

# THE ADOPTION OF E-BANKING IN JORDAN AND ITS IMPACT ON JORDANIAN CUSTOMERS

Mohammed Nadem Dabaghia, Al- Ahliyya Amman University

## ABSTRACT

*Electronic communications and e-commerce have altered the banking business both in inside operations and in managing clients, and current clients in developed nations have exclusive standards of service quality gave from banks to meet their satisfaction; notwithstanding, many individuals oppose such change and remain established in conventional high-street banking designs, especially in developing nations. This paper utilizes a quantitative survey and interviews to investigate clients' points of view on the e-banking framework in Jordan, characterizing e-banking phrasing and its capacities and the benefits and limits of e-banking applications to investigate the effect of e-banking on customary services. It finds that e-banking reception positively affected Jordanian banks and customers' satisfaction rates, dependability and staggeringly sure word of mouth for the banks. The paper additionally recognizes not set in stone customers' satisfaction with online banking. In light of the findings a few suggestions are given to expand e-banking adoption in Jordan.*

**Keywords:** Online Banking, Jordanian Banks, Customer Satisfaction, E-Banking, Service Quality, E-Commerce, Adoption.

## INTRODUCTION

The usage of Information and Communications Technologies (ICTs) has changed the techniques for coordinating business trades and dealing with the creating solicitations of customers for most associations. Accommodation is the abrogating need for most customers; accordingly, they like to pick a service supplier who can offer the most proficient service as far as time and exertion. The promotion of ICTs and the web since the 1990s has been the characterizing attributes of present-day venture, empowering huge decreases in economic, time and exertion expenses and consequently offering better support. One of the spaces where ICT has applied an especially significant impact is in the banking area, where financial associations continually try to be more serious, upgrade their customer base, reduce functional overheads and foster the quality and practicality of their reaction (Nath & Liu, 2017).

Banking is an indispensable part of the Jordanian economy and financial services are a fundamental component of present-day individual and public life. As per the Central Bank of Jordan (2010), there are 23 business banks in the somewhat little public market, increasing seriousness between those organizations, whose primary objective is to at last to boost benefit, as in any commercial business.

Electronic banking (E-banking) or online banking is characterized practically by investorwords.com (2015) as a framework permitting people to perform banking exercises at home, by means of the web. It incorporates the frameworks that empower

financial foundation clients, people or organizations, to get to accounts, execute business, or acquire data on financial items and services through a public or private network, including the web. Internet banking offers extraordinary independence to clients to regulate their own exchanges and to profit from banking services over the web, most clearly e-commerce, albeit numerous different services, for example, e-government are progressively conceivable over the web (Nazaritehrani & Mashali 2020).

The more extensive adoption of the World Wide Web during the 1980s introduced the idea of internet banking among financial associations in Europe and the North America, who talked about the idea of home banking. While spearheading arrangements were made by Citibank and Chase Manhattan in New York as right on time as 1981, and by the Bank of Scotland in the UK in 1983, the services offered were simple, for example, seeing bank statements and covering bills online. Current Online banking arose during the 1990s with the broad adoption of dial-up home web and mass PC possession. In 1994 the main bank that offered the most comprehensive e-banking services was the Stanford Federal Credit Union Bank. In 1995 president bank made a tremendous advancement in the home financial services by offering its clients full admittance to their accounts online. These endeavors were industry-driven, with a stamped hesitance among most shoppers to draw in with e-banking, mainly due to privacy concerns.

The 2000s period was named the development and acknowledgment stage, in which practically over 80% of banks in the US offered online financial services. In the early 2000s the Bank of America was quick to reach to nearly 3 million online financial clients, which addresses 20% of its client base. Online banking began to prosper and turn out to be more adequate among clients because of a few elements, most clearly the accommodation of economic and time saving, alongside the day in and day out accessibility of online services and the demonstrable protection of online exchanges (given a fillip by the advertising of e-commerce giants like Amazon and eBay). In 2007, Apple presented the iPhone and made a huge improvement in online banking by moving the financial exchanges from banking through PCs into banking by smartphones. By 2009 it was assessed around 52 - 55 million US Households got to their financial balances online. Two years later, even late adopters favored essentially to get to their accounts online as opposed to visiting a branch or utilizing Automatic Teller Machines (ATMs).

One of the main advantage of e-banking is that it empowers clients to lead a large portion of their financial exchanges all at once which suits them, with day in and day out access for taking care of bills and making buys, as well as facilitating the cycles engaged with getting to and transferring finances between accounts (Tabassum, 2019).

Internet banking in Jordan started in early 2000s with two local banks, the Arab Bank and Jordan Kuwait Bank, started offering basic online services, for example, balance checking (Siam, 2006), however all through the time of 2001-2003 Jordanian banks didn't genuinely attempt to repeat the spearheading endeavors being made by their opposite numbers in Europe and North America. As per the Central Bank of Jordan Annual Report (2010), 23 enlisted banks executed internet banking by mid-2009, addressing nearly 550 branches. The primary reasoning recognized for the adoption of e-banking by these organizations was the need to stay aggressive in the quickly growing financial area of information development and data transfers, which enable electronic facilities in financial exercises.

The Jordanian financial framework is right now going through a time of basic change that is upsetting the manner by which financial services are conveyed, with movement to fuse a beneficent augmentation in the amount of choice channels open for the conveyance of services, with e-banking shaping the center vehicle for these new items. Meanwhile, business banks in Jordan are hoping to upgrade their activities and reduce their costs through electronic e-banking frameworks. Notwithstanding, all together for client internet banking adoption to be expanded, Jordanian banks and other e-commerce firms should address purchaser concerns and grasp the key factors that sway customer e-banking adoption to conquer limitations to such changes (Mullan, Bradley & Loane 2017).

### **Research Goals**

- 1) Illustrate effect of e-banking services on customer satisfaction in Jordanian banks.
- 2) Discover whether the customers' segment attributes (age, gender, education and pay income) impact on internet banking acknowledgment.
- 3) Determining the qualities and weaknesses of internet banking frameworks in Jordanian banks.

### **Research Questions**

- 1) What is the impact of internet banking services on traditional financial Services?
- 2) What is the impact of e-banking relying on customer satisfaction in Jordan?
- 3) To what degree can bank clients in Jordan depend on e-banking services?

## **LITERATURE REVIEW**

### **E-banking Functions**

As seen by AlNaaji & Qusef (2021), E-banking is a worldwide and pervasive marvel vital to the endurance of present-day financial establishments, and clients who use e-banking services verifiably trust them and see them to be protected and solid techniques to embrace their financial exchanges. Investors additionally believe e-banking capability to be an essential for banking efficiency and competitiveness. In any case, the inquiry survives from the huge number of individuals, particularly in developing nations, who don't utilize internet banking.

Studies have investigated boundaries to e-banking adoption and customer satisfaction for quite a while, distinguishing a few factors that can influence customer satisfaction while utilizing the internet banking. Because of the broad adoption of e-banking service arrangement by banks, they are constrained to offer extra provisions to spur clients to utilize such contributions to support a competitive advantage. Ok, Suy, Chhay & Choun (2018) characterized consumer satisfaction as the aftereffect of insight, evaluation and intellectual reactions to the use insight with a product or service; as such, it is a consequence of an intellectual and full of affective assessment whereby some use standard is appeared differently in relation to the truly seen execution. Consequently, if the performance noticed is not as much as what was generally anticipated clients won't be fulfilled, while on the off chance that the performance experienced surpasses expectations, they will be viewed as fulfilled clients, which addresses positive results for

both the bank and the client (Aldaihani & Ali, 2018; Ramesh, Jaunky, Roopchund & Oodit, 2020).

The procedures that are directed by the financial business primarily mean to one or the other keep, meet or surpass clients' expectations, which consequently distinguishes a client as a loyal service client will set aside less effort to manage exchanges, be less sensitive to changing costs and try to ignore contenders' promoting (Tabrani, Amin & Nizam 2018), thus knowing the degree of customer satisfaction is vital for banks. The vital record of customer satisfaction is word of mouth, which is a significant determinant of goal to buy and client loyalty for the most part, characterized as a customer's expectation or inclination to buy from a similar association once more (Goutam, Gopalakrishna & Ganguli 2021). Loyalty is viewed as a critical factor to make organization progress and maintainability over the long run.

Word of mouth is an informal methodology of connection between private parties in regards to the evaluation of services and products (Rahman, Noh, Kim & Lee 2021). Internet banking is emphatically identified with customer satisfaction and maintenance; in case clients are happy with the services given by banks and the time span inside which exchanges are refined, they are almost certain to utilize online banking services again and to connect this with great service from the association, but in the event that not they will incline toward utilizing the customary financial services or they may attempt another banks who offer more amiable e-services and simplicity of managing exchanges.

Loyal clients extend their normal exchanges into directing a wide range of services presented by the bank. Client retention can be defined as of how much a client displays rehash buying and value resistance conduct to a service supplier and has a positive attitudinal and intellectual demeanor. Estimating shopper loyalty can give banks accommodating information about customer devotion and support, while assisting them with conceiving fruitful techniques to use capable customer service as a separating factor in this strongly customer arranged service industry.

Consumer loyalty and its components as per the adoption of internet banking. It tends to be seen that the reliant variable of customer satisfaction is influenced by the autonomous factors admittance to accounts, account control, adoption of account, cost/time viability, convenience and privacy and security; having accomplished customer satisfaction, the last then, at that point, builds clients' adoption of e-banking in a pattern of positive feedback, for example, the more clients experience effective e-banking exchanges, the more they will use e-banking Services. (Rahman, Noh, Kim & Lee 2021). The findings of this research states that the acknowledgment of e-banking's autonomous factors positively affected the Jordanian Commercial Bank and customer's satisfaction, while loyalty and eventually great word of mouth impact purchaser decisions.

Advantages and disadvantages of internet banking is basically the execution of financial institution account transactions the use of anytime, everywhere digital way. Some of the advantages and disadvantages of this financial platform are defined below.

### **E-banking Advantages**

- 1) Convenience and comfort, banks that offer online banking are just getting started trades whenever a client wishes to utilize them and from any spot, especially from home. Beside times of site support, general e-banking services are open 24/7/365.
- 2) Faster and simpler methods of going through with and observing exchanges. A client can screen spending through a virtual wallet through explicit banks and applications and engage instalments.

The speed of trade is speedier as for usage of ATMs or standard overseeing of accounts, which likewise permits clients to be informed by email and telephone of updates and changes in their financial balances.

- 3) Customers can get to their accounts from anyplace and whenever. This facilitates the interaction since they can watch out for their cash and accounts from anyplace on the planet where they can get to the web.
- 4) Reducing traditional expenses. At the point when the web is free, the client can get to their accounts by means of a PC or smartphone, diminishing time and monetary expenses related with customary high road banking, assuming that the interest in ICT hardware is accidental and not dependent upon e-banking – for example that clients as of now have a PC or cell phone free of their adoption of online banking.

### **E-banking Disadvantages**

- 1) Security, e-banking is mostly secure, but like all types of exchange it is not generally and everlastingly destined to be liberated from hazard. Electronic fraud and Cybercrime are a relentless reality and a danger to all clients of e-commerce, including banks. Hacking, information leaks and different types of cyber-attacks to banks, especially client accounts, can be unfortunate.
- 2) Poor e-banking services. In conventional banking clients could expect an in a real sense human interface that would clarify data top to bottom and take into account individual necessities and prerequisites. Alternately, customer service for online banking can be extremely poor, regardless of most banks having a dedicated client support group for online customers; encountering the feared telephone menu can in any case be bothering to many individuals.
- 3) Complicated sites. Complex encryption writing computer programs is used to guarantee account information. In any case, there are no perfect structures. Records are leaned to hacking attacks, phishing, malware and illegal activities. Moreover, convoluted destinations can be oppressive to investigate and may oblige one to examine through instructional exercises to investigate them.
- 4) Transaction issues. A couple of clients really incline in the direction of personal meeting (human interaction and customized consideration), incorporating individuals with impedances to utilizing e-services, and human collaboration is fundamental for most complex trades and issues that emerge in e-banking. Standard banks might gather for meetings and search for master direction to address issues, yet online banking is basically impenetrable to explicit client necessities not enveloped and open in standard customer service formats.

### **Securing Clients Data**

As referenced already, the principle worry of clients is the strength of banking security frameworks and regardless of whether they are satisfactory to ensure their personal information and bank insights about their financial status and exchanges. The most fundamental security of client data in e-banking is the antivirus program, portrayed by Ahmad, Iqbal & Shahzad Jamil (2021) is a utility that scans a hard disk for virus and removes any that are found. Most antivirus programs consolidate an auto-update programs highlight that enables the framework to download profiles of new viruses so it can check for the new contaminations when they are found.

*Programming:* There are various enemy of infection programs accessible and banking firms are relied upon to get the most secure accessible, as dictated by their IT department, which distinguishes programmers infiltrating firms' firewalls and endeavoring to hinder unapproved access. At the point when an unapproved activity is distinguished by the framework, it naturally initiates additional safety efforts like asking the customer individual identifier security inquiries or sending a security code to a device that the customer has enrolled, which is known as two-step, two-factor or multi-factor confirmation.

Multi-factor authentication: Dasgupta, Roy & Nag (2017) characterized Multi-Factor Authentication (MFA) as a security framework that requires more than one strategy for validation from independent categories of certifications to confirm the client's identity for a login or other exchange. It is considered as the most practical system a business can convey to ensure computerized resources and client information.

Multi-factor authentication joins at least two independent accreditations; a combination of numbers or letters or symbols or all combined, known as (password), what the customer has (security token) and what the customer is (biometric affirmation). The goal of MFA is to make a layered shield and make it more problematic for an unapproved individual to get to a target, for instance an actual location, computing gadget and a framework or database. On the off chance that one component is compromised or broken, the programmer actually has no short of what another hindrance to crack before adequately breaking into the objective.

At the point when the client is getting to their ledgers online and enters their data accurately, and the framework doesn't identify any unapproved activity, a Secure Socket Layer (SSL) encryption makes a protected association with the program when the client signs in, and finishes up an application or take on online services. Here by this guarantees the customer that all the exchange being led is ensured and personal information is clarified.

Secure Socket layer SSL: Secure Socket Layer was characterized by Dastres & Soori (2020) as a PC networking protocol that oversees server authentication, customer authentication and encrypted correspondence among servers and customers. The SSL guarantees that:

- 1) Only the client can see that he is interconnecting with the bank.
- 2) The bank can pinpoint the client prior to diffusing private data.
- 3) Unauthorized people such as hackers, can't get to customer telecommunications.

Customers themselves should practice some autonomous activities to secure their e-banking accounts online by playing it safe to guarantee that they don't expose their accounts to unnecessary danger, for example, not having a conspicuous password, and transforming it frequently, consistently observing their accounts, and Being careful about phishing and different tricks.

### **Social Viewpoint on Online Banking in Jordan**

The Jordanian public culture affects e-commerce adoption, and individuals are still commonly moderate in the adoption of e-services for the most part. Most bank customers incline toward traditional paper methodology instead of e-services with regards to any interaction identified with their cash, and in accordance with the overall business culture in the Middle East and North Africa (MENA), most genuine bank clients (for example organizations) will have a personal relationship with somebody in their branch, frequently the branch manager. The adoption of individual compatibility and networking is a characterizing normal for business culture in MENA, and Jordanians will in general look for companions and family members in each foundation they need to manage prior to visiting it. On the off chance that they couldn't discover any, they will attempt to make their own relations inside that foundation, which causes them to feel better. Handshakes, common good greetings, and surprisingly knowing the name of the

bank representative enhances customer trust and causes clients to have a sense of safety and in charge of anything that might occur. Significant issues of worry for Jordanian individual customers utilizing e-banking Services are identified with trust and acquaintance; it will in any case require more opportunity to empower the e-banking services to be utilized for the entire scope of conceivable online banking services.

Technological limits (for example poor web framework and connectivity, especially outside major urban areas) additionally impeded the adoption of e-banking, alongside the restrictive cost of internet providers and an absence of information on utilizing e-services among many individuals. In any case, a developing number of Jordanians are utilizing e-banking services and the people who do express that they favor going through with their exchanges utilizing e-banking, instead of visiting the branch and squandering cash, time and physical energy. Banks are attempting to build this group of individuals by promoting their websites and carrying out more services as well as decreasing expenses for online clients in more ways than one.

## Theories

In view of the past literature examined over, this review looks to test the accompanying theories:

- A. Not applying e-banking services has a critical result on the benefit of non-electronic banks.
- B. E-banking services significantly affect the productivity of new adopter banks.
- C. There is a positive connection between customer satisfaction and client loyalty on the adoption of online banking service presented by the Jordan Commercial Bank.
- D. There is a positive connection between client assumptions and customer satisfaction on the adoption of online banking services presented by the Jordan Commercial Bank.
- E. There is a positive connection between perceived quality of the service and customer satisfaction on the adoption of online banking services presented by the Jordan Commercial Bank.
- F. There is a negative connection between client objections and client loyalty on the adoption of online banking service presented by the Jordan Commercial Bank.

## METHODOLOGY

This segment presents the study philosophy used in this review to gather the information needed to accomplish the research destinations. The hypothesis in this review was explained in functional terms as examined before, to decide the customer satisfaction of e-banking clients in Jordan. The secondary information shaped the premise to comprehend the overall ideas and thoughts of assessing customer satisfaction utilizing online banking, trailed by surveys and interviews as the essential information assortment strategy. To gather the fundamental information, interviews with bank chiefs were directed in the beginning stage to steer the study interview and surveys.

## Study Techniques and Time Horizon

Inductive and deductive methodologies are strategies used to set up what is valid or false in study and make inferences. A deductive methodology is generally embraced utilizing an organized quantitative study technique. Quantitative study includes mathematical investigation of information and empowers the adoption of factual systems to address research inquiries regarding connections and contrasts between estimated

factors. Then again, enlistment is typically embraced utilizing less structured subjective technique.

In any case, the determination of the study approach depends on the research destinations. Consequently, this study is deductive. The review depended on a consecutive blend techniques system to gather the necessary information from the targeted sample where quantitative strategies were utilized to assist with informing the qualitative strategies, and qualitative techniques used to support the translation of the information gathered through poll, giving comparable weight for the two techniques.

### **Study Strategies and Data Collection Methods**

Study technique is an outline which the scientist uses to respond to explicit research questions, by indicating the sources the analyst uses to gather the necessary information and considering the limitations during information assortment interaction, for example, location, admittance to information and ethical issues. There are many research techniques which are solidly established in a deductive methodology, while others are in an inductive methodology.

This study embraced the overview technique for its information assortment measure. Overview is generally connected with the deductive methodology and, consequently, information are frequently acquired by utilizing a poll to gather information, however it isn't the technique that has a place with this procedure, Interviews likewise have a place with the study system, by assisting analysts with gathering a lot of normalized information from a sizable populace in an exceptionally conservative manner.

Poll was utilized as a quantitative information assortment strategy to gather information from banks clients to gauge their satisfaction level identified with the service given by their banks. Nonetheless, to gather more inside and out data and to comprehend the degree of services presented to clients from their banks we needed to concentrate on the satisfaction level structure other point of view, hence we utilized interview as qualitative information assortment technique.

The quantitative poll comprised of fourteen inquiries split between three sections concerning different parts of socioeconomics, access of accounts and account security. The survey configuration was pre-tested and upgraded through personal interviews with bank Managers and bank clients by attempted the pilot concentrate on work.

### **Sample Size and Sampling Strategies**

The study populace is the whole gathering of individuals, occasions or things of premium that the analyst wishes to explore. Choosing the designated sample is an essential component in any research. In this way, specialists need to plainly distinguish and pick the designated sample to respond to explore questions. The populace for this study comprises of Jordanian banks offering online banking for their clients. Yet, to pick the more agent subset from the populace, analysts thought about the variables that impact the assurance of the objective sample which are information about online banking and admittance to the populace components.

In this review, tests were chosen utilizing convenience examining method. A sample size of 220 self-managed surveys was circulated utilizing random sampling to



clients in five chosen banks in Jordan. Among 220 questionnaires that were distributed, roughly 179 were returned and just 136 completely addressed survey from the respondents were used. As indicated by their criticism we have gotten the consequences of this review and acquired an extensive outline of the boundaries of customer satisfaction using internet banking, which can be used to build client loyalty and work on firm performance.

Eleven inside and out, semi-structured interviews were held with bank executives utilizing purposive expert specific sampling, which helped in testing emanant issues apparent from the questionnaires and giving an infiltrating understanding into the online banking frameworks of Jordanian banks according to the viewpoints of site developers and the online banking offices. Each interviewee was found out if the interview could be recorded and specialists were given authorization by all interviewees to record the interviews with the end goal of this study as it were. Answers were additionally recorded by note-taking to be utilized in the event that the voice-recorded tape was not satisfactory. Each interview took a normal period of 20 – 30 minutes and all interviews were held in the interviewee workplaces.

## **RELATED RESULTS AND FINDINGS**

The notable discoveries demonstrate that clients are by and large satisfied with the Jordanian banks and the services which are given by them, especially given the wide scope of services presented for covering telephone bills, charges, power bills and portable bills notwithstanding numerous other non-bank related services. Clients in Jordan progressively demonstrate weighty adoption of e-banking services for such purposes because of its accommodation.

### **Information Analysis for Questionnaire**

Following the distribution of the questionnaire to the JCB clients in a few bank branches, the information got is displayed in this section. Of 150 questionnaires, just 136 were qualified for definite study. The assembled discoveries show a gender appropriation of 40% males, 60% females, a proportion of 2:3. Most of male members are in the age group of at least 34. Results from the males showed that:

- A. Males in the age group of 18-24 detailed their absence of information concerning the offered online banking services, subsequently there was restricted use among their age group, however most of them expressed their inclination for utilizing the online banking services in contrast with conventional banking techniques.
- B. Males in the age group 25-35 expressed their inclination of utilizing the online banking services as they are all around educated regarding its reality and use. Also, they detailed their critical adoption of online banking because of its simplicity and every minute of everyday accessibility, permitting them the simplicity of managing a wide range of exchanges without limitations and obstruction of their day-by-day programs.
- C. Males in the age group of at least 35 detailed their outright ignorance and of the online banking services presented by the bank, and their inclination of utilizing customary banking services, essentially because of their security worries about their personal accounts. Most of female members were matured 25-35. Where results from them showed that:
  - a) Females in the age group between 18-24 announced their negligible information concerning the offered online services of the bank and their incidental adoption of it.

- b) Females in the age bunch between 25-35 announced their inclination for utilizing online banking services, and its huge use because of its simplicity.
- c) Females in the age group of at least 35 expressed their total ignorance and absence of information concerning online banking, notwithstanding their outright aversion of the strategy because of the trouble of mechanical use and security concerns.

A large portion of the JCB clients utilizing the online banking services expressed that internet banking and ATM services are the easiest to understand services presented by the bank. Half of the clients who like to utilize online banking think that it is simple, valuable and exceptionally like the decreased time it offers to manage day by day exchanges.

The discoveries of the survey additionally showed that half of the sample size addressed by the age group somewhere in the range of 25 and 35 supported two services; the exchange among accounts and the day by day exchanges, which were considered as good. Then again, just 15% of a similar sample has attempted the portable services, and because of its fragmented execution just a predetermined number of bank clients know about its reality. The members' positioning of the wellbeing of online banking as per the choices fluctuating from "poor" to "satisfactory".

40% of the sample size positioned the security of the online banking services presented by the bank as poor; this reaction was fundamentally from the age group at least 35 who don't utilize the online banking services. 27% of the sample size positioned it as agreeable, while 25% of the sample size positioned it as great and just 8% positioned it as superb. These numbers changed between the age groups between 18-24 and 25-35, contingent upon every individual's adoption of the online services presented by the bank. The respondents were approached to distinguish some other services they might want to be given by the bank, and 35% of them mentioned that the bank make an application that can be downloaded on advanced cells so they can get to any online bank services they wish straightforwardly without the problem of arriving at the authority page of the bank on the Web.

### **Analyzing Interviews Data**

The inquiries of the Interview were intended to be exact, in this manner the information gathered was effortlessly arranged and analyzed. The situation of the people Interviewed being the high-level management of the online banking office in the JCB decreased the chance of inaccurate or subjective Information, legitimizing the adoption of expert Interview as an essential information assortment technique in this research. Topical methodology was utilized to examine the subjective information, in light of disentangling the gathered information and grouping as per the importance and afterward breaking down to be decoded once more. The information was introduced and examined according to the study destinations, individually.

## **CONCLUSION**

The aftereffects of this research show that account access, control, account use or exchange; usability; protection and security are significant determinants of customer satisfaction with internet banking. Be that as it may, if the expense and time needed for internet banking builds, consumer loyalty will diminish, because of satisfaction being

predicated on the view of online banking as being worthwhile principally because of the decreased time and cost needed for banking purposes. Subsequently, this paper found that there is high idle satisfaction in Jordan with internet banking services authorized by the Jordan Commercial Bank, and clients are effectively anticipating the full execution of the Tejari Mobile service to have the option to lead a wide range of banking services utilizing their smart telephones.

The only impediment that is as yet considered as a hindrance for clients to adapt to the online banking services is their anxiety towards security issues with protection to their accounts. While they are past the underlying security concerns normal during the previous periods of e-business adoption (for example the 1990s in Europe and North America, and the mid-2000s in Jordan), they do keep a legitimate sagaciousness about the strength of online security frameworks to ensure their personal information and deposits. By guaranteeing of the security of the framework by additional raising awareness to light of the safety and reliability of online banking this issue can be solved, expanding E-Banking adoption and the customer's satisfaction as internet bank clients, which guarantees an increment the JCB benefits. The general results of this review influencing customer's satisfaction with online banking services represents that customer's expectations in regard to the quality and security of the service influences their satisfaction and loyalty ,while then again customer satisfaction and loyalty shows a converse connection to client objections.

Eventually, the Jordan Commercial Bank is educated to take on the arrangement with respect to guidance and further awareness about internet banking services and to give amicable customer service staff, which will acquire clients' trust and propel them to utilize e-banking services. This may not straightforwardly influence customer satisfaction, however it might by implication shape perception of quality, worth and commitment with banking services. Balci, Caliskan & Yuen (2019) showed that a more satisfied client implies a more loyal client, which in the end moves through the bank's benefit.

The outcome of the study show that internet banking is applying significant effects on banking connections, and the conventional model of a singular relationship with a high road bank issuing money and offering money withdrawal or transfer services is progressively sidelined, with no reference to a branch in most online exchanges, and clients' financial conduct (for example as far as product determination, usage, investment and borrowing and so forth) is additionally being reshaped. Online banking is basically the standard in most developed nations, established by its expense efficiencies and the expanding closure of conventional outlets, with more noteworthy proficiency being presented to clients by whenever, anyplace e-banking services.

## REFERENCES

- Ahmad, I., Iqbal, S., & Jamil, M.K. (2021). A systematic literature review of e-banking frauds: Current scenario and security techniques. *Linguistica Antverpiensia*, 3509-3517.
- Aldaihani, F.M.F., & Ali, N.A.B. (2018). Impact of social customer relationship management on customer satisfaction through customer empowerment: A study of Islamic Banks in Kuwait. *International Research Journal of Finance and Economics*, 170(170), 41-53.
- AlNaaji, H., & Qusef, A. (2021). A conceptual framework for representing business functions and their role in the quality of e-banking services. In 2021 International Conference on Information Technology (ICIT), 627-633, IEEE.

- Alsmadi, A.A., Sha'ban, M., & Al-Ibbini, O.A. (2019). The relationship between e-banking services and bank profit in Jordan for the period of 2010-2015. In Proceedings of the 2019 5th International Conference on E-Business and Applications, ,70-74.
- Altobishi, T., Erboz, G., & Podruzsik, S. (2018). E-Banking effects on customer satisfaction: The survey on clients in Jordan Banking Sector. *International Journal of Marketing Studies*, 10(2), 151-161.
- Balci, G., Caliskan, A., & Yuen, K.F. (2019). Relational bonding strategies, customer satisfaction, and loyalty in the container shipping market. *International Journal of Physical Distribution & Logistics Management*.
- Central Bank of Jordan Annual Report, 2006, 2007, 2008 and 2010.
- Dasgupta, D., Roy, A., & Nag, A. (2017). Multi-factor authentication. In Advances in User Authentication, 185-233, Springer, Cham.
- Dastres, R., & Soori, M. (2020). Secure Socket Layer (SSL) in the network and web security. *International Journal of Computer and Information Engineering*, 14(10), 330-333.
- Gangadwala, D.R., & Goyani, M.R. (2019). A study of issue of e-banking from the customers perception. *Emerging trends in global management and information technology*, 73.
- Goutam, D., Gopalakrishna, B.V., & Ganguli, S. (2021). Determinants of customer loyalty dimensions: E-commerce context in emerging economy perspective. *Journal of Electronic Commerce in Organizations (JEEO)*, 19(1), 1-23.
- Hanaysha, J.R. (2018). Customer retention and the mediating role of perceived value in retail industry. *World Journal of Entrepreneurship, Management and Sustainable Development*.
- Ismail, L.B., & Alawamleh, M. (2017). The impact of online banking of customer satisfaction in Jordan. *Journal of Organizational Studies and Innovation*, 4(2), 1-13.
- Jordan Commercial Bank. (2012). Available: <http://www.jcbank.com.jo/en>. Last accessed 02nd Nov 2016.
- Karim, S. (2019). The challenges and opportunities of e-banking adoption for small to mid-sized enterprises-SMES in Jordan. In 2019 IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT), 883-888. IEEE.
- Larsson, A., & Broström, E. (2019). Ensuring customer retention: insurers' perception of customer loyalty. *Marketing Intelligence & Planning*.
- Mapxashike, H.F., Nyamuziwa, N., Masendu, T.F., & Mafumbate, G. (2018). Impact of e-banking on traditional banking services. *Journal of Strategic Studies: A Journal of the Southern Bureau of Strategic Studies Trust*, 9(1), 28-40.
- Mullan, J., Bradley, L., & Loane, S. (2017). Bank adoption of mobile banking: stakeholder perspective. *International Journal of Bank Marketing*.
- Nath, H.K., & Liu, L. (2017). Information and communications technology (ICT) and services trade. *Information Economics and Policy*, 41, 81-87.
- Nazaritehrani, A., & Mashali, B. (2020). Development of E-banking channels and market share in developing countries. *Financial Innovation*, 6(1), 1-19.
- Ok, S., Suy, R., Chhay, L., & Choun, C. (2018). Customer satisfaction and service quality in the marketing practice: Study on literature review. *Asian Themes in Social Sciences Research*, 1(1), 21-27.
- Power, J.D., & Associates, R. (2009). Customer commitment to Retail Banks Continuous Decline.
- Rahman, T., Noh, M., Kim, Y.S., & Lee, C.K. (2021). Effect of word of mouth on m-payment service adoption: a developing country case study. *Information Development*, 0266666921999702.
- Ramesh, V., Jaunky, V.C., Roopchand, R., & Oodit, H.S. (2020). 'Customer satisfaction', loyalty and 'adoption' of E-banking technology in Mauritius. In embedded systems and artificial intelligence, 861-873, Springer, Singapore.
- Rita, P., Oliveira, T., & Farisa, A. (2019). The impact of e-service quality and customer satisfaction on customer behavior in online shopping. *Heliyon*, 5(10), e02690.
- Sandhu, S., & Arora, S. (2020). Customers' usage behavior of e-banking services: Interplay of electronic banking and traditional banking. *International Journal of Finance & Economics*.
- Scholasticus, K.. (2009). History of internet banking.
- Tabassum, R. (2019). Banking system: Emphasis on e-banking & SME banking prospect of NCC Bank Limited.
- Tabrani, M., Amin, M., & Nizam, A. (2018). Trust, commitment, customer intimacy and customer loyalty in Islamic banking relationships. *International Journal of Bank Marketing*.