

Challenges and Prospects of Payment Card In Dashen Bank Share Company in Addis Ababa

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Abstract

This study assessed the challenges and prospects of payment card system in Dashen bank S.C. Dashen Bank (DB) was selected since it is the first bank in Ethiopia to provide a fully-fledged payment card services as a principal plus member of visa international and master card. Primary data were collected by using questionnaires and interview and secondary data were collected from different literature, DB manual, DB website and DB annual report. The study employed stratified sampling because the total population were heterogeneous, which were employees of the company and outsiders who used DB VISA card. The study selected a representative sample from cardholders and staff of payment card department using simple random sampling technique, to give equal non-zero chance, and snow ball sampling technique was used for non-staff cardholders of DB because they were not located in a single place. It was difficult to locate the population; therefore, the study addressed the samples by chain referral. Data were analyzed using descriptive statistics and were presented using tables and graphs. Analysis of the data showed that most of the parameters which measured benefits of carding systems were rated as "agreed". It implies that customers are benefitting by using carding system. However, the majority of the respondents agreed that DB payment card services are not accessible even if the majority of the respondents were attracted to the use of carding system due to its easiness and accessibility, The bank should give due attention and follow up the ATMs and POS terminals machines. The respondents reported to face network problem, shortage of money and 'temporary out of services' ATMs while they were transacting. In conclusion, the incapacity of the country's telecom service which is rendered by Ethio telecom is a major challenge for the bank's desire to give a good payment card service and it is causing customer dissatisfaction. This is mainly a cause for the gap between actual service and customers' expectation. Therefore, the bank should undergo through intensive selling and promotion campaign to create deep awareness about the payment card service. The bank should strengthen its collaboration with Ethio-telecom to alleviate problems related with off line service. Otherwise, retaining current payment card users will be hard for the bank. In terms of meeting customer expectation, it is the right time for the bank to modify and rectify service provision problems connected to payment card department.

Introduction

In the history of mankind, several mechanisms of payments are observed ranging from traditional barter system to the modern day electronic payments. The concept of payment card comes into existence in the late 1940s and early 1950s in the United States. It was developed in response to people's high demand for bank loan to purchase household items. Moreover, considering the inconvenience of long process, it takes to follow the traditional way of effecting payments. The first modern card was introduced in the 1950s by dinner club (David 2003, p.3).

There have been some major steps taken by the public owned and private banks in terms of introducing new technologies to satisfy customers and to meet the requirement of the repeatedly expanding domestic and international trade. Payment card offers consumer more security, convenience, and control than any other payment method. Payment card saves merchant's time and money, enables them to attract and retain more customers, and helps them grow their business (Oludimu and Olayinka 2008, p. 10).

As per DB's website, DB is the first bank established in 2006 G.C in Ethiopia to provide a fully-fledged payment card services as a principal plus member of visa international and master card, the world leader card association. The bank is engaged in both card issuing and transaction acquiring business. DB is currently issuing debit cards that could be used to effect payment at merchant outlets and to withdraw cash from ATM machines installed at different location in the country.

As per the Annual Report of DB, 2012 G.C, the card acceptance network has expanded to 105 ATM and 748 point of sale (POS) terminals. The total numbers of cardholders are 203,598.

As per payment card policies and procedures manual, 2007 VISA card is uniquely identified by its embossed feature as it is designed to be used both on electronic terminals and paper based merchant outlets. These cards are usually credit cards linked to a credit facility from the bank. Payment cards can broadly be classified in to two as Debit and Credit. Debit card has a buy now- pay now concept; the cardholder is expected to have sufficient balance in his/her deposit account. A credit card has a buy now- pay later concept; the bank provides a certain level of credit privilege for the cardholder.

Background of the Organization

As per DB's manual, DB was established by the intent of monetary and banking proclamation number 83/1994. The bank came into existence on September 20, 1995 G.C, according to the commercial code of Ethiopia, 1960 E.C and the licensing and supervision of banking proclamation no.84/1994. The first founding members were 11 businessmen and professionals who agreed to combine their financial resources and expertise to form this new private bank with initial capital of 14,900,000.00 Birr (Birr fourteen million and nine hundred thousand).

As per Annual Report of DB, on 2012 G.C, the paid-up capital of the Bank was Birr seven hundred three million seven hundred eighty-nine thousand (703,789,000.00) which was established by 703,789 ordinary shares of par value of Birr 1,000 each.

Review of the Related Literature

Nowadays, banks are increasingly adopting information technology based solutions, for providing better services to their customers at a minimal cost. One way of transforming the traditional banking system is integrating the system with technology, which enable many banks to introduce different payment systems. ATM and other card payment systems are considerably the fruits of technology in the history of modern banking. With this highlight, this paper review various literatures related to the prospects and challenges of payment card system.

Overview of Payment Card in the Banking Industry

The current banking industry uses sophisticated technologies to make the transaction easy for customers. Technology is revolutionizing banking, like everything else, at a rapid pace that is hard to fathom. High-tech applications are not to the banking industry, which has long relied on computers to process checks, run ATMs, store data, transfer funds, process loans and measure risks (Dixon and Nixon 2005, pp. 8-9). Information technology has transformed the business environment all over the world. It has had a major impact on banking sector with the introduction of a number of e-channels like ATMs, ECSs, EFTs, credit cards, internet banking, mobile banking, tele-banking etc. It has bridged the gaps in terms of the reach and coverage of the systems, and enabled better management of banking business (Komal and Vandana 2012, p. 31). For Garuba and Aigbe (2010, p. 134), the wonders of modern technology have made it possible for bank customers to interact with an electronic banking facility such as ATM rather than with a human being for cash transactions. The Willis Report (1997) as cited in Joyawardhena and

Foley (2003) stated that the technology must be reasonably priced relative to alternatives for customers to adopt. Otherwise, the acceptance of the new technology may not be viable from customer's stand point. Customers today are more conscious of the expenses associated with the banking as they are generally better informed about alternative option. The total costs incurred in using Internet Banking must be minimal or competitive (Joy awardhena and Foley 2000; Hasan 2009, p. 3).

Kimball and Gregor (1995) as cited in Greenland and Woodruff (1995) emphasize the importance of developing alternative distribution channels for the banking industry in addition to the focus on cost reduction and improving competitiveness. He also states that the technological advancement shall be seen in terms of financial institution's ability to retain the existing customers and attract new ones (Greenland 1995; Woodruff 1995; Thornton and White 2000 as cited in (Hasan 2009, p. 3). The trend within the banking industry is to replace human tellers with self-service distribution channels; the strength of customer intentions for usage of human tellers within the coming few years support the concept that the branch will still play an instrumental rate in the delivery of services to customers in the future.

Opportunities in e-banking are immense but there is a need to explore them. The nature of banking services may still be the same but the way in which they are being offered has been changed dramatically. Banks must realize the seriousness of challenges ahead and develop a strategy that will enable them to leverage the opportunities presented by e-banking. E-banks need to shift now from product centric to customer centric i.e., to design services according to the needs, dreams and expectations of the customers.

Opportunities and challenges offered by e-banking can only be met fruitfully if banks assemble different dimensions services including banking, broking, insurance, channel delivery, sales culture, back office processes and knowledge management under on corporate name (Komal and Vandana 2012, p.34).

Electronic banking services, whether delivered online or through other mechanisms, have spread quickly in recent years. The impact of e-banking is not limited to industry and the most advanced emerging economies. Even for countries with underdeveloped banking systems, e-banking offers an opportunity to leapfrog. E-banking is much cheaper since it lowers processing costs for providers and searching and switching costs for consumers-providers can market banking services involving smaller transactions to lower-income borrowers even in remote areas (Kamath et.al 2003, p. 91).

Experts in the field agree that the move to the Internet is marking a time during which the industry has seen the biggest and most rapid changes in history, driven by new and even more powerful technologies (Dixon and Nixon 2005, pp. 8-9).

Development of ATM

Currently, the use of ATM becomes one way of smoothening the transaction in the banking industry and considered as a modern life style for many users. A station allows customers to enter their own transactions using cash cards as identification. The ATM interacts with the customer to gather transaction information sends the transaction information to the central computer for validation and processing and dispenses cash to the customer. We assume

that an ATM need not operate independently of the network (Adepoju 2010, p. 3).

The ATM is a terminal provided by bank or other financial institutions which enable the customer to withdraw cash to make a balance enquiry, order a statement, make money transfer, or deposit cash. The ATMs are basically self-service banking terminals and are aimed at providing fast and convenient service to customers. Some of the new generations of ATMs are able to cash a check to the penny, dispense traveler's cheques and postage stamps, and perform stock transfers print discount coupons, issue phone cards, and even sell concert tickets (Rasiah 2010, p.161). The ATM is a machine that dispenses cash to account holders or accepts cash deposits. The transaction is initiated and concluded with the use of a magnetic stripe card or smart card. The ATM card has either a magnetic stripe or a processors (or chip) that allows data or information to be stored or processed in it. ATM is a quick and convenient way to access money in your accounts. It allows bank customers to conduct their banking transactions from almost every other place within or around the banking premise except the banking hall (i.e., with every relative sense of convenience) (Oludimu and Olayinka 2008, pp. 10-11). According to Peter and Sylvia (2008) as cited in (Garuba and Aigbe 2010, p.134), an ATM combines a computer terminal, recordkeeping system, and cash vault in on unit, permitting customers to enter a financial firm's bookkeeping system with either a plastic card containing a Personal Identification Number (PIN) or by punching a special code number into a computer terminal linked to the financial firm's computerized records 24 hours a day.

In line with Peter and Sylvia (2008) in Rasiah (2010, p.161) also states that an ATM (also known as an ATM or Cash Machine), is a computerized

device that provides the customers of a financial institution with the ability to perform financial transactions without the need for a human clerk or bank teller. However, he argues that crime at ATM's has become a nationwide issue that faces not only customers, but also bank operators.

And he recommends the need of security measures at banks, which he believes can play critical and contributory role in preventing attacks on customers. According to him, these measures are of paramount importance when considering vulnerabilities and causations in civil litigations and banks must meet certain standards in order to ensure a safe and secure banking environment for their customers.

Diebold Inco (2002) as cited in European Journal of Economics Finance and Administrative Sciences (2010, p.162) indicated that the ATM is only one of many EFT devices that are vulnerable to fraud attacks. ATMs are generally designed for through the wall operations as well for use in lobbies. The Banker's magazine, September (1983), indicated that the ATMs provided convenient bank access to customers accounts 24 hours a day and seven days a week including public holidays. The lobby machines which are installed in the banking lobbies are only operational during banking hours.

James Essinger (1987) indicated that "ATM machines allow banks' customers who have been issued with a card and a six digit secret number known as a PIN number (Personal Identification Number) to perform their own banking transactions".(European Journal of Economics, Finance and Administrative Sciences-Issue 21 (2010, p.162). The use of ATM has grown rapidly in popularity because of its low bank's transactions costs and customers' convenience which has made it a basic element of today's financial service delivery. For Garuba and Aigbe (2010, p.134) ATM, this has the advantage that it does not have to be paid overtime and never sleeps,

thus being available for use 24 hours a day. Not only does this result in cheaper transactions for the bank, but it also provide more convenience for the customer.

The Benefits and Challenges of ATM

ATMs bank is put at locations other than a bank or its branches due to low costs of installation, which further increase customer convenience. The low cost of ATMs has meant that they have sprung up everywhere. The banks have also deployed the ATMs to other locations such as supermarkets, tertiary institutions, hospitals, hotels and so on. There is no doubt that the introduction of ATMs by banks is to reduce operation costs and to ensure that the customer are better served. But the ATM is not without challenges because there are always people out there who would want to reap where they did not sew. The infrastructures that support the machine are susceptible to abuse, misuse and failure in many ways, resulting in financial loss as a result of fraud, unauthorized use of customers personal identification number and loss of customers confidence. ATM fraud has taken an alarming proportion and most customers are now afraid to use their ATM cards. There is no doubt that there must be collusion between some bank staff and fraudsters for such frauds to succeed. This is one of the reasons customers are fret about the security of on-line transactions. While on the other hand, some customers have not helped matters because of their carelessness of fraudulent nature. All these have given rise to ATM challenges in the banking industry (Garuba and Aigbe 2010, p.135).

The ATM provides ample benefits to users of the service. These benefits can be categorized into two: the benefits to the bank and those to customers.

From the angle of the banks, the ATM has been able to add value in the following areas. Firstly, the problem of endless queues in most banking halls witnessed prior to the introduction of the machine is disappearing. Rather than having to queue up at a bank to withdraw money each time, most customers can get cash across the nearest branch of any bank, slot in their cards and pick whatever amount desired to meet their obligations. Secondly, round the clock cash service- apart from its ability to reduce the traffic in the banking halls, ATM facilitates the rendering due to 24x7 banking services (i.e., 24 hours a day and seven days a week). Thirdly, additional revenue based on the commissions charged on transactions especially when the user is not an account holder with the machine. Cost reduction is the fourth benefits of ATM service, though this may not be easily known but banks are expected to save the cost of hiring teller through the use of ATMs. Last but not least, it helps for mini adverts and notices: for the fear of running into expensive errors, customers are likely to read notices displayed or aired through ATMs than other bill boards. On the customers' side, ATM service benefits include: security and time saving benefits. As to security, a customer faces less risk of robbery and employee theft by having an ATM card since it discourages the practice of carrying cash during long distance travels. This is necessary due to the dangers associated with such practices especially without kind or roads. The second important benefit of ATM service is time saving. And ATM can save customer embarrassment and employees' time. Imagine the type of embarrassment one will suffer in the hands of restaurant's management for forgetting one's cash at home; this can be minimized if not eliminated with an ATM card to one's rescue (Oludimu and Olayinka 2008, pp. 10-12)

In their narrative, Meuter et.al (2000) in Oludimu and Olayinka (2008, p. 10) described ATM as a self-service technology and asserted that customers

benefited from the service in terms of how easy it is to use, the avoidance of service personnel, and the ability to transact whenever they wanted and not necessarily in the bank premises. They also observed that ATM users believed it was a better alternative and could also save them some money. Similarly benefits of ATM include retail outlets, stores, eateries, clubs and taverns. Fenton (2000) as cited in Rasiah (2010) mentioned that over the past three decades consumers have come to depend on and trust the ATM to conveniently meet their banking needs. However, he argued that in recent years, there has been a proliferation of ATM frauds across the globe. Managing the risk associated with ATM fraud as well as diminishing its impact is an important issue that face financial institutions as fraud techniques have become more advanced with increased occurrences.

A false representation of a matter of fact, whether by words or by conduct, by false or misleading allegation or by concealment of that which deceives and is intended to deceive another so that he shall act upon it to his legal inquiry. Anything calculated to deceive, whether by a single act of combination or by supersession of truth or suggestion of what is false whether it be by direct falsehood or innuendo, by speech or silence, word of mouth, look or gesture (Garuba and Aigbe 2010, pp.137-138)

According to Nwankwo (1991), as cited in Garuba and Aigbe fraud occurs when a person of trust and responsibility, in defiance of norms, breaks rules to advance his personal interests at the expense of the public interest which he has been entrusted to guard and promote. It occurs when a person through deceit, trickery or highly intelligent, cunning ways, gains an advantage he could not otherwise have gained through lawful, just or normal processes. Fraud has become a global problem with no financial institution or economic system in the world able to escape the growing complexity of fraudulent

transactions. The fact that remains fraud can only be minimized and not eliminated because it has been with us from creation. Unfortunately, banks are the major target of fraudsters in recent times, nor withstanding the increased use of technology in the banking industry. However, this is because banks trade on commodity (money) which everybody needs. Probably one of the greatest challenges facing the Nigerian banking industry is ATM fraud. ATM has proven especially vulnerable to fraud and identity theft in which sensitive private information about individuals is stolen by unauthorized persons and used to make huge withdrawal.

Nwaze (2009) as cited in Garuba and Aigbe (2010, pp.138) also says that since it is an established fact that no bank fraud succeeds without the active support, collaboration or connivance of staff, it stands to reason that you should understand the kind of staff that are working for you. A good understanding of the private and official dispositions of the generality of staff in your branch or department, their carrier history and records as well as their individual nuances and idiosyncrasies will enable you gauge the risk you run by keeping each of them, and by extension, the operational risk you need to mitigate.

The other challenge regarding the use of ATM service is computer literacy of customers: in case of core banking a very high level of technology is used at both the branch and customer level. The customers may not be familiar with the level of IT. In such cases, the customers may not feel comfortable in handling business transactions with their banks. The banks have to play an important role in directing their customers in this area. In addition to this, customers using off premise ATMs are more vulnerable to robbery. ATM robberies estimated are derived from periodic surveys of banks conducted by banking associations. According to those surveys, there was an estimated one

ATM crime (including robbery) per 3.5 million transactions (Adepoju 2010, p. 4).

Similarly, training of employees remained to be a challenge in the provision of ATM service particularly in the use of technology since they requisite the knowledge and skill. This is more so in case of Indian banks. Therefore, the top management of the banks should take the necessary steps to provide adequate training to their employees in the IT area so that the employees feel more comfortable in handling high technology based transactions. The other challenge related to ATM service is reliability.

Reliability of e-banking and is analyzed on the basis of three parameters i.e., very reliable and unreliable (Komal and Vandana 2012, p. 31). In line with this argument, weak development of ICT infrastructure facilities are also banks from extending the e-banking services, therefore, good infrastructures need to be developed (Komal and Vandana 2012, p. 34).

For Kamth et.al (2003), online-only banking has been less successful than was anticipated, with several online-only banks running into difficulties. Incumbent banks have started to offer banking services electronically (Kamth et.al 2003, p.91).

Garuba and Aigbe (2010) while assessing ATM and its challenges in the Nigerian banking industry argued that ATM which is meant to serve the customers better is now becoming a nightmare for some customers because of fraud perpetuated in their accounts through ATM withdrawals. This unpleasant experience by customers is one of the challenges of the ATM in the Nigerian banking industry. According to them, that is more worrisome is the paucity of accurate statistics of ATM fraud by banks. Hence, they intended to examine critically the ATM challenges and to proffer suggestions

that would enhance better bank-customer relationship in the Nigerian banking industry (Garuba and Aigbe 2010, p.133). Card theft, or the theft of card data, is the primary objective for potential thieves because the card contains all relevant account information needed to access an account.

Furthermore, the regulators play a vital role in the delivery of financial services regardless of the channel used, and are taking a keen interest in e-banking related developments owing to the new opportunities this channel has brought for the financial sector and the new threats to organizations and customers. For this reason, many regulatory bodies have set up consultation committees and are developing new regulation to address e-banking specifically. One problem is that e-banking is evolving very rapidly, and to keep pace with it new regulations are coming into force on almost monthly basis. This in turn has made the task of regulations management even more challenging (Shah and Clarke 2009, p.79).

Types of customers in Using ATM

There are two types of customers: one who is a multi-channel user and the other who still relies on a branch as the anchor channel. The primary challenge is to give consistent service to customers irrespective of the kind of channel they choose to use. The channels broadly cover the primary channels of branch (i.e. teller, platform, ATM) phone banking, (i.e., call centre, interactive voice response unit), and internet channel (i.e. personal computer, browser and wireless). A retail customer selects a bank based on two criteria- convenience and relationship and would continue with a bank if it provides good service. A customer would leave a bank if its services manifested error, long wait, and inconsistent information. For customers who are multi-channel users, consistent information across all channels is the key requirement of modern retails banking (Kamth et.al 2008, p. 91).

Functions of ATM

For Solomon, ATMs include many functions which are not directly related to the management of one's own bank account, such as paying routine bills, fees, and taxes (utilities, phone bills, social security, legal fees, taxes, etc.), printing bank statements, updating passbooks, loading monetary value into stored value cards, purchasing and so on. Christoslav et.al (2003) as cited in Adepoju (2010) asserted that ATM services are highly profitable for banks, and banks aggressively market the use of ATM cards. ATMs that are off bank premises are usually more profitable for banks because they attract a higher volume of non-bank customers, who must pay service fees.

Rasiah, (2010) indicated that ATMs normally dispense two or more denominations of paper money. Customer's advice slips are automatically printed and dispensed except for balance enquires. All deposits have to be accounted for by the bank staff, before they are credited to customers' accounts. Crosland (2010) indicated that aside from revenue generation and cost savings, ATMs are becoming the face of many financial institutions. For many consumers, ATMs are becoming the only interaction they have with their banks. In addition, ATMs are also becoming a competitive mark for many banks. Therefore, it is imperative to ensure that the customer's experience with the ATM is safe and secure. Once access is gained into the system, cash withdrawals may be made up to pre-specified limits and balance inquiries, and bill paying may take place. Mishkin (1998) states that the wonders of modern computer technology have also enabled banks to lower the cost of bank transactions by having the customer interact with an electronic banking facility rather than with a human being (Garuba and Aigbe 2010, p. 134).

Recent global ATM consumer research indicates that one of the most important issues for consumers when using an ATM service was personal safety and security. Financial institutions use the migration of cash transactions to self-service terminals a primary method of increasing branch efficient, the ATM experience must be as safe and accommodating as possible for consumers (Rasiah 2010, p. 161). On the other hand, customer satisfaction remains the basic issue in using ATM service. According to Santos (2003) as cited in Shah and Clarke (2009), automated service quality is defined as the customer's overall evaluation of the excellence of the provision of services through electronic networks such as the internet, ATM, and telephone banking (Shah and Clarke 2009, p. 145). The relationship between trust and perceived usefulness was not clear in the responses received. The lack of such relationship implies that perceiving ATMs to be secured and trustful delivery channels does not affect the customer perception of its usefulness. Such a conclusion may be valid for ATMs, although at this point, there is no proof whether this will also apply for other systems (Kamel and Hassan 2010, p.13).

Installation of ATMs has been particularly rapid in recent years. ATM growth was 9.3 percent per year from 1983 to 1995 but accelerated to an annual pace of 15.5 percent from 1996 to 2002. Much of the acceleration is due to placing ATMs in locations other than bank offices. These off-premise ATMs accounted for only 26 percent of total U.S ATMs in 1994, but now account for 60 percent (Richard et.al 2003, p.1).

According to Garuba and Aigbe (2010), easy installation of ATM and its easy way of functioning avoids the height cost of setting up and operating full-service branch offices. This has led recently to a sharp expansion in limited-service facilities such as ATMs.

Research works related to ATM service quality realized that the ATM is one type of innovation that can mechanically accept deposits, issue withdrawals; transfer funds between accounts, and collect bills. It has altered the relationship between banks and their depositors, as well as the level of service quality of banking service (Davies et al 1996); (Mcandrews 2003); (Komal and Singh 2009). Researchers identified secure and convenient location, adequate number of ATM, user-friendly system, and functionality of ATM plays important role in customers' satisfaction. Joseph and Stone (2003); Mobarek (2007) and Dilijonas et.al (2009) mentioned that adequate number of ATMs, convenient and secure location and user-friendly system, speed, minimum errors, high uptime, cash backup, cost, and service coverage are essential service quality aspects of ATM service.

Research Design and Methodology

Research Design

To attain the desired objectives descriptive research was applied

Sources of Data

This study uses two major sources of information:

- Primary data
- Secondary data

Methods of Data Collection

Primary data were collected by using questionnaire and interview, and secondary data were collected from the company documents, manual reports and magazines.

Population and sample frame

It is assumed that there are above 203,598 card holders in Addis Ababa of whom 100 subjects were selected, applying stratified, simple random and snow ball sampling techniques.

Summary of Major Findings

Based on the data collected, the major findings are summarized as follows:

- The majority of staff and non-staff cardholders were motivated by the carding system's fast and easily accessibility.
- The majority of respondents (66.7% of the non-staff respondents) agreed that payment card service delivered by DB is convenient and safe.
- Most of the respondents (66.3% of non-staff respondents) believed that they benefited by using carding system.
- The majority of the respondents' disagreed that payment card services are not accessible at any time.
- The majority of non-staff respondents (45%) believed DB's Automatic Teller Machines (ATM) runs with shortage of money "Temporary out of service".
- Nearly more than half of non-staff respondents (53.3%) agreed that there was a network problem in DB ATM.
- 36.7% of the non respondents believed that carding system is not exposed to fraudulent act.
- The majority of the respondents agreed that the current cash and purchase limit are not adequate.

- 38.3% of the respondents pointed out that their complaints to payment card services were handled and resolved quickly.
- 60% of the respondents were using POS terminal to transact.
- 36.7% of the respondents transacted using ‘POS’ terminal at super market.
- Almost all of the respondents were willing to use DB debit VISA card.
- The majority of the respondents were satisfied by DB payment card services.
- The majority of the respondents believed that they had adequate skill to perform their work.
- 42.5% of the respondents agreed that DB marketing awareness creation activities were good.
- Almost all respondents agreed that payment card services provided by DB are highly dependent on Ethio-telecom network infrastructures.

As per the research team interview conducted with Customer Service Division Head of payment card department, carding system is claimed to have the following prospects:

- DB has a plan to improve carding system to electronic banking which provides cash deposit and foreign exchange transactions in addition to cash withdrawal through ATMs.
- Mobile banking services which means a customer of DB whether he/she is a cardholder or not, he/she can transfer money by using mobile.
- DB issue country wide debit card due to the National bank’s tight foreign currency regulation. However, on January, 2013 National

bank permits commercial banks to issue credit and international card, and DB is on process to issue both credit and international cards.

Staff and non-staff cardholders' suggestions to improve the performance of the current DB carding system

Sample respondents were given the chance to identify some of the feasible recommendations which could improve the performance of the current DB carding system. Hence, the following recommendations were summarized from the responses given by respondents.

- Create awareness about the importance of carding system through different advertisements and attract the community by different incentive campaign.
- Proper and continuous training should be facilitated to the staff of payment card department.
- Working and discussing with Ethio-telecom is recommended to avoid network infrastructure problem and the overall Ethiopian infrastructure (like telephone lines, road and electrical energy) should be improved.
- There is a need to examine the Automatic Teller Machines balance frequently to avoid shortage of money.
- The current daily cash withdrawal (Birr. 5,000.00) and purchase (Birr. 8,000.00) limit ought to increase.
- There is a need to increase the number of 'ATM' and 'POS' terminals to improve accessibilities.
- There is a need to give due consideration for customers complaints.

Conclusion

The study, as discussed in the earlier section, has come up with major findings regarding the challenges and prospects of carding system in case of DB. Analyzed the findings in terms of their magnitude and possible implication in different aspects, based on the major findings the following conclusions are drawn:

- As the finding of the study clearly showed, the majority of the staff and non-staff respondents had their first degree. From this, the research team concluded that educational status has relation with accepting new technology.
- The majority of the non-staff respondents working at private companies and their experience as a customer of DB were below five years. It can be concluded that DB reached at private companies and didn't assess those government organizations and most customers were attracted to DB because of carding system.
- Most of the staff respondents have below five years experiences at their current position, and they have a direct relation with their payment card service. This leads the research team to conclude that payment card services are expanding and the responses from them were trustworthy.
- Both staff and non-staff respondents were attracted to carding system since the carding system are easy to use and accessible. The research team concludes that there must be different campaign performed by the bank to attract more customers to carding system.
- Most of the parameters which measures benefit of carding systems were rated as "agreed". It implied that customers get benefits by using carding system. However, as the finding of the study disclosed the majority of the respondents agreed that DB payment card ser-

vices are not accessible even if the majority of the respondents were attracted by carding system due to its easiness and accessibility.

- Even if the majority of the respondents are not exposed to fraudulent acts and their complaints are handled and resolved quickly, they spelled out that they faced a network problem and shortage of money ‘temporary out of services’ ATMs while they were transacting. This leads the research team to conclude that most of DB ATMs are faced with network and shortage of money problems.
- The majority of the respondents were using ‘POS’ terminals of super market, and they are willing to transact using ‘POS’ terminals. It is concluded that there are more to do with other ‘POS’ terminals.
- Most of the respondents agreed that they had adequate skill to run the operation at payment card department and they also agreed that DB marketing activities are attracting more customers to carding system
- Almost all of the respondents agreed that DB payment card services are affected by Ethio-telecom network infrastructure. It leads to a conclusion that to improve DB carding system, there is a need to do more with Ethio-telecom.

Recommendation

This section of the study depicts the research team’s recommendation on the challenges and prospects of carding system in case of DB. The study revealed several challenges and weakness related to the payment card services. To enhance customer’s satisfaction and increase the bank’s benefit from carding system, the bank needs to solve the following problems:

- Carding System is a new technology especially for developing countries like Ethiopia, so DB should perform more to create deep awareness about the importance of carding system through advertisements using different media and attract the society by diverse incentive campaigns.
- DB debit VISA card processing machines (ATMs and POS terminals) face network problem and shortage of money. The bank must give due attention and follow up the machines.
- Proper and continuous training should be facilitated to the staff of payment card department which helps them to handle any problems and forward a timely solution to their customers.
- The daily cash and purchase limitation should be improved to meet the cardholders' desire and today's market fluctuation.
- The two main software of DB are highly dependent on Ethio-telecom network infrastructure; therefore, working and discussing with Ethio-telecom is recommended to avoid the network infrastructure problem.

References

- Adepoju, S. (2010). **Challenges of ATM usage and fraud occurrences in Nigeria** , Retrieved from: <http://www.arraydev.com/commerce/jibc/>
- Dashen Bank (2012). **Annual report of Dashen Bank**, A.A, Ethiopia
- Dashen Bank (2010). **Dashen payment card**, Retrieved from: www.dashenbanksc.com/paymentcard/
- David, H. (2003). **Cost saving from electric payments and ATMs in Europe**, Retrieved from:

<http://www.philadelphiafed.org/fiels/wps/2003/wp03-16.pdf>

Dixon, B. and Nixon, M. (2005), **Managing your money and transactions**, Sams, USA

Garuba & Aigbe. (2012). **Automatic teller machines and its challenges in contemporary Nigerian banking industry**, AAU JMS Vol.1, 1, no.1, December 2012. Western Delta University, Oghara

Hasan, K. (2009). **E-Banking in Bangladesh: The Future of banking**, Retrieved; www.wbiconpro.com/602-kamril.pdf

Kamath, K.V. et.al. (2003). **Indian banking sector: Challenges and opportunities**, Retrieved from: www.vikalpa.com/pdf/articles/2003/2003-july-sep-83-99.pdf

Kamel, S & Hassan, M. (2010). **Assessing the introduction of technology acceptance Model**, Idea Group Publishing, USA, Retrieved from: <http://www.idea-group.com>

Komal & Vandna, R. (2012). **Progress of banking in India: Customers' perspectives**, Retrieved from: www.saycocorporativo.com/saycoUK/BIJ/journal/.../Article_3.pdf

Oludimul & Olayinka, M. (2008). **The ATM Dimension in Nigerian banking: Issues, Challenges and prospects**. Retrieved from: Olayinkmoses.blogspot.com/.../the-atm-dimension-in-nigerian-banking...

Rasiah, D. (2010). **ATM risk management and control**, retrieved from: <http://www.eurojournals.com>

Shah, M. & Clarke, S. (2009), **E-Banking management: Issues, solutions and strategies**, Yurchak printing Inc., USA, and Retrieved from:
<http://www.igi-global.com/reference>