THE VALUE OF ELECTRONIC MONEY TRANSFER SYSTEM IN BUSINESS PROCESS MANAGEMENT IN THE BANKING SECTOR: CASE STUDY OF COMMERCIAL BANKS IN KENYA

BY

GETEMBE N. KEPHA

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OCTOBER, 2010
DECLARATION

I declare that this is my original work and has not been presented for any award in any other university.

Sign_____________________________       Date_____________________________

KEPHA N. GETEMBE

REG.NO. D61/70052/2007

This project has been submitted for examination with my approval as university supervisor.

Sign_____________________________       Date_____________________________

MR. PETERSON O. MAGUTU

Lecturer

School of Business

University of Nairobi
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Finally, I owe my gratitude to a great pool of people who in one way or another contributed towards completion of this project. To all of you, I say a big THANK YOU!
DEDICATION

This research project is dedicated to my beloved wife Maximillah and daughter Sheila.
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<table>
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<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ATM</td>
<td>Automatic teller machine</td>
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<tr>
<td>EFT</td>
<td>Electronic funds transfer</td>
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<td>PIN</td>
<td>Personal identification number</td>
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<td>MSA</td>
<td>Micro-saver Africa</td>
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<td>TT</td>
<td>Telegraphic transfers</td>
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<td>DNS</td>
<td>Deferred net settlement</td>
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<td>E-business</td>
<td>Electronic business</td>
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<td>IB</td>
<td>Internet banking</td>
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<td>MIS</td>
<td>Management information system</td>
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<td>NTT</td>
<td>Networking and telecommunication technology</td>
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<td>BPM</td>
<td>Business process management</td>
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<td>MTS</td>
<td>Money transfer system</td>
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<td>E-MTS</td>
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ABSTRACT

As we enter the twenty-first century, business conducted over the Internet (which we refer to as ‘e-business’), with its dynamic, rapidly growing, and highly competitive characteristics, promises new avenues for the creation of wealth. Established firms are creating new online businesses, while new ventures are exploiting the opportunities the Internet provides. E-business has the potential of generating tremendous new wealth, mostly through entrepreneurial start-ups and corporate ventures. It is also transforming the rules of competition for established businesses in unprecedented ways. One would thus expect e-business to have attracted the attention of scholars in the fields of management information system, (Hitt and Ireland 2000)

Indeed, the advent of e-business presents a strong case for the confluence of the entrepreneurship and strategy research streams, as advocated by, McGrath and Macmillan (2000). Yet, academic research on e-business is currently sparse. The literature to date has neither articulated the central issues related to this new phenomenon, nor has it developed theory that captures the unique features of virtual markets.

The merge of the information technology and the web standards have formed the electronic business "E-business". Succession in e-business will need organizations to revise their strategies and goals to meet market rules of demand and supply. Conversion of ordinary business into e-business has forced organizations to be redesigned and reshaped. E-business is a combination of economic, technology and market forces that reinvented strategies of traditional business. The business process is counted to use the power of computers and communication networks which are known as Internet. This can allow organizations to stay competitive and more efficient. Also, new business models have been introduced and implemented in a variety of ways.

Electronic banking, also known as electronic fund transfer (EFT), uses computer and electronic technology as a substitute for checks and other paper transactions. EFTs is initiated through devices such as cards or codes that you use to gain access to your account. Many financial institutions use an automated teller machine (ATM) card and a personal identification number (PIN) for this purpose. The federal Electronic Fund
Transfer Act (EFT Act) covers some consumer transactions. It offers different services like Direct Deposit, Automated Teller Machines, and Pay by Phone Systems etc.
CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

IT has long been identified by many IT business value studies as indispensable in transforming business processes, which in turn may affect IT business value, (Benjamin and Levinson, 1993; Huang and Hub, 2007). For example, Brynjolfsson and Hitt (2000) identify that IT business value depends on complementary business processes when an organization implements a new electronic purchasing system. Brynjolfsson and Hitt indicate that the whole purchasing process may have to be redesigned while new activities or procedures such as electronic supplier search on public or private electronic markets are introduced at the same time. The new information systems and process redesign have to go jointly to make IT as valuable as possible for the implementing organization.

As we enter the twenty-first century, business conducted over the Internet with a lot of competitive characteristics, promises new avenues for the creation of wealth. Established firms are creating new online businesses. New ventures are also exploiting the opportunities the Internet provides, (Kenneth, 1974). E-business has the potential of generating tremendous new wealth, mostly through entrepreneurial start-ups and corporate ventures. It is also transforming the rules of competition for established businesses in unprecedented ways. E-business is therefore expected to attract the attention of scholars in the fields of business and management.

Mukwana and Sander, (2003) noted that Sending or receiving money for either payment of salaries, settlement of business transactions, payment of school fees, or for family support is common both for businesses and individuals. It requires efficient, reliable and affordable money transfer services whereby money can be deposited in one location and withdrawn in another in both urban and rural areas, (Loudon, 2010)

The new electronic age has differentiated the marketing of banking services. Customers nowadays demand new and differentiated financial products and services. In the essence banks must search for new strategies of marketing their products and services. With pressure from dynamic and advancement of IT, different electronic distribution channels
have been adopted to meet the demands of customers in Kenyan banks, (Orbeta, 2001).

1.1.1 Electronic Money Transfer Systems and Services

Electronic money transfer systems uses computer and electronic technology as a substitute for cheques and other paper transactions. Andam (2003) noted that, electronic banking, also known as electronic fund transfer (EFT), uses computer and electronic technology as a substitute for cheques and other paper transactions. EFT is initiated through devices such as cards or codes that you use to gain access to your account. Many financial institutions use an automated teller machine (ATM) card and a personal identification number (PIN) for this purpose. The federal Electronic Fund Transfer Act (EFT Act) covers some consumer transactions. It offers different services like Direct Deposit, Automated Teller Machines, and Pay by Phone Systems etc.

Money Transfer Services refer to services in which money or funds can be transferred from one location to another with the help of several methods. Mukwana and Sander, (2003), noted that the methods are quick, dependable, and easy to process; with which money can be sent or received all over the world without any hassles. The sending payments or purchasing money orders have never been so easy. Nowadays, the Internet has also become a highly popular method for transferring money and has services that are quick, affordable, and safe in comparison to other conventional methods.

1.1.2 Value of electronic Money Transfer Systems in Business Process Management

Accumulated balance digital payment systems enable users to make micro payments and purchases on the web, accumulating a debit balance that they must pay periodically on their credit card or telephone bills. Examples are Valista’s payments plus used by ABL, Vodafone, and NTT, and disk share, which is widely used by the online newspaper and publishing industry, (Mukwana and Sander, 2003)

Online stored value payment systems enable consumers to make instant online payments to merchants and other individuals based on value stored in an online digital account. A stored card stores information electronically on a magnetic stripe or computer chip and can be used to purchase goods or services, (Chakrabarti, 2002). The balance recorded on the card is debited at a merchant’s point of sale terminal when consumers make a
purchase. Generally stored value cards contain all the information necessary to identify the card and its value. This enables point of sale terminals in most systems to be “off line”. Stored value cards are not cash and they do not have the finality of cash. It must move through a complex payment system before a payment is completed. Some online stored value payments systems such as valista are merchant platforms; others are focused on peer-to-peer payments such as pay pal. Pay pal is owned by eBay and makes it possible for people to send money to vendors or individuals who are not set up to access credit card payments.

Digital checking systems such as Pay-By-Cheque extend the functionality of existing checking accounts so they can be used for online shopping payments. Digital cheques are processed much faster than traditional paper based checking, (Andam, 2003).

Electronic billing presentment and payment systems are used for paying routine monthly bills. They enable users to view their bills electronically and pay them through electronic fund transfers from the bank or credit card accounts. Electronic bill presentment and payment (EBPP) is a process that enables bills to be created, delivered, and paid over the Internet. The service has applications for many industries, from financial service providers to telecommunications companies and utilities. These services notify purchasers about bills that are due, present the bills and process the payment. Some of these services such as check free consolidate subscriber’s bills from various sources so that they can all be paid at one time, (Laudon, 2010).

Although buying products over the Internet with a credit card has become a common occurrence, viewing the credit card bill itself and making payments to settle the bill electronically has not. This has dramatically changed as new EBPP products have been introduced that include features such as secure e-mail delivery. EBPP technology has become more common in business-to-business e-commerce (Chaum, 1992).
1.1.3 Commercial Banks in Kenya

Andam (2003) pointed out that, in Kenya commercial banks operate under the Banking Act of 1995 and are regulated and supervised by the Central Bank of Kenya. This also places restrictions on the types of services banks can offer and imposes limits on risks a bank can take with its capital.

The five largest commercial banks in Kenya are Kenya Commercial Bank, Barclays Bank, Standard Chartered Bank, Cooperative Bank and National Bank of Kenya; they dominate the banking system with 300 of the total 494 branches and accounting for 72.1% of the total deposit base of KShs. 344 billion (Oketch, 2001). The majority of the 494 branches are concentrated in the major urban areas (Nairobi, Mombasa, Kisumu, Nakuru and Eldoret) (Economic Survey 2002). (Central Bank, 2002) Commercial bank products in Kenya are fairly standard in nature and include savings accounts, current accounts, credit or debit cards, and money transfer services catering mainly for corporate clients and high-income individuals.

In recent years, commercial banks have invested significantly in products that require high levels of automation and expensive equipment for online transfers and home banking. Services such as ATMs, different card products, branchless banking and online transfers greatly improve the efficiency of banks; at the same time the required initial investment is high and has increased costs to the client. Factors such as the locations of bank networks, minimum balance requirements, and levels of automation are among the main factors which limit the access of low-income people to bank services, (Argwings Kodhek and Jayne, 1996).

1.2 Statement of the Problem

The world witnesses an IT revolution which has touched every aspect of people’s life including banking, (Siam, 2006). Technology has introduced new ways of delivering banking services and products to the customers such as ATMs, and internet banking (IB). Hence banks have found themselves at the forefront of technology adoption for the past three decades (Sing, 2002). These changes and developments in the banking industry have impacts on the quality and future of the banking activities, and consequently on its
continually competitive ability in the world markets since going along with technology is one of the most important factors of economic organizations success in general and banks in particular (Siam, 2006). This motivates banks to spend more on technology and information to achieve maximum returns and attract a large number of clients. According to Sing (2002) efficient and reliable communications and computer systems, including management information system (MIS), are essential in operating a money transfer service. This is because speed and reliability are key product features for entering the market. Bus and courier companies, for instance, have become popular because of their ability to provide overnight or even same day physical transfer of money. On the other hand, POSTA lost significant business when it withdrew its telegraphic money orders that could provide same day or overnight delivery.

Commercial banks are the major players in money transfer business in Kenya, servicing mainly large users and, to a smaller extent, low-income users, (Andam, 2003). Among the commercial bank instruments, telegraphic transfers, electronic funds transfers and bank drafts are typically used for large value transfers, as they offer the cheapest service for the transfer of large amounts.

The study intended to establish how value can be created in business management through electronic money transfer systems in commercial banks in Kenya. This complements an earlier study on money transfer systems in Tanzania and Uganda. The team used Micro-Save Africa’s (MSA) qualitative research methods with in-depth interviews and focus group discussions with service providers and with users, particularly in the low-income segment. Therefore there was need for a study to be conducted in the value of electronic money transfer systems in business process management in commercial banks in Kenya. Although Research has been done in money transfer systems none has been done in commercial banks in Kenya, (Katherine L. 1998)

This study sought to find out how electronic money transfer system is both a strategic and a turn-around activity for the banking sector. Banks that were slow on their feet in embracing this technology have found a large chunk of their market niche grabbed from under their feet by banks that revamped their money transfer system and services
capabilities and are offering fast and better services coupled with a wide variety of banking products.

1.3 Objective of the Study

1.3.1 Main Objective
The main objective of the research was to investigate how value can be created in business process management through electronic money transfer systems in commercial banks.

1.3.2 Specific Objectives

i. To establish the benefits of electronic money transfer systems in business process management in the commercial banks in Kenya.

ii. To determine the challenges facing the use of electronic money transfer in the commercial banks in Kenya.

1.4 Research Questions
This study will therefore sought to identify the value of electronic money transfer services in commercial banks which operate in Kenya by addressing the following research questions:-

   i. What are the benefits associated with the use of electronic money transfer systems in business process management in commercial banks in Kenya?

   ii. What are the challenges facing electronic money transfer system in commercial banks in Kenya?

1.5 Significance of the Study
The study is important not only to commercial banks in Nairobi but also to other commercial banks in other parts of the country. It can help them understand the value of electronic money transfer systems in their businesses and use it to achieve a competitive edge.
The results of the study can be important to the managers both in Nairobi and other parts of the country by contributing to the existing body of knowledge in the area of business management and e-business in particular. Academicians would use findings for further research, while bank managers would apply lessons in electronic money transfer systems benefits and put more efforts to improve performance and success in their various banks.

The study can be a source of reference material for future researchers on other related topics. It will also help other academicians who undertake the same topic in their studies. The study would also highlight other important relationships that require further research; this may be the areas of relationships between intelligence and the banks’ performance.
CHAPTER TWO: LITERATURE REVIEW

2.1 Electronic Money Transfer Systems

Banks use more of EFT and TT to effect faster movement of funds and less paper work. For instance, inter-bank transfers use TT and EFT, fax, telegraphic. Electronic arrangements have to be made with key local and international correspondent banks, (Mann, Eckert, and Knight2000)

Electronic banking, also known as electronic fund transfer (EFT), use computer and electronic technology as a substitute for cheque and other paper transactions,(Hitt 2000). E-banking use electronically-based products in developing markets, such as telephone banking, credit cards, ATMs, and direct deposit. It also includes electronic bill payments and products mostly in the developing stage, including stored-value cards (e.g., smart cards/smart money) and Internet based stored value products. EFT is initiated through devices such as cards or codes that you use to gain access to your account. Many financial institutions use an automated teller machine (ATM) card and a personal identification number (PIN) for this purpose. The federal Electronic Fund Transfer Act (EFT Act) covers some consumer transactions. It offers different services like Direct Deposit, Automated Teller Machines, and Pay by Phone Systems.

2.1.1 Forms of Electronic Money Transfer Systems

According to Sander and Mukwana (2003), commercial banks are still the most popular providers of money transfer services followed by the Kenya Postal Corporation, Western Union, courier companies, and foreign exchange bureaus in that order. Users of EFT and TT find the services fast, efficient and reliable as value is realized either immediately or the following day. Although bank cheques are expensive, parents or guardians and business people who use them to settle low value third party obligations perceived them to be safe and reliable. Institutions with home banking facilities prefer the use of EFT due to its low cost.

Banks effect the transactions for credit transfers by using mail, telephones or telegrams and electronic connections. Electronic funds transfers (EFT) and telegraphic transfer (TT) are faster and more reliable than mail transfers which require a physical movement of
mail from the issuing bank to the paying bank and to the clearing house before payment can be effected. It can take up to two weeks to realize payment when using mail transfer; transfers can be immediate or within one day when using EFT and TT, respectively. Due to the high level of intra-bank connections, banks use more of EFT and TT to effect faster movement of funds and less paper work, (Sander and Mukwana, 2003).

Electronic Funds Transfers: Uses an automated system networked between the head office of the bank and its various branches. In this instrument realization of Value is instant but it is faced by Problems of High cost of investment in equipment and operating systems, it also requires automation of the system and requires an account with correspondent bank, (Katherine L. 1998)

Telegraphic Transfers: Uses wire transfers between the sending bank and the correspondent bank. The realization of Value is between1-2 days. Major Constraints in this system include; high cost investments, it requires automation of the system; requires telephone and telegraphic arrangements with the correspondent bank Mail Transfers: Involves physical movement of mail from the issuing bank to the paying bank and the clearing house, value realization is up to 14 days Problems Very slow.

Direct Debits: Uses Standing Orders to make regular payments to third parties with accounts at the same bank. Realization of Value is instantaneous debit to the payee and credit to the person making the payment, but it has a Problem of requiring the payee to have an account with the bank

Ordinary Cheque: Realization of Value is 3-10 working days after deposit subject to remoteness of sender / receiver: It has a Problem of Forgery; slow and requires the payee to maintain a current account and cheque book.

2.1.2. Value of Electronic Money Transfers

One reason cited for why buses and courier companies only transport money but do not operate as money transfer companies was a lack of capacity to manage cash. As pay-in and pay-out points as well as timing for money transfers are typically not balanced for a service location, sufficient floats and regular cash transfers to have sufficient funds on
hand are essential to provide an efficient and reliable service, (Andam, 2003)

Most money in today’s world is electronic, and tangible cash is becoming less frequent. With the introduction of internet / online banking, debit cards, online bill payments and internet business, paper money is becoming a thing of the past. Banks now offer many services whereby a customer can transfer funds, purchase stocks, contribute to their retirement plans and offer a variety of other services without having to handle physical cash or cheques. Customers do not have to wait in lines; this provides a lower-hassle environment.

Debit cards and online bill payments allow immediate transfer of funds from an individual's personal account to a business's account without any actual paper transfer of money. This offers a great convenience to many people and businesses alike, (Cheney, Julia S. 2006).

While the total value of transfers may be significant, each individual transaction of a typical money transfer would be of a small amount and destinations for transfers could vary. Securicor Courier Company, for instance, closed its money transfer service as it was too costly for them for this reason. One strategy could be to identify major hubs for sending and receiving funds and limiting the service to those locations, though the most competitive providers tend to be those with a strong network, (Sander and Mukwana, 2003).

Information system can improve coordination in organizations and make control of organizations easier. Information Technology (IT) has the ability to lower coordination cost without increasing the associated transactions risk, leading to more outsourcing and less vertically integrated firms. Lower relationship-specificity of IT investments and a better monitoring capability imply that firms can have inter-firm coordination than in traditional investments for explicit coordination such as co-located facilities or specialized human resources; firms are therefore more likely to coordinate with suppliers without requiring ownership to reduce their risk, (Laudon, C, 2010).

Efficient and reliable communications and computer systems, including MIS, are
essential in operating a money transfer service. This is part because speed and reliability are key product features for entering the market. Bus and courier companies, for instance, have become popular because of their ability to provide overnight or even same day physical transfer of money. On the other hand, POSTA lost significant business when it withdrew its telegraphic money orders that could provide same day or overnight delivery, (Hitt, 2000).

2.1.3. Challenges in Electronic Money Transfers

Sander and Mukwana (2003), the product review and client feedback highlight that there are different problems and challenges associated with each means of transferring money. Means typically used by large scale clients of formal services, such as EFT and TT, are considered as risk free. The highest levels of risks and problems are associated with physical transfers. These range from highway robberies, accidents and thefts to misuse of money by friends and relatives, (Andam, 2003). Forgeries, fraud and theft are challenges also related to bank and Postal transfers, especially for bank cheque and Postal orders. Fraud over digital cash has been a pressing issue in recent years. Hacking into bank accounts and illegal retrieval of banking records has led to a widespread invasion of privacy and has promoted identity theft.

There is a pressing issue regarding the technology involved in digital cash. Power failures, loss of records and undependable software often cause a major setback in promoting the technology. Privacy questions have also been raised; there is a fear that the use of debit cards and the like will lead to the creation by the banking industry of a global tracking system. Some people are working on anonymous e-cash to try to address this issue (Cheney, Julia S. 2006).

Apart from the challenges, each system has a number of problems that impede the use of the transfer system, (Cason, Katherine, 1998). They include delays in transferring value and long queues to send/receive payment, high costs of transactions, cumbersome and long identification procedures, network limitations and illiquidity of POSTA branches and unreliable communication systems. Money transfer services such as Western Union and Money Gram involve foreign exchange losses due to lower exchange rates paid for
money sent through them.

In general, the formal sector is not easily accessible for low-income users. It is highly concentrated in urban areas and the cost of sending money is very high for low values which are typically associated with low-income earners. Coupled with this is the sophistication of office structures, intimidating environments and language barriers due to the exclusive use of English in official forms. These deficiencies have continued to push the clients further away from the formal to the semi-formal and informal systems (Orbeta, 2001)

Alternative providers of transfer services such as courier companies and bus or matatu drivers and conductors are known to be fast, efficient and reliable, and have succeeded in areas where the formal is not so successful. However, these systems are not foolproof and still have to meet some standards acceptable in the industry. Their prices are not standard, their networks are limited, their systems are not transparent and many courier and bus companies do not have risk management strategies for money lost through their systems since officially they do not transfer money, (Mann, et al, 2000). The removal of money from parcels sent in envelopes is a challenge with courier and bus companies that carry money through their delivery system.

2.2 E-Business Process Management

Rosen, (2000), defined Electronic business (e-business) as the practice of servicing businesses or employees over the Internet. The practice of running a business over the internet; and e-commerce as a business that operates partially or primarily over the internet, usually providing services to other businesses. It encompasses all of what has been called e-commerce, and includes every aspect of the organization’s strategy and operations, (Orbeta, 2001)

In simple terms e-business means the use of information and the Internet technologies to conduct business between buyers, sellers and other trading partners, (Andam, 2003).

Succession in e-business will need organizations to revise their strategies and goals to meet market rules of demand and supply. Conversion of ordinary business into e-business
has forced organizations to be redesigned and reshaped, (Sander and Mukwana 2003). E-business is a combination of economic, technology and market forces that reinvented strategies of traditional business. The business process is counted to use the power of computers and communication networks which are known as Internet. This can allow organizations to stay competitive and more efficient. Also, new business models have been introduced and implemented in a variety of ways, (Andam, 2003).

Lallana et al (1997) noted that Information systems and technologies are transforming firms’ relationships and customers, Employees and logistics partners into digital relationships using networks and the internet. So much business is now enabled by or based upon digital networks. E-business includes activities in the internal management of the firms and the coordination and suppliers and other business partners. It also includes e-commerce. E-commerce encompasses activities supporting those market transactions, such as advertising, marketing, customer support, security, delivery and payments.
CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodology that will be used in gathering the data, analyzing the data and reporting the results. It further describes the type and source of data, the population and the sampling methods and techniques used to select the sample size. It also describes how data will be collected and analyzed and concludes with ethical issues deemed likely to influence the implementation of the study and how they were to be dealt with.

3.2 Research Design

This was a descriptive study where the researcher visited the selected commercial banks in Nairobi Area and asked them about benefits of using EFT in their banks. The study employed both quantitative and qualitative methods through the use of questionnaires to provide predominantly quantitative and qualitative data to the study. The qualitative data was used to shed some light on the quantitative data to enable the investigation of the research problem in more depth. The respondents were interviewed in their natural setups so as to provide more information freely.

Mugenda and Mugenda,(2003) noted that descriptive research design is used when the problem has been well designed and where the researcher can engage in a survey by going to the population of interest in order for the respondents to explain certain features about the problem under study. Primary data collected from such study is more reliable and up to date.

3.3 Population of the Study

Mugenda and Mugenda (1999), define population as an entire group of individuals, events or objects having common observable characteristics. The study targeted forty five (45) commercial banks within Nairobi Province. The target population in this study was the staff in the commercial banks that included top levels managers, middle level managers and lower level managers. This made it easy to get adequate and accurate information necessary for the research.
Interviewees included: top managers, middle and lower managers of medium and large commercial banks under study. Based on the number of banks within the Province an appropriate sample size was selected. Random sampling was applied to select the identified number of banks to be studied and thereafter a sample of managers and senior staffs were selected.

3.4 Data Collection

Primary data was obtained using self administered questionnaires. Primary data is fact, assumptions and premises contained in various documentary sources (Kothari C.R, 1990). The questionnaires with both open and closed ended questions were used to collect both qualitative and quantitative data to answer related questions. The “Drop and Pick” method was used to obtain feedback alongside personal and telephone interviews especially for those respondent who need clarification and filling of the questionnaires.

The questionnaire comprised of (3) sections to determine fundamental issues including the demographic characteristics of the respondents. The second section focused on money transfer systems and the third part focused on the identification of the value of money transfer systems in e-business management banks.

The questionnaire was self administered by the researcher and each questionnaire was coded and only the researcher knew which person responded. The coding technique was used for the purpose of matching the completed questionnaire with those delivered to the organizations.

Before commencing data collection permission to conduct the research was sought from the management of the commercial banks. Thereafter the researcher visited the top managers of the banks under study in order to bond with those who were to participate and make arrangements when to administer the questionnaires. The questionnaires were delivered to the respondent at the agreed venue on the appointed date. The respondents were given humble time to fill the questionnaire. Lastly’ the filled questionnaires were collected after one week for analysis.
3.5 Data Analysis

Raw data collected from the field was sorted and summarized in tables and diagrams. The process of data analysis involved several stages. Completed questionnaires were edited for completeness and consistency. The data was then be coded and checked for any errors and omissions (Kaewsonth & Harding, 1992). The data was analyzed using procedures within Statistical Package for Social Sciences (SPSS), PC version 10. The responses from part one to part three were analyzed to answer the research objectives. The responses from the open-ended questions were coded; the mean and standard deviation were used for likert-scale responses. For closed questions, a comparative analysis using distribution tables, quartiles (percentiles) and graphical analysis were done to improve the presentation of the analyzed results for ease of interpretation.
CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND DISCUSSION

4.0 Introduction
This chapter has presented the findings of the study with reference to study objectives. Information in this chapter has been presented in form of tables and charts. Interpretation has also been provided based on the study objectives.

4.1 Findings of the Study

4.1.1 Response Rate.
Out of 25 respondents targeted for this study 20 of them responded to the questionnaire giving a response rate of 80%. This was a good turn-up and adequate enough for the study since according to Mugenda 2003, 50% of the response rate is adequate enough to carry out a study.

4.2 General Information

4.2.1 Gender
The study sought to establish the gender of the respondents involved in the study. The information obtained from the respondents is as summarized in table 4.1 below

Table 4.1 Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>04</td>
<td>20.8</td>
</tr>
<tr>
<td>Female</td>
<td>16</td>
<td>79.2</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Field Data, 2010
From table 4.1 above, majority of the respondents involved in the study were male representing 79.2% whereas 20.8% were female.
4.2.2 Level of Education

The study sought to establish the respondents’ highest level of education completed. The information obtained from the respondents is as summarized in the table below

Table 4.2 Level of Education

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree</td>
<td>15</td>
<td>75</td>
</tr>
<tr>
<td>Diploma</td>
<td>05</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Field Data, 2010

From the research data in 4.2 above, it was established that majority (75 %) of the respondents had Degree qualification whereas 25% were Diploma holders.

4.2.3 Period of work in the bank

Period of work in the bank sought to establish the respondent’s extent of understanding the value of money transfer systems on business management process. This understanding might probably been achieved through experience attained over time. The study findings were displayed on figure 4.5 below.

Table 4.3 Years worked in the Bank

<table>
<thead>
<tr>
<th>Years worked in the bank</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less 2 years</td>
<td>03</td>
<td>15</td>
</tr>
<tr>
<td>3-5 years</td>
<td>05</td>
<td>25</td>
</tr>
<tr>
<td>6-10 years</td>
<td>09</td>
<td>45</td>
</tr>
<tr>
<td>More than 10 years</td>
<td>03</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>100.0</td>
</tr>
</tbody>
</table>
From table 4.4 above, 15% indicated that they have worked in the bank for less than 2 Years, 25% had worked for a period between 3-5 years, 45% had worked for a period between 6-10 Years while 3 (15%) had worked for a period of more than 10 years. Majority of the respondents had worked in the banking sector for a period of between 3-5 years while the minority had worked for a period of 6-10 years. These results indicated that many of the respondents had clear understanding of the value of money transfer systems on business management as their years of work had allowed them to learn more from their organizations.

4.3 Preference in electronic money transfer

The study sought to find out respondent’s important preference in electronic money transfer. The information obtained from the respondents is as summarized in the table below.

<table>
<thead>
<tr>
<th>Table 4.4: Preference in electronic money transfer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondents preference on money transfer systems</td>
</tr>
<tr>
<td>Efficiency</td>
</tr>
<tr>
<td>Speed</td>
</tr>
<tr>
<td>Reliability</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

The results indicated that 11 (55%) of the respondents preferred efficiency, 7 (35%) preferred speed while 2 (10%) preferred reliability. None of the respondents preferred low cost of money transfer systems while majority 55% of the respondents preferred efficiency while minority (2%) preferred reliability. This indicated that managers were willing to bare the cost of money transfer system as far as it was bringing efficiency. Respondents further added that electronic money transfer facilitated them to live in a
more relaxed way since they could easily access banking services. They further commented that electronic money transfer systems has substituted traditional banking as well as reduced wastage.

### 4.4 Use of Various Money Transfer Systems

The study sought to establish the extent to which banks use various money transfer systems. The respondents were asked to indicate this on a five – likert scale where 1=Not at all; 2=less extent; 3=Moderate extent; 4=Large extent; 5=very great extent. The descriptive and factor analysis output are as in table 4.13 below.

<table>
<thead>
<tr>
<th>Money Transfer Systems</th>
<th>5 4 3 2 1</th>
<th>Σf</th>
<th>Σfx</th>
<th>Σfx/Σf</th>
<th>Std. D</th>
</tr>
</thead>
<tbody>
<tr>
<td>EFT</td>
<td>20 00 00 00 00</td>
<td>20</td>
<td>100</td>
<td>0.0000</td>
<td>.00000</td>
</tr>
<tr>
<td>Telegraphic MTS</td>
<td>12 02 02 02 02</td>
<td>20</td>
<td>84</td>
<td>4.2078</td>
<td>.40839</td>
</tr>
<tr>
<td>Mail transfers</td>
<td>08 09 00 02 00</td>
<td>20</td>
<td>80</td>
<td>4.2000</td>
<td>.1678</td>
</tr>
<tr>
<td>Direct debit</td>
<td>09 07 04 00 00</td>
<td>20</td>
<td>85</td>
<td>4.2500</td>
<td>.40839</td>
</tr>
<tr>
<td>Ordinary cheque</td>
<td>08 09 00 02 00</td>
<td>20</td>
<td>80</td>
<td>4.2000</td>
<td>.1678</td>
</tr>
</tbody>
</table>

Source: Research Data

From the research data in table 4.10, the respondents’ opinion is that to a very high extent banks use EFT (Mean ≥ 4.5 = very high extent, with a significant standard deviation), as a money transfer system. Whereas telegraphic MTS, mail transfers, direct debit and ordinary cheque are used to a high extent (Mean ≥ 3.5 = high extent, with a significant standard deviation) as money transfer system.

### 4.5 Efficiency of Money transfer systems

The study sought to establish the efficiency of the money transfer systems used by the banks. The respondents were asked to rate the efficiency on a five-point likert scale; 5=Very Efficient; 4=efficient; 3=Neutral; 2=Fairly Efficient; 1=Inefficient.
Table 4.6 Efficiency of Money transfer systems

<table>
<thead>
<tr>
<th>Efficiency of Money transfer systems</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>∑f</th>
<th>∑fx</th>
<th>Std. D</th>
</tr>
</thead>
<tbody>
<tr>
<td>EFT</td>
<td>20</td>
<td>00</td>
<td>00</td>
<td>00</td>
<td>00</td>
<td>20</td>
<td>100</td>
<td>.00000</td>
</tr>
<tr>
<td>Telegraphic MTS</td>
<td>12</td>
<td>02</td>
<td>02</td>
<td>02</td>
<td>20</td>
<td>84</td>
<td>4.2078</td>
<td>.40839</td>
</tr>
<tr>
<td>Mail transfers</td>
<td>02</td>
<td>04</td>
<td>10</td>
<td>02</td>
<td>02</td>
<td>20</td>
<td>44</td>
<td>.1678</td>
</tr>
<tr>
<td>Direct debit</td>
<td>09</td>
<td>07</td>
<td>04</td>
<td>00</td>
<td>00</td>
<td>20</td>
<td>85</td>
<td>.40839</td>
</tr>
<tr>
<td>Ordinary cheque</td>
<td>08</td>
<td>09</td>
<td>00</td>
<td>02</td>
<td>00</td>
<td>20</td>
<td>80</td>
<td>.1678</td>
</tr>
</tbody>
</table>

From the research data in table 4.11, the respondents’ opinion is that EFT is very efficient (Mean ≥ 4.5 = very efficient, with a significant standard deviation), as a money transfer system. Whereas telegraphic MTS, direct debit and ordinary cheque were said to be efficient (Mean ≥ 3.5 = efficient, with a significant standard deviation) as money transfer system. Mail transfer was rated as fairly efficient.

4.6 Efficiency of service delivery by various Money transfer systems

The study sought to establish the Efficiency of service delivery by various Money transfer systems used by the banks. The respondents were asked to rate the efficiency on a five-point likert scale 5=Very Efficient; 4=efficient; 3=Neutral; 2=Fairly Efficient; 1=Inefficient.
Table 4.7 service delivery Efficiency of Money transfer systems

<table>
<thead>
<tr>
<th>MTS and service delivery</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>Σf</th>
<th>Σfx</th>
<th>Σfx/Σf</th>
<th>Std. D</th>
</tr>
</thead>
<tbody>
<tr>
<td>EFT</td>
<td>18</td>
<td>02</td>
<td>00</td>
<td>00</td>
<td>00</td>
<td>20</td>
<td>100</td>
<td>5.0000</td>
<td>.00000</td>
</tr>
<tr>
<td>Telegraphic MTS</td>
<td>12</td>
<td>02</td>
<td>02</td>
<td>02</td>
<td>02</td>
<td>20</td>
<td>84</td>
<td>4.2078</td>
<td>.40839</td>
</tr>
<tr>
<td>Mail transfers</td>
<td>02</td>
<td>04</td>
<td>10</td>
<td>02</td>
<td>02</td>
<td>20</td>
<td>44</td>
<td>2.200</td>
<td>.1678</td>
</tr>
<tr>
<td>Direct debit</td>
<td>09</td>
<td>07</td>
<td>04</td>
<td>00</td>
<td>00</td>
<td>20</td>
<td>85</td>
<td>4.250</td>
<td>.40839</td>
</tr>
<tr>
<td>Ordinary cheque</td>
<td>08</td>
<td>09</td>
<td>00</td>
<td>02</td>
<td>00</td>
<td>20</td>
<td>80</td>
<td>4.200</td>
<td>.1678</td>
</tr>
</tbody>
</table>

From the research data in table 4.11, the respondents’ opinion is that EFT is very efficient in service delivery (Mean ≥ 4.5 = very efficient, with a significant standard deviation), as a money transfer system. Whereas telegraphic MTS, direct debit and ordinary cheque were said to be efficient in service delivery (Mean ≥ 3.5 = efficient, with a significant standard deviation). Mail transfer was rated as fairly efficient in service delivery (Mean ≥ 1.5 = fairly efficient, with a significant standard deviation).

4.7 Online Transactions or Use E-Commerce

The study sought to establish how often the banks use or perform transactions online. The respondents were asked to indicate this on a five – likert scale where 5 = Very often; 4 = often; 3 = fairly often; 2 = no often1 = Never. The descriptive and factor analysis output are as shown in table 4.13 below.

Table 4.8: Extent of use of Online Transactions or Use E-Commerce

<table>
<thead>
<tr>
<th>Online Transactions or Use E-Commerce</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>Σf</th>
<th>Σfx</th>
<th>Σfx/Σf</th>
<th>Std. D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response</td>
<td>17</td>
<td>02</td>
<td>01</td>
<td>00</td>
<td>00</td>
<td>20</td>
<td>96</td>
<td>4.779</td>
<td>.40839</td>
</tr>
</tbody>
</table>

Source: Research Data

From the research data in table 4.18, the respondents indicated that to a very often extent they perform transactions online ≥ 4.5 = Very high extent, with a significant standard deviation).
4.7.1 Difficulty in performing transactions online

The study sought to establish the level of difficult encountered in performing transactions online. The respondents were asked to indicate this on a five – likert scale where 5 = Very difficult; 4 = Difficult; 3 = Neutral; 2 = fairly difficult ;1 = Not difficult. The descriptive and factor analysis output are as shown in table 4.14 below.

Table 4.9 Difficulty in performing transactions online

<table>
<thead>
<tr>
<th>Mail transfer and Business Process Management</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>Σf</th>
<th>Σfx</th>
<th>Σfx/Σf</th>
<th>Std. D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response</td>
<td>16</td>
<td>03</td>
<td>01</td>
<td>00</td>
<td>00</td>
<td>20</td>
<td>96</td>
<td>4.779</td>
<td>.40839</td>
</tr>
</tbody>
</table>

Source: Research Data

From the research data in table 4.15, the respondents indicated that it is very difficult to perform transactions online (Mean ≥ 4.5 = Very high extent, with a significant standard deviation). This was a clear indication of the challenges encountered in using the EFT.

4.8 Major shortcomings facing electronic money transfer systems

Among the responses given by respondents on major shortcoming of facing electronic money transfer systems was skills gap, poor information communication structure, there were no clear guidelines / policies guiding infrastructure and problems of audit trail issues.

4.8.1 Challenges affecting value of MTS in business process management

The study sought to establish the extent to which various challenges affect the value of MTS in business process management. The respondents were asked to rate the effect on a five-point likert scale 5=Very high extent; 4=high extent; 3=Neutral; 2=low extent; 1=very Low extent.
Table 4.10 Challenges affecting value of MTS in business process management

<table>
<thead>
<tr>
<th>Challenges affecting value of MTS in business process management</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>∑f</th>
<th>∑fx</th>
<th>∑fx/∑f</th>
<th>Std. D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delays in transferring money</td>
<td>20</td>
<td>00</td>
<td>00</td>
<td>00</td>
<td>00</td>
<td>20</td>
<td>100</td>
<td>5.0000</td>
<td>.00000</td>
</tr>
<tr>
<td>Long queues to send or receive payment</td>
<td>12</td>
<td>02</td>
<td>02</td>
<td>02</td>
<td>02</td>
<td>20</td>
<td>84</td>
<td>4.2078</td>
<td>.40839</td>
</tr>
<tr>
<td>Long identification procedure</td>
<td>09</td>
<td>07</td>
<td>04</td>
<td>00</td>
<td>00</td>
<td>20</td>
<td>85</td>
<td>4.250</td>
<td>.40839</td>
</tr>
<tr>
<td>Network limitations and illiquidity of branches</td>
<td>08</td>
<td>09</td>
<td>00</td>
<td>02</td>
<td>00</td>
<td>20</td>
<td>80</td>
<td>4.200</td>
<td>.1678</td>
</tr>
<tr>
<td>Unreliable communication systems</td>
<td>12</td>
<td>02</td>
<td>02</td>
<td>02</td>
<td>02</td>
<td>20</td>
<td>84</td>
<td>4.2078</td>
<td>.40839</td>
</tr>
<tr>
<td>Foreign exchange losses due to lower exchange-rates paid for money sent</td>
<td>02</td>
<td>04</td>
<td>10</td>
<td>02</td>
<td>02</td>
<td>20</td>
<td>44</td>
<td>2.200</td>
<td>.1678</td>
</tr>
</tbody>
</table>

From the research data in table 4.11, the respondents’ opinion is that delays in transferring money to a very large extent (Mean ≥ 4.5 = very high extent, with a significant standard deviation), is a challenge affecting value of MTS in business process management as a money transfer system. Whereas Long queues to send or receive payment, Long identification procedure, Network limitations and illiquidity of branches, Network limitations and illiquidity of branches, Unreliable communication systems, and Foreign exchange losses due to lower exchange rates paid for money sent affect value of MTS in business process management to a high extent (Mean ≥ 3.5 = high extent, with a significant standard deviation). High cost of transactions to a low extent (Mean ≥
1.5 = low extent, with a significant standard deviation) affects value of MTS in business process management.

### 4.9 Electronic money transfer systems and value in business process management

The study sought to establish the extent to which electronic money transfer systems create value in business process management. The rating was done on a five point likert scale: 1=Not at all; 2=less extent; 3=Moderate extent; 4=Large extent; 5=very great extent. The descriptive and factor analysis output are as in table 4.11 below.

#### Table 4.11 Electronic money transfer systems and value in business process management

<table>
<thead>
<tr>
<th>Electronic money transfer systems and value in business process management</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>( \Sigma f )</th>
<th>( \Sigma fx )</th>
<th>( \Sigma fx/\Sigma f )</th>
<th>Std. D</th>
</tr>
</thead>
<tbody>
<tr>
<td>EFT</td>
<td>18</td>
<td>02</td>
<td>00</td>
<td>00</td>
<td>00</td>
<td>20</td>
<td>100</td>
<td>5.0000</td>
<td>.00000</td>
</tr>
<tr>
<td>Telegraphic MTS</td>
<td>12</td>
<td>02</td>
<td>02</td>
<td>02</td>
<td>20</td>
<td>84</td>
<td>4.2078</td>
<td>.40839</td>
<td></td>
</tr>
<tr>
<td>Mail transfers</td>
<td>02</td>
<td>04</td>
<td>10</td>
<td>02</td>
<td>20</td>
<td>44</td>
<td>2.2000</td>
<td>.16780</td>
<td></td>
</tr>
<tr>
<td>Direct debit</td>
<td>09</td>
<td>07</td>
<td>04</td>
<td>00</td>
<td>00</td>
<td>20</td>
<td>85</td>
<td>4.2500</td>
<td>.40839</td>
</tr>
<tr>
<td>Ordinary cheque</td>
<td>08</td>
<td>09</td>
<td>00</td>
<td>02</td>
<td>00</td>
<td>20</td>
<td>80</td>
<td>4.2000</td>
<td>.16780</td>
</tr>
</tbody>
</table>

From the research data in table 4.11, the respondents’ opinion is that EFT to very great extent (Mean \( \geq 4.5 \) = very efficient, with a significant standard deviation) contributes to value creation in business process management as a money transfer system. Whereas telegraphic MTS, direct debit and ordinary cheque were said to contribute to value in business process management to a high extent (Mean \( \geq 3.5 \) = efficient, with a significant standard deviation). Mail transfer was rated to be contributing to and process management to a less extent (Mean \( \geq 1.5 \) = less extent, with a significant standard deviation).
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction.
This chapter discussed the summary of the finding on the value of MTS in business process management. The summary of the finding has been derived from the study finding.

5.1 Summary of the findings
The response rate for the study was 80% with 65% being male while 35% were female. The age bracket for the respondents ranged was 21 to over 45 years with majority of the respondents aged between 21 – 30 years. 35% of the respondents which formed the majority had worked in the banking sector for a period between 6-10 year.

The study revealed that majority (55%) of the respondents preferred efficiency, 7 (35%) preferred speed while 2 (10%) preferred reliability. None of the respondents preferred low cost of money transfer systems while majority 55% of the respondents preferred while minority (2%) preferred reliability. This indicated that managers were willing to bare the cost of money transfer system as well as it was bringing efficiency. Respondents further added that electronic money transfer facilitated them to live in a more relaxed way since they could easily access banking services. They further commented that electronic money transfer systems has substituted traditional banking as well as reduced wastage.

It was also revealed that that to a very high extent banks use EFT (Mean ≥ 4.5 = very high extent, with a significant standard deviation), as a money transfer system. Whereas telegraphic MTS, mail transfers, direct debit and ordinary cheque are used to a high extent (Mean ≥ 3.5 =high extent, with a significant standard deviation) as money transfer system.

In terms of efficiency of Money transfer systems, the study found out that EFT is very efficient (Mean ≥ 4.5 = very efficient, with a significant standard deviation), as a money
transfer system. Whereas telegraphic MTS, t debit and ordinary cheque were said t be efficient (Mean $\geq 3.5 = \text{efficient}$, with a significant standard deviation) as money transfer system. Mail transfer was rated as fairly efficient, in relation to service delivery the study found out that EFT is very efficient in service delivery (Mean $\geq 4.5 = \text{very efficient}$, with a significant standard deviation), as a money transfer system. Whereas telegraphic MTS, t debit and ordinary cheque were said t be efficient in service delivery (Mean $\geq 3.5 = \text{efficient}$, with a significant standard deviation). Mail transfer was rated as fairly efficient in service delivery (Mean $\geq 1.5 = \text{fairly efficient}$, with a significant standard deviation).

Relating to E-commerce the study revealed that to a very often banks perform transactions online $\geq 4.5 = \text{Very high extent}$, with a significant standard deviation) further it was revealed that it is very difficult to perform transactions online (Mean $\geq 4.5 = \text{Very high extent}$, with a significant standard deviation). This was a clear indication of the challenges encountered in using the EFT.

The shortcomings facing electronic money transfer systems were identified as skills gap, poor information communication structure, there were no clear guidelines/policies guiding infrastructure and problems of audit trail issues. It was further revealed delays in transferring money to a very high extent (Mean $\geq 4.5 = \text{very high extent}$, with a significant standard deviation), is a challenge affecting value of MTS in business process management as a money transfer system. Whereas Long queues to send or receive payment, Long identification procedure, Network limitations and illiquidity of branches, Network limitations and illiquidity of branches, Unreliable communication systems, and Foreign exchange losses due to lower exchange-Rates paid for money sent affect value of MTS in business process management to a high extent (Mean $\geq 3.5 = \text{high extent}$, with a significant standard deviation). High cost of transactions to a low extent (Mean $\geq 1.5 = \text{low extent}$, with a significant standard deviation) affects value of MTS in business process management.

The study further found out that EFT is that to very great extent (Mean $\geq 4.5 = \text{very efficient}$, with a significant standard deviation), contributes and value in business process.
management as a money transfer system. Whereas telegraphic MTS, direct debit and ordinary cheque were said to contribute to value in business process management to a high extent (Mean ≥ 3.5 = efficient, with a significant standard deviation). Mail transfer was rated to be contributing to and value in business process management to a less extent (Mean ≥ 1.5 = less extent, with a significant standard deviation).

5.2: Conclusions
The study was carried out to investigate the value of electronic money transfer systems on business process management. The study finding indicated that money transfer systems affected business process management in one way or another. Although there were many advantages attached to money transfer systems, the study found out that various short comings such as cost, long queues, losses as a results of foreign exchange and difficulty dealing with the technology of money transfer systems affected value of business process management.

Many respondents used money transfer systems because of the benefits associated with them. Among the most preferred benefits was efficiency while others that came in where reliability and speed. Most of the respondents were willing to bear any cost of an MTS as it was efficient.

On addition of value to BPM, EFTs and direct debit were found to be of great importance. However cost of MTS and other shortcomings associated with them were found to have significant effect on the value of Business process management.

5.3 Recommendation
Although electronic MTS was found to add some value on business process management, the study found out that the shortcomings of electronic MTS, limited the benefits they could add on the BPM. The researcher therefore recommends an improvement on the efficiency of electronic Money transfer Systems so as to reap the maximum benefits out of them. Since the study was carried out on banking institutions, the researcher recommend a similar study to be carried out on other institutions to establish other practice that valueon business process management.
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APPENDICES

APPENDIX 1: LETTER OF INTRODUCTION

SEPTEMBER 2010

Dear Respondent

**MBA RESEARCH PROJECT**

As the requirement for the degree of Masters of Business Administration of the University of Nairobi, the undersigned, who is a student in the faculty of Commerce at the University, is required to undertake management paper. He intends to undertake a study on the Value of Electronic Funds Transfer in electronic business management in banks with a specific reference to commercial banks.

The questionnaire is designed to gather information on the benefits of using electronic funds transfers in commercial banks.

Your response will be treated with strict confidence and in no circumstance will your name or that of your bank be mentioned in the report. Further confidentiality will be ensured though the necessary coding of the survey findings.

Your cooperation will be highly appreciated.

Yours Faithfully,

______________________                                                              _________________

GETEMBE KEPHA                                                              MR. MAGUTU PETERSON

MBA STUDENT                                                                            SUPERVISOR
APPENDIX 2: RESEARCH QUESTIONNAIRE

INSTRUCTIONS: kindly give an honest and accurate response to the questions in the questionnaire.

RESPONDENT’S PROFILE

Name of bank…………………………………………………………………………………………………………………………

Branch……………………………………………………………………………………………………………………………….

Please tick (√) as appropriate

1. Age

21-30 years              (  )
30-40 years              (  )
40-50 years              (  )
Above 50 years.       (  )

2. Gender

Male ( )                Female ( )

3. Level of education
4. How many years have you worked for this bank in that position?

   Less than 2 years  (  )
   3-5 years          (  )
   6-10 years         (  )
   More than 10 years (  )

5. Total number of years of work experience

   Less than 2 years  (  )
   3-5 years          (  )
   6-10 years         (  )
   More than 10 years (  )

SECTION A: BENEFITS OF ELECTONIC MONEY TRANSFER

What do you prefer important in electronic money transfer

   Efficiency          □
   Speed               □
   Reliability         □
   Low cost            □

How has Electronic Money Transfer impacted your life explain briefly?

________________________________________________________________________

36
What has Electronic Money Transfer substituted in the market (list any two)


What is the impact of Electronic Money Transfer in the economy


SECTION B: FORMS OF ELECTRONIC MONEY TRANSFER

6. Which forms of Electronic Money Transfer Systems do you know of in the market? (List them)


7. Which money transfer systems are you using at the moment? (Please Tick where appropriate)
Credit Transfers  
Bankers Cheques  
Ordinary Cheques  
Direct Debits  
ATM cards

8. How safe do you regard the money transfer system you use? In a scale of 1 to 5 below (please tick where applicable)

Excellent  
Very safe  
Fairly safe  
Safe  
Unsafe

9. How often do you use your preferred form of money transfer system? In a scale of 1 to 5 below (please tick where applicable)

Very often  
often  
Fairly often  
Not often  
Never
10. What is the impact of banking electronically-based products in developing markets?

11. To what extent has your bank used the following money transfer systems?

Use the key as follows:

1-Not at all 2-less extent 3-Moderate extent 4-Large extent 5-very great extent

(a) EFT
(b) Telegraphic MTS
(c) Mail transfers
(d) Direct debit
(e) Ordinary cheque

12. How efficient is the money transfer system you are using?

Use key as follows: 1-Excellent 2-Very Efficient 3-Fairly Efficient 4-Inefficient

(a) EFT
(b) Mail transfers
(c) Direct debit
(d) Ordinary cheque

Others (List and rate)
14. To what extent do you rate service delivery in the electronic money transfer systems below?

Use key as follows: 1-Excellent  2-Very Efficient  3-Fairly Efficient  4-Inefficient

(a) EFT (1) (2) (3) (4)
(b) Mail transfers (1) (2) (3) (4)
(c) Direct debit (1) (2) (3) (4)
(d) Ordinary cheque (1) (2) (3) (4)

15. How many electronic money transfer systems are you using currently?


16. How often do you perform transactions online or use E-commerce?

Very often □

often □

Fairly often □

Not often □

Never □

17. What is the level of difficulty in performing online transactions?

Very difficult □

difficult □

Fairly difficult □
SECTION C: CHALLENGES ON ELECTRONIC MONEY TRANSFER SYSTEM AND BUSINESS PROCESS MANAGEMENT.

19. What do you think are the major shortcomings facing electronic money transfer system? (List them)

--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

20. In your opinion to what extent do you think each one of the challenges above affect value of MTS in business management? Use the key as follows: 1-Not at all   2-less extent 3-Moderate extent 4-Large extent 5- very great extent

<table>
<thead>
<tr>
<th>Challenge</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delays in transferring money</td>
<td></td>
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<tr>
<td>Long queues to send or receive payment</td>
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<tr>
<td>High cost of transactions</td>
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<tr>
<td>Long identification procedure</td>
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<tr>
<td>Network limitations and illiquidity of branches</td>
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<tr>
<td>Unreliable communication systems</td>
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<tr>
<td>Foreign exchange losses due to lower exchange-</td>
<td></td>
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<td></td>
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<tr>
<td>Rates paid for money sent</td>
<td></td>
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</tr>
</tbody>
</table>
money transfer systems has created value in business process management? Use the key as follows: 1-Not at all   2-less extent 3-Moderate extent 4-Large extent 5- very great extent

(a) EFT (1) (2) (3) (4) (5)

(b) Telegraphic MTS (1) (2) (3) (4) (5)

(c) Mail transfers (1) (2) (3) (4) (5)

(d) Direct debit (1) (2) (3) (4) (5)

(e) Ordinary cheque (1) (2) (3) (4) (5)

23. In general do electronic money transfer systems have any impact in business process management?

YES [ ] NO [ ]

(i) If yes specify whether positive or negative

(ii) If no explain why

END
APPENDIX 3: LIST OF COMMERCIAL BANKS IN NAIROBI

<table>
<thead>
<tr>
<th>Bank Name</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>African Banking Corporation,</td>
<td>Nairobi</td>
</tr>
<tr>
<td>Bank of Africa Kenya, Nairobi</td>
<td>Nairobi</td>
</tr>
<tr>
<td>Bank of Baroda, Nairobi</td>
<td>Nairobi</td>
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<tr>
<td>Bank of India, Nairobi</td>
<td>Nairobi</td>
</tr>
<tr>
<td>Barclays Bank of Kenya, Nairobi</td>
<td>Nairobi</td>
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<tr>
<td>CFC Stanbic Bank, Nairobi</td>
<td>Nairobi</td>
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<tr>
<td>Charterhouse Bank Ltd, Nairobi</td>
<td>Nairobi</td>
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<tr>
<td>Chase Bank Ltd, Nairobi</td>
<td>Nairobi</td>
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<tr>
<td>City bank, Nairobi</td>
<td>Nairobi</td>
</tr>
<tr>
<td>City Finance Bank, Nairobi</td>
<td>Nairobi</td>
</tr>
<tr>
<td>Co-operative Bank of Kenya,</td>
<td>Nairobi</td>
</tr>
<tr>
<td>Commercial Bank of Africa,</td>
<td>Nairobi</td>
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<tr>
<td>Consolidated Bank of Kenya Ltd,</td>
<td>Nairobi</td>
</tr>
<tr>
<td>Credit Bank Ltd, Nairobi</td>
<td>Nairobi</td>
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<tr>
<td>Development Bank of Kenya,</td>
<td>Nairobi</td>
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<tr>
<td>Diamond Trust Bank, Nairobi</td>
<td>Nairobi</td>
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<tr>
<td>Dubai Bank Kenya Ltd, Nairobi</td>
<td>Nairobi</td>
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<tr>
<td>Equatorial Commercial Bank Ltd</td>
<td>Nairobi</td>
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<tr>
<td>Equity Bank, Nairobi</td>
<td>Nairobi</td>
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<tr>
<td>Family Bank, Nairobi</td>
<td>Nairobi</td>
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<tr>
<td>Fidelity (Commercial) Bank Ltd,</td>
<td>Nairobi</td>
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<tr>
<td>Fina Bank Ltd, Nairobi</td>
<td>Nairobi</td>
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<tr>
<td>First Community Bank Ltd,</td>
<td>Nairobi</td>
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<tr>
<td>Giro Commercial Bank Ltd,</td>
<td>Nairobi</td>
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<tr>
<td>Gulf African Bank Ltd, Nairobi</td>
<td>Nairobi</td>
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<tr>
<td>Habib Bank A.G. Zurich, Nairobi</td>
<td>Nairobi</td>
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<tr>
<td>Habib Bank Ltd, Nairobi</td>
<td>Nairobi</td>
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<tr>
<td>Housing Finance Co. Ltd, Nairobi</td>
<td>Nairobi</td>
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<tr>
<td>Imperial Bank, Nairobi</td>
<td>Nairobi</td>
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<tr>
<td>Guardian Bank, Nairobi</td>
<td>Nairobi</td>
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<tr>
<td>Eco-bank Kenya, Nairobi</td>
<td>Nairobi</td>
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<tr>
<td>Faulu Kenya Deposit Taking</td>
<td>Nairobi</td>
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<tr>
<td>Microfinance Ltd, Nairobi</td>
<td>Nairobi</td>
</tr>
<tr>
<td>I&amp;M Bank Ltd (former Investment &amp; Mortgages Bank Ltd),</td>
<td>Nairobi</td>
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<tr>
<td>K-Rep Bank Ltd, Nairobi</td>
<td>Nairobi</td>
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<tr>
<td>Kenya Commercial Bank Ltd,</td>
<td>Nairobi</td>
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<tr>
<td>Middle East Bank, Nairobi</td>
<td>Nairobi</td>
</tr>
<tr>
<td>National Bank of Kenya, Nairobi</td>
<td>Nairobi</td>
</tr>
<tr>
<td>National Industrial Credit Bank Ltd (NIB Bank),</td>
<td>Nairobi</td>
</tr>
<tr>
<td>Oriental Commercial Bank Ltd,</td>
<td>Nairobi</td>
</tr>
<tr>
<td>Paramount Universal Bank Ltd,</td>
<td>Nairobi</td>
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<tr>
<td>Prime Bank Ltd, Nairobi</td>
<td>Nairobi</td>
</tr>
<tr>
<td>Southern Credit Banking Corp. Ltd</td>
<td>Nairobi</td>
</tr>
<tr>
<td>Standard Chartered Bank,</td>
<td>Nairobi</td>
</tr>
<tr>
<td>Trans-National Bank Ltd, Nairobi</td>
<td>Nairobi</td>
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<tr>
<td>UBA Kenya Bank Ltd., Nairobi</td>
<td>Nairobi</td>
</tr>
<tr>
<td>Victoria Commercial Bank Ltd,</td>
<td>Nairobi</td>
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</tbody>
</table>