KEY FACTORS THAT DETERMINE ADOPTION OF INTERNET BANKING IN ETHIOPIA

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DEPARTMENT OF ACCOUNTING AND FINANCE

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DECLARATION

I, the undersigned, declare that this study is my original work and has not been presented for a degree in any other university, and that all sources of materials used for the study have been duly acknowledged.

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ABSTRACT

Banking around the clock is no longer a remote possibility. But the banks don't have to keep their branches open 24 hours a day to provide this service. This is one of the biggest advantages of Internet banking.

Advances in electronic banking technology have created new ways of handling banking transactions, especially via the online banking channel. In Ethiopia, internet banking is still in its early stages and it is not utilized as a considerable savings tool in operating costs for banks and in improving customer relationships. The intent of this research project is to identify the factors affecting the adoption of Internet banking by customers in Ethiopia.

An understanding of how demographic characteristics, social factors, and consumer perceptions and attitudes towards internet banking influence the adoption of internet banking can allow banks to create solutions and plans to attract consumers to their internet banking services, thus enabling them to gain a greater share in the banking market.

This study investigates attitudes of retail banking customers in Ethiopia, specifically in Addis Ababa, towards the adoption of internet banking. A research framework based on the diffusion of innovation theory was used to identify factors that would influence the adoption of internet banking. This report has reviewed current literature and opinions about this innovative banking technology. It has also reviewed the factors, including consumer demographic characteristics, consumer perceptions toward internet banking characteristics and social influences that affect consumer adoption of this mode of banking.

This study presents both the results of the 400 survey questioners and the analysis of these results, with graphs and figures to determine the extent that the factors studied influence customer adoption of internet banking.

The key findings revealed that demographic factors including age, income, education level and occupation have a relationship with the adoption of internet banking. Psychological factors including perceived relative advantage, perceived compatibility, perceived complexity, perceived risk, and perceived cost were found to influence the adoption of internet banking. Social influences including opinions of friends, parents and colleagues were not found to be significant factors to influence the adoption of internet banking in the Ethiopian context.

And finally possible recommendations were given so that the banking sector in Ethiopia can exploit the potential advantages of internet banking to remain competitive.

CHAPTER ONE: INTRODUCTION

1.1 Overview

Advances in information and communication technologies in particular, the growing use of the internet for business transaction, have had a profound effect on the banking industry. While this is a global phenomenon, creating a truly global marketplace, penetration of internet banking into less developed countries lags behind that of the developed Western countries.

Throughout the past three decades, innovation, within the banking industry, has rapidly increased in an attempt by the industry to combat escalating competition from incumbents, new entrants, accelerating costs and the increasing need by banks to satisfy sophisticated consumer demands. The most recent innovation to occur within the industry has been electronic distribution channels and, more specifically, internet banking which represents a means of revolutionising and modernising this traditionally stagnant industry (Bradley, 2000:2). There is no doubt that the revolutionary developments in information and communications technology will transform the banking industry. Internet banking, despite the uncertainties about its future, will be an important part of this transformation.

This study attempts to provide a useful picture of the current market for internet banking in Ethiopia, the factors involving demographic factors; consumer's perceptions and attitudes toward internet banking and social influences affecting the decision to adopt internet banking as well as the scope of services offered, and information on the banks plans for the future.

The objective of this study is to identify and describe the factors influencing the adoption of internet banking in Ethiopia. To date very little consideration has been given to researching these factors locally, and perhaps this is why internet banking has not been more widely exploited in this country. The fact that Ethiopian trail many other countries in the rate of adoption of internet banking indicates that there is an urgent need for a locally based study of this nature.

1. 2. Background of the Study

Banking has always been a highly information intensive activity that relies heavily on information technology (IT) to acquire, process, and deliver the information to all relevant users. Not only is IT critical in the processing of information, it provides a way for the banks to differentiate their products and services. Banks find that they have to constantly innovate and update to retain their demanding and discerning customers and to provide convenient, reliable, and expedient services. Driven by the challenge to expand and capture a larger share of the banking market, some banks invest in more bricks and mortar to enlarge their geographical and market coverage. Others have considered a more revolutionary approach to deliver their banking services via a new medium the Internet. Since the introduction of the Internet in 1969, it has evolved from the sole domain of the computer nerd and the academic to a mainstream channel of communication (Nehmzow, 1997). Recently, it has been rapidly gaining popularity as a potential medium for electronic commerce (Crede, 1995; Ooi, 1999; U.S. Department of Commerce, 1999).The rapid growth of the Internet has presented a new host of opportunities as well as threats to business. Today, the Internet is well on its way to become a full-fledged delivery and distribution channel and among the consumer-oriented applications riding at the forefront of this evolution is electronic financial products and services With the rapid diffusion of the Internet, banking in cyberspace is fast becoming an alternative channel to provide banking services and products. The Internet is now being considered as a strategic weapon and will revolutionize the way banks operate, deliver, and compete against one another, especially when competitive advantages of traditional branch networks are eroding rapidly (Nehmzow, 1997; Seitz, 1998). As "Business Week" noted, "Banking is essential to a modern economy, banks are not" (quoted in Financial Times, 1996). This statement is supported by a recent report from Booz Allen & Hamilton (Warner, 1996) that claims the Internet poses a very serious threat both to the customer base of the traditional banking oligopoly and to its profits. Their belief is that the Internet Promises a revolution in retail banking of monumental proportions. High street or brick and mortar banks as we know them may largely disappear .Indeed; the emergence of Internet banking has prompted many banks to rethink their IT strategies in order to stay competitive. Customers today are demanding much more from banking services. They want new levels of convenience and flexibility (Birch and Young, 1997; Lagoutte, 1996) on top of powerful and easy to use financial management tools and products and services that traditional retail banking

could not offer. Internet banking has allowed banks and financial institutions to provide these services by exploiting an extensive public network infrastructure (Ternullo, 1997).

1.3 Problem Statement

This study focuses on the adoption of Internet banking services in Ethiopia and aims to gain a deeper understanding of the factors influencing the adoption of Internet banking services by Ethiopians, particularly in Addis Ababa customers. The research question for this research is formulated as:

What are the main factors which influence the adoption of Internet banking services?

To this end, information was gathered from a broad base community in the Addis Ababa paying particular attention to customers of the retail banks. Addis Ababa is chosen as this is one of the most developed business and financial centre in the country. The focus of this research project is particularly to provide both bankers and policy makers with public opinion that could assist in the understanding and appreciation of the factors that affect the adoption of Internet banking in Ethiopia.

1.4 Objectives

1.4.1 General objective

The General objective of this study is to identify the factors influencing the adoption of internet banking in Ethiopia.

1.4.2 Specific objectives

1. To identify the factors that influence consumers to use internet banking.
2. To measure the relationships between the factors (consumer demographic factors, internet banking characteristics, social influences) and the adoption of internet banking.
3. To identify the factors that abstain customers from using internet banking.
4. To Propose opportunities for both participants and researchers to unseen problems, hereby improving the use and acceptance of internet banking

1.5 Significance of the Study

Introduction of new technologies allowed banking institutions to offer new channels of service outlets like ATM facility, Internet Banking, Telephone Banking, SMS banking and Mobile Banking. Ethiopian consumers recently too have access to many new channels to interact with their bank. Banks race against each other in bringing the latest technology for the benefit of their customers and themselves. But not many studies have been conducted to evaluate if "Internet Banking" channel is utilized properly by the customers in Ethiopia and Factors affecting customer's adoption towards Internet banking channel, if that exist, have also not been analyzed in an Ethiopian context earlier.

1.6 Scope of the study

The study was limited to Addis Ababa. The reasons for this are:
Ethiopia is too large for the researcher to travel all over the country.
Addis Ababa is one of the largest and commercial cities in Ethiopia and has a heterogeneous population which ensures a wide spread of potential respondents to the study.
The cost and time required to conduct the study was lower because the study was limited to a restricted geographic area.

1.7 Research Methodology

This section explains the research methodology that was applied to obtain representative data from a sample of the retail banks in Addis Ababa.

1.7.1 Research Design

This quantitative study is aimed at identifying the factors influencing the adoption of internet banking among Ethiopian customers. A questionnaire was developed and pre-tested in order to

obtain the information required. The research was descriptive, that is, it was used to determine market characteristics.

1.7.2 Definition of the target population

The sampling population was defined as customers of Ethiopian retail banks both users and non users of internet banking who have bank accounts; non-users are included in the sample to know their perceptions towards internet banking.

1.7.3 Sample Size.

150 respondents at each of two shopping malls (Denbel city center and Getu commercial center) and 100 postgraduate students at Addis Ababa University were interviewed. This means that 400 respondents in total were selected for the study from which 320 respondents were non users of internet banking and 80 respondents were users of internet banking.

1.7.4 Data Collection

Data was collected through the use of questionnaires, administered via interviews. In this study, non-probability sampling was used; judgmental sampling was used to choose sampling unit units, that is to say the place where the interviews would be conducted was selected. For selecting the respondents who were to be interviewed the convenience sampling method was used.

1.7.5 Data Analysis

A descriptive analysis is used to present and interpret the data collected on various variables of factors affecting adoption of internet banking. Frequency tables and charts along with percentages are also employed to analyze the responses of consumers of retail banks in Ethiopia.

1.8. Organization of the Study

The study is organized under four chapters. The introductory part bears background information, Statement of the problem, objectives, significance of the study, Scope of the study and the methodology used to conduct the study, the second chapter deals with review of related literature. The third chapter presents the findings from the respondents wherein the data gathered are analyzed and interpreted. Finally, the last chapter attempt to generalize and recommend possible solutions to the problems

CHAPTER 2: LITERATURE REVIEW

2. Review of Related Literature

Chapter two is structured along several themes. First of all, this chapter explains the basic terminology of electronic banking and Internet Banking. Second, this chapter outlines the definition of adoption and provides insight into the advantages and disadvantages of internet banking as well as the benefits for using internet banking for banks and customers. Moreover, this chapter gives an overview of the status of internet banking in Ethiopia.

2.1 Basics of Electronic Banking.

Electronic banking is a high-order construct, which consists of several distribution channels. It should be noted that electronic banking is a bigger platform than just banking via the Internet. However, the most general type of electronic banking in our times is banking via the Internet, in other words Internet banking. The term electronic banking can be described in many ways. In a very simple form, it can mean the provision of information or services by a bank to its customers, via a computer, television, telephone, or mobile phone (Daniel, 1999). Burr (1996), for example, describes it as an electronic connection between bank and customer in order to prepare, manage and control financial transactions. Internet banking allows consumers to access their bank and accounts to undertake banking transactions.

At an advanced level Internet banking is called transactional online banking, because it involves the provision of facilities such as accessing accounts, transfer of funds, and buying financial products or services online (Sathye, 1999).

The terms Internet banking and online banking are often used in the literature to refer the same things. Nowadays the Internet is the main channel for electronic banking.

Furthermore, electronic banking is said to have three different means of delivery: telephone, PC, and the Internet. Daniel (1999), for example, introduces four different channels for electronic banking: PC banking, Internet banking, managed network, and TV-based banking.

It is important to remember that Internet Banking is different from PC Home Banking. The obvious difference is that Internet Banking is browser-based, whereas PC Home Banking requires customers to install a software package assigned by the bank on their PC.

Moreover, PC Home Banking allows customers to do their banking services only on PCs that have been installed the assigned software package, Karjaluoto et al. (2002a) suggests that the main electronic delivery channel in banking is the Internet, accessed via personal computer.

Telephone banking, TV-based banking, and managed network do not play such a big role in banking today. However, in the future the delivery platform is expected to shift from wired Internet connections to wireless mobile technologies. Thus, as Wah (1999) points out, electronic banking does not necessarily have to be on a computer screen. It can, for example, be on the tiny screen of a mobile phone or any other wireless device. With these wireless applications, customers can, for example, consult their bank account balances and transaction histories, view pie charts of their holdings in a portfolio, initiate payments or orders to buy and sell securities, and also send e-mail to their banks.

Electronic banking is the newest delivery channel in many developed countries and there is a wide agreement that the new channel will have a significant impact on the bank market (Daniel, 1999; Jayawardhena and Foley, 2000). According to Nehmzow (1997) Internet banking offers the traditional players in the financial services sector the opportunity to add a low cost distribution channel to their numerous different services. He continues that Internet banking also creates a threat to traditional banks' market share, because it neutralizes so many of their competitive advantages in having a traditional branch bank network**.** Table 2-1 have summarized different delivery platform for e-banking.

There has also been some discussion about the disappearance of traditional banks. The future of Internet banking looks very promising. As Internet banking becomes more popular, it will be interesting to see what happens to traditional banks with branches. Wah (1999), for example, argues that traditional banks will not disappear in the future. Instead, the new technology will put

them on a new level in banking services. She concludes that even traditional banks will benefit from this new technology, and they will be able to care for their customers in a more efficient, more productive and even more fun way. She also argues that Internet banking is playful for customers. However, there is relatively little evidence about the playfulness of Internet banking.

Table 2-1: Delivery platform for electronic banking. Source: Adapted from Daniel, 1999 and Karjaluoto, 2003

Types of service	Description
PC banking (private dial up)	Proprietary software, distributed by the bank, is installed by the customer on their PC. Access to bank via a modem linked directly to the bank
Internet banking	Access their bank via Internet
Managed network	The bank makes use of an online service provided by another party.
TV based	The use of satellite or cable to deliver account information to the TV screens of customers (Also Internet based)
Telephone banking	Customers access their bank via telephone (Own personal ID and password required)
Mobile phone banking (SMS, WAP, 3rd generation)	Access with text message (SMS), Internet connection (WAP), or high speed 3rd generation mobile connection (also Internet based)

2.1.1 The concept of internet banking.

Internet Banking means that banking services such as services introduction, loan application, account balance inquiry, fund transfer and so forth are provided by a bank through the Internet. Internet banking has evolved into a “one step service and information unit” that promises great benefits to both banks and consumers. According to Michael Karlin, the President and Chief Operation Officer of the world's first virtual bank, Security First Network Bank, the idea of Internet Banking is as follows:

- You do not have to purchase any software, store any data on your computer, back up any information, since all transactions occur on the bank server over the infrastructure of the Internet.
- You will be able to conduct your banking services anywhere you like but you need to have a computer and a modem, no matter where you are (e.g. at home, at office, or in a place outside the country).
- You can use the banking services 24 hours a day, 7 days a week, and 365 days a year. You no longer have to reconcile a bank statement or manually track your ATM and paper checks.

Table 2:-2 Electronic banking services provided by Ethiopian banks.

ELECTRONIC SERVICE	FEATURES/SERVICE RENDERED
INTERNET BANKING	❖ Personal Profile Administration allowing personal demographic updates such as physical address, email address, phone numbers etc as well as Preference Updates such as automatic notifications, alerts and secure account messaging ❖ Balance enquiry for each account ❖ View daily transaction register, with PDF export capabilities or export to excel for further analysis ❖ Ability to link accounts together so that transfers can be completed from one account to another within a fraction of a second ❖ Customer Service enquiry and resolution ❖ View check issuance status through the register ❖ Password change and management features ❖ Intrusion detection capability
SMS BANKING	❖ authentication and verification ❖ Check daily, weekly or monthly balance ❖ Interactively receive account balance ❖ Produce a mini statement on your mobile ❖ Receive alerts and notification on: ✓ Low balance is reached in your account ✓ Deposit and withdrawal, including when check is presented at Branch ✓ Transfer of funds from your account or into your account

ATM BANKING	➢ All customers will receive an ATM Card and Personal identification Number (PIN). ➢ The ATM allows you to receive cash at your convenience. It also allows you to check your balance, make transfers and deposit cash. ➢ ATM machines are being deployed throughout Addis Ababa
CALL CENTER BANKING	➢ Secure delegated 24 hour service ➢ Authentication and verification ➢ Balance enquiry ➢ View daily transaction register (last five) Transfer between linked accounts ➢ Customer Service enquiry and resolution ➢ Request Online Statement via e-Mail or Branch

Source: www.zemen bank.com

2.1.2 The benefits of internet banking to banks and customers

The emergence of the Internet has had a significant impact on the diffusion of internet banking. With the help of the Internet, banking is no longer bound to time or geography. Consumers all over the world have relatively easy access to their accounts 24 hours per day, seven days a week.

Therefore, internet banking provides many benefits to both banks and their customers (Karjaluoto, 2002, p.348).

2.1.3 Benefits of internet banking to banks

Internet banking offers many benefits to banks and their customers. The main benefits to banks are cost savings, reaching new segments of the population, efficiency, enhancement of the bank's reputation and better customer service and satisfaction (Brogdon, 1999, p.2).

The more those clients convert to internet banking, the greater the monetary saving will be. According to Robinson (2000, p.105), the cost of an electronic transaction is dramatically lower than the cost of a face-to-face branch transaction. Robinson adds that internet banking strengthens the relationship between the service provider (e.g. bank) and the customer because it brings banking services directly to a customer's home, office or mobile phone. This creates customer loyalty. The last point the author makes is that online services are a must for banks that have to compete with a growing number of services from other financial institutions, investment concerns and insurance companies. The new technology offers a whole new possibility to the banking sector. Furthermore, banking is no longer tied to time and place. As a result global competition is expected to broaden.

Sheshunoff (2000,p.54) says that the single most important driving force behind the implementation of full-service internet banking by banks is the need to create powerful barriers to customers exiting. The author argues that once a customer moves to full–service internet banking, the likelihood of that customer moving to another financial institution is significantly diminished. The main reasons for this behaviour can be found in the consumer behaviour theory that switching always requires much time and effort from the individual consumer. The author concluded that the competitive advantage of internet banking for banks is very significant. Burns (2000, p.5) argues that electronic banking customers are more valuable to banks than traditional customers.

Through electronic banking, banks can achieve better cross-channel productivity and performance. The move towards internet banking increases the need for a holistic approach to channel and process management, especially when integrating new delivery channels into existing frameworks (as many traditional banks are currently doing). Burns (2000, p.5) indicates that the Internet will not replace other delivery channels, but will offer increased flexibility and the opportunity for improved service.

Internet banking customers are found to be more loyal to their bank than non- internet banking customers (Mols, 1998, p.200). Mols concluded a survey in Denmark and presented some interesting insights into internet banking users. His results suggest that internet banking customers: are more satisfied with their bank; have higher switching barriers; provide more positive word-of-mouth opinions about their bank; have higher repurchase intentions; have lower price sensitivity; have a lower propensity to exit and a higher propensity to complain. However, there is not much evidence to suggest that internet banking itself strengthens customer loyalty.

2.1.4 Benefits of internet banking for customers

Internet banking makes available to customers a full range of services including some services not offered at branches. The greatest benefit of internet banking is that it is cheap or even free to customers. However, price seems to be one factor militating against internet banking (Sathye, 1999, p.333).

Internet banking, in general, is not limited by time or place. It has also been argued that the electronic banks are more likely to change in response to customers demands (Brogdon, 1999,p.4). Internet banking has the advantage that the customer cuts down on traveling to and from a bank branch. In this way, internet banking saves time and money, provides convenience and accessibility, and has a positive impact on customer satisfaction. Customers can manage their banking affairs when they want, and they can enjoy more privacy while interacting with their bank. It has been claimed that internet banking offers the customer more benefits at lower costs (Mols, 1998, p.200).

To summarize, electronic banking in general and Internet banking in particular offer many benefits to both service providers and their customers.

2.1.5 Advantages and disadvantages of internet banking

Internet banking offers certain advantages in comparison with traditional banking methods. According to Wang (2002,p.4), internet banking is time saving and convenient since a customer can bank seven days a week and twenty-four hours a day without physically visiting a branch, and transactions are executed and confirmed almost immediately. Martins, et al., (2001, p.32) indicate that internet banking offers clients security as they can choose their own secret PIN (Personal Identity Number), thereby, preventing unauthorized access to their accounts. Client safety is also improved by reducing the need to carry around large amounts of cash.

However, Wang (2002,p.4) argues that internet banking also has disadvantages, the main one being the cost of purchasing and maintaining suitable computer equipment, or obtaining access to such equipment. This is an additional cost which is not present when using traditional banking or other online banking services such as ATMs. Pahnila (2002,p.2) points out that cash can neither be deposited nor withdrawn with internet banking, and so inevitably there is the inconvenience of having to visit the local branch or ATM. Another disadvantage of internet banking is the possibility that security may be threatened by computer hackers and fraudsters.

2.2 Different types of internet banking

Molla (2002,p.2) defines internet banking as a distinct subset of electronic/online banking which is more broadly defined as the provision of retail and small value-added banking products and services through electronic channels. This electronic banking definition includes several different forms of internet banking, the different types of which are outlined below.

- Internet banking which makes use of a bank's proprietary software. This form of online banking uses the bank as an "electronic gateway" to customer accounts. Customers install

this software on their home computers to enable them to transfer funds and pay bills electronically.

- Internet banking via personal computers using dial-up software. Here, customers make use of home finance software to link to banks for online banking.
- Internet banking via online services. Banks set up retail branches on subscriber-based online services such as America Online.
- Internet banking via the World Wide Web. This form of online banking bypasses subscription based services and allows banks to interact directly with their customers through the World Wide Web.

2.3 Adoption

Adoption is the acceptance and continued use of a product, service or idea. According to Rogers and Shoemaker (1971), consumers go through "a process of knowledge, persuasion, decision and confirmation" before they are ready to adopt a product or service.

So the stages through which a technological innovation passes are:

1. Knowledge
2. Persuasion
3. Decision
4. Implementation
5. Confirmation

A potential adopter passes through certain stages before decision is made on whether to adopt or reject an innovation. Rogers has been one of the number of researchers who has focused upon the adoption process, which he defines as the "the process through which an individual or other decision-maker unit passes from first knowledge of an innovation, to forming an attitude toward the innovation to a decision or rejection to implementation of the new idea, and to confirmation of this decision" (Frambach, 1993).

The innovation adoption process defined by Rogers is the process through which an individual or other decision making unit passes from knowledge of an innovation, to forming an attitude

towards the innovation, to a decision to adopt or reject, to implementation of the new idea, and to confirmation of this decision

There are five stages in innovation decision process.

These are:

1. **Knowledge**: Socio-economic characteristics, Personality variables and communication behavior all relate to innovativeness. Innovativeness is the degree to which an individual or other adoption unit is relatively early in adopting new ideas compared to other members of a system (Rogers, 1995).

According to Rogers early adopters have more formal education than later adopters and are more likely to be (socio-economic characteristics).

2. Persuasion: The potential adopter's attitude towards the innovation is formed in this stage. By anticipating and predicting future use satisfaction and risk of adoption, the potential adopter develop positive or negative attitudes to the innovation, which play important role of modifying the final decision. Perceived attitudes of an innovation as its relative advantage, compatibility and complexity are especially important here (Rogers, 1995).

3. Decision: The decision stage occurs when an individual engages in activities that lead to adoption or rejection of the innovation. In this stage the adopter starts to actively seek out information about the innovation that assists the decision making.

4. Implementation stage: In this stage, mental information processing and decision making come to an end, but the behavioral change begins.

5. Confirmation stage: After the adoption of innovations, the adopter keeps evaluating the results of his / her decision. If the level of satisfaction is significant enough, the use of innovation will continue; however, it is also possible that the rejection occurs after adoption. In the latter case, the reverse of previous decision is called "discontinuance".

The time frames for adopting an innovation can be compressed or fairly lengthy. For example, awareness of an innovation may precede the decision to adopt by months or years.

So we can briefly define adoption: Adoption is the acceptance and continued use of a product, service or idea. According to Rogers and Shoemaker (1971), consumers go through "a process of knowledge, persuasion, decision and confirmation" before they are ready to adopt a product or service.

2.4 Factors influencing consumer adoption of internet banking

2.4.1 Consumers and internet banking

Lamb, et al. (2000,p.142) define consumer behaviour as the acts of decision-making units (families as well as individuals) directly involved in obtaining and using need-satisfying products and services, and this also includes the decision-making process that precedes and determines these acts. These acts refer to activities like traveling to and from the stores, evaluation of both goods and services available in the market and the actual purchasing of goods.

When referring to consumers, Rice (1997, p.78) explains that consumers are people who use services and products, and pay for those things. Consumer behaviour is about learning about consumers and their buying behaviour. Schiffman and Kanuk (2000, p.8) explain that a "consumer" is used to describe two kinds of consumers, i.e. personal and business or organizational consumers. Personal consumers are consumers who buy goods and services for their own use, and business consumers are those buying products, equipment and services in order to run a business. Block and Roering (1979, p.132) define consumer behaviour as the acts of individuals directly involved in obtaining and using economic goods and services. This includes the decision making processes that consumers go through when buying goods.

With a better understanding of consumer behaviour banks will be able to identify customer profiles. Beckett, et al. (2000, p.20) suggests that the type of financial product being purchased influences consumer purchasing behaviour. Secondly, the emphasis on trust and having a relationship is also highly pertinent to the strategies of banks and other financial providers. Thirdly the ability to retain customers and increase customer profitability is very important (Karialuoto, et al., 2002, p.263). Individual differences in consumer behaviour have been

theorized and found to be associated with the acceptance of new information technology, such as internet banking (Nelson, 1990, p.85).

According to Wang (2002, p.3) the emergence of internet banking has created highly competitive market conditions, which have had a critical impact upon consumer behaviour. Internet banking providers must therefore attempt to better understand the factors affecting consumer acceptance of internet banking. If they succeed, banks will be able to influence and even determine consumer behaviour, which will become a major issue in creating competitive advantage in the future.

2.4.2 Consumer perception and attitude

Lamb, et al. (2000, p.168), defines perception as the process whereby an individual selects, organises and integrates stimuli into a meaningful and overall picture. Perception involves all the senses (seeing, feeling, tasting, smelling and hearing), and these sensory stimuli play a role in causing certain sensations which influence consumers in deciding whether to purchase or not.
According to Lussier (2000, p.295) perception has defense mechanisms that are used to protect consumers against undesirable stimuli from the environment. According to Reekie and Brits (1997, p.95) different consumers will perceive a product offering differently, depending on their needs. Consumer perception towards a product and service can play a role to influence their buying behaviour.

Consumers' acceptance of technological innovations such as internet banking may be influenced not only by their socioeconomic and demographic characteristics, but also by their perceptions of specific technologies and by the characteristics of different products and services (Davis, 1989, p.338).

Attitude is a positive or negative feeling or mental state of readiness, learned and organized through experience that exerts specific influences on a person's response to people, objects and situations (Gibson, et al., 2000, p.65). Consumer attitude refers to the feeling of liking or disliking that consumers have towards products, stores, brands and other marketing stimuli. The attitude of consumers is of importance to marketers because they show consumers' intentions

and behaviors towards the marketing mix variables of product, price, place and promotions (Foxall and Goldsmith, 1994, p.95). Attitudes represent a primary means of measuring the effectiveness of all aspects of marketing communication. Attitudes are learned and those which result in purchase behaviour are formed as a result of direct experience with the product, information acquired from others, and exposure to mass media (Hawkins, et al., 1989, p.432). According to Guo (1999, p.122), attitudes are often viewed as determinants of meanings, because they provide a context for the interpretation of new information, and help individuals to evaluate each other's opinions and organize and select facts.

The attitude theory suggests that the more favorable attitude a person has towards a given product/service, the more likely that person is to buy or use that product/service. The overall attitude towards an object is expected to relate to behaviors towards the object (Ajzen and Fishbein, 1980, p.65). The measure and understanding of attitudes allow and help marketers in the development of products that consumers want and promote them effectively and in evaluating their efforts at promoting the products (Foxall and Goldsmith, 1994, p.94).

According to Lussier (2000, p.296) attitude is an overall perception about an object. Attitudes both affect and are affected by behaviour. Hence attitude refers to the overall evaluation of an object. Attitudes are personal feelings that influence a person's tendency to act in a particular way. In this study attitude describes a person's perception towards internet banking. Attitude motivates consumers towards a particular behavior. According to Mink (2001,p.4), of the ten countries studied, 3% of consumers had no interest in internet banking as customer service is what really matters and they receive that at a traditional bank.

An innovation presents potential adopters with a new means of solving problems and exploiting opportunities. According to Rogers (1983, p.213) an individual first forms an attitude towards the innovation leading to a decision to adopt or reject the innovation. If the innovation is perceived to be better than the existing system (a measure of is relative advantage), is consistent with the needs of the potential adopter (a measure of its compatibility), and is easy to understand and use

(A measure of its complexity), it is more likely that a favorable attitude towards the innovation will be formed.

Attitudes are themselves influenced by past behaviour; hence, the relationship between attitude and behaviour is usually represented as a two-way process in which attitude and behaviour affect each other. Therefore, if a person has a positive attitude toward internet banking, he or she is more likely to become a user of internet banking (Du, 2002, p.1). Thus, the purpose of this research project is to provide greater insights into how attitudes towards internet banking in general tend to impact on consumer behaviour in Ethiopia.

2.4.3 Diffusion of innovation

Research on diffusion of innovation was introduced to the domain of marketing in the 1950s. Diffusion of innovation theory attempts to identify patterns and rates of adoption of innovation. This is especially significant in consumer markets in terms of attempting to forecast demand and market growth (Valente, 1993, p.31). According to Kotler (2000, p.348), an innovation refers to any goods, service, or idea that is perceived by someone as new. The idea may have a long history, but it is an innovation to the person who sees it as new. Rogers (1983,p.11) defines an innovation as any idea, practice, or object that is perceived as being new by an individual or other unit of adoption. Almost all of the new ideas are technological innovations, and innovation and technology are often used as synonyms. A technology is a design for instrumental action that reduces the uncertainty in the cause-effect relationships involved in achieving a desired outcome. Rogers (1983, p.192) defines the diffusion process as the spread of a new idea from its source of innovation or creation to its ultimate users or adopters. According to Kotler (2000, p.348) adoption is the decision of an individual to become a regular user of a product. Internet banking is potentially the most radical innovation, especially in the context of banks dominated by the branch as the means to provide service to customers. Only a few studies have investigated diffusion of innovation within the retail banking sector (Bradley and Stewart, 2003, p.1088). Senior bank management have an interest in studies which have investigated the adoption of internet banking as the results can shed light on how to better market their internet banking services and thus accelerate the rate of adoption. If the service can more quickly reach a critical

mass of customers, then the respective bank's investment in internet banking could be recouped more quickly (Gerrard and Cunningham, 2003, p.2).

Therefore this study aims to gain an understanding of the diffusion of internet banking in Ethiopia and to explore how to better market internet banking in order to accelerate the rate of its adoption.

2.4.4 The influence of innovation on the adoption of internet banking.

Rogers (1983, p.213) identifies three characteristics of innovations: relative advantage, compatibility, and complexity. Adopters have invariably been found to have different perceptions about these characteristics in comparison with non-adopters. According to Kotler (2000, p.350), the characteristics of an innovation affect its rate of adoption. Some products catch on immediately, whereas others take a long time to gain acceptance.

If the innovation is perceived to be better than the existing system (a measure of its relative advantage), is consistent with the needs of the potential adopter (a measure of its compatibility), and is easy to understand and use (a measure of its complexity), it is more likely that a favorable attitude towards the innovation will be formed (Ching and Ellis, 2004, p.411).

Thong (1999, p.212) found that the perceived relative advantage, compatibility and complexity of the innovation played a key role in the adoption of internet banking.

Therefore this study identifies how these characteristics of innovation influence the adoption of internet banking in Ethiopia. The remaining parts of this section identify these characteristics of innovations as established in prior studies.

2.4.5 Relative advantage

Relative advantage describes the degree to which an innovation is perceived as being better than its precursor (Rogers, 1983, p.213). Gerrard and Cunningham (2003, p.8) identify a perceived relative advantage as being a significant factor driving the adoption of internet banking.

According to Kotler (2000, p.351) when individuals pass through the innovation-decision process, they are motivated to seek information in order to decrease uncertainty about the relative advantage of an innovation. Potential adopters want to know the degree to which a new

idea is better than an existing practice. Hence relative advantage is often the content of network messages with regard to an innovation.

Relative advantage, in one sense, indicates the strength of the reward or punishment resulting from the adoption of an innovation. There are a number of sub-dimensions of relative advantage such as the degree of economic profitability; decrease in discomfort; time saving; and effort (Rogers, 1983, p.217). This construct is similar to the perceived usefulness in the Technology Acceptance Model, defined as the degree to which a person believes that a particular information technology would enhance his or her job performance. It has been revealed to be a factor towards the adoption of internet banking (Leaderer, et al., 2000, p.272).

Agarwal and Prasad (1998, p.222) found that relative usefulness of an innovation is positively related to its rate of adoption. Therefore it is possible to suggest that the way that people perceive the usefulness of Internet banking could affect its rate of adoption. In another survey, a large proportion of consumers said that twenty-four hour availability was the most important factor in their use of computer banking (Lockett and Littler, 1997, p.795). A study of 220 consumers found that shoppers appreciated the ability to visit virtual stores at any hour (www.studioarchetype.com).

Consumers may be motivated to use some electronic banking technologies because of the time saving. Time saving equates to a customer being able to bank without physically visiting a branch. In one survey of internet banking users, 79% indicated that convenience was very important in their decision to use internet banking and 71% said that saving time was very important (Fox, 2002, p.9). A survey conducted in Finland (Karjaluoto, et al., 2002, p.269) shows that internet banking users do not hunger for traditional banking. Usually, visiting bank branches is considered time-consuming due to long queues. Internet banking users are not eager to queue at branches. It is therefore possible to suggest that the advantages that internet banking offer over and above regular banking methods could influence its rate of adoption. For example, the possibility of performing transactions at any time of the day from any location with Internet access would be a source of real advantage to people who have extremely tight schedules

2.4.6 Compatibility

Compatibility is defined as the degree to which an innovation is perceived as being consistent with the existing values, past experiences and the needs of potential adopters. An innovation can be compatible or incompatible with socio-cultural values and beliefs; with previously introduced ideas; or with client needs for innovations (Rogers, 1983, p.213).The compatibility of an innovation, as perceived by members of a social system, is positively related to its rate of adoption (Rogers, 1983, p.226).

The term compatibility refers to the fact that an innovation is more likely to be adopted when it is compatible with an individual's job responsibilities and value system (Agarwal and Prasad, 1998, p.207). Bradley and Stewart (2003, p.1089) discovered that the perceived compatibility of internet banking is a key driver in the adoption of internet banking.

Compatibility is a measure of the values or beliefs of consumers, the ideas they have adopted in the past, and the ability of an innovation to meet their needs. Black, et al. (2001,p.393) concludes that past experiences and the values of consumers in the UK appear to have a significant impact on their willingness to adopt internet banking. Those that indicate that they are comfortable with the Internet are more positive about internet banking.

Research by Suganthi, et al. (2001, p.2) reported that in the Malaysian context, a personal relationship between customers and bankers transcends many boundaries especially so in the rural areas. About 90 percent of the Malaysian respondents valued human tellers very highly. Georgiades and Dowsland (2000,p.6) reveal that lack of personal contact and face anonymity are seen as disadvantages to the extent that "some websites have started to include photos and video clips of store owners and staff to overcome the perception that electronic storefronts are too impersonal". A survey conducted in Singapore (Gerrard and Cunningham, 2003, p.9) found that compatibility is a significant factor which affects the adoption of internet banking.

Therefore individuals that use the Internet frequently are more likely to perceive internet banking as being compatible with their lifestyles, and are therefore more likely to adopt internet banking

than individuals that prefer to communicate and conduct their affairs in a face-to-face type of environment.

2.4.7 Complexity

Complexity is defined as the degree to which an innovation is perceived to easy to understand and use. Adoption will be less likely if the innovation is perceived as being complex or difficult to use (Rogers, 1983, p.230). Complexity can be considered as the exact opposite of ease of use in the Technology Acceptance model, which has been found to directly impact the adoption of the Internet (Leaderer, et al., 1999:270).

Consumers will reject an innovation if it is very complex and not user friendly. In this context, Cooper and Zmud (1997,p.137) report ease of use of innovative products or services as one of the three important characteristics for adoption from the customer's perspective. For example, the user-friendliness of domain names, navigation tools and the graphical user interface are important determinants of the user-friendliness of a web page design.

Research by Davis (1989:338) has found that perceived complexity is associated with the adoption of electronic technologies. Research conducted in Estonia (Kerem, 2001, p.7) states that the most important factors in starting to use internet banking are first and foremost better access to the services (convenience), better prices and a high-level of privacy. Better service (i.e. preferring self-service over office-service) was also of above average importance. Therefore the adoption of internet banking is likely to be increased when customers consider using internet banking processes to be easy.

Therefore an individual is far less likely to adopt a new technology if this requires a high level of technical skills. Conversely the adoption of internet banking is far more likely to occur if the internet banking processes are simplified and are user friendly.

2.4.8 Perceived cost

According to Ching and Ellis (2004, p.414) adoption will be driven by the perceived costs and benefits inherent in the particular innovation. The cost of an innovation has many components initial investment costs, operational costs, and utilisation costs. Rothwell and Gardiner (1984, p.88) observe that there are two fundamental sets of factors affecting user needs, namely price factors and non-price factors. To this extent Gupta (1988, p.353) identifies price as a major factor in brand switching. If consumers are to use new technologies, the technologies must be reasonably priced relative to alternatives. Otherwise, the acceptance of the new technology may not be viable from the standpoint of the consumer.

According to the Comptroller's Handbook (1999, p.17) another factor that would stand in the way of consumer adoption of internet banking is the cost factor. In internet banking two types of costs are involved. First the normal costs associated with Internet access fees and connection charges. Secondly, the bank fees and charges. Bradley and Stewart (2003, p.1091) found high initial set up costs; cost reductions and the costs incurred during implementation are considered as the greatest inhibitors of the diffusion of internet banking. Another study indicates that consumers will not adopt a new financial product unless it reduces their costs and does not require them to change their behaviour when using it (Bareczal and Ellen, 1997, p.137).

From a customer retention perspective, Goosen, et al. (1999,p.59) point out that with the introduction of internet banking, lower switching costs and easy accessibility via the internet, customers who are dissatisfied with the services or products offered by their banks are more likely to withdraw their loyalty if their requirements are not provided for.

Clearly cost perception is a factor which continues to inhibit the adoption of internet banking in Ethiopia. To overcome this barrier banks should be at pains to prove to consumers that internet banking is a cost effective and beneficial form of banking and in doing so actively take measures to dispel any misperceptions that consumers may have about online banking costs. In conclusion, by lowering the perceived cost of using internet banking, cost conscious consumers are more likely to adopt this innovation.

2.4.9 Perceived risk

Perceived risk reflects the extent to which consumers are uncertain about the consequences of buying, using or disposing of an offering. It is important to recognize that risk is subjective. That is, the risk that a customer perceives in making a purchase decision may not really exist (Hoyer and MacInnis, 2000, p.67). Risk or uncertainty regarding the most appropriate purchase decision or the consequences of the decision is a significant variable influencing the total amount of information gathered by consumers (Loudon and Bitta, 1993, p.511).

According to Loudon and Bitta (1993, p.512) there are several situations that influence the consumer's perception of uncertainty or consequences and, thus, the perception of risk. These are: uncertainty regarding buying goals; uncertainty regarding which alternatives (such as product, brand, or model) will best match or satisfy the purchase goals; perceived possible undesirable consequences if the purchase is made (or not made) and the result fails to satisfy buying goals. If the consumer senses any of these situations, then he or she is said to perceive risk in the situation. Research conducted in Turkey (Polatoglu and Ekin, 2001, p.164) states that risk includes financial, physical, or social risks associated with trying an innovation. It is known that security risks are one of the major barriers to the adoption of online banking. With the introduction of internet banking services by a few large, well-known, and trusted banks in Turkey, customers perceive the security risk to have decreased considerably.

One of the major influencing factors around the use of internet banking is that of security. According to Liu and Arneet (1999, p.31) the need for secure transactions is critical to the success of not only internet banking but that of any e-commerce related to website. Consequently the lower the perception of risk in using internet banking the more likely an individual would be prepared to use it.

Hartman, et al. (2000, p.75) point out that security is a major concern wherever online transactions take place. They suggest that Internet-based service providers must implement access control, authentication procedures, encryption, firewalls, audit trails and virus protection to secure their online services. Another survey conducted by Cranor and Laurie (1999, p.2)

found that 81% of Internet users are concerned about threats to their privacy while online. An empirical study found that consumers are often reluctant to share personal information for fear that their financial life will become an open book to the Internet universe (Bestavros, 2000,p.55).

Security has been widely recognised as one of the main obstacles to the adoption of internet banking. Many studies suggest that banks must first convince their customers that internet banking and transactions are secure before customers will show a willingness to use internet banking. Consequently the adoption of internet banking is likely to increase when the risk of using internet banking is low.

2.5 Demographic characteristics of internet banking adopters

Demography is the study of human population statistics, including age, sex, race, location, occupation, income, education, and other characteristics. Each of these characteristics influences the nature of consumer needs and wants; ability to buy products; the perceived importance of various attributes or choice criteria used to evaluate alternative brands; and attitudes towards and preference for different products (Loudon and DellaBitta, 1993, p.35).

Marketers often segment markets on the basis of demographic information because it is widely available and often relates to consumers buying and consuming behaviour. Only with a clear understanding of major consumer characteristics can the implications of environmental and individual determinants of consumer behaviour begin to be appreciated (Du Plessis and Rousseau, 1999, p.274).

Age, education level, income and occupation are the most influential demographic variables affecting Internet usage. Typical internet banking users tend to be well educated, relatively young and are high income earners. It has been widely recognised that demographic factors have a great impact on consumer attitudes and behaviour towards internet banking (Karjaluoto, 2002, p.360). The consumer demographic factors relevant to this study are therefore age, education level, income and occupation. These are discussed in the following sections.

2.5.1 Age

The goods and services people buy varies during the different stages of their lives. For example the kind of food that appeals to youths is unlikely to be the choice of adults. Furthermore people's taste in clothes, furniture and recreation are also age related (Kotler, 2000,p.180). People in different age groups often share distinctive values, meanings, and behaviors. Marketers must be cautious, however, about segmenting consumers on the basis of actual age. Many adult American consumers think of themselves as ten to fifteen years younger than they really are. Their behaviour and cognition is more closely related to their psychological age than their chronological age (Peter and Olson, 1994, p.363).

According to Stoneman (2001,p.4), the greatest concentration of computer owners who have banked online in the USA are in the 18 to 34 year age group and represent 30% of the market. By way of contrast only 15% of the population in 55 to 64 year age group owns a computer and only 9% of this group banks online. Karjaluoto, et al. (2002, p.271) show that age has an impact on the use of internet banking. The results imply that the typical user is between 35 and 49. Therefore this study undertakes to determine whether age has an impact on consumer acceptance of internet banking.

2.5.2 Education level

Education level is defined as a means by which access to a particular occupation is granted (Kolter and Amstrong, 2000, p.75). There is a strong relationship between income and education level. More educated consumers have more money available to spend, due to better education, and this affects their life-styles. As people attain higher education, it affects which type of products they buy, what kind of stores to buy them in, and what prices they are willing to pay (Wilkie, 1990, p.78).

A person's level of education can impact strongly on their ability to generate income and their consumer spending potential. In short, better educated consumers tend to have better paying occupations than those who are not well educated (Schiffman and Kanuk, 2000, p.4).

According to Polatoglu and Ekin (2001, p.164) affluent and highly educated groups generally accept changes more readily, making them the most likely group of consumers to adopt internet banking; this is based on sample information gleaned from their survey of internet banking customers, which revealed that 82% of those interviewed are university graduates and 73% reported being in the medium high or high-income group. Therefore this study undertakes to examine whether education level has an impact on consumer adoption of internet banking.

2.5.3 Income

The amount of money consumers spend on goods depends on their income. Income as it affects spending is measured in three ways: i.e. personal income, disposable income, and discretionary income (McCarthy and Perreault, 1993, p.190). Income is a popular demographic variable for segmenting markets because income levels influence consumer wants and determines their buying power (Lamb, et al., 2000, p.217).

Income is meaningful only in relation to the amount of goods and services it can buy (its purchasing power). Inflation, recession, the international value of currency, and productivity all affect purchasing power. Marketers of income-sensitive goods pay constant attention to trends in personal income, savings, and interest rates. If economic indicators point to a recession, marketers can take steps to redesign, reposition, and re-price their products so they continue to offer value to target customers (Kotler, 2000, p.217). Well educated, intelligent consumers may be better able to evaluate more complex information and make informed decisions, however should they be faced with financial constraints this could well effect their motivation to act out these decisions (McCarthy and Perreault, 1993, p.191).

Du (2002,p.1) suggests that the wealthy segment represents a profitable and less risky customer base for several reasons: most importantly because they deal with larger sums of money, and thus, have more purchasing power in buying banks' products and services such as investments and insurance.

A survey in Finland (Karjaluoto, 2002, p.359) shows that income has a major effect in the adoption of internet banking. Internet banking users had much higher incomes than non-users did. Therefore this study aims to identify whether income has an impact on consumer adoption of internet banking in Ethiopia.

2.5.4 Occupation

A person's occupation also influences his or her consumption pattern. For example a blue-collar worker is unlikely to buy the same type of clothes, join the same type of clubs, or enjoy the same type of recreational pursuits as a company president would. Marketers try to identify the occupational groups that have above-average interest in their products and services. A company can even specialize their products for certain occupational groups (Kotler, 2000, p.181). Demographic variables are often used as a basis to describe different types of consumers. Differences in occupations are also commonly used (Wilkie, 1990, p.105).

Education, occupation and income level tend to be closely correlated in a cause-and-effect relationship. High-level occupations that are rewarded with high incomes usually require advanced educational training. Individuals with little education rarely qualify for high-level occupations (Schiffman and Kanuk, 2000, p.42). Karjaluoto (2002, p.359) relates this to internet banking where those currently using online services are well-educated and have better occupations than non-users.

In conclusion, occupation has an impact on internet banking and current users tend to be employed in better positions than non-users. The challenge facing banks in this regard is to find ways to make internet banking equally attractive to the majority of their clients who are not employed in top occupations.

2.6 Social influences on the adoption of internet banking

Social influences result from face-to-face communication. The opinion of friends and neighbors, the judgment of one's peers or the influence of the family are all social influences (Du Plessis and Rouseau, 1999, p.80).

Service buyers are guided in their behaviour not only by their own motives, perceptions and attitudes, but also by those of the reference groups to which they belong. The influence of others may be elicited by the consumer, who for example may ask a friend to recommend a good electrician. The influence of other people may also be very direct, such as when a mother forbids her children to see a particularly violent film (Du Plessis and Rousseau, 1999, p.166).

Groups having a direct influence on a person are called membership groups. These are groups to which the person belongs and interacts. Some are primary groups, such as family, friends, neighbors and co-workers with whom the person interacts fairly continuously (Kotler, 2000, p.178). Family members constitute the most influential primary reference group. The family of orientation consists of the person's parents. From parents a person acquires an orientation toward religion, politics and economics and a sense of personal ambition, self-worth, and love. Even if the buyer no longer interacts very much with parents, the parents' influence on the buyer's behaviour can be significant (Kotler, 2000, p.179). A more direct influence on everyday buying behaviour is the family of procreation, namely, spouse and children. The family is the most important consumer-buying organization in society, and it has been researched extensively. Marketers are interested in the roles and relative influence of the husband, wife, and children in the purchase of a large variety of products and services (Stanton, et al., 1994, p.165). Many groups influence a person's behaviour. Reference groups serve as a point of focus in purchasing decisions and in identifying solutions to problems. A person's reference group consists of all the groups that have a direct (face-to-face) or indirect influence on that person's attitudes or behaviour (Mason and Ezell, 1987, p.261).

Cheung, et al. (2000, p.55) state that the Internet is such a broadly discussed topic that social pressure plays an important part in explaining its usage. It follows therefore that social pressures

may also affect internet banking. Social pressures can emanate from any group such as parents, colleagues, and friends. Whilst it would be difficult to predict how a particular group could influence an individual in the adoption of Internet banking it is never the less possible to assert that there is some influence by others on an individual's intention to adopt internet banking.

A survey conducted in Hong Kong (Cheung, 2001, p.116) shows that classmates and friends are likely to have an influence on potential adopters and users of Internet banking. Social factors are a dominant force that not only influence consumers to adopt internet banking, but also influences them to continue banking by internet. This suggests that strategies should be implemented to attract potential adopters through the references of friends, colleagues and family members. This can be achieved by offering member referral rewards.

According to Davis (1989, p.336), should a superior or a co-worker suggest that a particular system (e.g. internet banking) is useful, a person may come to believe that this is actually so, and become amenable towards accepting that system.

The opinion of a reference group is an important factor influencing the adoption of internet banking. To bring internet banking to the attention of reference groups, banks should be more actively promoting their online services. With greater awareness people are more likely to start discussing the advantages and disadvantages of internet banking. Once people perceive that its positive aspects out weight any negative aspects, they are more likely to accept internet banking (Du, 2002, p.4).

Because consumers are often influenced by the opinions of others, it is important therefore that marketers identify these influences and understand the impact they have on the adoption of internet banking. Reference groups are a major factor in consumer decision making, so campaigns that are aimed at key influences within reference groups would be effective if they were successfully implemented, because others would be influenced in turn. Perhaps additional incentives such as membership reward incentives could be used to add impetus to the campaign

CHAPTER THREE: ANALYSIS AND RESULTS

3.1 INTRODUCTION

A descriptive statistical analysis is used to present and interpret the data collected on various variables of factors affecting adoption of internet banking. Frequency tables and graphs along with percentages are employed to analyze the responses of consumers of retail banks in Ethiopia. This study analyzed 400 responses. All the respondents were customers of major Ethiopian retail banks; there were 320 non-users and 80 users of internet banking.

The analysis was conducted in order to identify the factors that influence consumer usage of the Internet banking. The ultimate aim of the study was to gain a better understanding of factors that influence the adoption of internet banking. The data was analyzed in accordance with the four research project objectives. The analysis begins with a description of the internet usage profile of the respondents, which will give the reader an insight into internet usage trends typical of any representative sampling of retail banking customers in the Addis Ababa.

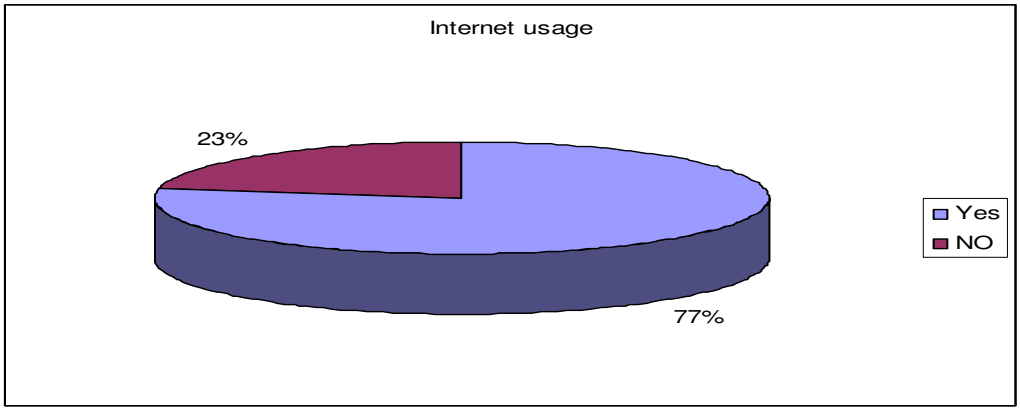
3.2 INTERNET USAGE

This section discusses the usage patterns of respondents of the Internet, the location where they have access, what for they use the Internet and how frequently they use the Internet. The influence of all these factors on the use of internet banking is also discussed.

3.2.1 Frequency of Internet use

The results shown in Figure 3.1 are in response to a question aimed at establishing the number of respondents who use the internet for any purpose (but not necessarily for internet banking). A total of 77 percent of the respondents use the Internet.

Figure 3 .1 Frequency of Internet use.



3.2.2 The place where respondents use the internet

Table 3.1 reveals that 55 percent of respondents (172) use the Internet at their work places, 37 percent (116) at their homes, and 33 percent at internet cafes (102) and 32 percent at libraries (98). This indicates that many of the respondents use the internet at more than one location.

Table 3.1 Where do respondents use the Internet

Location where internet used	Multiple response (Percent)
Home	37
Work place	55
Internet Cafe	33
Library	32

3.2.3 Why for respondents use the Internet?

Table 3.2 reveals that from those 310 internet users the Internet is mostly used for e-mail (74.5%) and 54.8% for study purpose. 45% of respondents use the Internet for entertainment. Internet as a means of keeping up to date with the news (43.5%) is used. only 25% of the respondents do their banking on the internet. These results suggest that there is a real need for Internet-based financial service delivery in Ethiopia

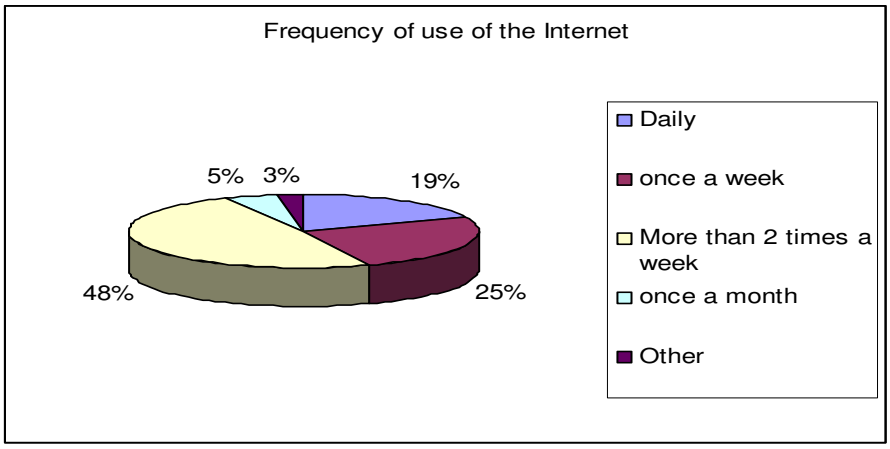
Table 3.2 why for respondents use the Internet?

Why do you use Internet for	Multiple response (Percent)
E-mail	74.5
Entertainment	45
Study	54.8
Update on current news	43.5
Banking	25

3.2.4 Frequency of use of the Internet

Figure 3.2 indicates that 48 percent of the respondents use the Internet more than 2 times a week; 25 percent use the internet once a week; 19 percent use the Internet daily and 5 percent use the Internet once a month.

Figure 3.2 Frequency of use of the Internet



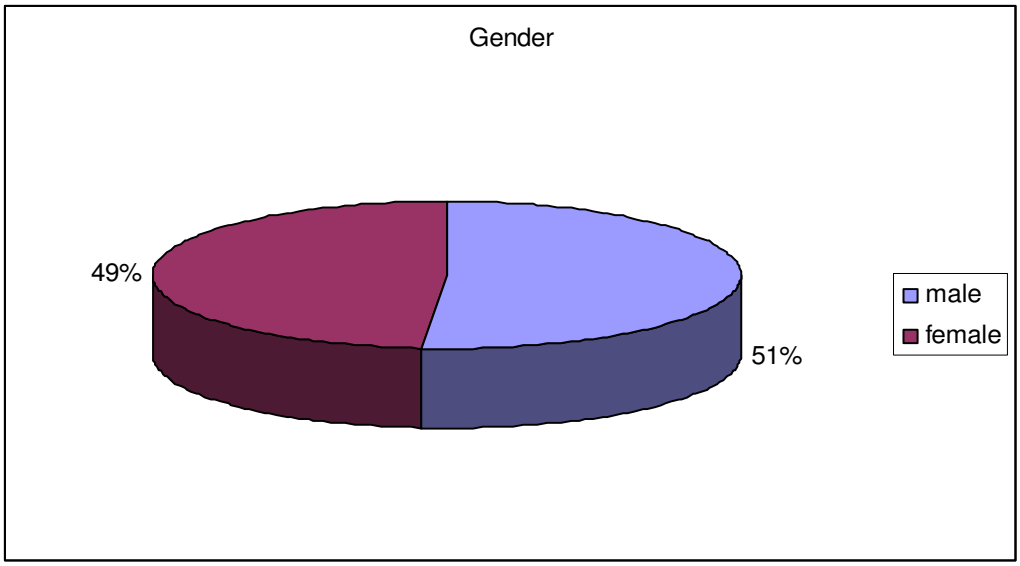
3.3 DEMOGRAPHIC FACTORS

This section introduces the demographic profile of the participants. Firstly, the participants are introduced together in terms of their demographics. Secondly, this section introduces some important demographic findings in the different groups separately.

3.3.1 Gender

As reflected in Figure 3.3, fifty one percent of the study participants were male and forty nine percent were female. This indicates that both males and females were nearly equally represented in the sample size of this research. This, however, should not be taken as an indication that both the male and female respondents use internet banking equally.

Figure 3.3 Gender of respondents



Figures3.4 and 3.5reflect user and non-user gender distribution. With 71 percent of users being male and 29 percent of non-users being female, these results show that men are using internet banking more than women. This indicates that gender could be a factor that affects customer adoption of internet banking in Ethiopia.

Figure 3.4.Internet banking users Gender distribution

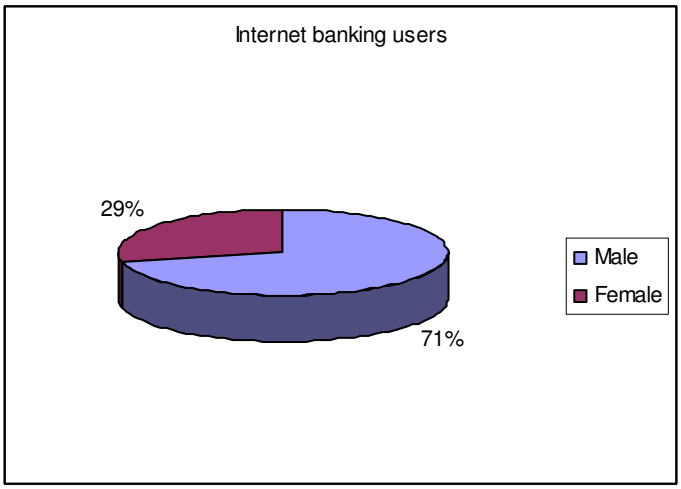
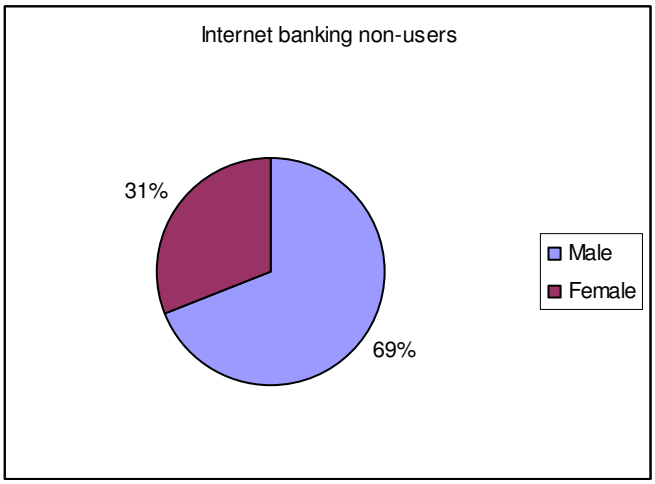


Figure 3.5 Internet banking non-users Gender distribution



3.3.2 Age

Figure 3.6 shows the age groups into which respondents fell. (42 percent) of the respondents fall into the 21 to 29 age group, with 30 percent in the 30 to 39 age group, 18 percent in the 40 to 49 age group and only 10 percent in the over 50 age group. The demographic age profile of the study participants shows that the 21 to 29 age group is dominant.

Figure3.6 Age of respondents

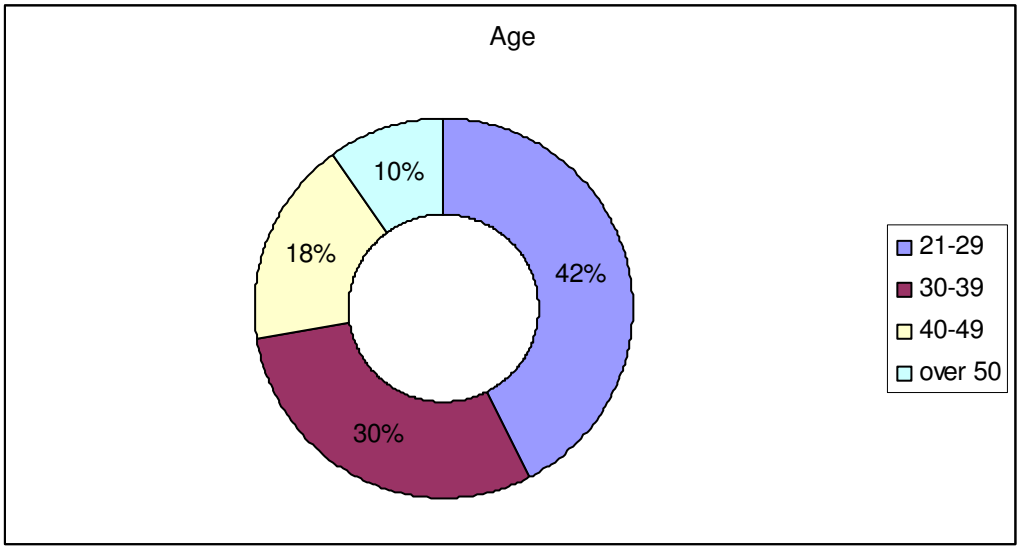


Figure 3.8 shows that non-users are relatively young (55 percent in the 21-29 age group), while users are middle age (Figure 3.7). The present data analysis suggests that age has an impact on the use of internet banking. Additionally, the results imply that typical internet banking users are middle-aged

Figure3.7 Internet banking users' Age distribution

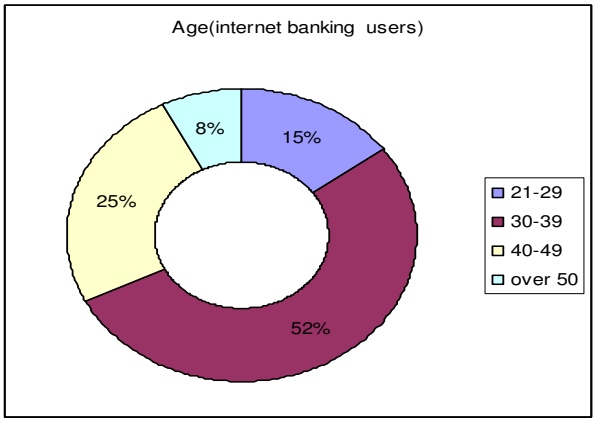
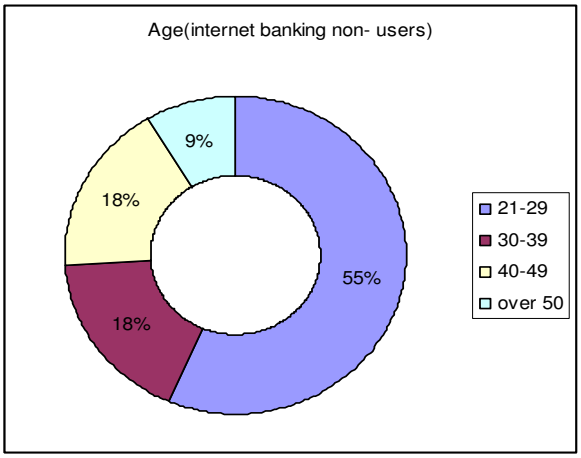


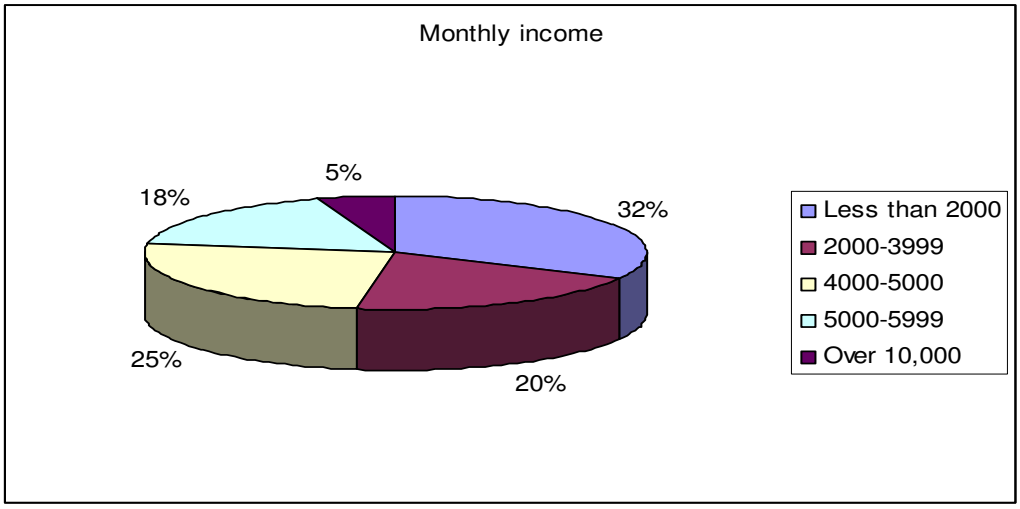
Figure 3.8 Internet banking non-users' Age distribution



3.3.3 Income

Figure 3.9 displays the monthly income of respondents. 18 percent of the respondents earn over Br 5000, while 25% were in the Br.4000 to Br. 4999 bracket. The respondents in these groups are likely to have their own computers with Internet access. Those earning below Br. 2000 accounted for 32 percent of the total respondents. This group is unlikely to have access to a computer or the Internet.

Figure 3.9 Monthly Incomes.



A figure 3.10 and 3.11 indicates that monthly income seems to be a major factor affecting the use of internet banking. The findings show that a total of 49 percent of users have a monthly income of more than Br.10, 000 per month. Another interesting implication of Figure 3.11 is that about 44 percent of non-users have an income of less than Br.2000 per month, and that only 3 percent of non-users have an income of more than Br.10, 000 per month. This finding concurs with prior studies (Karjaluoto, et al., 2002:265), which show that income has a major effect on the adoption of internet banking. Internet banking users earn a higher income than non-users.

Figure 3.10 Internet banking users' Monthly income distribution

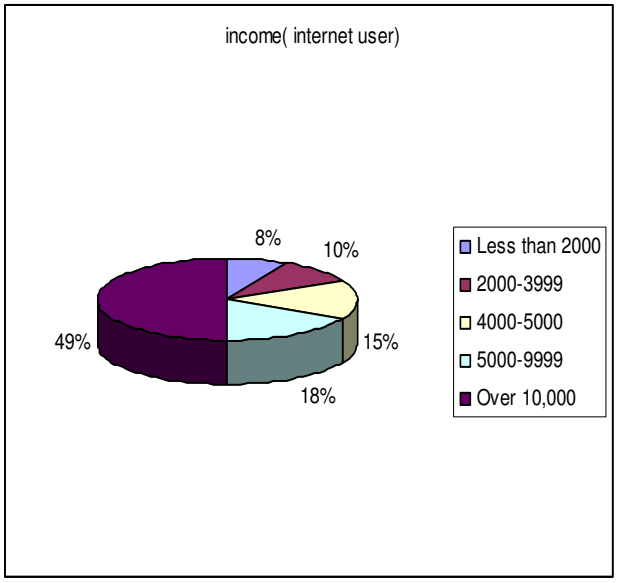
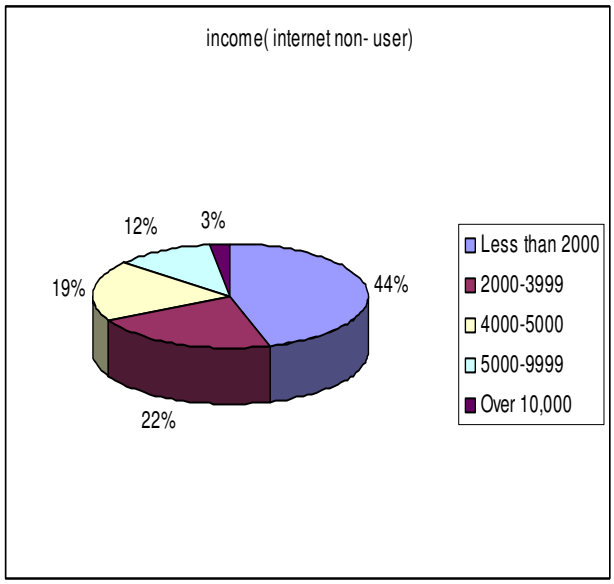


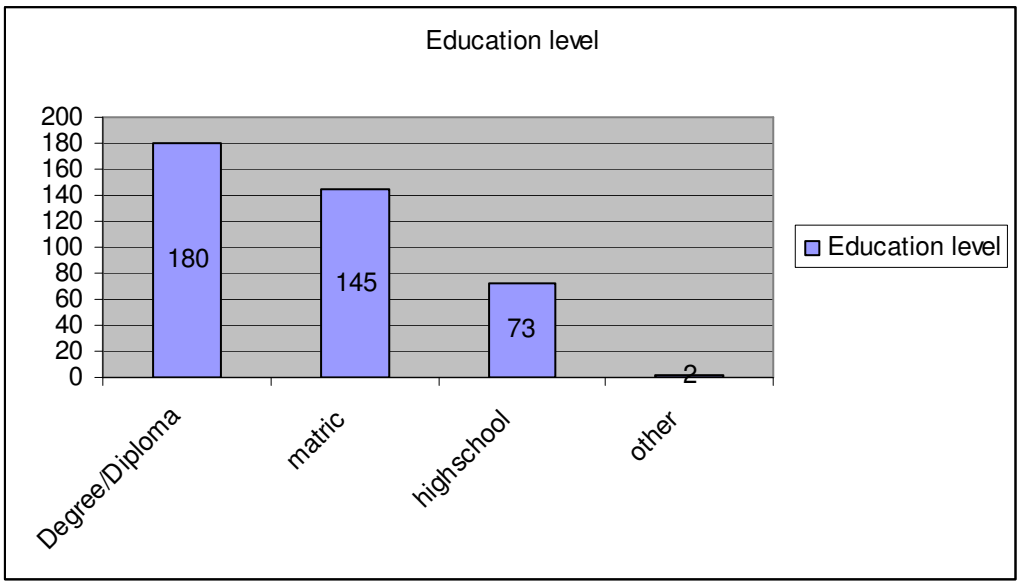
Figure 3.11 Internet banking non-users' Monthly income distribution



3.3.4 Education level

The education level of the participants varied widely. Figure 3.12 indicates that 45 percent (180) have a university or technical education; 36.25 percent (145) have a matriculation certificate, 18.25 percent (73) have a high school qualification and 0.5 percent (2) have other education.

Figure 3.12 Education level



Figures 3.13 and 3.14 compare the education level distribution between users and non-users. The higher education levels are particularly significant in both groups, as earlier research indicates that high levels of education enhance the consumer's ability to process more complex information and make decisions based on that (Polatoglu and Ekin, 2001:159). The education level distribution between user and non-user groups was exactly in line with this. Figure 3.13 shows that 81 percent of internet banking users (65) have a high education level while figure 3.14 shows that only 34 percent of the non-users (110) have a tertiary level education.

Figure 3.13 Internet banking users' education level distribution

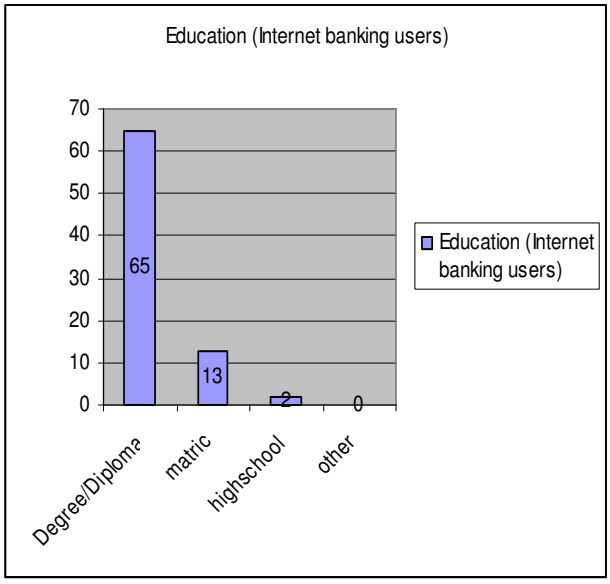
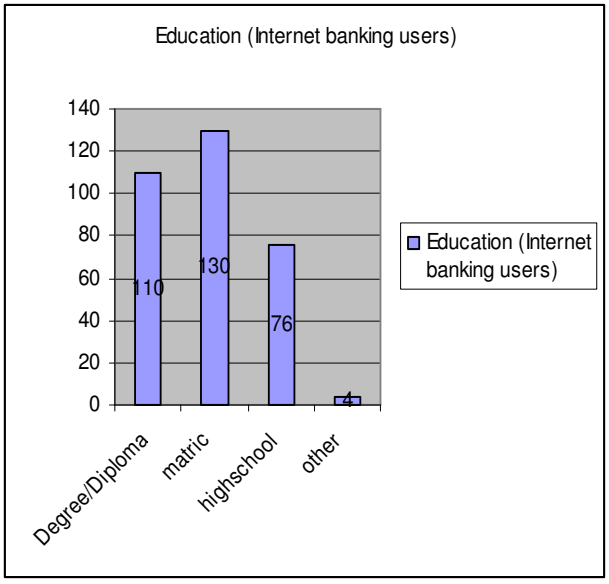


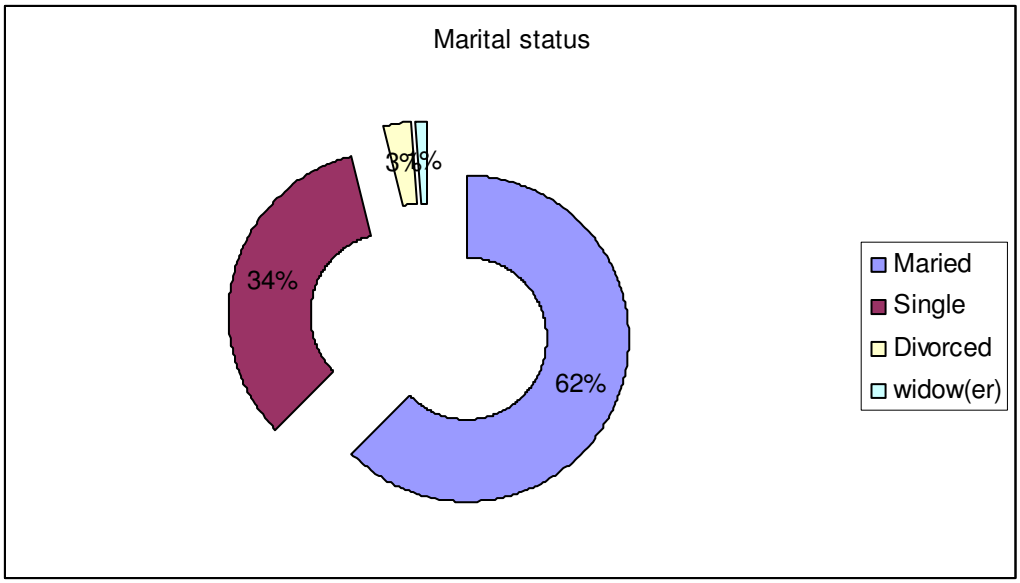
Figure 3.14 Internet banking non-users' education level distribution



3.3.5 Marital status

Figure3.15 shows that more than half of the respondents (62 percent) are married, 3 percent are divorced, 34 percent are single and 1 percent was widowed.

Figure 3.15 Marital status



More specifically, 67 percent of the internet banking users are married, whereas about half (49 percent) of the non-users are single. This is partly explained by the fact that users are older than non-users. The frequency results given in Figure 3.16 and 3.17 suggest that marital status influences the use of internet banking.

Figure3.16 Internet banking users' marital status distribution

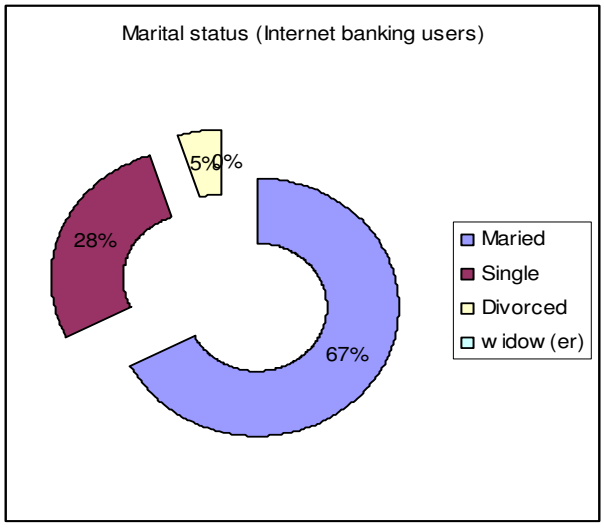
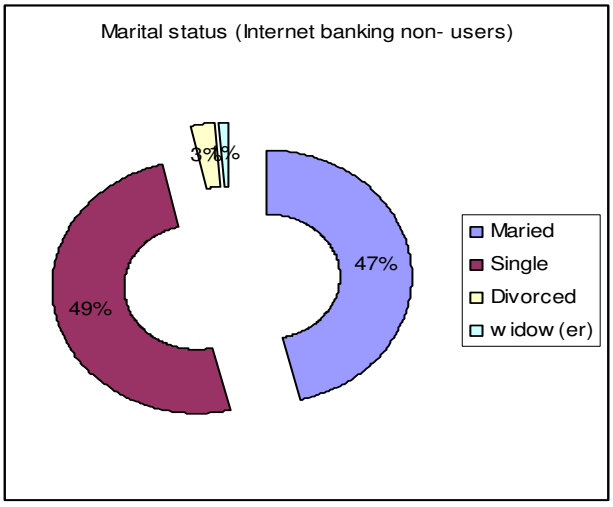


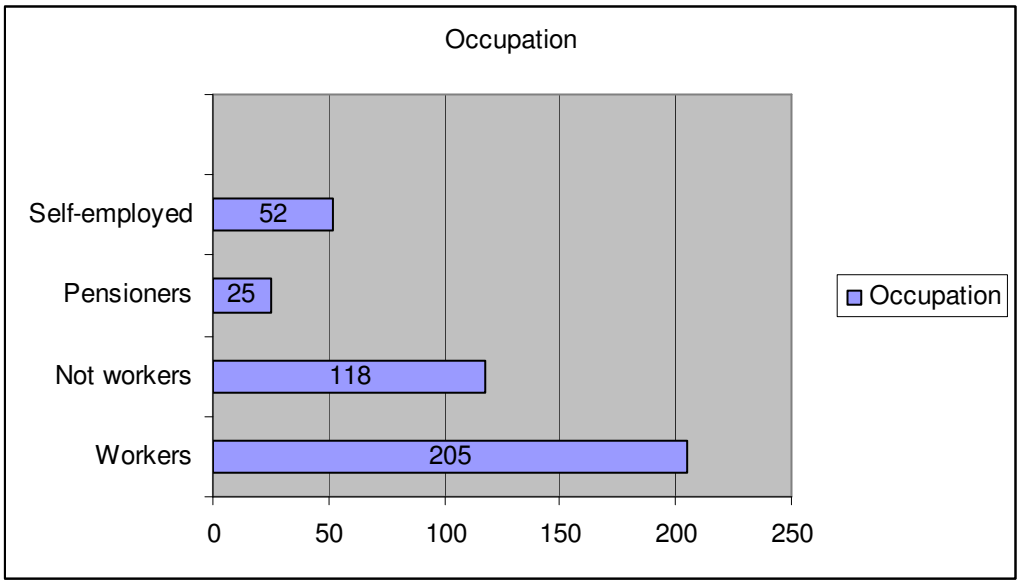
Figure 3.17 Internet banking non-users marital status distribution



3.3.6 Occupation

The occupation distribution of the respondents varies widely. Figure 3.18 shows that the largest proportion of respondents is employed (52%). While 29.5% are unemployed, 6.5% are pensioners and 13% have other occupations.

Figure 3.18 Occupation



Figures 3.19 and 3.20 depict the occupation distribution between the two different groups. As can be seen, 80% of the users (64) are employed, whereas more than half of the non-users (58 %) are not employed (110). To sum up, occupation seems to have an impact on the use of internet banking; and most users are employed, but the majority of non-users are unemployed. This confirms other research findings (Karjaluoto, 2002:359), which reveal that occupation has an impact on the usage of internet banking, and that users are generally well educated and have better occupations than non-users.

Figure3.19: Internet banking users' occupation distribution

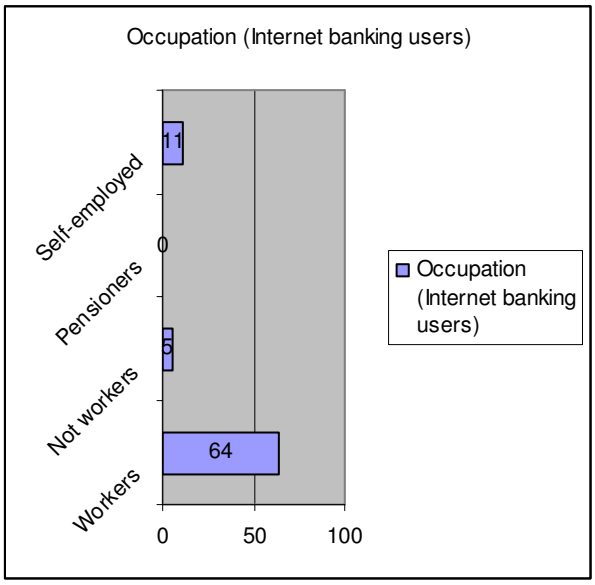
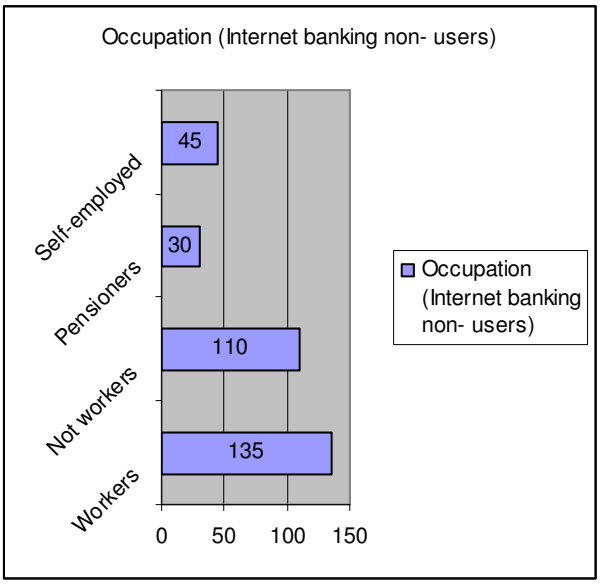


Figure 3.20 Internet banking non- users' Occupation distribution



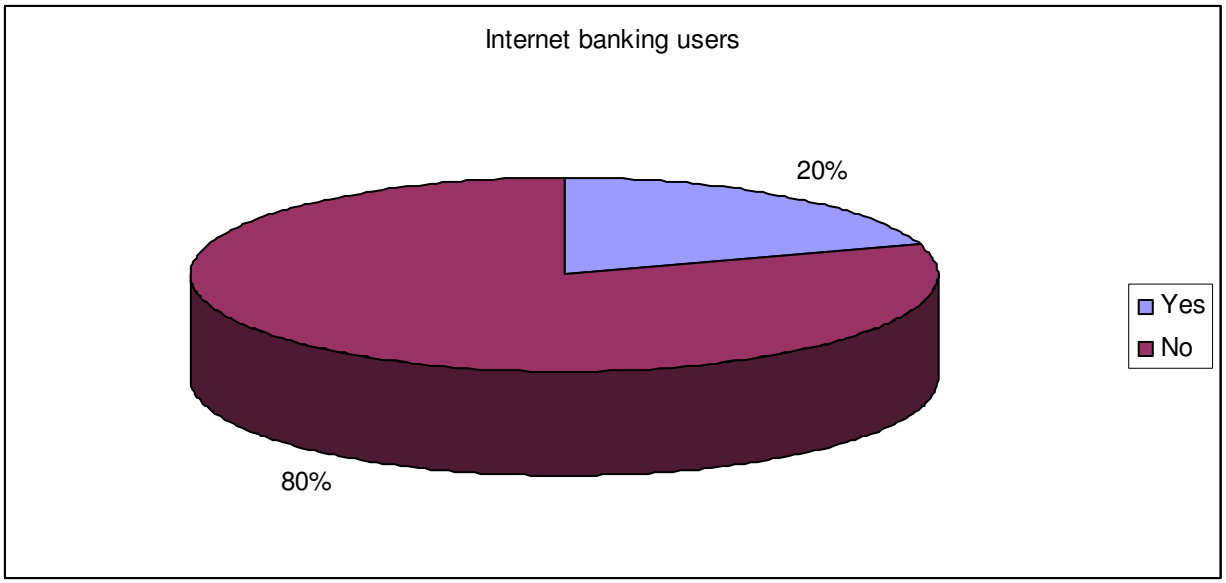
3.4 INTERNET BANKING

This section reveals findings about the respondents' habits with regard to internet banking in Ethiopia. The willingness of respondents to conduct internet banking and what they use internet banking for as well as factors encouraging or hampering the adoption of internet banking are tested in this section.

3.4.1 Internet banking users

The result of a question aimed at establishing the number of internet banking users within the sample is illustrated in Figure 3.21. Surprisingly only 20 percent of the respondents use internet banking despite the fact that 74percent of the respondents are Internet users.

Figure 3.21 Users of internet banking.



3.4.2 Factors that hampered the use of internet banking.

The 80 percent (320 respondents) who do not use internet banking gave the following reasons for not using this facility: firstly, 138 respondents indicated that the cost of Internet access is too high; secondly, 116 respondents do not believe that internet banking is sufficiently safe; thirdly, 61 respondents do not know how to use the Internet. The fourth (68) and fifth (48) most common reasons are that they are not good with computers and they do not feel there is a need for them to engage in internet banking respectively. These are the main reasons given by non-users' for their reluctance to adopt internet banking. The full range of results is shown in Table 3.3. A smaller number of the respondents indicated that they did not own a computer (66) or have internet access (65). Being unequipped for internet banking is one of the reasons why non-users do not adopt this service. Other respondents indicated that they were unaware of internet banking. In

this regard banks should be doing a lot more to bring about awareness and actively promote this service.

Table 3.3 Factors that hampered the use of internet banking.

Factors that hampered internet banking use	Multiple response
No Internet access	65
No computer at home	66
Not good at computer usage	68
Not good at using Internet	61
Cost of Internet access is high	138
Internet banking is not safe	116
No need	45
Have not heard of internet banking	58

3.4.3 Factors encouraging the use of internet banking

The purpose of this question was to establish some of the factors that would encourage non-users to change their attitudes towards internet banking. 67% of the non-users revealed that free Internet access would be a major factor, 57.8% stated that free skills training would encourage them to change, and 54.7% agreed that if banks could provide better security they would be inclined to change to internet banking. Some of the issues indicated under 'other' include an increase in the number of personal transactions allowed, and the provision of better support (brought about by increased staffing) when an enquiry or problem is encountered.

Table 3.4 Factors encouraging the use of internet banking

Factors encouraging use of internet banking	Multiple response (Percent)
Free internet access	67
Free skills training	57.8
More economical banking transactions	23.4
Better security	54.7
Other	1.25

3.4.4 Where respondents learned about internet banking.

Table 3.5 indicates the sources from which users learned about internet banking. It emerges that that television and radio (75%) have been the most effective means of promoting internet banking, followed by newspaper and magazine coverage (42%), printed promotional material put out by banks (40%) and finally word-of mouth (11%). The data presented in Table 3.5 reveals that broadcasted media and printed periodicals are the most effective channels by which banks can promote their internet banking services. Internet banking involves personal finance matters, and is therefore unlike other IT innovations, so existing users are unlikely to influence non-users by showing them how easy it is to use. Instead, banks need to provide interactive demonstration accounts on the Internet so that non-users have an opportunity to try it out and know what the relative advantages of internet banking are. Banks could also offer video demonstrations in their branches aimed particularly at those who do not use the internet. On the whole, banks should use every effective means to educate those clients who do not use internet banking.

Table 3.5 where respondents learned about internet banking

Sources of internet banking knowledge	Multiple response (Percent)
Bank leaflets/advertisements	40
Television/Radio	75
Newspaper/Magazines	42
Word-of-mouth	11

3.4.5 The bank of preference to respondents

Table 3.6 indicates that Zemen Bank is the preferred bank of the respondents who use internet banking. Followed by united bank s.co

Table 3.6 which banks do respondents prefer for internet banking

Preferred banks for internet banking users	Percent
Zemen Bank	68.75
United Bank s.co	31.25
Others	0

3.4.6 Uses of internet banking

Table 3.7 shows that internet bankers use their online service for viewing account statements (93.4%), for viewing cheque account balances (90%); and for transferring funds (40%).

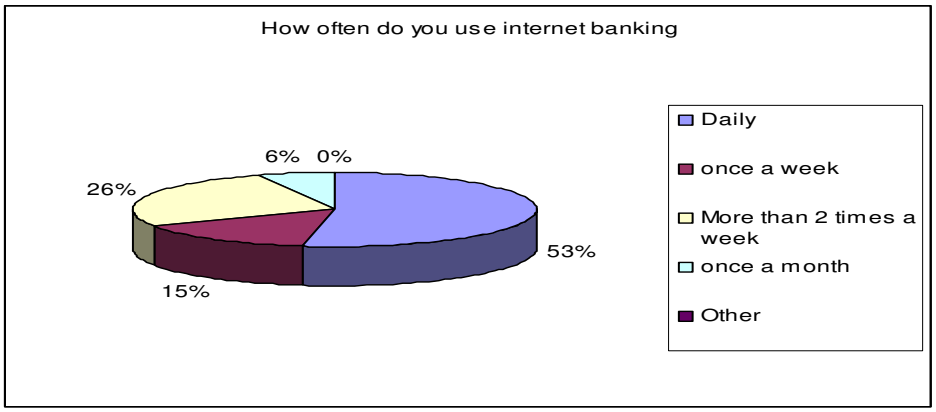
Table 3.7 what for respondents use internet banking

Uses of internet banking	Multiple response (percent)
Viewing account statements	93.4
Viewing cheque account balances	90
Making payments	0
Transferring funds	40
Other	0

3.4.7 The frequency with which respondents' use internet banking

Figure 3.22 illustrates that more than 50 percent of the respondents use internet banking daily, 26 percent use it more than twice a week, 15 percent use it once a week and 6 percent use it monthly. None of the respondents use internet banking annually.

Figure 3.22 How often do you use internet banking.



3.5 PERCEPTIONS OF INTERNET BANKING

This section reports on the perceptions and attitudes of respondents towards using internet banking. The respondents were asked to rate each item on a scale ranging from 1 (strongly

disagree) to 5 (strongly agree), as recommended by Struwig and Stead (2001:94) for conducting this kind of research.

3.5.1 The relative advantages of internet banking

The following sub-sections report on responses to questions concerning attitudes and perceptions towards the internet banking characteristic of relative advantage.

Internet banking enables better management of finances

The response to this question confirms that when customers perceive internet banking as being advantageous they then become far more likely to adopt internet banking for themselves. As reflected in Table 3.8, only 35.6 percent of non-users agreed that internet banking users conduct their finances better. Clearly internet banking users have a contrary viewpoint because 85 percent of them do agree that internet banking enables them to manage their finances better.

Table 3.8 Internet banking enables better management of finances

option	Strongly disagree	disagree	neither	agree	Strongly agree	Total
Internet banking users (Percent)	0	0	15	23.75	61.25	100
Internet banking non-users (Percent)	1.25	41.25	21.9	28.4	7.2	100

Internet banking saves time

In response to this question, customers indicate that they perceive time savings as being an important advantage, though not all respondents believe that this benefit can result from using internet banking. Table 3.9, reveals that 95 percent 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. Surprisingly Table 3.9 also shows that about half of non-users (49 percent) disagree that internet banking can be time saving.

Table 3.9 Internet banking saves time

option	Strongly disagree	disagree	neither	agree	Strongly agree	Total
Internet banking users (Percent)	0	0	5	45	50	100
Internet banking non-users (Percent)	0.9	33.75	14.4	32.5	18.4	100

Internet banking makes respondents more comfortable communicating with their bank

In response to this question, customers indicate that they perceived being able to communicate more comfortably with their banks as being an important advantage. As can be seen from Table 3.10, 77.5 percent of users agreed while only 34.7 percent of non-users agreed that internet banking makes communication with their banks more comfortable. Consequently internet banking users perceive that internet banking enables them to communicate with their bank more comfortably than non-users in this research.

Table 3.10 Internet banking makes respondents more comfortable communicating with their bank

option	Strongly disagree	disagree	neither	agree	Strongly agree	Total
Internet banking users (Percent)	0	2.5	20	28.75	48.75	100
Internet banking non-users (Percent)	1.25	37.8	26.25	28.75	5.9	100

3.5.2 The compatibility of internet banking

The following sub-sections report on responses to questions concerning attitudes and perceptions towards the internet banking characteristic of compatibility.

Internet banking suits respondents' life styles

This question probes customer perceptions about the impact that internet banking has on their life style and what influence this has on their willingness to use internet banking. These results show that 85 percent of users were in agreement, whereas just 11 percent of non-users agreed that internet banking suits their life style. This indicates that internet banking users perceive internet banking to be suitable to their life style far more than non-users do.

Table 3.11 Internet banking suits respondents' life styles

option	Strongly disagree	disagree	neither	agree	Strongly agree	Total
Internet banking users (Percent)	0	5	10	37.5	47.5	100
Internet banking non-users (Percent)	8	48	33	9.4	1.7	100

Internet banking suits respondents' work styles

This question probes customer perceptions about the impact that internet banking has on their work style and what influence this has on their willingness to use internet banking. Table 3.12 shows that 84 percent of users agreed whereas just 19.7 percent of non-users agreed that internet banking suits their work style. Consequently internet banking users perceive that internet banking fits their work style far more than non-users do.

Table 3.12 Internet banking fitting respondents work styles

option	Strongly disagree	disagree	neither	agree	Strongly agree	Total
Internet banking users (Percent)	0	3.75	12.5	40	43.75	100
Internet banking non-users (Percent)	7.5	40.6	32	16.9	2.8	100

Internet banking makes respondents' life convenient

This question aims to establish if internet banking is perceived to be convenient by the respondents and whether this is a factor that influences its usage. As can be seen from Table 3.13, 82.5 percent of users agreed while just 18 percent of non-users agreed that internet banking makes their lifestyle more convenient. Consequently users perceived that internet banking makes their life more convenient whereas non-users do not.

Table 3.13 Internet banking makes respondents life convenient

option	Strongly disagree	disagree	neither	agree	Strongly agree	Total
Internet banking users (Percent)	3.75	0	13.5	37.5	45	100
Internet banking non-users (Percent)	4.7	26.9	51.25	15	3	100

3.5.3 The complexity of internet banking

The following sub-sections report on responses to questions concerning attitudes and perceptions towards the internet banking characteristic of complexity.

The ease of conducting internet banking

The question aims to understand how customer perception of the ease of use of internet banking influences their willingness to use internet banking. 85 percent of the users agreeing and only 23 percent of the non-users agreeing that internet banking is easy to use. Hence this result is in line with the earlier literature review, which suggests that ease of use has a positive influence on the adoption of internet banking (Cheung, et al., 2000, p.49).

Table 3.14 Internet banking programme is easy

option	Strongly disagree	disagree	neither	agree	Strongly agree	Total
Internet banking users (Percent)	0	0	15	30	55	100
Internet banking non-users (Percent)	3	20.6	52.5	20.6	3	100

The complexity of using internet banking

The question aims to determine if there is a difference between users and non-users in their perceptions of how complex internet banking is. A table 3.15 show that 47 percent of the non-users agreed that internet banking is complex. Contrary to this only 7.5 percent of users agreed that internet banking is complex. It emerged that there is a difference between users and non-users when it comes to their perceptions of the complexity of internet banking.

Table 3.15 Using internet banking is complex

option	Strongly disagree	disagree	neither	agree	Strongly agree	Total
Internet banking users (Percent)	62.5	13.75	16.25	5	2.5	100
Internet banking non-users (Percent)	1.7	11.25	39.7	41.25	5.9	100

The simplicity of the internet banking process

The question aims to understand how customer perception on the simplicity of using the internet banking process influences their acceptance of internet banking. Table 3.16 shows that 85 percent of users, but only 5.2 percent of non-users agree that the internet banking process is simple for them to use.

Table 3.16 Internet banking process is simple

option	Strongly disagree	disagree	neither	agree	Strongly agree	Total
Internet banking users (Percent)	0	2.5	12.5	45	40	100
Internet banking non-users (Percent)	6.25	40	48	3	2.2	100

3.5.4 The perceived cost of internet banking

The following statements are the basis for questions about the respondents' attitudes and perceptions towards the cost of internet banking.

Telecommunication costs are expensive

This question aims to establish customer perceptions of the telecommunication cost of internet banking. Table 3.17 shows that 91 percent of the non-users agree that the telecommunication costs are expensive while 67.5 percent of the users did not agree that the telecommunication costs are expensive. This is an indication that perception of cost plays an important part in the consumer decision-making process and when viewed negatively, hampers customer acceptance of internet banking.

Table 3.17 Telecommunication costs are expensive

option	Strongly disagree	disagree	neither	agree	Strongly agree	Total
Internet banking users (Percent)	7.5	60	2.5	40	20	100
Internet banking non-users (Percent)	1.25	0.3	7.5	67,5	23.4	100

The cost of internet banking services

This question aims to understand if customer perceptions of the cost-effectiveness of internet banking influence their willingness to accept internet banking. These results as reflected in Table 3.18 indicate that a 91 percent of the non-users agreed that the internet banking service fees are expensive compared to users of which just 31.25 percent agreed that internet banking service fees are expensive. The results therefore indicate that internet banking charges are a key factor in motivating the use of internet banking. This information will assist banks in establishing their target market for internet banking.

Table 3.18 Internet banking service fees are expensive

option	Strongly disagree	disagree	neither	agree	Strongly agree	Total
Internet banking users (Percent)	6.25	58.75	3.75	23.75	7.5	100
Internet banking non-users (Percent)	0.6	0.3	8	61	30	100

The cost of Internet installation

This question aims to understand if customer perceptions of Internet setup costs influence their use of internet banking. Table 3.19 reveals that 62.5 percent of the users do not agree that Internet installation costs are expensive, while 80.2 percent of non-users agree that Internet installation costs are expensive. This factor will inhibit customers who are not suitably equipped from using internet banking.

Table 3.19 Internet installation costs are expensive

option	Strongly disagree	disagree	neither	agree	Strongly agree	Total
Internet banking users (Percent)	6.25	56.25	3.75	22.5	11.25	100
Internet banking non-users (Percent)	0.63	.94	17.8	58	22.2	100

The cost-effectiveness of internet banking

This question aims at measuring how likely customers are to accept internet banking if they perceive it to be cost-effective. Table 3.20 reveals that 81.25 percent of users perceive that internet banking is cost-effective which contrasts with the 89.4 percent of non-users who do not agree that internet banking is cost-effective.

Table 3.20 Internet banking is cost-effective

option	Strongly disagree	disagree	neither	agree	Strongly agree	Total
Internet banking users (Percent)	1.25	2.5	15	50	31.25	100
Internet banking non-users (Percent)	3.75	33.75	51.9	8.75	1.9	100

3.5.5 The perceived risk of internet banking

The results presented in this section describe responses to questions concerning the perception of risk associated with internet banking by the respondents.

The safety of internet banking

This question investigates consumer beliefs about the safety of internet banking. Table 3.21 shows that most of the users (91%) agree, but only 17.2 % of the non-users consider internet banking to be safe. Consequently the higher the perception of risk in using internet banking the less likely an individual will be to adopt it.

Table 3.21 Internet banking is safe

option	Strongly disagree	disagree	neither	agree	Strongly agree	Total
Internet banking users (Percent)	0	5	5	56.25	33.75	100
Internet banking non-users (Percent)	5	35.6	39	16.25	0.9	100

3.5.6 Social influences on internet banking

Social factors are considered to be a powerful influence that affects attitudes towards internet banking. The results presented in this section describe responses to questions examining how respondents perceive the effect of social influences on internet banking.

The influence of friends on the use of internet banking

This question aims at investigating if the adoption of internet banking is influenced by friends. Earlier research (Cheung, 2001:116) indicates that classmates and friends are likely to have an influence on potential adopters and existing users of internet banking. Table 3.22 reveals that More than half of the users (54%) and 63 % of non-users disagreed that friends influence their attitudes towards internet banking. Consequently this result contradicts the earlier literature

review and it appears that in Ethiopia the opinion of friends is not a major factor affecting the adoption of internet banking.

Table 3.22 My friends influence me to use internet banking

option	Strongly disagree	disagree	neither	agree	Strongly agree	Total
Internet banking users (Percent)	45	3.75	5	42.5	3.75	100
Internet banking non-users (Percent)	23	9.7	25.9	38	2.8	100

The influence of parents on the use of internet banking

This question aims to reveal if the adoption of internet banking is influenced by parents. Table 3.23 shows that less than half of both users (44%) and non-users (38%) agree that their parents have had influence on them with regard to internet banking.

Table 3.23 My parents influence me to use internet banking

option	Strongly disagree	disagree	neither	agree	Strongly agree	Total
Internet banking users (Percent)	50	3.75	2.5	40	3.75	100
Internet banking non-users (Percent)	38	6.9	25	27.5	2.2	100

The influence of colleagues on the use of internet banking

This question aims to determine whether the adoption of internet banking is influenced by colleagues. As can be seen from Table 3.24, more than half the users (52.5%) and non-users (59%) do not agree that colleagues influence them to use internet banking. This indicates that colleagues do not significantly influence each other by their attitudes towards internet banking.

Table 3.24 My colleagues influence me to use internet banking

option	Strongly disagree	disagree	neither	agree	Strongly agree	Total
Internet banking users (Percent)	45	2.5	5	42.5	5	100
Internet banking non-users (Percent)	23.75	13	22.5	38	2	100

CHAPTER: CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

From the analysis made in the preceding chapter, the following conclusions are drawn

The conclusions drawn about the impact of demographic factors on consumers' adoptions of internet banking are the following:

- In this study, the age group 30-39 accounts for 52 percent of internet banking users, which is relatively high proportion of younger user, the data suggests that age has an impact on the use of internet banking in Ethiopia.
- The results of this study indicate that, 49 percent of internets banking users have an income of more than Birr 10,000 per month. On the other hand, 44 percent of the non-users have an income of less than Birr 2000 per month. Only 3 percent of the non-users have an income of more than Birr10, 000 per month. Therefore this finding showed that income has a major effect on the adoption of internet banking. Internet banking users generally earn a higher income than non-users.
- Education levels are regarded as an influential factor in consumers' use of internet banking services with high education levels being particularly significant. In this study, 81 percent of internet banking users have a higher education level (diploma or degree), whereas only 34 percent of non-users have tertiary education level qualifications. This confirms the high impact of education levels on the use of internet banking in this study.
- In this study 80% of the users were employed, whereas more than half of the non-users (58%) were not employed, as can be seen from these figures most of current users are employed compared to non-users. Hence occupation has an impact on the adoption of internet banking in Ethiopia.

Conclusions drawn on the psychological factors influencing consumers' adoption of internet banking

Relative advantage: On the basis of the results of this study, in comparison to non-users, users perceived internet banking to make a positive contribution to their finances, saving time and making communication with banks more comfortable. The greater the perceived advantage of using internet banking, the more likely that internet banking would be adopted; hence the perceived relative advantage of internet banking is a significant factor in influencing consumers to adopt internet banking.

Compatibility: Based on the results of this study, internet banking users perceived internet banking to be more suitable to their life style and work style and more convenient to their life style compared to non-users. This finding showed that consumers who feel that internet banking is more compatible with their values are more intent on using internet banking services. The more a customer uses internet banking, and the more he or she perceives internet banking to be compatible with his or her lifestyle, the more likely that customer will continue to use internet banking. Therefore, a perception of compatibility of internet banking is an influential factor in the use of internet banking

Complexity: The results of this study indicate that internet banking users perceived internet banking as not involving complex procedures. Users perceived the service to be easier, less complex and simpler than non users did. This result suggested that the more complex internet banking is perceived to be, the less likely it is that internet banking will be adopted. Hence, the perception of complexity is a significant factor influencing the use of internet banking.

Perceived cost: This research project indicates that consumers view factors such as telecommunication costs, internet banking service fees and the cost of the installation of the Internet as being important in motivating them to use internet banking services. However, non-users of internet banking perceived these costs as being higher and more expensive than did users. This result showed perceived cost to have a negative influence on the adoption of internet banking.

Perceived risk: According to the results of this study, factors which hamper internet banking usage are: consumers believe that it is not safe to use internet banking; consumers believe that it is unsafe to reveal personal information on a bank websites. This finding show that the lower the perceived risks of internet banking the more likely an individual would be prepared to become active users of internet banking. Therefore, to sum up, the perceived risk negatively influences consumer behaviour with regard to internet banking.

Social influences on the adoption of internet banking

The results of this study provide a higher level of significance, which indicates that adoption is not affected by social influences. In other words, opinions of friends, parents or colleagues are not considered an important factor when deciding whether to adopt internet banking service.

4.2 Recommendations

- Banks have to effectively demonstrate that using the Internet as a service channel will be worthwhile for the potential user and that functionality will be delivered.
- Easy-to-use internet banking is important for all customers so, Banks should aim to make their internet banking as simple and easy to use as possible so that customers do not perceive them as being complicated or difficult to use. This gives insights for web page developers to design an internet banking system interface and Websites which are more user-friendly with clear instructions for users.
- Banks should install security features such as encryption devices, which safeguard sensitive information.
- There is a need to further enhance mechanical resources within the structure of the main internal framework. That is to say, if internet banking becomes popular, there would be problems generated by the influx of banking transactions being made at the same time. Banks need to look into better equipping their systems with more powerful and advanced computer technologies.
- A reduction in the cost of internet banking transactions can motivate consumers to use the service, therefore banks have to strive to provide cost effective service .for example banks could introduce price bands Customers, who process large volumes of transactions online, should receive a discount on transaction charges.
- An important feature in promoting internet banking is the emphasis on time and cost saved as a key benefit of online transactions. Promotions could be conducted through, offering prizes to customers who sign up and use the online facility.
- Banks offering internet banking should launch campaigns to direct awareness to potential adopters. Issues such as fear of the lack of privacy and security, together with relative advantages of using internet banking. Awareness should be created about the differences in traditional and internet banking charges through advertisements on radio, television and newspapers.

- To boost confidence and enhance the efficacy of using internet banking services, demonstrations via video presentations could be made at bank branches to showcase the user-friendliness of such services

- Banks could target business and establish relations with them.

- When the cost of the technology and access to the Internet becomes more wide-spread, different strategies may be employed to tailor services to those in the lower income groups.

Appendix

Addis Ababa University
School of Business & Public Administration
Department of Accounting and Finance
Post graduate studies

My name is Abenet Yohannes I am conducting research for my Msc in Accounting and Finance at Addis Ababa University. The title of my research project is "Key Factors that determines Adoption of Internet banking in Ethiopia In order to collect representative data I would like to interview you. The information provided will be treated confidentially and your co-operation will be highly appreciated. The aim of this research project is to improve the internet banking service to Ethiopian customers.

Full name: Abenet Yohannes **Date**

Signed: _____ _____

1. Demographic Details

1.1. Gender

Male	
Female	

1.2. Age category

21 to 29	
30 to 39	
40 to 50	
Over 50	

1.3. Monthly Income

Less than Br 2000	
Br 2000 to Br 3999	
Br4000 to Br 4999	
Br 5000 to Br 9999	
Over Br 10000	

1.4. Educational qualifications.

University / degree/diploma	
Metric	
Some high School	
Other (Specify)	

1.5. Occupation

Workers	
Not working	
Pensioner	
Self employed	
Other (Specify)	

1.6. Marital Status

Married	
Divorced	
Single (never married)	
Widow(er)	

2. Internet usage

2.1 Have you ever used the Internet?

Yes	1
No	2

2.2 If yes, where do you use Internet at: (you can tick more than one choice) If no, please go to Section3

□Home	1
□Work place	2
□Internet café	3
□Library	4
□Other, please specify: _____	5

2.3 You use the Internet for (you can chose more than one answer)

□E-mail	1
□Entertainment	2
□Study	3
□Update on current news	4
□Banking	5
□Other, please specify: _____	6

2.4 How often do you use the Internet?

□Daily	1
□Once a week	2
□More than 2 times a week	3
□Once a month	4
□Other, please specify: _____	5

3. Internet banking

3.1 Have you ever used internet banking?

□Yes	1
□No	2

If yes please answer question 3.4-3.7, if no please answer 3.2-3.3

3.2 If you have not used internet banking, state why? (You can tick more than one option)

□ I do not have Internet access	1
□ I do not have a computer at home	2
□ I am not good at computer	3
□ I am not good at using Internet	4
□ Cost of Internet access is very high	5
□Internet banking is not safe.	6
□No need.	7
□I have not heard of internet banking	8
□Other, please specify: _____	9

3.3. Will you engage in internet banking service if the bank offers: (you can tick more than one choice?)

□Free Internet access	1
□Free training skills on the use of internet banking	2
□More economical banking transaction	3
□Great security	4
□Other, please specify: _____	5

3.4 If yes, where did you learn about internet banking? (You may tick more than one answer).

□ Bank leaflets/advertisements	1
□ Television/Radio	2
□ Newspaper/Magazines	3
□ Words-of-mouth	4
□ Other, please specify: _____	5

3.5 Which bank do you prefer to use (you can choose more than one answer)

□ Zemen Bank	
□ United Bank S.Co	
□ Other, specify: _____	

3.6 Why do you use internet banking for? (You can select more than one option).

□ Viewing account statements
□ Viewing cheque account balances
□ Making payments
□ Transferring funds
□ Other, please specify: _____

1
2
3
4
5

3.7 How often do you use internet banking?

□ Daily
□ Once a Weekly
□ More than twice a week
□ Once a month
□ Other, please specify: _____

1
2
3
4
5

4. Internet banking perception

Please read each statement and then put a score in the box, which best indicates how strongly you agree or disagree with the statement for the statement 4.1 to 4.6

Strongly disagree	Disagree Somewhat	Neither agree nor disagree	Agree to some extent	Strongly Agree
1	2	3	4	5

4.1 Relative advantages of internet banking

a. Internet banking allows me to manage my finances better. □
b. Internet banking saves my time. □
c. Internet banking makes me more comfortable to communicate with the bank. □

4.2 Compatibility of internet banking

a. Internet banking suits my life style. □
b. Using internet banking to do my banking business fits into my work style.□
c. Using internet banking makes my lifestyle more convenient. □

4.3 Complexity of internet banking

a. Internet banking programme is easy for me to manage my finances. □
b. Using internet banking is very complex.□
c. Using internet banking process is simple □

4.4 Perceived cost

a. The telecommunication cost is expensive. □
b. Internet banking service fee is expensive for me. □
c. The Internet installation cost is expensive. □
d. Internet banking is cost-effective to me.□

4.5 Perceived risk

a. I prefer to go to the bank to do my banking business for security reason. □
b. Internet banking is safe/secure. □
c. I am not afraid of disclosing personal information on the Internet.□

4.6 My decision to adopt internet banking is influenced by:

a. My friends	
b. My parents	
c. My colleagues	

5. Please indicate how the banks can improve the internet banking service to you

_____
_____
_____
_____
_____
_____
_____
_____
_____

Thank you for time and your responses.

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