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# FACTORS THAT DETERMINE ADOPTION OF INTERNET BANKING IN ETHIOPIA (A CASE STUDY OF ZEMEN BANK IN BAHIR-DAR CITY)

# **RESEARCH PAPER**

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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 Bahir-dar 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. The total population was 619 which consisted of customers, 557 customers are non-users of internet and 62 customers are Internet users in zemen bank in Bahirdar using a confidence level of 94%, the sample size was 267 employees, And finally possible recommendations were given so that the banking sector in Ethiopia can exploit the potential advantages of internet banking to remain competitive.

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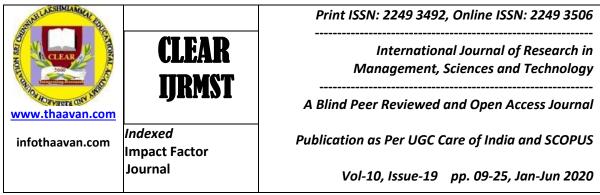
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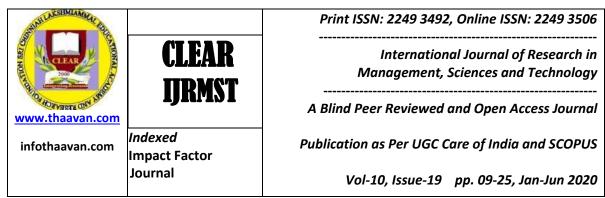
# indicates that there is an urgent need for a locally

# **1.1 INTRODUCTION**

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 represents means banking which а of revolutionizing and modernizing this traditionally stagnant industry (Bradley, 2000:2). There is no doubt that the revolutionary developments in information and communications technology was transform the banking industry. Internet banking, despite the uncertainties about its future, was being 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 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 fullfledged 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 was revolutionize the way banks operate, deliver, and compete against one another, especially when competitive advantages of traditional branch networks are eroding rapidly



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(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.

### **1.3 Problem Statement**

This research have 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 Bahir Dar city. And particularly to provide both bankers and policy makers with public opinion that shall be assisting in the understanding and appreciation of the factors that affect the adoption of Internet banking in Ethiopia. In another study conducted by Shah, Ahmad, Sayyed and Bin (2007) on the factors affecting internet banking adoption in the manufacturing companies in Malaysia. The findings established that security or confidentiality was taken as additional factor in the adoption of the technology besides relative advantage and compatibility which have a significant influence. Metwally (2013) also conducted a study the assessment of Users Acceptance of internet banking, the results show that the main factor, which affected banks' customers' decision to use internet banking service, was ease of use, followed by usefulness and trust and credibility of the service. factors such Other external as personal innovativeness, individual differences, computer and Internet use experience, promoting circumstances and service assistance, and communication, were applicable and valid in explaining users' adoption. It

seems that there are not many studies conducted to investigate internet banking activities and there is not more awareness of the important of internet

banking and user attitudes among Ethiopia,

Scupola (2002) argued that financial institutions are not getting what they expect from Internet-based technology investments since Internet-based projects carry risks which usually appear later. The risks associated with the Internet based technology investments become even higher in a competitive business environment. At imperial bank, the frequency and the use of internet banking at Imperial bank remains poorly defined and fragmented (Martin, 2014). Hence, this study aims to extend the web of knowledge with regards to the perception of security as an influence on the utilization of internet banking services among customers, the implications of introducing online banking services to create favorable Environment in predicting the users attitude to adopt services and how the internet payment arrangements increase the use of internet banking services.

# 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.

# **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



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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 customers 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. This study contributes to the knowledge of the important of internet banking in the costumer by enhancing the understanding of the effect of different contexts. The study would be significant in providing useful information for individuals who want to work further research. For management, it helps to save time, saving cost implementation in the organization and to take the necessary measures to correct weakness and to keep up strength of the organization and to new technologies.

# 1.6 Scope of the study

The study was limited to Bahir-dar. The reasons for this are: Ethiopia is too large for the researcher to travel all over the country and Bahir-dar is one of the largest and commercial cities of amhara region 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. Limitation of the study

The study was specifically be focused on factors influencing the adoption of internet banking in Ethiopia especially in Bahir-dar city in zemen bank. the study is going to be subjected to some limitations because of its scope .Thus, the findings of the study was limited to those areas and conclusions and recommendations was also be limited to the challenges and practices of adoption of internet banking It may also have methodological limitations since it was use simple random sampling technique to get sample respondents in each custemer. **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



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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 was having 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. 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 was be interesting to see what happens to traditional banks with branches. Wah (1999), for example, argues that Traditional bank was not disappearing in the future. Instead, the new technology was put them on a new level in banking services. She concludes that even traditional banks was benefit from this new technology, and they was be able to care for their customers in a more

#### efficient, more productive and even more fun way. 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 were 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 check

# 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.

**2.1.3 Benefits of internet banking to banks** Internet banking offers many benefits to banks and



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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 was 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,

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-ofmouth 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. 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.



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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 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. Here, customers make use of home finance software to link to banks for online banking. Banks set up 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

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 knowledge, persuasion, decision of 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.

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).



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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 develops 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 was continuing; however, it is also possible that the rejection occurs after adoption. In the latter case, the previous reverse of 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.

#### 3.1 Research Design

This chapter explains the research methodology that was apply to obtain representative data from a sample

of the retail banks in Bahir-Dar city espashaliy in zemen bank.Research design and methodology is very crucial that helps the researchers how to address the research problems and provides the overall structure for the procedures that researchers should follow. It is also very important to get meaningful data to achieve objectives of the study. Thus, this chapter presents the study areas description, design and sample size ,data sources, data collection instruments, data collection procedures, data analysis tools and ethical considerations of the study.These research was quantitative study that aims at identifying the factors influencing the adoption of

internet banking among Bahir-dar city espashaliy zemen bank. A questionnaire was develop and pretested in order to obtain the information required. The research proposal was descriptive that is it was determine market characteristics. 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 619 responses. All the respondents were customers of major Ethiopian retail banks; there were 557 nonusers and 62 users of internet banking. The sample to know their perceptions towards internet -banking. According to those 90% of are non- Internet users and 10% of the total are users of Internet. And also have 49 total branches of zemen bank in Ethiopia. Using a confidence level of 94%, the sample size will 267 employees, Random sampling techniques will adopt. Structured questionnaires will use as data collection tool. Demographic data will tabulate using frequency and percentages.

#### 3.2 Description of the Study Area

Bahir Dar is the capital city of the Amhara Region in northern Ethiopia Amhara region is one of the nine ethnic divisions of Ethiopia, containing the homeland of the Amhara people. The State of Amhara is located in the nrth western and north central part of



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Ethiopia. The State shares common borders of with the state of Tigray in the north, Afar in the east, Oromia in thesouth, Benishangul-Gumuz in the south west and the Republic of Sudan in the west. It covers approximately 161,828.4 sq.km in area and this is 11% of the Ethiopian total area and is moderately compact in shape. This land consists of three major geographical zones. There arehighlands (above 2,300 metres above sea level), semi-highlands (1,500 to 2,300 metres aboveea level) and lowlands (below 1,500 metres above sea level) accounting 20%, 44%, and 28% respectively. The State of Amhara consists of 10 Administrative zones, one special zone, 113woredas, 3,216 kebeles and 78 urban centers.

Amharic is the working language of the region. it is located approximately 565 km of northwest of Addis Ababa. It's a port on the south shore of the huge inland Lake Tana. Deck Island is one of many islands in the lake that are home to medieval monasteries. On the Zege Peninsula, the Ura Kidane Mihret monastery is known for its elaborate, colorful murals. The Blue Nile River snakes southeast of the city toward the towering cliffs at the Blue Nile Falls.

#### 3.3. Source of Data

The research was collect data from both secondary and primary sources of data. The primary source of data was collect from customers of zemen bank in Bahir-dar and the secondary source of data was collect from written manuals and internal documents of the organization, any Report, internets, books and journals etc...

# 3.4.Sample Technique

The researcher was use probability sampling method also called simple random sampling (lottery method). Having selected such number of sample respondents, the questionnaire was distribut by using simple random sampling to get each respondent from each custemer of zemen bank in Bahir-dar. This sampling technique was chosen as it gives each member of population equal chance of being selected and homogeneity of population characteristics

# 3.5. Target population

The sampling population was defined as customers of zemen bank in Bahir-dar retail banks both users and nonusers of internet banking who have 619 bank accounts; non-users are included in the sample to know their perceptions towards internet banking. According to those 90% of are non- Internet users and 10% of the total are users of Internet. And also have 49 total branches of zemen bank in Ethiopia.

# **3.6.** Sampling Design Procedures and Sample Size Determination

The study was focuse on Factors that determine adoption of internet banking in Ethiopia espashaliy in zemen bank Bahir -dar city as the study areas with a total number of 619 custemers in zemen bank In the

determination of sample size was very important to gather the required data from sample respondents. These was include the level of Internt users and the level of Internt non-users confidence or risk and the degree of variability in the attributes being measured that enable the researchers to determine appropriate sample siz Therefore, by considering these issues sample size to collect data through questionnaire for this research was determin by using Yamane's (1967) formula.

$$n=\frac{N}{1+N(e)^2}$$

Where

n = the sample size

N= the population size

e = customers of precision or significance customers for 94% confidence customers e value is 0.06.

$$\mathbf{1}$$
 = designates the probability of the event occurring

$$n = \frac{N}{1 + N(e)^2} = \frac{619}{1 + 619(0.06)^2} = 267$$

Therefore, 267 respondents was used as sample for this study to gather date through questionnaire. The researcher deems necessary to take independent sample for each divisions that manes Internit users and Internit non-users to ensure equal representation because divisions have different number of custemers. Therefore, the sample size for was



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calculated using proportion. The study was use proportionate sample allocation formula so as to make each stratum sampled identical with proportion of the population.

Therefore, proportional sample size from each stratum was calculated by using the following formula.

$$n_i = \frac{n * N_i}{N}$$

Where:

 $n_i$  = sample size for individual custemer  $N_i$  = the total number of custemer in each custemer

 $\mathbf{N}$  = the total number of custemers in the selected custemer

 $\boldsymbol{n}$  = the total sample size for selected custemer

This sampling technique was chosen as it gives each member of population equal chance of being selected and homogeneity of population characteristics

# 3.7. Data Collection

Data was collect through the use of questionnaires,

administered via interviews. In this research proposal, probability sampling was used; . to chooses probability sampling units, that is to say the place where the interview was select.

### ANALYSIS AND RESULTS

### 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 4.8, only 26 percent of nonusers agreed that internet banking users conduct their finances better. Clearly internet banking users have a contrary viewpoint because 88 percent of them do agree that internet banking enables them to manage their finances better.

Option	Strongly disagree	Disagree	neither	Agree	Strongly agree	Total
Internet banking users (Percent)	0	0	12	28	60	100
Internet banking non-users (Percent)	23	30	21	16	10	100

 Table 1 Internet banking enables better management of finances

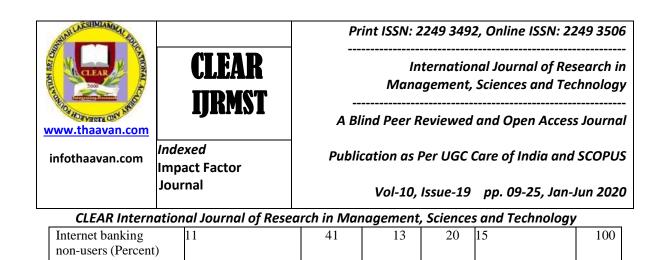
Sources: annual reportes of based on zemen bank custners in bahir dar city (2020).

# 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 4.9 reveals that 93 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. And about more than half of non-users (52 percent) disagree that internet banking can be time saving.

Table 2 Internet banking saves tin	ne
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Option	Strongly disagree	Disagree	neither	agree	Strongly agree	Total
Internet banking users (Percent)	0	0	7	42	51	100



Sources: annual reportes of based on zemen bank custners in bahir dar city (2020).

#### 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 4.10, 81 percent of users agreed while only 32 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 3Internet banking makes respondents more comfortable communicating with their bank

Option	Strongly disagree	Disagree	neither	agree	Strongly agree	Total
Internet banking	0	0	19	32	49	100
users (Percent)						
Internet banking non-users (Percent)	10	41	17	21	11	100

Sources: annual reportes of based on zemen bank custners in bahir dar city (2020).

#### 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. These results show that 81 percent of users were in agreement, whereas just 19 percent of nonusers 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 Three her b				J	
Option	Strongly disagree	disagree	neither	agree	Strongly agree	Total
Internet banking users (Percent)	0	7	12	35	46	100
Internet banking non-users (Percent)	16	40	35	11	8	100

### Table 4 Internet banking suits respondents' life styles

Sources: annual reportes of based on zemen bank custners in bahir dar city (2020).

#### Internet banking suits respondents' work styles

This question probes customer perceptions about the impact that internet banking has on their work style. Table 4 shows that 86 percent of users agreed

whereas just 19 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.



CLEAR International Journal of Research in Management, Sciences and Technology Table 5 Internet banking fitting respondents work styles

	Table 5 Internet banking fitting respondents work styles								
Option	Strongly disagree	disagree	neither	agree	Strongly agree	Total			
Internet banking users (Percent)	0	0	14	45	41	100			
Internet banking non-users (Percent)	13	37	31	15	4	100			

Sources: annual reportes of based on zemen bank custners in bahir dar city (2020).

# 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 Table5.13, 80 percent of users agreed while just 14 percent of non-users agreed that

internet banking makes their lifestyle more convenient.

	Table 5 Internet bar	iking makes	s responde	ents life co	nvenient	
Option	Strongly disagree	disagree	neither	agree	Strongly agree	Total
Internet banking users (Percent)	0	4	16	38	42	100
Internet banking non-users (Percent)	16	23	47	9	5	100

 Table 5 Internet banking makes respondents life convenient

Sources: annual reportes of based on zemen bank custners in bahir dar city (2020).

### 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 there to use internet banking. 81 percent of the users agreeing and only

21 percent of the non-users agreeing that internet banking is easy to us.so users are more ease to conduct internet banking than non-users.

	Table 0 Interne	e banking p	'i Ugi ammu	cu is casy		
Option	Strongly disagree	Disagree	neither	agree	Strongly agree	Total
Internet banking users (Percent)	0	0	19	33	48	100
Internet banking	6	22	51	17	4	100

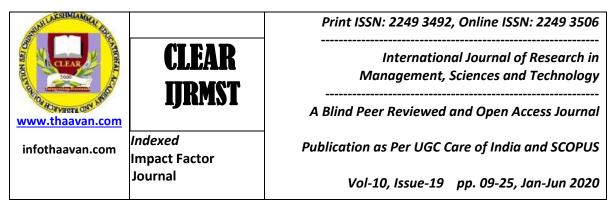
 Table 6 Internet banking programmed is easy

Sources: annual reportes of based on zemen bank custners in bahir dar city (2020).

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. Table 6 show that 57 percent of the non- users

agreed that internet banking is complex. Contrary to this only 6 percent of users agreed that internet banking is complex. It emerged that there is a difference between users and non- users when it



CLEAR International Journal of Research in Management, Sciences and Technology comes to their perceptions of the complexity of internet banking. Table 7 Using internet banking is complex

Option	Strongly disagree	disagree	neither	agree	Strongly agree	Total
Internet banking users (Percent)	57	23	14	6	0	100
Internet banking non-users (Percent)	7	12	24	48	9	100

Sources: annual reportes of based on zemen bank custners in bahir dar city (2020).

### 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 7 shows that 79 percent of users, but only 19 percent of non-users agree that the internet banking process is simple for them to use.

	Table 8 Inte	гпет рапкп	ig process	is simple		
Option	Strongly disagree	disagree	neither	agree	Strongly agree	Total
Internet banking users (Percent)	0	6	15	27	52	100
Internet banking non-users (Percent)	9	38	34	12	7	100

#### Table 8 Internet banking process is simple

Sources: annual reportes of based on zemen bank custners in bahir dar city (2020).

#### 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.

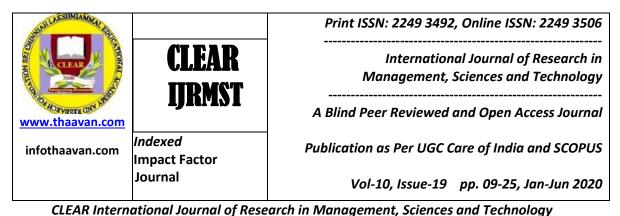
#### Telecommunication costs are expensive

This question aims to establish customer perceptions of the telecommunication cost of internet banking. Table 8 shows that 61 percent of the non-users agree that the telecommunication costs are expensive while 60 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 7 Telecolini	lumeation		spensive		
Option	Strongly disagree	disagree	neither	agree	Strongly agree	Total
Internet banking users (Percent)	8	52	10	20	10	100
Internet banking non-users (Percent)	0	13	26	53	8	100

# Table 9 Telecommunication costs are expensive

Sources: annual reportes of based on zemen bank custners in bahir dar city (2020).



This question aims to understand if customer perceptions of the cost-effectiveness of internet banking influence their wasingness to accept internet banking. These results as reflected in Table 9 indicate that a 58.3 percent of the non-users disagreed that

the internet banking service fees are expensive

compared to users of which just 26 percent agreed that internet banking service fees are expensive. The results therefore indicate that internet banking charges are factor in motivating the use of internet banking. This information was assist banks in establishing their target market for internet banking.

	Table To Intel	net Dankn	ig sei vice		Apensive	
Option	Strongly disagree	disagree	neither	agree	Strongly agree	Total
Internet banking users (Percent)	11.1	48.1	14.8	18.5	7.5	100
Internet banking non-users (Percent)	8.3	50	25	12.5	4.2	100

 Table 10 Internet banking service fees are expensive

Sources: annual reportes of based on zemen bank custners in bahir dar city (2020).

#### The cost of Internet installation

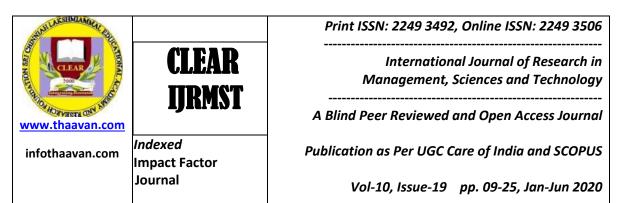
This question aims to understand if customer perceptions of Internet setup costs influence their use of internet banking. Table 11 reveals that 55.6 percent of the users do not agree that Internet installation costs are expensive, while 52.5 percent of non-users agree that Internet installation costs are expensive. This factor was in habit customers who are not suitably equipped from using internet banking.

Table 12 Internet instanation costs are expensive						
Option	Strongly disagree	disagree	neither	agree	Strongly agree	Total
Internet banking	7.5	48.1	11.1	18.5	14.8	100
users (Percent)						
Internet banking	5	6.25	36.25	37.5	15	100
non-users (Percent)						

#### Table 12 Internet installation costs are expensive

Sources: annual reportes of based on zemen bank custners in bahir dar city (2020).

This question aims at measuring how likely customers are to accept internet banking if they perceive it to be cost-effective. Table 12 reveals that 74.5 percent of users perceive that internet banking is cost-effective which contrasts with the 36.25 percent of non-users who do not agree that internet banking is cost-effective



CLEAR International Journal of Research in Management, Sciences and Technology Table 13 Internet banking is cost-effective

Table 15 Internet banking is cost-enceuve							
Option	Strongly disagree	disagree	neither	agree	Strongly agree	Total	
Internet banking users (Percent)	3.7	7.5	14.3	40.75	33.75	100	
Internet banking non-users (Percent)	6.25	30	46.25	10	7.5	100	

Sources: annual reportes of based on zemen bank custners in bahir dar city (2020).

# 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 This question investigates consumer beliefs about the safety of internet banking. Table 4.21 shows that most of the users (98%) agree, but only 20 % 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 was to adopt it.

#### The safety of internet banking

Table 14 Internet banking is safe
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Option	Strongly disagree	disagree	neither	agree	Strongly agree	Total
Internet banking users (Percent)	0	0	2	53	45	100
Internet banking non-users (Percent)	7.5	35	37.5	13.75	6.25	100

#### 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

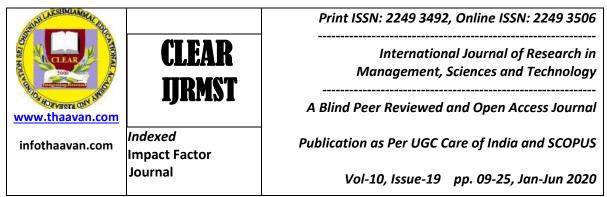
This question aims at investigating if the adoption of internet banking is influenced by friends. Earlier research (Cheung, 2001:116) indicates that classmates and friends are likely to have an influence on potential adopters and existing users of internet banking. Table 14reveals that of the users (48.45%) was disagree and 40 % of non-users disagreed that **The influence of colleagues on the use of internet banking** 

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

# 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 15 show that less than half of both users (33.4%) internet banking and non-users (27.5%) agree that their parents have had influence on them with regard to internet. This indicates that parents do not significantly influence each other by their attitudes towards internet banking.

This question aims to determine whether the adoption of internet banking is influenced by colleagues. As can be seen from Table 16, less



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than half the non-users (47.5%) was disagree and more than half of the users (52.1%) are disagree that colleagues influence them to use internet banking. **CONCLUSION** 

# Conclusion

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

This study aims at investigating the main factors affecting adoption of internet banking in Ethiopia. Technical and managerial skills available in Ethiopian banks for the adoption of internet -banking are also limited. This is influencing the choice of technology in Ethiopian banks. In general, the findings of this study offer additional insights into the current internet banking adoption situation. It has also be valuable to all banking industries of the country to increase their awareness and understanding of internet-banking benefits Internet banking should be trustworthy and secure to avoid undesirable consequences in the face of risky decisions. There should be a fast response time to answer customer queries in relation to internet banking sservices. Banks should hire well knowledgeable and qualified personnel to answer customer queries. Internet banking should offer banking services at cheaper rates. Internet banking should be well organized to collect customer information to fulfill their financial needs in different ways. Internet banking should allow costs saving, increase 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 44.4 percent of internet banking users, which is relatively high proportion of middle age user, therefore, this finding the data suggests that age has an impact on the use of internet banking in Ethiopia. The results of this study indicate that, 28 percent of internets banking users have an income of more than Birr 10000 per month. On the other hand, 29 percent of the non-users have an income of less than Birr 2000 per month. Only 14 percent of the non-

This indicates that colleagues do not significantly influence each other by their attitudes towards internet banking.

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 consumer's use of internet banking services with high education levels being particularly significant. In this study,41 percent of internet banking users have degree education level whereas only 21 percent of non-users have degree education level qualifications.

This confirms the high impact of education levels on the use of internet banking in this study. In this study 71% of the users were employed, whereas lessen than half of the total internet banking users (27%) 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

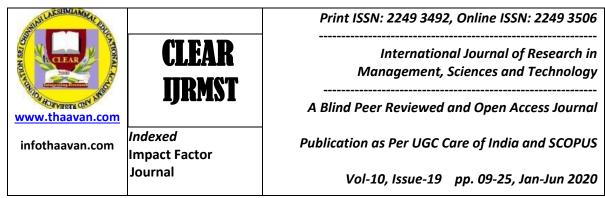
#### References

Agarwal,R.and Prasad, J. (1998). A conceptual and<br/>operational definition of personal<br/>innovativeness in the domain of information<br/>technology". Information systems<br/>research. Vol.9.pp.204-224Ajzen,I.andFishbein,M.(1980). Understanding

Attitudes and Predicting Social behavior Englewood Cliffs: Prentice-Hall.

Anonymous. (2002) "Living standards – surprise!" (Online). Available at: <u>http://www</u>. safrica.info/doing

business/economy/success/living standards.htm. Accessed on (2004- 03-15). Anonymous. 2004. "Meaning of Internet". (Online). Available at: http://www.hyperdictionary.com/dictionary/Internet. Accessed on 2005-3-2.



CLEAR International Journal of Research in Management, Sciences and Technology

Bareczal, G. and Ellen, P. (1997) "Developing typologies of consumer motives for use of technologically – base banking services". *Journal of Business Research*. Vol.38. pp.131-139. Besavros, A. (2000). "Banking industry walk "tightrope in personalization of web services". *Bank Systems & Technology*. Vol. 37(1). pp.54-56.

Beckett, A.; Hewer, P. and Howcroft, B.( 2000.) "An exposition of consumer behavior in

the fiancial services industry". International Journal of Bank Marketing. Vol.18(1).

pp.15-26. Black, N. F.; Lockett, A.; Winkhofer, H. and Ennew, C. (2001.) "The adoption of Internet financial services: A qualitative study". *International Journal of Retail and Distribution Management*. Vol.29 (8). Pp.390-398.

Block, C. and Roering, J. (1979.) *Essential of Consumer Behavior: Concepts and Application* Hinsdale: The Dryden Press.

Bradley, L.( 2000 ) "The diffusion of Internet banking within the Irish retail banking industry," Unpublished MBA dissertation. Dublin Institute of Technology.

Bradley, L. and Stewart, K. (2003.) "The diffusion of Online Banking". *Journal of* 

Marketing Management. Vol.19. pp.1087-1109.

Brogdon, C. (1999.) "Banking and the Internet: Past, Present, and Possibility". (Online). Available at: http://

db.stanford.edu/pub/gio/CS99I/banking.html.