MADDA WALABU UNIVERSITY

FACULTY OF BUSINESS AND ECONOMICS

ASSESSMENT ON UTILIZATION, CHALLENGES AND PROSPECT OF E-BANKING; THE CASE OF MADA WALABU UNIVERSITY ACADEMIC STAFF, OROMIA REGION, ETHIOPIA

MBA THESIS

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ASSESSMENT ON UTILIZATION, CHALLENGE AND PROSPECT OF E-BANKING; THE CASE OF MADA WALABU UNIVERSITY ACADEMIC STAFF, OROMIA REGION, ETHIOPIA

RESEARCH THESIS SUBMITTED TO GRADUATE SCHOOL OF BUSINESS AND ECONOMICS, MADDA WALABU UNIVERSITY IN PARTIAL FULFILLMENT FOR THE REQUIREMENTS OF MASTER OF ARTS DEGREE IN BUSINESS ADMINISTRATION

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Declaration

I, Endalkachew Amare, undersigned declare that this study entitled as "Utilization, challenges and prospects of E-Banking: the case of Mada Walabu University academic staff, Oromia region, Ethiopia", it is my own original work and has not been presented for a degree award in any other University.

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Acronyms/Abbreviations

AOR	Adjusted odds ratio
ATM	Automated teller machine
BA	Bachelor of Art
CBE	Commercial Bank of Ethiopia
CI	Confidence Interval
COR	Crudes odds ratio
Dr.	Doctor
E.C	Ethiopian Calendar
E-banking	Electronic Banking
E-payment	Electronic payment
ICT	Information and Communication Technology
IDT	Innovative Diffusion Theory
IT	Information Technology
MBA	Master of Arts in Business Administration
MWU	Meda Walabu University
PhD	Doctor of philosophy
PIN	Personal identification number
ROE	Returns on equity
SMS	Short text message
TAM	Technology Acceptance Model
TPB	Theory of Planned Behavior
TRA	Theory of Reasoned Action

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ABSTRACT

Effective utilization of E-banking enables customers to access their accounts and perform online transactions anytime of the day as they would on the physical floors of the bank at their own comfort, pace and convenience without any human intervention. The objective of the study was to assess utilization, challenge and prospect of e-banking among Academic Staff of Madda Walabu University, Oromia region, Ethiopia.

Cross sectional study design has been conducted. The study has employed using single population proportion sample size determination formula to calculate sample size. Stratified sampling was employed to select the study subjects. Pre tested and structured, self- administered questionnaire was used to collect the data. The data was entered in to computer using statistical package for social sciences (SPSS) windows version 20. Descriptive statistics as well as Binary and multiple logistic regression analysis have been computed. The result of study presented in the form of text, tables, figures and charts.

A total of 379 respondents were successfully interviewed yielding the response rate of 98.7%. In this study 327(86.28%) of the study subjects were use some form of e-banking services. More than half, 191(50.4) of the respondents were face out of service machines. 368(97.1%) of the respondents were want to use E-banking services in the future. Time saving feature of e-banking products eight times (AOR=8.23, 95% CI=4.18, 16.19) more likely promote to use e-banking services than other features. Expanding more ATM outlets three times (AOR=3.01, 95% CI=1.58, 5.73) recommended more likely to increase e-banking utilization than other e-banking utilization strategies.

E-banking utilization is high among MWU academic staffs and these variables were determinants of e-banking utilization. That is enough awareness about e-banking products, its perceived ease of use and time saving features were determinants of e-banking utilization. To conclude that bankers should conduct awareness creation strategies to increase e-banking utilization. In addition to these banks must be insuring that their products are user friendly and easy to use. Furthermore, providers of e-banking services have done their products more reliable and speedy to avoid vague and long process. Finally, there should be constant monitoring and maintaining of the ATM.

***Key words**: E-banking, utilization, challenge, prospect*

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

E-banking came into being in UK and USA in 1920s. It became prominently popular during 1960s through electronic funds transfers and credit cards. The concept of web based banking came into existence in Europe and USA in the beginning of 1980s. It has been estimated that around 40 percent of banking transaction would be done through Net (Roshan, 2012).

For close to a century , electronic banking has evolved as a simpler way of transacting business (Ofori-Dwumfour, 2013). It has been generally argued that electronic banking makes it easier for customers to compare banks' services and products and increase competition among banks, which allows banks to penetrate new markets and thus expand their geographical reach. For some scholars, electronic banking is an opportunity for countries with underdeveloped financial systems to lunch into developmental stages (Bassey, 2008). Customers in such countries can access services more easily from banks abroad and through wireless communication systems, which are developing more rapidly than traditional "wired" communication networks (Khan, 2010).

It is evident that banks and other financial institutions in developed and developing countries are embracing e-banking. As technology evolves, different kinds of electronic banking systems emerge, each bringing a new dimension to the interaction between user and bank. They include Automated Teller Machine (ATM), mobile and Internet (online) banking, electronic funds transfer, direct bill payments and credit card (Gikandi, 2010). Among these E-banking facilities, the Automated Teller Machine (ATM) is the first well-known and widely adopted system that was introduced to facilitate the access of the user to his banking activities (Nyangosi et al. 2009).

E-payment in most African countries is either inexistent or practiced in limited circumstances. Most African countries lack the infrastructure and proper legal and regulatory framework for e-payment. E-payment infrastructure such as Internet is not widely available in Africa. Bank and other financial institutions are not adequately automated to enable e-banking and e-payment.

Legal and regulatory framework is also inexistent in most African countries. However, some African countries such as Tunisia and Egypt have adequate infrastructure with proper legal and regulatory framework for e-payment and e-commerce in general (Wondwossen, 2005).

The advent of e-banking in Ethiopia goes back to the late 2001, when the largest state owned, Commercial Bank of Ethiopia (CBE) introduced ATM to deliver service to the local users, CBE has had Visa membership since November 14, 2005. But due to lack of appropriate infrastructure, it failed to real the fruit of its membership (Tekabe, 2016). Dashen Bank is a pioneer in implementing full-fledged electronic banking service back in May 2006 by bringing Visa international on board through issuing Visa branded debit cards. Thus, the aforementioned scenarios are good practical exposure showing how challenging to Ethiopian banks to introduce technological based innovative products and reluctant approach of users to use e-banking services.

Studies related to the factors that affect customers' e-banking usage behavior have been at the forefront of several research works in the developed and developing countries. Previous studies conducted by different researchers reveals that demographic factors ; such as gender, age, income, marital status and occupation , Environmental factors ; such as infrastructure and legal framework , Technological factors; such as perceived risks and perceived benefits are among the important factors that influence users' e-banking adoption behavior(Bruce M, 2017),(Beza and Dhiraj, 2017), (Gikandi & Bloor, C. 2010). Nevertheless, this area is not well studied from the viewpoint of Medda Walabu University academic staffs. Therefore, there is a need to understand the relevance of e-banking services in Madda Walabu University academic staff.

1.2 Statement of the problem

In E-banking system data, is electronically transmitted through wireless communication channels and the internet. These processes raise issues of how users are authenticated, how integrity of data is maintained and importantly the confidentiality of this data. One of the issues raised with adoption of new technology is Perceived risk or uncertainty about the outcome of the use of the innovation or uncertainty that the use of the innovation is secure(Gerrard & Cunningham 2003) .

According to Wai-Ching Poon, (2008) the study on consumer acceptance or adoption of e-banking services in Malaysia in the light of ten determinants, namely convenience, accessibility, feature availability, bank management and image, security, privacy, design, content, speed, and fees and charges. Of the survey across e-banking services, privacy and security were the major sources of dissatisfaction (Wai-Ching Poon, 2008).

Study done by Bruce (2017) in Zambia with the aid of correlation and multiple regression analyses, the findings of the study show that all the three antecedents, namely, perceived ease of use of e-banking services, perceived useful of e-banking services and perceived trust worthiness and safety of e-banking systems, were significantly and positively associated with attitude towards e-banking use(Bruce, 2017).

In Ethiopia customers were missed to enjoy the technological advancement in banking sector which has been entertained elsewhere in Africa and the rest of the world. This is due to lack of awareness or competition among banking industry. The modern E-banking methods like Automated teller machine (ATM), Debit cards, Credit cards, Tele banking, Internet banking, Mobile banking and others are not well developed to the Ethiopian banking sector. Certainly, the banking industry is not well developed with a growing number of international trades; increase the demand of the customer and international relations. The today's banking system has problems of offering efficient and dependable services (Garedachew, 2010).

Very little research in this field has been conducted, which analyze the challenge and prospects of adopting e-banking system in Ethiopia, to mention, Ayana (2014), Gardachew (2010) and Beza (2010). These studies were almost all consider factors from banks perspective and give

possible recommendations from this perspective, but there is gap on considering factors that influence the decision to use such services as well as how various factors interact to affect usage from customer's perspective still not studied. Venkatesh, Morris, and Davis (2003) noted that the successful implementation of information systems is dependent on the extent to which such a system is used and eventually adapted by the potential users. Information system implementation is not likely to be considered successful if users are unmotivated to use that type of technology, and thus it will not bring full benefits to the organization(Venkatesh, Morris, and Davis, 2003).

Studying e-banking usage, challenges and prospects from customer's point of view has a paramount importance for service providers, policy makers and customers. An understanding of how socio-economic and demographic characteristics, infrastructure related variables, technological factors, consumer perceptions and awareness toward e-banking influence the adoption of e-banking will enable banks and policy makers to develop solutions and plans to attract consumers and gain a better market share. Most of previous studies were consider factors from banks perspective, but there is gap on considering factors that influence the decision to use such services from customer's perspective still not enough studied.

The issue of utilization, challenge and prospect of e-banking in higher academic institution are not yet studied. Besides, as per the knowledge of researcher, it is also not researched in Madda Walabu University. Therefore, the aim of this study is to assess utilization, challenges and prospects of e-banking among academic staff in Madda Walabu University, Ethiopia.

1.3 Objective

1.3.1 General objective

The general objective of the study is to assess utilization, challenge and prospect of e-banking among Academic Staff of Madda Walabu University, Oromia region, Ethiopia

1.3.2 Specific objectives

1. To describe utilization of e-banking among Academic Staff of Madda Walabu University, Oromia region, Ethiopia, 2017
2. To assess challenge of e-banking utilization among Academic Staff of Madda Walabu University, Oromia region, Ethiopia, 2017
3. To determine prospect of e-banking utilization among Academic Staff of Madda Walabu University, Oromia region, Ethiopia, 2017
4. To analyze factors associated with utilization of e-banking among Academic Staff of Madda Walabu University, Oromia region, Ethiopia, 2017

1.4 Research Questions

This study answers the following basic research questions:

1. What is the extent of utilization of e-banking service among academic staff of Madda Walabu University, Ethiopia?
2. What are the challenges of e-banking utilization among academic staff of Madda Walabu University, Ethiopia?
3. What are the prospects of e-banking utilization among academic staff of Madda Walabu University, Ethiopia?
4. What factors are associated with e-banking utilization among academic staff of Madda Walabu University, Ethiopia?

1.5 Significance of the study

The finding of this research is expected to help banks as-well-as policy makers by pointing out challenges of E-banking utilization among users and to generate supportive recommendation that possibly solve this problem. The banks and other regulatory bodies will be benefited from the findings of this study by identifying the reasons behind the lack of customer engagement in e-banking services and implement new policies accordingly. Furthermore, it will provide base line information for any interested researcher to conduct further research up on it.

1.6 Scope of the study

The study was conducted in Madda Walabu University. Besides, the objective of this study is limited to assessing utilization, challenges and prospects of e-banking adoption among academic staff in Madda Walabu University. ATM, mobile banking, internet banking and POS machine were considered as type of e-banking services for this study.

1.7 Limitation of the study

Social desirability bias has been shown on this research. This means some respondents didn't honestly report those challenges that hinder them to use E-banking services. In cross-sectional study design omission of a single variable may be undermine the results significantly and didn't permit analysis of causal relationships. There was a difficulty to get enough literature and secondary data in this area from users' perspective.

1.8 Operational and term definitions

E-banking which refers to the use of modern technology that allows customers to access banking services electronically whether it is to withdraw cash, transfer funds, and to pay bills, or to obtain commercial information and advices. For the purpose of this study among the many e-banking delivery channels only the most widely used e-banking channels were chosen: ATM, POS, Mobile and internet banking.

E-banking: ATM, mobile banking, internet banking and POS machine were considered as type of e-banking for the purpose of this study.

- **Automated Teller Machines (ATM):** It is an electronic terminal which gives consumers the opportunity to get banking service at almost any time. To withdraw cash, balance inquiry, mini statement and PIN change, a consumer needs an ATM card and a personal identification number (PIN).
- **Point-of-Sale Transfer Terminals (POS):** The system allows consumers to pay for retail purchase with a check card, a new name for debit card. This card looks like a credit card but with

a significant difference. The money for the purchase is transferred immediately from account of debit card holder to the store's account.

- **Internet banking:** It is an electronic home banking system using web technology in which Bank customers are able to conduct their business transactions with the bank through personal computers.
- **Mobile banking:** Mobile banking is a service that enables customers to conduct some banking services such as account inquiry and funds transfer, recharge, pay bill, pay merchant by using of short text message (SMS).

E-banking utilization: respondents that were subscribed to use one of e-banking tool/services (ATM, Mobile banking, Internet banking, POS) for checking their account balance, or withdraw many, or receive money, or transfer money or download statement, or pay bill (recharge) considered as users of e-banking under this study.

1.9 Organization of the paper

This paper consists of five chapters with different sections and sub-sections. Chapter one contain introduction of the paper. It also encompasses background of the study, statement of the problem, objective of the study, research questions, significance of the study, and scope of the study, limitation of the study, operational and term definition and organization of the study. Chapter two consists of literature review. Literature review consists of theoretical and conceptual framework. Chapter three deals about research methodology, research methodology consists of description of study area, research design, sources of data, population and sample of the study, sampling technique, method of data collection and data analysis. Chapter four describes about findings and results of the research work. Chapter five contains summary, conclusion and recommendation. Finally, references and appendixes stated at the end of the chapters.

CHAPTER TWO

LITERATURE REVIEW

2.1 Theoretical perspectives of E-banking

E-banking has different definition, that all refer to the same meaning, the following section shows some of these definitions. E-banking is a form of banking service where funds are transferred through an exchange of electronic signal between financial institutions, rather than exchange of cash, checks, or other negotiable instruments (Kamrul 2009). E-banking is the term used for all types of electronic banking - it is also known as online banking or Internet banking. E-banking uses the Internet as the delivery channel to conduct banking activities, such as transferring funds, paying bills, viewing account balances, paying mortgages and purchasing financial instruments and certificates of deposits (Mohammed, S.k, 2009).

There is a range of theories related to the adoption of new technology, very few focused on e-banking or Internet banking. Some researchers investigated individuals' perceptions regarding the adoption of Internet banking for corporate purposes, The main theories in this regard are the Theory of Reasoned Action (TRA) (Fishbein and Azjen, 1975), the Innovative Diffusion Theory (IDT) (Rogers, 1983), the Theory of Planned Behaviour (TPB) (Ajzen, 1985), and the Technology Acceptance Model (TAM) (Davis, 1989).

Concept of consumer adoption developed by Catherine Karungu, (2014) states the meaning of adoption as follows. Adoptions are a person's decision to purchase or use a product. An innovation on the other hand is any good, service or idea that is perceived by someone as new. The adoption process resembles a bell curve formed by innovators, early adaptors, and the majority of consumers, late adapters and laggards. Consumer behaviour and satisfaction are key ingredients to adoption of a product or service. Quality, service and satisfaction are directly related to the way a consumer will perceive a product or service(Catherine Karungu, 2014).

The technology adoption process goes through five phases that results in acceptance and adoption of a good or service. The first phase is awareness when people first become aware of the product. Prospective adopters then move to the second phase of assessment. At this stage, adopters make the decision to accept or reject a product.

The third stage is the acceptance stage where potential adopters have weighed all the evidence at their disposal and made their decision. The fourth and fifth stages are the learning and usage stage respectively, where at the last stage people are actively using the new technology to achieve their goals.

2.2 Utilization of e-banking

In 2014, a survey conducted by the Board of Governors of the Federal Reserve System of United States of America, it has been found out that 72% of bank users used online banking as a medium to interact with their banks. A study conducted by Office for National Statistics, UK in 2013 derived that 76% of the household populace with access to Internet, performed online banking activities(N. J. Kariyawasam &Nuradhi K, 2016).

A study done on Electronic Banking in Albania: A Statistical Analysis results reviled that among all e-banking services offered from banks, ATM were used by majority of the respondents (88%), followed by electronic credit/debit cards (33%), internet banking (27%) and POS (4%).The logistic regression results of the study show that education and monthly income level were significantly related to the use of e-banking. Contrary Age, Gender and marital status were not statistically related with the use of e-banking services at 5% significance level (Alma, 2014).

According to Amutha D.(2016) study in India revealed that out of the total respondents, majority (i.e.) 93.33% of the customers were satisfied about the mobile banking as most of the customers prefer to adopt the mobile banking services in the near future. 88.89% of the customers are satisfied with the ATM and 78.89% of the customers were satisfied about internet banking. 86.67% of the customers were satisfied about credit/debit cards service and 81.11% were satisfied about the Electronic fund transfer services by the customer (Amutha D., 2016).

A study done in Malaysia on prospects and challenges of e-banking revealed that 53.9 percent of those surveyed used e-banking. 292 of the 542 respondents went online to conduct banking transactions, compared to 250 who went to bank counters or ATM machines to bank the conventional way. Out of the 53.9 percent who used e-banking, 85 percent used the saving account facility and 55.8 percent use the current account facility. The next most popular items were bill payments (37 percent), follow by visa/master cards with (35.3 percent) and third party fund transfers (30.8 percent) (Ainin Sulaiman, 2005).

A study done in Nepal on Internet Banking revealed that only 37 % of the respondents said that they have used or currently using the internet for the banking purpose. Nearly 2/3rd of the respondents in the study didn't use the internet banking services. According to Polatoglu and Ekin , affluent and highly educated groups generally accept changes more readily, making them the most likely group of consumers to adopt e-banking. This is based on sample information gleaned from the survey of Internet banking customers, which revealed that 82% of those interviewed were university graduates, and 73% reported being in the medium or high-income group (Polatoglu and Ekin ,2001).

According to (N. J. Kariyawasam &Nuradhi K, 2016) the study on utilization of internet banking in serilanka the result reveals that, 75% of the respondents who have engaged in their Masters qualification were using e-banking services and the usage of internet banking has reduced to a 65% of the respondents who have studied up to their university degrees. The usage rate has further reduced to 64% among the respondents who have studied only up to a diploma level or a professional qualification. The lowest internet banking usage rate was witnessed among the respondents who have completed their GCE Advanced level education.

According to Elizabeth A & Gloria,(2014) results of the study also reveals that majority of respondents were highly educated (86.5%). This, perhaps, relates to the fact that e-banking products are common among highly literate Ghanaians than the illiterate counterparts. About 58.9% of the respondents were single and the remaining 41.1% were married. Were self-employed (22.7%), teachers (19.6%) and students (11.7%). More than half (51.5%) of the respondents had a high income level (above 200 Ghana cedis) (Elizabeth A & Gloria,2014).

2.3 Challenge of e-banking

Banking organizations have been delivering electronic services to consumers and businesses remotely for years. Electronic funds transfer, including small payments and corporate cash management systems, as well as publicly accessible automated machines for currency withdrawal and retail account management, are global fixtures. However, the increased world-wide acceptance of the Internet as a delivery channel for banking products and services provides new business opportunities for banks as well as service benefits for their customers (BCBS, 2001). Notwithstanding the significant benefits of E-banking and its capabilities, it carries risks and challenges as which are recognized and need to be managed by banking institutions in a prudent manner.

An empirical study done by Faisal I. (2013) in Ghana revealed that the main factors for not using M-banking technology by customers were M-banking requires knowledge and learning ,M-banking attracts additional banking charges, and Poor telecommunication technology.

According to Sabita Paul study in India reveals that, among the nonusers of ATM, 37.71% don't use it as they don't have knowledge to operate it. About 28.07% were getting fear about the safety and security due to the ATM fraud or stolen of ATM card again because of robbery at the location of the ATM as compared to a Banking Hall. 21.05% people get frustrated due to regular failure, card jamming and breakdown of machine and 13.15% were don't take an interest to use it due to its all above demerits (Sabita Paul, 2013).

An empirical study done in Cameron on factors affecting adoption of E-banking revealed that from the total of 441 respondents who do not use the internet banking gave the following reasons for not using the service, 134 (30%) respondents indicated that they do not trust e-banking services; 92(21%) respondents have not heard about e-banking services; 38 (9%) respondents do not know how to use the services or the tools linked to that service, such as computers; 58 (12%) feel that there is no security in e-banking, 60 (14%) believe that e-banking is not easily accessible, 42 (10%) feel that the cost of the Internet is too high, and 17 (4%) are of the view that they do not need e-banking(Faisal I. 2013).

According to Edward (2014) study in Ghana the results show that most respondents (52%) mentioned that the main challenge facing E-banking system in ECOBANK is unreliable network system, Bank charges for ATM services (20%), Valid Limit on amount of cash withdrawn (12%), wrong debits and Unreliable source of power were identified as a challenge(Edward, 2014).

The general challenges like link failure, frequent breakdown of machines, slow process of service delivery and long queues were challenges identified by Ghanaian respondents. (Haruna Issahaku, 2012)

According to Ayana(2014) ,the major barriers Ethiopian banking industry faces in the adoption of Electronic banking are: security risk, lack of trust, lack of legal and regulatory frame work, Lack of ICT infrastructure and absence of competition between local and foreign banks.

2.4 Prospect of e-banking

The study done by Haruna Issahaku (2012) on Challenges of Electronic Payment Systems in Ghana reveals that number of users that will continue to use e-ZWCIH in the next five years were 41 out of 50 respondents representing 82% while the remaining 9 representing 18% responded in the negative. Thus the majority of e-ZWICH users pledge their loyalties to e-ZWICH irrespective of its challenges at least in the next 5 years. These assertions were born out of the confidence they have in e-ZWICH due to its cost effectiveness, security, reliability and accessibility among others(Haruna Issahaku ,2012).

The study done by Chibueze et al (2013) in Nigeria revealed that the adoption of electronic banking has positively and significantly improved the returns on equity (ROE) of Nigerian banks (Chibueze et al, 2013).

The study conducted by Mattewos (2016) on Challenges and Prospects of E-banking in Ethiopia reports the following opportunities in the country for the adoption of e- banking i.e. late adopter opportunities, improvement in the banking habit of the society, sustainable economic growth in the country, increment of tourist inflow to Ethiopia, commitment of the government to facilitate

the expansion of ICT infrastructure and willingness among banks to cooperate in building infrastructure (Mattewos 2016).

According to Henok (2015) study on Challenges and prospects of M-banking in Ethiopia In 2013/14 there were about 28.3 million mobile phone subscribers, recording an annual growth rate of 19.2 percent. The mobile phone subscribers' penetration rate is increasing in each year. During the same period, the penetration rate reached at 33.3 percent. Development in mobile phone subscribers implies an immense potential in reaping the benefits from m-banking service. Moreover, the continual increase in per capital income of the nation can be considered as another potential for banks to reap the full benefits derived from M-banking (Henok, 2015).

2.5 Factors associated with utilization of e-banking

1. **Technological factors:** Limit on amount of cash withdrawn, Wrong debit, Ease of use, Lack of appropriate software, long process of transaction and link problem which affects utilization and prospects of e-banking.
2. **Infrastructure related factors:** it consists of Accessibility, Reliability, Breakdown of machines, Machine out of cash, long waiting time and Unreliable network system which affects utilization and prospects of e-banking.
3. **Personal related factors:** it consists of Department, Awareness of E-Banking, lack of trust and in ability to use which affects utilization and prospects of e-banking.
4. **Perceived barriers:** it consists of Security related barriers, Cost of service, the presence of queues and Time saving which affects utilization and prospects of e-banking.
5. **Socio –Economic factors and Demographic factors**: it consists of Age, Sex, Marital status, Educational level, Income and Length of experience which affects the utilization of e-banking.

Convenience: E-banking is perceived to be convenient in every way, and one of the main critical factors affecting the usage of Internet banking as per Dassanayake (2003). They are open 24 hours a day, and all 7 days of the week (Hettiarachchi, 2013). So the customer's banking requirements will never have to wait till the next business day.

Speed : Deutsche Bank AG Research (2006) identifies 'speed' as one of the main driving forces behind the success of internet banking. Transactions, transaction processing, data transfer, information requests etc. happen almost instantly in online banking.

Security: Georgia Institute of Technology Atlanta Report (2004) considers security of online banking to be a major factor affecting the usage. A common misconception relating to online banking is that it is prone to security threats.

Low Cost: Mols (1998) has identified that for customers, internet banking can be of a low cost alternative to traditional banking. The term 'cost' refers to all types of costs from financial costs, time costs, energy costs etc. In all things considered, E-banking can provide a banking activity at the lowest cost possible

Reliability – the ability to perform the promised service dependably and accurately. This dimension is critical as all customers want to deal with firms that keep their promises and this is generally implicitly communicated to the firm's customers (Zeithaml, Bitner, & Gremler, 2006).

2.6 Conceptual Framework

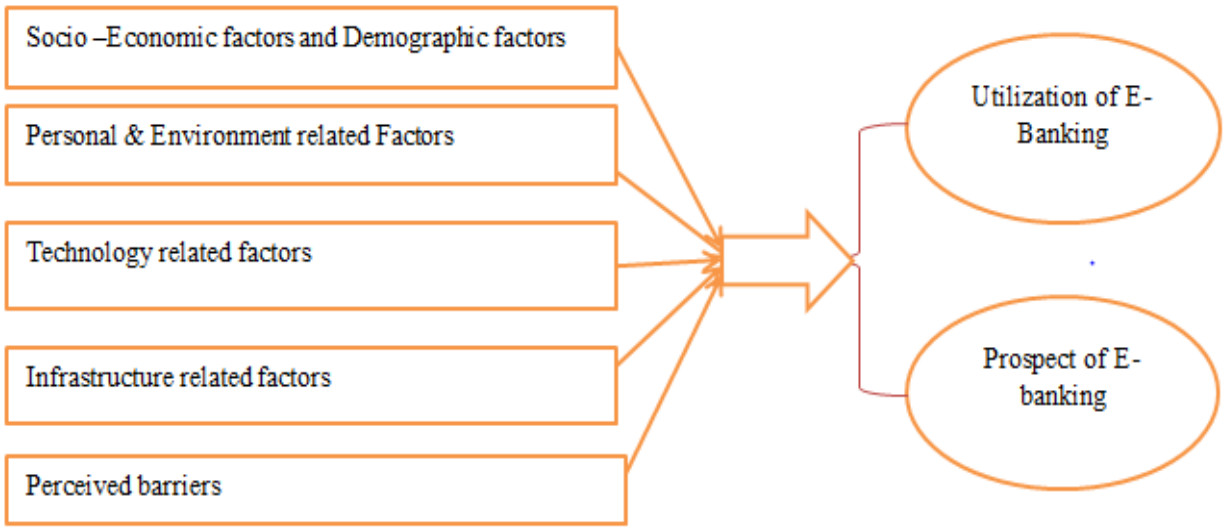

Figure 1 Conceptual framework

Source: Developed after reviewing relevant literatures

CHAPTER THREE

METHDOLOGY

3.1 Description of study area and period of the study

The study was conducted in Madda Walabu University among academic staffs. Madda Walabu university is one of higher education institution and is located in Southeastern part of Ethiopia; Bale zone about 430 Km away from the capital city of Ethiopia; Addis Ababa. It is among the recently founded (1999 E.C) institutions of public higher education in the country. The university is surrounded by different tourist attraction centers which make it appealing to be ear catching institution to be visited. Currently, the university is running over 46 undergraduate programs and 23 graduate studies. It has 10 schools, 1 institution and 1 college. Now a day, there are 17615 students in all programs at regular, extension, summer, and in-service bases. It gives education services to the students in different campuses and satellite branches (Robe, Goba, Ginir, Dodola and Dello Menaa) and there are around 8 department in graduate regular and extension program. The university accommodates about 924 instructors (616 on job and 308 on study leave) off which 839 Ethiopians and 85 foreigners. The University composed of 86 female and 838 male instructors, and over 1600 administrative staff (Madda Walabu University Public Relation Office, 2016)

Data was collected from December 04- December 25, 2017.

3.2 Research Design

Cross sectional study design with both descriptive and analytical analysis used to conduct the study**.** A cross-sectional study design is one that produces a ”snapshot” of a population at a particular point in time.(Louis, Lawrence & Keith,2007). Cross sectional research is the most predominately and frequently used descriptive research design in marketing (Yogesh, 2006).

3.3 Source of Data

The data used in this study is primary data. The data collected through self-administered questionnaires from academic staff of Madda Walabu University.

3.4 Population and Sample of the study

3.4.1 Source population

The source population was all academic staff of Madda Walabu University.

3.4.2 Study population

Sampled academic staff of Madda Walabu University was the study population.

Inclusion criteria

Madda Walabu University all Academic staffs were included in the study.

Exclusion criteria

Academic staffs that were foreigners and on study leave were not included in this study.

3.4.3 Sample size determination

The study was employed using the single population proportion sample size determination formula to calculate sample size. To obtain optimum sample size, Suggested by Anderson,(2011) for selecting a planning value **p** (proportion) is to use **p** = .50. with 95% confidence interval (C.I), and 5% marginal error (where **n** is desired sample size, **Z** is value of standard normal variable at 95% confidence interval and, **p** is maximum expected proportion which is 50% and **E** is marginal error which is 5%). This value of p is frequently used when no other information is available (Anderson, 2011).

$$n = \frac{Z^2 \alpha/2\ P\ (1-P)}{E^2} = \frac{(1.96)^2 * 0.5 * 0.5}{(0.05)^2}$$

$$= \underline{384}$$

3.5 Sampling Technique

Proportionate Stratified sampling was employed to select the study subjects based on gender. As per the strata to reach each study subject by preparing sampling frame which are list of staff from the selected category, random sampling was used to select the each study subjects.

The strata have been done by referring Kerejcie and Morgan (1970) formula to determine the study subjects in each stratified parts.

$S= X^2NP (1-P)/ d_2 (N-1) + X^2P (1-P)$

S= required sample size

X^2 = the table value of chi-square for one degree of freedom at the desired confidential level

N= the population size

P= the population proportion (P=.50)

d= the degree of accuracy expressed as a proportion (0.05)

p=S÷N p= 384÷ 531*= 0.723

Table 1 Stratified Sample table

Sections	Number of population N	Each section taken 72.3 %	Sample size (s) 0.723
Male	481	72.30%	348
Female	50	72.30%	36
Total	531		384

* Source ODA 2009 E.C.

3.6 Study variable

3.6.1 Dependent variable

- ✓ Utilization of e-banking

- ✓ Prospects of e-banking

3.6.2 Independent variable

Socio-economic & demographic factors

- ✓ Age
- ✓ Sex
- ✓ Marital status
- ✓ Educational level
- ✓ Income level
- ✓ Length of experience

Personal related factors

- ✓ Department
- ✓ Awareness of E-Banking
- ✓ Lack of trust
- ✓ Inability to use

Technology related variables

- ✓ Limit on amount of cash withdrawn
- ✓ Link problem
- ✓ Lack of appropriate software
- ✓ Too many steps to process transaction
- ✓ Ease of use
- ✓ Wrong debits

Infrastructure related variables

- ✓ Unreliability of network system
- ✓ Long waiting time
- ✓ Accessibility
- ✓ Breakdown of machines

- ✓ Machine out of cash
- ✓ Non printing of statement

Perceived barriers

- ✓ Security related barriers
- ✓ Time saving
- ✓ Cost of service

3.7 Data Collection method and tool

In order to collect sufficient data, the researcher decided to apply structured close ended questionnaires. Questionnaire was developed by analyzing relevant literatures and constructing relevant conceptual framework. When we use questionnaire in logistic regression analysis it more likely yield the data that satisfies the research objectives. The closed ended questionnaire consists of a question or a statement to which a person responds by selecting one or more choices, such as "yes" or "No". The closed form item facilitates the tabulation and analysis of data. It also improves the reliability and consistency of the data (Yogesh, 2006).

3.8 Data Analysis

The data was collected using survey. Questionnaire was analyzed using both descriptive and regression analysis methods. The data was checked for completeness and consistencies, then it has been on cleaned, coded and entered in to computer using statistical package for social sciences (SPSS) windows versi20.1 (IBM®SPSS® Statistics, version 20.1).

Descriptive statistics such as frequency, percentage, mean, standard deviation was computed to describe the background characteristics of study subjects. Binary logistic regression analysis was used to analyze the relationship between utilization of E- banking and each independent variable. In addition to this multiple logistic regression analysis was conducted to analyze the relationship between utilization of E- banking and a combination of various independent variables. Finally, the results presented in the form of text, tables, figures and charts.

3.9 Ethical consideration

The proposal was approved by Institutional Review Board of Madawalabu University. Furthermore, letter of permission was obtained from Madda Walabu University, Head Department of Management Office. Verbal consents were obtained from the study subjects after explaining the study objectives and procedures. Their right to refuse not to participate in the study was assured. For this very purpose, a one page consent letter was attached to the cover page of each questionnaire stating about the general objective of the study and issues of confidentiality. Anonymity of the data was secured by collected the data without the name of the respondents.

3.10 Data quality control

The quality of the data was assured by using validated questionnaire, doing pre-test. Since the instruments are developed after reviewing different literatures, it has been done pre-test on the relatively similar population. Therefore, the questionnaire was pretested on randomly selected academic staff of Robe Teachers College before the actual data collected and necessary adjustments has been done before using the tool for actual data collection on actual sampled population. Reliability test analysis has been done using SPSS 20 version after collecting data from relatively similar population and finally done on actual data. Individual variables were tested using Cronbach's Alpha for internal consistency. The results show that all variables have high reliability (see on Annex B-1) by scoring more than 0.7 Alpha values (Robert, J.N. 2011). For type of e-banking Services alpha value is 0.851, for Awareness About E-banking is 0.834, for Source of information is 0.895, for Use of e-banking is 0.861, for Frequency of e-banking is 0.880, for ATM challenges is 0.922, for Internet Banking Challenges is 0.907, for Mobile Banking Challenges is 0.877, for Promotes E-banking usage is 0.839 and for helps to enhance e-banking services the Cronbach Alpha value is 0.825.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

Both descriptive and analytical statistical methods used to present and interpret the data on various variables of factors associated with utilization and prospects of e-banking and challenges to use e-banking services. Frequency tables and graphs along with percentages were employed to analyze socio-demographic characteristics of the respondents. The analysis begins with a description of socio demographic characteristics of the respondents.

4.2 Socio demographic characteristics of the respondents Madda Walabu University academic staff.

Three hundred seventy nine respondents participated in the study accounted 98.7% response rate. Three hundred forty three (90.5%) of the respondents participated in the study were males and more than two third, 266 (70.2%) of the respondents were within the age range of 26-35 years with Mean ($\pm$SD) of 30.43 ($\pm$5.08) years. Academically 244 (64.4%) of the respondents had a master's degree and 243(64.1%) of the study subjects were less than 5 years' work experience. More than half, 196(51.7%) of the study subjects were married. Two hundred forty five (64.6%) of the study subjects were earning more than 10400 Ethiopian birr per a month (Table 2).

Table 2 Socio demographic characteristics of e-banking users at Madda Walabu University academic staff, 2017.

Variable	Frequency(n=379)	Percentage
Sex		
Male	297	86.6
Female	30	83.3
Age		
18-25	50	84.7
26-35	237	89.1
36-45	40	78.4
46-60	0	0
Educational Status		
Degree	98	90.7
Masters	208	85.2
Phd	21	77.8
Post Doc	0	0
Income		
4000-10469	119	88.8
10470-13100	187	84.6
13140-20000	21	87.5
Experience		
<5	203	83.2
(5-10)	112	91.1
>10	12	100
Marital status		
Single	165	90.2
Married	162	82.7
Divorced	0	0
Widowed	0	0

Source: The researcher own computation

4.3 Socio demographic characteristics of e-banking users Madda Walabu University academic staff

Two hundred ninety seven (86.6%) of males and 30(83.3%) of female respondents were e-banking users. Majority of e banking users, 237 (72.48%) of the respondents were within the age range of 26-35 years. First degree holders 98(90.7%) more utilized e-banking services. Three hundred fifteen (96.33%) of e-banking users were less than 10 years' work experience. More than half, 165(50.46%) of e-banking users were single. Three hundred six (93.58%) of e-banking users were earning less than 13100 Ethiopian birr per a month.

Table 3 Socio demographic characteristics of e-banking users at Madda Walabu University academic staff

Variable	Frequency(n=379)	Percentage
Sex		
Male	297	86.6
Female	30	83.3
Age		
18-25	50	84.7
26-35	237	89.1
36-45	40	78.4
46-60	0	0
Educational Status		
Degree	98	90.7
Masters	208	85.2
Phd	21	77.8
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4000-10469	119	88.8
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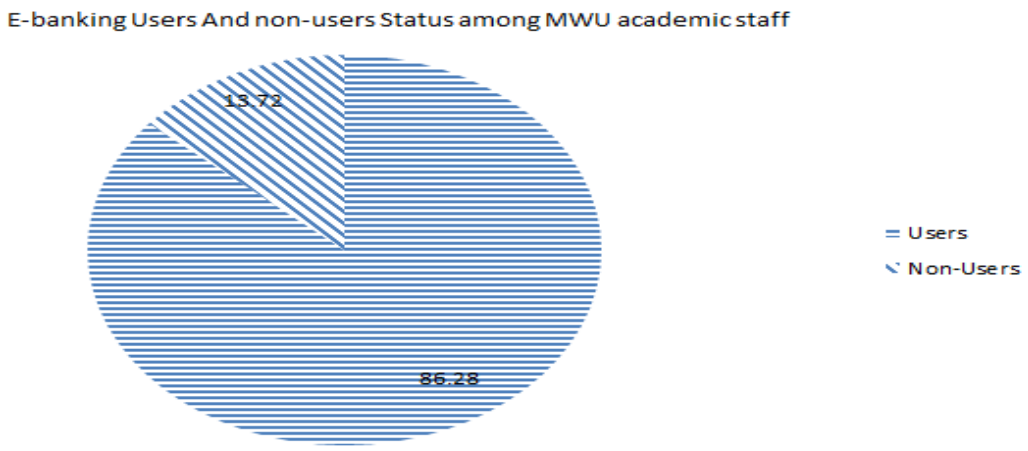
Experience		
<5	203	83.2
(5-10)	112	91.1
>10	12	100
Marital status		
Single	165	90.2
Married	162	82.7
Divorced	0	0
Widowed	0	0

Source: Researcher own computation

4.4 Utilization of E-banking among Madda Walabu University academic staff

This section discusses about the usage patterns of the respondents. From where they access, which type of e-banking services they uses, how often frequently they use, for what purpose they use, their source of awareness.

Out of 379 respondents participated in this study 327(86.28%) of them were use some form of e-banking services, whereas 52(13.72%) of the respondents were not use any form of e-banking services.

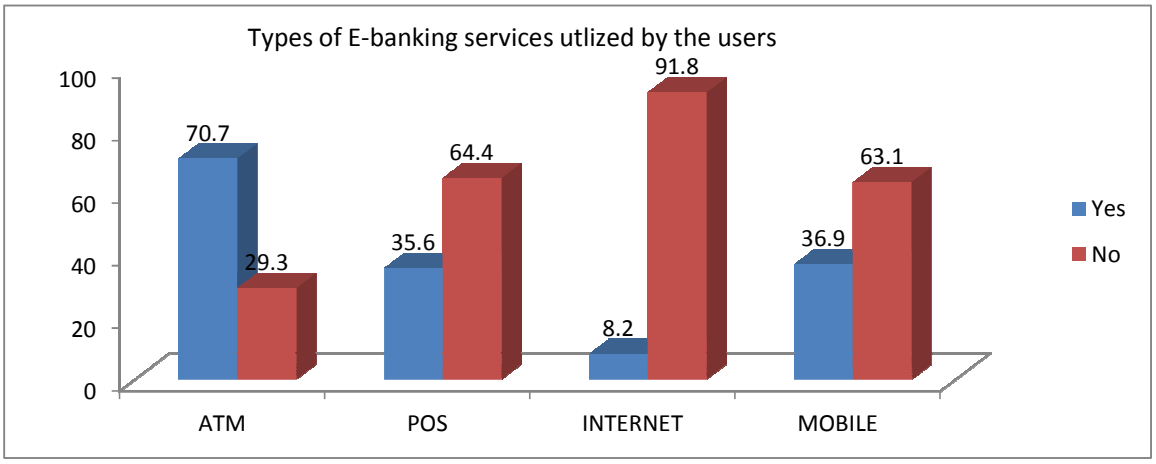


Source: Researcher own computation

Figure 2 E-banking usage statuses of the respondents among MWU academic staff in 2017.

4.4.2 Type of E-banking Services

Among all e-banking services offered from banks, More than two third of the respondents, 268 (70.70%) were use ATM, followed by mobile banking users 140(36.9%). One hundred thirty five (35.6%) of the respondents were use POS to accesses their bank account. Only 31(8.2%) of the respondents were use internet banking.

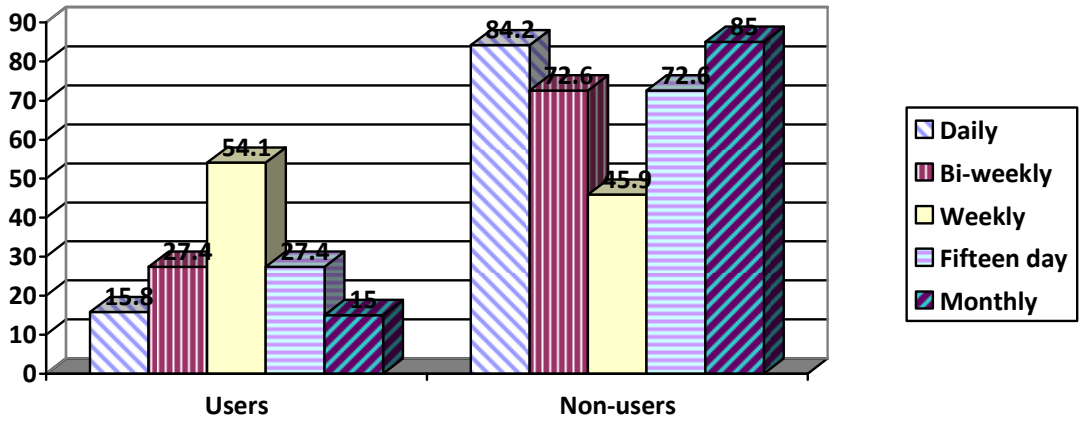


Source: Researcher own computation

Figure 3 Types of e-banking services and their percentage usage among MWU academic staff in 2017.

4.4.1 Frequency of use of e-banking services among MWU academic staff

Figure 4 indicates that more than half, 205(54.1%) of the respondents were use e-banking services weekly. More than one forth, 104(27.4%) of the respondents were use e-banking services bi-weekly. Sixty (15.8%) of the study subjects use e-banking services daily.

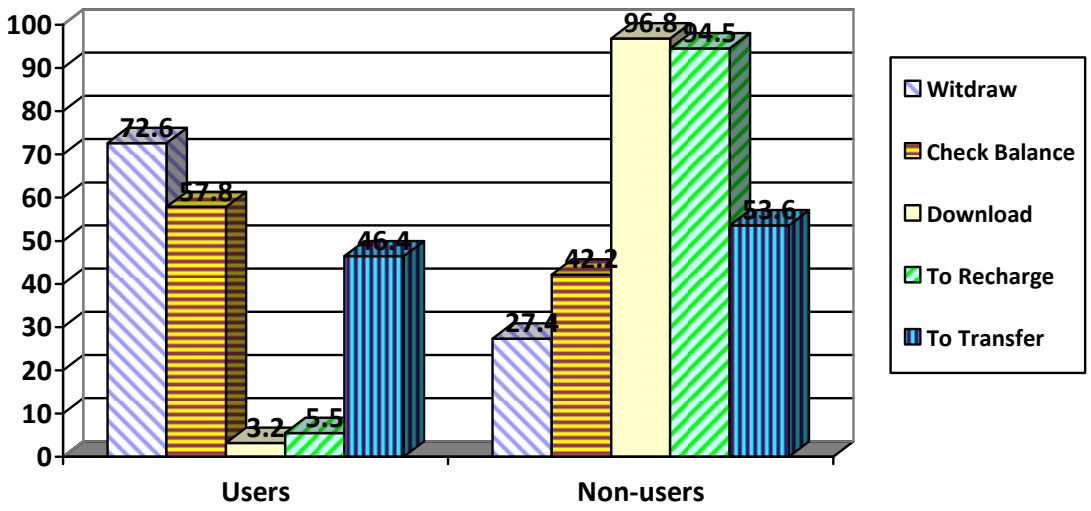


Source: Researcher own computation

Figure 4 Frequency of E-banking usage among Madda Walabu University academic staff in 2017.

4.4.3 Purpose of E-banking Services

The frequency results reveled in Figure 4.3 reveals that near to three fourth, 275(72.6%) of the respondents were use e-banking services for money withdrawal purpose. Two hundred ninety (57.8%) of the respondents were use e-banking services to check their account balance. Twenty one (5.5%) of the study subjects was use e-banking services to recharge their account balance. Only twelve (3.2%) of the respondents were use e-banking services to download account statement.

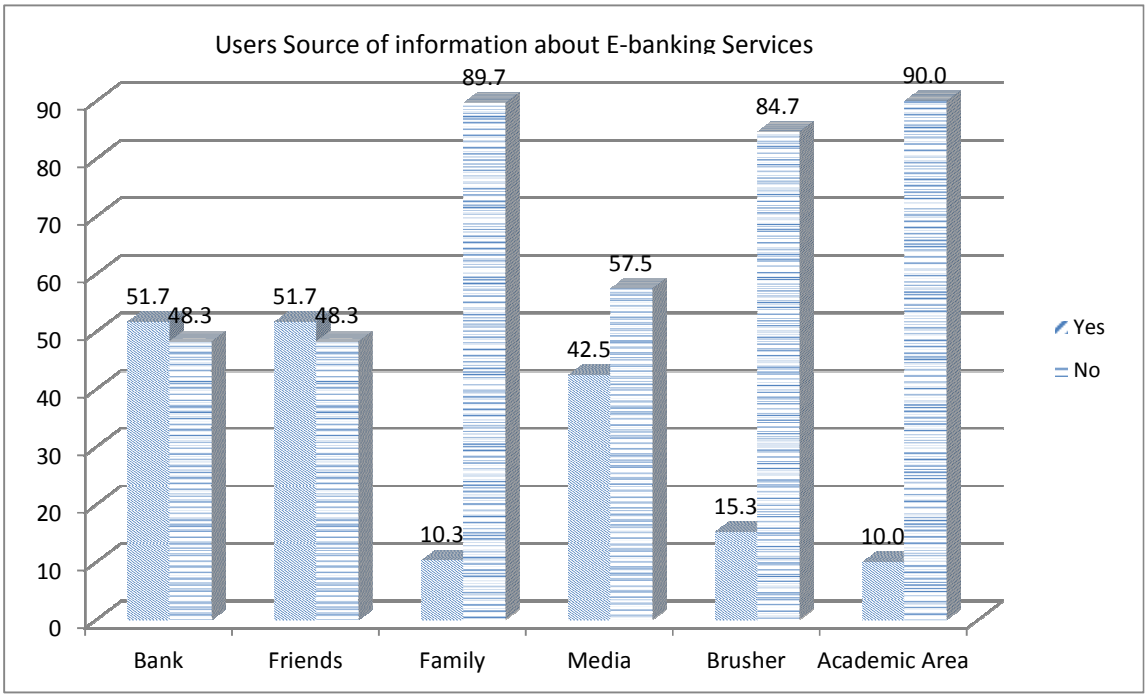


Source: Researcher own computation

Figure 5 Purposes that respondents use E-banking services among MWU academic staff in 2017.

4.4.3 Source of information about E-banking Services

Figure 6 reveals that more than half, 196(51.7%) of the respondents were receive information about E-banking services form the Bank. and it shows that from academic staffs of MWU information received from banks and friends more chance to utilize e-banking services . One hundred ninety six (51.7%) of the respondents were use e-banking services based on the information received from their friends. It shows that among academic staffs of MWU who received information from about e-banking services from the banks and friends have more chance to utilize e-banking services. Thirty nine (10.3%) of the study subjects were get information from family members. One hundred sixty one (42.5%) of the study subjects their source information about use e-banking services were media (TV, Radio, Gazette, Advertising, etc.). Pamphlets and brushers issued by financial institutions were the source of information for 58(15.3%) respondents. Thirty eight (10%) of the study subjects were get information from academic area.



Source: Researcher own computation

Figure 6 Users Source of information about E-banking services among MWU academic staff in 2017.

4.5 Challenges of E-banking utilization among MWU academic staff

Out of 379 respondents 166(43.8%) of them were faced card blocking problems, link problem has been occurred on 134(35.4%) respondents. One third, 125(33%) of the study subjects were experienced machine out of cash. One hundred ten (29%) of the respondents has been an experience of not getting print outs after processing any transactions. More than half, 191(50.4) of the respondents were face out of service machines. 97(25.6%) refer long waiting time as a problem to use ATM, wrong debit 95(25.10%), one hundred three (27.20%) says ATM is not easily accessible. Unreliable network system 150(39.6%), not giving fast response 75(19.80%), leaving the operation unfinished 55914.50%), Lack of security features 16(4.2%) were referred as internet banking problems. Furthermore, one hundred forty (36.90%) of the respondents were login/sign off not easy in mobile banking, followed by lack of security 96(25.30%), lack of appropriate software mentioned by 75(19.80%) respondents as a mobile banking problem.

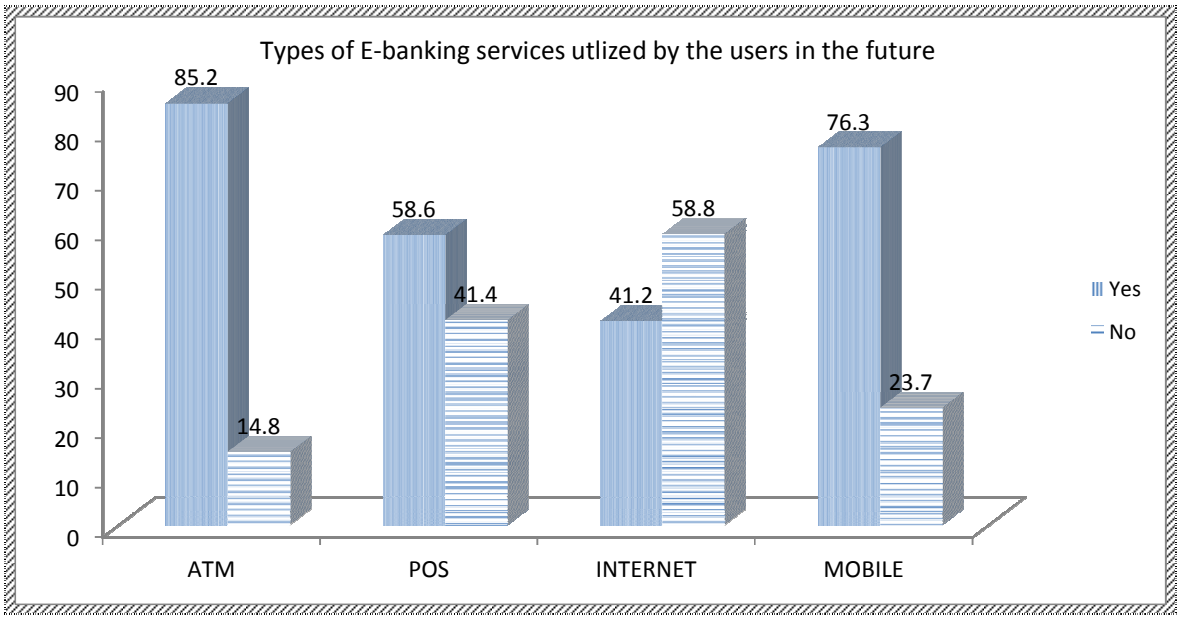
Table 4 **Challenges of e-banking utilization among MWU academic staff in 2017**

Variables	Frequency(n=379)	Percent (%)
ATM Challenges		
Cards blocked	166	43.8
Link problem	134	35.4
Machine out of cash	125	33
Lack of printout	110	29
Out of service	191	50.4
Long waiting time & queues	97	25.6
Wrong debit	95	25.1
ATM not easily accessible	103	27.2
Lack of trust	53	14
Internet Banking challenges		
Not providing information	57	15
Lack of security	16	4.2
Not giving fast response	75	19.8
Leaving the operation unfinished	55	14.5
Tempered by others	22	5.8
Unreliable network system	150	39.6
Too many steps to transact	44	11.6
High cost of internet service	46	12.1
Lack of trust	21	5.5
Mobile Banking challenges		
Login/sign off are not easy	140	36.9
Lack of security	96	25.3
Lack of software	75	19.8

Source: Researcher own computation

4.6 prospects of e-banking utilization among MWU academic staff

Out of 379 respondents, 368(97.1%) of the respondents were want to use E-banking services in the future. Among all respondents, More than two third, 323 (85.20%) were promise to use ATM in the future, followed by mobile banking users 289(76.3%). Two hundred twenty two (41.4%) of the respondents were interested to use POS to accesses their bank account for the coming soon. Only 156(41.2%) of the respondents were promise to use internet banking in the future.



Source: Researcher own computation

Figure 7 Prospects of e-banking utilization among academic staff of MWU in 2017.

4.7 Factors Associated with E-banking Utilization among MWU academic staff.

Logistic regression analysis is an extension to the multi-regression analysis technique in cases where the dependent variable is categorical. Logistic conversion is the natural algorithm of the rates of success and failure odds. Taking into consideration the logistic conversion of success state probability (p) as a correlation function within the framework of a generalized linear model, X_i's express the independent variables and logistic model is obtained as shown below (Ouzlar, 2005).

$$\frac{\partial^2 L}{\partial \beta_{ik} \partial \beta_{ik'}} = -\sum_{j=1}^{N} x_{kj} x_{k'j} \pi_{ig} \left(1 - \pi_{ig}\right)$$

$$\frac{\partial^2 L}{\partial \beta_{ik} \partial \beta_{i'k'}} = \sum_{j=1}^{N} x_{kj} x_{k'j} \pi_{ig} \pi_{i'g}$$

In multiple regressions, the common *t*-test for testing the significance of a particular regression coefficient is a Wald test. In logistic regression, the Wald test is calculated in the same manner. Wald test tests the effect of individual predictor while controlling other predictors.

The Wald test result shown in table 5 in the sig column, the p-values of ease of use and time saving feature below 0.05 reviles that although the Chi-squared test for use vs. not use e-banking was significant, once the other variables were controlled for, there is not a strong enough relationship between that variable and utilization of e-banking. When interpreting the differences, look at the exp (β) column which represents the odds ratio for the individual variable. These means in ease of use were 3.566 times more likely promote to use e-banking than others variables entered in the equation table. With gender, the odds ratio compares the likelihood of a male usage of banking in comparison to females. The odds are lower for women (0.77 times that of men) than men. For ease of interpretation, calculate the odds of a male use of e-banking over a male using 1/0.77 = 1.3 men's were 1.3 times more likely to use e-banking product (see Table 5).

Table 5 Wald test of logistic regression results

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1[a]	Confidence(1)	-.095	.402	.056	1	.813	.910	.414	1.998
	Cost Effect(1)	.612	.511	1.436	1	.231	1.844	.678	5.018
	Ease of use(1)	1.271	.355	12.798	1	.000	3.566	1.777	7.156
	Security(1)	-.349	.459	.578	1	.447	.705	.287	1.735
	Reliability(1)	.233	.500	.218	1	.640	1.263	.474	3.362
	Access(1)	-.348	.369	.889	1	.346	.706	.343	1.455
	TIME(1)	2.058	.360	32.682	1	.000	7.830	3.867	15.856
	Constant	-.052	.360	.021	1	.886	.950		

a. Variable(s) entered on step 1: TIME.

The researcher uses the stepwise method for enter variables in the regression equation. In stepwise method variables were selected in the order in which they maximize the statistically significant contribution to the model. For stepwise logistic regression enter model preferred case-to-variable ratios is 50 to 1 (Hosmer D.W., Lemeshow S., 2004). In this analysis, there were 379 valid cases and maximum of 7 independent variables entered at once. The ratio of cases to independent variables was 54.1 to 1, which satisfies the minimum requirement.

Omnibus tests of model coefficients have been conducted to test the significance of the variables entered in the model at the initial stage of logistic regression. In this analysis, the model was statistically significant chi-square (35.75=P <0.001), (see on Annex B-2), less

than or equal to the level of significance of 0.05. This supports the existence of a relationship between the independent variables and the dependent variable. This means the model was successfully able to differentiate respondents who use e-banking services and who did not use.

On binary logistic regression analysis, awareness about e-banking services, lack of awareness about e-banking services, educational level, source of information about e-banking from bank and friends, cost effectiveness, ease of use, time saving, respondents recommendations to enhance e-banking services: Expansion of more ATM outlets, customer education and marketing, regular maintenance of ATM machines, introducing prompt transaction data on to phones and improve network connections have statistically significant association with e-banking utilization.

To control the possible confounder, multiple logistic regression analysis was also constructed. In the first step, the effects of selected socio-demographic variables on E-Banking utilization were assessed. In the second step of the analysis, personal and environmental related variables were added, and their effect was assessed in the presence of socio-demographic variables that had p value < 0.5. Technological and infrastructure related factors were entered in third step. In this step, the effect of the selected technological and infrastructure related factors were assessed in the presence of both socio-demographic and personal related variables that had p-value < 0.5. The odds of e-banking utilization is two times higher (AOR=2.39, 95% CI=1.29, 4.44) among people who have receive information from banks than other source of information. Time saving feature of e-banking products eight times (AOR=8.23, 95% CI=4.18, 16.19) more likely promote to use e-banking services in the future than other features. Expanding more ATM outlets three times (AOR=3.01, 95% CI=1.58, 5.73) recommended more likely to increase e-banking utilization in the future than other e-banking utilization strategies. Besides, introducing prompt transactions data on to phones three times (AOR=3.42, 95% CI=1.39, 8.44) more likely recommended to increase e-banking utilization than other e-banking utilization strategies.

From all variables entered in all steps of analysis, receive information from banks, time saving feature of e-banking product, expanding more ATM outlets, and introduction of prompt transaction data on to phones were significant after adjusting for other socio-demographic, technological, infrastructure and personal related factors See Table 5.

The Hosmer-Lemeshow test has been applied to determine the goodness for fit in the model and results shown in Table 6 have been reached as a measure of model's effectiveness. It has

been decided that the model is compatible with the data and no lack of compatibility in the model according to the results obtained. The Hosmer and Lemeshow test measures the correspondence of the observed and expected values of the dependent variable (based on the chi-square distribution). The better the model fit, the smaller the difference in observed and expected classification (Hosmer D.W., Lemeshow S., 2004). 0.114 A non-significant value indicates that the model fit is acceptable (no significant differences between observed and expected values)(see Table 6).

Table 6 Hosmer and Lemeshow Test of Goodness- of- fit

Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	11.619	7	.114

Contingency Table for Hosmer and Lemeshow Test

		Do you use e-bank = Yes		Do you use e-bank = No		Total
		Observed	Expected	Observed	Expected	
Step 1	1	44	43.164	0	.836	44
	2	57	55.135	0	1.865	57
	3	40	42.286	4	1.714	44
	4	43	43.651	3	2.349	46
	5	34	33.973	3	3.027	37
	6	34	33.405	4	4.595	38
	7	28	31.445	10	6.555	38
	8	32	27.420	5	9.580	37
	9	15	16.521	23	21.479	38

The other measure goodness-of–fit model is Classification table it is the measure of predictive accuracy used in logistic regression is the hit ratio, i.e. the percentage of cases correctly classified. Percentage of cases correctly classified by the logistic regression model it shows the model fit. These measure of predictive accuracy used in logistic regression is the hit ratio, i.e. the percentage of cases correctly classified. The higher percentage, the better model. The classification accuracy should be at least 25% greater than that achieved by chance (Hosmer D.W., Lemeshow S., 2004).(see Table 7)

Table 7 Classification Table

Classification Table[a]

Observed			Predicted		
			Do you use e-bank		Percentage Correct
			Yes	No	
Step 1	Do you use e-bank	Yes	312	15	95.4
		No	29	23	44.2
	Overall Percentage				88.4

a. The cut value is .500

Table 8 Logistic regression analysis results on E-banking utilization among Madda Walabu university academic staff in 2018.

Variable	Utilization of e-banking		COR (95% CI)	AOR (95%CI)
	Non-users Frequency (%)	Users Frequency (%)		
Sex				
Male	46 (13.4)	297 (86.6)	Ref	
Female	6 (16.7	30 (83.3)	0.77 (0.306, 1.963)	
Level of awareness				
Know E-banking services(AW3) (Yes* Vs. No)	30(10.1)	267(89.9)	8.83(3.67,21.24)	
Know about benefits(AW5) (Yes* Vs. No)	44(12.9)	298(87.1)	0.49(0.2,1.22)	
Never Know about E-banking(AW1) (Yes* Vs. No)	46(23.2)	152(76.8)	8.83(3.67,21.34)	
Prefer traditional banking(AW2) (Yes* Vs. No)	8(6.7)	112(93.3)	0.75(0.35,1.59)	
Believe that training necessary(AW6) (Yes* Vs. No)	37(15.4)	203(84.6)	1.26(0.64,2.47)	
Source of information				
Bank (Yes* Vs. No)	34(18.6)	149(81.4)	2.26(1.22,4.16)	2.39(1.29,4.44)
Friend (Yes* Vs. No)	34(18.6)	149(81.4)	2.39(2.39,4.44)	
Family (Yes* Vs. No)	50(14.7)	290(85.3)	2.73(0.63,11.88)	
Media (Yes* Vs. No)	32(14.7)	186(85.3)	1.56(0.82,2.97)	

Factors promote E-banking utilization				
Confidence on the service				
(Yes Vs. No*)	145(85.8)	24(14.2)	0.93(0.52,1.67)	
Cost effectiveness				
(Yes* Vs. No)	142(92.8)	11(7.2)	3.88(1.79,8.39)	
Ease of use				
(Yes* Vs. No)	238(91.9)	21(8.1)	3.53(1.9,7.42)	3.56(1.8,7.00)
Security				
(Yes* Vs. No)	95(88.8)	12(11.2)	0.71(0.31,1.06)	
Reliability				
(Yes* Vs. No)	128(92.1)	11(7.9)	1.46(0.61,3.49)	
Accessibility				
(Yes* Vs. No)	164(85.9)	27(14.1)	0.68(0.36,1.29)	
Time saving				
(Yes* Vs. No)	266(94.0)	17(6,0)	7.83(3.87,15.86)	8.23(4.18,16.19)
Users recommend that to enhance utilization of E-banking				
Increase security features of e-banking				
(Yes* Vs. No)	206(88.0%)	206(88.0%)	1.46(0.81,2.63)	
Have more ATM outlet				
(Yes* Vs. No)	238(92.2%)	238(92.2%)	4.28(2.33,7,87)	3.01(1.58,5.73)
Customer Education & marketing				
(Yes* Vs. No)	181(89.6%)	181(89.6%)	0.55(0.3,0.99)	
Regular maintenance of ATM				
(Yes* Vs. No)	209(91.3%)	209(91.3%)	2.83(1.55,5.18)	
Introduce prompt transaction data on to phones				
(Yes* Vs. No)	148(94.9%)	148(94.9%)	0.22(0.1,0.48)	3.42(1.39,8.44)
Improve network connections				
(Yes* Vs. No)	260(88.7%)	260(88.7%)	2.23(1.19,4.17)	
Reduce E-banking charges				
(Yes* Vs. No)	157(89.7%)	157(89.7%)	1.74(0.95,3.21)	

*Reference Group. Significant at p-value<0.05 Source:

Source: Researcher own computation

4.7 Discussion

Three hundred seventy nine respondents participated in the study accounted 98.7% response rate. 343(90.5%) of the respondents participated in the study were males. Gender was not statistically related with the use of e-banking at 5% significant level. The same result was obtained by (Alma, 2014). Educational status was not statistically related with the use of e-banking. The same result was reviled by (Alma, 2014), and more than two third, 266 (70.2%) of the respondents were within the age range of 26-35 years with Mean (±SD) of 30.43 (±5.08) years. Academically 244 (64.4%) of the respondents had a master's degree and 243(64.1%) of the study subjects were less than 5 years' work experience. More than half, 196(51.7%) of the study subjects were married. Two hundred forty five (64.6%) of the study subjects were earning more than 10400 Ethiopian birr per a month.

In this study 327(86.28%) of the study subjects were use some form of e-banking services. It seems higher than previous similar studies, 53.9 percent of those surveyed used e-banking (Ainin). Whereas 52(13.72%) of the respondents were not use any form of e-banking .ATM was used by majority of the respondents 268 (70.70%) it is higher than previous similar research done in Ghana by Sumani the result reviles that only 41.1% of the respondents use ATM (Sumani,2011). followed by mobile banking users 140(36.9%) . One hundred thirty five (35.6%) of the respondents were use POS to accesses their bank account. \Only 31(8.2%) of the respondents were use internet banking, it is also better than similar research results 2.2% of the respondents use internet banking (Owusu 2012). More than half, 205(54.1%) of the respondents were use e-banking services weekly. More than one forth, 104(27.4%) of the respondents were use e-banking services bi-weekly. Sixty (15.8%) of the study subjects use e-banking services daily.

Two hundred seventy five (72.6%) of the respondents were use e-banking services for money withdrawal purpose. Two hundred ninety (57.8%) of the respondents were use e-banking services to check their account balance. Twenty one (5.5%) of the study subjects was use e-banking services to recharge their account balance. Only twelve (3.2%) of the respondents were use e-banking services to download account statement.

More than half, 196(51.7%) of the respondents were receive information about E-banking services form the Bank. One hundred ninety six (51.7%) of the respondents were use e-banking services based on the information received from their friends. Thirty nine (10.3%) of

the study subjects were get information from family members. One hundred sixty one (42.5%) of the study subjects their source information about use e-banking services were media (TV, Radio, Gazette, Advertising, etc.). Pamphlets and brushers issued by financial institutions were the source of information for 58(15.3%) respondents. Thirty eight (10%) of the study subjects were get information from academic area.

Out of 379 respondents 166(43.8%) of them were faced card blocking problems, link problem has been occurred on 134(35.4%) respondents. One third, 125(33%) of the study subjects were experienced machine out of cash. One hundred ten (29%) of the respondents has been an experience of not getting print outs after processing any transactions. More than half, 191(50.4) of the respondents were face out of service machines. 97(25.6%) refer long waiting time as a problem to use ATM, wrong debit 95(25.10%), one hundred three (27.20%) says ATM is not easily accessible. Unreliable network system 150(39.6%), not giving fast response 75(19.80%), leaving the operation unfinished 55914.50%), Lack of security features 16(4.2%) were referred as internet banking problems. Furthermore, one hundred forty (36.90%) of the respondents were login/sign off not easy in mobile banking, followed by lack of security 96(25.30%), lack of appropriate software mentioned by 75(19.80%) respondents as a mobile banking problem.

Out of 379 respondents, 368(97.1%) of the respondents were want to use E-banking services in the future. Among all respondents, More than two third, 323 (85.20%) were promise to use ATM in the future, followed by mobile banking users 289(76.3%). Two hundred twenty two (41.4%) of the respondents were interested to use POS to accesses their bank account for the coming soon. Only 156(41.2%) of the respondents were promise to use internet banking in the future.

On binary logistic regression analysis, awareness about e-banking services, lack of awareness about e-banking services, educational level, source of information about e-banking from bank and friends, cost effectiveness, ease of use, time saving, respondents recommendations to enhance e-banking services: Expansion of more ATM outlets, customer education and marketing, regular maintenance of ATM machines, introducing prompt transaction data on to phones and improve network connections have statistically significant association with e-banking utilization.

The odds of e-banking utilization is two times higher (AOR=2.39, 95% CI=1.29, 4.44) among people who have receive information from banks than other source of information. Time saving feature of e-banking products eight times (AOR=8.23, 95% CI=4.18, 16.19) more likely promote to use e-banking services than other features. Expanding more ATM outlets three times (AOR=3.01, 95% CI=1.58, 5.73) recommended more likely to increase e-banking utilization than other e-banking utilization strategies. Besides, introducing prompt transactions data on to phones three times (AOR=3.42, 95% CI=1.39, 8.44) more likely recommended to increase e-banking utilization than other e-banking utilization strategies.

From all variables entered in all steps of analysis, receive information from banks, time saving feature of e-banking product, expanding more ATM outlets, and introduction of prompt transaction data on to phones were significant after adjusting for other socio-demographic, technological, infrastructure and personal related factors.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

This chapter summarizes the major findings from the data collected. The investigator draws conclusions from the findings and recommends what could be done to increase e-banking utilization in the study areas.

The research results reviled that the majority of the study subjects at MWU academic staff were use e-banking services. From different types of E-banking facilities Automated teller machine (ATM) were widely used by the respondents. Most of e-banking users were utilized e-banking services for withdrawal purpose and to check their account balance.

Regarding awareness and utilization of e-banking facilities, the study results brought that most of academic staffs were some knowledge about e-banking products. Majority of the respondents were receiving information about E-banking services form the Bank and from their friends.

Most of the respondents experience widely the following ATM challenges: Wrong debits, out of service ATM machines and network failures. Regarding mobile banking service lack of Unreliable network system and lack of appropriate software were shown as mobile banking problems in this study. Internet banking more likely utilized by few people and it needs more marketing to sale this important and wide spectrum e-banking product. Internet banking challenges were unreliable network system, unfinished operation and Lack of security features.

This research limited to only Madda Walabu University academic staffs and these are relatively similar population with low diversity. Therefore in the future need to conduct the research in relatively diversified population.

5.2 Conclusion

To conclude, this research discovered that most of academic staffs use e-banking facilities currently and want to in the future. The majority respondents were males and academically have a master's degree and above. Almost all academic staffs have a bank account and most of them have knowledge about e-banking. The researcher concluded that, from all possible source of information about e-banking, who receive information from banks and friends more likely utilize e-banking services. Furthermore, ATM is widely utilized e-banking product and most of users use ATM to withdraw cash. In addition to these most of the respondents were wanted to use ATM in the future. In the contrary, the research results reviled that internet banking was poorly utilized currently and it has also less relative chance to be utilized in the future. Ease of use and time saving feature of e-banking products have a significant effect on e-banking utilization. Expanding more ATM outlets, and introduction of prompt transaction data on to phones were significant relationship with utilization of e-banking.

5.3 Recommendation

The researcher forward recommendations based on the research findings to increase e-banking utilization.

Banks must be ensured that and work hard to make e-banking products more user-friendly and easy to use.

Providers of e-banking products expected to provide more reliable and speedy products to avoid vague and long transaction process.

Banks must be ensured the functionality of e-banking facilities during delivery to customers. Encourage first time use on ATM, POS or mobile banking immediately after issue. It makes customers more familiar to the product and eliminates confusion and link problem.

Banks required reinforcing their investments in e-banking channels, including ATMs, mobile banking, internet banking and install POS terminals in various merchant locations. Be sides they required to advertise and sell their products for effective utilization of e-banking.

Banks should conduct promotional campaigns to sell e-banking products and services to the customers. In addition to this bankers initiate users to utilize the complete set of a certain e-banking product features.

Security is critical issue for the current e-banking environment because e-banking carried out through internet and internet lacks central management to eliminate endangers. Because of this scenario e-banking exposed to hackers that may intercept messages, misuse the information or modify the content of message and leads users in to wrong decisions and financial loss. Therefore financial institutions that provide e-banking services to customers must be ensure strong securities.

Banks should be shorten e-banking transaction processes and promote users to access at a minimal time. In addition to this bankers should conduct awareness creation strategies to increase e-banking utilization.

Finally, there should be constant monitoring and maintaining of the ATM. Experts in ATM should be follow strictly the status of their machine weather it is break down or not, have a cash or not and take appropriate action immediately. The number of ATM should also be increased to avoid pressure on few ones and to make accessible.

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APPENDIXES

Annex A Questionnaire

Madda Walabu University

School of business and Economics

Department of Management

Master of Business Administration (MBA)

I am Endalkachew Amare

Dear respondent

My name is Endalkachew Amare I am conducting research for my partial fulfillment of MBA at Madda Walabu University, Graduate School of Business and Economics. This is a study conducted with the objective of assessing Utilization, Challenges and Prospects of E-Banking among academic staff of Madda Walabu University, Ethiopia. As the study is directly related to your University, you are selected as one of the study subjects. The confidentiality of the questionnaire is protected and only used for research purpose. Please assist me by giving correct and complete information.

General Instruction: For your free and genuine responses, please circle your answer and fill on the blank space.

Part I: BACK GROUND INFORMATION		
Ser. No	**Question**	**Response**
1.	Your department/unit	_____ Please specify
2.	Age	_____ Years
3.	Sex	Male Female
4.	Educational Status	Degree Masters PHD Post doc
5.	How long have you worked in this University	_____Month or _____ year ***Use one of the above time parameter***
6.	Your monthly Income	_____ ETB Please specify

7.	Marital Status	Single Married Divorced Widowed

Part II: UTILIZATION OF E- BANKING		
Ser. No	**Question**	**Response**
1.	Do you have a bank account	Yes No
2.	Do you know about e-banking?	Yes No
3.	How aware are you about E-banking services and its benefits? ***(Circle all that are acceptable to you)***	I receive enough information about e-banking services I receive enough information about the benefits of e-banking services I receive enough information about how to use e-banking services I never received information about e-banking services from the bank I prefer traditional method of banking than e-banking I prefer to use e-banking services when enough information/ training provided
4.	What is your source of information about e-banking? ***(Circle all that are acceptable to you)***	Bank Friends Family Media (TV, Radio, gazette, advertising) Brusher and Pamphlet Academic area Other_____specify
5.	Do you use e-banking service?	Yes No
6.	From where do you use e-banking service? ***(Circle all that are acceptable to you)***	CBE (Commercial Bank of Ethiopia) Private commercial banks
7.	Does your bank provide E- Banking services?	Yes No
8.	Which type of e-banking services do you mostly used? ***(Circle all that are acceptable to you)***	ATM POS machine Mobile banking Internet banking

		Other _____ specify
9.	Why do you use e-banking service? ***(Circle all that are acceptable to you)***	To withdraw money To transfer money To check balance To download statement To pay bill Other _____ specify
10.	How often do you use E-Banking service?	Daily Bi-Weekly Weekly Once in two weeks Monthly Other_____ Specify

PART III: CHALLENGES OF E-BANKING		
Ser. No.	**Question: Challenges of technology Usage:**	**Response**
1.	**ATM Challenges** ***(Circle all that are acceptable to you)***	**C**ards get blocked Link problem Machine out of cash Non printing of statement Machine out of service long waiting time in queues Reduction in balance without cash payment ATM is not easily accessible I do not trust ATM services Other_____ Specify
2.	**Internet Banking Challenges** ***(Circle all that are acceptable to you)***	Not providing information Not being able to maintain security Not giving fast response Leaving the operation unfinished Internet banking can be tampered with by others There is unreliable network system Too many steps in processing transaction The cost of the internet is too high I do not trust I-banking services Other_____ Specify

3.	**Mobile Banking Challenges** ***(Circle all that are acceptable to you)***	Login / Sign off are not easy. Lack of security in transactions. Lack of appropriate software Other_____ specify

PART IV: PROSPECTS OF E-BANKING		
Ser. No.	**Question**	**Response**
1.	Will you use e-banking in the future?	Yes No
2.	If your answer is ***yes*** to Question No ***1.*** for what purpose will you use? ***(Circle all that are acceptable to you)***	To withdraw money To transfer money To check balance To download and print statement To recharge Other _____ specify
3.	If your answer is ***yes*** to Question No ***1***. Which type of e-banking will you use? ***(Circle all that are acceptable to you)***	ATM POS machine Mobile banking Internet banking Other _____ specify
4.	Which factors promotes you to use e-banking services? ***(Circle all that are acceptable to you)***	Confidence on the service Ease of use Cost effectiveness Security Reliability Accessibility Time saving Other _____ specify.
5.	What ways do you recommend to enhance better utilization of E-Banking? ***(Circle all that are acceptable to you)***	Valid Increase security on use of E-banking products Have more ATM outlet Customer education and marketing E-banking products Regular maintenance of ATM Introduce prompt transaction data on to phones

		Improve on network connections Reduce E-banking charges Other_____specify

Thank you

Annex B

Annex B-1

Survey Data

Reliability statistics (All data)

	N of Items	Cronbach's Alpha
Type of E-banking Services	4	0.851
Awareness About E-banking	6	0.834
Source of information	6	0.895
Use of e-banking	5	0.861
Frequency of e-banking	5	0.880
ATM challenges	9	0.922
Internet Banking Challenges	9	0.907
Mobile Banking Challenges	3	0.877
Promotes E-banking usage	7	0.839
Helps to Enhance E-banking	7	0.825

ANNEX B-2

Omnibus test result

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 7	Step	35.750	1	.000
	Block	35.750	1	.000
	Model	35.750	1	.000

Contingency Table for Hosmer and Lemeshow Test

		Use of E-banking = 2		Use of E-banking = 1		Total
		Observed	Expected	Observed	Expected	
Step 1	1	16	21.523	68	62.477	84
	2	18	12.477	81	86.523	99
	3	18	12.477	81	86.523	99
	4	0	5.523	97	91.477	97