned about generating and providing customers with a better level of experience. Customer experience is known as "the internal and subjective response customers have in any direct or indirect contact with a company" [Loureiro & Sarmiento, 2018]. The experience that customers practice "is affected by the kind of service provided and the sympathy of providers of services" [Loureiro & Sarmiento, 2018].

This paper aims to explore how could selected factors enhance customer's experience through using digital banking services within an emerging market in a developed country as the Jordanian market. It is comprised of the subsequent sections; the second, presents a research background highlighting the foremost necessary factors of digital banking in a theoretical way, starting from the definitions, through the channels of digital banking, to the effect of the improved factors on customer's experience. Section

three covers the results of the analysis and discussion. Finally, the paper closes with a discussion and then conclusion sections.

The Hypothetico-deductive method is followed in this research. This method comprises of eight-step process (Sekaran & Bougie 2013): Identify a broad problem area, define the problem statement, develop hypotheses, determine measures, collect data, analyze data, interpret the result, report and/or try again. The method of data collection using SPSS analytical tool was utilized in the form of a survey. The survey contained twenty-four questions using a likert Scale extending from 1 to 5, 1 symbolized “strongly disagree” while 5 symbolized “strongly agree”. Out of 22 banks forming the Jordanian banking sector; fifteen banks were contacted to fill-out the survey, five of them reject that due to their internal policies, four banks have been contacted face-to-face in branches by filling hard copies, two banks were reached through social media using online survey, the other two banks were reached through formal email. The analysis of the survey responses took approximately two weeks.

## **Research background**

With regard to the increased level of competition in the marketplace and the decreasing cost of systems, brick and mortar banks have implemented strategies in order to improve digital facilities. The collaborative facilities of banks have presently been used universally, and have become an essential portion of the commercially oriented environments. Recently, services provided by banks are developing frequently due to improvements of the technological systems [Levy, 2014]. Notably, after the adoption of e-banking services, marketing efforts and clients were affected. The old financial institutions style has achieved an inspirational transformation by using telephones, online networks and smartphones which has turned out to be the most important technique to provide collective carriers of online facilities to clients [Mbama & Ezepue, 2018].

### ***Definition, Channels and Improved Services of Digital Banking***

In the past few years, the growth of what is identified as online banking or internet banking increased immensely. Digital banking is known as the process of providing facilities and information to the bank's clients using digital gadgets such as: personal computing devices, mobile phones and many other gadgets that are connected to the internet [Levy, 2014]. It is also known as the process of using technological devices such as smart phone applications and personal computers by the firms, organizations and the society as a whole [Larson & viitaoja, 2017]. Basically, there are 3 standard channels that banks provide to clients (phone banking, mobile banking, internet banking) in order to maintain bank's existence among competing banks in the region. These channels provide accessibility and availability at any moment and from any place. This new cyber-banking smooths the process of customer support. Today, clients have more than one interface to interact and communicate with banks, the earliest was phone banking. Furthermore, the focus of banks shifted towards online banking and mobile banking, and the excellence of its facilities that have an effect on client's trust in the banks [Mbama & Ezepue, 2018]. Consequently, E-banking allows financial institutions to boost the services of banks which enables them to provide clients with mature technological services as well as helping them in reducing the expenses associated with providing the services manually such as sending clients statements by letters or having face-to-face communication with clients in local bank offices. Recently, clients want to experience an equivalent degree of communication and collaboration using E-banking services and interactive multimedia as through personal banking. The interaction between clients and banks through mobile devices (smartphones, cell phones and digital assistants) is known as mobile banking. It completes E-channels like online banking and automated banking machines and enhancing it by adding various features such as cell phone wallet, and cellphone payment [Brun & Rajaobelina, 2017].

Nowadays, clients can perform banking functions on their own without the need of participation from a bank advisor. By using e-banking services, many of these online services are now available on the palm of their hands like web banking, smartphone banking, telebanking and ATMs. Recently, banks invested more in banking applications as it provides self-service to clients, technological trends and managing monetary and non-monetary transactions such as: controlling the bank accounts, checking the balance statements, conducting internal and external money payment, setting the login and security codes, and complete debits payments. Accordingly, this improvement offers flexibility in the utilization of services

and conducting financial transactions, since it became the trendiest way to conduct any monetary operation due to its availability, intractability, ease-of-use and user-friendliness.

Recently, banking sector is focusing on providing smart banking applications that think like humans and interact based on specified rules with clients. One of the focuses is to enrich these applications with features based on Artificial Intelligence (AI) such as automated multi-channels chat systems. These improvements also affect debt payment service, managing accounts, personal investment advice and managing deception services [Payne, et al, 2018]. AI based mobile banking features will provide clients an unusual and special financial practice, which will help banks to move forward and focus on clients and advertising new relationship philosophy. Additionally, banks are craving to let their clients communicate with machines that think and act somehow like humans. Still, it is not clear if clients have the same wish to communicate with a machine that can learn and forecast feelings to help them in the decision-making process and predict their reactions. Accordingly, there is a gap between existing banking applications and AI-banking applications [Payne, et al, 2018].

One of the major revolutions in banking technology is financial technology also known as FinTech. It has been given a worldwide interest for its massive importance as an effective element that strengthens the competitive advantages of companies. Ministries from all over the world are interested in this technology and they also encourage putting new principles and strategies to assist the FinTech evolution [Wonglimpiyarat, 2017]. International Projects have shown huge improvements in its development and growing revenues during the last three years. For many years, there have been huge pursuits and efforts from financial institutions towards improving monetary technology performance and development structure. The financial services have grown under several foundations of the financial technology invention such as electrical monetary deposit at the place of selling, cash machine, online banking, community for international monetary operating between banks communication, online information exchange, cellular banking technology, digital currency purse, group financial institutions and mass money providing. FinTech aims to enable problem solving empowered by technological setup that is incorporated with the information technology. It also, offers services for monetary and non-monetary facilities to simplify transactions and deposit functions [Wonglimpiyarat, 2017].

### ***The Effect of Improved Factors on Customer Experience***

Using innovative high-technological e-banking improves banks anticipations of their customers wishes and requirements. Kenneth et al. argue in their paper [kenneth, et al, 2010] that a philosophy in marketing applications discovers the mean of internal and external aspects in predicting client's attitude toward online facilities, along with businesses' effectiveness. Banks have expanded their strategies digitally, in order to construct and sustain durable relations with their consumers [Levy, 2014]. They are focusing on improving digital banking services by applying more factors that affect user's experience and commitment such as the trust which is an important factor for customers. The lack of trustworthiness in e-banking can rise from the type of the online serving transfer process [kenneth, et al, 2010]. logically, customers' level of trust in bank effect the way they will receive its digital banking [McNeish, 2018]. In the online nature, sellers and buyers cannot reach each other physically which means that the buyer cannot use the materialistic cues to judge the seller and the physical store by observing them. Online services are surrounded by many threats like invasion of privacy and hackers, so bank managers should be aware of these threats by bridging the gap of trust. This will make the online banking more suitable as a service delivery. There are many factors for e-banking to build customer's trust and enhance customer's experience within this virtual environment, such as well-designed and attractive user interface that provide cognitive cues. Also, Customers should believe that the online banking sites are secure, safe and encrypted by a third party, to strengthen their trust in such services. This security and privacy can be provided and enhanced by security policies, third party assurance, and other similar privacy tools [Kenneth, et al, 2010].

Another important factor is user-friendliness together with helpfulness factors that inspire client's performance in accepting innovative and high technological services. Accordingly, stakeholders of banks in Jordan determined that ease of use, confidence, as well as versatility are the forecasters of the use of e-banking services. Still, there are many other possible factors relevant to e-banking services and need to be discovered [Mbama & Ezepue, 2018]. Ensuring usability and ease of use decrease complaints caused by misuse. Here, usefulness means that the electronic services should create similar trust in the system as

customers perceive in traditional banks [kenneth, et al, 2010]. Moreover, banks and service providers are aware about the interrelation between the services quality and the clients satisfaction level which increase the loyalty [Yaya, et al, 2011]. In service oriented industry, the improved level of customer loyalty tends to increase profit and expand the competitive advantage of the firms [Wang & Wu, 2012]. Moreover, electronic services should be innovative with a level of creativity that is in line with the available standards, previous knowledge, and needs of probable carriers. Furthermore, Agreeableness has a significant impact on the way of dealing with smart high- tech tools in simulated stocks. While in a digital banking situation, the person who realize that the methods of utilizing the financial process is reliable according to his own principles and his monetary uses, will probably have a promising behavior in terms of digital banking. Likewise, difficulty of use is an essential component which affects the behavior of a person while dealing with smart tools or data structure [Ayo, et al, 2016].

## **Hypothesis**

**H1:** Trustworthiness in bank applications positively affects client's intentions toward accepting self-service.

Self-service means to enable clients to perform their financial activities without asking for a assistance [Giovanis,et al,2018], in this regard, a higher level of trust must exist in the ability of the bank to provide the e-service, therefore strong trust and belief in the presented online services can help in minimizing the professed risk and uncertainty and encourage clients to use online services and accept the self- service [Zhou, 2011].

**H2:** Perceived security along with technological services affect customers trust.

Security is known as “the subjective probability with which consumers believe that their personal information will not be viewed, stored, and manipulated during transit and storage by inappropriate parties in a manner consistent with their confident expectations” [choi & Nazareth, 2014]. Customers generate insights about security that can directly affect trustworthiness; the aspect of security impacts the procedure of generating customers' trust. Trust during this stage is essential, once the connection is established the extent of trust is modified to an everlasting relation and, whenever something becomes unpleasant for the customer throughout the relation, this could cause a scarcity of trust within the context of conducting digital transactions. Security is crucial to the digital setting and it is thought of as a major component of the process of generating trust by customers [choi & Nazareth, 2014].

**H3:** Improved service quality positively increases the client's trustworthiness and experience.

Service quality is outlined as the distinction between the client's expectations towards a service and what is truly being received from the service provider. Also, it is the client's impression of superiority or even inferiority of the service [Akbar & Parvez, 2009]. The quality of service plays an enormous role in influencing client's trust therefore, once the quality of provided online services surpasses client's expectations it will influence increasing the amount of trust in using online banking. The complete positive perspective toward a particular behavior is thought of as trust [kenneth, et al, 2010].

**H4:** Improved service attractiveness and user-friendliness positively increase the client's acceptance and agreeableness.

Clients' experience with artistic styles of digital applications impact their judgment and perception, financial institutions must turn out attractive and user-friendly interface for their digital banking functions. If clients have the power to enter and use digital banking functions like sending or receiving cash actions and checking their account easily and simply, it will enhance their confidence and effectiveness, it will also increase their acceptance and agreeableness towards new digital functions. User-friendliness is a crucial factor that motivates clients to move from dealing with brick and mortar banks directly to using digital banking applications [Ho& Ko, 2008].

**H5:** Ease of use of bank applications positively affects usefulness for the customer.

Clients are using digital applications so as to accomplish their financial transactions anyplace anytime, however, they may face difficulties when using the application, the application ought to be easier to adapt and use [Chong, et al, 2010]. Thus make sure that ease of use feature meaning no effort needed from clients when they accomplish their transactions [Ho& Ko, 2008]. By availing easy flow of function, banks

let the clients reach targeted outcome in a straightforward manner [Casalo, et al, 2007]. In this effect, the usefulness of applications are magnified.

## **Analysis results**

A survey was conducted as the data collection method using SPSS analytical tool and Google forms. Eight surveys were distributed face-to face, interviews and via social networks using automated surveys over two weeks in Dec. 2018. The survey contained twenty four questions using likert scale ranging from 1 to 5. As 1 symbolized “strongly disagree” and 5 symbolized “strongly agree”.

Digital banking is the process of providing facilities to bank's clients using digital gadgets [Levy, 2014]. As presented in the analysis 62.5% of bank managers strongly agreed, 37.5% agreed that digital banking is the new technique that banks are using to provide facilities to clients. Which has been proved in the mean analysis 4.6250 that indicated through the responses as it's around strongly agree, and the low standard deviation 0.51755 indicated that the spread of data is very low and around the mean. Hence, the relations between customers and banks can be influenced by digital extension, 62.5% of banks managers strongly agree, 25% agree, 12.5% neither agree nor disagree that by expanding digital services the relationships between customers and banks can be affected, which has been proved in the mean analysis 4.5000 which indicates that most responses around strongly agree and agree, and the low standard deviation 0.75593 indicated that the spread of data is low and around the mean. As a result of the expansion more channels have been developed such as phone banking, Mobile banking and Internet banking which turned out to be the most important channels that banks must offer to their clients in order to keep its sustainability among its competitors, as shown in the analysis, 87.5% of managers strongly agree, 12.5% agree that these channels are the most vital channels that keep bank's existence, which has been proved in the mean analysis 4.8750 which indicates that most responses around strongly agree, and the very low standard deviation 0.35355 indicated that the spread of data is very low and around the mean. Lately, banks capitalize more in mobile banking applications since it offers its clients the ability to do financial and non-financial transactions on their own, 50% of bank managers strongly agreed, 37.5% agreed and 12.5% neither agree nor disagree that banks invest in mobile applications to help customers perform their transactions on their own. Which has been proved in the mean analysis 4.5000 which indicates that most responses around strongly agree, and the low standard deviation 0.75593 indicated that the spread of data is low and around the mean. Therefore, banks added features to mobile banking such as AI (artificial intelligence) which is defined as the ability of making bank applications thinks like humans that helps in increasing client's loyalty. 50% of bank managers strongly agree, 50% agree that AI increases the level of loyalty. which has been proved in the mean analysis 4.5000 which indicates that responses are around strongly agree and agree and the very low standard deviation 0.53452 indicated that the spread of data is low and around the mean.

The improved services provided by banks to its clients help to increase revenue. As resulted 50% of bank managers strongly agreed, 50% agreed that the enhancement of services will increase profit. Which has been proved in the mean analysis 4.5000 which indicates that most responses around strongly agree and agree and the low standard deviation 0.53452 indicated that the spread of data is very low and around the mean. The bill payment service offered by banks digitally, make the process easier to clients, 75% of bank managers strongly agree, 25% agree that the provided service make processes easier for customers. which has been proved in the mean analysis 4.7500 which indicates that responses are around strongly agree, and the very low standard deviation 0.46291 indicated that the spread of data is very low and around the mean, another service that some banks added to their mobile applications is to offer automated chat system service to communicate with clients. 50% of bank managers strongly agree, 50% agree that they offer automated chat system. which has been proved in the mean analysis 4.5000 which indicates that responses are around strongly agree and agree and the very low standard deviation 0.53452 indicated that the spread of data is low and around the mean. Furthermore, customer satisfaction will be increased by the availability of online transfer services, 87.5% of bank managers strongly agree, 12.5% agree that the availability of transfer services increase satisfaction. which has been proved in the mean analysis 4.8750 which indicates that responses are around strongly agree, and the very low standard deviation 0.35355 indicated that the spread of data is low and around the mean. The produced techniques and services used by banks help in decreasing time of producing services as presented in the analysis, 57% of bank managers strongly agree, 25% agree that new techniques reduce time of producing services. which has

been proved in the mean analysis 4.7500 which indicates that responses are around strongly agree and the very low standard deviation 0.46291 indicated that the spread of data is low and around the mean. Moreover, banks are empowering their services by applying Fintech (applying innovative technologies into financial services) as a result, 50% of bank managers strongly agree, 25% agree, 12.5% neither agree nor disagree and 12.5% strongly disagree that they have been recently using Fintech. which has been proved in the mean analysis 4.0000 which indicates that responses are around strongly agree, and the very low standard deviation 1.41421 has been increased since the responses are spread around the mean. Therefore, the efficiency of the financial innovation system will be improved by using Fintech technology. 87.5% of bank managers strongly agree, 12.5% agree that using Fintech technology can improve provided services. which has been proved in the mean analysis 4.8750 which indicates that responses are around strongly agree and agree, and the very low standard deviation 0.35355 indicated that the spread of data is low and around the mean.

According to the factors affecting customer experience, superiority and high quality of the services provided by digital banks affect client's trustworthiness as clarified in the analysis that 75% of bank managers strongly agreed, 25% agreed that the level of trust presented by customers is affected by the superiority of services presented by digital banks, which has been proved in the mean analysis 4.7500 which indicates that most responses around strongly agree, and the low standard deviation 0.46291 indicated that the spread of data is very low and around the mean. Furthermore, loyalty level generated by customers can be influenced by the relation between service quality and the satisfaction level of clients. As shown in the analysis 62.5% of bank managers strongly agree, 37.5% agree that the loyalty level of customers can be affected by the relation between satisfaction and quality. which has been proved in the mean analysis 4.625 which indicates that responses are around strongly agree, and the very low standard deviation 0.5175 indicated that the spread of data is low and around the mean.

Another factor is trustworthiness; the level of trust can be affected negatively between the banks and its clients due to the lack of physical interactions between them. 12.5% of bank managers strongly agree, 25% agree, 25% neither agree nor disagree, 25% disagree and 12.5% strongly disagree that the level of trust decreases when there is no physical interactions between customers and banks. which has been proved in the mean analysis 3.5555 which indicates that responses are between disagree and agree, and the low standard deviation 1.30931 has been increased since the responses have been spread around the mean. Also, when customers generate a high level of trust for a specific bank that they are used to deal with, accordingly this will generate a positive effect of the way consumers behave towards digital banking. 87.5% of bank managers strongly agree, 12.5% agree that when clients trust the bank that they are used to deal with, they will positively accept and use digital banking services. which has been proved in the mean analysis 4.8750 which indicates that responses are around strongly agree, and the very low standard deviation 0.35355 indicated that the spread of data is very low and around the mean.

The factor of user friendliness and helpfulness features added by banks help customers in accepting the innovative and high technological services. 50% of bank managers strongly agreed, 50% agreed that these added features will increase client's performance in accepting innovative services. Which has been proved in the mean analysis 4.3750 which indicates that most responses around strongly agree and agree, and the low standard deviation 0.51755 indicated that the spread of data is very low and around the mean. Also, a proper interface design enhances the cognitive cues for clients. 62.5% of bank managers strongly agree, 37.5% agree that the enhanced design of the digital interface helps customer's cognitive cues. which has been proved in the mean analysis 4.6250 which indicates that responses are around strongly agree, and the very low standard deviation 0.51755 indicated that the spread of data is very low and around the mean.

Agreeableness and difficulty factors are defined as the level of creativity received by customers and can affect consumer's attitude towards digital banking. 25% of bank managers strongly agree, 50% agree and 25% neither agree nor disagree that the level of difficulty and agreeableness of digital banking services can affect client's behavior. which has been proved in the mean analysis 4.000 which indicates that responses are around agree, and the very low standard deviation 0.75593 indicated that the spread of data is low and around the mean. Recently, it became important for digital banks to use the factor of security. 100% of bank managers strongly agree that banks use digital banking security policies. which has been proved in the mean analysis 5.0000 which indicates that responses are strongly agree and there is no spread in the data since the standard deviation is 0.00000.

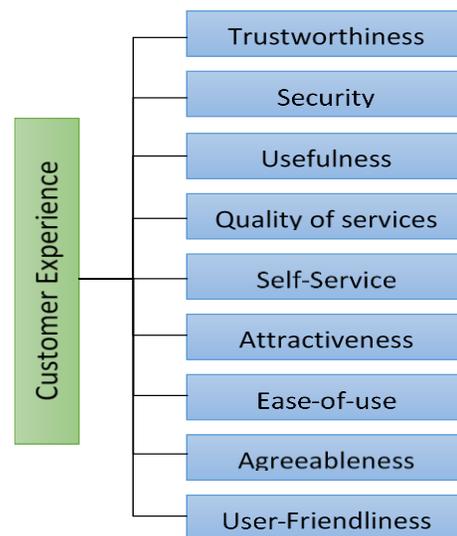
Aspects such as brand names, workforce and the location of brick and mortar bank influence how clients act towards digital services. 25% of bank managers strongly agree, 50% agrees, 25% neither agree nor disagree that these factors affect client's behavior. which has been proved in the mean analysis 4.000 which indicates that responses are around agree, and the very low standard deviation 0.75593 indicated that the spread of data is low and around the mean. Also, when customers have a high level of digital loyalty to a specific bank, this will decrease the new customer acquisition process for banks. 50% of bank managers strongly agree, 37.5% agree and 12.5% neither agree nor disagree that digital loyalty decreases the high expenses of acquiring new customers. which has been proved in the mean analysis 4.3750 which indicates that responses are around strongly agree and the very low standard deviation 0.74402 indicated that the spread of data is low and around the mean.

Regarding Jordanian customers, they are reluctant to use digital banking. As presented in this chapter, 62.5% of banks' managers neither agree nor disagree, 25% agreed and 12.5% strongly agreed that customers in Jordan are reluctant to use digital banking, which has been proved in the mean analysis 3.5000 which indicates that most responses around neither agree nor disagree, and the low standard deviation 0.75593 indicated that the spread of data is low and around the mean. Thus, the majority of customers in Jordan are still using brick and mortar banks, 50% of banks' managers agreed, 12.5% strongly agreed, 12.5% neither agree nor disagree, 12.5% disagree and 12.5% strongly disagree that Jordanian customers are reluctant to use digital banking and still use traditional banking services. Which has been proved in the mean analysis 3.3750 which indicates that most responses around agree, and the low standard deviation 1.30245 has been increased since the responses have been spread around the mean.

## Discussion

As the research investigated number of factors that have an effect customer's experience, considering the time of introducing services digitally, trustworthiness has emerged to be a very important factor affect the acceptance and the way consumers behave towards digital services. In order to completely understand how consumers behave digitally, companies should examine some elements such as branding, workforce and the location of brick and mortar banks. Moreover, each element is connected to increase the level of trustworthiness in digital oriented services [McNeish, 2015]. As hypothesized in the paper and presented in the (Figure 1), self-service is affected by trustworthiness in bank application. Also, the security provided in the technological services is crucial for generating customer trust in the digital environment and the improved quality plays an enormous role in influencing client's trustworthiness. Likewise, the improved attractiveness together with user-friendliness boost the confidence of customers in dealing with digital applications; consequently, it will increase their acceptance towards digital functions. So as the customers to perform their financial transactions easily, the provided services should be easy to use to increase quality and strengthen the utility of applications.

The research results indicated that the improved factors discussed in the paper, positively affect customer's experience. Although the results showed that the digital banks are growing all over the world; Most consumers in Jordan remain using brick and mortar banks. Nevertheless, banks in Jordan are keen to provide digital banking facilities to customers in order to increase superiority and decrease the charge of transactions. Consumers in the Arab world are unwilling to utilize the services of digital banks because of traditional, financial and societal causes [Yaseen & Qirem, 2018].



**Figure 1: Digital banking factors that affect customer experience**

## **Conclusion**

This paper provided an overall understanding on the impact of the improved factors used in the digital banking services on customer's experience, as it is directly impacted by the provided services by e-banking as it became very crucial in competence of financial transactions and its effectiveness, it also has an impact on the marketing sector [Mbama & Ezepue, 2018]. As findings indicated that there is a positive relation between the improved factors provided by digital banks and customer experience, satisfaction and acceptance of using digital banking. According to this, bank's revenue will increase. The presented factors allowed customers to use digital banking anytime, anywhere, and the elements of brand name, workforce and the location of banks affect how clients act towards services. On the other hand results showed that Jordanian customers are still reluctant to use digital banking. In Future, the study can be to cover more banks in Jordan and Middle East. Also, studied more segments of respondents such as bank clients and cover other factors that would affect customers directly. Some limitations occurred in the study due to banks procedures and policies, as number of banks refused to answer the survey, along with the continuous cancelation due to bank manger's hectic duties, which lead to a narrow sample size. as well as, the limited time provided for this research was a dilemma.

## **REFERENCES**

- Alain Yee-Loong Chong, Keng-Boon Ooi, Binshan Lin, Boon-In Tan, (2010) "Online banking adoption: an empirical analysis", *International Journal of Bank Marketing*, Vol. 28 Issue: 4, pp.267-287
- Anthony Larsson, Yamit Viitaoja, (2017) "Building customer loyalty in digital banking: A study of bank staff's perspectives on the challenges of digital CRM and loyalty", *International Journal of Bank Marketing*, Vol. 35 Issue: 6, pp.858-877
- Apostolos Giovanis, Costas Assimakopoulos, Christos Sarmaniotis, (2018) "Adoption of mobile self-service retail banking technologies: The role of technology, social, channel and personal factors", *International Journal of Retail & Distribution Management*
- Cajetan I. Mbama, Patrick O. Ezepue, (2018) "Digital banking, customer experience and bank financial performance: UK customers' perceptions", *International Journal of Bank Marketing*, Vol. 36 Issue: 2, pp.230-255
- Charles k. Ayo, Aderonke Atinuke Oni, Oyerinde J. Adewoye, Ibukun O. Eweoya, (2016) "E-banking users' behaviour: e-service quality, attitude, and customer satisfaction", *International Journal of Bank Marketing*, Vol. 34 Issue: 3, pp.347-367
- Chung-Yu Wang, Li-Wei Wu, (2012) "Customer loyalty and the role of relationship length", *Managing Service Quality: An International Journal*, Vol. 22 Issue: 1, pp.58-74
- Elizabeth Manser Payne, James W. Peltier, Victor A. Barger, (2018) "Mobile banking and AI-enabled mobile banking: The differential effects of technological and non-technological factors on digital natives' perceptions and behavior", *Journal of Research in Interactive Marketing*, Vol. 12 Issue: 3, pp.328-346
- Francisco Muñoz-Leiva, Teodoro Luque-Martínez, Juan Sánchez-Fernández, (2010) "How to improve trust toward electronic banking", *Online Information Review*, Vol. 34 Issue: 6, pp.907-934
- Jae Choi, Derek L. Nazareth, (2014) "Repairing trust in an e-commerce and security context: an agentbased modeling approach", *Information Management & Computer Security*, Vol. 22 Issue: 5, pp.490-512,
- Jarunee Wonglimpiyarat, (2017) "FinTech banking industry: a systemic approach", *foresight*, Vol. 19 Issue: 6, pp.590-603
- Joanne McNeish, (2015) "Consumer trust and distrust: retaining paper bills in online banking", *International Journal of Bank Marketing*, Vol. 33 Issue: 1, pp.5-22
- Kenneth B. Yap, David H. Wong, Claire Loh, Randall Bak, (2010) "Offline and online banking – where to draw the line when building trust in e-banking?" *International Journal of Bank Marketing*, Vol. 28 Issue: 1, pp.27-46
- Khian Sin Ong, Bang Nguyen, Sharifah Faridah Syed Alwi, (2017) "Consumer-based virtual brand personality (CBVBP), customer satisfaction and brand loyalty in the online banking industry", *International Journal of Bank Marketing*, Vol. 35 Issue: 3, pp.370-390

- Luc Honore Petnji Yaya, Frederic Marimon, Marti Casadesus, (2011) "Customer's loyalty and perception of ISO 9001 in online banking", *Industrial Management & Data Systems*, Vol. 111 Issue: 8, pp.1194-1213
- Luis V. Casalo, Carlos Flavián, Miguel Guinalú, (2007) "The role of security, privacy, usability and reputation in the development of online banking", *Online Information Review*, Vol. 31 Issue: 5, pp.583-603
- Manon Arcand, Sandrine PromTep, Isabelle Brun, Lova Rajaobelina, (2017) "Mobile banking service quality and customer relationships", *International Journal of Bank Marketing*, Vol. 35 Issue: 7, pp.1068-1089
- Mohammad M. Akbar, Noorjahan Parvez, (2009) "Impact of service quality, Trust, and customer satisfaction on customer loyalty", *ABAC Journal* Vol. 29, No.1, pp.24-38
- Saad Ghaleb Yaseen, Ihab Ali El Qirem, (2018) "Intention to use e-banking services in the Jordanian commercial banks", *International Journal of Bank Marketing*, Vol. 36 Issue: 3, pp.557-571
- Sandra Maria Correia Loureiro, Eduardo Moraes Sarmiento, (2018) "Enhancing brand equity through emotions and experience: the banking sector", *International Journal of Bank Marketing*, Vol. 36 Issue: 5, pp.868-883
- Shalom Levy, (2014) "Does usage level of online services matter to customers' bank loyalty?" *Journal of Services Marketing*, Vol. 28 Issue: 4, pp.292-299
- Sekaran Uma, Bougie Roger (2013); *Research Methods for Business*, 6th Edition, John Wiley & Sons Ltd. ISBN: 978-1-119-94225-2
- Shu-Hsun Ho, Ying-Yin Ko, (2008) "Effects of self-service technology on customer value and customer readiness: The case of Internet banking", *Internet Research*, Vol. 18 Issue: 4, pp.427-446
- Tao Zhou, (2011) "An empirical examination of initial trust in mobile banking", *Internet Research*, Vol. 21 Issue: 5, pp.527-540