The Impact of Electronic Banking on Customers’ Satisfaction in Ethiopian Banking Industry (The Case of Customers of Dashen and Wogagen Banks in Gondar City)

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Abstract
This study presents what impact electronic banking has on customer satisfaction in comparing with traditional brick and mortar banking service, its relationship with that of age, occupation and education, its impact on branch visits, the level of customer understanding about e-banking and the opportunities and challenges of e-banking. The paper tried to see all the above among 402 properly filled and returned questionnaires of e-banking customers and interview with four branches of the two commercial banks which have started e-banking service in Gondar city when this study was conducted. The study used tables, percentages, chi-square independency test to see the relationship between demographic characteristics and e-banking, independency t-test to see the visits of branches before and after e-banking by customers is significant or not and regression analysis test has been conducted to explain the variables which determine customers’ satisfaction in e-banking. The results of the study implied that majority of users of e-banking are the young, the educated, salaried and students, business men and women are not actively using the service of e-banking and there is also a relationship between e-banking and demographic characteristics, e-banking currently provided for saving and current accounts holders only, e-banking has improved customer satisfaction, reduced frequency of bank hall for banking service, reduced waiting time for customers, there are customers who don’t know the fee charged for being e-banking users, the bank customers’ satisfaction increased after being e-banking users, enabled customers to control their account movements and there is high opportunity to expand e-banking service in the city.

Keywords: Electronic banking; Customers’ satisfaction; Ethiopian banking industry; Dashen and Wogagen banks; Gondar city

Introduction

Background of the study and the study area
Customer satisfaction is a measure of how products and services supplied by a company meet or surpass customer expectation. Customer satisfaction is also defined as the number of customers, or percentage of total customers, whose reported experience with a firm, its products or its services (ratings) exceeds specified satisfaction goals [1]. And yet another definition of customer satisfaction is it refers to the extent to which customers are happy with the products and/or services provided by a business. Further definition of customer satisfaction is it is a term generally used to measure a customer’s perception of a company’s products and/or services. It’s not a straight forward science however, as customer satisfaction will vary from person to person, depending on a whole host of variables which may be both psychological and physical. The usual measures of customer satisfaction involve a survey with a set of statements using a Likert Technique or scale [2].

Technology is making a tremendous impact upon service companies in general and the financial services sector is no exception. The application of information and communication technology concepts, techniques, policies and implementation strategies to banking services has become a subject of fundamentals importance and concerns to all banks and indeed a prerequisite for local and global competitiveness in banking industry. As a result of this technological improvement business environment in financial sector is extremely dynamic and experience rapid changes and demands banks to serve their customer electronically. The evolution of e-banking started from the use of Automatic Teller Machine (ATM) and Finland is the first country in the world to have taken a lead in e-banking [3]. E-banking has been widely used in developed countries and in developing economies; however, the spread of e-banking is much limited. As suggested by Claessens, Claessner and Klingebiel, developing countries in general have an advantage as they can learn from the experience of advanced economies [4]. Today, almost all banks are adopting electronic banking as a means of enhancing service quality of banking services. They are providing electronic banking to their customers to increase customers’ satisfaction in banking service.

A study by Kumbhar on customer satisfaction towards e-banking services of ICICI bank in Chennai, India, which considered factors affecting on customer’ satisfaction: an empirical investigation of ATMs service and examined that the cost effectiveness of ATM service were core service quality dimension and it was significantly affecting on overall customer satisfaction in ATM service provided by commercial banks [5].

Though there are few researches done about electronic banking in Ethiopia electronic banking is a useful topic to study how to make it applicable using the available Information Communication Technology infrastructures together with the existing financial and legal frameworks so that the quality of services in Ethiopian banking
sector can be enhanced for the future. Moreover Internet banking has been widely studied in developed countries and also to some extent in developing countries but not in Ethiopia. Very few studies have been done in developing countries, and it has not been well investigated in Ethiopia. Customers in Ethiopia are late adopters of the Internet and its applications with regards to electronic banking. It looks that electronic banking is facing difficulties in Ethiopia. Ethiopian banking system is still underdeveloped compared to the rest of the world and electronic payment systems are at an embryonic stage. Among 15 commercial banks in Ethiopia very few of them are engaged with the diffusion of e-banking. Moreover among several services of e-banking, they are limited to ATM service. Creating an electronic banking in Ethiopia is the same as to building a web business for all who are participating in the economy of the country. This leads the country to the electronic business (e-business). The e-business, e-commerce is about using electronic techniques to create opportunities, create new markets, new processes and growth the creation of wealth using electronic mediums [6]. The development of Ethiopian banking system has largely been affected by the dominance of cash. In Ethiopia, cash is a king since the bulk of personal consumption is done through the medium of cash. For being companies in particular this has resulted in problems of cost and delay, arising from the counting bundling, transporting and depositing of large volumes of cash, as well as the risk and inconvenience of dealing with counterfeiting and the treatment of damaged notes.

Though there is no official statistic on the banking services of the country it is estimated that out of a total population of 80 million, less than 10% are getting banking services. Cash remains as the main method of payment especially among individuals. Although the number of bank account holders is increasing since the liberalization of banking industry in the country, the account holders are mainly high-income earners and urban areas. This may due to the concentration of bank branches at the major cities and towns. The payment system is manually handled using papers that moves from banks to National Banks of Ethiopia (NBE). To improve the payment system of the country, the NBE is working on the modernization of the national payment system project that encompassed the following components:

- RTGS (Real Time Gross Settlement)
- ACH (Automatic Clearance House)
- Central/National Switch and
- Central Security deposit (CSD).

Up on the accomplishment of this assignment, there will be a switching company with unique brand that will be connecting all ATM machines and POS terminals from the currently fragmented card alliances. The unification of card alliances will ensure the effective usage of card payment infrastructure, bringing more convenience for card users and providing access to small banks.

From the experience of other countries banking services, electronic payment systems are found to benefit commercial banks by extending bank customer base, reducing operating costs, enhancing customer services and improving banks competitive advantages. For example, some proactive banks have considered cards as the strategic products to broaden their customer base, cut down paper work, invoices and cashier services and build competitive advantage over other banks without card products.

Electronic banking is in an embryonic stage in the country. The current e-banking services being delivered in the country are

- Automatic Teller Machine (ATMs)
- POS (Point of Sale)
- Online book transfer which is not considered as transaction by the NBE.

But there are no mobile transaction banking service and online banking. National Bank of Ethiopia made CORE banking system mandatory since June 2011 in order to facilitate the payment of the banking system and also a mandatory to use electronic banking that is enable banks to provide mobile, internet and card banking services. After the directive has been issued all commercial banks operating in the country are on the way to get the system from different companies.

The other development of e-banking in the country is the establishment of a company called Eth Switch S.C. It is established by all commercial banks currently operating in the country and NBE for national Electronic Fund Transfer (EFT). The Company will enable clients to transact money from a nearby ATM with payment cards of any bank included in the system. It is a company of industry wide established with a registered capital of 80 million birr equally contributed banks operating in the country and the NBE as shareholders.

In Ethiopia there are more than 18 million mobile holders which provide more opportunities for financial institutions to reach the un-banked areas. The numbers of mobile holders are near to fold of the number of bank account holders in the country. The number of ATMs available in the country has reached 194 by the end of 2011, much lower than the number of ATMs operated by commercial banks in Kenya, which stood at 1,979 during the same time. Zemen bank has launched prepaid bank cards which can be used without opening a deposit account at the bank. The cards will have preloaded funds, which can be withdrawn from ATMs or used to make purchases from POS terminal. The prepaid cards will be given to the cardholders with a personal identification number (PIN) to withdraw the cash. The prepaid cards can be used as gift cards or employee salary or expense cards, which can avoid the need to carry around a large amount of cash. The cards can be preloaded with a minimum of 100 Br. And a maximum of 50,000.00 Br. and reloaded after the previous funds have been fully utilized. The bank will take a commission each time a card is loaded.

The Ethiopian banking industry also entering in to this ICT based service to customer in order to bring efficiency in operation by minimizing operating cost thereby increasing customer satisfaction and profitability. The state owned Commercial bank of Ethiopia is pioneer in introducing electronic banking service in the country with eight ATMs machine in 2001 in Addis Ababa and then followed by Dashen Bank. Currently Zemen bank and Wogagen bank are also providing the service. In the specific area in which the study conducted, Gondar city, while this thesis was being done there were 12 commercial banks with 20 branches. But only two commercial banks, Dashen and Wogagen banks, provide electronic banking service using ATM and POS. Dashen bank has started the service since March 2010 and currently having 3 ATMs located one at the branch and two in Gondar University in different campuses and 25 POSs located in different retail shop, supermarket, hotels, etc. Wogagen bank started the service since June 2012 and currently having one ATM located in Taye Belay Hotel and 17 POSs located in different retail shop, supermarket, hotels, etc.

**Statement of the problem**

The introduction of electronic banking in to the banking sector is to bring customer satisfaction there by to enhance the banks’ profitability. Unless this technology bring increase customer satisfaction than the
traditional brick and mortar branches customer may perceive as the same as different branches rather than a new means of delivery channels. Daniel and Mols described that compared to ordinary banking system electronic banking is providing the competitive advantage by lowering the cost and providing best satisfaction of customer needs [7,8]. The old age people are generally shy of use of ATM because of perceived risk of failure, complexity, security, and lack of personalized service [9]. Applegate also described the benefit of e-banking from customer point of view [10]. Conveniences and valuable source to deal with funding because it provides convenience to access account 24/7 that is access not limited to banking operation hours and available around the clock, wherever the customer's located. Abraham described several benefits of electronic banking like transferring money, collecting receivable, paying bill, productivity gains, transaction cost reduction, customer service improvement and at the same time establishing a means to control the overall activities on bank accounts [6]. Study conducted in Nigeria revealed that 47% of customer that used electronic banking products and services are satisfied with the quality of the products and efficiency of the delivery [11]. A study conducted by Philipos L about customer satisfaction and electronic banking service on some selected banks of Ethiopia listed that currently there are some factors which affect customer satisfaction in electronic banking service in selected banks (commercial banks of Ethiopia, Wegagen, bank, and Zemen bank) of Ethiopia [12]. Those are machine out of order, machine out of cash, no printing statements, cards get blocked, frequent breakdown of ATM service, unreliability of ATM service, lack of sufficient technicians in all bank who solve breakdown of ATM machine, lack of sufficient alternative system which substitute ATM service for the customer when temporary problem happen in the machine, lack of convenience of E-bank service, lack of mobile banking service, lack of reliable Tele-banking, lack of credit card service, under-development of technological infrastructure, low level of relevant knowledge creation and innovation, interruption of network, lack of suitable and regulatory frame work for e-commerce, resistance to changes in technology among customers and service providers as result of fear of risk, lack of fair distribution of E-banking service in all over Ethiopia during his pretest of this study. In his study result he found that customer satisfaction in e-banking has significant relationship with convenience, reasonable and fair fees (charges) during transaction, efficient service of e-banking, privacy, security, reliability and responsiveness of employees to solve e-banking service failure and these variable determined 84% customer satisfaction in e-banking and he also recommended for future researcher to investigate the impact of e-banking on customer satisfaction, customer loyalty and customer retention. Belay Deribe and Ebisa Deribe in their study of evaluation of customer satisfaction on bank services in Jimma Commercial bank of Ethiopia found that 25% of their sample responded that there was no any change the benefits they got from e-banking in comparison to ordinary banking and 17% of their sample respondents replied that they got best benefits at best level through e-banking service than ordinary banking [13]. Abenet Yohannes, in his study of key factors that determine adoption of internet banking in Ethiopia 85% the sample respondents of them do agree that internet banking enables them to manage their account better than the ordinary banking, occupation has an impact on the adoption of internet banking, demographic factors have a relationship with the adoption of internet banking and education levels are regarded as an influential factor in consumers, use of internet banking services with high education levels being particularly significant [14]. Empirical evidence implies that customer, patronage for and reaction to a particular product depend on their level of understanding of what the product can do and what they stand to benefit there from Balachandher [15]. The researcher here want to answer the above problems and findings against his findings that is to investigate the impact of e-banking on customer satisfaction e-banking that have been recommended by other researchers for future study, to explain the problem listed by other researchers in the particularly study area, to know customer view about what they feel about over all activities of bank account movement control, to see the relationship of e-banking variables listed by other researchers which determined customer satisfaction in e-banking would look like in the study area and the researcher believes that previously no research has been done in this specific topic in the city to provide empirical evidence of the impact on customer satisfaction of e-banking.

Research questions

- What are the impacts of e-banking on customers' satisfaction in comparison to traditional mortar and brick, banking service?
- Does increment of customers' satisfaction in banking service is related to e-banking?
- Does usage of e-banking has reduced the visits of mortar and brick branches and waiting time for customers and the services are available 24/7?
- Does satisfaction in e-banking services related to age, occupational and educational status in the city?
- What is the level of understanding of customers about e-banking?
- How customers see the challenges and opportunities of e-banking in the city?
- Do customers know that there is a fee charged for getting e-banking services?
- Does e-banking service help customers’ more than ordinary banking in controlling their accounts movements?
- How customers see their relationship with employees after they have started e-banking service?

Research hypothesis

In addition to answering the research questions the study tested the following hypothesis.

H0: There is no relationship between customers’ satisfaction in e-banking than ordinary banking and demographic characteristics

Ha: There is relationship between customers’ satisfaction in e-banking than ordinary banking and demographic characteristics

H0: There is no significant difference between branch visits after e-banking and before e-banking

Ha: There is significant difference between branch visits after e-banking and before e-banking

H0: There is no relation between customers’ satisfaction in e-banking than ordinary banking with customer knowledge about e-banking, availability and improvement of account control movements

Ha: There is relation between customers’ satisfaction in e-banking than ordinary banking with customer knowledge about e-banking, availability and improvement of account control movements

Objective of the study

General objectives: To assess and examine the impact of e-banking on customers' satisfaction in Ethiopian banking industry with
particular emphasis in Gondar city in comparison with the ordinary mortar and brick banking system.

Specific objectives:

- To describe the age, gender, marital status, occupation and educational status of e-banking users in the city specifically.
- To see the relationship of customers satisfaction in e-banking than ordinary banking service with age, occupation and education.
- To assess the level of customer understanding of e-banking customers and does it has reduced cycle time for customers.
- To know customers responses related employees relationship after using e-banking and e-banking impacts on controlling their movement on their accounts.
- To know customers understanding about the fee charged and do they get the service 24/7.
- To see if e-banking service has reduced the visits of branches for customers.
- To list the major challenges and opportunities of e-banking from customers point of view.
- To suggest necessary actions that should be considered by the commercial banks in order to increase the impact of e-banking on customer satisfaction.

Significance of the study

First the study will be useful for Ethiopian commercial banks in order to see the impacts of e-banking on customers’ satisfaction in comparison with the ordinary mortar and brick banking system. Second it helps in understanding what attitude customers’ have towards e-banking and what actions should the banks take in order to benefit from the opportunities and how to overcome the challenges. Third study can be used by other researcher as a reference who wants to study further in this or related areas or to serve as a reading material for anyone who is interested. Last but not least this research will alert bankers tomorrow’s problems today in order to get the intended customers satisfaction as this service can be said it is at infant stage in the country.

Scope and Limitations of the Study

Scope of the study

In assessing the impact of e-banking on customers’ satisfaction customers of two commercial banks that is Dashen and Wogagen bank which were chosen because these banks were the only banks that have started to provide at least one electronic banking payment systems to customers in the city are considered the population study of the. The study will also see whether or not the usage is related to age, educational status and occupation. Last but not least the study will see do customer know about what e-banking means and how they see the challenges and opportunities of e-banking in the city.

Limitations of the study

The basic limitation of this study is that it only considers customers perspective of e-banking and it does not take in to consideration what perspective do all bankers employees have on the technology. Second it does not include bank customers who do not use the current e-banking which would help to compare the attitude of e-banking users and non-users towards e-banking. Third it is also limited to banks customers only that started e-baking service it doesn’t fully cover those which do not start it. Fourth most available data of previous research conducted may not explain specific to our country context of the area. Last but not least the study only covers one city that is Gondar city.

Organization of the study

The study is organized in to five chapters. The first chapter deals with background of the study, statements of the problem, objective of the study, the research questions, and scope and significant of study, limitations of the study, and definitions of terms and organization of the research. The second chapter presents previous related research done on e-banking, and customer satisfaction both which done in the country and outside country (empirical study) and theoretical background of issues related to e-banking. The third chapter explains types and source of data that will be used for the study, sampling techniques used to determine the sample size, method of statistical data analysis tools and collection. The fourth chapter presents the analysis and result of the study that will be arrived using descriptive and inferential statistical tools. The last chapter will present conclusion and recommendation of the study.

Meaning of E-Banking

The concept of electronic banking has been defined in many ways; Daniel defines electronic banking as the delivery of banks’ information and services by banks to customers via different delivery plat forms that can be used with different terminal devices such as personal computers and mobile phone with browser or desktop software, telephone or digital television [7].

According to Abid and Noreen electronic banking defined as any use of information and communication technology and electronic means by a bank to conduct transactions and have interaction with stakeholders [16]. Stan also defined electronic payment as a system of payment whereby transaction takes place electronically without the use of cash. Magembe BAS and Shemi AP defined electronic banking (e-banking) is nothing but e-business in banking industry [17]. E-banking is a generic term for delivery of banking services and products through electronic channels, such as the telephone, the internet, the cell phone, etc. The concept and scope of e-banking is still evolving. It facilitates an effective payment and accounting system thereby enhancing the speed of delivery of banking services considerably [18]. Ovia argues that electronic banking is a product of e-commerce in the field of banking and financial services [19]. In what can be describe as business to consumer domain for balance enquiry request for cheque books recording stop payment instruction balance transfer instruction account opening and other forms of traditional banking service. Banks are also offering payment services on behalf of their customer who shop indifferent e-shops.

Saleh M Nsouli and Andrea Schaechter also defined electronic banking as per the following chart concluding that e-banking is providing banking products and services through electronic delivery channels (Figure 1) [20].

In simple words, e-banking implies provision of banking products and services through electronic delivery channels. Electronic banking has been around for quite some time in the form of automatic teller machines (ATMs) and telephone transactions. In more recent times, it has been transformed by the Internet – a new delivery channel that has facilitated banking transactions for both customers and banks [21].
Types of e-banking

There are many electronic banking delivery channels to provide banking service to customers. Among them ATM, POS, mobile banking and internet banking are the most widely used and discussed below.

**ATM**: Automated Teller Machine (ATM) is a machine where cash withdrawal can be made over the machine without going in to the banking hall. It also sells recharge cards and transfer funds; it can be accessed 24 hours/7 days with account balance enquiry [22].

**Internet banking**: Internet banking allows customers of a financial institution to conduct financial transactions on a secure website operated by the institution, which can be a retail or virtual bank, credit union or society. It may include of any transactions related to online usage. Banks increasingly operate websites through which customers are able not only to inquire about account balances, interest and exchange rates but also to conduct a range of transactions. Unfortunately, data on Internet banking are scarce, and differences in definitions make cross-country comparisons difficult [23].

**POS**: Point of sale (POS) also sometimes referred to as point of purchase (POP) or checkout is the location where a transaction occurs. A ‘checkout’ refers to a POS terminal or more generally to the hardware and software used for checkouts, the equivalent of an electronic cash register. A POS terminal manages the selling process by a salesperson accessible interface. The same system allows the creation and printing of the receipt. Because of the expense involved with a POS system, the eBay guide recommends that if annual revenue exceeds the threshold of $700,000, investment in a POS system will be advantageous. POS systems record sales for business and tax purposes. Illegal software dubbed ‘zappers’ is increasingly used on them to falsify these records with a view to evading the payment of taxes [24].

**Mobile banking**: Mobile banking (also known as M-banking, mbanking) is a term used for performing balance checks, account transactions, payments, credit applications and other banking transactions through a mobile device such as a mobile phone or Personal Digital Assistant (PDA). The earliest mobile banking services were offered over SMS, a service known as SMS banking. Mobile banking is used in many parts of the world with little or no infrastructure, especially remote and rural areas. This aspect of mobile commerce is also popular in countries where most of their population is un-banked. In most of these places, banks can only be found in big cities, and customers have to travel hundreds of miles to the nearest bank. The scope of offered services may include facilities to conduct bank and stock market transactions, to administer accounts and to access customized information [25].

**Customer satisfaction**

According to Hansemark and Albinsson [26], satisfaction is an overall customer attitude towards a service provider, or an emotional reaction to the difference between what customers anticipate and what they receive, regarding the fulfillment of some need, goal or desire. Oliver defined satisfaction as a judgment following a consumption experience—it is the consumer’s judgment that a product provided (or is providing) a pleasurable level of consumption-related fulfilment [27]. Kotler defined satisfaction as a person’s feelings of pleasure or disappointment resulting from comparing a product’s perceived performance (or outcome) in relation to his or her expectations [28]. Satisfaction can be associated with feelings of acceptance, happiness, relief, excitement, and delight. Most research confirms that the confirmation or disconfirmation of pre-consumption expectations is the essential determinant of satisfaction. This means that customers have a certain predicted product performance in mind prior to consumption. During consumption, customers experience the product
performance and compare it to their expected product performance level. Satisfaction judgments are then formed based on this comparison. The resulting judgment is labelled positive disconfirmation if the performance is better than expected, negative disconfirmation if it is worse than expected and simple confirmation if it is as expected. In short, customers evaluate product performance by comparing what they expected with what they believe they received.

Customer satisfaction in e-banking

During the recent years, the development of e-channels has dramatically changed the rules and operation in the banking industry [29]. Aladwani mentioned that while the industry has moved instantly to deploy and offer new banking services via e-channels for customers and in consequence the e-banking services have boomed promptly [30]. Today, several financial institutions are endeavouring to emphasize customer–oriented services. For this sake, it is crucial to implement new banking services in order to develop and keep better relationships with customers. Hence building up competitive predominance almost depends on customers' satisfaction with banking service. It is recognized that banks gaining higher customer satisfaction will have a conspicuous marketing ascendency because the higher customer satisfaction is associated with greater revenues, increased cross-sell ratios, higher customer retention and bigger market share [31].

A study conducted by Athanassopoulous examined the impact of customer satisfaction on customers’ behavioural responses [32]. The findings of the study indicated that when customers assessed customer satisfaction to be high, they either decided to stay with the existing service provider or subdue their negative behavioural intentions. Customer satisfaction is also found to have strong positive association with word-of-mouth communication. The research results confirm prior research and indicate that the customer satisfaction dimensions are not industry specific, but also country specific. The authors suggest developing strategies to enhance behavioural responses to customer satisfaction and prohibit negative ones. Such strategies can include meeting customers desired service levels, preventing service problems from occurring, dealing effectively with dissatisfied customers, solving service problems effectively when they occur and dealing with customer complaints positively.

A study by Kumbhar on customer Satisfaction towards E-banking services of ICICI bank in Chennai [5], India which considered factors affecting on customers’ satisfaction: an empirical investigation of ATMs service and examined that the cost effectiveness of ATM service were core service quality dimension and it was significantly affecting on overall customer satisfaction in ATM service provided by commercial banks. However, result of factor analysis indicates that cost effectiveness, easy to use and security and responsiveness were also influence customer satisfaction. Therefore, banks should concentrate their efforts on these dimensions for cater better ATM service to satisfy their customers.

Hazra attempted to examine a contribution of various dimensions of service quality in customers’ satisfaction. A result of the study indicates that, all 13 variables were found significant and were good predictors of overall satisfaction in e-banking. However, A result of principle component analysis indicates that, perceived value, brand perception, cost effectiveness, easy to use, convenience, problem handling, security/assurance and responsiveness are important factors in customers satisfaction in e-banking it explains 48.30% of variance. Contact facilities, system availability, fulfillment, efficiency and compensation are comparatively less important because these dimensions explain 21.70% of variance in customers’ satisfaction. Responsiveness, easy to use, cost effectiveness and compensation are predictors of brand perception in e-banking and fulfillment, efficiency, security/assurance, responsiveness, convenience, cost effectiveness, problem handling and compensation are predictors of perceived value in e-banking. Therefore, banker and e-banking service designers should think over these dimensions and make possible changes in the e-banking services according to the customers’ expectations and need of the time. It will help to enhance service quality of e-banking and increase the level of customers’ satisfaction in e-banking.

Zeithaml expressed their view customer satisfaction is an ambiguous and abstract concept. Actual manifestation of the state of satisfaction will vary from person to person, product to product and service to service. The state of satisfaction depends on a number of factors which consolidate as psychological, economic and physical factors. The quality of the service is one of the major determinants of customer satisfaction and many researchers and experts mentioned that, service quality can be enhanced by using advanced information and communication technology (ICT) [33].

Kumbhar expressed that today almost all banks are adopting ICT as means to enhance service quality of banking services. They are providing ICT based e-service to their customers which is called as e-banking, internet banking or online banking etc. It brings convenience, customer centricity, enhance service quality and cost effectiveness in the banking and increasing customer satisfaction in banking services. Even know, customers are also evaluating their banks in the light of e-service era [5].

Ahmed described that electronic commerce is now thought to hold the promise of a new commercial revolution by offering an inexpensive and direct way to exchange information and to sell or buy products and services. This revolution in the market place has set in motion a revolution in the banking sector for the provision of a payment system that is compatible with the demands of the electronic marketplace [11].

Bank customers’ taste and desire have begun to raise the stakes of expectation of exceptional services. Customers want to transact their banking transactions at any time and location convenient for their life style. They want to pay their regular household bills, buy and sell stocks and shares [34].

Research conducted in some countries on customers’ perception and reaction to electronic banking products and services and others on customer satisfaction concluded that the few e-banks that face liquidity problems in so called advanced countries as a results of negative perception their customers have of the services. In fact, in some countries, e-banking products and services are not very popular because customers do not consider them as better alternative to traditional banking service [15]. Worst still; findings of few researches reveal that some customers view these e-developments as nothing to talk about. The success of e-banking depends squarely on customer satisfaction of the e-products and e-services. Therefore banks need to make a lot of effort in creating awareness among existing and prospective customers about the benefits of the products and services. Study conducted in Nigeria revealed that 47% of the respondents that use electronic banking products and services are satisfied with the quality of the products and efficiency of the delivery. This calls for concern.

The study also revealed that customers’ enjoying electronic banking services are still not satisfied with the quality and efficiency of the services [11]. Another study conducted in one of Nigerian bank,
Unit bank, has shown that an effective electronic banking system has improved its customer’s relationship and satisfaction [24].

Wise and Ali argued that many banks want to go invest in ATMs to reduced branch cost since customers prefer to use them instead of a branch to transact business [35]. The financial impacts of ATMs are a marginal increase in fee income substantially offset by the cost of significant increases in the number of customer transactions. The value proposition however, is a significant increase in the intangible item; customer satisfaction. The increases translate into improved customer loyalty those results in higher customer retention and growing organization value. Ala et al. study results analysis revealed that there is a variation in the effect of e-banking functionality factors on satisfaction and empirical evidence in this research suggest that e-banking factors have a significant degree of influences on satisfaction and outcomes of satisfaction [36]. In their study they conclude that e-banking positively influences customer satisfaction in Jordan commercial banks. The study also find that influence of e-banking on customer satisfaction would differ according to the personal variable that is gender, age, marital status, educational level, computer literacy, and internet accessibility. Although waiting for service is a fact of life, excessive waiting can impair significant satisfaction and economic impacts. Bank professionals also experience adverse effects of long queues and waiting time including a growing frustration associated with the inability to provide timely and appropriate service delivery. A third study made in Nigerian banks revealed that there is a significant relationship between electronic payment and banking services, direct relation between high level of automation of banking firm services and improvement of services delivery and it is a must to invest in electronic payment system before it can compete effectively in the new age as well as increase customer satisfaction [22].

E-banking can offer speedier, quicker and a dependable service to the customers for which they may be relatively satisfied than that of manual system of banking. E-banking system not only generates latest viable return, it can get its better dealings with customers [37].

Thornton and White have compared seven distribution channels (ATM, EFTPOS, credit card, cheques, human teller, telephone and Internet) with a view to a set of variables affecting their usage. They concluded that customer orientations such as convenience, service technology, change, knowledge, computer, and internet affected the usage of different channels. The usage of ATM, EFTPOS, and telephone increased as customers were more oriented towards change, knowledge, computer and confidence. Polatoglu and Ekin argued that early adapters and heavy users of internet banking services were more satisfied with the service compared to the other customer groups [38]. According to Joseph and Stone, the ability in order to deliver services via technology appears to be correlated with high satisfaction with services deemed most important to customers [39]. Furthermore Moutinho and Smith emphasized that human and technology based delivery channels were greatly linked with the customer perceptions of how these bank services were delivered to them and pointed out that these perceptual outcomes would affect the level of bank customer satisfaction, retention and switching [9]. Before the shift of technology customers were facing a lot of problems like handling a lot of money and transferring of these money, submission of utility bills and waiting in a long queue by banks and mostly deposit holders were unaware of how to get benefits from bank product s and services like bank loans, credit cards, ATM cards etc. So if we go back five to ten years we can see the quite difference between two banking systems.

Zohra and Kashif study of electronic banking in Pakistan revealed that reliability, learning and feedback are very important for the satisfaction of the customers [40]. This study also revealed those customers are not satisfied by the downloading time of website banks in Pakistan. If clients are not happy with the banking products, prices or services offered by a particular bank, they are able to change their banking partner much more easily than in the physical or real bank-client relationship. Abraham described that currently available research findings about adoption of electronic banking are not enough in Ethiopia to the development of electronic services as required [6]. Doll results showed that there is a relation between customer satisfaction in e-banking and reliability, responsiveness, assurance and empathy [41].

Yohannes in his study of key factors that determine adoption of internet banking in Ethiopia findings revealed that demographic factors including age, income, education level and occupation have a relationship with the adoption of internet banking [14]. In his study, the age group 30-39 accounts for 52% of internet banking users, which is relatively high proportion of younger users and based on his data, concluded that age has an impact on the use of internet banking in Ethiopia. In his study findings education levels were regarded as an influential factor in consumers’ use of internet banking services with high education levels being particularly significant. In the study, 81% of internet banking users have a higher education level (diploma or degree), whereas only 34% of non-users have tertiary education level qualification and confirmed that education levels have an impact on the use of internet banking in this study. In the study 80% of the users were employed and concluded that occupation has an impact on the adoption of internet banking. 85% of the study sample agreed that internet banking enables them to manage their account better. 95% of users agree that internet banking allows them to conduct transactions at any time, from any location, with time savings being the end result. Thus internet banking eliminates time and place constraints. The results indicated that internet banking charges are a key factor in motivating the use of internet banking.

Kumbhar in his study has shown that there is a positive relationship between age, education and profession [42]. In the study 82.10% of the respondents were male and the rest were female and age wise 54.70% of the respondents were 35 and below and 9.50% were above 50. The study result also showed that in order to increase customer satisfaction and its further adoption bankers should enhance service quality of alternative banking services. It also mentioned that many researchers from USA, UK, Finland, Malaysia, Taiwan etc. have proved that technology have positive impacts on customers’ satisfaction in banking industry. Ala’ Eddin and Hassan in their study in which 70.40% were male, age wise 71.60% of the users of e-banking were 35 or below and below 45 accounts 7.8% and educational level e-banking customers participated in the study that only 8.40% were high school complete or less and the rest 91.6% were above high school [36]. The study also investigated that fees determined by Jordan banks were an important element to facilitate the using of e-banking which was reflected on the customer satisfaction. Jayaraman in their study of demographic factors in adaption of retail internet banking in Klang valley, Malaysia, found that gender, age, education, occupation and annual income were negatively related to adoption of internet banking [43]. Only race has positive relationship with internet banking usage and gender and annual income exhibit a significant negative relationship with adoption. Paul in his study entitled ATM: The new horizon of e-banking on commercial banks customers in Odisha, Hyderabad, India out of the 300 sample, 61.33% were male and 38.66% were female and most of the respondents (30.66%) belong to 25-35 age groups [44]. Regarding education most of the customers were qualified that is 68.34 of them...
have degree and above. Out of total respondents 28% were students, 24.33% were self-employed, 8.33% were professionals where as 19.33% were belong to the house hold group. In the study he also found reasons why people prefer ATM were time saving, faster transaction, easy to use, easy banking anytime/anywhere and also reasons why customers do not prefer ATM were lack of knowledge, lack of security and ATM Machine problem. Timothy in his study 61.40% of the respondents were male and the rest female, age wise 66% of the respondents were 35 and below and education its base 97.70% were diploma and above it and the study has also shown electronic banking service had significant influence on customers’ satisfaction in Nigeria [23]. Ahmed in his study of the impacts of e-banking on customer satisfaction in Nigeria showed that in contrary to the expectations the visits of customer bank hall per month has increased by 11% after using e-banking, much need to be done in the area of creating awareness about the availability of electronic banking products and service, how they operate and their benefits a head of providing the service, only 47% of customers of e-banking have satisfied with e-banking service and 82% of the respondents of the sample respond consider human teller very important and important [11]. Sampson E found that e-banking services have been able to cut costs, save time and offer services at the expenses of man-hour to the satisfaction of customers [45]. Sultan in his study has found that there exists an indirect relationship between fee charged in e-banking and customer satisfaction and there is direct relationship between the problems faced in e-banking and customer satisfaction. Zohra and Kashif in their study have shown that the users do not understand about what meant mobile banking is and suggested to control their accounts movements more than ordinary banking. Empirical evidence implies that customer’ patronage for and reaction to a particular product depend on their level of understanding of what the product can do and what they stand to benefit there from Balachandher [15].

Philopes in his study of customer satisfaction and e-banking service in some selected banks of Ethiopia found out that customer satisfaction in e-banking has significant relationship with convenience, reasonable and fair fees (charges) during transaction, efficient service of e-banking, privacy, security, reliability and responsiveness of employees to solve e-banking service failure and these variable determined 84% customer satisfaction in e-banking [12]. Hasan et al. in their survey of on relationship between customers, satisfaction and electronic banking features found that easy access, design, transaction speed, security, information content and customer support of electronic banking have meaningful and positive relationship with electronic banking [46]. Fenuga in his study the effect of electronic payment on customer satisfaction in Nigerian banks have also deduced that electronic payments have affected an average increased in the customer service delivery and customer satisfaction [22]. Deribe and Deribe in their study of evaluation of customer satisfaction on bank services in Jimma commercial bank of Ethiopia found that 25% of their sample responded that there was no any change the benefits they got from e-banking in comparison to ordinary banking and 17% of their sample respondents replied that they got best benefits at best level through e-banking banking service than ordinary banking [13].

Gardachew in his study electronic banking in Ethiopia-Practices, opportunities and challenges listed that the main opportunities were opportunities offered by ICT through e-learning programs, late adaptor opportunities, the help given by UNECA, World Bank and UNCTAD and commitments of the government in considering ICT as an indispensable tool to alleviate poverty and the state GTP [47]. Low level of internet penetration and poorly developed telecommunication, lack of suitable legal and regulatory framework, frequent power interruption, absence of financial networks that links different banks, high cost of internet, high rate of illiteracy and political instabilities in neighbouring countries were the challenges he had listed. Tewodros described that Ethiopian banking system is one of the most underdeveloped compared to the rest of the world [48]. In Ethiopia cash is still the most dominant medium of exchange and Electronic-banking is not well known, let alone used for transacting banking issues. Key challenges in technology and e-banking applications are: new technologies, internet and telecommunication, lack of suitable legal and regulatory framework for banking, political instabilities in neighbouring countries, high rates of illiteracy, integration of different financial networks, frequent power interruptions, resistance to changes in technology among customers and staff. Ayana Gemechu in his study the adaption of electronic banking system in Ethiopian banking industry (Barriers and driver) indicated that, the major barriers Ethiopian banking industry faces in the adoption of electronic banking are, security risk, lack of trust, lack of legal and regulatory framework, lack of ICT infrastructure and absence of competition between local and foreign banks [49]. The study also identified perceived ease of use and perceived usefulness as a driver of adopting E-banking system. E-banking system, such as ATM, mobile banking, internet banking and others were not well adopted by Ethiopian banking industry. This is due to low level of ICT infrastructure and lack of legal frame works at NBE, which can initiate banking industry to implement the system. In addition to the above two basic factors affecting adoption of e-banking in Ethiopia, result of the study also shows that security risk and lack of trust on the use of technological adoption are other major barriers for the system. The level of security risk associated with e-banking product or service, such as ATM, internet banking, mobile banking and others, pose different challenges to different banks. Improvements are required to ensure client confidence. Lack of competition among local and foreign banks is also another challenge for the adoption of e-banking in the country.

**Challenges and opportunities of e-banking**

The changing financial landscape has brought with it new challenges for bank management and regulatory and supervisory authorities. The major ones stem from increased cross-border transactions resulting from drastically lower transaction costs and the greater ease of banking activities, and from the reliance on technology to provide banking services with the necessary security [20]. While electronic banking can provide a number of benefits for customers and new business opportunities for banks, it exacerbates traditional banking risks. Even though considerable work has been done in some countries in adapting banking and supervision regulations, continuous vigilance and revisions will be essential as the scope of e-banking increases. In particular, there is still a need to establish greater harmonization and coordination at the international level. Moreover, the ease with which capital can potentially be moved between banks and across borders in an electronic environment creates a greater sensitivity to economic policy management. To understand the impact of e-banking on the conduct of economic policy, policymakers need a solid analytical foundation. Without one, the markets will provide the answer, possibly
at a high economic cost. Further research on policy-related issues in the period ahead is therefore critical [20].

The primary challenge for banks is to provide consistent service to customers irrespective of the kind of channel they use. The more a bank relies on electronic delivery channels, the greater the potential for reputation risks. There are some serious implications of international e-banking. It is a common argument that low transaction costs potentially make it much easier to conduct cross-border banking electronically. For many banks, cross-border operations offer an opportunity to reap economies of scale. But cross-border finance also needs a higher degree of cross-border supervision. Such cooperation may need to extend to similar supervisory rules and disclosure requirements (for efficiency and to avoid regulatory arbitrage) and some harmonizing of legal, accounting and taxation arrangements [21].

Major concerns of electronic transactions are the issues of security and privacy. In the developed countries like France, 3 out of 40 purchases on line and the remaining 37 are reluctant to use on line services and the reason is security and privacy which is the major threat to perform online business. It is not only the duty of industry but also the duty of government assuring people to perform secure electronic transactions [50].

When we see the challenges and opportunities of e-banking in Ethiopia only 20% of the Ethiopian households are connected to IT network and a large number of people are served by one bank branch even compared to other African countries. Un-served market, stable and secure political environment, rapidly growing mobile infrastructure, availability of delivery channels (outlets), safe and sound financial sector are the most important opportunities in Ethiopia.

Low level of financial literacy of the public, level of readiness and capacity of financial institutions to provide service, infrastructure, insufficient cash flow in rural areas limited potential agents, and presence of a few branches in rural areas are some of the challenges facing the country. Legal and related issues, the importance of looking in to the role of newly emerging third party technical providers, reconsidering pre-paid balance requirements and widening the scope of mobile banking service are also critical [51].

Abraham described in Ethiopian, among the known common problems which are related to electronic banking few of them are listed below [6].

- Lack of banking services through the web or other electronic means such as using mobile phone.
- Data and network security and privacy.
- Lack and limitation of government policies, regulations and e-commerce laws, as well as legislation to protect workers and to make the Internet secure.
- Weak telecommunications.
- Broken and slow Internet connections.
- Lack of Internet awareness.

But in recent years the Ethiopian government has a grand plan for the improvement of ICT infrastructures hoping for Ethiopia to leapfrog into the information age.

Banking in Ethiopia faces numerous challenges to fully adopt and adopt e-banking application and seize the opportunities presented by ICT applications in general. Key challenges of 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 of e-commerce in Ethiopia. Lack of suitable legal and regulatory framework for e-commerce and e-payment: Ethiopian current laws don’t accommodate electronic contracts and signature.

Ethiopia has not yet enacted legislation that deals with e-commerce concerns including enforceability of the validity of electronic contracts, digital signatures and restricts the use of encryption technologies. High rate 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 know only how to read and write but also possess basic ICT literacy. High cost of internet: The cost of internet access relatively to per capita income is a critical factor. Compared to the developed countries, there is higher cost of entry in to e-commerce market in Ethiopia. These include high start-up investment costs of computers and telecommunication and licensing requirements. Absences of financial networks that link different banks, 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 areas, tendency to be content with the existing structures and people may be resistance to new payment systems [48].

Research Methodology

Types and sources of data

Primary data and their sources: The sources of the primary data for this study were e-banking customers of Dashen and Wogagen bank and the branch managers of the four branches of these two commercial banks in the city.

Secondary data and their sources: The secondary data were used for supporting the study and to get the findings of other researchers in the area (empirical study). The sources of secondary data were library books, newspapers on business, magazines on business, a bilingual quarterly magazine published by public relation of NBE (Birtu), annual reports of different commercial banks, reports of national bank of Ethiopia, internet sources, reports made by Ethiopian Bankers' Association on establishing national electronic payment system, Fortune News Paper which focus on business reports, and other related materials were used.

Sampling techniques and sample size

The population of this study was e-banking customers of Dashen and Wegagen bank in Gondar city and questionnaires were distributed using simple random sampling techniques and these banks were chosen because in the specific area in which the study conducted, Gondar city, while this thesis was being done there were 12 commercial banks with 20 branches. But only two commercial banks, Dashen and Wogagen banks, provide electronic banking service using ATM and POS. Dashen bank has started the service since March 2010 and currently having 3 ATMs located one at the branch and two in Gondar University in different campuses and 25 POSs located in different retail shop, supermarket, hotels, etc. Wogagen bank started the service since June 2012 and currently having one ATM located in Taye Belay Hotel and 17 POSs located in different retail shop, supermarket, hotels, etc.
total number of e-banking customers of Dashen Bank was 14,000.00 while the total customers of Wegagen bank were 400.00. Taro Yamane (1967) provided simplified formula and table to calculate simple size. As per the formula that is
\[ n = \frac{N}{1 + \frac{Ne^2}{14,400}} \]
the sample size will be \(14,400\) and the researcher assumed 90% response rate and totally distributed 420 questionnaires but 402 were filled completely and used for the study.

**Methods of primary data collection**

To collect the relevant data or information the following methods of data collection were used in the study:

Questionnaire: It was one of the methods of primary data collection that was employed in this study.

Interview: Direct structure interview has been made with Ato Yemane Teka branch manager of Dashen Gondar area branch on 11-03-2013, with Ato Daniel Haliu branch manager of Dashen bank Jantekel area branch on 11-03-2013, Wro. Meseret Mekonnen branch manager of Fasiledes of Wegagen bank on 09-03-2013 and Ato Tadesse Alebel branch manager Gondar branch of Wegagen bank on 01-03-2013 in order to triangulate the sample of the study respondents’ responses.

**Methods of data analysis**

In order to facilitate the interpretation the finding of the study both descriptive and inferential statistic were employed in analyzing this study and were done using SPSS version 20. Tables, percentage, linear regression, chi-square independence test statistic and paired sample t-test were specifically used in the study.

**Data Analysis and Result of the Study**

**Analysis and result**

Demographics of respondents: The descriptive analyses for demographics profile of respondents which indicated out of 402 respondents 30.85% were female and the rest 69.15% were male. In terms of age as Table 1 depicts 94.53% of 402 were respondents whose age was between 18 and 35. From the sample respondents there were no respondents whose age were 51 and above. Marital status of the respondents 73.88% single and 24.88% married and 1.24% separated and there were no divorced and widowed from the sample respondents participated. Educational status results shows that 86.56% of the respondents current educational status is university degree and above. There were no respondents who were illiterate or less than primary education level. Occupational results of the respondents showed that salaried and students were the majority users which account 94.28%, business men/women accounts 1.24% and there were no respondents from pensioner category in the sample respondents under consideration.

The interview responses support the above result obtained from customers that is the educational level the educated, occupationally salaried and employees, age wise the young generation, gender males are the dominant and marital status single are the majority of the users (Table 1).

**Hypothesis testing:** Here the researcher also tests whether there is a relationship between customers’ satisfaction in e-banking than ordinary banking (Ordinal level measurement) and demographic characteristics (Nominal level measurement). Since the two are categorical variables for testing the hypothesis, a statistical test chi square test for independence was employed to test if there is a significant relationship in between the two through the use of SPSS statistical package.

Ha: There is relationship between customers’ satisfaction in e-banking than ordinary banking and demographic characteristics.

H0: There is no relationship between customers’ satisfaction in e-banking than ordinary banking and demographic characteristics.

Since the P-value is <0.05 the null hypothesis is rejected that is there is a relationship between demographic characteristics and satisfaction in e-banking service than ordinary banking service. The result of the chi square independence result shows that there is a relationship between demographic characteristics and customer satisfaction in e-banking than ordinary banking and in addition the

### Table 1: Demographics profile of respondents.

| Demographic          | Frequency | Percent | Cumulative percent |
|----------------------|-----------|---------|--------------------|
| **Gender**           |           |         |                    |
| Female               | 124       | 30.85   | 30.85              |
| Male                 | 278       | 69.15   | 100.00             |
| Total                | 402       | 100.00  |                    |
| **Age**              |           |         |                    |
| 18-24                | 218       | 54.23   | 54.23              |
| 25-35                | 162       | 40.3    | 94.53              |
| 36-50                | 22        | 5.47    | 100.00             |
| 51-60                | 0         | 0.00    | 0.00               |
| **Marital status**   |           |         |                    |
| Single               | 297       | 73.88   | 73.88              |
| Married              | 100       | 25.12   | 98.76              |
| Separated            | 5         | 1.24    | 100                |
| Divorced             | 0         | 0       | 0                  |
| Widowed              | 0         | 0       | 0                  |
| Total                | 402       | 100.00  | 100.00             |
| **Current educational status** | |        |                    |
| Less than primary    | 0         | 0.00    | 0.00               |
| Primary              | 3         | 0.75    | 0.75               |
| High school          | 20        | 4.98    | 5.73               |
| TVET                 | 5         | 1.24    | 6.97               |
| Diploma              | 26        | 6.47    | 13.44              |
| University degree    | 239       | 59.45   | 72.79              |
| Master’s degree      | 101       | 25.12   | 98.01              |
| Doctorate            | 8         | 1.99    | 100.00             |
| Other                | 0         | 0.00    | 0.00               |
| Total                | 402       | 100.00  | 100.00             |
| **Occupation**       |           |         |                    |
| Unemployed           | 18        | 4.48    | 4.48               |
| Student              | 213       | 52.99   | 52.99              |
| Salaried             | 166       | 41.29   | 41.29              |
| Business man/woman   | 5         | 1.24    | 1.24               |
| Pensioner            | 0         | 0.00    | 0.00               |
| Other                | 0         | 0.00    | 0.00               |
| Total                | 402       | 100.00  | 100.00             |

Source: Compiled from questionnaires
results of descriptive statistics results highly support this therefore the statistical hypothesis is rejected and the research hypothesis accepted. This study result supports the study result of Vijay in which 82.10% of respondents were male, 54.70% of the sample respondents age were 35 and below, 90.60% of the participants education level were degree and above occupationally where 36.30% and 4.20% were businessmen and retired respectively and the rest where salaried and students which found that there is relationship between demographics characteristics and customer satisfaction in e-banking [43]. This study result also supports the result of study of Abenet Yohannes the study of key factors that determine the adoption of internet banking in Ethiopia in which his findings revealed that demographic factors have relationship with the adoption of internet banking in Ethiopia and also found that the majority of the users are younger and most of the current users of internet banking in the country are the educated which he described diploma and above diploma holders [14]. In contrary this study result is against the study result of Jayaraman in Klang Valley, Malaysia, about the study of demographic factors in adoption of retail internet banking factors that found that there is no relationship between gender, age, education, occupation and annual income with that of adoption of retail internet banking and only race has relationship [44].

**Types of bank accounts:** From the result of the sample respondents 96.52% of 402 respondents were users of saving accounts and the rest 3.48% were users of current account and from the 96.52% who use saving account all them were ordinary saving holders. There are no sample respondents for checking saving and other types of accounts from respondents. The interview responses support this result of customers that is the interview result found that the bank provide the service for ordinary saving account holders and current account holders and all most majority of the users are ordinary saving account holders and there is no time limit set as pre condition for customers to be e-banking users (Table 3).

**Frequency of branch visits:** The Table 4 depicts those who visits the branch in a month (from once per month up to ten per month) accounts 42.79% before the introduction of e-banking service but those respondents who visits the branch in month after using e-banking service (from once per week up to seven per week) accounts only 36.57%. From this table it can also be seen that only 46.01% of the sample respondents started to use e-banking on account opening and the rest 53.99% was either were customers who were users of the bank before e-banking service or started to use e-banking service after using the ordinary banking. The result of this study is against the findings of Ahmed B who found in contrary to the expectation the visits of customer bank hall per month has increased by 11% after using e-banking service in his study of the impacts of e-banking on customer satisfaction in Nigeria [11].

The interview responses of the branches which is justified by the transaction that had been transacted on ATM or POS would haven transacted on branches said that there is no question that it has reduced the visit of branches for customers (Table 4).

Here the researcher also tests whether the difference of branch visit before and after introduction of e-banking is significant. For testing the hypothesis, a statistical test called independent samples t-test was employed to test the significance difference of branch visit and to compare the means of branch visits before e-banking and branch visits after e-banking through the use of SPSS statistical package.

### Table 2: Chi-square test for independence result.

| Demographic character | Value | df | Asymp. sig. (2 sided) |
|-----------------------|-------|----|----------------------|
| Gender                | 154.405 | 4  | 0.000                |
| Age                   | 1108.86 | 12 | 0.000                |
| Marital status        | 533.432 | 8  | 0.000                |
| Educational status    | 53.716  | 16 | 0.000                |
| Occupation            | 679.169 | 12 | 0.000                |

Source: SPSS analysis result

### Table 3: Types of banking account respondent use.

| Types of account | Frequency | Percent | Cumulative |
|------------------|-----------|---------|------------|
| Saving           | 388       | 96.52   | 96.52      |
| Current          | 14        | 3.48    | 100        |
| Loan             | 0         | 0.00    | 0.00       |
| Other            | 0         | 0.00    | 0.00       |
| Total            | 402       | 100     | 0.00       |

| Types of saving account | Frequency | Percent | Cumulative |
|-------------------------|-----------|---------|------------|
| Checking saving         | 0.00      | 0.00    | 0.00       |
| Ordinary saving         | 388       | 96.52   | 96.52      |
| Other                   | 0         | 0.00    | 0.00       |
| Total                   | 388       | 96.52   | 96.52      |

Source: Compiled from questionnaires

### Table 4: Frequency of branch visit of the customers.

| After the introduction of e-banking | Frequency | Percent | Cumulative |
|-------------------------------------|-----------|---------|------------|
| Once per week                       | 109       | 27.11   | 27.11      |
| Twice per week                      | 41        | 10.20   | 37.31      |
| Three times per week                | 11        | 2.74    | 40.05      |
| Four times per week                 | 8         | 1.99    | 42.04      |
| Ten times per week                  | 3         | 0.75    | 42.79      |
| Twice per month                     | 23        | 5.72    | 48.51      |
| As necessary                        | 12        | 2.99    | 51.50      |
| I don’t know                         | 10        | 2.49    | 53.99      |
| Started e-banking on opening account| 185       | 46.01   | 100.00     |
| Total                               | 402       | 100     | 0.00       |

Source: Compiled from questionnaires
a) Statement of hypothesis

H0: There is no significant difference between the branch visits after e-banking and before e-banking.

Ha: There is significant difference between the branch visits after e-banking and before e-banking.

b) Decision rule

Reject H0 if P value is <0.05 and accept H0 if P value is >0.05 (Table 5).

Since the P value is <0.05 the H0 is rejected that is the difference of branch visit before and after introduction of e-banking is significant at 95% confidence level. This means the result indicates the mean of branch visits before e-banking is statistically significantly different from the mean of branch visits after e-banking.

Using the Cohen's rule that is small effect for 0.1 < r < 0.3
- Medium effect for 0.3 < r < 0.5
- Large effect for r > 0.5

\[ r = \frac{t}{\sqrt{t^2 + df}} \]
\[ r = \frac{(-15.284)}{\sqrt{(-15.284)^2 + 40}} \]

r = 0.92 which implies the introduction of e-banking in the banks have large effect on frequency of branch visits of customers which supports the output of independence sample test.

Satisfaction in e-banking service and e-banking delivery channel:
The response of customers question which compare the satisfaction of customer between ordinary banking and e-banking 95.02% of the 402 respondents said that e-banking has given them more satisfaction than ordinary banking and only 4.98% said they are dissatisfied. The responses for e-banking service delivery channel 96.02% use ATM and 3.98% use both ATM and POS no user of internet banking and mobile banking and other types of delivery channels. The interview responses support the results obtained from customers that is the four branches said that the types of e-banking service delivery channels currently provided by them are ATM and POS and majority of the users use ATM to transact and from the oral feedback they got from customers the technology has given more satisfaction to customers (Table 6).

Waiting time: The result of the sample respondents in the table below the percentage of the respondents who said average waiting time per routine transaction before using the e-banking service 5 minutes or below accounts 48% while the respondents who said average waiting time per routine transaction after using e-banking 5 minutes or below accounts 76.64%. The result support the finding of Sampson that said the types of e-banking service delivery channels currently provided by them are ATM and POS and majority of the users use ATM to transact and from the oral feedback they got from customers the technology has given more satisfaction to customers (Table 7) [46].

Fee charged: Out of 402 respondents 250 or 62.19% respondents said yes that means they know the fee charged for being e-banking service and the rest 29.60% said that the did not pay any fee for being e-banking users and 8.21% they don’t know whether they pay fee or not for being e-banking users the interview responses obtained from the banks there is a fee charged for being e-banking user which is for ATM 0.25 cents/100.00 birr and 0.50 cents/100 birr for POS users (Table 8).

Customers’ responses about their perspective on e-banking:
This part presents the result of 10 questions asked for customers to express their degree of agreement and disagreement for the questions summarized in the table below. Customers’ responses about their satisfaction in e-banking service and e-banking delivery channel:

The result of the sample respondents in the table below the percentage of the respondents who said average waiting time per routine transaction before using the e-banking service 5 minutes or below accounts 48% while the respondents who said average waiting time per routine transaction after using e-banking 5 minutes or below accounts 76.64%. The result support the finding of Sampson that said the types of e-banking service delivery channels currently provided by them are ATM and POS and majority of the users use ATM to transact and from the oral feedback they got from customers the technology has given more satisfaction to customers (Table 7) [46].

| Mean | Std. deviation | Std. error mean | t | df | Sig. (2-tailed) |
|------|----------------|-----------------|----|----|-----------------|
| 2.2927 | 1.55312 | 0.24256 | 18.956 | -15.284 | 40 | .000 |
| 6.0000 | 0.00000 | 0.00000 | 0.000 | 0.000 | 0.000 |

Source: Compiled from SPSS result

Table 5: Independent samples test and group statistics.

| More satisfaction after using e-banking | Frequency | Percent | Cumulative percent |
|---------------------------------------|-----------|---------|--------------------|
| Yes | 382 | 95.02 | 95.02 |
| No | 20 | 4.98 | 100.00 |
| Total | 402 | 100.00 | |

Source: Compiled from questionnaires

Table 6: Satisfaction and e-banking delivery channel.

| Average time per routine transaction before e-banking | Frequency | Percent | Cumulative percent |
|------------------------------------------------------|-----------|---------|--------------------|
| I don't know | 51 | 12.69 | 12.69 |
| above one hour | 110 | 27.36 | 40.05 |
| 31 min/1 hour | 158 | 39.3 | 79.35 |
| 16-30 minutes | 41 | 10.20 | 89.55 |
| 15 minutes | 8 | 1.99 | 91.54 |
| 6-10 minutes | 16 | 3.98 | 95.52 |
| 1-5 minutes | 17 | 4.23 | 99.75 |
| within seconds | 1 | 0.25 | 100.00 |
| Total | 402 | 100.00 | |

Source: Compiled from questionnaires

Table 7: Waiting time.

### Table 5: Independent samples test and group statistics.

| Mean | Std. deviation | Std. error mean | t | df | Sig. (2-tailed) |
|------|----------------|-----------------|----|----|-----------------|
| 2.2927 | 1.55312 | 0.24256 | 18.956 | -15.284 | 40 | .000 |
| 6.0000 | 0.00000 | 0.00000 | 0.000 | 0.000 | 0.000 |

Source: Compiled from SPSS result

### Table 6: Satisfaction and e-banking delivery channel.

| Average time per routine transaction before e-banking | Frequency | Percent | Cumulative percent |
|------------------------------------------------------|-----------|---------|--------------------|
| I don't know | 51 | 12.69 | 12.69 |
| above one hour | 110 | 27.36 | 40.05 |
| 31 min/1 hour | 158 | 39.3 | 79.35 |
| 16-30 minutes | 41 | 10.20 | 89.55 |
| 15 minutes | 8 | 1.99 | 91.54 |
| 6-10 minutes | 16 | 3.98 | 95.52 |
| 1-5 minutes | 17 | 4.23 | 99.75 |
| within seconds | 1 | 0.25 | 100.00 |
| Total | 402 | 100.00 | |

Source: Compiled from questionnaires

### Table 7: Waiting time.
knowledge of e-banking 62.19% of 402 respondents strongly agree that means they know what e-banking means. There were no sample respondents who strongly disagree that they do not know what e-banking means and 0.73% said they disagree and the study results improve the result of the study of Salaman and Kashif about knowledge of users of e-banking in Pakistan bank customers and found that customers knowledge what meant e-banking is poor but the result of this study shows that it is against the study findings of Zohar and Kashif in which they found the users of mobile banking, one elements of e-banking, do not understand what mobile banking is though they are users of the service. From the interview responses obtained the banks have not provided any official practical training for customers to increase the awareness of customers about e-banking and said since the bank provide brief description during the card taking process the believe that at least customers know the basics of e-banking.

From the result of the response as it can be seen from the table below those who said they do strongly agree that there is a direct relationship between their banking service satisfaction and electronic banking and electronic banking service providing service up to their expectation accounts 66.42% and 70.15% respectively. The result can be supported by the findings of the study of Kumbhar which revealed the enhancing service quality of e-banking will increase customers’ satisfaction and he also supported this by mentioning the findings of many researchers from USA, UK, Finland, Malaysia, Taiwan proved that technology have a direct positive relationship with customers’ satisfaction in banking industry and also the study of Hasan in their survey of relationship between customers’ satisfaction and electronic banking features found that easy access, design, transaction speed of electronic banking have direct relationship with customers’ satisfaction in e-banking [43,47].

The table below shows that availability of the service 24/7 in which 53.23% said they strongly agree or agree that they do get the service 24 hours a day and seven days a week and those who responded that they disagree and strongly disagree that is they do not get the service 24/7 account 22.89% and 11.44 respectively. The interview responses about the availability that is 24/7 the two branches of Dashen branches said except power failure, network problems and some technical problems provide the service 24/7 and the two Wegagen branches said that since they have stand by generator for the ATM said that they are providing the service as much as possible.

The level customers’ satisfaction improvement after using e-banking service accounts 90.55% for strongly agree or agree and those who said disagree and strongly disagree account 2.98% which reveals from the sample respondents most of them said there is an increase in their satisfaction in e-banking than ordinary banking. The result of the study is against the findings of Ahmed who found only 47% of Nigerian banks e-banking customers responded the improvement of their satisfaction in e-banking than ordinary banking [11]. This study also disproves the findings of Deribe and Deribe in their study of the evaluation of customer satisfaction on bank services in Jimma Commercial bank of Ethiopia found that 25% of the sample respondents that there is no change the satisfaction and the benefits they got from e-banking and ordinary banking and only 17% of them said they got best benefits and satisfaction through e-banking service than ordinary banking [13]. But the findings of this study is supported by the findings of Fenuga from his study the effects of electronic payment on customers satisfaction in Nigerian banks customers that electronic payment system have affected customer satisfaction increment by large than ordinary banking [22].

Concerning the relationship of customers with employees before and after the introduction of e-banking 51% said that they strongly disagree or disagree that e-banking has reduced their relationship with the bank employees. These findings disprove the findings of Salaman and Kashif which they found that e-banking totally reduced the interaction with bank employees.

Comparison of e-banking and employees about their service to customers those who said strongly agree or agree accounts 67.42% that is e-banking is doing for them everything what employees do for them but this disprove the findings of Ahmed which found 82% of the respondents of the sample study still consider human teller very important and important than e-banking [11]. The interview responses about this the four branches said that since the types of the service provided by e-banking is limited said that the technology is not providing same as what employees do.

Concerning improvement of controlling their account movements 75.87% of the sample respondents said that they strongly agree or agree that e-banking has improved in controlling their account movements after being e-banking customers which is supported by the result of the study of Salaman and Kashif.

The interview responses support this that is the four branches said that since customers could see their balance now and then without any fear said that e-banking is better in controlling their account movements.

Concerning the opportunity exists in expanding e-banking service in the city 48.61% of the respondent responded that they either strongly agree or agree that there is high opportunities in expanding e-banking service in the city and 38.80% the sample respondent said that they strongly agree or agree that challenge for electronic banking is high in expanding e-banking service in the city.

The interview responses about the opportunity of e-banking by the four branches said that there is high opportunity in expanding the technology the main once are the existence of large number of users, the growth of the city from time to time and the eagerness of customers to use the technology and the challenge is not high and the main once would be power failure, getting secured place in keeping ATM and network failure (Table 9).

The researcher here also test whether e-banking has impact on customers’ satisfaction where e-banking variables are considered independent and customer satisfaction as dependent variables. The independent variables are knowledge of customers about e-banking (I1), 24/7 availability (I2) and improvement of controlling account movement (I4). For testing the hypothesis, a statistical test called liner regression analysis test was employed through the use of SPSS statistical package.

a) Statement of hypothesis

H0: There is no relation between customers’ satisfaction in

| Fee charged | Frequency | Percent | Valid percent | Cumulative percent |
|-------------|-----------|---------|---------------|--------------------|
| Do you pay for using e-banking |
| Yes | 250 | 62.19 | 62.19 | 62.19 |
| No | 119 | 29.6 | 29.6 | 91.79 |
| I don't know | 33 | 8.21 | 8.21 | 100 |
| Total | 402 | 100 | 100 | |

Source: Compiled from questionnaires

Table 8: Fee charged.
e-banking than ordinary banking with customer knowledge about e-banking, availability and improvement of account movements.  

Ha: There is relation between customers’ satisfaction in e-banking than ordinary banking with customer knowledge about e-banking, availability and improvement of account movements.

b) Dependent variable (D1): Customers’ satisfaction.

c) Independent variables (I4, I1 and I2): Customers’ knowledge about e-banking, availability of e-banking service 24/7 and customers’ account movement control (Tables 10-12).

From the above model summery $R = 0.915$ which shows there is a positive relationship (direct effect) between customer satisfaction in e-banking than ordinary banking with knowledge of e-banking, availability (24/7) and improvement customer in controlling their account. $R^2$ implies that the above three variables contributed for customer satisfaction 83.70% where the rest 16.30% explained by other variables. F is 682.105 at a significance level of 0.000 which implies the rejection of $H_0$ which means there is a relationship between customer satisfaction and availability (24/7), knowledge of customers about e-banking and improvement of customers in controlling their account movements.

**Interview responses**

The interview responses of the four branches concerning age, gender, occupational, marital status and others are presented here to triangulate with customers responses. Dashen Gondar area branch answered that concerning gender and marital status the branch have no any recorded data or observation to express which category dominate. But concerning the age status of the users of e-banking from actual observation youth is the majority of the users and to describe in number age that ranges from 18 up to 30 are dominant. About educational status the branch replied that since most of their customers are Gondar University employees, Israel embassy employees and Gondar university students the branch guessed that 90% of them are diploma and above diploma holders. In occupational category since majority of their users are Gondar university employees, Israel embassy employees and Gondar university students most of them can be said students and salaried and confirmed that business men are rare to use this technology. Dashen Jantekel area branch replied that in age status of the users majority of them are youth and the status of the gender though there is no much gap as the branch believes it could be said

**Table 9:** Customers’ responses about their perspective on e-banking.

|   | Strongly agree | agree | Undecided | Disagree | Strongly disagree | Total |
|---|---|---|---|---|---|---|
| I do understand what meant by electronic banking | 62.19 | 33.58 | 3.48 | 0.75 | 0 | 100.00 |
| There is a direct relationship between my banking service satisfaction and electronic banking service satisfaction and electronic banking service | 66.42 | 30.09 | 1.99 | 0.75 | 0.75 | 100.00 |
| Electronic banking is providing banking service satisfaction up to my expectation | 70.15 | 17.41 | 4.48 | 5.97 | 1.99 | 100.00 |
| I do get the service of electronic banking 24 hours per day and 7 days a week | 33.58 | 19.65 | 12.44 | 22.89 | 11.44 | 100.00 |
| The level of satisfaction, I am getting from electronic banking service is higher than ordinary banking service | 53.73 | 36.82 | 6.47 | 1.49 | 1.49 | 100.00 |
| Using electronic banking avoid to relationship with bank employees | 9.44 | 10.95 | 28.61 | 30.35 | 20.65 | 100.00 |
| Electronic banking can do everything for me as employees do | 34.83 | 32.59 | 13.93 | 11.94 | 6.71 | 100.00 |
| Controlling of my bank account has improved after using electronic banking | 40.05 | 35.82 | 12.44 | 8.71 | 2.98 | 100.00 |
| The opportunities for electronic banking service expansion in the city is high | 19.65 | 19.15 | 19.15 | 27.87 | 14.18 | 100.00 |
| The challenges for electronic banking expansion in the city is high | 26.62 | 21.39 | 24.88 | 13.18 | 13.93 | 100.00 |

Source: Compiled from questionnaires

**Table 10:** Model summary.

|   | R | R square | Adjusted R square | Std. error of the estimates |
|---|---|---|---|---|
| 1 | 0.915 | 0.837 | 0.836 | 0.32154 |

Predictors: (Constant), I4, I1, I2

**Table 11:** ANOVA.

|   | Unstandardized coefficients | Standardized coefficients | t | Sig.(a) | Collinearity |
|---|---|---|---|---|---|
| (Constant) | -0.045 | 0.025 | -1.794 | 0.074 | 1.000 |
| I4 | 0.302 | 0.036 | 0.407 | 8.452 | 0.000 |
| I1 | 0.603 | 0.053 | 0.456 | 11.377 | 0.000 |
| I2 | 0.054 | 0.028 | 0.097 | 1.892 | 0.059 |

*Dependent variable D1
The interview responses of the four branches concerning account holders type that is for which types of bank account holders the banks provide the service of e-banking and the researcher used this to triangulate with customers responses. Gondar Dashen area branch replied that concerning account type ordinary saving account holders are the main users and as a general currently they are not providing e-banking service for time deposit, checking saving account holders, over draft account holders and loan account holders. Gondar Jantekel area branch replied that all most all users are ordinary saving account holders and though the bank provides e-banking service to current account holders the branch said that the majority of them due to the limits on one time withdrawal they are not willing to use but they do have few customers but the bank could not provide the service for over draft account holders. Fasilades branch replied that the bank provides the service for ordinary saving account and current account holders but said that majority of the users is saving account holders. Wegagen Gondar branch responded that currently majority of the users are saving account holders but in the future the branch expects that current account holders would be business men if the bank increase limit on one time withdrawal.

The interview responses of the four branches concerning if there is any time limit set as a pre-condition to be e-banking user are presented here to triangulates with customers responses. Dashen Gondar area branch replied that there is no any time limit set by the bank to get the service and whenever a customer opens either ordinary saving account or current account the branch’s employees give brief description about all the benefits of the technology and related issues like security issue, charges maximum amount of withdrawal per a transaction and then if the customer become willing the bank provides standardized form and contractual agreement to be filled and signed by the customer and after checking the form is filled and signed properly by the customer the branch transmit it to head office. Therefore in general in the branch if a customer wants the service it could be given immediately and the only time a customer wait to use the service is one up to two weeks until the personalized electronic card is received from Addis Abeba. Gondar Jantekel area replied that except the time it takes for preparing the card any one can be the users of the service immediately. The two Wegagen branches said that there is no any time limit set as pre condition to be the user of the service except 3-4 days in personalizing the electronic card.

The interview responses of the four branches concerning types of e-banking delivery channels they provide are presented here to triangulate with customers responses. Gondar area Dashen bank replied that most of their customers use ATM and there were rare cases of POS in comparison with ATM and Jantekel area Dashen bank branch replied that from the branch’s experience around 98% of them use ATM and 2% use POS and from this 2% of POS users 50% are foreigners. The two branches of Wegagen said that all most all customers use ATM but their bank has been working in creating awareness among customers that customers develop the habit of paying payments through POS.

The interview responses of the four branches about comparison of customers’ satisfaction in e-banking and ordinary banking and frequency of branch visits before and after e-banking are presented here to triangulate with customers’ responses. Gondar area Dashen bank branch replied that there is no question that the technology has given more satisfaction as customer get it 24/7, standardized service, quicker and near to their residence. The branch also said that e-banking totally reduced the visit of branch and said that if ATM fails for one hour due to various reasons the branch would be full of people. Jantekel area Dashen branch responded that it has reduced the visits of the branch which could be seen from the transaction on ATM and even some customers have been even totally do not visit the bank they take the personalized electronic card and about satisfaction it could not be compared as e-banking gives more satisfaction than ordinary banking from oral feedback of customers it got. Fasilandes Wegagen branch said that concerning satisfaction from the oral feedback of customers it depends on customer that is those people who are specifically older do not like the technology and for the young it gives them more satisfaction. About the frequency of the branch visits it has reduced and that the very purpose of the technology is to avoid branch visits of customers now and then. Gondar Wegagen branch replied that from oral customers’ responses it has increased customer satisfaction and for the visits of the branch since this technology is as a substitute of building branch there is no question for the reduction of branch visit otherwise those transaction transacted on ATM would have been taken in the branch.

The interview responses of the four branches issue related to fee charged for being e-banking user are presented here to triangulate with customers responses. Dashen Gondar area branch responded that there is a payment charged from customers for being e-banking users that is POS users 0.50 per birr 100.00 and for ATM users 0.25 per 100.00 birr. Gondar Dashen Jantekel area branch responded that there is a payment the same as described above but there is a great problem that most of the customers do not like to read the contractual agreement whenever they sign to be e-banking users that describe the rate of e-banking charge and because of this there were cases that customer complain when they see the debit amount on their passbook. The two Wegagen branches responded that the rate payment is the same as Dashen bank that is for ATM 0.25 for every 100.00 birr and for POS 0.50 birr for every 100.00.

The interview responses of the four branches concerning official training given for customers about the service of e-banking and the level of awareness of customers about e-banking are presented here to triangulate with customers responses. Gondar area Dashen bank responded that the branch has not given any official training and it is difficult for the branch to say the level of awareness of customer about e-banking. Dashen Jantekel area branch replied that the bank has not given any official training for customers but since the bank give brief orientation whenever a customer take the card said that it is possible to say that customers know at least the basic of e-banking. Wegagen Fasilades branch responded that unless they are aware of it they could not have taken the card but concerning the training said that until now the bank has not provided official training. Wegagen Gondar branch
responded that customers know what electronic banking means since the branch provides to customers about e-banking whenever they fill the form and sign the contractual agreement to take the card and whenever they take the card but has not given any official training for customers.

The interview responses of the four branches concerning whether the service is available 24/7 and does e-banking gives service like employee provide to customers are presented here to triangulate with customers responses. Gondar area Dashen bank responded that it could be said that customers are getting more than what employees provide when we compare the service availability with that of ATM and POS but said that the total types of the service provided by ATM and POS with that of employees provide more types of the service as example mentioned currently ATM and POS are not accepting deposit but employees do, about the availability of the service except for power failure and some technical problem customers are getting 24/7. Jantekel Dashen branch responded that the technology is not providing the whole service as employees do and 24/7 except when ever power failure, network failure or technical problem happened and in comparison to the ordinary banking service replied that the technology is providing better service for customers. Fasiledes Wegagen branch replied that there is no question that the types of the service provided by e-banking and employees differ and since the bank has stand by generator for ATM and most of POSs said that the bank is providing 24/7. Gondar Wegagen branch responded that from the oral feedback got from customers that most of them are telling more than happy in using the technology and comparing the service what employees is providing with that of e-banking said that the branch could not say that it is providing as employees provide. For instance employees might give the criteria for taking loan to customers but the technology does not and the bank is providing the service 24/7 as much as possible.

The interview responses of the four branches whether e-banking has enabled to control customers account movement better than ordinary banking are presented here to triangulate with customers responses. Dashen Gondar area branch responded in this aspect that the situation is the same whenever customers withdraw from e-banking they can see their balance and whenever they withdraw using passbook they can see on it. Jantekel area Dashen bank said that the technology enabled customers to control their account movement in a better way but said that most customers strongly believe the bank that they take only the money without checking the movements of their accounts that is from the experience customers most of the times do not concentrate on their remaining balance amount. Gondar Fasiledes branch replied that there is no much difference in between the two if customers want it. Wegagen Gondar branch said that the technology is better for customers in controlling their account movement.

The interview responses of the four branches about the issues related to the opportunities and the challenges of e-banking in the city are presented here to triangulate with customers responses. Dashen Gondar area branch replied that the opportunities of e-banking in the city can be said it is good and the main challenge is blackout. The availability of large number of users and the growth of the city from time to time can be seen as opportunity and also described that Gondar Dashen bank branches are one of the top branches which have highest time to time can be seen as opportunity and also described that Gondar the city can be said it is good and the main challenge is blackout. The Gondar area branch replied that the opportunities of e-banking in the city can be said it is good and the main challenge is blackout. The two branches of Wegagen branches responded that the challenge would be getting secured place in putting ATM and the main opportunities are the eagerness of customers in using the technology and the development of the city from time to time.

Conclusions and Recommendations

Conclusions

Based on the result of the descriptive analysis study it can be concluded that the majority of current e-banking users are youth between the age of 18 up to 35, gender wise the males are the dominant users, occupationally salaried and students are the majority users and business men/women are not active participant in using the service, educational level diploma and above diploma holders are the majority users and the banks do not keep full record of their customer profile in standardized way for easy reference. There is a relationship between demographic characteristics and customer satisfaction in e-banking than ordinary banking. The banks are currently providing e-banking service for ordinary saving account holders and current account holders and in the city there are only two e-banking delivery channels of which ATM the most widely used and POS service is not well known among customers like that of ATM even this channels provide limited in comparison to bank hall service given by the banks' employees. E-banking service highly reduced the visits of bank hall, waiting time for service, there customers who do not know the existence of fee charged for being e-banking users though they have been been charged and there also customers who do not know what e-banking means and the banks except providing the card have not given any organized training for customers in order to create awareness about e-banking. E-banking has improved customer satisfaction than ordinary banking, enabled customers to control their account better than the ordinary banking, there is high opportunity in expanding the service and the banks have not taken any empirical study or customer survey to measure customer satisfaction in the technology. Customers' knowledge about e-banking, availability of the service 24/7 and improvement of customers in controlling their account are more sensitive variable which determine customer satisfaction in e-banking. To put it in a net shell e-banking has impact in improving customer satisfaction, impact in reducing waiting time for customers to get bank service and impact in improving customers to control their account movements.

Recommendations

The banks should work much in increasing the number of users from all aspects that is from gender, age, educational status, occupationally and should do great job in making- business men/ women to be the users of e-banking and also should keep all rounded personal profile of customers to retrieve easily whenever needed and bankers should determine which customers with which demographic characteristics are more sensitive to e-banking service satisfaction. The banks should add other e-banking service delivery channels like mobile banking and internet banking in addition to existing delivery channels, also try to provide e-banking service for other types of account holders and encourage customers to use POS like ATM. E-banking service should expand as much as possible in order to reduce the visits of bank hall for customers and to get investment cost advantage than opening bank hall as the current rent price per year for opening bank hall is much greater than buying an ATM machine. All Customers should be awaken to know the existence of e-banking service charge; official trainings should be organized by the banks for customers in order to increase customers’ awareness about e-banking rather than providing...
the card only. Current account holders should be encouraged to use e-banking service as the users of this type of account are business men and women who need money now and then which increase the revenue generated from the service when they use now and then. The banks should exceed the promise of providing 24/7 rather than under delivering 24/7 availability that is the banks should ensure that at no time should service cease as a result of network problem, power failure and other technical problems. Should increase the effort to keep customers satisfaction above the current level and should conduct survey to measure customers’ satisfaction empirically. The types of service provided by e-banking should be increased for instance to accept the deposits and the banks should exploit the opportunities in expanding e-banking by mitigating the challenges. Finally more emphasis should be given by the banks on those aspects which have more impacts in determine customers’ satisfaction in e-banking. Future researchers try to determine customers’ satisfaction of in e-banking if it depends on banks including other geographic areas, other variables, include customers who do not use e-banking and banks which do not provide e-banking service currently (Appendices A and B).

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