

The Nexus between Acceptance and Adoption of Internet Banking Services by Bank of Botswana Customers in Gaborone: A COVID-19 Perspective

Cosmas Mwanza* and Pearl Bone Oahile

Department of Research and Data Analysis, Dean Strickland Research, Windhoek, Namibia

Abstract

In the midst of the pandemic, adoption and use of internet banking has become a necessity and not a choice. However, there is still some reluctance by some banking customers in adopting online banking. Using a quantitative research design a sample of 125 bank customers of Bank of Botswana in Gaborone to investigate factors that impede the adoption of online banking a questionnaire adopted, Online Technology Acceptance Model was adopted to collect the data using the convenience sampling method. SPSS (Statistical Package for Social Sciences) was used to analyze the data.

The study revealed a lacuna between adoption of the service and security concerns bordering on cyber fraud as some of the causes of non-adoption of using internet banking. Among the recommendations, it was suggested that banks should consider offering cheaper internet provision to their customers, reduction of overall online banking costs, provision of adequate information about internet banking services and benefits as well as embarking on aggressive advertising and marketing to ensure that the services were well known by the bank clientele. The study further recommended that Bank of Botswana should as a matter of urgency devise and implement strategies that would foster and increase customer trust in internet banking systems across the banking sector including the provision of training to their clients related to the use of internet banking.

The implications of the study have far reaching consequences in the current dispensation where the whole world is affected by the COVID 19 pandemic when the adoption of internet banking has become a necessity in the "new normal". Internet banking and online banking were used interchangeably in the study.

Keywords: Acceptance • Fourth industrial revolution • Online banking

Introduction

The phenomenon of online banking has sparked considerable excitement around the world, with some hailing it as the most significant technological advancement since the turn of the 19th Century [1]. Coupled with the emergence of the 4th Industrial Revolution that has affected all industries as a result of advances in technology as well as the exacerbation of the COVID-19 pandemic which has forced the need to transform and adhere to the "new normal". According to the World Bank's Report, organizations of the future that initiate new ways of doing business using technology and customers would have to quickly familiarize themselves with the use of online transactions, with specific reference to online banking. On the other hand, Haquel, is of the view that online banking services provide banks with a proper launching pad platform for providing their customers with a variety of services and products a view that is consistent with World Bank Reports [2].

Aim of the study

The aim of the study was to investigate why Bank of Botswana customers do not opt for online banking services. The study focus was on Bank of Botswana customers and their experience or inexperience in using online banking platforms.

Objectives

The primary objective of the proposed study was to assess the perceptions of Bank of Botswana customers on online banking and factors affecting their adoption of internet banking.

The main objectives for the research were as follows:

- To assess perceptions of Bank of Botswana customers on online banking platforms;
- To examine factors that influence the adoption of online banking services; and
- To recommend to strategies management of Bank of Botswana, on ways to sensitize its customers, encourage them and enable online banking platforms for use by customers.

Literature Review

This section deals with the extant literature review by scholars relating to the study. The section commences with the Origins and Definitions of Online Banking, Information Technology and service innovation practices, Controversies Surrounding Online Banking, Notable Authorities on Technology Acceptance and Adoption, Current Trends on Online Banking and Impact of Technology in the COVID-19 Era.

Empirical review on the adoption of internet banking

There has been a stream of research studies relating to the acceptance and adoption of internet banking. For example [3]. Used an extension of the TAM in their study in India on additional factors that influence the adoption of internet banking. Features of the website and perceived usefulness were found to be key drivers in encouraging internet banking [4]. In the Philippines conducted a study, which found that the non-adopters of mobile banking hinged on the initial trust as a significant influence on the intention

***Address of Correspondence:** Dr. Cosmas Mwanza, Supervisor and Research Consultant at Dean Strickland Research, Windhoek, Namibia, Tel: +264818643972; E-mail: asaphsazini@gmail.com

Copyright: © 2021 Mwanza C, et al. This is an open-access article distributed under the terms of the creative commons attribution license which permits unrestricted use, distribution and reproduction in any medium, provided the original author and source are credited.

Received: May 14, 2021; **Accepted:** May 28, 2021 ; **Published:** June 05, 2021

to use online banking services.

Other studies conducted in Thailand by [5]. Found that adoption of internet banking use bordered around security issues, perceived usefulness, perceived ease of use and social influence. While a study in Singapore by [6]. Revealed that attitudinal and perceived behavioral control factors influenced the intention to adopt internet banking. On the other hand, a study in Turkey by [7]. Found that usefulness and ease of use determined in the adoption of internet banking [8]. In their study in South African rural areas found among other inhibitors to the adoption of online banking to be compatibility and security.

All these studies indicate a common thread around perceived usefulness in the adoption of internet banking while security concerns are obstacles. This study is unique in that it is conducted in the midst of a pandemic and on customers of a central bank

Origins and definitions of online banking

Internet banking or online banking has been traced back to its origins in 1995, with the internet being used by banks as a remote channel to deliver banking services to their customers. This delivery channel has enabled banks to offer both informational and transactional services with ease. According to online banking is an umbrella term for the process by which a customer may perform banking transactions electronically without visiting a brick-and-mortar institution [9]. Online banking allows bank customers to manage their banking transactions anywhere and anytime. According to the main aim of introducing internet banking was to enable the banks to use it as an information presentation platform where they could market their products and services through their websites. However, advancements in technology have seen this development enabling banks to maintain databases about their customers and their transactions at a lower cost [10].

Information technology and service innovation practices

There have been rapid advancements in the Information Technology field across the world and these innovations have affected the way the banking industry handles its day-to-day business. The internet is seen to be the key force driving the change in the banking sector in line with the emergence of the fourth industrial revolution including COVID-19 pandemic. Banks have had to reconsider the way they deliver their services since electronic payments as technological advancements, have become key to providing convenience to customers as the use of cash diminishes [11]. These technological advancements have seen the world in recent years embracing innovation practices, leading to easier and faster, more convenient ways of conducting business regardless of geographical barriers and location.

The global world has embraced the technological advancements era. However, despite the envisaged online banking services benefits and the huge investments made by banks towards the implementation of online banking, many customers are still reluctant to use these services [12]. The subject of technology acceptance has attracted a lot of the interest from researchers across the world, who has been working on trying to establish why people choose to use or not to use technological offerings as presented by different service providers. The banking industry has not been left behind in this search for the truth, as far as internet or online banking usage is concerned.

Controversies surrounding online banking

Like any other new product or offering launched for use by the public, internet banking has had its share of controversies bordering on security concerns and privacy relating to customer information. The need to keep customer activity private must be balanced with robust security requirements for the benefit of all users of the offering in question. There is, therefore, a call for all financial institutions offering online-based products and services to put in place effective methods for ensuring that customer identities are authentic and verified, in order to guard against and prevent identity thefts and fraudulent activities [13].

It is also noted that the banking industry globally has suffered at the hands of cyber criminals, leading to a loss of millions of US dollars [14]. Further asserts that a sophisticated cyber-attack on the United States could have a ripple-effect on major banks and severely disrupt the broader financial system.

While online banking platforms have been praised to offer easy access and convenience, these digital services have been seen to be vulnerable to cyber-attacks, fraud and failure to process and execute transactions, thereby exposing customer funds to losses. System failures have also led to inconveniences to customers while banks take their time to reconcile and resolve customer queries, resulting in low customer trust in the services offered online by any bank [15].

Notable authorities on technology acceptance and adoption

The most influential authors in technology acceptance among others include, with their Theory of Reasoned Action which advances that behavior is determined by the behavioral intention which are driven the perceived usefulness and ease of use. Other notable scholars are the ones who developed the Technology Acceptance Model (TAM) which was essentially an extension of the Theory of Planned Behaviour developed [16-18].

Is another notable author who made valuable contribution to the field of technology acceptance. Introduced the Theory of Diffusion that sought to explain how, why and at what rate new ideas and technology spread. He advanced that diffusion was the process by which an innovation was communicated over time among participants in a social system. Rogers asserted that adoption was a decision of viewing full use of an innovation as the best course of action available at any particular point in time; while rejection was a decision not to adopt an innovation.

Current trends on online banking

According to the world is in the middle of the Fourth Industrial Revolution where technology is evolving faster than ever before. He asserts that companies and individuals that do not try to keep reinventing themselves and embracing some of the major technological trends run the risk of being left behind. For an organization to remain relevant and current, it is crucial for those running it to understand key technological trends in the business world in order to prepare for and grasp opportunities that presented themselves for development and growth. This would manifest in the development and offering of new and updated products including services to address the ever-changing needs of consumers across the world. The same could be said for the banking industry [19,20]. Once opined that "banking is essential while banks were not". This meant that the traditional way of conducting banking business was going to disappear in order to make way for electronic banking, which continues to grow and attract the attention of many users within the global forum.

Impact of technology in the COVID-19 era

The pandemic of COVID 19 has brought the world to realise the need to embrace the 4.0 industrial revolution that is unstoppable [21]. According to Currency Research 2020, the current COVID-19 crisis has brought to the surface familiar arguments against the use of physical cash in the form of banknotes and coins. Online or contactless payments were observed to be increasingly taking the spotlight during the pandemic, while cash was being attacked and labeled as dirty and unhygienic. It was thus singled out as a key transmission agent of the virus, even though there was a wealth of evidence against that sentiment. The Currency Research Report 2020 further asserts that there was rampant speculation that the global outbreak of the COVID-19 pandemic would finally bring about the end of physical cash, in favor of online or contactless payments.

During the pandemic, restrictions on physical contact as well as the "Stay Home" order required banks to urgently assess and make a compilation of processes that required in-person interaction with a view to move them online as soon as it were possible. Banks had to accelerate

the deployment of such initiatives without incurring undue cyber and anti-money laundering risks. This meant that banks across the world were embarking on implementing critical operational changes to protect their staff and their customers. While some staff members were given support to work from home wherever possible, customers were being urged to use available online banking platforms for their daily banking requirements. This move was necessitated by banks having to reduce their operating hours across their branches in a bid to implement safety measures meant to safeguard staff and customers from spreading the of COVID-19 virus.

Advantages of online banking

There are numerous advantages found in the use of online banking that have not been fully utilized. According to banks in developing countries are increasingly relying on innovative technologies such as the internet, telephone banking and auto teller machines to penetrate existing markets and to create new markets. Internet banking is seen to assist banks in being able to reach and serve wider geographic areas without the need for building or acquiring additional physical branches thereby creating “branchless banking” [22]. It also presents banks with the possibility of offering a greater number of products and services, without the congestion of customers at their physical service points. According to online banking allows banks to offer customized products to chosen customers. In terms of benefits perceived due to bank customers [13,23]. Argues that internet banking has resulted in the automation of traditional banking practices and thus ensured that there is easy maintenance of personal accounts. Customers are now able to carry out their banking transactions from the comfort of their own homes or offices 24 hours, 7 days a week, hence saving time compared to having to queue for hours in order to perform only one transaction at the banking halls. Such transactions carried out online include and are not limited to cash transfers, bill payments, account balance checks, access to account activity and statements, application for debit and credit cards, as well as application for cheque books. Customers are able to access multiple accounts at a click of a button, offering them flexibility and convenience, including low cost of banking services.

According to the information that is already available on online banking and the benefits promised thereof, it is evident that internet banking has undeniable benefits for both banks and their customers.

Disadvantages of online banking

Internet banking seems like an obvious choice when those willing to try it assess the benefits promised. However, there are potential problems associated with the use of the internet for whatever purpose. According to, inadequate availability of reliable and secure telecommunications infrastructure may discourage users to explore the service as offered by the banks, due to geographical locations. Some customers may require training to equip them to use the service confidently. In recent times, of a major concern to the larger population of the world have been issues of cyber security, where platforms such as bank websites have been exposed to hackers, fraudsters and identity thieves. This makes it unsafe to perform banking transactions online as the possibility of attempts to steal customer credentials with the aim to steal funds remains a reality. There is therefore increased concern about privacy and security of customer information as asserts [23].

Online banking in Botswana

Commercial Banks in Botswana provide their customers with an assortment of electronic banking platforms in the form of internet banking, mobile banking, point of sale transfers and auto teller machines, just to mention a few. According to a survey on African Banking Customer Satisfaction, ninety nine percent (99%) of Africa's banking customers still preferred the traditional way of doing banking. The survey also found that most electronic banking channels operated at below thirty percent (30%) utilization [24]. The study also interestingly revealed that sixty six percent (66%) of bank customers in Botswana still chose to visit physical bank branches to attend to their banking needs. On the other hand, the Botswana Financial Sector Overview of 2009/2010 reported that cellphone banking,

as one of the channels of online banking had considerable potential in Botswana. Cellphone penetration was reported to be amongst the highest in sub-Saharan Africa at ninety-eight (98) per one hundred (100) people in 2008. The overview reported that the high uptake of cellphones in Botswana suggested that the population of the country was ready to try and adopt new technology. This observation was reinforced by further findings [25]. The survey revealed that seventy-five percent (75%) of respondents were ready and prepared to learn how to use new technology [26]. Finding suggested that the population of Botswana was ready to receive and embrace technological advancements and thus accommodate them in their daily routines. However, this suggestion seems not to have taken root.

Resistance to innovation

According to resistance to innovation is defined as the reluctance to accept technological advancements by consumers, either because it poses potential changes to the current state of affairs or it conflicts with the belief structure [26].

Many products are introduced into the market every year and the contemporary economy seems to be defined by a continuous stream of innovation, while on the other hand, met by a lukewarm reception by the consumers the products are meant for. Consumers may accept or reject new offerings, depending on whether the new product is deemed satisfactory or does not fit their requirements. Resistance to change, therefore, occurs when consumers perceive the risks of the change as being greater than its benefits. The relationship between innovation and acceptance is therefore a complex one because not all innovations that organisations offer come across as beneficial as perceived by consumers [27].

Competing theories on technology acceptance

The main theories used to explain why customers accept or resist innovation and technology include the following: Roger's Diffusion Theory, Theory of Planned Behavior, Theory of Reasoned Action, and Theory of Technology Acceptance. However, the rudiments and fundamentals towards doing anything is rooted in the planned behavior of the individual which emanates from the Human Agency theory that states that performance behavior is imbedded on intention, attitude, subjective norms and perceived behavioral control (Figure 1).

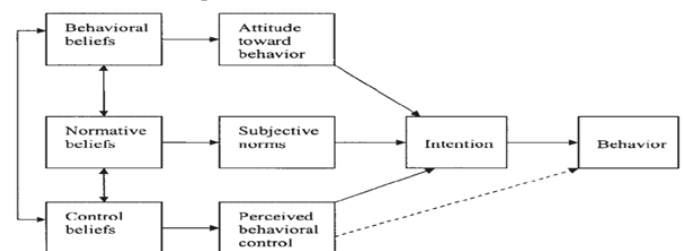


Figure 1. Theory of Planned Behavior (TPB).

Conceptual framework-online technology acceptance model

Define a conceptual framework as a diagrammatic linkage of variables of interest in a study [28].

Online banking is a relatively new distribution channel for banking services, particularly in most developing countries such as Botswana. The conceptual framework that was found suitable for this study was the Online Technology Acceptance Model developed [1].

A number of studies have used the TAM and TPB models to assess the usage of e-banking as well as its acceptance. However, according to neither the TAM nor the TPB has been found to consistently provide adequate explanations or behavioral predictions concerning the acceptance and adoption of internet banking [29].

According to factors influencing the adoption of technology are a complex set of different aspects including access to the technology and

infrastructure related factors, sector specific internet banking factors and other socio-economic factors [1]. Therefore, access to the infrastructure supporting the internet banking service is a prerequisite to usage. Time and trust are also needed to convince bank customers to switch to e-service delivery channels. On the other hand, perceived ease of use and perceived usefulness are considered the main factors influencing the intention to use e-banking [30]. It is also important to note that the process of intention to use as related to internet banking requires that sufficient information be available to customers to raise awareness of the service on offer as well as the benefits attached to using the product (Figure 2).

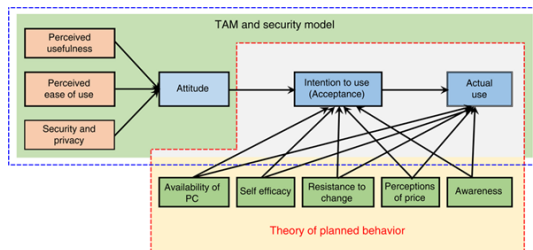


Figure 2. Online technology acceptance model.

Amongst the barriers to using online banking is the availability of Personal Computer. Access to a personal computer as well as to the internet is a pre-requisite for the use of e-banking for everyone [1]. Stated that a lack of access to either a computer or the internet is one of the possible reasons for the slow growth of e-banking. The researchers can affirm with these sentiments due to the cost of computers which are not attainable to all citizens in developing countries such as Botswana. Other factors relate to Self-Efficacy which is the confidence and the extent to which individual beliefs in the individuals capability to accomplish difficult tasks [31,32]. Advances that individuals with high capabilities of self-efficacy are expected to require minimum assistance while those with low capabilities of self-efficacy are expected to require maximum support. Strength, on the other hand refers to the trust of individuals in their ability to use services. Another inhibitor relates to Resistance to change and perceptions on the cost of transactions and use of online banking. According to the existing mode of service delivery that sufficiently fulfills customer needs is another factor that affects the intention to use e-banking services [33]. Costs include both normal costs associated with using the internet and the cost of bank fees and charges. The intention to use new technology is directly influenced by reasonable pricing, where lower prices can attract customers to use such a service. According to price tends to be a primary characteristic influencing brand switching [34,35].

Response rate

The primary data targeted 132 participants, who were Bank of Botswana customers in Gaborone and the response rate was high at 94.7% (125/132). The participants were given three weeks to respond to the questionnaires, where weekly reminders were sent to remind them about the need to respond to the questionnaires. This strategy led to a high response rate of 94.7% and hence a high response rate above 90% is perceived as meaningful according to [36,37]. Which can be used to generalize findings about why Bank of Botswana customers in Gaborone do not opt for online banking services?

Reliability

To test reliability, a Cronbach test was conducted which was within the acceptable score of 0.07 and deeming the research instrument reliable based on these alpha statistics.

Demographic information

The composition of the participants was eighty-four (84) female participants which translates to 67.2%, and forty-one (41) male participants translating to 32.8%. There were more female participants who had an interest in the study compared to male participants. Generalizations could be made that more females were interested in the study and open to giving

information about their perceptions to online banking platforms and factors that may be influential towards their adoption of online banking services compared to their male counterparts. Given the online banking context of perception vs adoption, more females are attracted to adopting online banking services should they receive more information especially about security issues. The findings are supported by [38]. On e-banking security which observed online banking as affected by the perceptions and factors influencing its (online banking) adoption.

Age of participants

The modal age group was 25-45 years with 28% under the age of 25 years and 17.6% between 45-65 years. These statistics show that the majority of banking sector customers is made up of young adults.

Academic qualifications of participants

Relating to academic qualifications of participants, the majority (41.6%) were Diploma holders, with 16.0% degree holders. Those with master's degrees were 8.8% while 0.8% was PhD holders.

Employment status of participants

In terms of employment status, the majority of the respondents work in the private sector (48.8%), followed by those employed in the public sector (39.2%) and those who were in the self-employed category were 12.0%.

Perceptions on internet banking

Perceived Ease of Use (PEOU): Asked about the perceived ease of use to establish whether they found online banking easy or difficult to use. All respondents found internet banking easy to use. The findings are in harmony with those of who found that perceived usefulness will positively influence customers' intention to accept and use Online banking services. However, despite the responses given, indications were that both clear and understandable interaction seemed to be lagging behind for some users. Despite an almost balanced view on the perceived ease of use, more respondents were observed to be skillful in the use of internet banking services. A further inquiry was made on the perceived usefulness of internet banking services in the target area.

Perceived Usefulness (PUSE): Perceived usefulness was highly concentrated with respondents who found it advantageous to use internet banking. This was witnessed across all the participants who took part in the study from different age groups. Indications were that all the respondents found the use of internet banking advantageous.

Perceived Security (PSEC): The primary findings revealed that more respondents at 85.6%, strongly disagreed with the total safety of providing sensitive information about themselves over the internet banking platforms, compared to other respondents at 14.4%, who found internet banking to be a secure means to transmit sensitive information. In order to further investigate the subject, a question was asked about the self-efficacy of respondents in the target area. The following results presented in table 4.6 were obtained (Table 1).

Table 1. Perceived security.

	Frequency	Percent	Valid percent	Cumulative percent
The internet banking is a secure means through which to send sensitive information.	18	14.4	14.4	14.4
Valid I feel totally safe providing sensitive information about myself over the internet banking.	107	85.6	85.6	100
Total	125	100	100	

Self-Efficacy (SELF): All participants indicated that they would be confident in using internet banking if they had a built in online "help" function for assistance, based on the primary information gathered by the researcher.

This indicates that bank customers in the target area had confidence in the built-in function which may or would be provided by the bank on the online banking platform (Table 2).

Table 2. Self-efficacy.

		Frequency	Percent	Valid percent	Cumulative percent
Valid	I am confident of using internet banking if I have built-in online "help" function for assistance.	125	100	100	100

Factors influencing adoption of internet banking

A correlation was tested between awareness and availability influence relative to the adoption of internet banking services. On the basis of the Pearson-correlation, there was a positive and high correlation between influence of awareness adoption of internet banking services. This is supported by the Pearson correlation coefficient of 0.705 which is more than 0.5. Therefore, a correlation of 0.705 shows that influence of awareness and availability are correlated in that; effective influence generally leads to the adoption of new or available internet banking services (Table 3) [39].

Table 3. Pearson correlation on awareness and availability.

		Disagree	Agree
Awareness	Pearson Correlation	1	0.705
	Sig. (2-tailed)		0.49
	N	125	125
Availability	Pearson Correlation	0.705	1
	Sig. (2-tailed)	0.49	
	N	125	125

Resistant to Technology (RETT): On assessing the primary evidence, it did not come out clearly that respondents were resistant to technology, particularly towards the adoption of internet banking services. As the majority, 40.8% indicated that they were in agreement with the statement that technological developments had enhanced their lives. Respondents who felt that they would often be interested in hearing about available new technological developments were at 25.6% of the total sample.

Those who indicated that they felt comfortable in changing and using internet banking services for their financial activities were at 20.8% of the total participants. While those who indicated that they would like to experiment with new technologies such as internet banking services were just 12.8% (Table 4).

Table 4. Resistant to technology (RETT).

		Frequency	Percent	Valid percent	Cumulative percent
Valid	I am interested to hear about new technological developments.	32	25.6	25.6	25.6
	Technological developments have enhanced our lives.	51	40.8	40.8	66.4
	I feel comfortable in changing and using internet banking services for my financial activities.	26	20.8	20.8	87.2
	I like to experiment with new technologies such as internet banking services.	16	12.8	12.8	100
	Total	125	100	100	

Perceived of Price (POPR): The investigation on the perception of

prices charged for using internet banking services suggests that 33.6% of the respondents indicated that they would be charged more for using internet banking transactions. Those who felt that extra services charged for internet banking transactions were expensive were 28.8%. Respondents who indicated that internet banking transaction expenses were burdensome for them were 20.8% while those who indicated that network connection fees for internet banking transactions were expensive were 16.8% of the total participants (Table 5).

Table 5. Perceived of price (POPR).

		Frequency	Percent	Valid percent	Cumulative percent
Valid	I would be charged more to use internet banking transactions.	42	33.6	33.6	33.6
	Network connection fees for internet banking transactions are expensive.	21	16.8	16.8	50.4
	Extra services charged for internet banking transactions are expensive.	36	28.8	28.8	79.2
	Internet banking transactions expenses are burdensome for me.	26	20.8	20.8	100
	Total	125	100	100	

Attitude (ATTD): The primary findings on attitude towards internet banking reflected resistance from the majority of participants at 46.4%, who indicated that they strongly disagreed with the notion that using internet banking was a good idea. However, other participants were of the view that using internet banking services for financial transactions was a good idea as indicated by 38.4% of the respondents, indicating that they often used internet banking. Generally, findings indicated the balance between attitude and adoption in that they both were capable of exerting influence over one another. However, the majority of participants, 84.8% (46.4%+38.4%) were of the view that using internet banking was a good idea and would be beneficial (Table 6).

Table 6. Attitude (ATTD).

		Frequency	Percent	Valid percent	Cumulative percent
Valid	I think that using internet banking is a good idea.	58	46.4	46.4	46.4
	I think that using internet banking for financial transactions would be a wise idea.	48	38.4	38.4	84.8
	I think that using internet banking is pleasant in my opinion; it is desirable to use internet banking.	19	15.2	15.2	100
	Total	125	100	100	

Contributors to the adoption of internet banking services

Multiple regression analysis was performed in order to examine the

degree to which the factors of perceived usefulness and ease of use, trust in the internet banking system, perceived self-efficacy and the level of customer awareness could help explain the adoption of internet banking services. The results of this analysis, shown in the above it indicated that the dependent variables account for 69.8% for variability in internet banking. The results point to a positive linear relationship between internet banking adoption and the variables employed in the study. From the analysis, it is further noted that customers' trust in the internet banking system is the most significant determinant of adoption for both Internet banking services. This is evident from the fact that trust in the Internet banking systems has the highest beta coefficient value of 0.373 compared to all the other variables (Table 7).

Table 7. Multiple regression.

Frequency		Internet banking	
Dependent variable: Internet banking adoption		R ² =698	
Independent variables	Beta	t-value	Sig.
Perceived usefulness	0.289	7.249	0
Perceived ease of use	0.269	5.79	0.001
Trust in the internet banking system	0.373	10.552	0
Perceived self-efficacy	0.211	4.052	0.002
Awareness of internet banking services	0.188	2.089	0.003

Discussion

This section covers each of the objectives to the study and links the findings to literature reviewed.

Objective 1: To assess perceptions of Bank of Botswana customers on online banking platforms: In terms of the first objective of the study being "Perceptions of Bank of Botswana customers on online banking platforms", the majority of the respondents observed in the study found online banking services to be easy to use and useful as well as advantageous. However, the majority of the respondents also on the other hand strongly felt that it was not safe to transmit or provide sensitive personal information about themselves over internet banking platforms, thereby raising issues of security, privacy and credibility. It was also discovered that the majority of the respondents were confident in their ability to operate online banking service platforms even if there was no one to assist them.

The findings are in line with those of who notes that the majority of respondents in a study conducted in Namibia agreed that internet banking was easy to use and that learning to operate internet banking services would be easy for them [1]. Also found out from their study conducted in Jordan that perceived ease of use had a significant impact on the intention to use e-banking services [40].

Perceived Usefulness (PUSE): Relating to the question on perceived usefulness the majority of respondents found it advantageous to use internet banking. These findings agree with those of [1]. Who note that perceived usefulness was the most essential determinant of customer intention to use e-banking services [41]. Also note that perceived usefulness had a direct positive effect on the acceptance of internet banking from a study conducted in Lebanon.

Perceived Security (PSEC): Pertaining to Perceived Security, the majority of respondents (85.6%), strongly disagreed with the total safety of providing sensitive information about themselves over the internet banking platforms, compared to other respondents at 14.4%, who found internet

banking to be a secure means to transmit sensitive information. The findings are in harmony with those of who noted that security was the most important factor that motivated Chinese consumer adoption of mobile banking. This view was consistent with the one held who concluded that website security was a relatively major factor affecting the adoption of internet banking in Kenya [42,43]. Further note that the improvement of website security of information on the internet could go a long way in boosting the adoption of internet banking in Kenya.

Self-Efficacy (SELF): On Self-efficacy, participants indicated that they would be confident in using internet banking if they had a built in online "help" function for assistance, based on the primary information gathered by the researcher. This indicates that bank customers in the target area had confidence in the built-in function which may or would be provided by the bank on the online banking platform. The findings confirm those of who noted that computer self-efficacy was one of the most important factors that contribute to the creation of a positive performance and in turn positive outputs for e-banking services [1,44]. Also conclude that individuals with a high self-efficacy magnitude perceived themselves competent to accomplish more difficult tasks with minimum support and assistance. On the basis of the first objective, indications are that bank customers do not identify as different and unique sets of people on the basis of how they perceive their ability in using internet banking services.

Objective 2: To examine factors that influences the adoption of online banking services: In seeking to address the second objective of the study, it was discovered that the majority of bank customers felt that the awareness of available internet banking services and their envisaged benefits positively influenced the adoption of internet banking. On the other hand, resistance to technology was found not to have any significant bearing on the adoption of internet banking, while perceived cost or price charged by banks on their customers for using internet banking was found to be a major factor influencing the adoption of online banking services. In terms of customer attitude towards internet banking, it was found that customer attitudes towards various bank technologies were not the same and were influenced by different factors; the majority of bank customers held the view that using internet banking was a good idea [38].

Awareness of Internet Banking Services (AWRN): Relating to whether awareness of internet banking services influenced its adoption, the majority of participants (50.4%) indicated that they received adequate information on how to use internet banking while 32.8% stated that they received enough information about the benefits of internet banking. The results here further suggested that awareness of internet banking services in terms of the information disseminated to customers was one of the factors that influenced its adoption. These findings agree with those of who notes that information about online banking had a positive influence on internet banking [41]. This view was consistent with the one held by who examined the effects of information and guidance offered by a bank on adoption barriers and discovered that information and guidance disseminated by banks had the most significant effect on perceived functional usability of the innovation offered [41].

PC Availability/facilitating conditions (PCAV): The majority (46.4%) of participants were of the view that internet banking was compatible with other systems they used, according to their own personal observation. However, the minority response rates of 18.4% were of the view that they had the resources necessary to use internet banking transactions. Those who cited that they had the knowledge necessary to use internet banking transactions were 35.2% of all participants. The findings are in concert with those of who noted that facilitating conditions were found to be significant determinants of the actual usage of internet banking in Lebanon. This view was also presented by who discovered that lack of access to e-banking was a major factor which hindered full utilization of e-banking in Gaborone [45,46].

Resistant to Technology (RETT): In assessing the primary evidence, it did not come out clearly that respondents were resistant to technology, particularly towards the adoption of internet banking services. As the

majority, 40.8% indicated that they were in agreement with the statement that technological developments had enhanced their lives. The findings are in line with those of who noted that resistance to change had no significant impact on the intention to use e-banking services. Respondents who felt that they would often be interested in hearing about available new technological developments were at 25.6% of the total sample [1].

Those who indicated that they felt comfortable in changing and using internet banking services for their financial activities were at 20.8% of the total participants. While those who indicated that they would like to experiment with new technologies such as internet banking services were just 12.8%. On the basis of the findings, it could be generalized that not all internet banking customers would be resistant towards new technological improvements introduced in the banking sector.

Perceived of Price (POPR): In relation to the perception of prices charged for using internet banking services, 33.6% of the respondents indicated that they would be charged more for using internet banking transactions. The findings are in line with those of who noted that the majority of respondents in a study conducted in Namibia agreed that low service charges could influence the adoption of internet banking [40]. This view was also presented by who noted that costs incurred by the customer were a major factor affecting the adoption of internet banking in Kenya [43]. Those who felt that extra services charged for internet banking transactions were expensive were 28.8%. Respondents who indicated that internet banking transaction expenses were burdensome for them were 20.8% while those who indicated that network connection fees for internet banking transactions were expensive were 16.8% of the total participants.

Attitude (ATTD): On the issue of attitude towards internet banking, the findings reflected resistance from the majority of participants at 46.4%, who indicated that they strongly disagreed with the notion that using internet banking was a good idea. However, other participants were of the view that using internet banking services for financial transactions was a good idea as indicated by 38.4% of the respondents, indicating that they often used internet banking. Generally, findings indicated a balance between attitude and adoption in that they both were capable of exerting influence over one another. The findings are in harmony with those who noted that customer attitudes towards various bank technologies were not the same and were influenced by different factors. In Sudan, internet banking customers were found to be influenced by the benefits derived from the service, ease of use and the credibility of the bank system used [1]. Also note that the consumers' attitude positively affected the intention to use e-banking.

In conclusion, despite the perceived use of online banking, there is some reluctance relating to trust and security issues which hinder the adoption of internet banking as bank customers feel the online banking is not secure in terms of their banking transactions. The perceived cost of using online banking is another factor influencing non adoption of the service. These findings indicate that there is a lack of awareness relating to the benefits that can be obtained from using online banking and hence there is a need for the bank to come up with strategies to bring awareness and benefits towards the use of online banking in order to improve the status quo.

Recommendations

On the back drop of the findings of the study, it is recommended that Bank of Botswana, as a regulator of commercial banks should work towards the provision of facilitating conditions in order to improve the ease of access and the security of online banking services for improved adoption rates and overall effectiveness of the facility. The era of COVID-19 has dictated that contactless business strategies are the future and the importance of business continuity under the circumstances cannot at this point be overemphasized. The following recommendations were made in line with the findings.

- **Cheaper internet provision:** In order for the banking sector to continue thriving and to fully benefit its customers, online banking should be made easily accessible and affordable by all means. Cheaper internet provision

has been found to be a significant influencing factor on online banking adoption and effectiveness. However, there is need for improvement on the current approaches used, in terms of public education, accessibility and ease of use.

- **Reduction of online banking costs:** The reduction of online banking costs has also been recommended to improve on its adoption as the majority of the respondents found the cost of using online banking services burdensome.

- **Training in the use of internet banking:** Banking customers require some sort of training so as to be confident in adopting and using internet banking. Therefore, it is recommended that the banks ensure to provide training and 'quick assistance' menus on their platforms.

- **Provision of adequate information to users:** Lack of adequate information had a significant factor in their perception and adoption of online banking. Awareness programs including leaflets could be used by the bank to disseminate information about internet banking.

- **Aggressive advertising and marketing strategies:** The central bank could encourage commercial banks to use aggressive advertising and marketing strategies to influence customer attitudes towards online banking, which would positively affect the intention to use internet banking services.

This study further recommends that Bank of Botswana should embark on devising and implementing strategies that would foster and increase customer trust in internet banking systems across the banking sector. It is expected that this would lead to the rapid and widespread adoption of Internet banking services in Botswana. Commercial banks could be called upon to improve the security features on all internet banking platforms to ensure that they are completely safe, as such assure their customers that they are safe to use. Advertising campaigns could be used to emphasize on the positive safety features as this could further change customer perceptions towards online banking [47-51].

In tandem with what needs to be done to ensure the smooth process in the use of internet banking, is that essential commodity suppliers such as grocery shops and pharmacies have to develop online shopping portals to enable their customers to purchase necessities from the safety of their homes. This move requires that payments be made online electronic funds transfers or through point-of-sale machines.

Conclusion

On the basis of the findings, it is recommended that Bank of Botswana as a regulator of the banking industry in Botswana should work towards attaining a balance between ease of access to internet banking platforms and internet availability. Management should not only focus on calling the banks to consider reducing the charges on internet banking, but on attaining a balance between ease of access and cheaper internet services. Commercial banks should also be held to embark on proper information dissemination strategies, to ensure that their customer base is adequately informed about this greatly beneficial service provision, considering that the COVID-19 era has presented the most appropriate platform to sell the service. The dissemination of effective messages to bank customers on available services, benefits thereof and the adequacy of current security features would enable user confidence on the online banking platforms since users would feel safer using the platforms.

Limitations

All research studies are affected by some limitations. The limitations pertaining to this study included the following:

- **Convenience sampling** was adopted for this study. According to it is also known as haphazard sampling and it involves selecting cases that are the easiest to obtain for the required sample [35]. The choice of the convenience sampling method as suitable for the study was dictated by the era of the COVID-19 pandemic, in which the orders of decongesting public

places and social distancing are in full effect in Botswana, in an effort to prevent the spread of the novel corona virus.

- The study may have been limited by various factors which included among others the fact that some respondents may not have returned the questionnaires; some questionnaires were returned incomplete; some may have given answers that were favorable to the bank

- The study was cross-sectional in nature as it involved examining data collected from a small population at one specific point in time. It therefore could not fully assess the changes in the use of on-line banking practices in Botswana. It is worth noting that a longitudinal study would have reflected such changes.

- There was a geographical limitation in that the study was based on a case study focusing on the Bank of Botswana customers who are located in Gaborone and hence the findings may not be generalized to other customers of central banks.

- The study was restricted to the banking sector in the financial services sector.

- The restrictions of the COVID 19 regulations created difficulties in the collection of data for the study. The fact that the survey had to take place inside the Bank of Botswana may have caused participants in failing to respond with openness and frankness to the questionnaire. The researcher is of the view that the study may not have provided a true representation of the real situation of the Botswana banking sector customers with regards to the factors that influence the adoption of online banking. This section presents the findings of the study. The section commences with discussion on the response rate and the findings.

References

- Anouze, Abdel Latef M and Alamro Ahmed S. (2019), "Factors Affecting Intention to use E-Banking in Jordan." *Int J Bank Mark.* 38 (2019): 86-112.
- World Bank. "Annual Report -Implementing Innovation." International Bank for Reconstruction and Development, Washington DC, (2018).
- Patel, Kiran J and Patel Hireen J. "Adoption of Internet Banking Services in Gujarat: An Extension of TAM with Perceived Security and Social Influence." *Int J Bank Mark.* 36 (2018):147-169.
- Chiu, Jason Lim, Bool Nelson C and Chiu Candy Lim. "Challenges and Factors Influencing Initial Trust and Behavioral Intention to Use Mobile Banking Services in the Philippines." *Asia Pacific J Innov Entrepreneurship.* 11 (2017): 246-278.
- Jaruwachirathanakul, Bussakorn and Fink Dieter. "Internet Banking Adoption Strategies for a Developing Country: The Case of Thailand." *Internet Research.* 15 (2005): 295-311.
- Tan, Margaret and Teo Thompson S H. "Factors Influencing the Adoption of Internet Banking." *J Assoc Inf Syst.* 1 (2000): 1-42.
- Daneshgadeha, T Salva and Yıldırım Sevgi Ozkan. "Empirical Investigation of Internet Banking Usage: The Case of Turkey." *Proc Technol.* 16 (2014): 322-331.
- Ramavhona, Thinamano and Mokwena Sello. "Factors influencing Internet banking adoption in South African rural areas." *S Afr J Inf Manag.* 18 (2016): 1-8.
- Keivani, F Sameni, Jouzbarkand M, Khodadadi M and Sourkouhi Z K. "A General View on the E- Banking." Department of Accounting, Islamic Azad University. (2012).
- George, A and Kumar G G. "Impact of Service Quality Dimensions in Internet Banking on Customer Satisfaction." *Decis.* 41 (2014): 73-85.
- Doyle, Margaret and Quigley Patrick. "Banking Disrupted: How Technology is Threatening the Traditional European Retail Banking Model." (2014).
- Chaouali, Walid and Hedhli Kamel E. "Toward a Contagion-Based Model of Mobile Banking Adoption." *Int J Bank Mark.* 37 (2017).
- Heeb, G. Business Insider. (2020).
- Shams, Ghazal, Rehman Mohsin Abdur, Samad Sarminah and Rather Raouf A. "The Impact of the Magnitude of Service Failure and Complaint Handling on Satisfaction and Brand Credibility in the Banking Industry." *J Financial Serv Mark.* 25 (2020): 25-34.
- Davis, Fred D. "A Technology Acceptance Model for Empirically Testing New End-User Information Systems: Theory and Results." PhD Diss., Sloan School of Management, Massachusetts Institute of Technology, (1986).
- Ajzen, Icek. "Theory of Planned Behavior." *Organ Behav Hum Decis Process.* 50 (1991): 179-211.
- Rogers, E M. "Diffusion of Innovations." (5th edn). New York: Free Press, United States, (2003).
- Marr, B. "Intelligent Business Performance." Bernard Marr and CO. (2019).
- Gates, Bill. "Banking is Essential, Banks are Not." (2008).
- Schwab, K. "The Fourth Industrial Revolution." Geneva: World Economic Forum, Switzerland, (2016).
- Berndt, A D, Saunders S G and Petzer D J. "Readiness for Banking Technologies in Developing Countries." *South Afr Bus Rev.* 14 (2010).
- Coetzee, Johan. "Strategic Implications of Fintech on South African Retail Banks. South African." *J Econ Manag Sci.* 21 (2018): 1-11.
- Musaev, O E and Yousoof M. "A Review on Internet Banking Security and Privacy Issues in Oman." ICIT 2015 The 7th International Conference on Information Technology, Jordan. (2015).
- KPMG. "African Banking Industry Customer Satisfaction Survey." (2013).
- FinScope Survey. "Access to Finance Report." Finmark Trust. (2009).
- Ram, S and Sheth Jagdish. "Consumer Resistance to Innovations: The Marketing Problem and its Solutions." *J Consum Market.* 6 (1989):5-13.
- Rajapathirana, R P Jayani and Hui Yan. "Relationship Between Innovation Capability, Innovation Type, and Firm Performance." *J Innov Knowl.* 3 (2018): 44-55.
- Saunders, M N K, Lewis P and Thornhill A. "Research Methods for Business Students." (8th edn). London: Pearson Education Limited, United Kingdom, (2019).
- Chen, Chun Der, Fan Yi Wen and Farn Cheng Kiang. "Prediction Electronic Toll Collection Service Adoption: An Integration of the Technology Acceptance Model and the Theory of Planned Behavior." *Transp. Res Part C Emerg Technol.* 15 (2007): 300-311.
- Teka, Beza Mucbe. "Factors Affecting Bank Customers Usage of Electronic Banking in Ethiopia: Application of Structural Equation Modeling (SEM)." *Cogent Econ Finance.* 8 (2020).
- Bandura, Albert. "Self-Efficacy: The Exercise of Control." (1 edn). New York: W H Freeman/Times Books/Henry Holt & Co, United States, (1997).
- Peral-Peral, Begona, Villarejo-Ramos Angel F and Arenas-Gaitán Jorge. "Self-Efficacy and Anxiety as Determinants of Older Adults' Use of Internet Banking Services." *Univers access inf soc.* 19 (2020): 825-840.
- Mastoori. "Reasons Barring Customers from using Internet Banking in Iran: An Integrated Approach Based on Means-End Chains and Segmentation." Science program in Marketing and Electronic Commerce., Lulea University of Technology, (2009).
- Munyai, L S. "Determinants of bank-switching behaviour within a South African context." Degree Masters of Commerce in Risk Management., North-West University. (2020).
- Saunders, M, Lewis P and Thornhill A. "Research Methods for Business Students." (5th edn). London: Pearson Education Limited, United Kingdom, (2009).
- Peytchev, Andy, Tourangeau R and Massey D S. "Consequences of Survey Nonresponse." *Ann Am Acad Political Soc Sci.* (2013).
- Moscato, Donald R and Altschuller Syhoshana. "International Perceptions of Online Banking Security Concerns." *Communications of the IIMA.* 12 (2012): 51-64.
- Al-Sharafi, Mohammed Abdullah, Arshah Ruzaini Abdhullah, Herzallah Faid and Alajmi Qasim. "The Effect of Perceived Ease of Use and Usefulness on

- Customers Intention to Use Online Banking Services: The Mediating Role of Perceived Trust." *Int J Innov Comput.* 7 (2017): 9-14.
39. Al-Ghath, Waleed, Sanzogni Louis and Sandhu Kuldeep. "Factors Influencing the Adoption and usage of Online Services in Saudi Arabia." *Electron J Inf Syst Dev Ctries.* 40 (2010): 1-32.
40. Kamutuezu, Elizabaeth Ujarura. "The Adoption of Digital Banking in Namibia." Master in Business Administration., University of Mauritius, (2016).
41. Ali, Basel, and Omar Wan. "Role, Challenges and Benefits of Electronic Banking Service in Jordan." *Am Educ Res J.* 5 (2016).
42. Laforet, Sylvie and Li Xiaoyan. "Consumer Attitudes Towards Online and Mobile Banking in China." *Int J Bank Mark.* 25 (2005).
43. Gikonyo, Kariuki John. "Factors Influencing the Adoption of Internet Banking in Kenya." *J Bus Manag.* 16 (2014): 1-90.
44. Mautsu, Pholoso. "Investigation on the Adoption of Electronic Banking by the Botswana Banking Clientele." BA (Hons) Accounting and Finance., Botswana Accountancy College. (2014).
45. Laukkanen, Tommi and Kiviniemi Vesa. "The Role of Information in Mobile Banking Resistance." *Int J Bank Mark.* 28 (2010): 372-388.
46. Tarhini, Ali, Hone Kate, Liu, Xiaohui and Tarhini Takwa. "Examining the Moderating Effect of Individual Cultural Values on Users' Acceptance of E-Learning in Developing Countries: A Structural Equation Modelling of An Extended Technology Acceptance Model." *Interact Learn Environ.* 25 (2014).
47. Currency Research. "Covid-19: A Time to Protect the Future of Cash." *The World's Resource for Currency Knowledge.* (2020).
48. Eriksson, Kent, Nilsson Daniel and Kerem Katri. "Customer Acceptance of Internet Banking in Estonia." *Int J Bank Mark.* 23 (2005).
49. Kalaiarasi, H and Srividya V. "An Investigation on Internet Banking Adoption." *Int J Bus Innov Res.* 7 (2013): 99-112.
50. Mathieson, Kieran, Peacock Eileen and Chin Wynne W. "Extending the Technology Acceptance Model: The Influence of Perceived User Resources." *Data Base Adv Inf Syst.* 32 (2001): 86-112.
51. Tarhini, Ali, Hassouna Mohammad, Abbasi Muhammad S and Orozco, Jorge. "Towards the Acceptance of RSS to Support Learning: An Empirical Study to Validate the Technology Acceptance Model in Lebanon." *Electron J E-Learn.* 13 (2011).

How to cite this article: Mwanza C. "The Nexus between Acceptance and Adoption of Internet Banking Services by Bank of Botswana Customers in A COVID-19 Perspective." *Arabian J Bus Manag Review* S6 (2021):003.