

# **E-Banking Adoption by Zimbabwe Banks: An Exploratory Study<sup>1</sup>**

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## **ABSTRACT**

Increased use of mobile services and use of internet as a new distribution channel for banking transactions and international trading has created necessary conditions for E- banking. The growth of E-banking in Zimbabwe has been encouraged by improved internet connectivity and the introduction of mobile money products by Mobile Network Operators thanks to the introduction of the multicurrency regime by the Government of National Unity in 2009. This study was carried out to assess the extent of E- banking adoption among the Zimbabwean banks and identify possible hindrances to the same. Key drivers to adoption of E-banking were also part of the focus of the study as well as its inhibitors. An exploratory research design was used to achieve the envisaged aims of the study. Data were collected using a survey questionnaire. The participants in the study were bank managers and bank customers. Overall the results of the study showed that while E-banking has made inroads in Zimbabwe its adoption has been at a very slow pace. The main reason for this was lack of public trust in the banking system as a result of 2003 to 2010 economic meltdown experiences of bank customers. The implications of the study are that banks should vigorously promote adoption of E-banking among its customers and that the Government should move with speed to restore public confidence in banking sector restoring macroeconomic fundamentals and coming up with consistent policies.

**Keywords:** E-banking, online banking, perceived usefulness, Zimbabwe

## **1.0 INTRODUCTION**

The proliferation of, and advances in, technology world over specifically those related to internet has led to fundamental changes in how financial institutions serve their customers. Use of the electronic banking (e-banking) has become the self-service delivery channel that allows banks to provide banking services to their customers with more convenience. Today, many financial institutions, worldwide, are rushing to become more customer focused with less customer contact through use of internet banking and 'plastic money'.

In its very basic form, e-banking can mean the provision of information about a bank and its services via a home page on the World Wide Web (WWW). Zwass (2003) echoes a more coherent definition of electronic banking stating that it is the deployment of banking services and products over electronic and communication networks directly to customers. These electronic and communication networks include ATMs, direct dial-up connections, private and public networks, the internet, televisions, mobile devices and telephones The banking industry has been

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undergoing changes since the mid 1990s, in the form of innovative use of information technology and development in electronic commerce (Kalakota and Whinston, 1996). This development made e-banking pose as a threat to the traditional branch operations. For customers, the internet offers faster access, is more convenient and available around the clock irrespective of the customer's location. From the banks' point of view, use of the internet has significantly reduced the physical costs of banking operations.

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 and recently internet banking (Dube, et al ,2009). In Zimbabwe, over the past twelve years the banking sector has undergone great metamorphosis because of policy related issues, corporate governance failures of the early 2000s, and the meltdown of the economy which climaxed in 2008 with rampant speculative behaviour in the financial sector of the economy and industry specific factors (Reserve Bank of Zimbabwe, 2011). These events affected the adoption of e-banking services by Zimbabwean banks adversely, until 2009 when things started to pick up thanks to the adoption of the multicurrency regime by the government (Biti, 2010). Since 2009, when the economy rejuvenated, the Zimbabwean government, in conjunction with the financial sector, as the case in many other countries, is exploring ways to encourage the vigorous use of e-banking (Gono, 2012).

In view of the extent of e-banking adoption, a majority of the banks in Zimbabwe have adopted this technology and are using the service to reach and serve their clients (corporate and individual customers). Despite a seemingly good adoption rate, the extent of usage has remained relatively low as not many consumers are using the facility. The main usage of e-banking in Zimbabwe has been for checking account balances, payment of bills and funds transfers. The adoption process of e-banking by banks was fraught with several challenges such as compatibility with legacy systems, cost of implementation and security concerns among others(Dube, Chitura, & Runyowa, 2009). It can be concluded that although e-banking usage in Zimbabwe has increased since 2009, the adoption is still lower as compared to developed countries; worse still the new technologies take time to reach Zimbabwe.

Objectives of the study: The main objective of the study was to explore the extent of E-banking adoption among the Zimbabwean banks. In pursuit of the main objective, the study also sought to identify key success factors of E- banking adoption and at the same time its main impediments.

## **2.0 LITERATURE REVIEW**

E- Banking has been defined by several scholars. Internet banking can be defined as the use of technology to communicate instruments to and receive information from a financial institution where an account is held (Jackson, Harris, & Eckersley, 2003). Sullivan and Wang (2005) view internet banking as a process innovation whereby customers handle their own banking transactions without visiting bank tellers.It can be concluded that E- banking, also known as electronic fund transfer (EFT), uses computer and electronic technology in place of checks and other paper transactions. EFTs is initiated through devices like cards or codes that let you, or

those you authorize, access your account. Many financial institutions use ATM or debit cards and Personal Identification Numbers (PINs) for this purpose.

## **2.1 Forms of Electronic Banking Provided by Banks**

The evolution of banking technology has been driven by Smartcard banking (Value Card, Automated Teller Machine (ATM) Card, Debit Card, Credit Card, Master Card, Visa and Zimswitch, for Zimbabwe), Phone-banking, Tele-banking, Personal Computer-banking, Electronic Fund Transfers (EFT) and, most recently, internet banking (Chang, 2003).

E-banking, according to Lemon & Rust (2001) and Daniel (1999), offers a plethora of services that are offered through the various channels. Among them include Internet Banking, Automated Teller Machine (ATM) and Mobile Banking (MB). Online banking (or internet banking) services allows customers to conduct financial transactions on a secure website operated by their retail or virtual bank, credit union or building society. With Automated Teller Machine (ATM), customers can access their bank accounts in order to make cash withdrawals, credit card cash advances, and check their account balances as well as purchase prepaid cell phone credit. Electronic Funds Transfer is a system of transferring money from one bank account directly to another without any paper money changing hands. One of the most widely used EFT programmes is Direct Deposit, in which payroll is deposit straight into an employee's bank account, although EFT refers to any transfer of funds initiated through an electronic terminal, including credit card, ATM, and point-of-sale (POS) transactions. It is used for both credit transfers, such as payroll payments, and for debit transfers, such as mortgage payments.

## **2.2 Key drivers of E- banking adoption by bank customers**

A lot of research has been done to try to determine what really drives up E- banking adoption by bank customers. Much of the research on the subject has used an extension of Davis (1989) technology acceptance model (TQM) which investigates into factors that influence older adults' intention to use technology. Among the factors are perceived ease of use and perceived usefulness. This refers to the degree to which a consumer believes that no effort will be required to use the system with effort referring to both physical and mental effort to learn to use the system (Manzano et al,2009). Pavlou (2002) argued that perceived risk also contributes to acceptance and adoption of a system. In banking context, customers associate risk with the loss of bank's account number, passwords etc which can result in loss of money. A study conducted in UK on Direct Banking customers (Phone Banking) by Lockett and Littler (1997) found that risk averse households were less likely to adopt B- banking. Studies of online banking (Mukhejee and Noth,2003) have shown that trust is a critical factor in stimulating online banking operations otherwise the consumer will be reluctant to use the online banking services.

Product involvement has also been identified as one of the key drivers of E- banking adoption. It is defined as the degree of personal relevance of an object, product or service to a customer based on inherent needs, values and interests (Zaichkowsky 1985). In banking, an individual will be involved with such products if he or she is interested in reading information about financial services either in the press or in consumer reports. Previous research has found a link between product involvement and perceived usefulness in that users who believe a system has personal significance and relevance are more likely to perceive the system as being useful with regard to the performance of their activities (Jackson et al, 1997). Bradley and Stewart (2002) concluded

that the key drivers for bank adopting E- banking were the external factors such as competition and industry adoption, low risk, enhanced ability to deal with customers and the availability of technology.

### **2.3 Challenges to E- banking adoption**

Mahajan et al (2002) identified that lack of awareness, uncertainty about the benefits of e-banking, concerns about lack of human resources and skills, set-up costs and pricing issues, and concerns about security, are the most significant barriers to e-banking by customers and suppliers, concerns about security, concerns about legal and liability aspects, high costs of development, limited knowledge of e-banking models, are other factors.

Organizations adopting ICT and e-banking in developing countries face problems such as lack of telecommunications infrastructure, lack of qualified staff to develop and support e-banking sites, lack of skills among consumers needed in order to use the Internet, lack of timely and reliable systems for the delivery of physical goods, low bank account and credit card penetration, low income, and low computer and Internet penetration, in general (Bingi, Mir , & Khamalah, 2000). Lack of telecommunications infrastructure includes poor Internet connectivity, lack of fixed telephone lines for end user dial-up access, and the underdeveloped state of Internet Service Providers (ISPs). In addition, the absence of legal and regulatory systems inhibits development of e-banking in developing countries (Kapurabandara, 2009).

Bradley and Stewart, (2003), found that adoption is heavily influenced by factors within the organisation itself. Lack of access to computers, lack of suitable software/hardware components, affordable telecommunications, low e-banking use by supply chain partners, concerns with security and legal issues, low knowledge level of both management and employees, and unclear benefits from e-banking, were found to be major factors that inhibit adoption.

As reported by Kapurubandara (2009), a study in Egypt (El-Nawawy & Ismail 1999) found that the main contributing factors to non-adoption included lack of awareness and education, market size, lack of a suitable e-banking infrastructure, as well as telecommunications infrastructure and financial infrastructure, the legal system, the government's role, pricing structures, and social and psychological factors. It can be seen that adoption of e-banking technologies by banks and financial institutions in both developed and developing countries is subject to a myriad of complex, interwoven factors at both the macro and micro-level.

## **3.0 RESEARCH METHODOLOGY**

The main objective of this work was to investigate the extent of E-banking adoption among banks in Zimbabwe. An exploratory research design was considered the most suitable approach in view of the nature of the problem that was being investigated.

### **3.1 Research Sample and Questionnaire Distribution**

To accomplish the main aim of the study, a survey questionnaire was chosen as the primary research method for this study. The population of the study consisted of all commercial banks and their customers within Masvingo Province. The sampling frame consisted of five banks that were purposively selected, and one hundred and sixty bank customers randomly picked.

Structured questionnaire was used for data collection. Questionnaires enabled access to a wider spectrum of views and opinions in a shorter space of time, as responses were predefined, specific or limited by the use of a limited range of predefined answers from which the respondent simply had to choose. The questionnaire was divided into two sections. Section A captured basic demographic information of the respondent. Section B captured information on level of use of E-banking by indicating use of different platforms of E-banking, benefits being derived and the challenges being faced from E-banking. The participants were asked to rate their perception towards the benefit and challenge variables on a five-point Likert-type scale with anchors from —5- Strongly agree to —1- Strongly disagree. The rating was used to assess the degree of importance for each. Indeed, to evaluate the effectiveness of the chosen research method it was important to conduct a pilot study on a small sample of subjects. The outcome from the pilot study helped to detect any flaws in the questions so that they could be corrected prior to the main survey. However, feedback from piloting resulted in minor changes to the survey instructions and questions

## 3.2 RESULTS AND DISCUSSION

### 3.2.1 Respondents' Response

Out of 160 questionnaires administered 149 were returned representing a response rate of 93%. Males who responded were 87 (representing 58 %) against 62 females (constituting 42%).

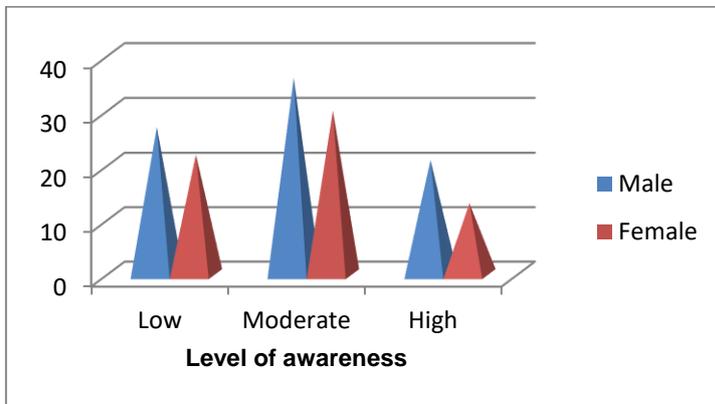
Table1 : Respondents' Education Level

Education level	Frequency	Percentage	Cumulative %
Secondary Certificate	18	12	12
Diploma	58	39	51
Degree	43	29	80
Post Degree	30	20	100
TOTAL	149	100	

Source: Field Survey

The above table shows high literacy among the respondents as only 12% did not go beyond secondary schooling. It can be assumed that the respondents were very aware of what they were being asked about. The study sought to determine the level of awareness of E-banking among the respondents which in turn influences its adoption and usage. Thirty three percent (33%) of the respondents demonstrated low awareness of E-Banking platforms and forty four percent (44%) had moderate awareness whilst twenty three percent (23%) had high awareness of E-banking. When further split according to gender, the study revealed that women generally have less awareness of E-banking platforms. Figure 1 below shows the distribution.

Figure 1: Level of Awareness of E-Banking based on Gender

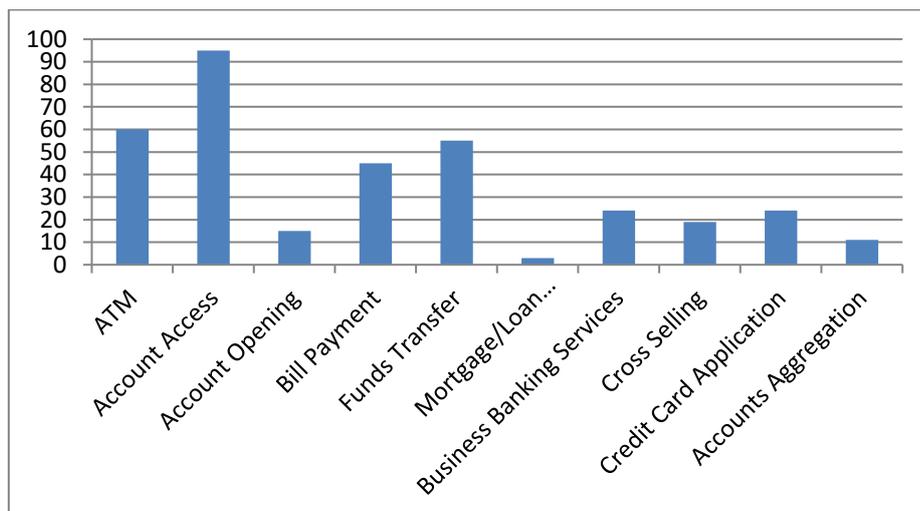


Source: Field Study

### 3.2.2 Level of Adoption of E- banking

The respondents were asked to indicate the E- banking services they were using at least once in a week. The purpose was to get an insight into the level of usage of different E-banking platforms. The results showed that Account access through the use of the mobile telephone remained the most widely used platform with 64% of respondents using it. The least used service was Mortgage/Loan application where only 3% of respondents had access to it. The reason was probably because it there was only one bank that offered such a facility. The ATM usage was low at 40%. However, this should be explained within the context of acute shortage of cash that is persisting in the country. Very few banks are dispensing cash through their ATMs and even if they do so, they will be in very small figures which tend to discourage bank customers from visiting ATMs in the first place. Figure 2 provides the uptake of E banking services by bank customers on a weekly basis.

Figure 2: Respondents’ use of E- Banking services



Source: Field Survey

From Figure 2 it can be established that only three services (ATM, Account Access and Funds Transfer) scored more than 50% among the respondents in terms of being in regular use. This can be taken to mean there is still low adoption of E- banking services even though the reasons need to be explained.

### 3.3.3 Barriers in E banking adoption

The participants were asked to rate their perception towards a barrier variable on a five-point Likert-type scale with anchors from —5- Strongly agree to —1- Strongly disagree. The rating used to assess the degree of importance for each single barrier is ranked according Table 2. The barrier that receives strong or medium rating is accepted as an effective barrier on E- banking adoption Zimbabwe.

**Table 2: Rating used to assess a barrier**

		Rating
1	If the amount of population mean is greater or equal 4.00 – the barrier has strong impact.	+++
2	If the amount of population mean is greater than 3.00 and less than 4.00 – the barrier has medium impact	++
3	If the amount of population mean is less than 3.00 – the barrier has low impact	+

The results show that security concerns remain the biggest obstacle to adoption of E- banking among the respondents. This might not be surprising given an upsurge of crimes involving hacking of bank accounts, fraud and card cloning in recent times. System breakdowns or failure was cited by the respondents as having a huge impact in hindering adoption of E-banking. Lack of awareness of E- banking services or their availability at banks had the lowest impact on its adoption and usage. The findings are summarised in Table 3

**Table 3: Average importance of barriers to E- banking**

Barrier	Number of participants					Mean	Rating
	1	2	3	4	5		
Security concerns	0	3	4	69	73	4.42	+++
Lack of awareness	41	31	26	26	24	2.72	+
System breakdowns/failure	1	5	7	60	77	4.40	+++
Consumer acceptance/confidence	3	8	90	10	38	3.53	++
Lack of facility at the bank	69	29	27	14	10	2.11	+

Source: Field Survey

#### **4.0 CONCLUSIONS AND RECOMMENDATIONS**

E-banking has the potential to greatly improve how banks operate internally and how they serve their customers. This research investigated the factors that influence and inhibit the implementation of E-banking in Zimbabwe. Based on the literature and the results of this research, the following conclusions are drawn.

The results showed bank customers in Zimbabwe have only adopted basic applications of E-banking. They generally use the services of account access, funds transferring and bank statement inquiry. The findings implied that more efforts are needed by banks to help and encourage their customers to speed up E-banking adoption, particularly the more advanced applications.

Secondly, factors that may hinder the implementation of E-banking are lack of Internet security and systems breakdowns/failures as a result of power outages. Banks are therefore encouraged to have their standby power whilst the Government should look for a lasting solution to the problem which has gone for a couple of years.

Thirdly, E-banking relies heavily on information and technology (ICT) to achieve its promise of 24-hour availability, low error rates and quicker financial services. It therefore imperative on the part of the Government that continued economic and banking reforms are key requirements so that E-banking can easily be implemented in Zimbabwe.

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