

Electronic -Banking in Ethiopia- Practices, Opportunities and Challenges

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Abstract

The paper examines the practices, opportunities and challenges of E-banking services in Ethiopia. Ethiopian banking system is still underdeveloped compared to the rest of the world. In Ethiopia Cash is still the most dominant medium of exchange and electronic payment systems are at an embryonic stage. Commercial Bank of Ethiopia (CBE), despite, being the pioneer in introducing ATM based payment system; it lagged behind private commercial bank, Dashen Bank, which worked aggressively to maintain its lead in electronic payment systems. At the end of June 2009, Dashen bank has installed more than 40 ATMs in its area branches, university compounds, shopping malls, restaurants and hotels and has maintained its leadership in introducing and expanding e-banking in Ethiopia. Low level of infrastructural development, lack of suitable legal and regulatory framework, high rates of illiteracy, frequent power interruption and security issues are the main challenges for developing e-banking in Ethiopia. All banks in Ethiopia are too late to move with technological advancement. In order to promote and develop viable e-banking in Ethiopia, they should clearly chart out the time schedule for their integration and technological advancement.

Introduction

Information technology is considered as the key driver for the changes taking place around the world. Due to a pervasive and steadily growth of information and communication technology, the world banking industry is entering into new phenomena of unprecedented form of competition supported by modern information and communication infrastructure (C.S.V Murthy, 2004). The evolution of e-banking started from the use of Automatic Teller Machines (ATMs) and Finland is the first country in the world to have taken a lead in e-banking (Mishra, R. and J. Kiranmai (2009). Electronic banking has been widely used in developed countries and is rapidly expanding in developing countries. However, the slow diffusion of e-commerce to African countries has been attributed to a number of issues some of which may be unique to the African continent (Darley, W. K, 2001).

Electronic banking (e-banking) is nothing but e-business in banking industry. It may also be referred as internet banking. The computer applications are paramount concern to the banks in today's business environment and Internet has become the major platform for all financial, banking and commercial

transactions in the present scenario (Magembe, B A S and Shemi A P (2002). The paperless banking has become inevitable. Electronic commerce has empowered the financial markets, by virtue of providing information on a finger tip and settling the payments in the same way (C.S.V Murthy, 2004).

The rapidly growing information and communication technology is knocking the front-door of every organization in the world, where Ethiopian banks would never be exceptional. In Ethiopia, however, cash is still the most dominant medium of exchange, and electronic payment systems are at an embryonic stage. In the face of rapid expansion of electronic payment systems throughout the developed and the developing world, Ethiopia's financial sector cannot remain an exception in expanding the use of the system. While E-banking has improved efficiency and convenience, it has also posed several challenges to the regulators and supervisors (Uppal R. and Rimpi Jatana, 2007). Thus this study is conducted with the following objectives.

Objective s of the study

- To describe and differentiate between different e-banking techniques
- To conduct a survey on the existing operating style of banks in Ethiopia.
- To analyze the status of electronic banking in Ethiopia
- To investigate the main challenges and opportunities for e-banking in Ethiopia.
- To recommend appropriate actions to be taken to promote e-banking in Ethiopia.

Methodology: This piece of survey and descriptive study is conducted primarily by using secondary data. Some primary data were collected through on site observation; and interview with customers and branch managers of both private and public banks was held. The secondary sources are the annual and quarterly reports of the banks. News papers and literatures have also been consulted.

Types, Benefits and Features of Electronic payment methods

Types

The traditional payment system with money as a medium of settlement has been replaced by cheques and drafts and further development in the field has been with the advent of electronic cards. The most commonly used electronic cards include ATM cards, Debit cards, Credit cards and Smart cards.

ATM card is a kind of plastic card which allows a cardholder to withdraw money from his bank account through automated teller machine. This card can be used also for other banking services like deposit and transfer to any other account by using the ATM machine.

Credit card is the modern electronic plastic card that may be used repeatedly to borrow money or buy products and services on credit. VISA, Master Card, American Express and Discover are commonly known and widely used credit cards throughout the world. The decision with which card to go depends on the comparison of the features of the specific card (not the brand). The most important features, of course, are Interest rate and Annual fees. (C.S.V Murthy, 2004)

Debit cards are electronic plastic cards directly tied to bank account and the amount of money the cardholder can spend with it is limited to the amount of money he/she has in the bank. It is called debit card because when cardholder uses a debit card, the transaction debits (withdraws) the amount of the transaction from cardholders' account, usually on the same day.

Benefits of e-cards

According to C.S.V Murthy, (2004), E-cards offer a number of benefits to the issuing banks and customers of the bank including:

- Dramatically reduce printing, mailing, and financial handling costs associated with processing transaction.
- Enhance payment security by minimizing theft or loss.
- Reduce undeliverable payments via electronic delivery to the card account.
- Prevent fraud through automated controls
- Increase customer satisfaction and enhance service to constituents.
- Ensure continuity of service to cardholders in emergency or disaster situations
- Improve operational efficiency and profitability of the issuing banks.

Review of Commercial Banking practices in Ethiopia

In Ethiopia nine private and three state owned banks are operating at the end of June 2009. Despite a rapid increase in the number of financial institutions since financial liberalization, the Ethiopian banking system is still underdeveloped compared to the rest of the world. Cash is still the most dominant medium of exchange. The use of checks is mostly limited to government institutions, NGOs and some private businesses. Commercial banks in Ethiopia provide the same services with the same operational style that they used to offer before decades. The common banking functions provided by public and private banks in Ethiopia are deposit mobilization, credit allocation, money transfer and safe custody. Banks in Ethiopia are unable to improve customer service, design flexible and customized products, and differentiate themselves in a

market where product features are easily cloned. Ethiopian banking is unable to come from long way of being sleepy to a high proactive and dynamic entity.

The customers of Ethiopian commercial banks have missed to enjoy with the technological advancement in banking sector which has been entertained elsewhere in Africa and the rest of the world. The modern e-banking methods like ATMs, Debit cards, Credit cards, Tele banking, Internet banking, Mobile banking and others are new to the Ethiopian banking sector. E-banking which refers to the use of modern technology that allows customers to access banking services electronically whether it is to withdraw cash, transfer funds, to pay bills, or to obtain commercial information and advices are not known in Ethiopia.

In Ethiopia it is impossible to withdraw money with out presenting the pass book and money transfer is allowed only in between branches of the same bank. However, from the public and the economy there is a strong need for strengthening linkages among banks in order to allow healthy flow of financial resources among financial institutions and optimize the contributions of the entire financial system to the development processes as whole.

The Ethiopian banking industry as a whole has a net work of 521 branches at the end of the fiscal period ended in June 2008, which is the lowest compared to the size of the country (1.1million square km) and number of population (78 million) and this shows that the number of population being served by a single branch stood at around 149, 712. With such highly scattered branch network and disintegrated working system it is hard to ensure efficient flow of financial resources and optimize the contributions of the entire financial system to the development processes.

All banks in Ethiopia are too late to move with technological advancement and they should clearly chart out the time schedule for their integration and technological advancement. Some of the banks even today do not have information websites which can help them to provide at least the information on financial services offered by them. Every bank customer is highly dissatisfied by the disappointing status of financial development in Ethiopia. Even the time wasted in traveling for search of bank branches and the long waiting time to access the account is really disappointing. This is particularly because of the non-integration of branches of the same bank, i.e. even with in individual banks their branches are not linked to each other and it is a must for the customer to physically visit the branch in which an account has been opened.

E-banking Practice in Ethiopian Commercial banks

Certainly the banking industry in Ethiopia is underdeveloped and therefore, there is an all immediate need to embark on capacity building arrangements and modernize the banking system by employing the state of the art technology being used any where in the world. With a growing number of import-export businesses, and increased international trades and international relations, the current banking system is short of providing efficient and dependable services and therefore all banks operating in Ethiopia should recognize the need

for introducing electronic banking system to satisfy their customers and meet the requirements of rapidly expanding domestic and international trades, and increasing international banking services.

Undeniably the largest state-owned bank, Commercial Bank of Ethiopia, is the pioneer in introducing ATM service for local users in 2001 with its fleet of eight ATMs located in Addis Ababa. Moreover, CBE has had Visa membership since November 14, 2005. However, due to lack of appropriate infrastructure, it failed to reap the fruit of its membership. Despite, being the pioneer in introducing ATM based payment system and acquired Visa membership, CBE lagged behind Dashen Bank, which worked aggressively to maintain its lead in electronic payment systems.

Dashen bank, a forerunner in introducing e-banking in Ethiopia, has installed ATMs at convenient locations for its own cardholders. The Dashen Bank ATM is available 24 hours a day, seven days a week and 365 days a year providing service to Dashen Debit Cardholders and International Visa Cardholders coming to the country. At the end of June 2009, Dashen bank has installed more than 40 ATMs in its area branches, university compounds, shopping malls, restaurants and hotels. Available services on Dashen Bank ATMs are, cash withdrawal, balance Inquiry, mini-statement, fund transfer between accounts attached to a single card and PIN (Personal Identification Number) change.

Currently, the bank gives debit service only for Visa cards. Dashen bank clients can withdraw up to 3,000 birr in cash and can buy goods and services of up to 5,000 birr a day. As of June 30, 2009, Dashen Visa card holders have reached 54,624. Expanding its leadership, Dashen Bank has begun accepting MasterCard in addition to Visa credit cards it began serving over two years ago. Dashen won the membership license from MasterCard in 2008. Moreover, harnessing its leadership with advanced banking technology, Dashen Bank signed an agreement with iVeri, a South African electronic payment technology company, for the introduction of mobile commerce in April 21, 2009. According to the agreement, iVeri Payment Technologies has licensed its Gateway and MiCard e-payment processing solution to Dashen Bank. This would make Dashen Bank the first bank in Ethiopia to acquire e-commerce and mobile merchant transactions. The younger United Bank is the first to introduce tele-banking - including text messages (SMS) - by the end of 2008. Wegagen Bank has signed an agreement with Technology Associates (TA), a Kenyan based IT firm, for the development of the solutions for the payment system and installation of a network of ATMs on December 30, 2008,

The memorandum of understanding signed by three private commercial banks to launch an Automated Teller Machine (ATM) and Point of Sale terminal (POS) network, in February 2009 is welcoming strategy to improve electronic card payment system in Ethiopia. Three private commercial banks - Awash International Bank S.C., Nib International Bank S.C and United Bank S.C. – have agreed in principle to establish an ATM network called Fettan ATM network. If everything goes as planned, Fettan ATM will install over 140 ATM

machines and over 340 POSs across Ethiopia. There will be one ATM at every branch of the consortium banks, all domestic airports serviced by commercial service, shopping complexes and merchants. The agreement is the first significant cooperation between competing banks in Ethiopia, which others should be encouraged to follow as there is no single bank in Ethiopia that can afford to provide extensive geographical coverage and access (Binyam Tamene, 2009).

The first ever electronic banking gateway was signed between Ethiopian Commodity Exchange (ECX) and Dashen Bank and CBE. The electronic banking system being developed with both banks is designed to give a secure electronic data sharing gateway between clients, banks and ECX, facilitating a smooth transaction (Abiy Demilew, 2008)

As the CBE continues to move at a snail's pace in its turnkey solution for Card Based Payment System, Dashen Bank remains so far the sole player in the field of electronic banking since 2006. The agreements signed by other private banks to introduce e-banking are welcoming and further steps towards realizing those agreements should be taken.

Opportunities for E-banking development in Ethiopia

- Opportunities offered by ICT through e-learning programs. The School Net program introduced in Ethiopia to connect more than 500 Schools creates opportunities to citizens to be familiar with ICT applications and increases the awareness of the public (Yayehyirad Kitaw, 2006).
- Late adopter opportunities:
- UNECA, World Bank and UNCTAD are helping developing countries to design national e-strategies, including e-commerce, via National Information and Communication Infrastructure plans (UNCTAD, 2004).
- Commitment of the governments: The Ethiopian government considers ICT as an indispensable tool to alleviate poverty and facilitate a state-transformation aiming an effective and efficient service delivery. It has initiated commendable ICT policy frameworks and several E-Government projects, including the WoredaNET Project (ITU4D, 2006).

E-banking challenges in Ethiopia

Banking in Ethiopia faces numerous challenges to fully adopt and adapt E-Banking applications and seize the opportunities presented by ICT applications in general. Key

Challenges for E-Banking applications are:

- Low level of internet penetration and poorly developed telecommunication infrastructure: Lack of infrastructure for telecommunications, Internet and online payments impede smooth development and improvements in e-commerce in Ethiopia. Most rural areas of the country, where the majority

of small and medium businesses are concentrated, have no Internet facilities and thus are unable to engage in e-commerce activities.

- Lack of suitable legal and regulatory framework for e-commerce and e-payment: Ethiopian current laws do not accommodate electronic contracts and signatures. Ethiopia has not yet enacted legislation that deals with e-commerce concerns including enforceability of the validity of electronic contracts, digital signatures and restrict the use of encryption technologies.
- Political instabilities in neighboring countries: Political and economic instabilities in Somalia, Southern Sudan, and Eritrea are threatening traits that do not provide a very conducive environment for e-banking in Ethiopia. Political instabilities inevitably disturb smooth operations of business and free flow of goods and services
- High rates of illiteracy: Low literacy rate is a serious impediment for the adoption of E-Banking in Ethiopia as it hinders the accessibility of banking services. For citizens to fully enjoy the benefits of E-Banking, they should not only know how to read and write but also possess basic ICT literacy.
- High cost of Internet: The cost of Internet access relative to per capita income is a critical factor. Compared to the developed countries, there are higher costs of entry into the e-commerce market in Ethiopia. These include high start-up investment costs, high costs of computers and telecommunication and licensing requirements
- Absence of financial networks that links different banks (Banks are not yet automated): Most of the banking-transactions currently taking place use credit and debit cards supplied by Visa and MasterCard. For conducting e-banking, the use of credit or debit cards is mandatory thus requiring the need for specialized systems which are not currently available.
- Frequent power interruption: Lack of reliable power supply is a key challenge for smoothly running e-banking in Ethiopia.
- Resistance to changes in technology among customers and staff due to:
 - Lack of awareness on the benefits of new technologies,
 - Fear of risk,
 - Lack of trained personnel in key organizations,
 - Tendency to be content with the existing structures,
 - People may be resistant to new payment mechanisms
- Cyber security issues: Cyber security is a global challenge that requires global and multi-dimensional response with respect to policy, socio-economic, legal and technological aspects. E-banking applications represent a security challenge as they highly depend on critical ICT systems that create vulnerabilities in financial institutions, businesses and potentially harm banking

customers. It is imperative for banks to understand and address security concerns in order to leverage the potentials of ICTs in delivering E-banking applications. In the deployment of E-banking application, attention should be drawn to the prevention of cyber crime (i.e. the use of ICTs by individuals to commit fraud and other crimes against banking transactions) (ITU4D, 2006).

Conclusions and Recommendations

Information technology is considered as the key driver for the changes taking place around the world. Due to a pervasive and steadily growth of information and communication technology, the world banking industry is entering into new phenomena of unprecedented form of competition supported by modern information and communication infrastructure. The Ethiopian banking system is very much behind compared to the rest of the world. Cash is still the most dominant medium of exchange. Even the use of checks is mostly limited to government institutions, NGOs and some private business. ATM, Credit Card and debit card services, and other electronic payment systems are at rudimentary stage. Low level of infrastructural development, lack of suitable legal and regulatory framework, inadequate banking system, high rates of illiteracy, resistance to changes in technology among customers and staff, frequent power interruption and security issues are the main challenges for developing e-banking in Ethiopia. In order to promote and develop viable e-banking in Ethiopia the following recommendations are forwarded:

- Banks should invest in automating their banking system and it is imperative to devise strategies that involve alliances and collaborations between and amongst private and public banks. Such alliances and collaborations would enhance e-banking initiatives in Ethiopia.
- Current laws don't accommodate e-contracts and e-signatures and hence a comprehensive regulatory and legal framework for e-banking and e-commerce should be developed.
- Public awareness on the use of ICT, e-commerce and e-Payment need to be raised.
- Provide incentives for financial institutions to invest rigorously on ICT and use of e-commerce and e-Payment.
- Ongoing efforts by ETC to expand ICT infrastructure should be encouraged.
- The government should consider the liberalization of the telecom industry to enhance efficiency and competition within the sector.
- The government should consider the liberalization of the financial sector for foreign bank entry to enhance the introduction of modern technology in the banking sector.
- Frequent connectivity failure in telephone line and electricity should be drastically improved.

References

- Abiy D., 2008, March, 17), Capital, weekly news paper, Addis Ababa
- Binyam T., (2009, February, 20), Daily Monitor, Addis Ababa
- C.S.V. Murthy 92004) "E-commerce, Concepts, models and Strategies(ed), Himalya Publishing House, Mumbai.
- Darley, W. K., The Internet and Emerging E-commerce: Challenges and Implications for Management in Sub-Saharan Africa Journal of Global Information Technology Management Vol. 4 No. 4 2001
- ITU (2006) "Cyber security guide for developing countries, ITU, Geneva, 2006
- ITU4D (2006), *the National ICT for Development (ICT4D), Five Years Action Plan for Ethiopia [2006-2010]*, Ministry of Capacity Building, Addis Abeba, 2006
- Magembe, S and Shemi A P (2002). Challenges and opportunities for adopting Electronic commerce in a developing country: The Botswana Perspective. IAABD Conference proceedings, Port Elizabeth 2002.
- Mishra R and J. Kiranmai (2009) "E-Banking: A Case of India", The Icfai University Journal of Public Administration, Vol. 5, No. 1, pp. 55-65, 2009.
- UNCTAD (2004), E-commerce and Development Report. New York and Geneva: UNCTAD
- Uppal, R. and Rimpi Jatana, (2007) "E-banking in India – Challenges and opportunities (ed). ISBN: 8177081373, PP. 266.
- Yayehyirad Kitaw (2006) "E-Government in Africa, Prospects, challenges and practices" Annual report of Ethiopian Private Banks (2007/8 and 2008/9).
- Annual and Quarterly report of Commercial bank of Ethiopia (2006/7 and 2007/8)