



COMPARATIVE STUDY BETWEEN TRADITIONAL AND  
ELECTRONIC BANKING WITH CUSTOMER SATISFACTION  
PERSPECTIVE IN AZERBAIJAN

by

Tamima Saleem

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Date:

Signature:

Name: Tamima Saleem

Course: Master's in Business Administration (Banking)

Examination No.: IM.02.453.17.003

E-Mail: tamimasaleem@gmail.com

Submission Date: 28, June 2019

## **DEDICATION**

I dedicate this research work to my parents their love, concern and support inspired me to achieve this goal.

## ACKNOWLEDGEMENT

In the Name of Allah, the Most Gracious and the Most Merciful, I give thanks to my creator who has granted me the ability to complete this research.

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## **ABSTRACT**

In recent years, banking sector evolved rapidly due to advancement in information and technology and result in intensive competition in financial market. The purpose of this research is to evaluate the customer satisfaction using different Channel bank provide to the customers to perform banking services traditionally or electronically based on customer perception, experience awareness and security. This is an empirical study using primary data collected through a well-structured questionnaire. The method of the study validity and reliability testing of questionnaire using SPSS program. The questionnaire personally administered on a sample size of 120 bank customers. This research will make a useful contribution as there are only a few studies conducted on customer satisfaction using different means of banking services. The findings based on three different independent variables to measure customer satisfaction (Ease of use, Security and Confidence level) showed that all these variables influenced consumers satisfaction in banking sector. EOU has a major and positive impact in significant relationship with customer satisfaction. Use of electronic banking is measure with the variables (Ease of use, Security, Confidence level and electronic banking offer all banking services). Result showed that there is a negative relationship between electronic banking usage and e-banking offer all banking services.

## REFERAT

Son illərdə, bankçılıq sektoru informasiya və texnologiyanın inkişafı ilə əlaqədar sürətlə inkişaf edərək maliyyə bazarında sıx rəqabətə səbəb oldu. Bu tədqiqatın məqsədi müştərilərin qəbulunun, təcrübə şüurunun və təhlükəsizliyin əsasını təşkil edən ənənəvi və ya elektronik olaraq bank xidmətlərini müştərilərə təqdim etməklə müxtəlif yollarla banklarından istifadə edərək müştəri məmnuniyyətini qiymətləndirməkdir. Bu, düzgün qurulmuş anket vasitəsilə toplanan ilkin məlumatlardan istifadə edərək empirik bir araşdırmaadır. SPSS proqramı ilə sorğunun öyrənilməsinin etibarlılığı və dəqiqliyinin sınaq üsuludu. Sorğu 120 bank müştərisinin məlumatlarına əsasən aparılmışdır. Bu araşdırma faydalı bir töhfə verəcəkdir, çünki müştəri məmnuniyyəti ilə bağlı müxtəlif bank xidmətləri göstərən yalnız bir neçə tətqiqat var. Müştəri məmnuniyyətini ölçmək üçün üç fərqli müstəqil dəyişən: istifadənin asanlığı, təhlükəsizlik və məxfiliyə əsaslanan nəticələr; bütün bu dəyişənlər bank sektorunda istehlakçıların məmnuniyyətə təsir göstərir. İstifadənin asanlığı müştəri məmnuniyyətinə mühüm və müsbət təsir göstərir. Elektron bankçılıq istifadəsi dəyişənləri: istifadənin asanlığı, təhlükəsizlik, məxfiliyə və elektron bankçılığın bütün bank xidmətləri ilə ölçülür. Nəticələrə əsasən deyə bilərik ki, elektron bankçılıqdan istifadə ilə elektron bankçılığın bütün bank xidmətləri arasında mənfi bir əlaqə var.

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# INTRODUCTION

## **Background of The Study**

Technology is rapidly changing the business environment. Technology helps to develop the business model which identify customers need, meet their need and satisfy them in a profitable way Charles Baden-Fuller, Stefan Haefliger (2001). Innovation and technology have created great opportunities for many organizations, from small businesses to large corporations, including financial institutions which influencing customer's behavior.

Bank has a history of using technology to provide value to the customers. Now bank need to use innovative technology to capture customers in order to stay competitive Arvind Astrta and Guillaume Biot-Paquerot (2018). Since the 1970s, Electronic banking introduced a new concept in the business using telecommunications networks information technologies centering on electronic data interchange and moved rapidly to the Internet (Zwass, 1996). Electronic banking help customers to get access to cash 24 hours through ATM, debit card and personal identification number (PIN), electronic transfer and online banking for easy transactions.

Banks play an important role in economy as a financial intermediary and these days consider as a basic requirement to make transactions. Traditional banks have physical presence like headquarters and local branches that offer in person customer service that considered trustworthy. In 2016 Global Consumer Banking Survey, which surveyed 55,000 consumers in 32 countries finds out that 60% consumers would want to visit a physical branch or speak with a real person in order to purchase a new financial product or ask for advice especially when the consumer is in the beginning stages of opening an account. However, customers face lack of access to their banking information and services outside of the business hours when they are travelling may not be able to find a branch or ATM without high fees.

This study aims to find out customer preference base on ease of use, time and trust which lead to customer satisfaction using different banking channels including traditional and electronic banking in Azerbaijan.

Customer satisfaction defined as a collection of expectation, perception, evaluation and reactions the experience customer gain through the consumption of a product and service Saha and Zhao (2005). In other words, meeting the customer expectation in a valuable way. Customer's satisfaction has the potential to increasing an organization's customer base, increase the use of more volatile customer mix and increase the firm's reputation (Fornell, 1992, as cited in Alabar, 2012). Consequently, get the competitive advantage to provide better customer services compare to the competitor to stay competitive in the market where technology is the key.

### **Structural Difference Between Traditional and Electronic Banking**

The banking industry has evolved tremendously in the past few decades. Bank has been offering different mode of banking to perform financial service for value and convenience of their customers.

The difference between traditional and electronic banking is a physical presence, traditional bank has a headquarters, branches located across the countries in which it operates. According to a survey, consumers prefer to visit a physical branch to deal with a real person because it seems trustworthy especially when the consumer is in the beginning stages of opening an account.

On the other hand, E-banking ensure access to the cash 24 hours anytime and anywhere. E banking include ATM, telephone banking and online banking. Banks that operate only online, also called direct banks or branchless banks. They provide financial services without any local branches. They offered more attractive rates due to the less cost of physical branch. It also saves time and customers do not need to wait long in ques. you can make transactions through credit card you do not need to carry cash. E banking can market their products and services online. Banking have become

more global than local, operating in multiple countries around the world. According to the need of the present customers, banks need to consider digital solution of financial services, which results in disappearing of local branch banking. At the same time rise in digital banking has also created rise in cybercrimes. Banks must also inform their customers how to use them safely.

Financial sector is emerging rapidly and non-bank players entering the market. Consequently, banks should rethink their strategies to stay competitive and satisfied the needs of present customers. Traditional banks with their face-to-face interaction remain trust-worthy to consumers but in the era of globalization and technology banks focus on the digital solution but maintaining the personal service that traditional banks have historically offered.

### **Elements of Electronic Banking**

Electronic bank provides financial services through electronic means. E banking is a fully automatic service based on information technology, including ATM, Telephone banking, Internet banking, Mobile banking and digital banking.

### **Automated Teller Machines (ATM)**

ATM network is a set of interconnected automated teller machines that linked to a centralized computer system of financial institution. It relies on computer systems that communicate using telephone lines. These computer systems record transfers and ownership of funds, and they control the methods customers and commercial institutions use to access funds. A common method of access is a code, such as a personal identification number (PIN) that use to withdraw cash from an ATM machine.

History of ATM begins in 1972 with a successful partnership of Lloyds with IBM, which allowed the proper management system of database. Software technology improved sufficiently for electronic data processing to link with cash dispensing machine to the computer. It means ATM linked with central computer system Arvind Ashta (2018). This system allows customers to handle large, time-sensitive payments,

such as those required to settle real estate transactions. The ATM revolution began in 1980 as more companies were paying salaries through ATM. It means more customers open bank account and use ATM to get cash when they require.

### **Telephone Banking**

Telephone banking enables customers to perform financial transactions through telephone without visiting bank branch. Telephone banking first introduced in the 1980 by Girobank in the United Kingdom. Telephone banking start growing during the 1980s and early 1990s, and heavily used by the first generation of direct bank. Customers use telephone banking to get access of their account balance; electronic bill payments and transfer fund without make a trip to the bank.

### **Internet Banking**

Electronic banking speed and convenience for customers. Personal computer allows customers to do banking at any hour of the day. The first online banking services based on the Internet were introduced by Stanford Federal Credit Union (SFCU) in October 1994 (Business Wire, 1995), online banking has spread rapidly in all countries of the world as a result of its convenience and speed in executing transactions swiftly and at a specific service level (Finextra, 2010).

Customers prefer to perform several types of services through which they can make information request of retail banking services such as balance reporting, inter-account transfers, bill-payment etc through telecommunication network without leaving their homes or organizations (Daniel, 1999; Mols, 1998; Sathye, 1999).

When funds transferred between accounts by electronic means, it is called an electronic funds transfer (EFT). Dominant provider of electronic financial transactions is PayPal, a service founded in 1999. In 2002 eBay acquired PayPal.

## **Statement of The Problem**

Banks have been utilizing technology to develop and improve their products and service to provide value to the customer as well as decreasing cost of the bank. Banks introduce innovative mode of payment from paper-based to electronic payments and ATM use as opposed to visiting of branches by the customers. It brings convenience in the life of customer, but it also has some critical issues in terms of quality, security and efficiency. In the present era of competition banks focused on maintaining, a satisfied customer based through customer centric approach to survive and gain profit through satisfaction and loyalty of the customers and improving its quality.

Traditional branch banking most widely used and considered trustworthy. Therefore, there is need for further study to understand the factors that lead to customer satisfaction as it will be helpful to understand customer in determining the successful implementation of new, technology based, online banking services and its usability. This study aims to look at the usage and frequency of electronic vs traditional banking in Azerbaijan and determines how this correlates with their satisfaction. This will help to estimate consumer inclination and have empirical evidence for better understanding. This could also drive future research in the area of Digital banking. The focus of this study was to evaluate customer perception and preference of using different banking channels, examine how this relates with their satisfaction levels.

## **Objectives of The Study**

This study aims to address the factors, which affect the customer preference in performing financial services using different banking channels traditional or electronic and measure customer satisfaction towards it. The objectives of this study are:

- To study the customer perception of electronic banking.
- To analyze the level of customer satisfaction towards different banking channels providing customer services through traditional and electronic.

Developing an understanding for the customer preferences to multiple channels offering financial services with focus of customer satisfaction. In a broader perspective, this study intended to be a valuable addition to the literature regarding customer behavior towards technological advancement in financial service sector that leads to customer satisfaction.

### **Research Questions**

Question 1: How customer perceive electronic banking?

Question 2: Do customers prefer traditional or electronic banking?

Question 3: What is customer satisfaction level in electronic banking?

Question 4: What is customer satisfaction level in traditional banking?

Question 5: Use of electronic banking compare to traditional banking?

### **Significance of The Research**

This is an exploratory study to examine the factors influence the customer behavior towards different banking channels offered by bank. This is one of the few comparative studies on customer satisfaction of traditional and electronic banking users in Azerbaijan. Further, this study aims to explain which factor has a dominant influence towards consumer preference. Aside from theoretical value banks need to understand why consumer accept and reject electronic banking in order to anticipate customers response towards technology by understanding these factors banks will be able to provide these services in more effective way.

# **CHAPTER ONE**

## **LITERATURE REVIEW**

This chapter reviews the previous studies by scholars in this field and their contribution to a body of knowledge. This chapter covered the conceptual framework, theoretical and critical literature review on the factors associated with customer satisfaction using different mode of banking traditional and electronic banking such as perception, preference, convenience and trust.

### **1.1 Traditional Banking**

Banks are closely connected with our everyday lives to perform different functions such as drawing salaries, payments of bill, asset management and investment, savings and taking out loans all involve transactions with banks. Businesses also depend on the banking system for settlement of their transactions and meeting other financial needs. Banks play leading role in planning and implementing financial policies.

The Banks play crucial and active role in the prosperity of general masses and economic development of a country. Banks promote capital formation by accepting deposits from individuals and businesses and lend to the households, individuals and businesses, which make use of them for productive purposes in the country. The banks therefore not only the storehouses of the country's wealth, but also provide financial resources necessary for economic development of nation and masses. Vasant Desai, (2013) described that the performance of a bank can be assessed in their broad dimensions business development, customer service and housekeeping. Branch bank has the resources such as labor, premises, planning, system procedure, organizational structure and general administration. The efficiency of a branch measure by utilization and balance of these resources.

Banks help in asset management by providing short and medium-term loans to entrepreneurs to invest in new enterprises and adopt new methods of production. As

I.M. Pandey (2005) concluded that, an efficient allocation of capital is essential financial function of banks. Financial decisions are crucial to influence the firm's growth because firm's value as well as shareholder value will increase if investments are profitable

Banks play fundamental role in economic development. Many of empirical researches worldwide have confirmed this argument. Therefore, economic growth theory believes that financial institutions especially bank is realized a useful instrument to enhance the productive capacity of the economy and its important internal source of fund for any country especially in the initial stages of economic growth (Schumpeter, 1911). Borchgrevink & Moe (2004) claim that in many transition economies the Central Bank act as the backbone of the financial system, combining both macroeconomic stabilization and micro control of the emerging financial system. Driffill *et al.* (2003) draw a parallel line between monetary policy and financial stability. They conclude that the Central Bank's formulation of smooth interest rates and stabilize the price fluctuations lead to greater stability without disrupting market equilibrium.

Traditionally, bank primarily focused on the size and depth of the banking system apart from access of banking services and products to the broader population, efficiency in the process of financial intermediation and stability and resilience of the banking system to negative shocks (World Bank, 2006). As such, these conventional measures of banking sector development only deal with the ratio of broad money supply (M2) to GDP and the ratio of private credit to GDP, which have all been used in measuring the causal effects of financial development on economic growth (World Bank, 2006).

Customers are central focus of any business. Therefore, banks should pay close attention to that in order to retain the loyal customer base.

William George A J and Dr. Manoj P K (2013) study the modern management philosophy of customer relationship management (CRM) which deals with the

maintenance of a sound relationship with the customers. The study found that Customers switch banks and go to other banks where they find better services and thus the find it difficult to retain their old customers

## **1.2 Banking History of Azerbaijan.**

Azerbaijan restored its independence on October 18, 1991. The law "On the National Bank of the Republic of Azerbaijan" was adopted on August 7, 1992. Manat the national currency of the Republic of Azerbaijan declared the only means of payment in the country from date January 1, 1994. New bank laws on June 14, 1996, allowed the banking system to become closer to the world banking experience and establish credit institutions. Azerbaijan adapt to the updated scientific and theoretical methods and the requirements of modern ongoing processes, the Law "On the National Bank of the Republic of Azerbaijan" on December 10, 2004. "National Bank of the Republic of Azerbaijan" renamed to "The Central Bank of the Republic of Azerbaijan". Measures taken for the creation of deposit insurance mechanisms, the law "On Deposit Insurance" adopted On December 29, 2006. Important activities carried out in Azerbaijan to prevent legalizing criminally obtained money or other properties and financing of terrorism. In this regard, Law "On the Prevention of the Legalization of Criminally Obtained Funds or Other Property and the Financing of Terrorism" came into force on date February 25, 2009.

At present day developed two-stepped bank system, which based on market principles, in the first step is National Bank of the Republic of Azerbaijan, in the second one commercial banks and other non-bank credit organizations functions in republic. In the first stage of reforms, measures of restructuring and recovery of state banks taken, institutional formation of private bank system ensured. In this phase low requirements concerning capital, very liberal terms for entering the system were determined and soft regulating instruments applied to regulate the bank activity.

At present, 45 banks, 530 bank branches function in Azerbaijan. One of acting banks founded with participation of state capital, 23 of foreign capital. For January 1, 2008, 96 non-bank credit organizations act in republic along with banks, 77 of which are credit allies.

Crediting plays special role in structure of bank assets. For January 1, 2008, banks credits to the customers are 4664 mln AZN, which makes 69% of bank assets. Special weight of private sector in structure of credit investments is higher than 86%.

### **1.3 Definition of Electronic Banking**

In the financial sector, the last two decades have been under the signs of continuous liberalization and modernization. It is without a doubt that now technology is the biggest strategic issue in the financial sector. One of the greatest revolutions created by the banking sector was using the new information and communication technologies using the internet. Through this a new but sound and effective concept of electronic banking commonly referred to as E banking evolved.

Since the mid-1990s, banking industry experience integral shift in delivery financial services using self-service channels such as electronic banking including automated teller machines (ATMs) and internet banking. Technology plays crucial role in self-service channel by providing faster, economical and efficient services to customers in user-friendly manner. Daniel (1999) defines electronic banking as the delivery of products and services to customers through various delivery channels by different electronic means such as computer and a mobile phone with browser software, telephone or digital. Pikkarainen *et al* (2004) defines electronic banking as an internet portal, by which customers can use different kinds of banking services from bill payment to asset investments. Apart from withdrawals of cash, electronic banking gives customers access to distinctive sorts of banking transaction options.

Burr (1996) describes E banking as an electronic connection between the bank and customer in order to prepare, manage and control financial transactions. On the other hand, Leow, Hock Bee (1999) state that the terms PC banking, online banking, internet banking, telephone banking or mobile banking refer to several ways in which customer can access their banks without having to be physically present at the bank branch.

Electronic banking is an automated delivery banking system that provide banking product and service directly to the customers through electronic channels. It enables the customers and business to access the accounts business transactions or obtain information of financial product and services through electronic means including internet. (Federal Foundation Institutions Examination Council, 2003). In fact, the use of electronic banking as an option of financial institutions has turned into a competitive tool rather than only an approach to accomplish competitive advantage of preference in the era of globalization (Flavián *et al*, 2004; Gan and Clemes, 2006)

Organizations will continue to invest in IT in the hope that it will improve their business process and increase their productivity. However, for technologies to improve productivity it must be accept by intended users. (Venkatesh et al., 2003) conducted research in understanding user acceptance of new technology has resulted in several theoretical models with roots in information systems, psychology and sociology.

#### **1.4 History of Electronic Banking**

Electronic innovation in banking can be trace back to the 1970s when computerization of financial institution gains momentum Pang (1995). However, visible presence of this was evident to the consumers since 1981 with the introduction of Automated Teller Machine (ATM). Banks and Financial institutions mostly count on Information Technology for their everyday activities. The Information attain by financial organization is not used only by them and their employees but also by their customers and stakeholders (McAnally, et al 2000).

Innovative banking has grown since then aided by technological development in telecommunication and information technology industry. The early decade of 1990s saw the emergence of automated voice response technology (AVT). By using this technology bank could offer telephone-banking facility for financial services. With further advancement in technology, banks were able to offer services through personal computers owned and operated by customers at their convenience-using internet. The Internet explosion in the late-1990s made people more comfortable with making transactions over the web. (Aladwani, 2001) discussed electronic banking is the rapid, easier, and more reliable to enhance customer's service. It improves the bank competitive position and proves to be the most important drivers of online banking among banks. While financial institutions took steps to implement e-banking services in the mid-1990s, many consumers were skeptical to perform monetary transactions over the web. Innovative companies such as America Online, Amazon.com and eBay, play vital role in the adoption of electronic banking and online payment. By 2000, 80 percent of U.S. banks offered E banking.

The use of these services were however mainly corporate customers rather than retail one Sohail and Shanmugham (2003). The Security First Internet Bank was the first internet bank in the world that built in 1995, USA. After that, some famous banks introduced their internet banking one after another such as Citibank and Bank of America.

### **1.5 Benefits of E-Banking**

Today customers are experiencing digital life in communication shopping and banking. E banking bring lots of ease to the customer and the bank itself. E banking give a competitive edge to bank to meet market demand. Such as banks that provide services known to be leaders in technology implementation and advancement and enjoy brand

image. The primary objective of every institution is to increase profits including banking sector Mols (1998).

Technology transform the business models. The internet revolution in electronic-banking transaction is much less expensive than branch or even telephone transactions. According to Jen and Michael (2006) electronic banking open new doors for banks and businesses around the world by transforming the way customers performing financial transaction. It is a great opportunity for banks but there are various difficulties such as the innovation of IT applications, business sector limits, emerging competitors, and the development of new plans of action.

Rikya (2007) and Han (2008) has studied the prospects of internet banking by collecting data from the public and found that Internet technology rightly viewed as the fast growing means to perform financial services. The enhancement of the internet eliminates the constraint of time, distance and communication by making the globe really a little village. Han (2008) likewise discovered the good effect of informational technology on SME finance. SMEs that adapt e- banking are more dynamic that those that utilize conventional channel. Electronic banking considers a crucial part in the economy helping buyers and sellers to perform the financial transactions and the exchange of goods and services by avoiding physical contacts (Bakos, 1998).

Through electronic banking, banks can serve more customers, which give to a great degree to make profit by giving portable money related services. Wind (2001) find out that numerous banks offering electronic banking are increasing in number with expansion their profit through spread in market scope. The increase use in credit card is attributable to electronic banking. It makes it possible for Customers to perform financial transactions around the world without carrying paper money.

## 1.6 Challenges of E- banking

Technological developments have been rising worldwide. The internet is one of the best in those developments. Therefore, the banking sector is also making the best use of the internet. Even though online banking simplifies trading, offers wide range of product, and services to the consumers. There are some major challenges and issues in the online banking sector.

A research by Daft (1982) described that the rise of E-banking is agile however, with respect to customers they may confront some risk associated with the specific type of innovation. Daft identified it a strategic risk. Management of financial institutions should know and understand risks connected with e- banking and provide remedies for it. Poor E-banking planning and investment decisions can increase a financial institution's strategic risk.

The costs of establishing e-banking services are high. Establishing a trusted brand is very costly, as it requires the purchase of expensive technology. Some of the problems that customers face in using electronic banking services include risk arising from fraud, network and system errors and other unanticipated events resulting in the organization's inability to convey banking products and services. This risk could be inherent in different products and services (Earl, 2000).

Other challenges associated with electronic banking spans from the type of technology selected, lack of knowledge and implementation. Earl (2002) furthermore identified that while managers understand their business and operational process, their employees mostly lack the skills and experience to adapt to software technologies and educate their customers.

Uppal & Chawla (2009) studied the customer perception towards e banking services, bank frauds, and future of e- banking preferences of customers. The

study evaluate that customers of all bank groups are interested in e-banking services but at the same they face problems like insufficient knowledge, lack of infrastructure and problems they face in opening an account.

Many financial institutions have already modified their regulations to achieve their main objectives, ensuring the safety and soundness of the domestic banking system, promoting market discipline, and protecting customer rights and the public trust in the banking system.

### **1.7 Definition of Customer Satisfaction**

Customer satisfaction is a measure of how product and services provided by company meet customer expectation. A customer's expectations about a product indicates how he or she presume the performance of product and services. Bruhn, (2003) defines satisfaction as an assessment based on experience on how far overall functionality of services meet the customer's expectation. It is affirming that customer satisfaction shown as repeated purchase, tireless effort in obtaining the product and service. (Yi, 1999, as cited in Saha and Zoha, 2005) defined Customer satisfaction is a collective outcome of perception, evaluation and psychological reactions to the consumption experience with a product and service.

Customer satisfaction is a state of mind that customers have about a company when their expectations met over the lifetime of the product or service. It is noticeable that satisfaction take place between pre-exposure and post-exposure of attitudinal components and serves as a link between the various stages of customer buying behavior (Jamal and Naser, 2002). Pairot (2008), described customer satisfaction as the company's capability to fulfil the business, emotional and psychological needs of its customers. He also concedes that customer satisfaction levels vary as consumers have different perception and experiences from the company.

## **1.8 Customer Satisfaction in Banking**

In the banking industry, everyone proposes nearly the same products and services with less room to compete on price. Competitive edge of a bank is the experience customers have with their banks. Both customers and banks closely associated with significance of satisfaction. Intense efforts are being made by banks to offer high quality products and

Services to their customers. Customers also want the best value for their money and sparing no efforts in selecting the best products and services, (Strategic Direction, 2007). Once customers are satisfied and have a positive image or perception of a firm, it is hard for competitors it takes some time to switch their preferences. As pointed out by Assael (1995), the economic viability of firms lies in the hands of consumers Bank and customer relationship have the big impact on customer satisfaction. They want customer centric services and need their bank to try to get to know them instead of just pushing a product. Bank customer satisfaction viewed as banks' ability to fulfill the customer's expectation and it is link with customer experience, which connects the various purchasing behavior (Jamal and Naser, 2002). According to Solomom et al (1999), Bank serves vast category of customers including individuals, organizations, communities or nations. The banking industry like any other industry has escalated its efforts to satisfy consumers through the quality of services in order to survive in the competitive market.

Modern banking sector offer various ways to interact with their customers, including online and mobile banking. Most important thing that matter to the customers is the experience they have across different channels. Customers are well informed and expect their bank to fix the problem quickly and effectively. The study of Levesques and McDougall (1996) on the Customer satisfaction in banking sector showed result that quality of the services related to performance and problem recovery, competitive interest rates of the bank and professional and skilled employees. Customers who encountered service problems were likely to switch to other banks

## **1.9 Customer Satisfaction in Traditional and Electronic Banking**

Abdullah and Rozario (2009) described that the level of customer satisfaction can be influenced by various internal and external factors. This shows that the determination of satisfaction is very difficult. Veloutsou et al (2005) indicate that overall customer satisfaction is not a static process but keeps on changing when the customer gets an experience with the service provider. The results of the study of Schneider (1980) suggest that customers will be gladder and more satisfied if the frontline manager provide services well.

Zeithaml and Bitner, cited in Kangis and Voukelatos (1997:280), mentioned the factors associated with customer's perceptions of satisfaction based on the verbal and non-verbal experience form by intangible service such as environment layout of the room or building and level of service provided by employees. Zeithaml and Bitner have mentioned employees, process and physical structure are evidence for customer satisfaction.

Al-bro's (1999) studied factors influence customer satisfaction in bank. The findings revealed that the most significant attributes that results in satisfaction include human interaction, courteous employees and professional behavior'. Moreover, the findings also revealed that the provision of personal service considered important by clients.

Today banking has changed because banking services are no base on brick structure. Due to Continues growth of technology, increasing customer base, evolution of alternate banking channels has changed the way of banking services and the customer satisfaction. Economy is very competitive, and customers are well informed and smart, customer satisfaction is the core of success and online technology can be used to improve service quality for customer satisfaction (Jamal and Naser, 2002).

Previous research (Ojokuku and Sajuyigbe, 2012; Alabar, 2012; Gbadeyan and Akinyosoye, 2011; Oladejo and Akanbi, 2012) agree that e-banking services have significant effect on customer satisfaction. Robinson (2000) argues that the online banking extends the relationship with the customers through providing financial services right into the home or office of customers. Ovia (2002) finds that electronic banking usage has a considerable effect on customer satisfaction among the electronic banking users, while it has a negative impact on non-users. It was concluded that customer care and customer retention should be taken into consideration, because the convenient and fast banking services is associated with the human and technology-based delivery processes so that they are linked with the customers' perceptions of how these bank services are delivered to them. Casaló et al. (2008) who contend that higher levels of website usability might lead to higher levels of consumer's affective commitment to the website as well a direct, positive and significant relationship between satisfaction in previous interactions and the consumer's commitment to a financial services website

It is a strategic advantage for banks to maintain great relationships with their customers for success. Consistent customer centric behavior is a requirement for improving the implementation of quality, as most banks are now largely consumer oriented as opposed to product oriented (Jamal and Naser, 2002). This enables banks to facilitate quick transactions and information access from any point the customer is which leads to customer satisfaction. This has ensured that banks are striving to improve their services, as customers are aware of developments taking place and demand for higher quality services (Oyieke, 2008).

Banks not only competing among themselves but also competing against other non-financial institution. This has made banks constantly improve themselves and ensure that they meet customer needs and expectations consistently. E-banking offers benefits to banks as well, Banks can benefit from lower transaction costs as E-banking requires less paperwork, less staff and physical branches (Cheng, 2006) E- banking leads higher

level of customers satisfaction and retention (Polatoglu and Ekin, 2001). E banking reduces loan-processing time as borrowers loan application can be view by loan processing and loan approval authority simultaneously (Smith and Kupp, 2003). Typically, loan applications receive at the branch level and send to head office for approval. The documents transfer to and from branch to head office consume much of time and delay loan transaction period.

Machogu, A. M., & Okiko, L. (2015) research brought to light e-banking customer satisfaction. Factors that lead to customer satisfaction particularly in E banking are accessibility, convenience, privacy, content, design, speed, fees and charges.

## **CHAPTER TWO**

### **RESEARCH METHODOLOGY**

This chapter describes the methods used to conduct the research. It includes research purpose, research approach, research design, data collection and sample selection.

#### **2.1 Research Purpose**

Customers are the primary focus for every business. The purpose of this study is to understand the customer's behavior towards banking services in Azerbaijan. Banking industry is evolving rapidly and offering different banking channels to the customers. Traditional banking is trustworthy with human interaction on the other hand electronic banking provide faster and efficient banking services without visiting bank anymore, you can perform transaction anytime anywhere you are. Literature and observation help to understand the factors influence the adoption of electronic banking. Hypothesis formed to investigate the impact of these factors on the electronic banking customers of Azerbaijan as compared to traditional banking.

This study helps to highlight the customer's preferences towards technological adoption in banking sector.

#### **2.2 Research Approach**

There are two ways to conduct a research in social science, a positivistic paradigm and phenomenological paradigm. These approaches help to create a better understanding of individual, group and institutional action and analyze their influence on each other. Some researcher describes positivistic as a "quantitative" and phenomenological as a "qualitative" (Hussey & Hussey, 1997).

According to (Saunders, Lewis and Thornhill (2009) there are three different styles of reasoning approaches. These are inductive, deductive and abdicative. Inductive approach identifies as observing a phenomenon and form a theory based on it for analyzing and interpreting results, deductive method used to develop the theories based

on literature and observation and collect the data to confirm the hypothesis. Abductive involves combining developed theory with empirical findings, which allows the researcher to understand both empirical findings and theory.

Since the direction and hypotheses of the proposed study already known, it follows the deductive reasoning approach. This study relate to positivistic paradigm as the study wants to seek the preference of customers using different banking channels in the present situation. In this study hypothesis formulated through logical reasoning. The hypothesis will be test by data collection through questionnaire from sample and the sample present the attributes of Azerbaijan population.

### **2.3 Research Design**

Research design plays a vital role that allows information and data collection to be carry out in a structured way that best suits the projects objectives, goals and scope. Without research approach and design validity, reliability cannot be confirmed Shipham (2009) Quantitative research is an approach to test the theory by examining the relationship among variables. Therefore, that data can be analyzed using statistical procedures. Qualitative approach is used to explore and understanding variables and mixed method involved both quantitative and qualitative method and use distinct design philosophical assumptions and theoretical framework John W. Creswell (2013).

Researcher can use different techniques to collect data regarding the nature of question. According to positivistic paradigm researcher can consider experiment, longitudinal, cross sectional, survey and case study (Hussey & Hussey, 1997).

This research is positivistic because quantitative data collect from banking customers of Azerbaijan to study their behavior towards different channels to perform banking services. Considering geographical dispersion, time and money constraint, questionnaire survey conducted.

## 2.4 Data Collection

Different approaches can be used to collect data including online survey, mail, telephonic and personal interview depend upon the size and form of data objective, time, money and geographical constraint.

Online and email survey are common these days. According to researchers, online survey helps to collect data faster and with least cost and you can get honest opinion of customers but the problem with this method is sample size because not everyone has access to internet. Email survey facilitate to gather data, but response rate is low. Therefore, this method is not used to collect data in this research.

Telephone survey also used to collect data to save time and response rate is high, but it is more suitable when we have few simple questions not a series of questions. This research wants to seek the in-depth study of customers so this approach will not be appropriate.

Interview surveys are arranged in a manner that able the researcher to gain insight of respondent through detailed observation of gesture and body language. Two most common ways use for interviews. First, one is arranged interview where you need to make an appointment to contact the respondent and second is Intercept interview where researcher stop the people at busy street and request for interview it is quick and risky way. Interview is expensive and time-consuming method so not considered carrying out in this research.

Questionnaires classified as both, quantitative and qualitative method depending on the nature of questions. Answers obtained through closed-ended questions with multiple choice answer options are analyzed using quantitative methods and they may involve pie charts, bar charts and percentages. Answers obtained to open-ended questionnaire questions are analyzed using qualitative methods and they involve discussions and critical analyses without use of numbers and calculations. Advantages of questionnaires include speed of data collection, low cost and higher levels of objectivity compare to many alternative methods of primary data collection but in close

ended questionnaire there is usually no possibility for respondents to express their additional thoughts about the question.

In this survey, data collected through close-ended questionnaire survey. Questionnaire distributed in the classroom, workplace or at the meeting of group to get insight the customer behavior and perception.

Several methods used to collect data, each method has its pros and cons. Questionnaire survey consider suitable mode for data collection in this research.

## **2.5 Sample Method**

Data collected from bank customers through questionnaire survey. A systematic random sampling method used in the research. Systematic random sampling present probability method as every sample has an equal chance to come. Systematic sampling help to conduct customer behavior survey (Sekaran, 2003). The sample used in this survey taken from bank customers of Azerbaijan.

## **2.6 Sample Size**

Sample size should select carefully because it represents the population. However, quality of sample is far more important than the size. Poor quality of large size sample fails to represent the true population (Kothari 2003). Therefore, optimum level of sample size should be select not too small or large so it present population efficiently and reliably.

To conduct this study, select the respondents who are well informed and have knowledge of related field make them able to contribute in this research to meet its objective. 100-150 samples randomly selected for this study to take place.

## **2.7 Research Area**

The study take place in Baku, the area of study selected mainly because it is the capital and people have more opportunity to use advance means of technology to perform their banking services. Moreover, large population has access to internet.

## **2.8 Target Population**

Data presents the behavior and preference of customer towards traditional and electronic banking, which represents their attitude towards technology adoption in banking sector, so customers of banks selected randomly.

## **2.9 Questionnaire Development**

A proposed study uses the survey questionnaire. Primary data collection was preferred to collect data. Due to the limited research on this topic of customers behavior towards various banking channels available. This study is descriptive in nature so with the help of literature and observation factors considered to study the customer behavior and level of satisfaction towards different banking channels available to them.

The survey questionnaire begins with a short introductory paragraph, describing the electronic banking channels and purpose of the study as well as assuring confidentiality to the respondent. Instructions given in order to complete the questionnaire. The questionnaire was design in a way that support the respondent to answer it without any difficulties. Questions were well spaced, and this allowed the respondent to answer it clearly.

All the questions in the questionnaire were close ended in order to reduce the amount of time, easy to compare and code the answer of different respondents and statistically analyze them.

## 2.10 Questionnaire Format

The questionnaire covers three parts. In first part, identify the percentage of customers using traditional or electronic banking services. Second part related to how often they use electronic banking and how they perceive it. Last part consists to collect information regarding their experience and satisfaction level. Either, they prefer human assistance or technological efficiency.

## 2.11 Theoretical Framework

This study examines the impact of electronic banking ease of use, security and confidence level as independent variables and customer satisfaction is dependent variable. The influence of these variables on the customer satisfaction.



## 2.12 Hypothesis Development

Based on theoretical framework hypothesis formed to test the relationship of variables.

According to Jamil Hammoud, Rima M. Bizri, Ibrahim El Baba (2018) who studied the relationship between E-Banking service quality efficiency, and ease of use showed that there is significant positive relationship of these variables with customer satisfaction

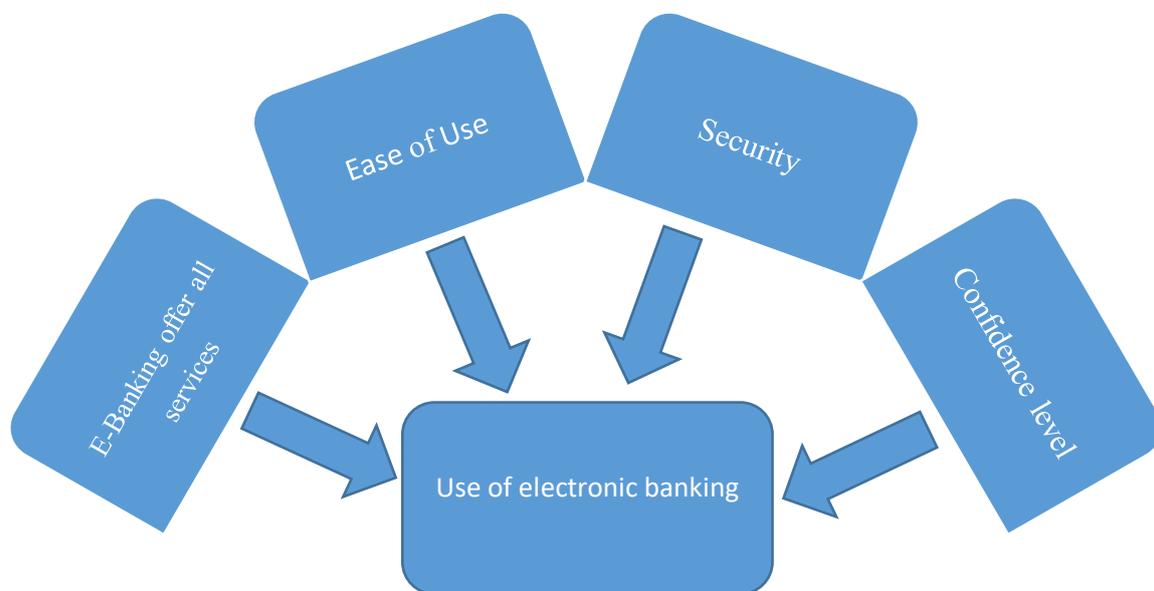
H1: There is positive relationship between Ease of use and customer satisfaction in the Banking sector.

According to Mahmoud Abdulai Mahmoud (2018), research findings revealed that trust had significant effect on customer retention. There is a positive relationship between these variables. Managers recommend that institutions should build trustworthiness in order to satisfy and retain the customers.

H2: There is positive relationship between confidence level and customer satisfaction in the Banking sector

According to Felix kombo 2016 revealed in his study the relationship of security and customer satisfaction of electronic banking

H3: There is positive relationship between security and customer satisfaction in the Banking sector



According to Salva Daneshgadeha, Sevgi Özkan Yıldırma study in 2014 indicate the ease of use an important factor influence in the usage of electronic bankng.

H1: There is positive relationship between Ease of use and use of electronic Banking.

Zachary Omariba mention in his research 2012 the relationship between security and use of electronic banking. Electronic mean allow business to more effectively interact with their customers, but they need to address security and privacy issue.

H2: There is positive relationship between security and electronic Banking use.

According to Pravettoni, G., Leotta, S. N., Lucchiari, C., & Misuraca, R. (2007) mentioned in study trust is a crucial factor in the usage of electronic banking.

H3: There is positive relationship between confidence level and electronic Banking use.

H4: There is positive relationship between electronic banking offer all services and electronic Banking use.

### **2.13 Statistical Analysis**

The primary objective of this study is to test the research hypotheses based on the conceptual framework. This study has used quantitative research approach. The statistical software SPSS version 19 was used to investigate the relevant issues in inclusive manner. Simple and advanced statistical tools and methods are use where applicable for analyzing the relationship among the variables.

The questionnaire divided to four parts. The first part was particular to the Dependent variable which “customer satisfaction”, it is a question which is using to examine the customers preference on traditional or E banking services. The second part was particular to the first Independent variable, which “Customer Awareness” appear five questions that test the degree of customer knowledge of different Banking services provided by bank. The second variable “Ease of Use” has tested by four questions and the third variable "Trust" tested by two questions and last variable “Customer experience” has tested by six questions to determination its relationship with the customer satisfaction.

## 2.14 Data Analysis Technique

When analyzing data both descriptive and inferential statistics can be used to analyse the results and draw conclusions.

Descriptive statistics is the term use to analysis the data that helps to describe, show or summarize data in a meaningful way. Descriptive statistics do not allow making conclusions beyond the data. We can analyze or reach conclusions regarding any hypotheses we might have made. They are simply a way to describe our data.

Descriptive statistics are very important because if we simply presented our raw data it would be hard to visualize what the data was showing, especially if there was a lot of it. Descriptive statistics therefore enables us to present the data in a more meaningful way, which allows simpler interpretation of the data.

**Measures of central tendency:** these are ways of describing the central position of a frequency distribution for a group of data. In this case, the frequency distribution is simply the distribution and patterns. We can describe this central position using several statistics, including the mode, median, and mean.

**Measures of spread:** To describe this spread, several statistics are available to us, including the range, quartiles, absolute deviation, variance and standard deviation.

However, when researcher does not have access to the whole population and interested in investigating certain factor can take sample, which represent population. Inferential statistics arise out of the fact that sampling naturally incurs sampling error and thus a sample does not expect to perfectly represent the population. The methods of inferential statistics are the estimation of parameters and testing of statistical hypothesis

Descriptive statistics employed in this study. Several statistical tests and analysis use such as, descriptive analysis, Normality Multicollinearity, correlation and regressions test to examine the relationship of variables and the hypothesis in the research framework.

## **2.15 Normality**

Prior the use of the statistical techniques to test research hypothesis it is better to examine whether the data follows a normal distribution or not because many of the statistical process including correlation, regression based on the assumption that the data follows a normal distribution (Zahediasl,2012). In other words, normality test in statistics is used to determine whether a data set is well distributed or not. There are several tests for the assessment of normality and shape of a data distribution such as skewness and kurtosis test, which will be use in the present study.

Skewness use to measure the symmetry of distribution. The normal distribution is symmetrical and has zero value. A positive value show that the distribution has a greater tendency to tail to the right (positively skewed or skewed to the right), and a negative value indicates a greater tendency of the distribution to tail to the left (negatively skewed or skewed to the left). Skewness is 0 for a normal distribution (Keller, 2010).

Kurtosis measure the shape of a distribution. A positive value indicates that the distribution has longer tails than the normal distribution (platy kurtosis); while a negative value indicates that, the distribution has shorter tails (leptokurtosis). For the normal distribution, the kurtosis is 0 (Keller, 2010). As well as kurtosis refers to Peak or flatness of the distribution, so that the high peak data called a Leptokurtic where the kurtosis value is greater than 3 (kurtosis  $>3$ ). The perfect normal distribution of the data called Mesokurtic, which as a kurtosis equals 3, while the high flatness data is called Platykurtic, where the kurtosis value is less than three (kurtosis  $< 3$ ) (Bulmer, 1979).

## **2.16 Multicollinearity**

The F test is used to determine whether there is a substantial relationship between the dependent variable and the set of all independent variables, while Multicollinearity is used to determine the relationship among the independent variables one another. In short, the multicollinearity indicates the correlation among the independent variables.

Multicollinearity is a problem in multiple regression that develops when one or more of the independent variables is highly correlated with one or more of the other independent variables. (David R. Anderson, 2011). The Variance Inflation Factor (VIF) is widely used measures of the degree of multicollinearity of the independent variable with the other independent variables in regression model. If the value of VIF reaches 10 the multicollinearity regarded as a serious one. If so, should reduce the collinearity by eliminating one or more variables (O'BRIEN, 2007).

## **2.17 Correlation analysis**

Correlation, linear and multiple regressions will be used for inferential statistics. The Pearson correlation use to measure the significance of linear bivariate between the independent and dependent variables thereby achieving the objective of this study. Multiple regressions use to determine the relationship between independent and dependent variables, the direction of the relationship, the degree of the relationship and strength of the relationship (Sekaran, 2000).

Moreover, simple linear regression enables us to find the straight line most appropriate for representing the connection between two sets of observed values. Because the line that we 'fit' to our data can used to represent the relationship it is rather like an average in two dimensions, it summarizes the link between the variables (Buglear,2001)

A correlation describes a statistical relationship between two variables based on each observation, in other words, correlation is the extent to which two or more things relate to one another (C. Reinard,2006, Mike Allen & Hunt, 2009). The correlation range is from +1.00 to – 1.00 (both of these values indicate perfectly correlated variables) thus the values between 0 to – 1.00 which has minus sign indicate to a negative correlation, the meaning of that as one value for a variable increases the value of the other variable decreases. On the other hand, the positive correlation presented by the values fall in between 0 to +1.00, the positive correlation indicates that as one value increases, the value for another variable also increases. Likewise, the size of the correlation value

indicates the accuracy of the prediction in the direction indicated larger correlations indicate greater accuracy. (C.Reinard, 2006, Mike Allen & Hunt, 2009).

The correlation interpretation guide suggested by Losh (2004) has been used in this study to describe the relationship between the independent variables and the dependent variables, the association measurements are described as:  $r=1.0$  “Perfect” relationship. 0.76 to 0.99 “Very strong” relationship. 0.51 to 0.75 “Strong” relationship. 0.26 to 0.50 “Moderate” relationship. 0.11 to 0.25” Weak” relationship.0.01 to 0.10 “Very weak” relationship. In addition, 0 “No relationship” (C.Reinard, 2006).

## **2.18 Regression analysis**

Regression analysis is a set of statistical methods used for the estimation of relationships between a dependent variable and one or more independent variables. It can be utilized to assess the strength of the relationship between variables and for modeling the future relationship between them.

Regression analysis includes several variations, such as linear, multiple linear, and nonlinear. The most common models are simple linear and multiple linear. Nonlinear regression analysis commonly used for data that are more complicated, in which the dependent and independent variables show a nonlinear relationship.

Simple linear regression is a model that assesses the relationship between a dependent variable and one independent variable. The simple linear model expressed using the following equation:

$$Y = a + bX + \epsilon$$

Where:

Y – Dependent variable

X – Independent (explanatory) variable

a – intercept

b – Slope

$\epsilon$  – residual (error)

Multiple linear regression analysis is essentially similar to the simple linear model, with the exception that multiple independent variables used in the model.

$$Y = a + bX_1 + cX_2 + dX_3 + \epsilon$$

Where:

Y – Dependent variable

$X_1, X_2, X_3$  – independent (explanatory) variables

a – intercept

b, c, d – slopes

$\epsilon$  – residual (error)

Multiple regression tests more information about the variables relationship it allows calculating a partial correlation, which is the correlation between a predictor variable and a dependent variable when holding constant another variable or variables (Mike Allen & Hunt, 2009). However, for multiple regression to work all assumption has already met, in the previous sections.

Multiple regression is used to analyze relationships between more than two variables, and non-linear regression, which is used to analyze relationships that do not have a straight-line pattern (Buglear,2001). In other word multiple regression analysis is the study of how a dependent variable Y is related to two or more independent variables (David R. Anderson, 2011).

## CHAPTER THREE

### FINDINGS

This chapter will present the findings of the study. SPSS version 23 is used to analyze the existing data using some of the statistics analyses related to the main aim for this study, such as descriptive statistics, multicollinearity, correlation analysis, linearity and multiple regression, in order to answer the research questions as well as to test the hypotheses.

#### 3.1 Description Analysis

From the Table 3.1 descriptive statistics, the total sample size (n) is 120 respondents. Customer satisfaction has mean of .46 and standard deviation of .50 (M= .46, SD = .50). The lowest value was 0 and the highest 1. EOU shows mean of 2.50 and standard deviation of 1.108. The lowest value was 1, and the highest 5. Customer security has mean of 2.50 and standard deviation of 1.20 the lowest value was 1 and the highest 5. Confidence level has mean of 3.13, and standard deviation of 1.156 the lowest value was 0 and the highest 1. Usage of electronic banking has mean of .82, and standard deviation of .389 the lowest value was 0 and the highest 1. Electronic banking offers all services has mean of .16, and standard deviation of .367 the lowest value was 0 and the highest value is 1.

**EOU** (Ease of use) is important variable to measure customer satisfaction. It helps to find out that banking customers find electronic banking easy to use or not.

**Security** electronic banking transaction needs protection against security threats. Biometric identification systems, the new solutions to address the issues of security and privacy of data.

**Confidence level** shows trust customers have on electronic banking services.

**Table 3.1 Descriptive Statistics**

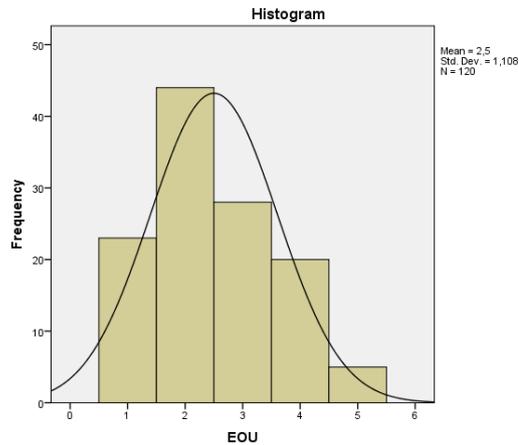
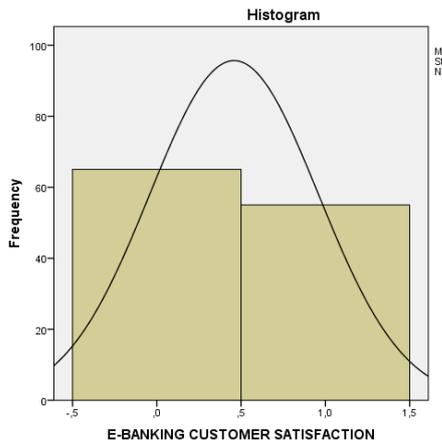
Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
E-BANKING CUSTOMER SATISFACTION	120	0	1	,46	,500
EOU	120	1	5	2,50	1,108
SECURITY	120	1	5	2,50	1,209
CONFIDENCE LEVEL	120	1	5	3,13	1,156
USAGE OF E-BANKING	120	0	1	,82	,389
E-BANKING OFFER ALL SERVICES	120	0	1	,16	,367
Valid N (listwise)	120				

From the Table 3.1 (1) the customer satisfaction represents the dependent variable; it has skewed with 0.169 peak with -2.005 kurtosis as the histogram 1 shows below. Customer EOU, Security and Confidence level which present independent variables, EOU skewed with .415 peak with -0.626 kurtosis. Skewness for security is 0.145 and -0.864 kurtosis. Confidence level is skewed with -0.513 and -0.346 kurtosis. skewness of usage of electronic banking is -1.658 and kurtosis is 0.760. Skewness of electronic banking offer all banking services is 1.896 with kurtosis 1.620. All of them high flatness (platykurtic distribution) with -0.626 kurtosis for customer EOU, -0.864 kurtosis for security and -0.346 for confidence level as can be seen from the histogram 4. Whereas the usage of electronic banking variable as can be seen from table 3.1 (1) is 0.760 kurtosis and e banking offer all services is (leptokurtosis) with 1.620 as shown in the histogram 6. Hence, the assumption of normality has not been violated.

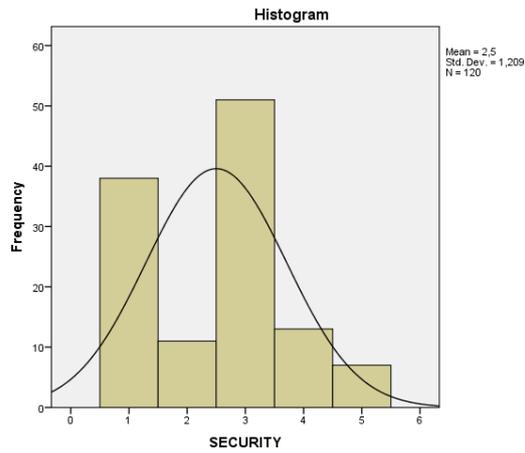
**Table 3.1(1) Descriptive Statistics**

**Descriptive Statistics**

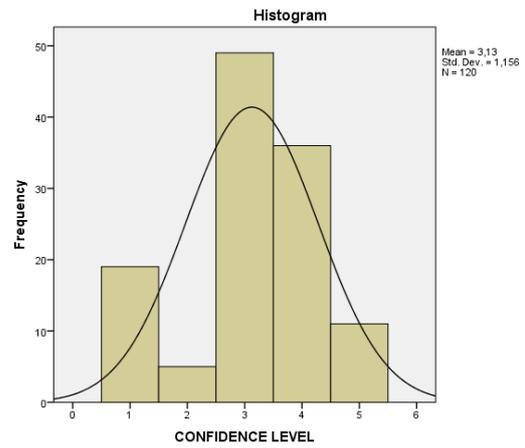
	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
E-BANKING CUSTOMER SATISFACTION	120	,169	,221	-2,005	,438
EOU	120	,415	,221	-,626	,438
SECURITY	120	,145	,221	-,864	,438
CONFIDENCE LEVEL	120	-,513	,221	-,346	,438
USAGE OF E-BANKING	120	-1,658	,221	,760	,438
E-BANKING OFFER ALL SERVICES	120	1,896	,221	1,620	,438
Valid N (listwise)	120				



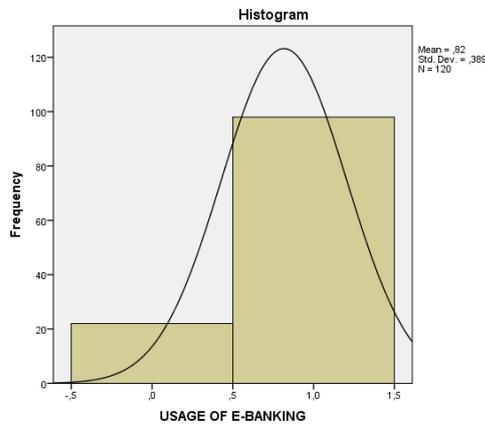
**Figure 3.1(1) Histogram1 Customer Satisfaction    Figure 3.1(2) Histogram 2 EOU**



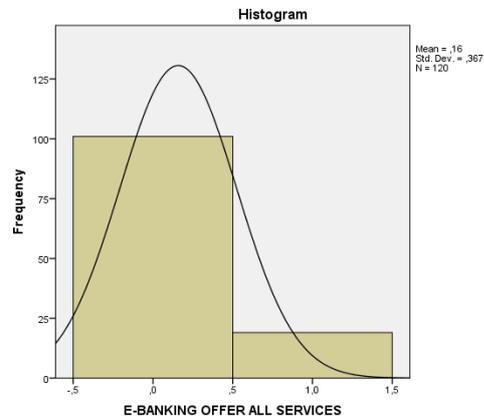
**Figure 3.1(3) Histogram 3 Security**



**Figure 3.1(4) Histogram 4 Confidence level**



**Figure 3.1(5) Histogram 5 Usage of E-Banking**



**Figure 3.1(6) Histogram 6 E-Banking offer all**

### 3.2 Multicollinearity Analysis

As can be clearly seen from the above Table 3.2 that there is no multicollinearity issue, whereby the VIF value is less than 10. Hence, the assumption of multicollinearity has not been violated.

**Table 3.2: Multicollinearity Analysis**

Model		Collinearity Statistics	
		Tolerance	VIF
1	SECURITY	,934	1,071
	CONFIDENCE LEVEL	,996	1,004
	EOU	,937	1,067

a. Dependent Variable: E-BANKING OFFER ALL SERVICES

Model		Collinearity Statistics	
		Tolerance	VIF
1	EOU	,511	1,956
	SECURITY	,919	1,088
	CONFIDENCE LEVEL	,987	1,013
	E-BANKING OFFER ALL SERVICES	,507	1,971

a. Dependent Variable: USAGE OF E-BANKING

### 3.3 Correlation Analysis and Linearity

After checking the present study data by looking at the descriptive analysis, normality and multicollinearity, this section will assign for examining the relationship and linearity between the independent variables and the dependent variable, using simple linear regression analysis which is the most commonly considered analysis method, by looking at Pearson Correlation. The table 3.3(1) showed that the relationship between customer satisfaction as a dependent variable and customer ease of use as independent variable is a positive, strong, and linear relationship with a significant statistical correlation ( $r = .842$ ), while the relationship between customer satisfaction and security is positive weak and nonlinear, with a significant statistical correlation ( $r = .342$ ). As for the relationship between customer satisfaction and confidence level is positive very weak and nonlinear also statistically it is not significant ( $r = .060$ ).

The next table 3.3(5) showed that the relationship between use of electronic banking as a dependent variable and customer ease of use as independent variable, which is positive strong and linear relationship with a significant statistical correlation ( $r = .742$ ). The relationship between use of electronic banking and security is positive weak and nonlinear, with a significant statistical correlation ( $r = .261$ ). As for the relationship between use of electronic banking and confidence level is positive very weak and nonlinear also statistically it is not significant ( $r = .061$ ). The relationship between use of electronic banking and e-banking offer all services is negative strong and nonlinear ( $r = -.915$ ) as show in the table 3.3(4).

**Table 3.3(1): Correlation Analysis E-Banking Customer Satisfaction & EOU**

		Correlations	
		E-BANKING CUSTOMER SATISFACTION	EOU
E-BANKING CUSTOMER SATISFACTION	Pearson Correlation	1	,842**
	Sig. (2-tailed)		,000
	N	120	120
EOU	Pearson Correlation	,842**	1
	Sig. (2-tailed)	,000	
	N	120	120

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Table 3.3(2): Correlation Analysis E-Banking Customer Satisfaction & Security**

		Correlations	
		E-BANKING CUSTOMER SATISFACTION	SECURITY
E-BANKING CUSTOMER SATISFACTION	Pearson Correlation	1	,342**
	Sig. (2-tailed)		,000
	N	120	120
SECURITY	Pearson Correlation	,342**	1
	Sig. (2-tailed)	,000	
	N	120	120

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Table 3.3(3): Correlation Analysis E-Banking Customer Satisfaction & Confidence level**

		Correlations	
		E-BANKING CUSTOMER SATISFACTIO N	CONFIDENCE LEVEL
E-BANKING CUSTOMER SATISFACTION	Pearson Correlation	1	,060
	Sig. (2-tailed)		,516
	N	120	120
CONFIDENCE LEVEL	Pearson Correlation	,060	1
	Sig. (2-tailed)	,516	
	N	120	120

**Table 3.3(4): Correlation Analysis Usage Of E-Banking & E-Banking Offer All Services**

		Correlations	
		USAGE OF E-BANKING	E-BANKING OFFER ALL SERVICES
USAGE OF E-BANKING	Pearson Correlation	1	-,915**
	Sig. (2-tailed)		,000
	N	120	120
E-BANKING OFFER ALL SERVICES	Pearson Correlation	-,915**	1
	Sig. (2-tailed)	,000	
	N	120	120

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Table 3.3(5): Correlation Analysis Usage Of E-Banking & EOU**

		Correlations	
		USAGE OF E-BANKING	EOU
USAGE OF E-BANKING	Pearson Correlation	1	,742**
	Sig. (2-tailed)		,000
	N	120	120
EOU	Pearson Correlation	,742**	1
	Sig. (2-tailed)	,000	
	N	120	120

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Table 3.3(6): Correlation Analysis Usage Of E-Banking & Security**

Correlations			
		USAGE OF E-BANKING	SECURITY
USAGE OF E-BANKING	Pearson Correlation	1	,261**
	Sig. (2-tailed)		,004
	N	120	120
SECURITY	Pearson Correlation	,261**	1
	Sig. (2-tailed)	,004	
	N	120	120

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Table 3.3(7): Correlation Analysis Usage Of E-Banking & Confidence Level**

Correlations			
		USAGE OF E-BANKING	CONFIDENCE LEVEL
USAGE OF E-BANKING	Pearson Correlation	1	,061
	Sig. (2-tailed)		,510
	N	120	120
CONFIDENCE LEVEL	Pearson Correlation	,061	1
	Sig. (2-tailed)	,510	
	N	120	120

### 3.4 ANOVA Analysis (Customer Satisfaction)

The ANOVA (Analysis of Variance) table below provides us with the inferential test of each model. In particular, the F and its df (degrees of freedom) are indicators of how good the model is. It can be seen that all models have a statistical significance, which means that every single predictor variable has a significant predictor of the outcome of the customer satisfaction, with a different degree, but the compensation of all of them it has more effect on the dependent variable which presented as follow (F=108.26. 462, df =0.00, p< .05). Sig. (statistical significance) is a measure of how likely it is that an

F this high or higher could have arisen if there was no relationship in the whole population from which the sample analyzed was drawn.

**Table 3.4(1): ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21,952	3	7,317	108,276	,000 <sup>b</sup>
	Residual	7,839	116	,068		
	Total	29,792	119			

a. Dependent Variable: E-BANKING CUSTOMER SATISFACTION

b. Predictors: (Constant), CONFIDENCE LEVEL, EOU, SECURITY

Table 3.4(1) shows the lists of the variables that used as a predictor. As can be clearly seen that there are three predictors variables (Confidence level, EOU and Security), and one dependent variable or outcome variable (Customer Satisfaction).

**Table 3.4(2): ANOVA Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	,858 <sup>a</sup>	,737	,730	,260	,737	108,276	3	116	,000

a. Predictors: (Constant), CONFIDENCE LEVEL, EOU, SECURITY

Table 3.4(2) shows regression model summary includes the R, R-squared and adjusted R-squared for the model, and the standard error of the estimate. R is the multiple correlation coefficients; it presents all the variables together (R = .858). R-squared is a measure of how much of the variation in the dependent variable is accounted for by the model, as can be clearly seen from Table 3.4(2) that R<sup>2</sup> is .737 (R<sup>2</sup> = .737) explains approximately 74% of variance in customer satisfaction, which predicted by the combination of the three independent variables. Adjusted R-squared attempts to adjust this for the complexity of the model. Models that are more complex will explain more

variance than simpler models. Table 3.4(2) shows the adjusted R square is 0.730. The adjusted R square shows that 73% of the variance in Customer Satisfaction which significantly explained by 1% change in the three independent variables. The almost same value between R square and the adjusted R square indicates high model fit.

**Table 3.4(3): Coefficient Analysis**

Coefficients <sup>a</sup>									
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1 (Constant)	,724	,097		-7,471	,000	,916	,532		
EOU	,363	,022	,803	16,326	,000	,319	,407	,937	1,067
SECURITY	,065	,020	,158	3,202	,002	,025	,106	,934	1,071
CONFIDENCE LEVEL	,036	,021	,083	1,740	,084	-,005	,077	,996	1,004

a. Dependent Variable: E-BANKING CUSTOMER SATISFACTION

Customer EOU (ease of use) is significant at 1% which means that it has a major impact on customer satisfaction and accept the null hypothesis that EOU has influence the customer satisfaction, result in the rejection of the alternative hypothesis. Security is less significant and have some influence on customer satisfaction so accept the null hypothesis. Whereas, confidence level is significant at about 10% showing that it does have a weak influence on customer satisfaction.

Table 3.4(3) shows the coefficients for each model tested. Notice that all models are statistically significant with p-value less than .05. ( $p < .05$ ) the meaning of that every single predictor variable has contribution in the outcome variable

**Table 3.4 (4): ANOVA (Usage of E-Banking)**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15,473	4	3,868	178,361	,000 <sup>b</sup>
	Residual	2,494	115	,022		
	Total	17,967	119			

a. Dependent Variable: USAGE OF E-BANKING

b. Predictors: (Constant), E-BANKING OFFER ALL SERVICES, CONFIDENCE LEVEL, SECURITY, EOU

Table 3.4(4) shows the list of the variables that used as a predictor. As can be clearly seen that there are four predictors variables (Confidence level, EOU Security, E-banking offer all services), and one dependent variable or outcome variable (Usage of electronic banking)

**Table 3.4 (5): ANOVA MODEL SUMMARY**

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	,928 <sup>a</sup>	,861	,856	,147	,861	178,361	4	115	,000

a. Predictors: (Constant), E-BANKING OFFER ALL SERVICES, CONFIDENCE LEVEL, SECURITY, EOU

Table 3.4(5) shows regression model summary includes the R, R-squared and adjusted R-squared for the model, and the standard error of the estimate. R is the multiple correlation coefficients; it presents all the variables together (R = .861). R-squared is a measure of how much of the variation in the dependent variable is accounted for by the model, as can be clearly seen from Table 3.4(5) that R<sup>2</sup> is .861 (R<sup>2</sup> = .861) explains approximately 86% of variance in the use of electronic banking, which predicted by the combination of the four independent variables

**Table 3.4 (6): Coefficient Analysis**

Coefficients <sup>a</sup>									
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1 (Constant)	1,171	,061		19,038	,000	1,049	1,293		
EOU	,072	,017	,206	4,241	,000	,106	,039	,511	1,956
SECURITY	,007	,012	,022	,615	,540	,030	,016	,919	1,088
CONFIDENCE LEVEL	,009	,012	,026	,736	,463	,032	,015	,987	1,013
E-BANKING OFFER ALL SERVICES	-,811	,052	-,766	15,696	,000	-,914	-,709	,507	1,971

a. Dependent Variable: USAGE OF E-BANKING

Table 3.4(6) shows the coefficients for each model tested. Ease of use is significant at 1 % which shows it major influence on the usage of electronic banking and that is why we accept the null hypothesis and reject the alternative hypothesis. Security and confidence level statistically significant at 10% do not show the strong influence in the use of electronic banking. Electronic banking offers all services is significant at 1% so accept the null hypothesis.

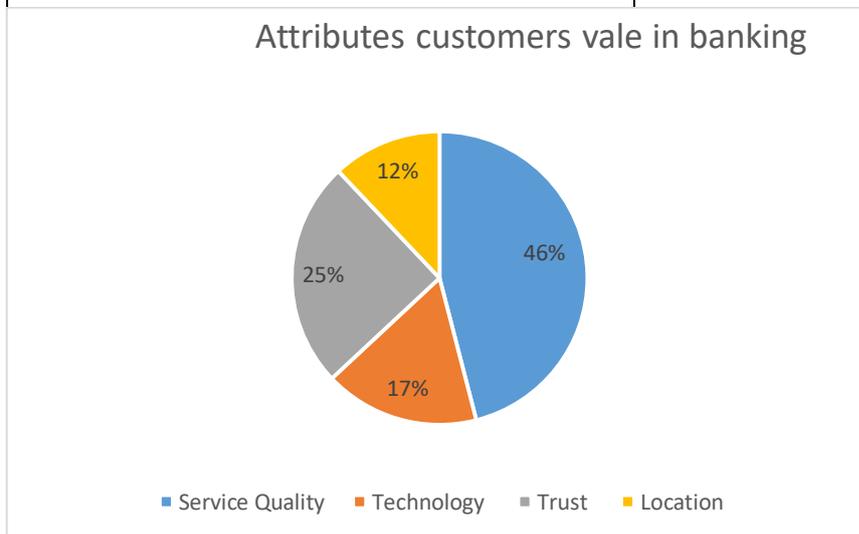
Data gathered through rest of the questions analyze through tables and diagram because it cannot be coded and use SPSS software for analysis.

### 3.5 Attributes of The Bank

Respondents asked to indicate attributes they value the most while performing a banking transaction. Table 3.5 throws light on the results that found. The results indicate that respondents prefer the Service quality, which is 46% outnumbered the rest of the attributes. Apart from this, Trust and Technology is important to them 25% and 17% respectively. Only 12% customer choose location as an important factor.

**Table 3.5 Attributes**

Attributes customers vale in banking	
Service Quality	46%
Technology	17%
Trust	25%
Location	12%

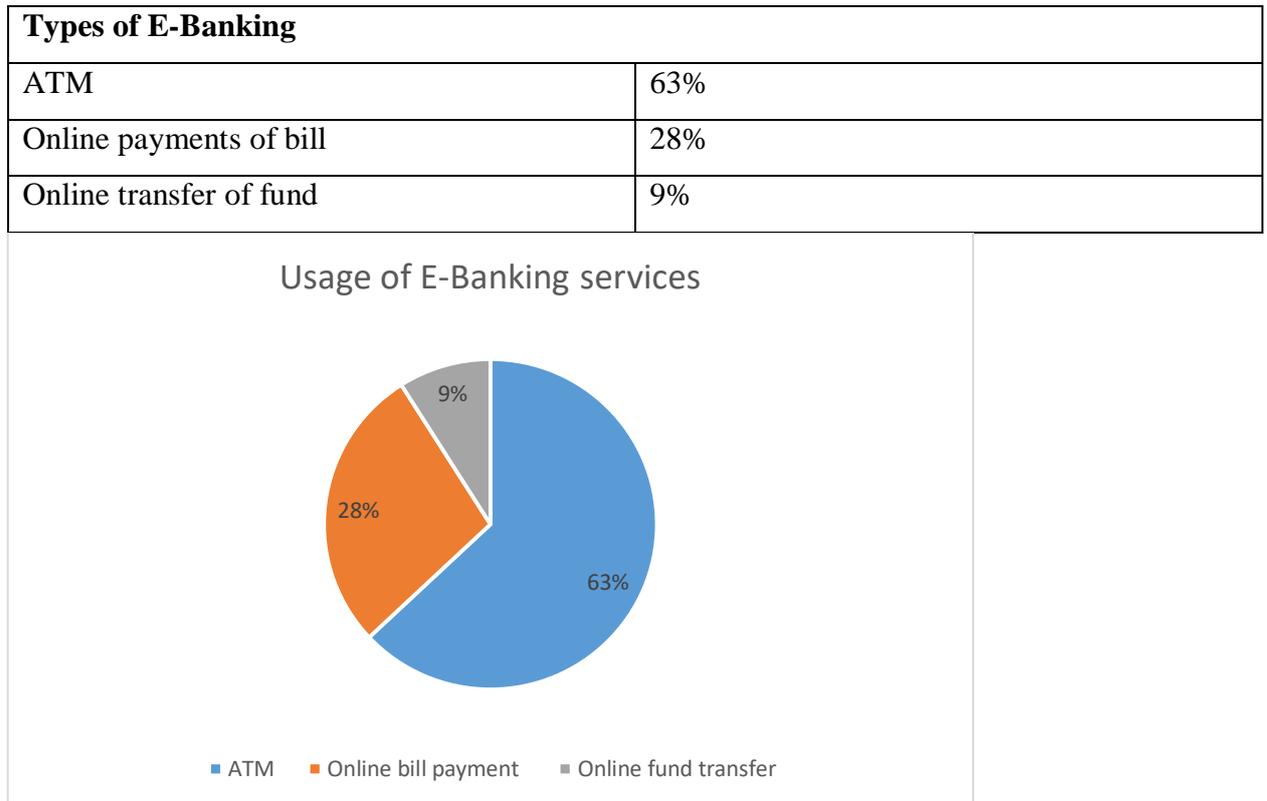


**Figure 3.5 Attributes customers value in banking**

### 3.6 Types of E-Banking Services Mostly Use

As illustrated by table 3.6, ATM is major E- banking services use by customers followed by online bill payments. Online fund transfer is use by 9% of the respondents. ATMs exist in a world more than thirty year; it has become part of our banking culture. For many people, the only contact they now have with their bank is through an ATM.

**Table 3.6 Types of E-Banking**



**Figure 3.6 Usage of E-Banking services**

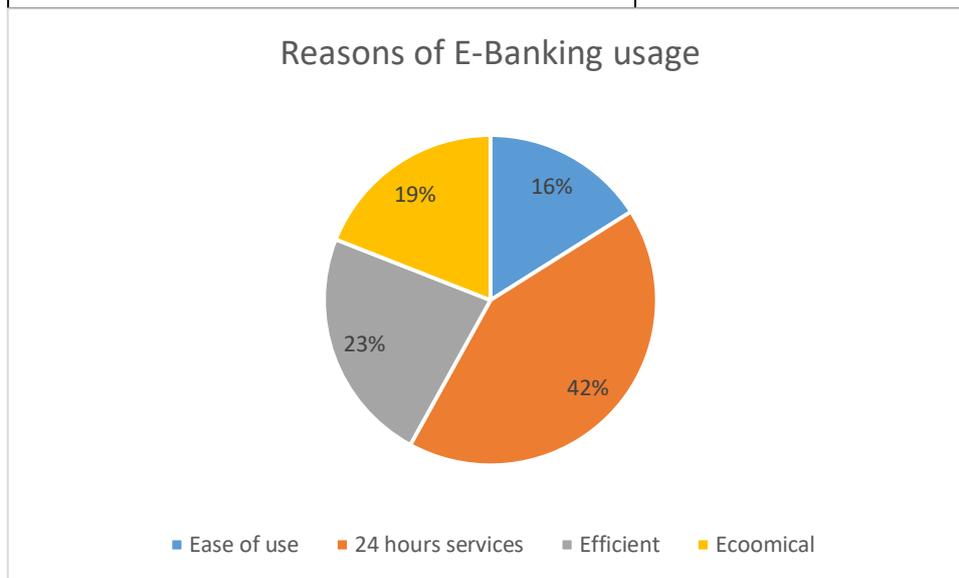
### 3.7 Reasons of Using E-Banking Services

The results in table 3.7 show the main reasons of customers using E-Banking services. 42% of customers prefer to use it because its services are available 24 hours. In previous question mentioned in table 4.7 found that, most of the customers use ATM so they can perform banking transactions after the banking hours. 23% respondent’s reason of using E-banking because it is efficient, 19% customers consider the services

provided by e-banking are economical especially those who prefer to transfer funds online. 16% customers find it easy.

**Table 3.7 Reasons of using e-banking**

Reasons of using E-Banking services	
Ease of use	16%
24 hours services	42%
Efficient	23%
Economical	19%



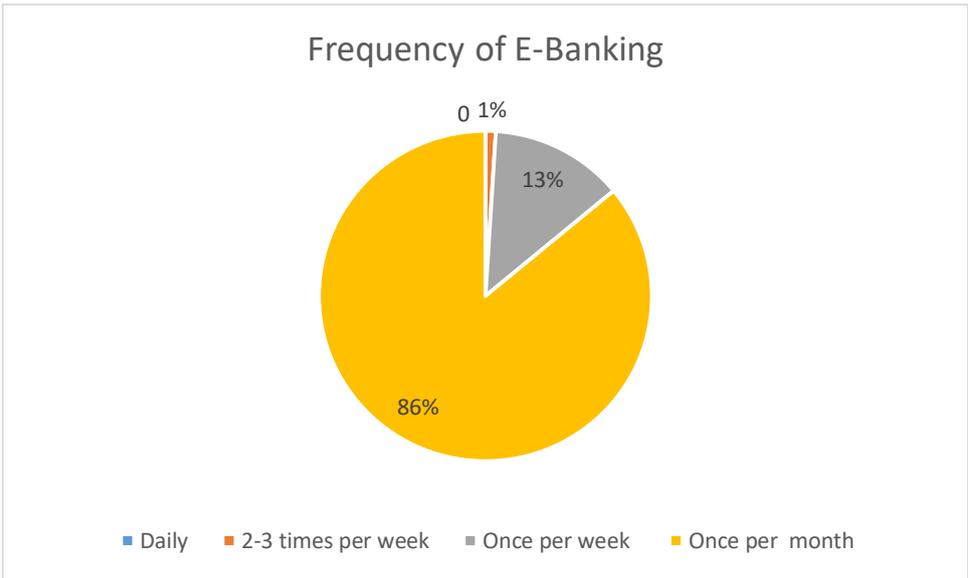
**Figure 3.7 Reasons of E-Banking usage**

### 3.8. Frequency of Transactions Through E-Banking Services

The number of times customers perform transactions through e-banking gives a clue about the level of their satisfaction and loyalty. Owing to this, respondents were asked to indicate how often they perform transaction with electronic channels. The results as depicted by table 3.8 indicate that 86% customers use e-banking once per month. 13% use it once per week and only 1% use it 2-3 times per week and no one use it on daily bases.

**Table 3.8 Frequency of E-Banking**

Frequency of E-Banking	
Daily	0%
2-3 times per week	1%
Once per week	13%
Once per month	86%



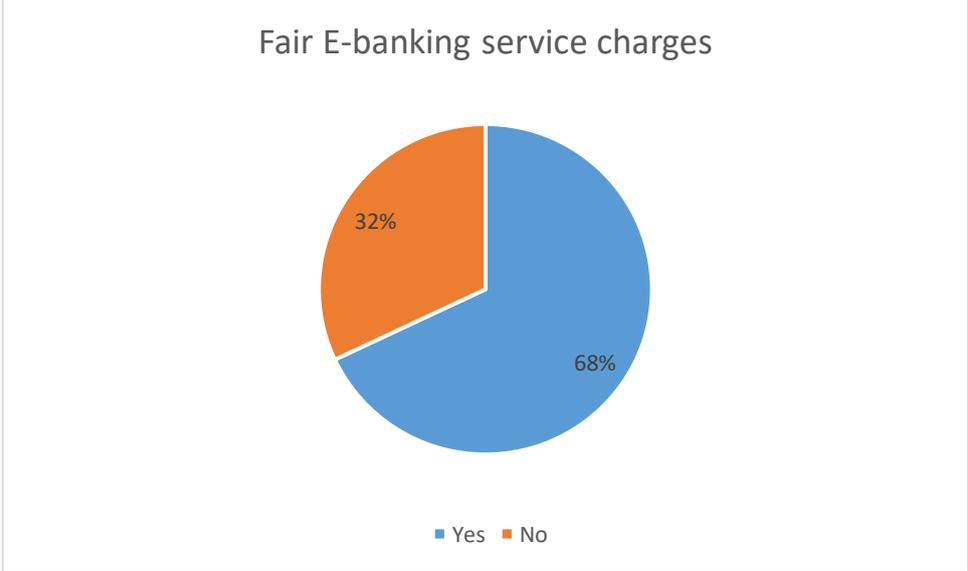
**Figure 3.8 Frequency of e-banking usage**

**3.9. Service Charges of E-Banking Services**

Table 3.9 shows that most of the customers, approximately 68% think that e-banking services are costly because majority of them use ATM. 32% believe it is not costly regarding to online fund transfer.

**Table 3.9 Fair Service charges of E-Banking**

Fair Service charges of E-Banking	
Yes	68%
No	32%



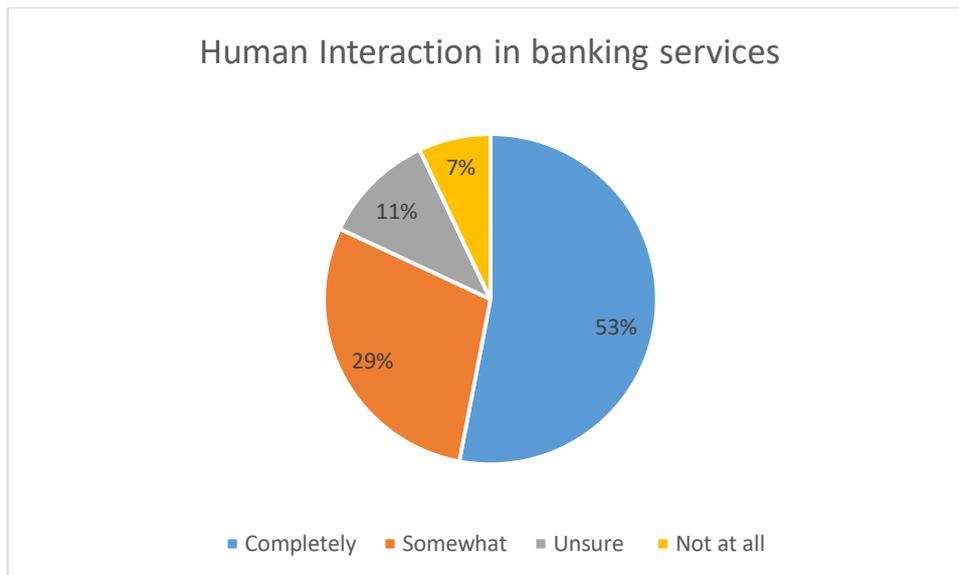
**Figure 3.9 Fair e-banking service charges**

### 3.10. Human Interaction in Banking Services

It is clear from table 3.10 that almost half of the respondents think that human interaction is necessary at the time of performing the banking transactions especially while opening an account and consultancy requirement because face-to-face interaction is convenient and reliable. 29% customers think that human interaction is needed to some extent. 11% are not sure and 7% believe that technology is easy to use so human assistance is not required.

**Table 3.10 Human interaction in Banking**

Human interaction in Banking	
Completely	53%
Somewhat	29%
Unsure	11%
Not at all	7%



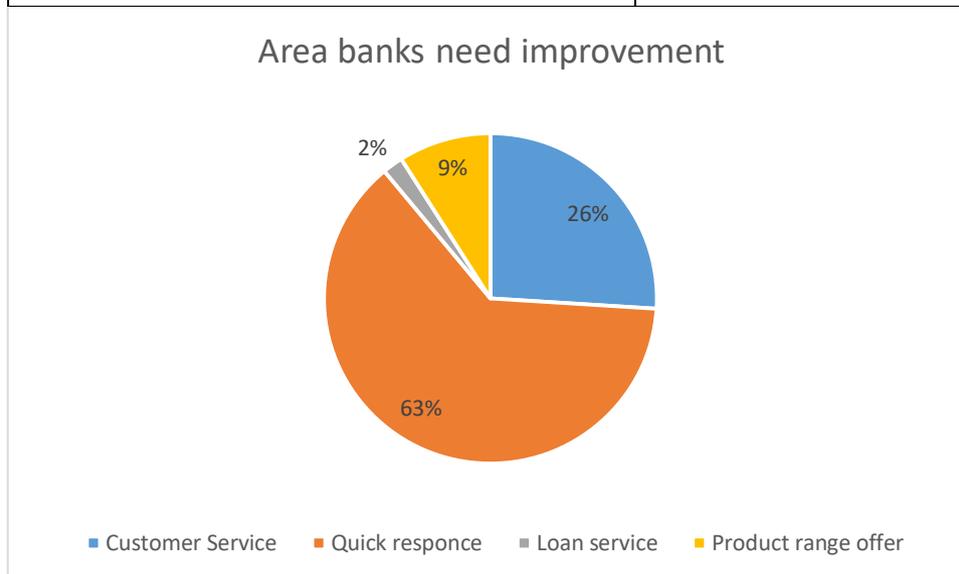
**Figure 3.10 Human interaction in banking services**

### 3.11 Area Banks Need to Improve

Respondents were asked to mention which area of bank need improvement in their opinion. The results indicate that respondent's think that banks need to respond quickly, another area bank need progress is customer service consider by 26% customers. 9% customer believe that banks need to broad their product range offer.

**Table 3.11 Area banks need to improve**

Area banks need to improve	
Customer Service	26%
Quick response	63%
Loan service	2%
Product range offer	9%



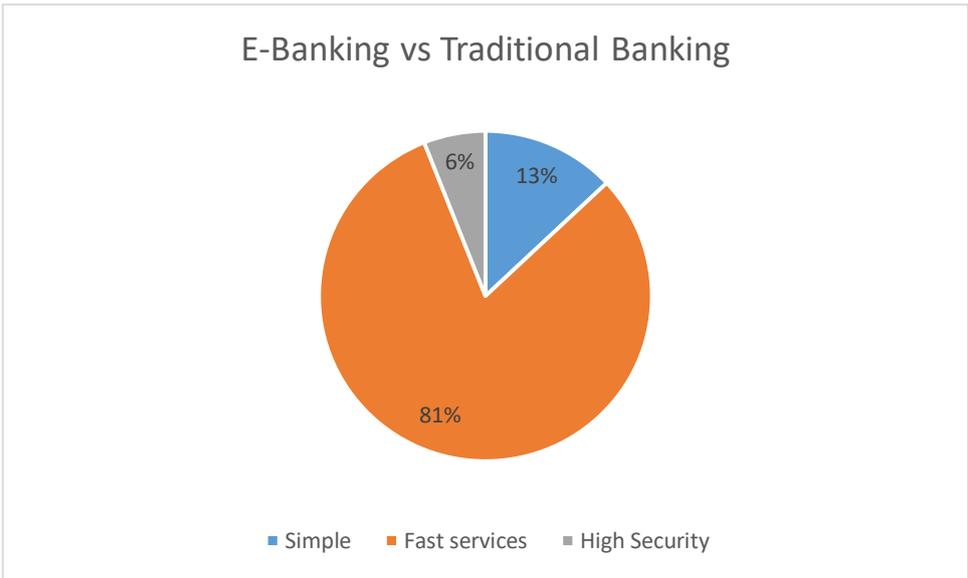
**Figure 3.11 Area banks need improvement**

### 3.12. Use Of E-Banking Instead of Traditional Banking

The figure 3.12 highlights the reason encourage customers to use electronic banking instead of traditional banking. As can be seen from table 3.12, 81% customer find e-banking better than traditional banking, because it provides fast service in previous question table 3.11 quick response is the main area customers think bank need to improve.13% customers find it easy but few of them consider it secure.

**Table 3.12 E-Banking VS Traditional banking**

E-Banking instead of Traditional Banking	
Simple	13%
Fast Service	81%
High Security	6%



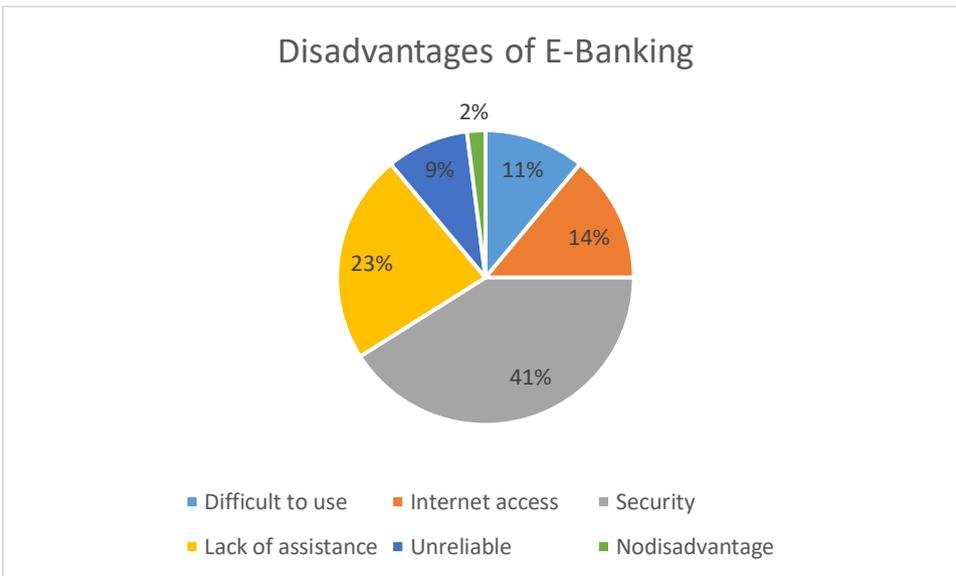
**Figure 3.12 E-Banking VS Traditional Banking**

**3.13. Disadvantages of Electronic Banking**

The data regarding the disadvantages of electronic banking was analyze. The results depicted by table 3.13. Majority of people think that it is not secure, and it lack assistance, which is the main reason in the adoption of electronic banking. 14% customers think internet access is the barrier, while 9% customers find it unreliable. Only 2% customers believe that it has no disadvantage.

**Table 3.13 Disadvantages of Electronic Banking**

Disadvantages of Electronic Banking	
Difficult to use	19%
Internet access	14%
Security	41%
Lack of assistance	23%
Unreliable	9%
No disadvantage	2%



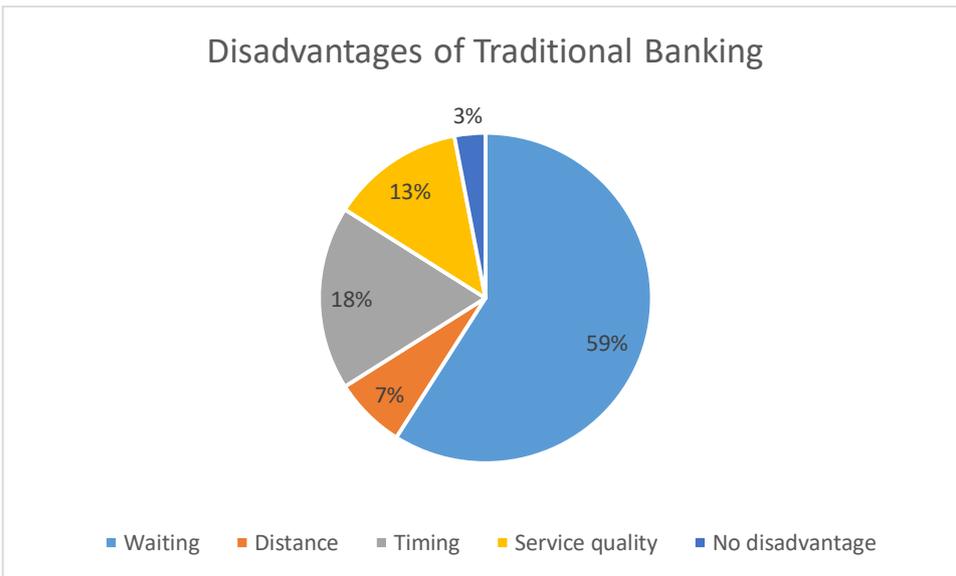
**Figure 3.13 Disadvantages of E-Banking**

### 3.14. Disadvantages of Traditional Banking

Respondents were asked to indicate the disadvantages of traditional banking they usually deal with. Table 3.14 gives the picture of what was obtained. 59% of customers find waiting is inconvenient for them because tradition banking takes so much time. 18% customer think timing is not favorable because it does not work 24/7 like ATM facilitate the customers. 13% customers not happy with service quality and 7% with distance. 3% customers think that there is no disadvantage of traditional banking.

**Table 3.14 Disadvantages Traditional of Banking**

Disadvantages Traditional of Banking	
Waiting	59%
Distance	7%
Timing	18%
Service Quality	13%
No Disadvantage	3%



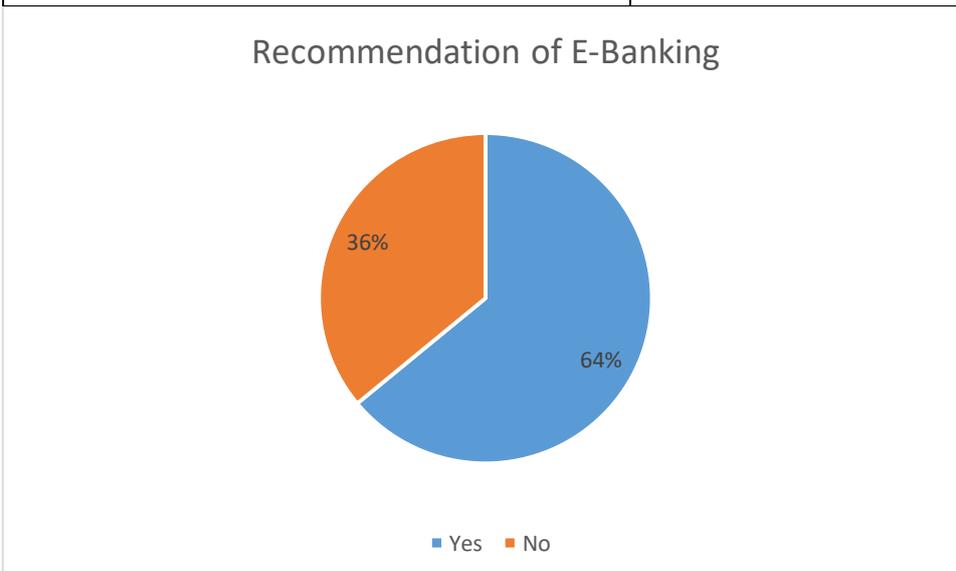
**Figure 3.14 Disadvantages of Traditional Banking**

### 3.15. Recommendation of Electronic Banking

The table 3.15 highlights the recommendation of customers regarding electronic banking, 64% customers recommend e-banking to their friends and family because most of them use ATM and find it convenient and 24/7 available. 36% customers do not recommend electronic banking because they found it difficult and insecure.

**Table 3.15 Recommendation of electronic banking**

Recommendation of electronic banking	
Yes	64%
No	36%



**Figure 3.15 Recommendation of E-Banking**

## CONCLUSION AND RECOMMENDATION

The aim of this study is to achieve the following objectives:

- To explore how the customers, perceive electronic banking.
- To determine the main reason customer, prefer to use electronic banking instead of traditional banking.
- To assess the degree of satisfaction through ease of use, security and confidence level.
- To determine the main factors that influences the degree of customer satisfaction in electronic banking.
- To determine the main reason to use electronic banking base on ease of use, confidence level, security and does e-banking offer all banking services.

### Conclusion

Table 3.4(3) shows coefficients analysis to the variables influencing customer satisfaction. The result indicates that a 1% change in customer ease of use leads to 36.3% increase in customer satisfaction. This result suggests that customer ease of use is the major factor in influencing customer satisfaction. There is a significant and positive relationship between customer ease of use and customer satisfaction (t-statistic = 16.32,  $P < 0.01$ ). The positive relationship indicates that the higher the customers ease of use is expected that the bank provide a higher customer satisfaction. Customer EOU as a major determinant has been supported by past studies such as Luiz Moutinho, Anne Smith (2002). The first hypotheses H1: assume that there is positive relationship between customer ease of use and customer satisfaction in the banking sector and this hypothesis is accepted.

Customer EOU refers to the extent of the customer's desire to continue to deal with the electronic banking more compare to traditional banking offered by banks. This study shows that there is positive correlated between customer EOU and customer

satisfaction. The bank customers in Baku prefer to perform banking transaction through ATM because they feel it is 24 hours available.

Likewise, as for Security and confidence level concern the result indicates that 1% change in security leads to .065 increase in customer satisfaction. Security also has an influence on customer satisfaction. There is a significant and positive relationship between security and customer satisfaction (t- statistic = 3.202,  $p < 0.02$ ). The positive relationship indicates that the higher the security provided by electronic banking a higher customer satisfaction will attain. The second hypothesis assumed that there is positive relationship between security and customer satisfaction in the banking sector, so this hypothesis has accepted too.

The hypotheses test of this study confirms that there is positive relationship between security and customer satisfaction. These results imply that when security is high, the customer satisfaction will be also high.

While confidence level represents that 1% change in confidence, level leads to 3.6% increase in customer satisfaction. This result suggests that confidence level has a little influence on customer satisfaction. There is a positive relationship between confidence level and customer satisfaction with a statistically significant (t-statistic= 1.740. The positive relationship indicates that more confidence level of customers leads to more satisfaction of electronic banking. The result of this study accepts the hypothesis, which say there is positive relationship between confidence level and customer satisfaction in the banking sector.

The core concept of confidence level is to provision of the safety and the trust of the customer in electronic banking and keep the information, which considered very important to the customer. This study indicates positive relationship between the confidence level and customer satisfaction. This means customers of electronic banks have high confidence level are more satisfied with the electronic bank.

Table 3.4(6) shows coefficients analysis to the variables influencing usage of electronic banking. The result indicates that a 1% change in customer ease of use leads to 0.72%, security 0.007, confidence level 0.009 and e banking offer all services -0.811 in electronic banking. Although use of electronic banking is high but most of customers do not believe it offer all banking services and it is secure way to perform financial transactions.

- The result of the study revealed that most of the customers are aware of the electronic services provided by their banks and they prefer technological advancement of their banks just like other factors such as the quality service.
- The result of the study indicates that main reason of usage of electronic banking services is that it provides 24 hours services efficiently. Electronic banking is fast service solution compare to traditional banking. In opinion of customer's, important area traditional banking need improvement is quick service. On the other hand, customers are satisfied with human interaction while performing financial transaction because in electronic banking they feel lack of assistance.
- The main factors that influence the degree of customer satisfaction in electronic banking are EOU, Security and confidence level. The result indicated that a 1% change in customer EOU leads to 36.3% increase in customer satisfaction. This result suggested that customer EOU is the major factor in affecting customer satisfaction.
- The relationship between use of electronic banking as a dependent variable and customer ease of use, security, confidence level and electronic banking offer all services as independent variable. Result indicate that although most of the people use electronic banking in form of ATM and online payments of bill, but majority believe that e banking does not offer all services. It is not secure and that is why customer's confidence level is low.

## **Implication of The Study**

According to the response of the participants, both channels of banking traditional and electronic need to consider and improve the weak areas in order to meet customer requirements. Hence, to be successful in electronic banking sector banks must provide secure service because trust is very important in order of adoption. Another area bank need to put emphasis is ease of use because in traditional banking customers have human interaction so they should design user friendly electronic means and provide assistance 24/7 through toll free numbers, email and assure the quality service it will help to increase the confidence level of customers.

## **Suggestion for Future Researches**

The current research can be a reference for further research in future, especially those researches who want to study customer behavior towards digital banking and customer satisfaction of fintech. This study wants to explore how customer perceive the technology in financial sector what is their preference and in near future how they are going to embrace the new means of banking.

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## APPENDIX

### Questionnaire:

Electronic banking is a method of banking in which the customer conducts transactions electronically it includes ATM, telephone banking, Internet banking and mobile banking.

Age (a) 21-30 years (b) 31-40 years (c) 41-50 years (d) 51years & above  
Monthly Income (a) AZN 100-200 (b) AZN 200-500 (c) AZN 500 & above  
Education (a) Under Graduate (b) Graduate (c) Post Graduate (d) Professional  
Occupation (a) Govt. Employee (b) Private Employee (c) Self Employed

**Q1.** Which attribute of the bank do you value the most?

(a) Quality of Service (b) Technology used (c) Trust (d) Location

**Q2.** How you perceive electronic Banking?

(a) Easy (b) Difficult accessibility (c) Complicated

**Q2.** While opening an account were you aware of e- banking services provided by bank?

(a) Yes (b) No

**Q4.** Do you use E-banking?

(a) Yes (b) No

**Q5.** Which type of service you mostly use by electronic banking?

(a) ATM (b) Online payment of bills (c) Online fund transfer

**Q6.** Which one is the main reason for you to use e- banking?

(a) Ease of use (b) 24 hours service (c) Efficient (d) Economical

**Q7.** Frequency of transactions through electronic banking?

(a) Daily (b) 2-3 times per week (c) Once per week (d) Once per month

**Q8.** Are service charges for E-banking fair?

(a) Yes (b) No

**Q9.** Do you think that human interaction is important to provide banking service?

(a) Completely (b) Somewhat (c) Unsure (d) Not at all

**Q10.** What areas do you feel the bank needs improvement?

- (a) Customer Service (b) Quick Response (c) Loan Services(d) Product Range Offered
- (e) Name any other factor \_\_\_\_\_

**Q11.** What would encourage you to use electronic banking instead of traditional banking services?

- (a) Simple (b) Fast service (c) Higher security (e) Name any other factor \_\_\_\_\_

**Q12.** Do you think electronic banking offers all banking services?

- (a) Yes (b) No

**Q13.** What are the main disadvantages of using electronic banking?

- (a) Difficult to use (b) Interest access (c) Security (d) Lack of assistance
- (e) Unreliable (f) No disadvantages

**Q14.** What are the main disadvantages of using branch banking?

- (a) Waiting (b) Distance (c) Timing (d) Service quality (e) No disadvantage

**Q15.** Do you believe traditional banking is easier than electronic Banking?

- (a) Strongly Agree (b) Agree (c)Neutral (d) Disagree (e) Strongly Disagree

**Q16.** Degree of confidence on e- banking?

- (a) Little (b) Some (c) Not at all (d) High (e) Very High

**Q17.** Are transactions through electronic banking secure?

- (a) Very Much (b) Much (c) Some (d) Little (e) Not at all

**Q18.** Would you recommend electronic banking to your friends and family?

- (a) Yes (b) No

**Q19.** Is E-banking more satisfying than traditional banking?

- (a) Yes (b) No