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**CUSTOMERS' ADOPTION OF ELECTRONIC BANKING: AN INVESTIGATION ON THE
COMMERCIAL BANKING INDUSTRY IN ZIMBABWE**

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Abstract

The advent of electronic banking offers banking firms a new frontier of opportunities and challenges. This study investigates how social factors, awareness, consumer perceptions and attitudes towards electronic banking influence the adoption of electronic banking in Zimbabwe. In Zimbabwe little is known and understood about the emergence of electronic banking, this is because electronic banking is new, and so consumer acceptance and use of electronic banking is still limited. This study has reviewed current literature and opinions about factors influencing electronic banking, thus including consumer perceptions towards electronic banking characteristics and social influences that affect consumer adoption of this mode of banking. This study also explains the methodology used in conducting interviews to obtain primary information for this study. This study presents both the results of the interviews and the analysis of these results, with figures to determine the extent that the factors studied influence customer adoption of electronic banking. Psychological factors including, compatibility, complexity, risk, convenience, security, privacy and cost were found to influence the adoption of electronic banking. The theoretical contributions and the practical implications of the findings are discussed and suggestions for future research are presented.

Keywords: electronic banking, consumer awareness, consumer perceptions, adoption

INTRODUCTION

Electronic banking is changing the banking industry and is having the major effects on banking relationships. It involves use of networks and internet for delivery of banking products and services. The primary drivers of electronic banking are to improve customer access, facilitate the offering of more services, increase customer loyalty, attract new customers, provide services offered by competitors and reduce customer attrition. These electronic and communication networks include Automated Teller Machines (ATMs), direct dial-up connections, private and public networks, the Internet, televisions, mobile devices and

telephones. Among these technologies, the increasing penetration of personal computers, relatively easier access to the Internet and particularly the wider diffusion of mobile phones has drawn the attention of most banks to e-banking.

Electronic banking services in Zimbabwe, range from one way information push services where customers receive information about the bank, its products and services to information download where customers can download (or ask in case of telephone-banking) account information and forms to full transaction services where customers can perform most banking transactions (such as transfer between accounts, bill payment, third party payment, card and loan applications) electronically.

Some of the key drivers of offering electronic banking services include reducing transaction costs, increasing convenience, availability and timeliness of transactions, and improving accessibility for better fund administration. Achieving these objectives tend to contribute strategic benefits in terms of better customer relationship management, increased customer base, and improved market image. A bank may therefore need to decide on what electronic banking services to provide to which customers and when and how (channel choice) to provide those services. The seeming dominant strategy is the "click and mortar" model in which the bank combines or adds an online presence to its physical presence.

The financial services industry plays a key role in the development of any country, and is an especially large and important sector in Zimbabwe. Given the importance of the financial services industry to overall economic activity in Zimbabwe, it is important to monitor and assess new developments in the industry.

Although there has been a rapid diffusion of innovative products and services by commercial banks in Zimbabwe, electronic banking services have not been widely adopted by most bank customers. The acceptance and use of such initiatives has been worrisome if anything minimal thus therefore the research seeks to investigate why consumers' adoption of electronic banking has been slow in Zimbabwe. Commercial banks across the region have invested hundreds of millions of dollars in developing online structures and services for their customers. How have customers in Zimbabwe reacted to the presence of these services? Are they snapping up these new services, why or why not? How best can the financial service sector effectively implement such initiatives to consolidate their customer base?

Background of electronic banking in Zimbabwe

Within recent years, many local banks in Zimbabwe have made significant investments in their online infrastructure, particularly in the early 2000s. Despite the tremendous investment made by banks in this aspect of bank service delivery and the adoption of electronic banking in Zimbabwe has been lagging.

In Zimbabwe the first visible form of electronic innovation was in the early 1990s when Standard Chartered Bank and Central Africa Building Society (CABS) installed Automated Teller Machines (ATMs). Other forms of electronic innovations that have found their way into Zimbabwean banks are Electronic Funds Transfer Systems (EFT), Telephone banking, Personal Computer (PC) banking through electronic data interchange (EDI) and recently internet banking. These have released banks from the constraints of time and geographical location also allowed banks to cut costs on transactions, improve their service delivery, and respond better to the demands of the market.

In Zimbabwe at the end of 2003, there emerged a financial crisis in the banking sector, which saw the closure of most banks resulting in the public losing confidence in the banking sector. The loss of public confidence in the banking sector pursued until 2008, which saw banks having to engage in non core activities to strengthen their financial base. In 2007 there was an increased use of the Real Time Gross Settlement (RTGS) system to facilitate money transfer in a bid to increase the use of plastic money. This had drastic effects on the economy which saw retailers charging different prices of their goods if one was using plastic money and cash money. The RTGS system was grossly misused to a point where it was said to be fuelling inflation in Zimbabwe. The abuse of RTGS system also caused serious cash shortage. The public reached a point where they practically refrained from putting money in the bank and relied on keeping it as foreign currency in order to keep abreast with inflation levels. Although the proficiency of using internet is relatively low and electronic banking is still in its infancy, with the advantages of being convenient, safe, efficient and economical, Zimbabwean domestic banks seem to be confident that electronic banking benefits might outweigh traditional banking services in the future.

However, in the Zimbabwean banking sector particular in Bulawayo the adoption of this innovation has remained sluggish despite the convenience it brings to the customers and the banks. Most customers in Zimbabwe for example, do not pick ATM cards from banks and over 80% of the Kingdom Bank customers who are served at the counters have ATM cards processing transactions which would have been done using electronic banking. This results in increased queues inside banks which wastes a lot of time and making no difference from the time before the innovation of electronic banking.

LITERATURE REVIEW

The arrival of the internet technology on the commercial panorama has generally changed the nature of contemporary banking. Indisputably, the trend is towards more of financial transactions migrating to online electronic systems using highly sophisticated computer machines (Gan et al, 2006:189).

The adoption of electronic banking has allowed banks to design delivery channels from a customer perspective and not only from their productivity oriented viewpoints. This has enabled the tailoring of banking services to client expectations in building close relationships with customers (Lamb et al, 2002:649). The pace at which user adoption has been transpiring is unarguably a major drawback for electronic banking to accomplish its successful potentials in Zimbabwe. However technology and infrastructural development in the country had been a huge challenge. (Thulani et al, 2009)

Adoption of electronic banking

One of the more important characteristic for adoption or acceptance of any innovative service or product is the creation of awareness among the consumers of the product or service (Molla, A. 2002). To this extent Rogers and Shoemaker (1971), asserted that consumers go through a series of process in knowledge, conviction, decision and confirmation before they are ready to adopt a product or service and the adoption or rejection of the innovation begins when the consumer becomes aware of the product.

Some of the major psychological and behavioural factors which affect the adoption of any new innovation such as electronic banking include consumer awareness, ease of use, security, accessibility, techno phobia or simply reluctance to change, preference for personalized services and cost of adopting the innovation (Gerrard, P. and Cunningham, J. B. 2003). However, awareness alone is not sufficient since consumers would reject an innovation if it was very complex and not user friendly. In this context, Cooper (1997) reported that ease of use of innovative product or service as one of the three important characteristics for adoption from the customer's perspective. The user friendliness of domain names as well as the navigation tools available in the websites is an important determinant for ease of use.

According to Cooper (1997) and Daniel (1999) another important factor affecting the acceptance and adoption of electronic banking innovation is the level of security or risk associated with it. Even in countries where electronic banking has long been established, one of the most important factors slowing progress of this new innovation is the consumers concern for security of financial transactions over the Internet. An empirical survey conducted by Sathye (1999) on consumers confirmed this fact.

In addition, electronic bank customers would also be curious to find out how the banks would generally deal with erroneous transactions occurring in online transactions. Will the burden of proof be on the customers or the banks would be willing to settle the issue up front and investigate the problem later.

The element of trust in this context would determine the security of transacting for consumers generally and determine the acceptability rate of this alternative delivery channel in the long run. On this issue, Stewart (1999) claimed that the failure of the Internet or connecting networks as a retail distribution channel has been attributed to the lack of trust consumers have in the electronic channel and in the web merchants.

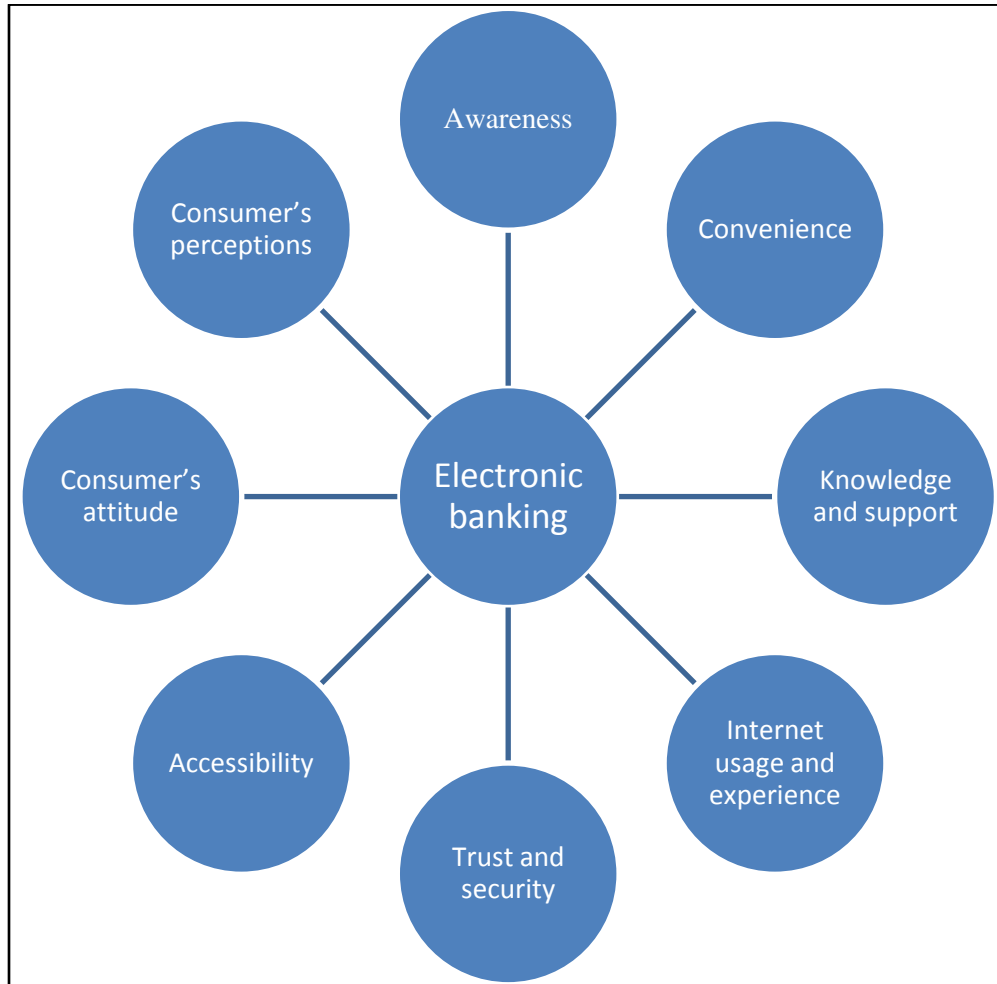
Reluctance to change is also another factor that affects adoption because the existing mode of service or product delivery fulfils the customer's needs adequately (Mols, N. P. 1998:200). In the context of Internet banking, telephone banking, P.C banking and brick and mortar branches are the existing alternative modes of transacting banking business. For customers to change their present ways of operating and to take up new technology, Mols says it must 'fulfil' a specific need".

Unless such a need is fulfilled, consumers may not be prepared to change from the present ways of operating. Rodgers (1983) says many ways can be introduced to overcome the reluctance to change. Provision of personalized customer service personnel to assist consumers in performing transactions via the Internet as well as providing specific value added service, which are currently not provided through traditional banking channels, can also help to reduce the customers reluctance to change (Sathye, M. 1999:300).

Availability of access to the Internet is an essential prerequisite for the adoption of electronic banking. The more widespread the access to computers, connecting networks and internet, greater is the possibility of use of electronic banking. O'Connell (1996) identified lack of access to computers as one of the possible reasons for the slow adoption of electronic banking. The Zimbabwean government in a move to encourage consumers to embrace information technology has encouraged purchases of electronic devices in the last years (Tandon, 1998).

Some consumers have generally been afraid of new technology. These consumers may not have the knowledge or know how in dealing with computers specifically and thus trust human beings more than computers and machines. Their fear for computers and technology generally grows and eventually develops into a phobia for technology. Thus, technology phobia can also be a factor affecting the customers' reluctance to opt for electronic banking (Financial Mail. 1997). Figure 1 shows the major factor discussed above that affect the adoption of electronic banking.

Figure 1: Key factors in consumer adoption of electronic banking



METHODOLOGY

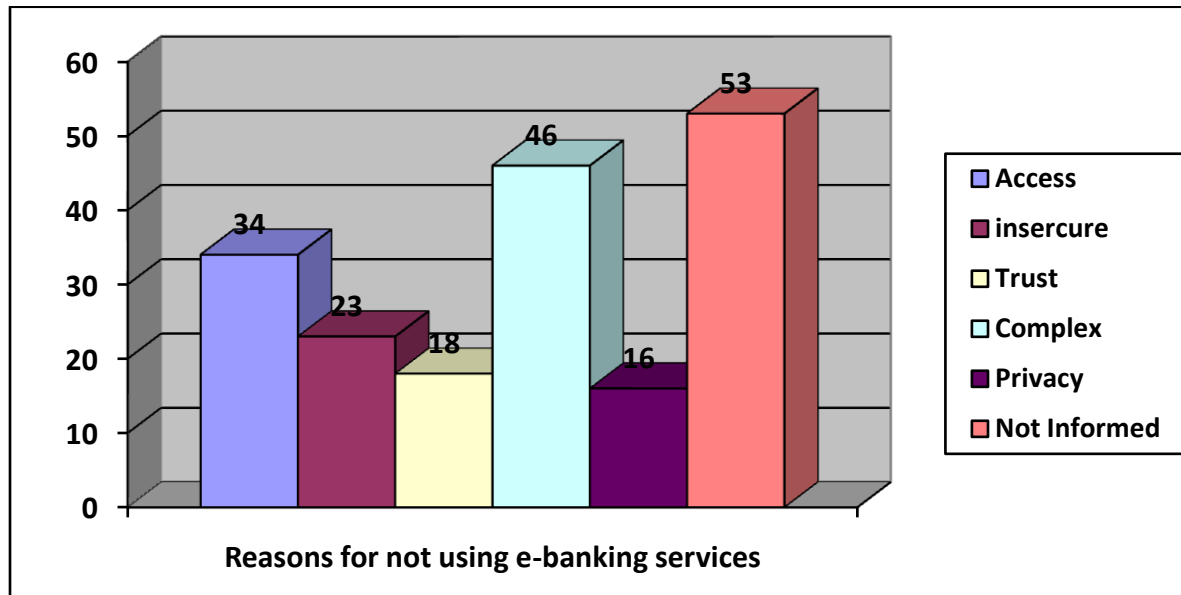
Great care was taken in ensuring that the target population was properly representative. The targeted respondents were the customers of Commercial Banks in Zimbabwe, thus consumers of electronic banking services. Target population was 200 people and 16 banks in Zimbabwe. Probability sampling was used for sampling and simple random sampling was used in selecting the respondents (10 in each of the 16 banks). Data was collected using questionnaires administered during interviews. The research methodology stretched from both primary data sources through to the secondary sources of data.

The main object of this study was to find factors influencing the adoption of electronic banking. To analyse the data collected from sample customers and generalise the data to population the both quantitative and qualitative approach were used.

RESULTS AND DISCUSSION

The respondents gave the following reasons for not using this electronic banking services: firstly, 34 respondents indicated that they have no access to the services for example some do not have debit cards, and they do not have access to internet or networks that provide either P.C banking or internet banking; secondly, 46 respondents said electronic banking services are too complex for their use, not good with computers, do not know how to use the services ; 23 do not believe that internet banking is sufficiently safe, they do not feel secure in using the services; 53 respondents are not well informed about the services provided, for example most consumers know of the ATM and not of the other services provided; 16 respondents had concerns of privacy when using electronic banking services; 18 respondents do not trust the services.

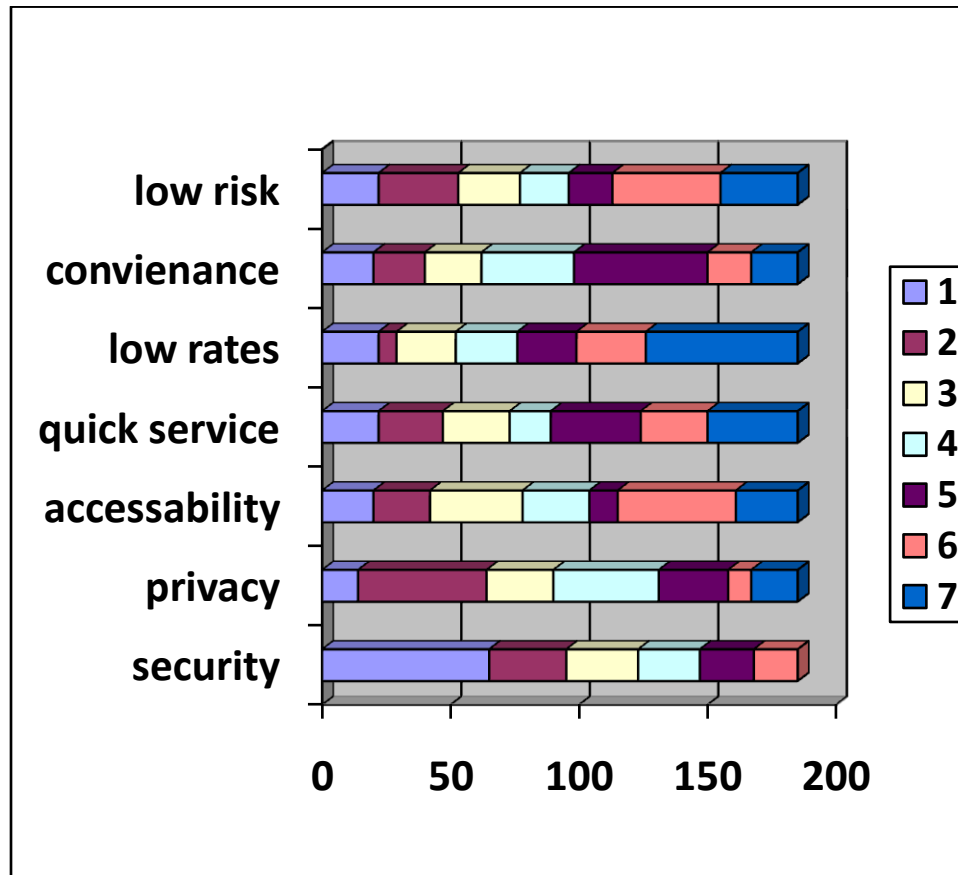
Figure 2: Reasons for not using e-banking



These are the main reasons given by non-users' for their reluctance to adopt electronic banking. The full range of results is shown in Figure 2. Other respondents indicated that they were unaware of electronic banking yet they were still reluctant in using the services. In this regard banks should be doing a lot more to bring about awareness and actively promote this service.

Further, Figure 3 shows consumers preferences or the most important factor they would consider before adapting to the electronic services.

Figure 3: Ranking factors according to importance



65 of the respondents rated security no 1 as the most important factor, privacy 50 respondents as the Second most important factor, the third factor with 46 respondents is accessibility, fifth convenience with 59 respondents, sixth is quick service and seventh last is low rates.

The statistics above depict that security and privacy of consumers are important factors in the adoption of electronic banking and they have a huge influence on the adoption. However low transaction rates is the least of the factors that would influence the adoption of electronic banking.

Factor Analysis

The data was further subjected to principal component analysis. As shown in the figure above convenience and comfort that a customer should get from banks is a factor affecting electronic banking adoption. The elements are convenient locations of the ATMs along with provision of the ATMs at several prominent locations, the number of branches provided, and convenient locations of the branches being used.

Privacy concern is another important factor; the element of trust in this context would relate to the security of transacting for consumers and determine the acceptability rate of this alternative delivery channel in the long run.

According to (Rayport and Jaworski 2004), "Security is the ability of a system to prevent illegal or inappropriate use of its data and to deter cyber-criminals and hackers. Using the internet as medium for transaction always entails some risks".

As (Kamel and Hassan 2003) put it, "perception of high risk associated with performing financial transactions over the Internet may actually hinder electronic banking adoption."

Another factor is Availability, according to (Sathye 1999), "Access to computers and Internet is a prerequisite for adoption of electronic banking. The higher the access to computer and Internet, wider is the probability of electronic banking adoption". Attributes such as information content about the product, structure, layout features etc. would also affect consumers' perception of the user friendliness of the electronic banking and overall customer satisfaction.

Reliability is an important factor as well, most bank customers are not confident with the provision of electronic services, for example consumers state that electronic services are not reliable because like the ATM it offers high denominations notes for withdrawals and internet banking the bank network is always down.

Efficiency of the services is important for example the RTGs can go for more than a week to clear, therefore efficiency is questioned in this kind of electronic banking scenario.

Complexity and ease of use are important factors; according to this study most consumers have identified complexity as the hindrance to adopt electronic services. Customers find the electronic machines intimidating. The most prominent and vital characteristic for any adoption of new service or product, is generating awareness among the customers about that specific service or product. Hence, if the consumers of Bulawayo are not adopting electronic banking, it may be because they are not aware about such a service being available and the added value that it offers.

CONCLUSIONS

Given the importance of the financial industry to overall economic activity in Zimbabwe, it is important to monitor and assess potential new developments in the industry. One such development is internet banking. The main goal of this research is to provide individuals working in the financial industry some assessment of Zimbabwean people's attitudes and perception of electronic banking and the overall factors influencing consumer adoption of the services.

The research shows a significant relationship between security and privacy. This means when consumers believe that internet banking is safe, efficient, confidential, convenient, easy to

use, reliable, and fulfils the commitments and promises it assumes, they are likely bound to trust the system. Consumer attitude and trust can help in creating electronic banking acceptance among Zimbabwean Bank customers. The relationship between Trust and electronic banking adoption is positive because online users complete the transactions through network technologies without face to face interaction. The users will thus be worried that their personal information and money will be transferred to the third party without their knowledge. Thus the existence of trust in a relationship is a kind of insurance against risks and unexpected behaviour. When customers are not sure of the privacy and security aspects of electronic banking, they are bound not adopt the system. The higher perceived risk, the lower the rate of electronic banking adoption. This is because in the online environment, criminal acts can be performed with extremely high speed, and without any physical contact. If an unauthorized individual is able to get access to the online banking portfolio of a user, a considerable amount of financial information may be jeopardised and there might be considerable financial losses.

The escalating trend towards adopting electronic banking and offering internet banking services by Zimbabwean banks make it principally important for them to identify the barriers perceived by their customers in the adoption of electronic banking. The research revealed that getting service directly from bank's personnel and developing one to one relationship with them is a major concern for the customers and internet banking perceived to be a possible cause for losing such opportunities unlike on branch interactions. Security, privacy and high associated risks are significantly perceived barriers after low perceived value and lack of knowledge about online benefits and offers. The findings show that customers perceive more value and satisfaction in conventional banking system as compared to electronic banking, customer banker communication gap seems to be the most significant factor behind it.

RECOMMENDATIONS

In light of the findings it is suggested that banks should understand the information needs of their customer and effective communication channels should be developed in order realize potential benefits of electronic banking and to remove the perceived concerns associated with it. The online offerings can be promoted through emails and mobile phone short messaging services; however, an interpersonal communication channel is essential to converse benefits and basic information about electronic banking which will also help in removing the customer's concern for losing the personal service and one to one relationships. The website interface should be secure, simple and convenient leading towards enjoyable experience. The offerings must be designed while considering the specific needs of the customers. Finally banks need to develop synergy between traditional banking system and internet banking.

Trust building among the customers should be a major concern for the service providers while improving the usefulness of the system. In order to enhance trust in electronic banking, trust creating activities must be continuously pursued.

Commercial banks should ensure security and privacy. Security features should be considered an important issue by banks because electronic banking users are more favourably inclined toward using it when they perceive that the information provided during the banking transactions is secure, and third parties will not have access to it.

Bank managers should develop a system that provides up to date and relevant financial information with good user interface consistency in order to enhance trust.

Bank managers should monitor and evaluate the usage of the implemented technologies. This can be done by identifying the number of customers using a given technology and how often it is used, with such a measure in place. Information Technology bank managers should therefore get feedback on which technology that should be improved and then later plan for their business without wastage of resources.

Changing consumer attitudes towards electronic banking should be put into consideration. Bank managers should place more emphasis on the awareness of electronic banking adoption while educating individual customers on its existence and benefits. User awareness of electronic banking services can be increased through putting in place community based workshops and through various social networks and channels, such as word of mouth and informal seminars before introduction of new technology.

Commercial banks should make the electronic banking interface for the customer more attractive and easier to navigate in order to increase the adoption rate of electronic banking.

Electronic banking products such as Online Banking, Mobile Banking and ATMs should be made as user-friendly as possible as not many consumers are familiar with the Electronic Banking, especially the older generation. Providing online help and giving customer the choice of their preferred language will ease their transactions.

Zimbabwean Banks should take security of their electronic banking sites into serious consideration since fraud and websites hacking still haunt most of the customers. Perhaps they can implement more advanced encryption methods and build stronger firewalls to prevent security infringement.

Zimbabwean Banks should make their customer more aware of their new products or services so as to encourage higher adoption rate. They can do so by having a series of seminars, radio jingles, posters and fliers.

Furthermore, in order to receive greater response towards Electronic banking, it is recommended that Zimbabwean Commercial banks should target their promotional activities

towards those in the younger business personnel who are quite well to do as they seem to be the most likely users of Electronic banking as indicated in this study.

As previously discussed, in this study encouragement factors are those that contribute to the electronic banking adoption by the consumer of Zimbabwe commercial banks. The study revealed that importance to the security and privacy were the most significant factors in encouraging electronic banking adoption, and beside that convenience, efficiency, reliability, risk and privacy also contribute significant factor to the electronic banking adoption by consumers. It is essential for banks to facilitate encouragement and restrict impediment factors.

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