AN ANALYSIS OF THE FEASIBILITY OF A CASHLESS ZIMBABWEAN SOCIETY

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A dissertation submitted in partial fulfillment of the requirements for the degree of Master of Business Administration

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Graduate School of Management
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DEDICATION

To

Susie, my wife, best friend and soul mate

and

My wonderful son, Kupakwashe
DECLARATION

I, Reginald T Vhumbunu, do hereby declare that this dissertation is a result of my own investigation and research, except to the extent indicated in the acknowledgement, references and by comments included in the body of the report and that it has not been submitted in part or in full for any other university.

..............................................................          .............................. .......................
Student Signature Date

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Supervisor's signature Date
ACKNOWLEDGEMENTS

I would like to extend my gratitude to the following individuals for their support, inspiration and words of encouragement:

- to Dr. Hapanyengwi, my supervisor, for his invaluable guidance and meticulous approach in correcting submitted sections during the course of the study.

- to management and staff at banks, RBZ, Retailers and other Service Providers for providing me with their time and information needed to complete this study.

- to electronic payment systems users, for taking time to fill in questionnaires

- to my wife Susie, for the patience, support and putting up with my late nights at the computer.

- to my friends, for the continuous encouragement when I had lost hope.
The aim of the study is to analyse the feasibility of achieving a cashless society in Zimbabwe. There has been resistance by most sectors of the economy to adopt new electronic payment delivery channels. The cashless society is one where coins and notes are replaced by efficient electronic payments initiated by various types of plastic cards and other electronic delivery channels like the mobile phone and the internet. The research was quantitative in nature. A survey was carried out through the use of questionnaires with 151 members of staff who are regulators of financial and telecommunication industry, bankers, merchants, service providers of financial institutions and general users of electronic payment systems. Data was analysed using Statistical Package for Social Scientists (SPSS) and correlations were used to test the relationship between variables.

The main findings of this research were that a cashless Zimbabwean society is possible although it is important to have the necessary electronic payment systems and other relevant infrastructure in place. The Zimbabwean public has the right attitude towards the use of electronic payment systems. Mobile payment systems are the most commonly used in Zimbabwe although ATMs are also used significantly. The internet payments and point of sale are the other electronic payment methods used. Mobile phone based services have now offered financial institutions the ability to electronically include a wider cross section of the previously unbanked.

The research recommended that players in the electronic payments industry need to share infrastructure in order to promote productive efficiency. The cost of telecommunications and general ICT hardware and software should be made affordable to ensure that the general infrastructure improves. The government should remove barriers to innovation, including regulatory ones to enable growth in electronic payment systems in Zimbabwe.

An area of further study is recommended to investigate into mobile money payment systems, user acceptability and payment problems in Zimbabwe.
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<td>Description</td>
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<tr>
<td>ACH</td>
<td>Automated Clearing House</td>
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<td>AML</td>
<td>Anti-Money Laundering</td>
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<tr>
<td>ATM</td>
<td>Automated Teller Machine</td>
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<td>BAZ</td>
<td>Bankers Association of Zimbabwe</td>
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<tr>
<td>BLSSD</td>
<td>Bank Licensing Supervision and Surveillance Division</td>
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<tr>
<td>BREW</td>
<td>Binary Runtime Environment for Wireless</td>
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<td>CBN</td>
<td>Central Bank of Nigeria</td>
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<td>CCZ</td>
<td>Consumer Council of Zimbabwe</td>
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<tr>
<td>EFTPOS</td>
<td>Electronic Funds Transfer at Point Of Sale</td>
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<td>EFT</td>
<td>Electronic Funds Transfer</td>
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<tr>
<td>EMV</td>
<td>Europay, Mastercard and Visa</td>
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<td>E-Payment</td>
<td>Electronic Payment</td>
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<td>EPS</td>
<td>Electronic Payment Systems</td>
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<tr>
<td>ePSO</td>
<td>European Personnel Selection Office</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>J2ME</td>
<td>Java 2 Micro Edition</td>
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<tr>
<td>GPRS</td>
<td>General Packet Radio Service</td>
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<td>GSM</td>
<td>Global System for Mobile communications</td>
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<td>IB</td>
<td>Internet Banking</td>
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<td>ICT</td>
<td>Information Communication Technology</td>
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<td>IT</td>
<td>Information Technology</td>
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<td>ISP</td>
<td>Internet Service Providers</td>
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<td>MIS</td>
<td>Management Information Systems</td>
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<td>MMT</td>
<td>Mobile Money Transfers</td>
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<td>MoF</td>
<td>Ministry of Finance</td>
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<tr>
<td>M-Payment</td>
<td>Mobile Payment</td>
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<tr>
<td>NCC</td>
<td>Nigeria Communication Commission</td>
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<td>NFC</td>
<td>Near Field Communication</td>
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<td>NPSD</td>
<td>National Payment Systems Division</td>
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<tr>
<td>Acronym</td>
<td>Description</td>
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<td>NPS</td>
<td>National Payment Systems</td>
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<tr>
<td>PASA</td>
<td>Payment Association of South Africa</td>
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<tr>
<td>PC</td>
<td>Personal Computer</td>
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<td>PDA</td>
<td>Personal Digital Assistance</td>
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<tr>
<td>PIN</td>
<td>Personal Identification Number</td>
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<tr>
<td>POS</td>
<td>Point of Sale</td>
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<tr>
<td>POTRAZ</td>
<td>Postal and Telecommunications Regulatory Authority of Zimbabwe</td>
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<tr>
<td>RBZ</td>
<td>Reserve Bank of Zimbabwe</td>
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<td>RTGS</td>
<td>Real Time Gross Settlement</td>
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<td>SMS</td>
<td>Short Message Service</td>
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<td>SPSS</td>
<td>Statistical Package for Social Scientists</td>
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<tr>
<td>UK</td>
<td>United Kingdom</td>
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<tr>
<td>US</td>
<td>United States</td>
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<tr>
<td>USSD</td>
<td>Unstructured Supplementary Services Delivery</td>
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<tr>
<td>WAP</td>
<td>Wireless Access Protocol</td>
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<tr>
<td>ZESA</td>
<td>Zimbabwe Electricity Supply Authority</td>
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<td>ZETSS</td>
<td>Zimbabwe Electronic Transfer and Settlement System</td>
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<td>ZIMRA</td>
<td>Zimbabwe Revenue Authority</td>
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<tr>
<td>ZIPIT</td>
<td>Zimswitch Instant Payment Interchange Technology</td>
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<td>ZSS</td>
<td>Zimswitch Shared Services</td>
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</table>
CHAPTER ONE

INTRODUCTION AND BACKGROUND

1.0 Introduction

This research looked at an analysis of the feasibility of achieving a cashless Zimbabwean society both for business-to-consumer and business-to-business transactions. The cashless society is one where clumsy and expensive-to-handle coins and notes are replaced by efficient electronic payments initiated by various types of plastic cards and other electronic delivery channels like the mobile phone and the internet (Worthington, 1995).

This chapter presents the background to the study and summarises the issues under the problem statement section. After stating the objectives and research proposition, the researcher also outlined the conceptual framework summarising areas of literature review followed by a brief methodology of the study.

1.1 Background

Electronic Payment companies in developed countries as well as other emerging economies have come up with technological innovations, which have led to the provision of an array of products and services through electronic channels. These electronic products and services have brought the dream of cashless societies closer to reality. The term electronic payment is a collective phrase for the many different kinds of electronic payment methods available (also meaning online payment), and the processing of transactions and their application within online merchants and ecommerce websites. Electronic payments can also be defined as money which is exchanged electronically. Typically, this involves use of computer networks, point of sale devices, mobile phones, the internet and digital stored value systems. It is essential for all online businesses to be able to accept and process electronic payments.
payments in a fast and secure way. Businesses can gain a significant advantage over their competitors by providing an instant electronic payment service as it lets customers pay by their preferred way of credit or debit card.

There are several approaches to making electronic payments. Some of them can co-exist with others and some are mutually exclusive. Electronic payments in the developed world have taken the form of mobile banking (m-banking), electronic funds transfer at point of sale/service (EFTPOS) also referred to as point of sale (POS), Internet Banking (IB), Telephone Banking (Tele-banking), Digital Interactive Television (DIT) and Personal Digital Assistants (PDA)/palm pilots.

In the developing world, the internet and EFTPOS have been the main payment channels. However, in recent years a number of channels have been adopted like Tele-banking and GSM mobile banking being the latest addition.

1.1.1 Zimbabwean Background

The cash crisis in Zimbabwe that started manifesting itself during the hyperinflation period from around 2003 to 2009 and the change problem for small denominations that started when the multicurrency regime was introduced in Zimbabwe in 2009 are typical examples that underline the strategic importance of electronic payment systems at a national level. In growing markets like Zimbabwe, electronic payment systems enable consumers to transact with their cards, mobile phones or over the Internet without having to carry cash. Commercial banks and RBZ jointly flighted adverts in the electronic and print media, urging customers to use their debit cards on EFTPOS systems when doing their shopping. The Cards Association of Zimbabwe successfully went into discussions with the RBZ to lobby government to waive duty on EFTPOS devices and all plastic card related equipment.

Electronic Payment companies in Zimbabwe have seen a lot of growth due to a parallel growth in the financial services sector and deregulation in this sector. Electronic payment systems have in the past been regarded as sorely cost centres in banks. This is bound to change as some banks are looking at how they can realise some returns from their current investments in electronic payment systems.
Telecommunication companies in Zimbabwe have not been found wanting in promoting technologies that will help in creating a cashless Zimbabwean society. One good example is Econet Wireless’ Ecocash product that has attracted over 3 million subscribers.

Electronic payment companies or service providers should be major drivers in the effort to create an efficient system that will ensure a cashless society. They can achieve this through setting up the enabling technology, lobbying relevant authorities and creating awareness to end users. However, these and other measures are not happening at fast enough a pace to realise a cashless Zimbabwean society. This research sought to identify how this gap can be closed so that Zimbabwe moves fast towards a cashless society.

1.1.2 Electronic Payments

In the late 1990s and early 2000s electronic payment services became a hot topic and remained so even after the burst of the Internet hype. Electronic payments also attracted researchers such as Dahlberg et al. (2003a; 2003b), Ondrus and Pigneur (2004), Pousttchi (2003), and Zmijewska et al. (2004b). Hundreds of mobile payment services as well as access to electronic payment and Internet Banking were introduced all over the world. Strikingly many of these efforts failed. For example, most if not all of the dozens of mobile payment services available in European Union (EU) countries and listed in the European Personnel Selection Office (ePSO) database in 2002 (Carat, 2002) have been discontinued. The difference to the rapid diffusion of the Visa Electron smart card or eBay/PayPal is striking. Why have Visa Electron and PayPal succeeded in where mobile payment services failed?

The widespread embracing of digital mobile devices has paved the way for the progress of many innovation applications, among them, the possibility to use mobile devices for payment purposes. In developed countries most people never leave home without their mobile phone, whose storage, computing and transmission capability makes it an ideal device for containing everything people normally carry in
their wallet, including cash and bank cards. The mobile phone has achieved ‘permanent share of the pocket’, that is, next to the keys and the wallet, and having potential in succeeding to displace the wallet in the process.

The Mobile Payment Services (MPS) are currently in infancy and in continuous evolution with a history of numerous, tried and failed solutions elsewhere, and some successes elsewhere including in Africa, mainly on Mobile Money Transfers (MMT) and Bill Payments. However, there is a future of promising but yet uncertain possibilities with potential of the new technology innovation, which include increased convenience for the customers and increased return on investments for the service providers.

The aim of this research is to contribute to the further understanding and acceptance of electronic payments in Zimbabwe, allowing decision makers to better find their way to the new service development.

The market for electronic payments is still immature, hence there is need to analyse the unresolved technical, strategic, cultural and demand issues which make the adoption of electronic payments highly uncertain. In other countries, although most electronic payment solutions are already available, they are unsuccessful because they fail to provide the right value proposition to customers. This requires the researcher to investigate the needs and wants that may drive customers to adopt electronic payment solutions. Consumers create a specific demand for an electronic payment solution and drive to success by adopting and using it. In other words, the success of an electronic payment solution depends on the number of participants and the volume of transactions.

Issues of ICT infrastructure, availability of foreign currency, customer awareness, reliability of infrastructure and online security are investigated in this research. The research also looked at how electronic payment companies can influence other important players like the government, RBZ, Financial institutions, Zimswitch, Internet service providers (ISPs), merchants, Telecommunication companies, and cards associations to promote a cashless Zimbabwean society.
Payment trends in most parts of the world, according to the Zimbabwe Monetary Policy Statement of 2009, are towards electronic settlements and this has been responsible for the organised system that the Western world enjoys today. More Zimbabwean merchants, users and banks should use electronic payment systems as there are so many benefits that will accrue (Monetary Policy, 2004).

One of the major goals of mobile payments is to promote a cashless economy within a secure platform. This coincides with the RBZ’s aim to ensure that all financial transactions are electronically captured and traceable so as to enhance efficiency and reduce or eliminate fraud, the central bank governor said.

Like other international payment solutions, mobile payment provides a common platform that enables financial institutions to work together to enhance the performance of the monetary policies. It encourages transparency as transactions can be traced from start to finish and eliminates fraud. The net result of this will be fewer, more efficient or quality banks.

The system, which uses GSM telephones, enables account holders to shop securely, effect local and international money transfers online, pay bills, purchase airtime through mobile telephone short messaging service. According to an Econet (2010) report, the mobile payment system enables account holders to pay for goods and services from participating merchants such as Econet Wireless, TM Supermarkets, Greatermans, Exor Fuel, Medix Pharmacy and utility providers such as ZESA and the Harare City Council. According to the Monetary Policy report of 2011, banking institutions have partnered with mobile operators to provide various mobile banking and other electronic based products to the previously unbanked and marginalised communities.

The same monetary policy report of 2011 highlighted that banking institutions such as Kingdom Bank (now Afrasia Bank), FBC, NMB, TN Bank (now Steward Bank), CABS, Barclays Bank and Tetrad have entered into strategic alliances with mobile phone operators to develop new financial services delivery channels. These efforts are highly complemented. A cumulative total of mobile and internet transactions of 457 513 valued at USD193.13 million were processed from January to November
2010. Of the US$193.13 million, internet transactions accounted for 99%, while mobile payments were 1% of the same amount.

Electronic payments penetration in Africa has leapfrogged and Zimbabwe is no exception with a mobile phone subscriber base estimated to be over 12 million. This has created an opportunity for banks and other players to leverage on Information and Communication Technology developments. Consistent with these developments, the Central Bank approved the establishment of mobile phone banking initiatives in the country. This is consistent with their goal to promote electronic payments and financial inclusion. The then governor of the Reserve Bank of Zimbabwe (RBZ) Dr Gedion Gono said in the report “We remain resolute in urging the financial services sector and other stakeholders in the market to explore ways of furthering the utilization of these communication tools as channels for retail payments on a large scale across banks, borders and networks. As Monetary Authorities, we are pleased to note the increasing number of banking institutions venturing into mobile banking”.

As at 31 January 2012, fifteen (15) banking institutions out of eighteen (18) had introduced mobile banking products in partnership with mobile network operators as shown in the table 1.1 below. With the introduction of Ecocash banking services which allow customers to transfer money from their bank accounts to mobile phone wallets, most of the banks are now able to complement their in-house mobile banking systems with Ecocash.
1.1.3 Cashless Initiatives Introduced By Zimbabwean Banks

<table>
<thead>
<tr>
<th>Institution</th>
<th>Mobile Network Operator</th>
<th>Mobile Banking Platform / Brand Name</th>
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<tbody>
<tr>
<td>1. FDC Bank</td>
<td>Net One/ Telecel</td>
<td>ZIPIT */ One Wallet</td>
</tr>
<tr>
<td>2. Kingdom</td>
<td>Telecel</td>
<td>Kineto Mobile/Kingdom Cellcard</td>
</tr>
<tr>
<td>3. POSB</td>
<td>Net One/ Telecel</td>
<td>ZIPIT</td>
</tr>
<tr>
<td>4. CABS</td>
<td>Net One/ Telecel</td>
<td>ZIPIT / Textacash</td>
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<tr>
<td>5. Metropolitan</td>
<td>Net One/ Telecel</td>
<td>ZIPIT, Metbank mobile</td>
</tr>
<tr>
<td>6. FBC Building Society</td>
<td>Net One/ Telecel</td>
<td>ZIPIT</td>
</tr>
<tr>
<td>7. Interfin</td>
<td>Net One/ Telecel</td>
<td>ZIPIT</td>
</tr>
<tr>
<td>8. Barclays</td>
<td></td>
<td>Inbuilt Platform</td>
</tr>
<tr>
<td>9. TN Bank</td>
<td>Econet</td>
<td>Ercash</td>
</tr>
<tr>
<td>10. Tetrad</td>
<td>Telecel</td>
<td>c-Mali</td>
</tr>
<tr>
<td>11. CBZ</td>
<td>All</td>
<td>E-Tranzact /CBZ mobile/ ZIPIT</td>
</tr>
<tr>
<td>12. Stanchart</td>
<td>Net One/ Telecel</td>
<td>ZIPIT</td>
</tr>
<tr>
<td>13. Trust</td>
<td>All</td>
<td>E-Tranzact/Bank at Ease</td>
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<tr>
<td>14. ZB</td>
<td></td>
<td>E-Solutions</td>
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<tr>
<td>15. ZABG</td>
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<td>E-Solutions</td>
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</table>

Table 1.1: Cashless initiatives introduced by Zimbabwean Banks

The Reserve Bank requires all banking institutions to put in place appropriate risk management structures and processes to facilitate on-going monitoring of all risks associated with mobile banking products and other electronic service delivery channels.

1.1.4 Business Environment

The stakeholders for electronic payment systems do not operate in a vacuum, thus the external environment which is characterised by Political, Economic, Social, Technology and legal (PESTL) has an impact on e-business and in particular e-transacting.
Political

The continued political isolation of the country by its traditional trading partners in the West has meant that international financial institutions have perceived the country to be a risky destination for extending lines of credit and therefore closing opportunities for local firms to borrow competitively for infrastructure development and importation of machinery and equipment. This has resulted in mobile and telecommunication operators failing to access funds to upgrade their systems and expand their network coverage. Foreign direct investments (FDI) are likely to remain insignificant due to the disputed July 31 2013 election results and negative publicity of the country. Thus the failure by operators to upgrade or acquire modern technology or infrastructure due to lack of foreign currency, has adversely affected telecommunications industry operations.

Economic

Since the adoption of the multi-currency system in the beginning of 2009, the economy has experienced stability and inflation currently stands at 1.0%. Capacity utilisation in most industry sectors has improved and some have recorded an increase of 35% to 55%. However, high unemployment levels are likely to remain as there are no new jobs being created. The economy is not attracting FDI for creation of new formal jobs and local investments remain depressed. Cash shortages have hampered industry performance and re-equipping. Most operators are struggling to pay competitive remuneration in order to retain skilled labour and this has resulted in massive skills exodus.

Social

It is estimated that over 3 million economically empowered Zimbabweans are living in the Diaspora. Brain drain has continued on professionals emigrating in search of greener pastures especially in the telecommunications sector and this has adversely affected the availability of skilled labour. The HIV/AIDS pandemic has reduced mortality among the productive age group worsening the availability of skilled labour. The socio-economic pressures have overcome the spirit of loyalty which has resulted in attitude change among workers hence most organisations in the targeted industries have experienced massive employee turnover.
Technology

Some of the key industries are highly technology driven. The industry utilises and experiences fast changes in technology. Most developed countries are already on fourth Generation (4G) while in Zimbabwe, Econet Wireless has recently launched 4G in some areas in Zimbabwe like Victoria Falls. Faster convergence of electronic technologies (cell phone, e-mail, camera, movies and satellite receiving rolled into single devices) transacting faster and easier modes of communicating resulting in efficient and effective means of doing business. For example the introduction of Third Generation (3G) has necessitated internet accessibility everywhere anytime.

Legal

World over, the telecommunications and banking industries are highly regulated. In Zimbabwe, the Postal and Telecommunication Regulatory Authority of Zimbabwe (POTRAZ) has a stringent vice-like-grip of the industry. POTRAZ is mandated by law to issue licenses in the postal and telecommunications sector, and to set the terms and conditions for activities in the sector. POTRAZ is responsible for ensuring that all people in Zimbabwe are adequately provided with postal and telecommunication services. These services must be provided uniformly. The banking industry is regulated by the central banking regulations. In the Zimbabwean case, it is the Reserve Bank of Zimbabwe (RBZ). However the recent liberalisation of the ICT sector has resulted in telecommunications operators’ upgrading and expanding their networks and increasing their subscriber base tremendously. This has resulted in the telecommunications industry increasing its subscriber base, and improving on service delivery and adding more products to market.
1.2 Problem Statement

The use of cash is extremely high in Zimbabwe. This was mainly evident during the hyperinflation period before the introduction of multiple currencies in 2009 when the market experienced a prevalence of cash shortages to the point of the Reserve Bank, at one time, introducing a cap on cash withdrawals and staggering Government employees pay dates.

The financial sector of the economy is on a slow recovery path since the dollarization of the economy in 2009. At the moment the country does not have its own currency and the authorities do not know what to do when a cash crunch happens and resort to urging banks to import cash for the economy, a process which is costly to banks. During month ends, queues are the order of the day at several banks as account holders will be jostling to withdraw their salaries so that they go and buy groceries, pay utility bills at the municipality and the Zimbabwe Electricity Supply Authority (ZESA) as well as pay for rentals. If only the country was technologically suave, there would be no need for cash importation as transactions would be done through e-payment methods like mobile payments.

The problem of change due to shortage of small denomination notes and coins is also prevalent in Zimbabwe. Consumers are forced to take small value goods which they don’t need as a substitute for change. The shortage of small denomination notes also means that the small number of notes in circulation is passed back and forth so many times the numbers are almost rubbed off or the notes end up being filthy.

Financial institutions and retail outlets experience huge costs associated with handling cash. Security companies are paid a lot of money to ensure that cash is securely transferred from one place to another.

Background for this study shows that there has been resistance by most sectors of the economy to adopt new electronic payment delivery channels. The background
also shows that there has been poor telecommunications infrastructure characterized by lack of foreign currency to invest in new technologies.

This study therefore analysed the feasibility of achieving a cashless Zimbabwean society through establishing electronic payment systems.

1.3 Research Objectives

The major objectives of the study are:

1. To establish electronic payment systems available in Zimbabwe that help to achieve a cashless society.
2. To establish the challenges associated with the implementation of electronic payment systems in Zimbabwe and how they can be overcome.
3. To establish benefits to the business community that is associated with electronic payment systems.
4. To investigate the strategies that can be adopted to achieve a cashless Zimbabwean society.
5. To investigate the roles of different stakeholders in promoting a cashless Zimbabwean society.
6. To measure the level of awareness of the electronic payment systems by both the business and ordinary communities.

1.4 Research Questions

This study aims at providing solutions to the following research questions:

1. Is a cashless society achievable in Zimbabwe and has it been achieved elsewhere?
2. What factors have led to the slow uptake of electronic payment methods in Zimbabwe?
3. What are the business and ordinary communities going to benefit from adopting the electronic payment systems?
4. Are electronic payment companies doing enough to promote a cashless Zimbabwean society?
5. Are Zimbabwean communities aware that cash can be replaced by electronic payment methods?
6. What are the roles of different stakeholders in promoting a cashless Zimbabwean society?

1.5 Research Hypothesis

H0: A cashless Zimbabwean society is achievable and enhances efficiency and customer convenience and satisfaction.

H1: A cashless Zimbabwean society is not achievable in the Zimbabwean environment

1.6 Justification of Research

This study benefits all the stakeholders in the electronic payment system. In spite of the considerable research efforts which have been conducted to better understand the key aspects of electronic payments acceptance, the researcher feels that for Zimbabwean stakeholders to fully embrace the service, the amalgamations of the previous contributions should be improved by a union of perspectives from all important stakeholders of electronic payment services. This study will benefit the electronic payment systems users because the findings will extract the benefits of electronic payment systems and their effectiveness.

The study lays the ground to the stakeholders and maps away forward on how the country ensures that electronic payment platforms are used to alleviate the prevalent cash shortages. The electronic payment systems have been tried and tested in other countries abroad and within Africa there have been mixed reactions to their acceptance.

This study analysed the relevance of increased electronic payment systems investments and whether these can eventually lead to a cashless Zimbabwean society. It looked at whether current systems are providing perceived customer
satisfaction, lowering costs and/or providing any sustainable competitive advantage and whether there is justification for continued use of such systems.

Through the conclusions and recommendations of the study, stakeholders in this industry will be able to come up with ways of bringing awareness of electronic payment systems to its customers as well as its acceptance in the market. The stakeholders in this industry should analyse the reasons behind the slow responsiveness, work around the challenges to effectively take advantage of the rapidly growing mobile telephone subscriber base to substitute the use of cash in a low cost manner.

1.7 Scope of Research

The aim of the study is to analyse the feasibility of achieving a cashless Zimbabwean society through the use of electronic payment systems. The study targeted to get views from the banks, telecommunication companies, POTRAZ, RBZ, Zimbabwe Chamber of Commerce, the consumer Council of Zimbabwe, electronic payment companies, merchants and a few selected individuals who are industry captains.

1.8 Dissertation Outline

Chapter one provides the introduction and background information to the study. Chapter two appraises and presents empirical evidence and literature relating to the research topic. Chapter three describes and justifies the research methods employed in the research while chapter four presents the research findings and analysis. Chapter five draws conclusions and recommendations from the research findings and proposes an area of further study.
CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The purpose of this chapter is to provide literature review which addresses issues that impact a cashless society. The literature reviews mainly on the electronic payment systems (EPS) which are being exploited in Zimbabwe, the awareness of the public to the EPS available in their country, the advantages of using EPS and the challenges. The chapter also provides literature on the role played by stakeholders in promoting a cashless society in a Zimbabwean market.

2.1 Definition of a cashless society

Njenga (2010) defines a cashless society in which plastic money and technology that supports virtual transfer of money are the sole modes of payment. Landry (2013) pointed out that the term 'cashless' means exactly that; no cash, and the term is used to describe cards that people can add to using cash. A cashless system is the ability to store money in an electronic purse on a card and is fast becoming standard practice throughout the workplace. The electronic purse is then used to purchase products at a vending machine, the till in the college restaurant or at any point of sale terminal located within the business premises. According to the Central Bank of Nigeria (2011) a cashless economy is one where purchases and transactions are done mainly by electronic means and seldom by cash.

Hendrickson (2007) argued that one might think that the cashless society is a prediction of future widespread use of credit-card transfers, but instead it is a program which describes the kinds of conscious human effort and intellectual energy and understanding that must be brought to bear to foster evolution in the direction of the cashless society.
2.2 Electronic Payment Systems

Electronic payment refers to cash and associated transactions implemented using electronic means according to Humphrey et al. (2001). This will typically involve computer networks such as the Internet and systems that can store value in a digital format. The electronic payment system will allow users to perform various transactions like balance enquiries and paying bills directly from bank accounts without going to the bank.

According to Agimo (2004), electronic payment can be defined as ‘payment by direct credit, electronic transfer of credit card details, or some other electronic means, as opposed to payment by cheque and cash’.

The European Central Bank (2013) defined an electronic payment as “a payer’s transfer of a monetary claim on a party acceptable to the beneficially”.

Kalakota and Whinston (1997, p. 153) argue that “electronic payment is a financial exchange that takes place online between the seller buyer and the seller”. The nature and content of this exchange is usually the form of digital financial instrument (such as encrypted credit card numbers, electronic checks, or digital cash) that is backed by a bank or an intermediary, or by a legal tender.

For the purpose of this research, electronic payment refers to safe, secure and convenient methods for performing transactions using electronic means such as card, mobile phone, point of sale device, the Internet, fixed telephone, Electronic Funds Transfer (EFT), etc. The main purpose of electronic payments is to reduce cash and cheque transactions and they give consumers an alternative to paying bills and debts by cash, cheque, money order, etc.

Electronic money and hence the introduction of the cashless economy was studied by a number of researchers before. Wicksell (1898, 1935) studied a pure credit economy where, monetary policy is conceived without money. A cashless society was considered in these studies and the connection between the flows of investor demand as measured by movements in the demand deposits and the real sector.
Goodfriend and King, (1997) and Berg et al, (2006) suggested that money does not really matter in the determination of price movements and hence inflation and therefore the economy can do without cash as the money base is not relevant for manipulations in the price level while the quantity theorists claim otherwise.

Some authors like Good (1997), Godschalk and Kruger (2000), Palley (2001) and Rogers (2004) have investigated the introduction of electronic money with a view to ascertaining its implications for regulations, transactions and costs to banking and non bank public. However, these studies were not carried out in the developing economies but in the developed countries where the standard of living, technological sophistication and monetary policies were advanced.

The combination of market ready and emerging technologies is aligning to drive a majority of consumer payment transactions from cash toward other payments “form factors” including the Internet, mobile, and contactless payments. Theodore (2013) pointed out that most global payments will move from cash to other payment mechanisms which are electronic in nature. Most of these new payment methods are already being implemented in many countries around the globe. These include contactless payment terminals and fingerprint recognition payments, to micropayment and mobile money systems.

In Zimbabwe, a cashless society will be applicable to less than 35% of the population given that 66% live in rural areas. However, this is likely to change with the emergence of mobile money services even in rural areas.

An electronic payment structure by Kruger (2001) is shown in figure 2.1 below.
Gono (2012) noted that payment trends in most parts of the world are moving towards electronic settlements and he attributed the organized system that the Western world enjoys today to these trends. Electronic payment instruments in Zimbabwe such as e-wallet from NetOne and Ecocash from Econet Wireless Zimbabwe is widely used in Zimbabwe. These have increased the efficiency of electronic payment systems.

2.2.1 Types of Electronic Payments Systems

2.2.1.1 Mobile Payments Systems

Mobile payment (m-payment) solutions may be classified according to the type of payment effected, and based on the technology adopted to implement the solution. There are three different models available for m-payment solutions on the basis of payment (Lim, 2007):
1. Bank account based
2. Credit card based
3. Telecommunication company billing based

Bank Account based M-Payment

According to the Zimbabwean monetary policy statement (2012), banks have several million customers and telecommunication operators also have several million customers. If they both collaborate to provide an m-payment solution it is a win-win situation for both industries. In this model, the bank account is linked to the mobile phone number of the customer. When the customer makes an m-payment transaction with a merchant, the bank account of the customer is debited and the value is credited to the merchant account.

Ecocash in Zimbabwe has gone a long way in ensuring there is collaboration between banks and telecommunications operators through various initiatives with Steward Bank and other banks. In the first quarter of 2013, Ecocash integrated with about 10 banks in Zimbabwe to allow their customers to do transactions like wallet to bank and bank to wallet where value is transferred from a mobile money account to a bank account and vice versa. Ecocash customers are also able to buy groceries from merchants using value stored on their mobile phone wallets and a receipt is printed instantaneously on a point of sale device. No cash is involved in all of these transactions. On 9 October 2013, Ecocash launched the Ecocash Save product which allows their customers to open a savings account at Steward Bank through a mobile phone. This will go a long way in ensuring financial inclusion in Zimbabwe and making sure people who previously did not have access to bank accounts will open bank accounts without any hassles. If the number of mobile and bank account holders increases, there is bigger chance of people transacting using electronic channels which will lead to a cashless society.

Credit Card based M-Payment

In the credit card based m-payment model, the credit card number is linked to the mobile phone number of the customer. When the customer makes an m-payment transaction with a merchant, the credit card is charged and the value is credited to
the merchant account. Credit card based solutions have the limitation that it is heavily dependent on the level of penetration of credit cards in the country. Credit card usage in Zimbabwe is almost non-existent due to the lack of a savings culture in the economy.

**Telecommunication Company Billing of M-Payments**

Customers may make payment to merchants using their mobile phones and this may be charged to the mobile phone bills of the customer. The customer then settles the bill with the telecommunication company (Zheng and Chen, 2003). This may be further classified into prepaid airtime (debit) and post-paid subscription (credit).

According to Wah (1999), the mobile technology landscape provides various possibilities for implementing m-payments which includes the following:

- Short Message Service (SMS),
- Unstructured Supplementary Services Delivery (USSD),
- General Packet Radio Service (GPRS) /Wireless Application Protocol (WAP),
- Phone-based Application - Java 2 Micro Edition (J2ME)/ Binary Runtime Environment for Wireless (BREW),
- Subscriber Identity Module (SIM) -based application,
- Near Field Communication (NFC),
- Dual Chip and Mobile Wallet.

**2.2.1.2 Electronic Funds Transfer (EFT)**

The Nigeria National Commission (2010) has defined electronic funds transfer system as "a payments system in which the processing and communications necessary to effect economic exchange and the processing and communications necessary for the production and distribution of services incidental or related to economic exchange are dependent wholly or in large part on the use of electronics."

When using EFTs, users are issued with a card. The electronic purse is topped up using revaluation terminals. A range of terminals are now available including coin and note, credit card or payroll deduction terminal. Simply by inserting the card into a revaluation terminal and following the instructions given, money is added onto the
electronic purse on the card. The card then replaces your wallet or purse when paying for goods at both vending and catering facilities. Card readers are installed at all Points of Sale (e.g. vending machines, restaurant tills, coffee bar till, staff shops). Instead of juggling with cash at the Point of Sale, the card is inserted into the reader and the total sum of the purchase is quickly and accurately deducted from the card.

2.2.1.3 Point Of Sale (POS)

A point of sale device uses a debit card to activate an electronic funds transfer process (Chorafas, 1988). POS devices have evolved and now allow transactions like bill payments and deposits. Banks are using them as fast-lane tellers in branches and at merchant sites.

2.2.1.4 Internet Banking (IB)

Daniel (2002) defines IB as an online service that allows customers to perform banking functions directly over the Internet. IB allows consumers to access their bank and accounts to undertake banking transactions (Burr 1996). There are also various types of online banking. Kalakota and Whinston (1997) define them as follows:

1. **Online banking making use of a bank’s proprietary software.** The bank is used as an “electronic gateway” to customer accounts. Customers install software on their home computers to enable them to transact on their accounts.

2. **Online banking via Personal Computers (PC) using dial-up software.** Customers make use of home finance software to link to banks for online banking. Examples of such software include Intuit’s Quicken and Microsoft. PC banking ties a user to one location and device (Mattila 2001).

3. **Online banking via online services.** Banks set up retail branches on subscriber-based online services such as America Online.

4. **Internet banking via the World Wide Web.** This form of online banking by passes subscription based services and allows banks to reach customers directly through the internet.
2.2.1.5 Telephone Banking

Telephone banking is a service provided by financial institutions which allows its customers to perform transactions over the telephone. Most telephone banking services use an automated phone answering system with phone keypad response or voice recognition capability. To guarantee security, the customer must first authenticate through a numeric or verbal password or through security questions asked by a live representative located in a call centre. Telephone banking offers account balance information and list of latest transactions, electronic bill payments and funds transfer between a customer's accounts. Physical cash is not involved in all these transactions.

2.2.1.6 Smart Cards

A smart card or chip card is defined as any pocket-sized credit card with embedded integrated circuits which can process data. Electronic money or value can be loaded into the smart card and stored there for later use. Smart cards must be physically inserted into a card reader and PIN-based authentication must be provided for access, authentication, and digital signing. Smart cards can also include the traditional features of physical ID cards such as images, pertinent personal data, and even magnetic stripes and barcodes. The smart card can be used to perform transactions on point of sale devices which can read smart cards.

2.2.1.7 Automated Teller Machine (ATM)

An ATM allows customers to use plastic cards to perform electronic transactions on a computer terminal, with a cash vault and a record-keeping system. The customers can be identified by a Personal Identification Number (PIN) or biometric data like fingerprints. It allows cash dispensing, deposits, funds transfer between two or more accounts and bill payments. Although ATMs help in reducing queues in banking halls and ensure that customers can access their money 24 hours a day, the downside is that cash is still involved in ATM transactions and do not help in promoting a cashless society.
Looking at the country of study Zimbabwe, Kaseke (2012) pointed out that in Zimbabwe there are two main platforms from which the card system operates namely point of sale (POS) and automated teller machines (ATMs). The card based system has institutions which acquire or issue the cards. Institutions which issue cards are mainly banks which issue cards for use at ATMs and POS terminals. Institutions which acquire cards are those that own the POS terminals and ATMs which facilitate the processing of the transactions through the switching system electronically. Zimbabwe has only three switching systems namely Visa, MasterCard and Zimswitch. Visa and MasterCard are switches that cover both local and foreign transactions whilst Zimswitch is a local switch. Transactions done through these switches enables card transactions from one member bank to be done on another member bank’s infrastructure. The Zimbabwean market is dominated by debit and credit cards which are functional online. Credit cards include international Visa and MasterCard being offered by banks such as Standard Chartered Bank, NMB, CBZ and ZB Bank. Most of the card products operating in Zimbabwe are debit cards which allow access to funds through ATMs and POS terminals.

2.3 Factors affecting the use of Electronic Payment Systems

2.3.1 Levels of Income

According to Kwast and Kennickell (1997) riches have an important role to play in terms of decisions on the payment system to use. Mantel (2000) also noted consumers that experience brief financial shortfalls may not find electronic bill payments desirable as opposed to wealthy consumers who can easily fund their obligations.

2.3.2 Educational Level

Educational level may also affect one’s payment decisions because this might affect the demand for electronic banking products. In the study of customers in UK, Kwast and Kennickell (1997) found that education plays an important role in determining how households use of electronic payment methods. They also noted that the US market for electronic payment systems is still highly specialized, with most of the
demand coming younger, more educated and higher income households with stable financial assets. Anon (2003) noted that the technicalities involved in electronic payment transactions discourage less educated customers to patronize its use.

2.3.3 Levels of Employment

According to Ferguson (2000), more than half of the people in USA received a direct deposit of their pay into their accounts in 2000. This happened to people who are employed and these people are likely to use electronic means of payment than those who are not employed. Employees have constant contacts with banks are more exposed to electronic payment products, and are therefore, likely to patronize the products.

Most of the people in Zimbabwe are unemployed and this has an effect on the use of electronic payment systems. However, most of the people are working in the informal sector and a number of business transactions are moving through this sector. Bringing the informal economy into electronic transaction system would capture massive amounts of payment flows. EPS in the form of mobile money on the other hand, fits the needs of the informal economy because it does not require customers to have a bank account something many Zimbabweans are reluctant to embrace again.

2.3.4 Personal Choices

The customer’s personal preferences can influence the payment instrument that one will use. There are some people who easily embrace the use of technology than others.

2.4 Benefits associated with Electronic Payment Systems

There are a number of benefits that are associated with using electronic payment systems. Electronic payment systems have come up with a number of advantages to the business community as compared to cash payment systems. Kellner-Swick (2010) noted the most important advantages associated with using electronic
payments as convenience, mobility, transaction efficiency, costs, privacy, compatibility, integrity, acceptability, anonymity and low financial risk.

2.4.1 Convenience

Electronic payments provide a lot of convenience where consumers can make purchases and pay their bills at unconventional locations at any time. Customers don’t have to wait for merchants to open their businesses. People on vacation can pay their bills online.

2.4.2 Mobility

With the use of mobile payment systems, credit and debit cards, one can actually move with his or her money without necessarily carrying cash.

2.4.3 E-payment systems help in saving time

Most electronic payment transactions happen in a flash. The only problem comes with the initial implementation of the systems which can take long. Marketwatch.com found in a research study that electronic payments have reduced the amount of time spent by Americans paying for and managing their bills by about 60%. This means people will spend more time doing things that they enjoy.

2.4.4 Costs

Accepting online payments means that many banking processes become automatic. Consumers can save a lot of money by doing electronic payments compared to the cost of writing checks, postage and trips to the post office. Most business, merchants and vendors don’t charge for online payments and this is important for many consumers. The cost of handling cash for banks and retailers is also greatly reduced by electronic payments.

2.4.5 Security

Dawns (2006) and Badman (2004) postulate that the Internet is a relatively more secure way of transacting than mail as most instances of identity theft occur by stealing mail from discarded trash or out of a person’s mailbox. Electronic payments
also use encryption technology to secure transactions. This technology ensures that financial transaction data is scrambled before transmission.

The RBZ Monetary policy (2010) expressed that in some ways, going cashless can offer more security than using cash. Losing a wallet with cash is untraceable if someone had picked it. But if one loses a phone or credit card, one can remotely wipe his/her device or call the credit card company before a thief can spend the money. Phones, online bank accounts, and credit and debit cards come with security measures in place, passwords, PIN codes, and signatures, for example, while cash does not. Of course, malefactors may succeed in bypassing or tampering with those security measures. A hacker who has additional information about someone’s details such as date of birth or your mother's maiden name can do a lot of damage. However, mobile payment systems are still fairly new and a lot is yet to be improved by the creators of mobile payment systems.

In order to ensure security in a cashless transaction, the provider and retailer have the ability to track the user’s purchasing behaviours and even some financial information. Retailers aren't the only ones who track consumers’ purchases. Banks and credit card companies are interested in tracking transactions and building a profile so they can keep more secure (Mahdi, 2011). What Mahdi is expressing is that if a card is stolen just after buying something in Harare as an example, and it's used for another purchase soon after in Mutare, the system can automatically block it. In other words, privacy invasion can have its benefits, it seems. This means that consumers should not be afraid because in many cases the banks and credit card companies use this information to protect their customers. However, Mann (2004) argued that users should question whether or not they want another loyalty card, and should know what they are giving up in order to get that coupon.

2.4.6 Increased customer base

Cairns (2012) found that online payments take advantage of impulse buyers. About ninety five percent of electronic purchases are by credit cards in developed countries. If a business website does not offer payment by credit cards as an option, there is probability of losing out this market. However, in Zimbabwe there is still a low uptake of credit cards.
2.4.7 Solving change problems

Levine (2013) noted that in the Zimbabwean scenario, the switch to the U.S. dollar has helped to stabilize inflation, but it has created what is known in Zimbabwe as the “change problem”: $1 minimum transactions. The weight of U.S. coins makes them expensive and difficult to import, so with little U.S. change available, goods that used to cost 99 cents or less now cost a dollar. Sometimes merchants offer credit notes or even sweets as change. Shoppers are often forced to buy additional, non-essential items – essentially impulse buys – to bring their total purchase to one dollar. In a nation where the average person lives on less than two dollars a day, a dollar is still a lot of money. Ecocash was introduced by Econet with the aim of solving the change problem by replacing cash in the retail environment. Using mobile money would allow customers to pay the exact price electronically, eliminating the expensive headache of the $1 minimum. The change problem may be unique to Zimbabwe, but the bigger challenge – penetrating the retail environment – will resonate with any operator trying to expand the utility of their mobile money service.

2.4.8 Allows simple cash collection

According to Ejiofor and Rasaki (2012), time spent collecting, counting and sorting cash costs money. The cashless system offers a choice of top-up options including payroll deduction, credit and debit card and coin and note. Removing all the cash from site removes the security issues relating to cash handling significantly and reduces the risk of vandalism and theft from vending and catering points of sale. A payroll loader, where money is transferred from salary to smart card, or a credit card loader, where money can be loaded from Access, Visa or MasterCard directly to smart card offers customers a truly ‘cashless’ system. Sites where it’s not practical to remove cash can still achieve major benefits from using coin and note loaders to top-up cards. These terminals can be sited in central locations where security risk is low. All money is safely locked away in alarmed cashboxes that are fully auditable. Since the money collected from coin and note loaders is high value denominations, less time is spent on counting and reconciling the cash, saving time and money to the operator.
2.4.9 Reduces Cash in Circulation

Ejiofor and Rasaki (2012) noted that a cashless system prevents too much of cash in the circulation thereby curbing armed robbery cases and cash related crime.

2.4.10 Job Creation

According to Ejiofor and Rasaki (2012), the establishment of electronic payment agencies and licensing their operations will create jobs and new business opportunities. This phenomenon has been experienced in Zimbabwe where Econet Wireless has created employment by establishing a lot of agencies for the Ecocash mobile money system.

2.4.11 Improves hygiene on site

The handling of coins and notes provide an easy way for bacteria to spread quickly from one individual to another. Most of the small denomination notes circulating in Zimbabwe are soiled and there is high likelihood of the presence of bacteria in most of the notes. According to Ejiofor and Rasaki (2012), a recent study revealed the presence of bacteria on 87% of all notes circulating in Nigeria. With a cashless system, the catering staff no longer have to handle cash, at the same time as serving food.

2.5 Challenges associated with Electronic Payment Systems

Electronic payment systems may pose a number of challenges. Some of the challenges are explained below.

2.5.1 Lack of Authentication

It may be difficult to authenticate or verify that the individual entering the information online is who they say they are. An unauthorized user may carry out transactions in someone else’s name before the authorities have been alerted. However, most electronic payment systems these days make use of some form of customer authentication like personal identification number (PIN), biometrics or signature verification.
2.5.2 Registration process is a time consuming processes

Hamphery (2001) a professor of finance at the University of Florida pointed out that one of the disadvantages of electronic payments is that there is a requirement to register with the institution offering the service or do some form of enrolment before doing transactions with them. This is ideal with Ecocash. One has to be registered and without fail be a client of Econet. The overall payment process can be efficient but the initial registration can consume a lot of time. However, the registration is a once off process.

Ejiofor and Rasaki (2012) noted the main challenges associated with electronic payment systems as high cost of access, confidence and security, infrastructure, lack of knowledge and skill, operational disruptions, supply of power, lack of funds and urban/rural areas coverage. The following sections will explain these challenges in detail.

2.5.3 Access Costs

The high cost of access to the networks that provide connectivity and broadband and the high cost of electronic payment devices can be a problem especially in developing countries like Zimbabwe.

2.5.4 Security and Confidence

Certain electronic payment methods like card payments using magnetic stripe cards lack adequate security when they are used. Magnetic stripe cards can be schemed for fraudulent purposes. There are still limited cases of Internet fraud in Zimbabwe since the cashless system is in its early stages.

2.5.5 Infrastructure

The point of sale terminals (POS), telecommunication networks and internet facilities are still inadequate in developing countries like Zimbabwe. Sometimes even the few that are available are not well maintained.
2.5.6 Lack of Skill and Knowledge

There is general lack of knowledge of what electronic payment systems and services exist, skills of operating them and the benefits to be derived from a cashless economy from both consumers and business enterprises. This slackens the user acceptance of the electronic payment systems.

2.5.7 Operational Challenges

Operational disruptions provide a high risk to the stability of electronic payment systems. These can be caused by virus attacks or general system failures. However, a lot of organisations have implemented disaster recovery systems to militate against the risks caused by operational disruptions.

2.5.8 Supply of Power

The epileptic nature of power supply in Zimbabwe will make it difficult to really utilize even the available facilities. Customers are being inconvenienced in making their transactions due to serious load shedding experienced in the country.

2.5.9 Lack of funds

To establish a good cashless system is capital intensive. The relevant agency should pump enough money for the success of the cashless economy policy.

2.5.10 Urban/Rural Areas Coverage

The major problem is that the use of computer, access to Internet and other tools of ICT are limited greatly to the urban areas, and the challenges faced by the ICT sector in Zimbabwe include particularly the fact that the people in the rural areas are yet to know how to use the computer or IT facilities.

2.5.11 Attitudes on Privacy

The welcome efficiencies of computers, electronic data transmission, and the Internet have, unfortunately, also ushered in abuses, ranging from misuse of medical
data to identity theft, spam, and a variety of unwelcome and irritating marketing schemes. The creeping invasion of privacy has engendered widespread wariness, if not a negative bias, against any suggestion to create new electronic databanks and to collect personal data.

Privacy, which until recent years had been a nebulous term, has risen from relative obscurity to a position of equality with other major rights. But the pendulum can swing too far. Those who focus their efforts exclusively against invasions of privacy too often are oblivious to greater and more harmful social enemies. In the matter of electronic currency, they stand fixed to defend privacy while ignoring the robbers, murderers, thieves, kidnappers, drug dealers, and tax evaders who attack individuals, wreak widespread misery, and, collectively, compromise the pursuit of happiness. It is inconceivable that an electronic currency system would be enacted without the inclusion of privacy securing safeguards. In an electronic currency system, no one would be authorized to access private data without legal grounds and a court order or warrant. In actual operation, tens of millions of daily transactions would be processed automatically, efficiently, safely, and virtually anonymously to all but the transacting parties.

2.6 Stakeholders roles in promoting Cashless Zimbabwean Society.

2.6.1 Reserve Bank of Zimbabwe (RBZ)

According to FinMark Trust (2012), the Reserve Bank of Zimbabwe (RBZ) is the primary entity responsible for the oversight and guiding the development of retail payment services in Zimbabwe. The department’s strategy for National Payment System (NPS) development is focused on creating an ecosystem for retail payments, which includes a move towards e-payments, encouraging greater innovation, and pushing low value payments to Zimswitch to lighten the load on the RTGS system (ZETSS).

The Bank Licensing Supervision and Surveillance Division’s (BLSSD’s) role in respect to payment system development is largely a complementary one, since only banks can participate in the national payment system under the current legal
framework. For this reason, the BLSSD works with the National Payment System Division (NPSD) to support the application and approvals process for banks wishing to introduce new products and partnerships into the national payment system. The rapidly changing payment services market in Zimbabwe has challenged the ability of the NPSD to develop a policy framework that can keep up with market conditions. For this reason, the NPSD has developed some creative solutions to providing guidance to the market. These include the use of bi-annual Monetary Policy Statements published on the RBZ website and an internal coordinating committee between the NPSD, BLSSD, and Legal Departments that convene to discuss gaps in the current regulatory environment.

2.6.2 Electronic Payment Systems Service Providers (e.g. eTranzact)

In a bid to promote a cashless society in Zimbabwe, companies such as eTranzact have come up with their own electronic payment systems. According to Gono (2004) eTranzact has a goal of promoting a cashless economy within a secure platform. This is in line with the aim of RBZ’s to ensure that all financial transactions are captured electronically in a secure, efficient and traceable way. eTranzact enables account holders to pay for goods and services from participating merchants such as Greatermans, Medix Pharmacy, Econet Wireless, Exor Fuel, TM Supermarkets and utility providers such as the Harare City Council and ZESA (RBZ, Journal 2012).

2.6.3 Ministry of Finance

According to the Monetary Policy statement (2012), the Ministry of Finance (MoF) is the only other government institution in Zimbabwe which is engaged in payment system development, albeit indirectly. They are the policymakers for the financial sector, with an overall coordination role, who give direction to RBZ policies which are then pronounced in the Monetary Policy Statements. Therefore they have limited day-to-day engagement in payment system development. The MoF does not engage directly with firms, but however, they oversee the RBZ by administering the Reserve Bank of Zimbabwe Act, which gives oversight powers to the RBZ. The MoF coordinates most closely with the Bank Licensing Supervision and Surveillance Division (BLSSD) and occasionally with the National Payment Systems Division (NPSD), although this is likely to change as National Payment System (NPS)
development emerges and a key developmental milestone in Zimbabwe. The MoF’s policy priorities are to re-build confidence in the financial services sector, promote regional integration and further develop the electronic payment and banking infrastructure.

According to RBZ report (2012), currently there is no centralized national strategy or coordinating body for payment system development in Zimbabwe. However, the RBZ remains at the centre of payment systems development. Payment systems developments in Zimbabwe are driven using a payment systems strategy formulated by a Steering Committee, composed of various public and private sector stakeholders, led by the RBZ. This is in contrast with countries like South Africa where the Payment Association of South Africa (PASA) operates the clearing house, other retail payments and drives the payment systems development. In addition, the Bankers Association of Zimbabwe (BAZ) manages three associations (namely Interbank Committee, Treasurers and Plastic Card and Electronic Payments Association) who work in collaboration with RBZ to develop or formulate strategic policies where necessary (FinMark Trust, 2012).

2.6.4 Zimswitch and Banks

According to Mukandatsama (2013), banks and Zimswitch play a major role in promoting the use of electronic payment systems in Zimbabwe. Table 2.1 shows some electronic payment services offered by Zimswitch.
<table>
<thead>
<tr>
<th>Product Name</th>
<th>Transaction</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile Money</td>
<td>ZIPIT to bank</td>
<td>Instant bank to bank RTGS</td>
</tr>
<tr>
<td></td>
<td>ZIPIT to Mobile</td>
<td>Mobile to Mobile Money Transfer. Currently restricted to bank registered Econet subscriber only for sending</td>
</tr>
<tr>
<td>Mobile Money</td>
<td>Bill Payments</td>
<td>Bill Payment to merchants such as DSTV, City of Harare, City of Bulawayo, TelOne, CIMAS, ZIMRA and ZESA</td>
</tr>
<tr>
<td>Vpayments</td>
<td>Online payments</td>
<td>Internet Payments (Zimbabwe)</td>
</tr>
<tr>
<td>Postilion Hosting</td>
<td>Third party transaction switching</td>
<td>Third party transaction processing</td>
</tr>
<tr>
<td>POS Hosting</td>
<td>POS rental</td>
<td>POS terminal leasing. Some POS terminals have full branchless banking capacity</td>
</tr>
</tbody>
</table>

**Table 2.1: Some key Zimswitch Shared Services (ZSS)**

While Mukandatsama (2013) looks at the service providers themselves, much needs to also be done for the consumer. The Consumer Council of Zimbabwe (CCZ), POTRAZ and the Government at large do not seem to have a particular on-board appreciation of these products in as far as consumer vulnerability. The consumer is therefore left exposed to exorbitant pricing, spamming, invasion of privacy and other bothers which the average Zimbabwean does not understand or know they need to be protected from. There is need for a Mobile and Electronic Funds Transfer standards and lobby association whose role would be to negotiate and balance off the interests of the public and service providers in a mutually beneficial manner.
2.7 Empirical Studies of the Cashless Societies

There are a number of countries that have adopted the use of electronic payment systems. The electronic payment systems have been vastly used in developed nations. However for the purpose of this study the writer looks at two African countries which are Kenya and Nigeria because of their diverse strategies of adopting a non cash system.

2.7.1 M-Pesa in Kenya

Cairns (2012) found that non cash transactions took hold easily and quickly. The mobile payment service in Kenya is called M-Pesa. The "M" is for mobile and Pesa is Kiswahili for money which is run by a subsidiary of the telecom giant Vodafone called Safaricom. It is not a bank, but a service much like PayPal, though a user need not be connected to the Internet. David Wohnan (2012) pointed out that the benefits of this service have been staggering to the people of Kenya. In that country, many workers send money home to families in more remote locations. They may spend two days on a bus to do it or pay someone else to. But with the M-Pesa, all someone has to do is go to a local shop and hand over the cash they want to convert and send, and then type in the appropriate codes on a cell phone. The recipient gets a text saying that money has been flashed to his/her account and then goes to a local shop to redeem the cash.

2.7.2 Mobile money model adopted by Nigeria

According to Egbuta (2013), unlike most other African countries like Kenya and Tanzania whose mobile money efforts are driven by the Telecoms service providers the Nigerian effort is regulated by the Central Bank of Nigeria (CBN), the financial sector watchdog (CBN, 2009).

The model is categorized into three according to the lead initiators:
1. Bank focused: the lead initiator here is a licensed deposit-taking financial institution
2. Bank led: the lead initiators are licensed deposit financial institution(s) and or its consortium
3. Non-bank led: the lead initiator is a non-deposit taking corporate organization
Egbuta (2013) emphasized that the strength of this model is the emphasis on securing the deposits of the scheme subscribers and strong compliance to KYC/AML requirements. However, the CBN has no regulatory oversight over the Mobile network operators in the country and would rely on the cooperation of the telecom regulator, Nigeria Communication Commission, NCC, for proper enforcement of the ICT requirements; this cooperation may not be forthcoming considering the traditional bureaucracy in the Nigerian system. Other highlights of the model are that it ensures interoperability and facilitates international remittances. The Nigerian model has interoperability at various levels (bank level, switch level and payment channels level) as one of its major requirements.

2.8 Conceptual Framework

The conceptual framework shows the factors that affect a cashless society. For the success of adoption of a cashless society, regulation, legal framework, infrastructure and technology, customer awareness, must be examined.

![Conceptual framework](image)

**Figure 2.2: Conceptual framework**
2.8.1 Technology and Infrastructure

For electronic money service, the technology and the infrastructure must be well advanced. Technology and infrastructure affect the cashless payment systems.
H1: There is a relationship between technology and infrastructure and the adoption of a cashless society.
H0: There is no relationship between technology and infrastructure and the adoption of a cashless society.

2.8.2 User Education and Awareness

In order to have a successful cashless system, the users must be educated as a way to make them aware of the need for the systems. Users need to be educated so that they appreciate the use of the system. The success of adopting a cashless society relies on the level of user education and awareness. The following is the hypothesis:

H1: There is a relationship between user educational awareness and adoption of a cashless society.
H0: There is no relationship between user educational awareness and adoption of a cashless society.

2.8.3 Legal Framework

For the technology to be effective, the necessary legal framework has to be put in place. Legal framework of computer and electronic generated evidences in courts must be passed into law; thus strengthening digital forensic investigation in the country and providing the needed legal backing for prosecution of financial crimes in the country thus building user confidence in the service. This study therefore hypothesizes that
H1: There is a relationship between the adoption of a cashless society and the country’s legal framework.
H0: There is no relationship between the adoption of a cashless society and the country’s legal framework.
2.8.4 Regulation

A proper regulation for electronic payment systems is vital for its success. This means that regulation affects the cashless system.

H1: There is a relationship between regulation and a cashless society.
H0: There is no there is a relationship between regulation and a cashless society.

2.9 Chapter Summary

This chapter has provided literature review on the cashless society. The literature has shown that although the cashless system is coming up, cash is still widely used and is difficult to vanish. In most developed nations people are using more of non cash transactions while in developing countries especially in Africa, the non cash transactions are still few. There were a number of benefits and costs that are associated with the use of electronic payment systems. From the challenges that were found there is need to come up with proper regulations, legal framework and have adequate technology and infrastructure to accommodate the cashless systems. The literature has also looked into the cashless systems used in Kenya and Nigeria as a way of coming up with the strategies to adopt a cashless system in the Zimbabwean economy.

2.10 Conclusion

Chukwujike (2012) noted that literature on developed economies is developing on the issue of the cashless society but there is scanty literature on developing countries. This may be connected to the heavy presence of the informal sector in most dual developing economies and the poor banking culture in the same. This also applies to Zimbabwe and this naturally calls for further analysis of the issue of cashless society and electronic money.

Zimbabwe is in a unique position of using multiple currencies and it will be interesting to find out whether this has an impact on the push for a cashless society. Studies that have been done so far have not been carried out in such a unique environment. It will also be interesting to find out how the high unemployment levels in Zimbabwe
and the prevalence of the informal sector affects the adoption of electronic payment systems as studies in the US have shown that people in formal employment are more exposed to electronic payment methods than those who are not.

Various electronic payment systems have been reviewed in this chapter but studies that have been done so far show that somehow the adoption of electronic payments in Zimbabwe has not been encouraging and this can be attributed to a number of factors that will be investigated in this research. The electronic payments industry has not done enough to reduce the huge dependence on cash by the Zimbabwean society and this has been raised in various monetary statements from RBZ. Zimbabweans still spend long hours in bank queues trying to access cash. This cash is used to pay bills and buy other goods. This situation is avoidable because people can use electronic means to pay bills and buy goods. With the convergence of banking, information and mobile communications, Zimbabwe should be very well positioned to exploit these technological developments. The specific opportunity areas are mobile banking using SMS, internet banking, and GSM/GPRS based POS systems.

The launch of various mobile money products in Zimbabwe by companies like Econet Wireless and the aggressive deployment of POS infrastructure present an interesting situation which shows a move in the right direction. This study will investigate whether the gap of inadequate electronic payment systems, user education and awareness, legal and regulatory framework, is now being closed in a meaningful way to ensure a cashless Zimbabwean society. The next chapter presents the research methodology.
CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter outlines the research design and techniques that were used to gather data on the role that electronic payment companies can take to achieve a cashless Zimbabwean society. Wagenaar and Babbie (1983) describe the concept of research design as the process involving the development of strategies aimed at executing scientific enquiry.

3.1 Recap of the problem statement

The problematic issue on which this study is focused on is that the use of cash is extremely high in Zimbabwe; hence the prevalence of cash shortages experienced by the market to the point of the Reserve Bank, at one time, introducing a cap on cash withdrawals and staggering Government employees pay dates. Zimbabwe does not have its own currency and the authorities do not know what to do when a cash crunch happens and resort to urging banks to import cash for the economy, a process which is costly to banks. During month ends, queues are the order of the day at several banks as account holders will be jostling to withdraw their salaries so that they go and buy groceries, pay utility bills at the Municipality and the Zimbabwe Electricity Supply Authority (ZESA) as well as pay for rentals. If only the country was technologically suave, there would be no need for cash importation as transactions would be done through electronic payment methods like mobile payments. There has been resistance by most sectors of the economy to adopt new electronic payment delivery channels. This study is designed to establish if it is possible to have a cashless society in Zimbabwe.
3.2 Recap of the research objectives

Through the use of quantitative data in a survey research strategy, the following objectives must be achieved.

1. To establish electronic payment systems that are available in Zimbabwe.
2. To establish the challenges associated with the implementation of electronic payment systems in Zimbabwe.
3. To investigate the strategies that can be adopted to achieve a cashless Zimbabwean society.
4. To establish benefits to the business community that is associated with electronic payment systems.
5. To establish the roles of different stakeholders in promoting a cashless Zimbabwean society.
6. To measure the level of awareness of the electronic payment systems by both the business and ordinary communities.

3.3 Methodological framework

According to Creswell (2005) a research methodology analyses principles, rules, and postulates employed by a discipline. Dooley, (2000) stated that the methodology is the core of a research report because it explains how the study was done so that others can verify it. One way of verifying is to examine the methodology for possible rival explanations that were not ruled out by the design he further explains; another way of checking a study is by actually repeating it. This was concurred by Nachmias and Nachmias, (2003) who maintained that research methodology is a system of explicit rules and procedures upon which research is based and against which claims for knowledge are evaluated. The system is neither unchangeable nor infallible. The rules are constantly improved, that is, looking for new means of observation, analysis, logical inference, generalization, they go on to say.

The main aim for this study was to establish the feasibility of a cashless society. This was established through the use of quantitative data. A survey was carried out with the various stakeholders of electronic payment systems.
3.4 Research design

3.4.1 Research approach

This research has adopted a quantitative research approach. According to Quinton and Smallbone (2006) the dominant research tradition in management has tended in the past to be based on testing theories using quantitative data collection derived largely from asking managers, and others, questions in surveys, the results of which are then subject to extensive statistical testing. This approach is described as deductive (the theory testing) and positivist (the data collection method). Deductive reasoning works from the more general to the more specific (Burney 2008). The conclusions follow logically from available facts.

A deductive approach was used in this research. It is applicable in that the research is quantitative in nature. This subject has been researched before and one can generate hypotheses. This study measures the feasibility of cashless society in Zimbabwe which justifies the causation relationships. Quantitative methods involve the use of numerical measurements and statistical analyses of measurements to examine social phenomena (Saunders, Lewis and Thornhill, 2010). In terms of this approach, questionnaires were designed and a sample of the stakeholders of the electronic payment system was requested to complete them in order to assist in ascertaining the feasibility of a cashless society in Zimbabwe. The quantitative research method was chosen because it has the following advantages cited by Nykiel, (2007)

a) Has room for greater objectivity and accuracy of results.
b) Involves few variables and employs prescribed procedures to ensure validity and reliability.
c) Can be replicated, analysed and compared with similar studies carried out in the past.
d) Allows summaries of large sources of information.
e) Facilitates comparisons across categories and over time
The results of the study are projectable to the population and summaries from large set of data were generated. This data was collected from service providers and merchants, customers as well as policy makers. This data was then summarised through frequencies and measures of central tendencies. The objectivity of the data was achieved through the use of numeric and frequency analysis.

3.4.2 Research Strategy

A research strategy is a plan of action that gives direction to efforts, enabling one to conduct research systematically rather than haphazardly according to Ferguson (2005). Research strategies come in many forms which are experiments, surveys, action research and case studies. These are briefly explained below.

**Experiment**

This normally takes place in pure scientific research in a laboratory or in a natural setting in a systematic way. The aim is to manipulate the independent variable in order to observe the effect on the dependent variable. This strategy was not used in this research. Saunders et al (2000) argue that experiments are a classical form of research that owes much to natural sciences, although it also features strongly in social science research, particularly psychology. This strategy has been deemed unsuitable for this research.

**Surveys**

Surveys enable the researcher to obtain data about situations or views at one point in time through questionnaires or interviews. Quantitative analytical techniques are then used to draw inferences from this data regarding existing relationships. The use of surveys allows a researcher to study more variables simultaneously than is typically possible in laboratory or field experiments, whilst data can be collected about real world environments.

**Action research**

Action research involves the application of tools and methods from the social and behavioural sciences to practical problems with the dual intentions of both improving
the practice and contributing to theory and knowledge in the area being studied. Eden and Huxham (1996) observed that the intervention of the researcher will often result in changes within the organization studied and will therefore challenge the status quo. Ledford and Mohrman (1993) and Elden and Chisholm (1993) emphasize that participants themselves need to be actively involved in the research process, in some instances, to the extent that they become co-researchers.

Case studies

Yin, (1984: 23) defines the case study research method as “an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used.” Critics of the case study method believe that the study of a small number of cases can offer no grounds for establishing reliability or generality of findings. Others feel that the intense exposure to study of the case biases the findings. Some dismiss case study research is useful only as an exploratory tool but researchers continue to use the case study research method with success in carefully planned and crafted studies of real-life situations, issues, and problems, Soy (1997).

Yin (2003) suggests that a researcher can choose a strategy among an experiment, a survey, and an analysis of archival records or a case study. This study adopted a survey approach where questionnaires were distributed to the regulators of the financial and telecommunication industry, merchants, banks, service providers of electronic payment systems and customers or users of electronic payment systems.

The researcher can obtain data about situations or views at a point in time through questionnaires or interviews in surveys. Inferences from this data regarding existing relationships are drawn by the use of quantitative analytical techniques. The use of surveys allows data to be collected about real world environments and the researcher can study more variables simultaneously than is typically possible in laboratory or field experiments. A survey approach is suited to this type of research because more than one variable are being studied simultaneously and data is collected in real world environments. Questionnaires were distributed to regulators of
financial and telecommunication industry, financial institutions, service providers and customers because these are the major stakeholders in determining whether a cashless society is feasible in Zimbabwe.

3.4.3 Data Collection Instruments and Techniques

Kotler (2004) indicates that primary data can be collected in five ways, namely: observational research, focus-group research, survey research, behavioural data and experimental research. In a survey research, structured questionnaires are mainly used and these were used in this study.

Questionnaires

Questionnaires are data collection instruments that enable the researcher to pose questions to subjects in his/her research in order to obtain answers to the research questions. Saunders et al. (2003:280) maintain that it is generally good practice not to rely solely on questionnaire data but to use the questionnaire in conjunction with at least one other data collection instrument. Gupta (2003) says questionnaires are a popular means of collecting data, but are difficult to design and often require many rewrites before an acceptable questionnaire is produced.

This study used three sets of questionnaires as data collection instruments for this study. The first set was for service providers, banks and merchants, the second was for policy makers and the third one was for users or customers. The questionnaires were customised according to the targeted group of the population and they were constructed in 6 sections. The first section contains the demographics while each of the remaining five sections cover awareness of electronic payment systems, benefits of using electronic payment systems, uptake of electronic payment systems, roles of stakeholders and possible recommendations from the respondents. These 6 sections were broad enough to cover all the areas being investigated in this research and helped in gathering enough data that was used to test the hypotheses and achieve the research objectives.
The questionnaires have closed questions. An attempt was made to include all the major questions in the questionnaires and to make them as short as possible. Berenson and Levine (2005) observed that there is an inverse relationship between the length of a questionnaire and the rate of response to the survey. The longer the questionnaire, the lower will be the rate of response; the shorter the questionnaire, the higher will be the rate of response.

Questionnaires were self administered to the stakeholders of the electronic payment systems in Zimbabwe. Some questionnaires were sent to the respondents through email while the majority were delivered by hand. The researcher gave respondents one week to respond to the questionnaires. After a week the researcher followed up the questionnaires and collected the questionnaires for analysis. The questionnaires were followed up through the use of telephone, physically and some through reminders which were sent over the email. The follow ups helped to improve the response rate to the questionnaires.

### 3.4.4 Pilot study

A pilot study was conducted with employees who were not involved in the final distribution of questionnaires. A total of ten participants were selected to participate in the pilot study. The ten questionnaires were distributed to 3 merchants, 5 customers, 1 service providers and to 1 policy maker and were collected within three days. The results of the pilot study showed that some questions contained grammatical errors and others were not clear. The research corrected all the questions which were ambiguous before the final questionnaire was administered.

A pilot study is done to test whether the questionnaire would give the researcher the required result and whether everyone would understand the questionnaire without any difficulty. Another purpose stated by Sekeran (2003) was to refine the items included in the questionnaire in order to ensure that no ambiguity or bias was present and so that the measuring instrument could be fine tuned for data collection.
3.4.5 Population and Sampling

3.4.5.1 Population

The term ‘population’ refers to the totality of the elements under study where the elements are the units of analysis. The elements may be persons, but they could alternatively be households, or any other unit. The population definition needs to be precisely and carefully specified according to the survey objectives, because the results will depend on the definition adopted. In this study the target population is made up of merchants, telecommunication companies, financial service providers, POTRAZ, RBZ and individual customers of merchants, telecommunication companies and financial service providers.

3.4.5.2 Sampling techniques

Probabilistic and non-probabilistic techniques are the two main groupings of sampling techniques. Survey–based research uses probabilistic sampling, while other researches like case study usually use non-probabilistic sampling. Probabilistic sampling techniques include systematic random sampling, simple random sampling, cluster sampling and stratified random sampling. Non-probabilistic sampling includes convenience sampling, purposive sampling and quota sampling (Saunders et al, 2003).

In this study, the researcher used a stratified research approach, where different institutions were stratified according to the service they offer. The stratifications were banking, telecommunication, retail service industry, regulators and customers. The simple random sampling and the judgmental sampling was then applied to pick the respondents from each of the categories. The sample is shown in table 3.1 below.
<table>
<thead>
<tr>
<th>Institution</th>
<th>Number of questionnaires administered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banking</td>
<td>20</td>
</tr>
<tr>
<td>Telecommunication</td>
<td>10</td>
</tr>
<tr>
<td>Retail Service industry (Merchants)</td>
<td>30</td>
</tr>
<tr>
<td>Policy Makers (e.g. RBZ)</td>
<td>5</td>
</tr>
<tr>
<td>Customers/Users</td>
<td>86</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>151</strong></td>
</tr>
</tbody>
</table>

**Table 3.1: Samples used**

**3.4.5.3 Questionnaire administration**

To collect data from only a part of the population is clearly less costly and, providing the estimates are sufficiently precise, sampling is thus more economic (Karlton, 2003). A sample inquiry can also be conducted and processed more speedily, leading to timelier reporting. Furthermore, by concentrating resources on only a part of the population, the quality of the data collection may be superior to that of a complete enumeration. As a result, a sample survey may in fact produce more accurate results. For these reasons, unless the population is small, sampling is almost always used. According to Bryman and Cramer (1990), by and large researchers will want to form a representative sample.

To administer the questionnaire the researcher used a stratified sampling technique in association with simple random technique which are both probability sampling techniques. In this method each element in the entire population is ensured of an equal chance of being included in the sample. Polit and Beck (2005) say, in stratified random sampling, the population is divided into homogenous subsets from which elements are selected at random. The aim of this sampling method is to enhance the sample’s representativeness.
To administer the questionnaire for customers the researcher had to use judgemental sampling which is a non-probability sampling technique. The researcher had to use his discretion to select the respondents of the study. This simply means subjective selection of population units by the researcher based on their knowledge and pre-disposition. The amount of error depends on the degree of expertise of the researcher (Morrison, 2001). In making the judgement, the researcher considered customers with high institutional memories and some with a good understanding about the area of study.

3.4.6 Data Analysis Techniques

Bogdan and Biklen (1992) define data analysis as a process of systematically searching and arranging the field notes, interview scripts and other materials that a researcher accumulates to increase understanding of them and to enable the researcher to present what has been discovered to others. Data analysis involves organizing data, breaking it into manageable units, synthesizing them, searching for patterns, discovering what is important and what is to be learned, and deciding what to present to others. Yin (1989) states that data analysis consists of examining, categorising, tabulating or recombining the evidence to address objectives of a study. Miles and Huberman (1994) suggest that analysis consists of three concurrent flows of activity namely; data reduction, data display and drawing of conclusions and verification.

Data reduction is the process of selecting, focusing, simplifying, abstracting and transforming the data that appear in written-up field notes. It involves sorting, focusing, discarding and organising data in a way that allows conclusions to be drawn and verified. The process involved the researcher collecting data and classifying it into broad categories of reasons for and against the objectives of the study.

The hypothesis on technology and infrastructure was tested using responses from service providers, banks and merchants. Responses from policy makers were also used to test this hypothesis. The hypothesis on user education and awareness was
tested using the responses from users and customers. The hypotheses on legal and regulatory framework were tested using the responses from policy makers.

In order to achieve the analysis above the researcher used the Statistical Package for Social Scientists (SPSS version 12) and Microsoft Office Excel 2007 as tools to enable the analysis to happen efficiently and systematically. SPSS was used for analysis like correlation and Excel was used for graphs, charts and computing percentages.

3.5 Validity and Reliability

Validity refers to a valid measure that seems to represent a particular idea in a convincing way. A reliable measure has consistency. Reliable instruments obtain similar responses when administered to different respondents. Objectivity on the other hand is the absence of subjective judgements. Pre-testing was used to improve validity and reliability of the instruments and hence the data collected.

3.6 Ethics and Values

To ensure that research ethics are observed the researcher sought approval from the gatekeepers of the institutions visited. For customers, the researcher sought for their voluntary response and gave them the cover letter from the University to show that the research was purely academic. Consent forms were also given to show the participant’s consent to participate in the research. The consent form explains the objectives of the research and instructions on how to complete the questionnaires. The researcher also emphasized on the issue of confidentiality by instructing participants not to disclose their names on the research questionnaire.

3.7 Chapter Conclusion

This chapter discussed how the data was collected, processed and analysed and presented. The major concepts discussed include sampling techniques, research instruments, validity and research ethical considerations. The next chapter discusses the research findings and discussion.
CHAPTER FOUR

RESEARCH FINDINGS, ANALYSIS AND DISCUSSIONS

4.0 Introduction

This chapter is made up of results of the research and the associated discussion of the findings to the problem specified in chapter one. The analysis was derived from primary data which was collected using a set of questionnaires which are attached as an appendix of this paper. The questionnaires were administered to find out the feasibility of achieving a cashless Zimbabwean society both for business-to-consumer and business-to-business transactions.

4.1 Response Rate

Table 4.1 below shows the response rate for the questionnaires which were administered to service providers, banks, merchants, policy makers and customers or users. The service providers consisted of telecommunication companies and Electronic Funds Transfer companies and the policy makers were RBZ, PORTRAZ and Ministry of Finance.

<table>
<thead>
<tr>
<th></th>
<th>Questionnaires administered</th>
<th>Questionnaires responded</th>
<th>% Response rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merchants, Banks and Service Providers</td>
<td>60</td>
<td>42</td>
<td>70%</td>
</tr>
<tr>
<td>Policy Makers</td>
<td>5</td>
<td>3</td>
<td>60%</td>
</tr>
<tr>
<td>Customers or Users</td>
<td>86</td>
<td>61</td>
<td>71%</td>
</tr>
</tbody>
</table>

Table 4.1: Response rate

4.2 General Information

4.2.1 Electronic Payment Systems used

The researcher sought to find out from the survey participants who were merchants, banks, users and service providers, the kind of electronic payment systems available
to customers. The views of the merchants, banks, users and service providers are presented in figure 4.1 below.

**Figure 4.1: Electronic Payment Systems used**

The majority of the research participants in the case of merchants, banks, users and service providers (67%) indicated that they use mobile payment systems and 52% argued that they use ATMs. According to 39% merchants, banks, users and service providers, they stated that they use point of sale (POS) devices and 24% indicated internet payments. An analysis of the research findings will lead to the conclusion that the major electronic payment systems used by merchants, banks, users and service providers is the mobile payment system although ATMs are used significantly. Moreover internet payments and point of sale are also electronic payments used.

Contrary to the study findings, Carat (2002) had noted that, most if not all of the dozens of mobile payment services available in European Union (EU) countries and listed in the European Personnel Selection Office (ePSO) database in 2002 have
been discontinued. This shows that the Zimbabwean situation is different from the European situation that was observed by Carat (2002). In Zimbabwe, Mobile Operators are aggressively rolling out mobile money products like Ecocash from Econet Wireless, One-Wallet from NetOne and the recently introduced Telecash from Telecel. This aggressive shift towards mobile money payments is reflected in the results from this research. These results are also in line with the trends in other African countries like Kenya where M-Pesa has revolutionized the payments landscape in Kenya as observed by David Wohnan (2012) who pointed out that in that country, many workers send money home to families in more remote locations.

These results also emphasize the uniqueness of the Zimbabwean market where most people are unbanked. According to FinScope Consumer Survey (2011), 40 percent of Zimbabweans do not have bank accounts. All these people will find mobile money payments convenient as people without bank accounts also participate in electronic payments. This increased convenience offered by mobile money leads to increased usage of the service.

4.2.2 Possibility of a cashless society in Zimbabwe

A question was asked whether a cashless society was possible in Zimbabwe. The views of the respondents on the subject matter are presented in figure 4.2 below.
Figure 4.2: Possibility of a cashless society in Zimbabwe

Figure 4.2 above shows that 63% merchants, banks and service providers agreed that a cashless society is possible in Zimbabwe. On the contrary 37% respondents disagreed and stated that a cashless society is not possible in Zimbabwe. Basing on the views of the majority of respondents the research therefore implies that a cashless society is possible in Zimbabwe.

In line with the above findings, Researchers from Tower Group found that a combination of emerging and market ready technologies driving a majority of consumer payment transactions from cash toward other payment methods including mobile, Internet and contactless payments. Theodore (2013) pointed out that a substantial share of consumer payments globally will have moved from cash to other payment mechanisms.

Although results from the research show that the cashless society is possible in Zimbabwe, a lot of work still needs to be done to achieve this as there is still
widespread use of cash. This could be attributed to the slow uptake in the use of electronic payment systems, the mistrust of the banking system by the Zimbabwean public, lack of relevant infrastructure and an enabling regulatory and legal framework.

4.2.3 Readiness of Zimbabweans to use the Electronic Payment Methods

The researcher investigated from policy makers that participated in the research, the readiness of the people of Zimbabwe to use the electronic payment methods. The views of the policy makers on the subject matter are presented in figure 4.3 below.

![Figure 4.3: Readiness of Zimbabweans to use the Electronic Payment Methods](image)

The figure above shows that 23% policy makers stated that the people of Zimbabwe are not ready to use the electronic payment methods. However 46% of the respondents argued that the people of Zimbabwe are very ready to use the electronic payment methods while 31% policy makers indicated they are somehow ready. Research findings direct to the implication that the people of Zimbabwe are...
embracing the electronic payment methods which is good for promoting a cashless society.

4.3 Causes of slow uptake of Electronic Payment Methods

4.3.1 Causes of slow uptake of Electronic Payment Methods in Zimbabwe

The causes of slow uptake of electronic payment methods in Zimbabwe are summarized in table 4.2 below basing on the views of merchants, banks and service providers that took part in the study.

<table>
<thead>
<tr>
<th>Causes of slow uptake of Electronic Payment Methods in Zimbabwe</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Not sure</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Users’ attitude</td>
<td>22%</td>
<td>50%</td>
<td>11%</td>
<td>12%</td>
<td>5%</td>
</tr>
<tr>
<td>Corruption in the system</td>
<td>16%</td>
<td>44%</td>
<td>21%</td>
<td>11%</td>
<td>8%</td>
</tr>
<tr>
<td>Poor Network coverage</td>
<td>14%</td>
<td>23%</td>
<td>39%</td>
<td>14%</td>
<td>10%</td>
</tr>
<tr>
<td>Concerns about account safety in Electronic Payment Systems</td>
<td>11%</td>
<td>18%</td>
<td>40%</td>
<td>22%</td>
<td>9%</td>
</tr>
<tr>
<td>Literacy level of the society</td>
<td>24%</td>
<td>37%</td>
<td>9%</td>
<td>20%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Table 4.2: Causes of slow uptake of Electronic Payment Methods in Zimbabwe

Findings from the table above show that 22% of respondents strongly disagreed and 50% disagreed to the fact that user attitude are the cause of slow uptake of electronic payment methods in Zimbabwe. Eleven percent respondents were not sure, 12% agreed and 5% strongly agreed. According to 16% respondents, they strongly disagreed, 44% disagreed and 21% were not sure to the fact that corruption
in the system causes slow uptake of electronic payment methods in Zimbabwe. Study findings in the table above also show that 24% respondents strongly disagreed and 37% disagreed while 9% were not sure to the fact that literacy level of the society causes slow uptake of electronic payment methods in Zimbabwe. On the contrary 20% agreed and 10% strongly agreed to the same fact.

Moreover 14% merchants and service providers that took part in the study strongly disagreed, 23% disagreed and 39% were not sure to the fact that poor network coverage causes a slow uptake of electronic payment methods in Zimbabwe. On the other hand, 14% agreed and 10% strongly agreed on the same fact. 11% respondents strongly disagreed and 18% disagreed to the fact on concerns about account safety in electronic payment systems. 40% respondents were not sure whether concerns about account safety in electronic payment systems causes slow uptake of electronic payment methods in Zimbabwe, 22% agreed to the fact and 9% strongly agreed.

The findings from the respondents above lead to the implication that the causes of slow uptake of electronic payment methods in Zimbabwe are users’ attitude, corruption in the system, poor network coverage and literacy level of the society. Moreover, winning public acceptance of the system will be a major problem. The general public is slow to change and difficult to educate. Adequate safeguards must protect against fraud, misuse, theft, loss or counterfeiting of identification cards, coercion or impression of the card holder.

4.4.2 Customer attitude towards the use of Electronic Payment Systems

The surveyor investigated the attitude of customers or users towards the use of electronic payment systems. The responses of customers that participated in the study are illustrated in figure 4.4 below.
Majority of customers or users as evidenced by a 74% response rate indicated that their attitude towards the use of electronic payment systems is highly positive. Moreover, 10% customers argued that their attitude is positive and 10% indicated neutral while 6% customers argued that their attitude towards the use of electronic payment systems is negative. From the views of the respondents above, the study can imply that customer attitude towards the use of electronic payment systems is highly positive which is good for the efforts towards a cashless society. Since the attitude towards the use of electronic payment systems is highly positive, it means what is remaining is to make sure Zimbabwe improves on other areas like technology and infrastructure in order to realize a cashless society.
4.3.3 Why some customers avoid using available Electronic Payment Systems

The Researcher investigated why some customers avoid using electronic payment systems that are available. The responses from the customers are summarized in the table 4.3 below.

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network problems</td>
<td>72%</td>
<td>17%</td>
<td>11%</td>
</tr>
<tr>
<td>Fear of fraudulent transactions</td>
<td>51%</td>
<td>31%</td>
<td>18%</td>
</tr>
<tr>
<td>Account safety</td>
<td>54%</td>
<td>29%</td>
<td>17%</td>
</tr>
<tr>
<td>Not readily available</td>
<td>61%</td>
<td>28%</td>
<td>11%</td>
</tr>
</tbody>
</table>

Table 4.3: Why some customers avoid using available Electronic Payment Systems

Table 4.3 above shows that 72% customers indicated that they avoid using electronic payment systems that are available because of network problems, 17% disagreed and 11% were not sure. 51% respondents agreed that they avoid using available electronic payment systems for fear of fraudulent transactions, 31% disagreed and 18% were not sure. Furthermore 54% customers stated that they avoid using electronic payment systems that are available because of account safety, 29% disagreed and 17% were not sure. 61% customers argued that they avoid using available electronic payment systems because they will not be readily available while 28% disagreed and 11% were not sure.

The research findings above lead to the implication that customers avoid using electronic payment systems that are available because of network problems, fear of fraudulent transactions, account safety and availability of systems.

A network problem is the biggest reason why customers avoid using electronic payment systems. There is need for network providers to investigate this area to improve the chances of realizing a cashless Zimbabwean society. In addition to the study findings, Hamphery (2001) a professor of finance at the University of Florida pointed out that one of the other disadvantages of e-payments is that most sites...
require you to open an online account with them. There is need to register with the institution in order to be authorized to perform money transactions with them. This is ideal with Ecocash where one has to be registered and without fail be a client of Econet Wireless. While the overall payment process is efficient, the initial registration can be time-consuming hence customers avoid using the electronic payment systems.

4.4 Benefits of using Electronic Payment Systems

4.4.1 Benefits of Electronic Payment Systems

The benefits of using electronic payment systems basing on the views of merchants, banks, users and service providers that took part in the survey are shown in the table 4.4 below.

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Not Sure</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic Payment Systems handle a large volume of business/payments/remittances</td>
<td>45%</td>
<td>25%</td>
<td>10%</td>
<td>11%</td>
<td>9%</td>
</tr>
<tr>
<td>Electronic Payment Systems provide alternatives for faster delivery of banking services acceptable to a wide range of customers</td>
<td>51%</td>
<td>34%</td>
<td>9%</td>
<td>6%</td>
<td>0%</td>
</tr>
<tr>
<td>Electronic Payment Systems provide convenient services to customers and reduce the chances of fraud</td>
<td>27%</td>
<td>43%</td>
<td>13%</td>
<td>9%</td>
<td>8%</td>
</tr>
<tr>
<td>Electronic Payment Systems reduce the substantial risks involved in the payment system</td>
<td>22%</td>
<td>39%</td>
<td>18%</td>
<td>10%</td>
<td>11%</td>
</tr>
</tbody>
</table>

Table 4.4: Benefits of Electronic Payment Systems
Table 4.4 above shows that 45% merchants, banks, users and service providers strongly agreed that electronic payment systems handle a large volume of business/payments/remittances and 25% agreed while 10% were not sure. On the other hand 11% respondents disagreed and 9% strongly disagreed to the fact that electronic payment systems handle a large volume of business/payments/remittances.

Majority merchants, banks, users and service providers (51%) strongly agreed that electronic payment systems provide alternatives for faster delivery of banking services acceptable to a wide range of customers, 34% agreed while 9% minority were not sure and 6% disagreed. 27% respondents strongly agreed and 43% agreed that electronic payment systems provide convenient services to customers and reduce the chances of fraud. On the other hand 9% disagreed and 8% strongly disagreed.

According to 22% merchants, banks, users and service providers they strongly agreed that electronic payment systems reduce the substantial risks involved in the payment system, 39% agreed while 18% were not sure. However 10% merchants and service providers disagreed and 11% strongly disagreed to the same fact. This is in contrast to the view of lack of use electronic payment systems due to fear of fraudulent transactions as expressed by 51% of customers who responded in section 4.4.3.

An analysis of the findings above leads to the implication that the benefits of an electronic payment system are: Electronic payment systems handle a large volume of business/payments/remittances, provide alternatives for faster delivery of banking services acceptable to a wide range of customers, provide convenient services to customers and reduce the chances of fraud and reduce the substantial risks involved in the payment system. Most respondents strongly agreed with the view that electronic payment systems provide alternatives for faster delivery of banking services acceptable to a wide range of customers.

In support to the study findings, electronic payment systems have come up with a number of advantages for the business community as compared to cash payment
systems. Kellner-Swick (2010) suggested that electronic payments have several advantages, which were never available through the traditional modes of payment. Some of the most important are: privacy, integrity, compatibility, good transaction efficiency, acceptability, convenience, mobility, low financial risk and anonymity.

4.4.2 Reasons why customers prefer to use the electronic ways of doing transactions

This study investigated the reasons why customers prefer to use the electronic ways of doing transactions. The findings from the investigation are presented in the table 4.5 below.

<table>
<thead>
<tr>
<th>Reason</th>
<th>Yes</th>
<th>No</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>To avoid queuing</td>
<td>8%</td>
<td>79%</td>
<td>13%</td>
</tr>
<tr>
<td>For more convenient and fast transactions</td>
<td>89%</td>
<td>4%</td>
<td>7%</td>
</tr>
<tr>
<td>Friendly use</td>
<td>76%</td>
<td>11%</td>
<td>13%</td>
</tr>
<tr>
<td>For security reasons</td>
<td>84%</td>
<td>16%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Table 4.5: Reasons for using the electronic ways of doing transactions

The majority of customers 89% indicated that they prefer to use the electronic ways of doing transactions as it is more convenient and fast. Other customers 76% argued that they prefer to use the electronic ways of doing transactions because it is friendly to use, 11% disagreed and 13% were neutral. According to 84% research participants they prefer electronic payment systems for security reasons and 16% disagreed. Seventy-nine percent customers argued that they do not prefer to use the electronic ways of doing transactions so as to avoid queuing, 8% agreed and 13% were not sure.

Survey findings lead to the conclusion that customers prefer to use the electronic ways of doing transactions because it is friendly to use, is secure, is convenient, and fast. Avoidance of queues was not considered to be of significance. Current alternatives, such as transferring money through bus companies, can be
inconvenient, slow, insecure, and expensive. Mobile money, on the other hand, fits the needs of many Zimbabweans because it does not require customers to have a bank account something many Zimbabweans are reluctant to embrace again.

4.4.3 Effective use of Electronic Payment Systems in Zimbabwe

An investigation was carried out to find out how electronic payment systems and instruments have been effectively used in Zimbabwe. Responses from policy makers that participated in the study are presented in the table 4.6 below.

<table>
<thead>
<tr>
<th></th>
<th>Very effective</th>
<th>Moderately effective</th>
<th>Less effective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zimswitch</td>
<td>72%</td>
<td>28%</td>
<td>0%</td>
</tr>
<tr>
<td>Real Time Gross Settlement</td>
<td>51%</td>
<td>19%</td>
<td>30%</td>
</tr>
<tr>
<td>(RTGS) System</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visa, Master Card</td>
<td>38%</td>
<td>46%</td>
<td>16%</td>
</tr>
<tr>
<td>Mobile Money Systems</td>
<td>64%</td>
<td>20%</td>
<td>16%</td>
</tr>
<tr>
<td>Point of Sale (POS) systems</td>
<td>41%</td>
<td>45%</td>
<td>14%</td>
</tr>
</tbody>
</table>

Table 4.6: How Electronic Payment Systems and instruments have been effectively used in Zimbabwe

According to 72% policy makers that participated in the study, they stated that Zimswitch as an electronic payment system and instrument has been effectively used in Zimbabwe and 28% respondents indicated that Zimswitch has been moderately effective. 51% policy makers indicated that the Real Time Gross Settlement (RTGS) system has been effectively used as an electronic payment system, 19% argued it has been moderately used and 30% added it has been less effective.

64% respondents indicated that mobile money systems as an electronic payment system and instrument have been effectively used in Zimbabwe, 20% said it is moderately effective and 16% said it is less effective. On the other hand 38% respondents stated that Visa, MasterCard is very effective as an electronic payment
system and instrument, 46% argued it is moderately effective and 16% said it is less effective.

Findings lead to the conclusion that Zimswitch, Real Time Gross Settlement (RTGS) System, Mobile Money Systems and Point of Sale (POS) systems are all effective as electronic payment systems and instruments used in Zimbabwe. The reason why Zimswitch is effective as a payment platform could be due to the high availability of Zimswitch branded devices. All customers banking with institutions that are on the Zimswitch network can readily use Zimswitch branded devices anywhere in Zimbabwe. Zimswitch integrates products offered by various financial institutions.

These findings are not in agreement with observations made by Singh (2009) who put a lot of emphasis on e-Tranzact as an effective payment system in Zimbabwe instead of Zimswitch.

4.5: Awareness of Electronic Payment Systems

The Researcher asked merchants, banks and service providers which source of promotions of electronic payment systems is used by their customers. The responses are presented in table 4.7 below.

<table>
<thead>
<tr>
<th>Source</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print Media</td>
<td>81%</td>
<td>19%</td>
</tr>
<tr>
<td>Websites</td>
<td>71%</td>
<td>29%</td>
</tr>
<tr>
<td>Email</td>
<td>64%</td>
<td>36%</td>
</tr>
<tr>
<td>Personal bankers</td>
<td>42%</td>
<td>58%</td>
</tr>
<tr>
<td>Mobile SMS</td>
<td>78%</td>
<td>22%</td>
</tr>
</tbody>
</table>

Table 4.7: Source of promotions of Electronic Payment Systems is used for your customers

The majority of the merchants, banks and service providers 81% stated the source of promotion that is used for electronic payment systems to customers is print media
and 19% do not use this source. 71% respondents indicated that websites is a source of promotions of electronic payment systems used for customers and 29% do not use this source.

Research findings also reveal that 64% respondents indicated that e-mailis were a source of promotions of electronic payment systems used for customers and 36% do not use emails. According to 58% merchants and service providers they disagreed to the fact that personal bankers are a source of promotions of electronic payment systems used to customers while 42% agreed. A significant 78% of respondents agreed that mobile SMS messages are used for promotion of electronic payment systems used for customers and 22% do not use this as a source.

The findings imply that print media and mobile SMS are the major source of promotions of electronic payment systems used for customers of merchants, banks and service providers while e-mail and websites are also used. The reason for this could be that print media SMS are readily accessible to a majority of Zimbabweans. These promotions help in increasing awareness to the use of electronic payment systems.

### 4.5.2 Electronic Payment Systems and instruments available to customers

The merchants, banks and service providers who took part in the survey stated the electronic payment systems and instruments available to customers. The findings from the survey are tabulated in table 4.8 below.

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ATMs</strong></td>
<td>63%</td>
<td>22%</td>
<td>15%</td>
</tr>
<tr>
<td><strong>Point of Sale (POS) devices</strong></td>
<td>71%</td>
<td>19%</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Internet Banking</strong></td>
<td>54%</td>
<td>37%</td>
<td>9%</td>
</tr>
<tr>
<td><strong>Mobile payment systems</strong></td>
<td>49%</td>
<td>32%</td>
<td>19%</td>
</tr>
</tbody>
</table>

Table 4.8: Electronic Payment Systems and instruments available to customers
The table above shows that 63% merchants, banks and service providers agreed that ATMs are available to their customers, 22% disagreed and 15% were not sure. Majority respondents 71% indicated that point of sale (POS) devices are electronic payment systems and instruments available to their customers, 19% disagreed and 10% were not sure if they are available.

According to 54% respondents they stated that internet banking is available to their customers while 37% disagreed and 9% were neutral. Results in the table above further show that 49% respondents indicated that mobile payment systems are available to customers, 32% disagreed and 19% were not sure.

The findings imply that the major electronic payment systems and instruments available to customers are point of sale (POS) devices and ATMs. However other electronic payment systems and instruments available to customers are internet banking and mobile payment systems. Although POS devices are highly available, mobile payment systems are still used more than POS devices because they are easily accessible to users.

Payment trends in most parts of the world, according to Gono (2012), are towards electronic settlements and this has been responsible for the organized system that the Western world enjoys today. He said it was a tool to mop up excess liquidity in circulation and assist in the execution of monetary policies. Electronic payment instruments in Zimbabwe such as one-wallet from NetOne and Ecocash from Econet Wireless Zimbabwe are widely used in Zimbabwe. According to Wah (1999), the mobile technology landscape provides various possibilities for implementing m-payments which includes the following Short Message Service (SMS), Unstructured Supplementary Services Delivery (USSD), General Packet Radio Service /Wireless Application Protocol, Phone-based Application (J2ME/BREW), Subscriber Identity Module-based Application, Near Field Communication (NFC), Dual Chip and Mobile Wallet.
4.5.3 Type of electronic transactions sometimes used by customers

The research investigated the type of electronic transactions sometimes used by customers. The findings from the customers are presented in table 4.9 below.

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>A little bit</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sending and receiving money</td>
<td>62%</td>
<td>24%</td>
<td>14%</td>
</tr>
<tr>
<td>Paying bills and utilities</td>
<td>38%</td>
<td>36%</td>
<td>26%</td>
</tr>
<tr>
<td>Online purchasing</td>
<td>39%</td>
<td>30%</td>
<td>31%</td>
</tr>
<tr>
<td>Transferring money from one account to another</td>
<td>46%</td>
<td>32%</td>
<td>22%</td>
</tr>
<tr>
<td>Purchasing goods and services in Retail outlets</td>
<td>40%</td>
<td>26%</td>
<td>34%</td>
</tr>
</tbody>
</table>

Table 4.9: Type of electronic transactions sometimes used by customers

The table above shows that 62% customers indicated that they occasionally send and receive money through electronic means, 14% disagreed and 24% use it sparingly. 38% customers added that they sometimes use electronic transactions for paying bills and utilities, 36% use it sparingly and 26% do not. 39% respondents stated that online purchasing is the electronic transaction they sometimes use, 30% indicated they at times do and 31% do not.

46% of customers that took part in the research also indicated transferring money from one account to another as the transaction they sometimes use, 32% stated that they use it at times and 22% do not use it. 40% customers indicated that purchasing goods and services in retail outlets is the type of electronic transaction sometimes used by customers, 26% use it sparingly and 34% do not.

Results above indicate that the type of electronic transactions sometimes used by customers are sending and receiving money, transferring money from one account to another, purchasing goods and services in retail outlets, online purchasing, paying bills and utilities. Most people send and receive money through electronic means. This also explains why mobile money systems are the most widely used means of electronic payments. Physical cash is not involved in all these transactions.
4.6 Stakeholder roles in promoting a Cashless Zimbabwean society

4.6.1 Roles of various stakeholders

An investigation was carried out from the merchants, banks and service providers who took part in the survey to find out the roles of different stakeholders in promoting a cashless Zimbabwean society. The findings from the respondents are presented in the table 4.10 below.

<table>
<thead>
<tr>
<th>Promotion of cashless society</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing knowledgeable and skilled staff</td>
<td>18%</td>
<td>49%</td>
<td>13%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Creating more awareness and sensitization</td>
<td>12%</td>
<td>39%</td>
<td>21%</td>
<td>15%</td>
<td>13%</td>
</tr>
<tr>
<td>Rejection of an individual opening numerous accounts</td>
<td>21%</td>
<td>38%</td>
<td>17%</td>
<td>11%</td>
<td>13%</td>
</tr>
<tr>
<td>Introduction of bank products</td>
<td>20%</td>
<td>13%</td>
<td>39%</td>
<td>15%</td>
<td>13%</td>
</tr>
<tr>
<td>Introducing more channels for transfers and payments</td>
<td>20%</td>
<td>32%</td>
<td>15%</td>
<td>18%</td>
<td>15%</td>
</tr>
</tbody>
</table>

Table 4.10: Roles of various stakeholders

Table 4.10 above shows that 49% of respondents agreed that providing knowledgeable and skilled staff is a role undertaken by merchants, banks and service providers in promoting a cashless Zimbabwean society, 18% strongly agreed and 13% were not sure. 39% respondents agreed that creating more awareness and sensitization is a role undertaken by different stakeholders in promoting a cashless
Zimbabwean society while 12% strongly agreed, 21% were not sure and 15% disagreed.

Findings in table 4.10 above also reveal that 38% respondents agreed and 21% strongly agreed that rejection of an individual opening numerous accounts is a role undertaken by merchants and banks in promoting a cashless Zimbabwean society. On the other hand 20% respondents strongly agreed and 13% agreed that introduction of bank products is a role undertaken by banks in promoting a cashless Zimbabwean society while 39% were not sure. 20% respondents strongly agreed that introducing more channels for transfers and payments accounts is a role undertaken by different stakeholders in promoting a cashless Zimbabwean society and 32% agreed while 15% were not sure and 18% disagreed.

This implies that the roles of different stakeholders in promoting a cashless Zimbabwean society are: providing knowledgeable and skilled staff, creating more awareness and sensitization, rejection of an individual opening numerous accounts, introduction of bank products, introducing more channels for transfers and payments.

To add to the study findings, in a bid to promote a cashless society Zimbabwe, companies such as e-Tranzact have come up with the electronic payment systems. According to Gono (2004) one of the major goals of e-Tranzact is to promote a cashless economy within a secure platform. This coincides with the RBZ’s aim to ensure that all financial transactions are electronically captured and traceable so as to enhance efficiency and reduce or eliminate fraud, the central bank governor said. Like other international payment solutions, e-Tranzact provides a common platform that enables financial institutions to work together to enhance the performance of the monetary policies. It encourages transparency as transactions can be traced from start to finish and eliminates fraud.
4.6.2 Infrastructure availability for Electronic Payment Systems in Zimbabwe

An investigation was carried out to determine if there is enough infrastructure in Zimbabwe to promote the use of electronic payment systems. Responses of policy makers on the research question are presented in figure 4.5 below.

Figure 4.5: Infrastructure availability for Electronic Payment Systems in Zimbabwe

Majority respondents 86% indicated that there is not enough infrastructure in Zimbabwe to promote the use of electronic payment systems. On the other hand 14% policy makers argued that there is averagely enough infrastructure in Zimbabwe to promote the use of electronic payment systems while none of the respondents said there are more than enough. The findings therefore imply that there is not enough infrastructure in Zimbabwe to promote the use of electronic payment systems.
Given that 86% of respondents indicated that there are not enough infrastructures in Zimbabwe to achieve the use of electronic payment systems, this came out as the biggest challenge in Zimbabwe’s move towards a cashless society. The Ministry of Finance (MoF) is the government institution in Zimbabwe which is engaged in payment system development, albeit indirectly and development of financial infrastructure, but it has not done enough. They are the policymakers for the financial sector, with an overall coordination role, who give direction to RBZ policies which are then pronounced in the Monetary Policy Statements, (FinMark Trust, 2012).

4.6.3 Policy initiatives to improve Electronic Payments infrastructure in Zimbabwe

Policy makers responded on the existence of any policy initiatives to improve electronic payments infrastructure in Zimbabwe. Their responses are summarized in figure 4.6 below.

Figure 4.6: Policy initiatives to improve Electronic Payments infrastructure in Zimbabwe

Not enough, 74%
Averagely enough, 16%
More than enough, 10%
The majority of the respondents 74% stated that there are not enough policy initiatives to improve electronic payments infrastructure in Zimbabwe. On the other hand 16% respondents stated that there are averagely enough policy initiatives to improve electronic payments infrastructure in Zimbabwe and 10% argued that there are more than enough policy initiatives. The findings lead to the conclusion that there are not enough policy initiatives to improve electronic payments infrastructure in Zimbabwe. There should be a clear regulatory and legal framework that promotes the use of electronic payment systems in order for a cashless society to be realized in Zimbabwe.

The RBZ remains at the centre of policy system development. Payment systems developments in Zimbabwe are driven using a payment systems strategy formulated by a Steering Committee, composed of various public and private sector stakeholders, led by the RBZ. This is in contrast with countries like South Africa where the Payment Association of South Africa (PASA) operates the clearing house, other retail payments and drives the payment systems development. In addition, the bankers Association of Zimbabwe (BAZ) manages three associations (namely Interbank Committee, Treasurers and Plastic Card and Electronic Payments Association) who work in collaboration with RBZ to develop or formulate strategic policies where necessary. The regulation of electronic payments in Zimbabwe is almost similar to that in Nigeria where the central bank plays an important role. This is in contrast to countries like Kenya and Tanzania where their telecommunications authority does the regulatory role.

4.7 Hypothesis Testing

H1: There is a relationship between technology and infrastructure and the adoption of a cashless society.
H0: There is no relationship between technology and infrastructure and the adoption of a cashless society

Correlations
Table 4.11: Relationship between technology and infrastructure

The analysis above revealed that there is a positive correlation of 0.073 between technology and infrastructure and the adoption of a cashless society. This implies that the more technology investment the easier it becomes to adopt the cashless society. Therefore the current prevailing low level of technology investments is affecting the adoption of the cashless society in the country.

H1: There is a relationship between user educational awareness and adoption of a cashless society.
H0: There is no relationship between user educational awareness and adoption of a cashless society.

Correlations

Table 4.12: Relationship between educational awareness and cashless society
The analysis above revealed that there is a correlation of 0.089 between user educational awareness and adoption of a cashless society. This implies that the higher the awareness levels the higher the adoption level of the cashless society.

H1: There a relationship between the adoption of a cashless society and the country’s legal and regulatory framework.
H0: There is no relationship between the adoption of a cashless society and the country’s legal and regulatory framework.

**Correlations**

<table>
<thead>
<tr>
<th></th>
<th>Adoption</th>
<th>Regulation and Legal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adoption</td>
<td>Pearson Correlation</td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>1</td>
<td>-.178</td>
</tr>
<tr>
<td>N</td>
<td>55</td>
<td>55</td>
</tr>
<tr>
<td>Regulation and Legal</td>
<td>Pearson Correlation</td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>-.178</td>
<td>1</td>
</tr>
<tr>
<td>N</td>
<td>55</td>
<td>55</td>
</tr>
</tbody>
</table>

**Table 4.13: Relationship between regulatory framework and cashless society**
The analysis above revealed that there is a negative correlation of 0.178 implying that there is no relationship between the legal framework and regulation in the sector on the adoption of a cashless society.

**4.8 Chapter Conclusion**
This chapter has presented the study findings, from questionnaires administered by the researcher to analyze the feasibility of cashless Zimbabwean society. Major issues were centred on factors that have led to the slow uptake of electronic payment methods in Zimbabwe, the benefits of electronic payment systems, role of electronic payment companies in promoting a cashless Zimbabwean society, awareness and the roles of different stakeholders in promoting a cashless Zimbabwean society. The next chapter presents the research conclusion and recommendations in line with the views of the respondents.
CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter presents the study conclusions and recommendations. The chapter will also present an area of further study.

5.1 Conclusions of the study

The research, basing on the views of the research participants that included policy makers, customers, merchants and service providers makes the following conclusions.

5.1.1 Main Conclusions

The main hypothesis in the research has been proven by the research findings. This study concludes that a cashless society is possible in Zimbabwe and this was confirmed by 63% of the respondents. However, the uptake of electronic payment systems is still low and there is a need for improvement in that area.

The main causes of slow uptake of electronic payment methods in Zimbabwe have been concluded in this study as poor infrastructure. 86% of respondents indicated that there is not enough infrastructure in Zimbabwe to promote the use of electronic payment systems. This is a significant finding as the results of the testing of the hypothesis on technology and infrastructure showed that there is a positive correlation between technology and infrastructure and achieving a cashless society. Other reasons identified for the slow uptake of electronic payment systems are users’ attitude, corruption in the system, poor network coverage and literacy level of the society.
The Zimbabwean public is generally aware of electronic payment systems but various stakeholders have to work together to ensure that a cashless society is realized in Zimbabwe. The results of the testing of the hypothesis on awareness of electronic payment systems showed that there is a positive correlation between awareness of electronic payments systems and achieving a cashless society. There is still a significant use of cash in the economy but the basic ingredients for the transformation towards a cashless society are in motion in Zimbabwe.

The study concludes that legal and regulatory framework in Zimbabwe is not enough to promote a cashless society. 74% of the respondents stated that there are not enough policy initiatives to improve electronic payments infrastructure in Zimbabwe. However, results from testing the hypothesis on legal and regulatory framework revealed that there is a negative correlation between legal and regulatory framework and achieving a cashless society. This shows that Zimbabwe can still achieve a cashless society despite the existence of a poor legal and regulatory framework.

The survey concludes that the major electronic payment systems used by merchants and service providers is the mobile payment system although ATMs are also used significantly. Moreover the research concludes that internet payments and point of sale are also electronic payments used. Mobile phone based services have now offered financial institutions the ability to electronically include a wider cross section of the previously unbanked market. Mobile money lessens the dependence on overall use of cash as a payment instrument.

It was found out and concluded in this study that customer attitude towards the use of electronic payment systems in Zimbabwe is highly positive. 74% of respondents had a highly positive attitude towards the use of electronic payments systems. The study also concludes that customers avoid using electronic payment systems that are available because of network problems, fear of fraudulent transactions, account safety and availability of systems.
The multicurrency environment in Zimbabwe has made it easier for companies to access foreign currencies that are used to buy the equipment required to implement electronic payment systems. This has resulted in rapid growth in the area of mobile money payments.

5.1.2 Conclusion on benefits of using Electronic Payment Systems

The benefits of an electronic payment system are concluded in this study as:

- Electronic payment systems handle a large volume of business/payments/remittances,
- They provide alternatives for faster delivery of banking services acceptable to a wide range of customers,
- They provide convenient services to customers and reduce the chances of fraud and reduce the substantial risks involved in the payment system.

Customers in Zimbabwe prefer to use the electronic ways of doing transactions because it is friendly to use, security reasons, more convenient and fast transactions. Zimswitch, Real Time Gross Settlement (RTGS) System, mobile money systems and point of sale (POS) systems are all effective as electronic payment systems and instrument used in Zimbabwe.

5.1.3 Conclusion on awareness of Electronic Payment Systems

Print media and mobile SMS are concluded as the major source of promotions of electronic payment systems used for customers of merchants and service providers while e-mail and websites are also used.

The major electronic payment systems and instruments available to customers are Point of Sale (POS) devices and ATMs. However the study also concludes that other electronic payment systems and instruments available to customers are internet banking and mobile payment systems.

The study concludes that the type of electronic transactions sometimes used by customers are sending and receiving money, transferring money from one account
to another, purchasing goods and services in retail outlets, online purchasing, paying bills and utilities.

5.1.4 Conclusion on the roles of different stakeholders in promoting a cashless Zimbabwean society

The roles of different stakeholders in promoting a cashless Zimbabwean society are concluded in this study as:

- providing knowledgeable and skilled staff,
- creating more awareness and sensitization,
- rejection of an individual opening numerous accounts,
- introduction of bank products,
- introducing more channels for transfers and payments.

The role of providing knowledgeable and skilled staff falls on merchants, banks and service providers. The same applies to creating more awareness and sensitization on the use of electronic payment systems. Banks are responsible for the introduction of bank products, rejection of opening numerous accounts and introduction of more channels for transfers and payments. The research concludes that there is not enough infrastructure in Zimbabwe to promote the use of electronic payment systems. This role should fall to merchants, banks and service providers. It is also concluded that there are not enough policy initiatives to improve electronic payments infrastructure in Zimbabwe and this role should fall on policy makers like the ministry of finance, POTRAZ and RBZ.

5.2 Limitations

It was difficult to reach out to users of electronic payment systems in remote areas of Zimbabwe and this may affect the generalization of findings. However, an attempt was made to reach out to as many areas as possible by administering questionnaires through emails and hand deliveries.
5.3 Recommendations

The research makes the following recommendations:

1. The use of new technology and changes in the banking laws can bring positive change to the Zimbabwean economy. Therefore, there is the need for the government to encourage innovation and remove regulatory barriers in order to promote the rapid development of the electronic payment systems in Zimbabwe.

2. Banks should alert consumers about all the possible electronic payment systems available and the advantages and disadvantages of each. Consumers will need to be educated about the possible liability for the use of each of the new types of electronic payment so that they can make informed decisions on their use and understand how they differ from cash.

3. Although POS devices are readily available in most merchants in Zimbabwe, their use is less than that for mobile devices due to lack of promotions on their use. There are more promotions on the use of mobile payments leading to their increased use. The findings of this research confirm that. There should also be aggressive promotions towards the use of POS devices for electronic payments.

4. There is need for players in the electronic payments industry to share infrastructure in order to promote productive efficiency. This will help in avoiding duplicative infrastructure and reduce costs of doing transactions. Zimswitch is a good example of financial institutions sharing front end infrastructure and the same concept should be extended to telecommunications companies. It will make a lot of difference in terms of costs to users if mobile operators could share base stations and mobile money agents for example. Regulators, government and market players therefore need to prioritize and promote interoperability of platforms in order for the mobile revolution the country is experiencing to provide maximum benefits at the least economic cost. However, care is still needed by regulators in terms of the implementation of the interoperability policies so that they do not depress the economic incentives for institutions to put up infrastructure.
5. It is recommended that Zimbabwe should learn valuable lessons from the experiences of other countries in the area of electronic payment systems and develop systems which suit their conditions. It is not good enough to simply import other countries’ electronic payment systems without adjusting for geography, banking and legal structures, infrastructure, culture, business practices and needs.

5.4 Areas of further study

An investigation into mobile money payment systems: user acceptability and payment problems in Zimbabwe.

In would be interesting to see how the payments landscape in Zimbabwe will be affected by the coming on board of more mobile money products like Telecash. Mobile payments are growing at a phenomenal rate. Will this lead to the eventual achievement of a cashless Zimbabwean society.
REFERENCES


34. Kaseke (2012) FinMark Trust Mapping the Retail Payment Services Landscape.


55. Orji Chima Egbuta, (2013). A former banker is a lecturer in the department of Mathematics, Computer Science and Informatics, Federal University, Ndufu Alike Ikwo, Nigeria.


60. RBZ report (2012),


67. The RBZ Monetary Policy (2010).


72. Wilson Simon (2007): Is this the end of cash as we know it?


Questionnaire for Customers or Users

SECTION A: DEMOGRAPHICS

1. Age
   a) Less than 21 years [ ]
   b) 21-30 years [ ]
   c) 31-40 years [ ]
   d) 41-50 years [ ]
   e) Above 50 years [ ]

2. Gender
   a) Female [ ]
   b) Male [ ]

3. Highest level of education
   a) None [ ]
   b) Primary [ ]
   c) Secondary [ ]
   d) Degree [ ]
   e) Masters or higher [ ]
   f) Any other [ ]
   g) Certificate/Diploma [ ]

SECTION B: AWARENESS OF ELECTRONIC PAYMENT SYSTEMS

4. Are you aware that you can do your transactions using Electronic Payment Systems?
   Yes [ ]
   No [ ]

5. Was there a promotion on usage of Electronic Payments in the last twelve months and if yes how did you know about it?
   Friends Yes [ ]
   Media Yes [ ]
   Internet Yes [ ]
   Personal bankers Yes [ ]
   Mobile SMS Yes [ ]
   Other .................................................................................................................................

6. Do you have a clear understanding of Electronic Payment Systems?
7. What kind of electronic transactions do you sometimes use?

Sending and receiving money

Yes [ ] A little bit [ ] No [ ]

Paying bills and utilities

Yes [ ] A little bit [ ] No [ ]

Online purchasing

Yes [ ] A little bit [ ] No [ ]

Transferring money from one account to another

Yes [ ] A little bit [ ] No [ ]

Purchasing goods and services in Retail outlets

Yes [ ] A little bit [ ] No [ ]

Online selling

Yes [ ] A little bit [ ] No [ ]

Other ........................................................................................................................................

8. Are you aware of the following channels and instruments for Electronic Payments?

ATMs

Yes [ ] No [ ] Not sure [ ]

Payment Cards (Visa Payment)

Yes [ ] No [ ] Not sure [ ]
9. Which of these Electronic Payment channels and instruments do you use?

- **Point of Sale (POS) devices**: [Yes] [No] [Not sure]
- **Internet Banking**: [Yes] [No] [Not sure]
- **Direct Debit**: [Yes] [No] [Not sure]
- **Direct Credit**: [Yes] [No] [Not sure]
- **Mobile Payment Systems**: [Yes] [No] [Not sure]

Other: __________________________

---

**SECTION C: BENEFITS OF USING ELECTRONIC PAYMENT SYSTEMS**

10. Why do you prefer to use the electronic ways of doing transactions?

- **To reduce the chance of robbery at the bank**: [Yes] [No] [Not sure]
- **To avoid queuing**: [Yes] [No] [Not sure]
- **For more convenient and fast transactions**: [Yes] [No] [Not sure]
- **Friendly use**: [Yes] [No] [Not sure]
- **For Security reasons**: [Yes] [No] [Not sure]
Readily available for customers 24hrs per day Yes [ ] No [ ] Not sure [ ]
Convenient way of paying for bills and recharges Yes [ ] No [ ] Not sure [ ]
Remove the burden of carrying huge amounts of cash Yes [ ] No [ ] Not sure [ ]

Other ........................................................................................................................................

SECTION D: WHY THERE IS SLOW UPTAKE OF THE CASHLESS SYSTEM

11. What is your attitude towards the use of Electronic Payment Systems?
Highly Positive [ ]
Positive [ ]
Neutral [ ]
Negative [ ]
Highly Negative [ ]

12. Why do you avoid using Electronic Payment Systems that are available?
Network problems Yes [ ] No [ ] Not sure [ ]
Fear of fraudulent transactions Yes [ ] No [ ] Not sure [ ]
For account safety Yes [ ] No [ ] Not sure [ ]
Very rigid Yes [ ] No [ ] Not sure [ ]
Not readily available Yes [ ] No [ ] Not sure [ ]
Compatibility problems Yes [ ] No [ ] Not sure [ ]
Systems are complicated for me Yes [ ] No [ ] Not sure [ ]
The process of registering is time consuming Yes [ ] No [ ] Not sure [ ]

End of questionnaire

Thank you for your time and effort
Questionnaire for Merchants, Banks and Service Providers

SECTION A: NATURE OF BUSINESS

1. What is the nature of your business?

2. When did you start using Electronic Payment Systems?

   Over 20 years ago [ ]
   15-20 years ago [ ]
   10-15 years ago [ ]
   5-10 years ago [ ]
   1-5 years ago [ ]
   Less than a year ago [ ]

3. What kind of Electronic Payment Systems do you use?

   ATMs [ ]
   Point of Sale (POS) devices [ ]
   Internet Payments [ ]
   Mobile Payment Systems [ ]

   Other

4. Do you think a cashless society is possible in Zimbabwe?

   Yes [ ]
   No [ ]

   Briefly provide a reason for your answer?
5. Electronic payments are growing at a faster rate than paper-based instruments. Do you agree?

Agree [ ]
Disagree [ ]

SECTION B: FACTORS THAT HAVE LED TO THE SLOW UPTAKE OF ELECTRONIC PAYMENT METHODS IN ZIMBABWE

Show by ticking in the appropriate box the causes of slow uptake of electronic payment methods in Zimbabwe.

5= strongly Agree, 4= Agree, 3= Not sure, 2= Disagree, 1= strongly Disagree

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Users’ attitude</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Corruption in the system</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Poor Network coverage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Concerns about account safety in Electronic Payment Systems</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Literacy level of the society</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Poor implementation</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>12</td>
<td>Political instability</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Unavailability of infrastructure in rural areas</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Poverty</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Power supply problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Security fears (that is users not thinking that its secure)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>High transaction charges</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other

Using the same scale in the table above show the challenges that is faced in implementing Electronic Payment Systems
<table>
<thead>
<tr>
<th>Item</th>
<th>Challenges</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>Lack of resources and skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Poor awareness and sensitization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Corruption on the part of bankers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Shortage of infrastructure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Poor relationship among major players in the economy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Absence of a clear policy on use of Electronic Payments Systems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Overdependence on banks</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

25. In your own words, what can be done in order to achieve a cashless society in Zimbabwe?
## SECTION C: THE BENEFITS OF ELECTRONIC PAYMENT SYSTEMS

May you show the benefits of Electronic Payment Systems?

5= strongly Agree, 4= Agree, 3= Not sure, 2= Disagree, 1= strongly Disagree

<table>
<thead>
<tr>
<th>Item</th>
<th>Benefits</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>Electronic Payment Systems handle a large volume of business/payments/remittances</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Electronic Payment Systems provide alternatives for faster delivery of banking services acceptable to a wide range of customers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Electronic Payment Systems provide convenient services to customers and reduce the chances of fraud</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Electronic Payment Systems reduce the substantial risks involved in the payment system</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Electronic Payment Systems serve the purpose of online purchasing, online shopping, and e-commerce.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>The transactions made through Electronic Payment Systems are faster than those done through other methods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Fees charged for Electronic payments are affordable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>Electronic Payment Systems help in reducing costs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>Electronic transactions are more accurate,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>Electronic transactions are user friendly</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Any other benefits not included in the table

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## SECTION D: ROLE OF ELECTRONIC PAYMENT COMPANIES IN PROMOTING A CASHLESS ZIMBABWEAN SOCIETY

Show by ticking in the appropriate box to show whether Electronic Payment companies are doing enough to promote a cashless society in Zimbabwe.

5= strongly Agree, 4= Agree, 3= Not sure, 2= Disagree, 1= strongly Disagree

<table>
<thead>
<tr>
<th>Item</th>
<th>Promotion of cashless society</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>Electronic Payment companies create more awareness and sensitization of the Electronic Payment Systems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>Electronic Payment Systems are compliant to the regulations they are expected of</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>Electronic Payment Systems are accessible to all classes of people</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>Electronic Payment companies’ service charges are affordable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>Electronic Payment Systems are efficient</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>Electronic Payment Systems are always online</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>Electronic Payments service providers educate users on how the Electronic Payment Systems work</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

43. In your own view, how can the Electronic Payment System companies promote the cashless society?

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SECTION E: AWARENESS

44. Customers are aware of the emerging Electronic Payment options

Very aware [ ]  somehow aware [ ]  Not aware [ ]

45. Which source of promotions of Electronic Payment Systems is used for your customers?

<table>
<thead>
<tr>
<th>Source</th>
<th>Yes [ ]</th>
<th>No [ ]</th>
<th>Not sure [ ]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print Media</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Websites</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Email</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Bankers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile SMS</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other ........................................................................................................................................
...............................................................................................................................................

46. What are the Electronic Payment Systems and instruments available to your customers?

<table>
<thead>
<tr>
<th>System</th>
<th>Yes [ ]</th>
<th>No [ ]</th>
<th>Not sure [ ]</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATMs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payment Cards</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Point of Sale (POS) devices</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internet Banking</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct Debit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct Credit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile payment systems</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other ........................................................................................................................................

47. Where do you see customers using Electronic Payment Systems?
48. Which of these Electronic Payment Systems and instruments are mostly used? Rank them from 1 to 7 where 1 is the most used

ATMs [ ]
Payment Cards (Visa Payment) [ ]
Point of Sale (POS) devices [ ]
Internet Banking [ ]
Direct Debit [ ]
Direct Credit [ ]
Mobile Payment Systems [ ]

SECTION F: THE ROLES OF DIFFERENT STAKEHOLDERS IN PROMOTING A CASHLESS ZIMBABWEAN SOCIETY

The table below provides the roles of various stakeholders. Show by ticking appropriately the roles that are being played.
<table>
<thead>
<tr>
<th>item</th>
<th>Promotion of cashless society</th>
</tr>
</thead>
<tbody>
<tr>
<td>49</td>
<td>Providing knowledgeable and skilled staff</td>
</tr>
<tr>
<td>50</td>
<td>Creating more awareness and sensitization</td>
</tr>
<tr>
<td>51</td>
<td>Provision of more functional equipment such as POS devices</td>
</tr>
<tr>
<td>52</td>
<td>Reduction of service charges</td>
</tr>
<tr>
<td>53</td>
<td>Rejection of an individual opening numerous accounts</td>
</tr>
<tr>
<td>54</td>
<td>Introduction of bank products</td>
</tr>
<tr>
<td>55</td>
<td>Reporting offenders</td>
</tr>
<tr>
<td>56</td>
<td>Introducing more channels for transfers and payments</td>
</tr>
<tr>
<td>57</td>
<td>Implementation of Electronic Payment Systems</td>
</tr>
<tr>
<td>58</td>
<td>Educating users on how Electronic Payment Systems work</td>
</tr>
</tbody>
</table>

Other  ------------------------------------------------------------------------------------------------------------------------------------------

End of questionnaire

Thank you
Questionnaire for Policy Makers

1. Do you see a cashless society being achievable in Zimbabwe?

Definitely [ ]   Somehow [ ]   not definitely [ ]

2. As policy makers what strategies can be put in place in order to achieve a cashless society in a multi-currency society?

3. How is the readiness of the people of Zimbabwe to use the Electronic Payment Methods?

Very ready [ ]   somehow ready [ ]   Not ready [ ]

4. How has the following Electronic Payment Systems and instruments been effectively used in Zimbabwe?

**Zimswitch**
Very effective [ ]   moderately effective [ ]   less effective [ ]

**Real Time Gross Settlement (RTGS) System**
Very effective [ ]   moderately effective [ ]   less effective [ ]

**Visa, Master Card**
Very effective [ ]   moderately effective [ ]   less effective [ ]

**Zimbabwe Electronic Transfer and Settlement System**
Very effective [ ]   moderately effective [ ]   less effective [ ]

**Mobile Money Systems**
Very effective [ ]   moderately effective [ ]   less effective [ ]

**Point of Sale (POS) systems**
Very effective [ ]   moderately effective [ ]   less effective [ ]
5. What are the other Electronic Payment Systems available?

6. What are the services provided by these Electronic Payment Systems?

7. Is there enough infrastructure in Zimbabwe to promote the use of Electronic Payment Systems?
   More than enough [ ] averagely enough [ ] not enough [ ]

8. Do we have enough investment in Electronic Payments infrastructural development in Zimbabwe?
   More than enough [ ] averagely enough [ ] not enough [ ]

9. Are there any policy initiatives to improve Electronic Payments infrastructure in Zimbabwe?
   More than enough [ ] averagely enough [ ] not enough [ ]

10. What should be done to improve the infrastructure for Electronic Payment systems in Zimbabwe?

11. As policy makers, what measures are being taken to promote the use of Electronic Payment Systems?

12. What is expected of the stakeholders of the Electronic Payment Systems in order to promote the systems?
13. What are the benefits of Electronic Payment Systems to the country? Rank them from 1 to 8 where 1 is the most common benefit.

- Increasing levels of security and consumer empowerment
- Greater economic transparency
- Increasing economic stimulation
- Widened participation in the banking system
- Enhancing transactional efficiency
- Expanding payment channels
- Enhancing customer convenience
- Reduction of cash in circulation

Any other

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What could be the reason for the low uptake of a Cashless Policy in Zimbabwe? Rank them from 1 to 8 where 1 is the most cause.

- Poor advocacy and enlightenment
- Corruption in the system
- Variation in perception among users and professionals
- Levels of literacy
- Poor implementation
- Political instability
- Unavailability of Electronic Payment Systems in rural areas
- Poverty
- Poor Electric power supply
- Poor network connectivity
15. What are the challenges of implementing Electronic Payment Systems in Zimbabwe?

16. What are the other factors that would lead to the adaptability of Electronic Payment Systems in Zimbabwe?

17. How does the local governance of organizations affect Electronic payment Systems?

18. How do the country’s governance/ regulatory issues affect Electronic Payment Systems?

Thank you

End of questionnaire