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## BAHIR DAR UNIVERSITY COLLEGE OF BUSINESS AND ECONOMICS DEPARTMENT OF MARKETING MANAGEMENT

## IMPACT OF NEW PRODUCT INNOVATION ON CUSTOMER SATISFACTION IN THE CASE OF ABYSSINIA BANK

#### M.Sc. THESIS

## BY WUDNEH GEZAHEGNE

JULY, 2021 BAHIR DAR ETHIOPIA

### THE IMPACT OF NEW PRODUCT INNOVATION ON CUSTOMERS SATISFACTION: THE CASE OF ABYSSINIA BANK

Prepared by: Wudneh Gezahegne

**Advisor: Mesfine Teshager (Dr.)** 

## BAHIR DAR UNIVERSITY COLLEGE OF BUSINESS AND ECONOMICS DEPARTMENT OF MARKETING MANAGEMENMT POST GRADUATE PROGRAM

July, 2021 Bahir Dar, Ethiopia **Declaration** 

I, Wudneh Gezahegn, declare that "The impact of New Product Innovation on Customer

Satisfaction in the case of Abyssinia Bank" is the result of my own effort and study. All sources

of the materials used for the study have been duly acknowledged. I have produced it

independently except the guidance and suggestion of the research advisor.

The study has not been submitted for any degree in this University or any other Universities.

It is offered for the partial fulfillment of the degree of Masters in Marketing Management

Name: Wudneh Gezahegne

**REG NO: BDU1110486** 

Signature \_\_\_\_\_

Date \_\_\_\_\_

i

#### Certification

This is to certify that Mr. Wudneh Gezahegne has completed his project work entitled with the impact of new product innovation on customer satisfaction in the case of Abyssinia Bank. As I have evaluated, his project is appropriate to be submitted as a partial fulfilment requirement for the Award of Degree in Masters of Marketing Management.

<b>Project Advisor:</b>						

**Mesfine Teshager (Dr.)** 

#### THE IMPACT OF NEW PRODUCT INNOVATION ON CUSTOMERS'

**SATISFACTION:** (The Case of Abyssinia Bank)

By: Wudneh Gezahegn,

Advisor: Mesfine Teshager (Dr.)

#### **Marketing Management Post Graduate Program**

Approved by Board of	Examiners		
Research Advisor	Signature	Date	
Internal Examiner	Signature	Date	
External Examiner	Signature		

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#### **Abbreviation**

ANOVA: - Analysis of Variance

AI: - Attractive & Innovative

ATM: Automated Teller Machine

BoA: - Bank of Abyssinia

CC: - Customer Centricity

ETB: - Ethiopia Birr

ITM: - Interactive Teller Machine

P: - Price

POS: - Point of Sales

SPSS: Statistical Package for Social Sciences

#### **ABSTRACT**

The general objective of the thesis was to measure the impact of new product innovation on customer satisfaction of Abyssinia bank. The study had tried to assess level of customer satisfaction in relation to customer centricity, attractive and innovativeness and price of the new product. The researcher used a qualitative type of research approach and a closed structured questionnaire was used to collect data based on the research questions. The study used both primary and secondary data. Primary data was collected with the aid of a self-administered semi-structured questionnaire. Secondary data was collected by use of desk search techniques from published reports, websites, news and other relevant documents. Sample size of the study was 385 and a convenience sampling technique was used. Descriptive statistics such as mean, standard deviation and frequency distribution were used to analyze the data. Descriptive (frequency, percentage, mean and standard deviation) and inferential statistic, analysis of variance (ANOVA) were employed. In addition, Pearson correlation analysis was used to assess relationship among the three dimensions of customer satisfaction. Data presentation was done by the use of percentages and frequency tables. The results indicated that the new product innovation to customers was to a great extent with majority disagreeing that product innovation affected customer satisfaction. It was found out that to command a higher market share; Abyssinia bank needed innovative ideas and technologies. As a key finding, the result depicted that those senior customers were not as such satisfied with new product innovation of the bank and generally, it is recommended that the bank should work hard and evaluate its performance so as to understand customers' need and to get continuous competitive advantage in the banking industry. From the study findings, it can be concluded that product innovation impacts on customer satisfaction is less due to lack of understanding and accessing it as they like. The banks should be enabling customer's access their bank accounts online. As concerns the level of satisfaction, it is determined by a banks range of products, and therefore the bank should maintain a wide range of products. Therefore, Abyssinia bank should aim at product innovation to enhance customer satisfaction.

**Key words:** customer satisfaction, product innovation, customer centricity and price of new product.

#### CHAPTER ONE

#### INTRODUCTION

#### 1.1. Background of the study

Product innovation is essential for a country's economic growth and for the competitive position of industry. Companies operate in a rapidly changing world in which customers' needs and wants are not fixed and where they face increasing competition due to open markets and globalization. Companies that effectively integrate innovation in the product development process can gain significant competitive advantage (Kotler, 2012).

New product development covers the complete process of bringing a new product to market. New Product development is described as the transformation of a market operation into a product available for Sale. The product can be tangible or intangible like a service, experience, or belief. The ability to bring new products to market quickly is fundamental to any successful Customer driven company. However, today's highly competitive environment makes this task more challenging than ever. Customers not only demand higher levels of quality in new products, but also demand the latest innovations (ibid, 2012).

According to (Therrien, 2011) innovation is a complex process related to changes in production functions and processes whereby firms seek to acquire and build upon their distinctive technological competence, understood as the set of resources a firm possesses and the way in which these are transformed by innovative capabilities. Innovation at firm level refers to a firm's receptivity and propensity to adopt new ideas that lead to development and launch of new products (Rubera & Kirca, 2012). In the third edition of the Oslo Manual, innovation is defined as the "implementation of a new or significantly improved product (good or service), process, anew marketing technique or a new organizational method in business practices, workplace organization or external relations" (OECD, 2005).

In this dynamic world, there is rapid economy change. To cope up with this change, continuous innovation is a necessity (Philip, K. & Kevin, L., 2012). The traditional focus on product features is not enough. Customers do not buy a set of product features but rather a bundle of benefits encompassing. Therefore, companies should strive to innovate new products that satisfy their customers need.

The most successful companies consider some form of customer information in designing their products & services. After repeated examples of problems with product introduction, it is still striking that actual customer ideas are not usually the first step in the new product development process. In the age of the marketing concept and market orientation, even successful organizations work on a set of assumptions about consumer wants, needs and circumstances (ibid, 2012). Thus companies tend to use distilled & derived information in creating new product offer. Recent findings report that there are continuing difficulties in introducing successful new product despite enormous company emphasis on new product development (MCB University Press Journal of product & Brand management, 1996).

On the other hand, Satisfaction in banking subsector represents the extent to which banking products and services meet customer needs. According to various authors, customer satisfaction can be measured by looking at different dimensions such as service quality, customer loyalty, repurchases behavior and trust, among others (Anderson and Fornell, 2001). According to researchers it is proved that when a firm introduces an innovative product, it should keep in mind the competitors' products and also the abilities of their own firm (Homas and Eigelt 2000). The resources of the firm should be used very efficiently when company is working on innovation in the product. The managers of organization should keep in mind the resources which they are using and resources which are needed for preparation of the product (Danneels, 2002).

Customer satisfaction may also be defined as when the user of the product is satisfied with the performance of the product and the expectations are met from the product. According to Oliver (1997) "satisfaction of the customer in general words means customer response to the condition of fulfillment, and customer decision of the statement of fulfillment."

Bank is a financial institution which accepts deposits and channels the money into lending for customers. Entry of private players in banking has encouraged the application of marketing principles to business enterprises in the services (Apte, 2006). In the current century, banking reforms have changed the way banking is done. Banking reforms have made transformational changes in Ethiopia too. Bank nationalization process has witnessed spectacular achievement in banking system through the expansion of bank branches (Kaul and Ahmed, 2005). Customers now have more options in choosing their banking operations. With advancement of technology coupled with high technology, banking services now have become more user-friendly than ever. Banks

have played a fundamental role in economy and the continued strength and stability of the banking system is a matter of general public interest and concern both in regard to its linkages with the real sector and for providing a payment and settlement system (Kapila and Kapila, 2001). Now, the banks are into consumer banking, corporate banking, finance and insurance, investment banking, mortgage loans, private equity, savings, securities, asset management, wealth management, credit cards etc. In Ethiopia, modern marketing techniques adopted by nationalized banks and private banks include Internet banking as a major tool.

In today's highly regulated and competitive banking environment in Ethiopia, innovating new Products provide an advantage over rivals and a path to higher profit. Abyssinia Bank is the first and oldest bank in terms of revenue, assets and market capitalization in Ethiopia. The Bank has a network of 561 branches and 633 ATMs nationwide as of September 2020. This also allowed BoA to increase its capital hundred-fold from ETB50 million to ETB 5.5 billion (https://www.bankofabyssinia.com). Moreover, it launches virtual banking to satisfy the need and wants of their customer. Among all the banks in Ethiopia, Abyssinia Bank (BOA) is the pioneer in computerization of banking operations in Ethiopia and introduce this virtual Banking. This new technology allows customer almost all the operations through his computer and even on mobile phone. These activities include opening of accounts, balance checking, transactions, tax filing, billing, loan applications and many more activities done online. Innovative service providers are interested in knowing how they can use new technological developments to automate and speed up processes, reduce costs, facilitate service delivery and relate more closely to their customers (Lovelock, 2004). All these efforts were aimed to enhance the productivity of bank along with customer satisfaction, which the banks have achieved to a large extent.

Financial new product innovation in Abyssinia Bank is also the process of creating new or modified financial product with the objective to increase market Share, maintain competitiveness and sustainably grow.

Abyssinia Bank S.C. was established in 1996 by 486 founding shareholders with a paid up Capital of Birr 23,123,917.00. It is the first private Bank to be established after liberalization of the Banking sector. The Bank always strives to innovate new products to satisfy their customers' needs (Abyssinia.com).

#### 1.2. Statement of the Problem

Banking Industry stimulates the saving and investment ventures to promote business and trade activities in the economy. Business organizations are striving to realize greater profits by delivering quality services according to customers' expectations. Satisfying customer is one of the main objectives of every business. Business recognize that keeping the current customer is more profitable than having to win new ones to replace those lost (Gantasala, and Prabnaker,2010) Providing a good service quality is a major issue for all businesses. Customer satisfaction may determine the success or the failure of the business. In order to remain competitive in the market place, banks need to satisfy their customers' needs which in turn will help them ensure a high market share and substantial return (Khali, 2010). Moreover, as we have discussed before, in this dynamic world, there is rapid economy change that affects every business organization. Therefore, to cope up with this change, continuous innovation is a necessity (Philip, K. & Kevin, L., (2012). The traditional focus on product features is not enough to attract customers, enhance market share and maximize profits. Therefore, companies should strive to innovate new products that satisfy their customers need.

However, the quality service due to uniform policies of the central bank, all banks are required to offer almost similar services/products. Therefore, to bring change, the innovation strategies are indispensable to banks' future growth and sustainability (Kiiyuru, 2014). The banks need to identify and analyze the customer needs in order to make relevant improvements and monitor the performance of the innovation in relation to customer satisfaction. According to Ankrah (2012) banks must deliver innovative products and services in response to the market change in order to expand their customer base and gain a competitive advantage.

Currently, there is a growing competition between banks on the market of bank service in Ethiopia. The introduction of new products in banking business is one of the important factors to be competitive in the industry. According to Philip Kotler and Kevin Lane (2013) in an economy of rapid change continuous innovation is a necessity in product development.

BOA has introduced a number of innovations over the years. Moreover, the bank should find ways to attract and retain customers by delivering their service/product with highest standards. The latest innovation is virtual banking that brought the banks service delivery one step forward in Ethiopia. This product in service delivery is the only one found in Abyssinia Bank in Ethiopia. This may enhance customer satisfaction in banking service delivery.

As we have seen above, the justification for carrying out this research is the limited documentation on the linkage of new product innovation and customer satisfaction in BOA. Therefore, this research focuses on the impact of new product innovation on customer satisfaction in the case of Abyssinia Bank, Addis Ababa Branch.

#### 1.3. Research Hypothesis

This research has the following research questions addressed on:

- I. **Null Ho1:** New Product innovation and attractiveness has no positive significant effect on customer satisfaction.
  - **Hall:** New Product innovation and attractiveness has positive significant effect on customer satisfaction.
- II. Null Ho2: Customer centricity new product has no Positive Significant impact on Customer Satisfaction.
  - **Hal2:** Customer centricity new product has Positive Significant impact on Customer Satisfaction.
- III. **Null Ho3:** Price of new product has no direct positive significant impact on customer satisfaction.

**Hal3:** Price of new product has direct positive significant impact on customer satisfaction.

#### 1.4. Objective of the Study

This study consists of general and specific objectives.

#### 1.4.1. General objective

The general objective of the study is to assess the impact of new product innovation on customers' satisfaction of Abyssinia Bank.

#### 1.4.2. Specific Objectives

The study has the following specific objectives.

- 1. To determine the impact of BOA's new product innovation on customer satisfaction.
- 2. To determine the impacts of price of the new product to customer satisfaction in BOA.
- 3. To determine the impacts of customer centricity of new product to customer satisfaction in BOA.

#### 1.5. Significant of the Study

The true finding of this study was expected to be a good source of input to the organization understudy area and to initiate further research in the area of new product innovation and customer satisfaction in banking industry of Ethiopia the case of Abyssinia Bank. It would also assist those engaged in Banking business pinpoint how new product development adds value to banking business.

The results will provide purposeful understanding that how much innovation influence to customers' satisfaction of the Banks. The results can be used in reviewing and developing innovation strategies and also as data for further study in this field of research. The study will provide important information to the bank managers when making decision about adopting new innovations in the banking sector. Moreover, the findings will provide help to suggest managers to make strategy for obtaining the competitive edge in the intense competition of mobile market for customers. Beyond the above significant, the study was also contributing empirical and theoretical knowledge on the field for testing the variables that are considered important in banking innovations, which in turn assists Abyssinia bank in satisfaction of customers as competition intensify. It will also be an important reference and a starting point for other fellow researchers interested to conduct further studies in the area since it is the first of its kind in the country's context given the growing level of demand.

#### 1.6. Scope of the Study

Customer satisfaction differs depending on the situation and the product or service. A customer may be satisfied with a product or service, an experience, purchase decision, a sales person, store, service provider, or an attribute or any of these. However, this study only emphasizes on new product innovation and customer satisfaction in Abyssinia Bank around Addis Ababa.

The researcher has chosen a research method which is within the limits of what he can do. That is, time, money, feasibility and availability to measure the study are considered. For instance, the researcher uses Convenience sampling method which is inherently a non-probability sampling method. The reason is that convenience sampling method is used to obtain large number of completed questionnaires quickly and economically.

#### 1.7. Organization of the Study

This study comprises of five parts which are presented in five chapters. The first chapter introduces the research with the background of the research problem. Then the aim of the proposed research is presented with the research question and significance of the research. Chapter two is literature review of work already done in the areas of adoption of innovations and customer satisfaction. The focus was in research already conducted or which could be applicable in developing countries. In chapter three the research methodology that was used in carrying out the study is presented and contains the research philosophy, area of research, sampling design, variables and measurements, methods of data collection and data processing and analysis. In chapter four data analysis is done using various scientific methods of statistical analysis. Finally, in chapter five the conclusions and recommendation parts are stated.

### CHAPTER TWO REVIEW OF RELATED LITERATURE

#### 2.1. Introduction

The technological innovation of electronic channel of service delivery has brought in a level playing field for businesses by eliminating geographical, regulatory, and industrial barriers. In the words of Balachandher et al. (2001), this revolution in the market place has set in motion a revolution in the banking sector for the provision of a payment system that is compatible with the demands of the electronic marketplace. The enormous increase of the internet is changing the way businesses interact with consumers as most businesses are now conducted using the internet. It is this introduction of e-commerce as a means of payment that has urged banks to take a leap from the traditional banking services, offering a service strongly through the medium of internet, which has come to be known as internet banking or e-banking.

Internet banking is an electronic payment system that enables customers of a financial institution to conduct financial transactions on a website operated by the institution, such as a retail bank, virtual bank, credit union or building society. Online banking is also referred as Internet banking, e-banking, virtual banking and by some other terms. This new channel has added a new dimension to the concept of customer satisfaction and how it can be affected in a positive way. All organizations exist and strive to become an integral part of the lives of their customers and therefore always strive harder to keep satisfying their customers through better channels of delivering their offerings. There are many factors which have an impact on customer satisfaction, one of the most important being service quality. Due to the varying nature of the products offered in manufacturing sector and in the services sector the definition and measurement of service quality, it was seen could not be the same for both. Especially, in the present era, with the emergence of internet as a major channel of service delivery, the need for a scale to measure the service quality in electronic media of services was felt strongly. Hence, service quality was taken up by the research scholars specifically in terms of the e-services which lead to the development of various models that helped in measuring e-service quality in the services sector.

#### 2.2. Banking sector in Ethiopia

Banking is a rapidly growing industry in Ethiopia. Currently there are 17 commercial banks in Ethiopia, one state owned and 16 private. Despite strict government regulations through lending

quota, bond buying, windfall tax and increased capital requirements, banks are reporting strong profit and paying high dividends. This means that the success of banking organizations in retention and recruitment of customers rests with the banks' success in meeting changing customer needs (Hasan et al., 2013).

As of 2018 in the banking sector the industry collected Birr 730bn in deposits; provided Birr 733bn (33% GDP) of total credit; handled close to \$10bn in annual foreign exchange trading; employed 90,000 workers; delivered attractive returns to roughly 115,000 shareholders; and contributed Birr 13bn in yearly taxes to the government (CEPHEUS, 2019).

As far as the performance is concerned, providing simple deposit accounts, loans, guarantees, and Letters of Credit for importers have been the traditional service offerings of Ethiopian banks. Digital banking services have become more common in recent years, including ATMs, POS, online banking, and mobile banking. Other recent innovations include interest-free banking, consumer/diaspora loans, and online payments services. Looking ahead, we think new offerings will include credit card, capital market, and corporate advisory services (ibid, 2019).

As far as the market share is concerned, the big giant in Ethiopian banking CBE enjoys a dominant 62 percent market share in terms of assets and deposits (not much changed from a decade ago). However, CBE's market share fell to just below 50 percent of sector profits for the first time last year. Among private banks, Awash currently holds a commanding lead in first place, while Dashen, Abyssinia, and united, make up the rest of the top five by assets (ibid, 2019).

As far as profitability rankings is concerned, the data is compiled from published annual reports ten years of earnings-per-share (EPS) data and rank banks by returns delivered to shareholders. Therefore, Awash stands out as the clear leader in recent years; Dashen is on top when seen over a decade-long perspective; and Abyssinia, Zemen, and United make up the rest of the top 5 banks from a (long-term) shareholder perspective (ibid, 2019).

#### 2.3. Profile of Abyssinia Bank

The Bank of Abyssinia (BoA) was open for business in 1996 with enthused initiation and determination. As the bank website indicates that, the name Abyssinia resembles bravery and character which are the core attributes of BoA. Its identity is demarcated with a sense of hope, optimism, and belief as it is perfectly displayed in its logo, the Adey Abeba. Adey Abeba brings the promise of a new beginning. BoA brings that very sense to all the customers it engages with.

Working with and through BoA brings sustained success with the help of a bank that is a symbol of determination and hard work.

Bank of Abyssinia is a share company of private individuals who amass experience and success in different areas including business, entertainment and education. Such diverse ownership not only reflects the company's determination and willingness to succeed in the sector it operates in, but also signify its ability to work together towards building a successful business venture and commercial bank service.

BoA's commitment to deliver quality commercial products along with first class customer service makes BoA the most suitable bank for all. With more financial products and services, BoA has demonstrated through the years that is a Bank for all and any kind of customer. BOA has a vision "to become the leading commercial bank in East Africa by the year 2030". And also has a mission that enables them to drive forward with the aim of providing excellent financial services through competent, motivated employees and digital technology in order to maximize value to all stakeholders.

As a bank that bears the former name of Addis Ababa, their commitment lies beyond delivering financial services. It goes without saying that they are deeply concerned and involved in helping the community they operate in. Their corporate social responsibility shows their care as it is a platform to which allows them to give back to their community.

To maximize its strategic partnership, the Bank build its brand traction and expand its customer base. Through it's over 561 branches in the country, BoA serves over 3 million customers. Its well-structured financial service system is connected through the T-24 core banking system. This coupled with the 633 ATM machines placed in different locations to afford customers to access their account from anywhere at any time. This also allowed BoA to increase its capital hundred-fold from ETB50 million to ETB 5.5 billion. Moreover, it launches virtual banking to satisfy the need and wants of their customer (https://www.bankofabyssinia.com).

The Bank has been introducing several innovations in its quest to offer a compressive range of Corporate, Retail, Business, Treasury, Premier and Microfinance Services offered through several branches (some are mobile), ATMs, Point of Sales (POS) terminals, several Microfinance partner institutions, internet banking, Mobile Banking, Sim Banking and agent banking services.

As of bankofabyssinia.com, since starting operations a quarter of a century ago with paid-up capital of 17.8 million Br, BOA currently has over 2.8 million customers, 2,400 shareholders and is operating with 532 branches across the country.

#### 2.3.1. Abyssinia's Virtual Banking

Bank of Abyssinia (BOA) has launched new technology internet bank that is five virtual machines that enable customers to open accounts, deposit and withdraw cash, and perform local money transfers. Dubbed Interactive Teller Machine (ITM) aka "branch in a box," the terminals use touch screens and video technology to offer virtual banking services. The terminals will be the first for the local banking industry in Ethiopia as Addis Fortune. "In the future, these machines will enable customers to receive cash sent through international money transfer agents," said Addis Fortune news (2020).

As the official website of Abyssinia bank stated that, Virtual banking conducted through the use of an Interactive Teller Machine (ITM) creates the hybrid experience of using an Automated Teller Machine (ATM) and working with a live teller. Sometimes called a virtual teller, ITMs contain the machine automation for handling currency, accepting checks, scanning identification, and printing receipts (http://abyssiniabank.com/, 2021). The system also adds a human element to the transaction through digital communication tools that connect with a remote, live person within the bank. Similar to using Skype on a personal computer, ITMs allow voice communication (over a speaker or a private handset), video conferencing, and chat. Some of the benefits are:

- Availblity24/7: available without any exception
- User Friendly; the system is simple and understandable
- Security options; it's an indoor service like branches
- Faster service; small queues rather than branches
- Personalized convenient face to face transaction service; using video conference
- Address concerns and questions immediately; any requests are answered at the moment (ibid, 2021).

#### 2.4. Product Innovation and Process Innovation

Innovation is a comprehensive concept that cannot be defined by using a singular factor. We mentioned concept, precisely because innovation can be seen as a process, mentality, culture, technology, human resources and many other notions that are at the basis of it (https://innovationcloud.com).

As most educators believed that, there are many kinds of innovation that has been applicable in the marketing arena. However, in the case of this paper we are going to look at product innovation. Product in marketing concepts comprises of both tangible goods and services. As the paper focuses on the new product innovations of Abyssinia bank, we have tried to see the service delivery that has been created to serve the customer (https://innovationcloud.com).

#### 2.4.1. Product Innovation

As innovationcloud.com describes, Product innovation is a type of innovation that is more noticeable for the consumer and it is related either to the enhancement of a company's older products, either to the development of new products which are based on new technologies or which solve new needs of a consumer.

Product innovation occurs as a reaction to multiple factors; for example, a consumer's needs are determined by social, cultural or economic factors, while at a business and organizational level, product innovation is performed when its purpose is the expansion to new market segments or the attainment of competitive advantage.

When product innovation is conducted through the development of a new product, it can either solve an older consumers' problem in a new (innovative) way, or solve a new consumers' problem, which occurred as a consequence of the evolution of the factors previously mentioned (https://topreviewuri.com/)

#### 2.4.2. Process Innovation

Process innovation focuses on the innovation of facilities, skills and technologies used for the production and delivering of products and services. As opposed to product innovation, the effects are not as noticeable to the consumers. Product innovation on the other hand can result in a decrease in production cost and time and the improvement of certain processes or the elimination of certain barriers from the production process or consumption (https://www.assemblymag.com/).

Most of the times, process innovation is performed either within the equipment used, either within the technologies used for developing the product or even within the methods used by the employees.

What you must keep in mind is the fact that these types of innovation can go hand in hand with each other or they can be extremely different. They are indeed two of the multiple types of innovation, but they are two of the most used ones as they work with tangible resources (innovatingsociety.com).

Moreover, as educators believed that innovation can be explained in different ways. An innovation is either radical or incremental by determining the degree of change associated with it (Ettlie et al., 1998). Radical innovations produce fundamental changes in the activities of an organization, industry or society and represent clear departures from existing practices on one hand and incremental innovations, on the other hand, merely call for marginal departures from existing practices as they mainly reinforce the existing capabilities of organizations (Ettlie et al., 1998). Incremental improvements to existing products, services and organizational routines can enhance performance, quality, and usefulness and are vital to making more competitively advanced products (Sciulli, 1998).

In the place of offering one or two or a large number of products to the customers, it is by understanding all bank related needs of a customer and then evolving a comprehensive product package which can take care of his entire spectrum of needs. Hence once the bank gives a tailor-made product, it will definitely cultivate a psychological ownership on the customer's mind. Another aspect required in a product policy is local touch that is, by considering local peculiarities; product must be local-oriented.

Grundiche (2004) argued that for a firm to compete effectively in the dynamic and competitive business environment and achieve set goals in terms of profitability, high sales volume, and large market share, it must continuously develop products and product lines to satisfy the constantly changing desires and needs of customers. According to Azazeet al., (2005), the reasons for new product development the most frequently cited by top business executives are corporate growth, diversification, and the quest for a competitive edge over rival business firms. They further add another specific reason for a firm to develop new products: exploiting new opportunities. New products are essential to the survival and long term growth of any firm (Ramaseshan et al., 2002).

Geroski (1995) examined the effects of the major innovations and patents to various corporate performance measures such as accounting profitability, stock market rates of return and corporate growth. The observed direct effects of innovations on firm performance are relatively small, and the benefits from innovations are more likely indirect. However, innovative firms seem to be less susceptible to cyclical sectoral and environmental pressures than non-innovative firms. Financial innovations are used by banks as formidable strategic variables to outstrip the competition and have become an essential means for the bank to improve its performance and to maintain its effectiveness on the market (Batiz-Lazo and Woldesenbet, 2006). This stimulates the interest in studying the relationship between financial innovations and banking performance. In a highly turbulent environment, a successful innovation creating a unique competitive position can give a bank a competitive advantage and lead to a superior financial performance. This can only be maintained by ceaseless innovation and improvement of the product and the process.

#### 2.5. Concepts of product (Service) Innovation and Quality

In today's economy, the service sector is of great importance regarding its share in supporting the world's economy and is observed as the competitive resource for differentiation that is hard to be copied by the competitors (Zeithaml and Bitner, 2000). Service organizations region over plenty of world economics and are constantly changing in response to the opportunities and challenges brought up to them by globalization, technological innovations and Competitors. Dealing with quality and innovation enhancement in services is consequently complicated and is multidisciplinary, comprising of finance, marketing, operations and information technology.

Innovation has been a leading element in sustaining global competitiveness. It heats up organizational development, propels future triumphs and it is the vehicle that enables businesses to support their stability in international economy (Gaynor, 2002). Firms deal with challenges to distinguish themselves in the industry by becoming innovative. They endeavor to come up with realistic choices concerning the identification, selection, and utilization of resources to develop differentiated new products and services which will bring about outstanding profits (Nijssen et al., 2006).

Service quality plays an integrating role between the organization and its customers because service quality is the result of internal organizational procedures and strategies that are extremely crucial in the service sequence that leads to customer satisfaction, customer value, and loyalty (Dean, 2002). The demand for quality and innovation in services firms are becoming very important regarding their business superiority in order to remain competitive by enhancing their competitive advantage (Bon & Mustafa, 2013).

Most banks are introducing services aimed at easing customer experience, and this leads to many innovations being introduced (Ankrah, 2012). There is risk involved in innovations because there is no guarantee that all innovations will lead to success. This was the finding in an investigation of the effect of change in the financial sector (Santomero & Trester, 1998) where it was found that the banking sector's risky asset portfolio is increased as a result of the innovations. This therefore means that in order to introduce innovations that will satisfy customers, banks require a well-planned change process with good strategic leadership, competitive intelligence and management of technology (Guimaraes et al., 2009).

#### 2.5.1. Product (Service) innovation in banking

Service innovation is one of the approaches for building a competitive edge in an extremely challenging environment. Service innovation evolves into a productive way for an organization to speed up its rate of growth and profitability (Berry et al., 2006). Innovation entails an approach to take advantage of new concepts effectively in an effort to enhance competitive positioning in the industry. Also, past researches in numerous industries proved that competition leads to service innovation, which could lead to in superior customer satisfaction (Danjum & Rasli, 2012). Service innovation includes intangible resources for a more radical service logic outlook that focuses on nontraditional characteristics based on viewpoint of service delivery designs (Blazevic & Lievens, 2008; Verma & Jayasimha, 2014). It goes past the traditional limitations of product innovativeness and includes acceptance of enhanced service processes by means of designing and creating new service delivery systems (Avlontis et al., 2001; Verma & Jayasimha, 2014).

Service innovation is designed to set up new markets by means of innovating service delivery and as a consequence stretching out firm's service range. Organizations should understand their targets and deal with these targets in a proper way. In order to attain an excellent service positioning, service firms need to deliver services and products by means of distribution techniques in new innovative ways that make use of their unique competences like knowledge and skills. In fact, the innovative usage of delivery methods is a lot more turning into a completely new resource for differentiation and innovation for firms (Wiertz et al., 2004; Chen & Huang, 2009).

#### 2.5.2. Product/ Service Quality in banking

Service quality is a perceived judgment in the offering of a service. It comes from assessing customer expectations considering the degree of service, customers believe to have experienced (Parasuraman, Zeithaml, & Berry, 2002). It is conformance to customer specifications during offering of a service. The measure of quality in service sector offering has turned out to be more challenging. Service quality is the customer's overall judgement of quality of service offering (Santos, 2003). Service quality is also influenced by capability of an organization in satisfying customer needs in accordance with their expectations (Yoo & Park, 2007). Services are usually performance driven, therefore creating accurate descriptions to a homogeneous quality is challenging to be determine (Kettinger & Lee, 1 994).

Service quality is an important tool in in measuring customer satisfaction as well as differentiating products and services. The relationship between service quality and customer satisfaction is found to be very strong and this relationship can be protected by providing the products or services with significant quality (Kadir et al., 2011).

Parasuraman et al. (1988) developed a scale to measure the service quality of different service providers. It is one of the fundamental instruments used to measure perceived service quality and has been verified by numerous past studies. The aim of SERVQUAL model was to measure the customer expectations of different dimensions of service quality and the perception of quality actually received by the customer (Samat et al., 2006). As a result, they developed SERVQUAL instrument which initially contains 10 service quality dimensions and later on they were reduced to final five: empathy, assurance, responsiveness, reliability and tangibles. This model is based on the model of disconfirmation model that is dependent on the evaluation of customers' expectations regarding their experience from the service. There are 22 attributes in the SERVQUAL instrument and the customers are encouraged to express (seven-point scale from "strongly disagree" to "Strongly agree") their experience from the service, their expectations from the service and what they perceived from the service (Grönroos, 2000). Gronoos (1983) has presented his own two dimensional model of service quality. He suggested that service quality is a function of two variables: technical quality and functional quality. The technical quality deals with what is provided whereas functional quality entails how it is provided.

Delivering superior service quality have significant role in achieving competitive advantage. Satisfied customers not only have effect on an organization's profitability but also it leads to positive word of mouth, brand loyalty and repeat purchases. Service quality is the comparison of customer expectations with performance. Delivering service quality means fulfilling customer expectations on regular basis. During evaluating service quality customers compare the expected services with the services they receive. It is perceived judgement that is measured by comparing the customer expectations from the service with the level of the service perceived by the customer (Parasuraman et al., 2004). It has been proved from the past research that there is positive relationship between customer satisfaction and service quality. Customer satisfaction depends on the quality of service provided by the service provider and it plays dominant role in the determination of customer satisfaction (Agbor, 2011). Superior service quality plays key role in enhancing customer loyalty. It has been proved from previous research that there is positive correlation between service quality and customer satisfaction (Cronin et al., 2000), that leads to customer loyalty (Lai et al., 2009). Service quality is also closely linked with customer's intention to adhere to the service provider (Anton et al. 2007; Bell et al. 2005).

Service innovation is an important feature of firm's capability to differentiate itself from its competitors and add more to firm's revenue. Innovations can enhance service differentiation, hence, it is essential for managers to carry out those innovations that are sought by the customers but also generate revenue for the firm (Dev et al., 2005). The firms which clearly define their innovation process for services are faster and successful in developing new services. The development of new services leads to higher revenue growth as well as increase in the share of their total revenue. The companies should pay more attention to their innovation strategy and processes and especially their services in order to make innovation process more systematic (Schulteß et al., 2010). Successful innovation strategies are more useful during the recession times when there is decrease in economic activity due to fewer investments. Service innovation is a big source of competitive advantage for those companies which capitalize on knowledge gained from customers, competitors and have the potential to develop more meaningful and unique services. Today's business environment is very competitive and therefore just providing quality services is not enough, companies should seek for new innovative service offerings that are valuable for customers (Bettencourt et al., 2013).

The excellent level of services is very helpful in raising customer retention, building valuable customers, attracting new customers, as well as improving the financial position of organization (Johnston and Clark, 2005). Moreover, firms' endeavors to pay attention to their customers, results

in improving overall firms' reputations and positive images. The presence of numerous service channels leads to more satisfied and loyal customers and encourages them to set up long-term relationship with the firm. Furthermore, through this firm attain competitive advantage that, consequently contributes to outstanding financial performance (Chen et al., 2009). Firms' achievement is extremely dependent on the degree to which it could incorporate its knowledge regarding her customers' wants, preferences and needs with their skills, creative potential and intellectual. As a result, competitive edge is acquired by means of intelligent recognition and satisfying customers through superior customer service tools that are swifter and better than rivals (Abiodun, 2008).

As service quality improves, the probability of customer satisfaction increases. Quality was only one of many dimensions on which satisfaction was based; satisfaction was also one potential influence on future quality perceptions (Clemes, 2008). Kotler and Armstrong (2012) preach that satisfaction is the post-purchase evaluation of products or services taking into consideration the expectations. Researchers are divided over the antecedents of service quality and satisfaction. Whilst some believe service quality leads to satisfaction, others think otherwise. The studies of many researchers suggest service quality leads to customer satisfaction. To achieve a high level of customer satisfaction, they suggest that a high level of service quality should be delivered by the service provider as service quality is normally considered an antecedent of customer satisfaction. As the above studies indicates, the main dimensions of service qualities are: tangibility, responsiveness, security, assurance, empathy, easiness and reliability (Dr. V.K. Shobhana, et al., 2012).

#### 2.5.2.1. Customer centric new product

The service firms in order to improve their customer service management, they should pay more attention to enhancing the service selectively as well as focusing on more important service features. It is important for service firms to know how delicate the customers are to numerous service features or measurements. Therefore, they should allocate resources in such a way that boost the usefulness of service operations and are in line with customer concerns. Moreover, the priorities of customers' service should be fully investigated keeping in view the service specific contexts (Sachdev & Verma, 2004).

Due to technological advancements and competition, etc. customer service of service firms is under tremendous pressure. Customers are more refined for their demands and therefore are more asserting on better standards of service. In their minds service signifies customer relationship, service delivery, customer delight, customer satisfaction, etc.

The service firms ought to give consideration to the significance of service quality parameters, for example tangibles, empathy, assurance, responsiveness and reliability, while considering about degrees of performance in achieving customer service targets. Customer service endeavors are, therefore, strongly linked to quality enhancement pursuits (Sachdev & Verma, 2004).

In today's challenging business environment, innovations by itself are of limited importance because its worth is what customers' perceive about the product or service rewards after consuming it. Service innovation results when a firm is in a position to concentrate its complete endeavors on customers for creating impact that exceeds customers' current expectations of higher value. Even the small innovations can bring about outstanding influence and are capable of producing something new and distorting the old. Innovations, hence, nourishes a culture where there can be much less obstacles to the development of partnership of ideas and pursuits on account of the customer. Creative innovations that render higher value to customers are demanded in the competitive marketplace. Hence, customer-focused firms for the benefit of their customers are responsive to new and far better means of carrying out things. Today's customers assume firms should please them with creative products and services. Therefore, creative and innovative innovation performed by a firm regarding their customers is, in fact the sole strategy that preserve the long-term success of the firm (Kandampully, 2002).

In today's economy, due to fast changing consumer tastes as well as the growth of variety of consumer segments with diverse preferences, values, and shopping habits, firms aim to offer services and products at low costs, provide better value to customers, and enhance service delivery strategies to boost sales and profits and cut down costs (Chen et al., 2009). Organizations are more likely in a position to catch the attention of new customers due to enhanced or excellent service quality as well as their capability to promote these improvements (Johnston and Clark, 2001).

Firms employing customer orientation bring about intelligence regarding the present as well as the potential future needs associated with targeted customers and also distribute the new intelligence throughout the entire organization (Grawe et al., 2009). The creation of customer value has been associated with the service innovation. Customer value is attributed to the customer's perceived liking for a product or service after usage it because of its features as well as performance

(Woodruff, 1997). The components of the customer value depend on the market environment. These components are likely to change due to the change in market environments (Flint and Mentzer, 2000). Due to this fact, creating customer value through service innovation necessitates that firms should predict the long term customer needs and demands. Therefore, firms monitored customers' operations and attempted to determine what customers like to accomplish while travelling through the airline. They found that airlines should involve customers during the design process rather than insisting that customers should follow the company designed process.

The satisfied customers have the likelihood of improving firms' customer base, raise firms' image and enhance the utilization of more unpredictable customer mix. One way to attain customer's satisfaction is via customers' service. Customer service is the provision of service to customers, just before, through and after a purchase order (Abiodun, 2008). Furthermore, due to the intangible nature of services, customers frequently depend on employee's behaviors in developing the image of the service delivery (Gronroos, 1984). Consequently, employees in the customers' eyes, in fact, became fragment of service. Anderson and Sullivan (1993) discovered that across different product categories, there is positive relationship between customers repurchases intention and satisfaction. Also, satisfied customers were more likely to be retained and loyal. Customer satisfaction can be achieved by keeping service encounters that provide an opportunity to deliver better service quality and differentiate the firm from its competitors ((Abiodun, 2008; Oliver, 1 999).

In most cases, most banks are introducing services aimed at easing customer experience, and this leads to many innovations being introduced (Ankrah, 2012). There is risk involved in innovations because there is no guarantee that all innovations will lead to success. This was the finding in an investigation of the effect of change in the financial sector (Santomero & Trester, 1998) where it was found that the banking sector's risky asset portfolio is increased as a result of the innovations. This therefore means that in order to introduce innovations that will satisfy customers, banks require a well-planned change process with good strategic leadership, competitive intelligence and management of technology (Guimaraes et al., 2009).

#### 2.5.2.2. The price of new product

For a bank the price is one of the elements of the marketing mix. The prices must always be in conformity with the four Ps and they must not be considered as a purely financial problem, in which they are calculated by estimating the costs, to which a margin for profit will be added. The marketing evaluates the market, essentially, from the client's point of view. Thus, the perception

of the price by the client is more critical than the size of the development costs or of the profit that will be realized.

The evaluation of the cost of a service involves two problems (Bateson, Hoffman, 1999, p.179). The first is, the identification of the costs relevant for the company when the profit for a certain service is calculated. And the second one is the identification of some methods for the allocation of the relevant costs on this service.

From the ones mentioned before we may break off three main differences between the evaluation of the price in the material goods and its evaluation on services (Zethaml, Bittner, 200, p.429). That are: The consumers have in most of the cases incomplete or insufficient information about services, the price is a visible element of the service's quality and the monetary costs are not the only relevant elements in the settlement of the price.

One of the most used methods of price calculation is the one based on the value of the service perceived by the consumer. On the other hand, the consumers define the value in four ways:

- 1. The value represents a low price
- 2. The value represents what they expect from a product or service.
- 3. The value represents what they receive for the price they pay
- 4. The value represents what they receive for what they give.

#### 2.6. Customer Satisfaction and Internet Service Quality

#### 2.6.1. Customer satisfaction

Most researchers agree that customer satisfaction refers to an attitude or evaluation formed by a customer comparing pre-purchase expectations of what they would receive from the product or service to their subjective perceptions of the performance they actually did receive. Measures of overall customer satisfaction typically capture consumer expectations towards the service provided, as well as how far the provided service is from their ideal (50) Customer satisfaction is a fundamental determinant of long-term consumer behavior (Cooil, B. etal 2007). They also added that in order to control customer defection, most companies focus on managing customer satisfaction. As Donavan, et al. (2004) stated that customer satisfaction has gained very much attention in the last few decades in all areas of production. In an increasingly competitive and dynamic environment, greater attention is continuously paid to customer relationships and satisfied customers (Eriksson, K.etal. (2000). for companies,

customer satisfaction is an effective way to differentiate themselves from competitors and gain competitive advantage (Soderlund, M. (2006), but it is also one of the key issues in their efforts towards improving quality.

Customer satisfaction in the banking industry come as a result of varying customer needs being met. In a study on customer satisfaction (Ahmad, 2011) it was found that adopting e-banking positively impacted bank customers. Satisfied customers would in turn inform other potential clients about their needs being met by the bank (Macharia, 2012). The knowledge of the importance of customer satisfaction leads banks to look for ways of meeting customer needs. This is compounded by the rapid growth of technology and the competitive market, which makes all banks face the challenge of retaining their customers and attracting new ones (Ouma, et al., 2013).

Moreover, Gronroos believes that Customer satisfaction is a phenomenon of particular importance in the evaluation process of a shopping, consumption, or product or service usage experience and is therefore vital in long term consumer responses. Oliver defined customer satisfaction as a judgment that a product or service feature, or the product or service itself, provide a pleasurable level of consumption related fulfilment, including levels of under or over fulfilment. According to Muffatto et al. Customer satisfaction is considered to be one of the most important competitive factors and as the best indicator of a company's profitability. Additionally, customer satisfaction will impel company to improve their reputation and image, to reduce customer defection, and enhance attention towards the customer needs. This will lead to creation of barriers to switching, and improvement in business relationships with their customers.

Service quality has been recognized as a dominant factor in keeping competitive advantage and sustaining satisfying relationships with customers. Service quality is one of the factors contributing to customers' satisfaction judgments. Moreover, as Ouma, et al 2013, quality bank services play a major role in customer satisfaction and retention. The retained customers are more willing to refer the bank to other people (ibid 2013). Business organizations that incorporate customer needs in their strategies are more likely to retain their customers who are satisfied with the products and services provided. As a result, the satisfied customers buy more of the products and spread a positive word of mouth (Odunlami, 2014). Customer loyalty is created when customers become advocates of an organization without any incentive (Oliver, 1997). Customer loyalty is a vital element for the continued existence and operating of a firm's business (Chen & Hu, 2010).

Riquelme et al. studied the attributes of e-service quality which predict customer satisfaction, tried to determine if satisfied customers use more online banking features than less satisfied customers and also tried to identify characteristics of less satisfied customers. They found that satisfaction could be generated by improving courtesy, content, timeliness and product and services offered. The services offered being the most important factor in driving internet banking satisfaction. Zavareh et al.(2005)study findings revealed that efficiency and reliability, fulfilment, security/trust, site aesthetics, responsiveness/contact, and ease of use constitute e-service quality for internet banking services in Iran and signified that security/trust, site aesthetics, and ease of use of the internet banking services have positive effects on e-customer satisfaction and also revealed that a significantly positive relationship exists between e-service quality and e-customer satisfaction in the internet banking Jayanthy M, et al. (2012).

Customer satisfaction is broader in scope than service quality, which is only one component of customers' level of satisfaction. People can make quality opinion about a product or service based on advertising, word of mouth or reputation of the organization but in order to make a satisfaction judgement a product must be experienced (Hill et al., 2007).

Quality bank services play a major role in customer satisfaction and retention. The retained customers are more willing to refer the bank to other people (Ouma, et al., 2013). Business organizations that incorporate customer needs in their strategies are more likely to retain their customers who are satisfied with the products and services provided. As a result, the satisfied customers buy more of the products and spread a positive word of mouth (Odunlami, 2014).

In general, satisfaction can be expressed as a person's feelings of pleasure or disappointment that result from comparing a product's perceived performance to expectations. If the performance falls below the expectations, the customer is dissatisfied; if it matches the expectations, the customer is satisfied; and if it beats expectations, the customer is highly satisfied.

#### 2.7. Theoretical Framework

According to (Ronald, E and Stephen, 1997) they proposed the 3 key dimensions of innovation capability such as attractive & innovative new product, customer centric new product and price if new product. Therefore, this study adopts the frameworks which is modified by those scholars by changing administrative innovation with product innovation to provide a blueprint for the

implementation of innovation in the banking sector. Accordingly, the study used the following conceptual framework.

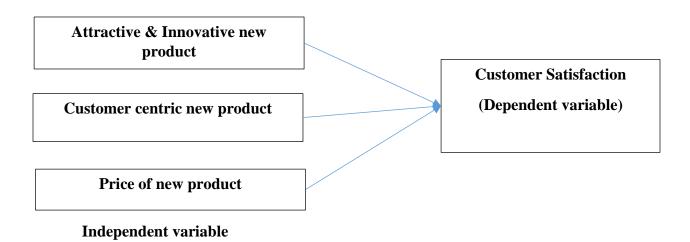


FIG. Conceptual framework adopted from (source: Ronald, E and Stephen, J: 1997. Innovativeness and price sensitivity, MCB University press)

# **CHAPTER THREE**

#### RESEARCH METHODOLOGY

#### 3.1. Research Method

Quantitative researchers favor methods such as surveys and experiments, and will attempt to test hypotheses or statements with a view to infer from the particular to the general. Therefore, the student researcher was carried out both quantitative research and qualitative one. Quantitative research is used to describe the impact of product innovation on customer satisfaction the case of Abyssinia banks' in Addis Ababa, Ethiopia by collecting quantitative data from customers of the banks'. In addition, the effect of the independent variables banking innovation which are product innovation and product (service) quality on dependent variables, i.e. customer satisfaction is quantitatively measured by this study. In this study, the student researcher applied survey technique by distributing self-administered questionnaire to gain feedback from respondents. Some respondents were also interviewed and the data was also used for triangulate the study.

# 3.2. Research Design

The research design is the conceptual structure within which research is conducted. It constitutes the blueprint for the collection, measurement and analysis of data (Kothari, 2004). They are classified into three categories: exploratory, descriptive, and causal (Burns & Bush, 2003). Accordingly, this study employed descriptive and explanatory research designs. With descriptive design, respondents" responses on their basic profiles, bank relationships and the existence of banking innovation in terms product, customer centricity and price in innovations were studied and presented. In addition to descriptive design, as the primary aim of the current study was to assess the impact of banking new product of innovation on customers" satisfaction, explaining the relationships among variables for the study population was its primary task By employing explanatory research design, hypotheses were tested in connection with the effect of banking innovation on customers" satisfaction and the relationships between variables were also explained using correlation and regression analysis. Accordingly, test of correlations, regression analyses of banking product innovation (namely product, price and customer centricity in product innovation) and customers" satisfaction on these innovations were tested and interpreted as well.

# 3.3. Research Approach

A research approach is the arrangement of conditions for collections and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. In fact, the research approach is the conceptual structures with in which research is collected; it constitutes the blue print for the collection, measurement and analysis of data (Sellitiz, 1966). Hence this study on the Impact of new product innovation on customer satisfaction in the case of Abyssinia Bank has followed a deductive form of scientific research approach because at this level building theory is very difficult and beyond the capacity of the researcher.

# 3.4. Population of the Study

This study has focused on Addis Ababa District, which has composed of 191 branches found in the area. The target population of the study was customers of BOA found in 3 sampled branches in which the new product has been lunched in Addis Ababa Districts. These sample branches were selected from among the sampling frame using purposive/judgmental sampling design.

# 3.5. Sample Size and its Determination

A larger sample can yield more accurate results-but excessive responses can be pricey. Kombo et al (2006) define a sample as a finite part of a statistical population whose properties are studied to gain information about, who sample. Sanders et al, (2003) define sampling as the process of selecting a number of individuals for a study from a large group referred to as the population. If researchers need to draw a conclusion valid for the whole study population, they should draw a sample in a way that it is representative of that population. So, in order to determine the sample size, the following points are considered: Population size, Margin of error (confidence interval), Confidence level and Standard deviation.

According to (Buglear, 2003), when it is difficult to determine sample size, maximizing P (1-P), where p is population proportion can yield the safest sample size using the following expression. By taking this into consideration making sample proportion p=0.5 to can maximize P (1-P), then;

Error = 
$$z_{\alpha/2} \times \sqrt{\frac{p(1-p)}{n}}$$

Based on this assumption the expression for the sample size n is;

$$n = \left(\frac{z_{\alpha/2}}{2 \times \text{error}}\right)^2$$

Therefore, for the purpose of this study the 5 percent of the population proportion with 95 percent degree of confidence the sample size is calculated as follows:

At 95% degree of confidence,

$$Z\alpha/2=1.96$$
 Error=0.05

For the error to be 5 per cent:

$$n = \left(\frac{1.96}{2 \times 0.05}\right)^2 = 19.6^2 = 384.16$$

The sample size for this study will be 385 customers.

Generally, from 3 branches 385 sample customers were proportionally selected and included in the study. Sample sizes drawn from each branches are also depicted in table 3.1 below. All the participants are found from Eastern part of Addis Ababa.

Table 3. 1: Customer sample size by their branch

No	Name of the Branch	Number of Target	Participant selected
1	Africa Avenue	1,717.00	150
2	Century Mole	678.00	105
3	Airport	63,753 68	130
	Total		385

Source: my research (June, 2021)

This gave a minimum sample size of 385 respondents which is 98.7 percent of the ideal sample customer of Abyssinia bank.

# 3.6. Sampling Technique

Sampling techniques provide a range of methods that enable one to reduce the amount of data needed for a study by considering only data from a sub-group rather than all possible elements (Saunders, Lewis, & Thomhill, 2009). Probability sampling technique, i.e. quota sampling to make sure that each were used by virtue of its appropriateness to involve customers of BOA in Addis Ababa districts of found in the city. A convenience sampling method was used to reach sampled customers.

#### 3.7. Variables and their Measurement

# 3.7.1. Dependent variable

**Customer Satisfaction:** Customer satisfaction in the banking industry come as a result of varying customer needs being met. In a study on customer satisfaction (Ahmad, 2011) it was found that

adopting e-banking positively impacted bank customers. Satisfied customers would in turn inform other potential clients about their needs being met by the bank (Macharia, 2012). The result was measured using a 5-point Likert scale (1= strongly disagree, 2= disagree, 3= neutral, 4=agree, and 5= strongly agree) to identify the overall level of respondents" satisfaction (See Appendix 1). While measuring customer satisfaction this study makes use of both quantitative and qualitative data are used as measures of customer satisfaction in this study. Again, similar to the situation associated with banking industries, the researcher investigating the new product innovation that is highly used to enhance customers to satisfy with the service delivery of the bank and maximize their profitability.

# 3.7.2. Independent variables

The independent variables used in this study are: Innovation and attractivness of new product, customer centercity and price of new product.

# 3.8. Data Collection Tools

Data capture instrument is the item used to collect data for a research project (Agbor, 2011). This could be a questionnaire or a personal interview. In this case, data were collected from primary sources using questionnaire that will be distributed to customers of the bank during the data collection time. The questionnaire developed by the researcher is 5 point Likert scale rating from 1 (strongly disagree) to 5 (strongly agree). Data were gathered using two major tools; namely selfadministered questionnaire and document analysis. Self-administered questionnaire (Annex 01 English Version, Annex 02 Amharic version) was used to gather data from sample customers, whereas document analysis was utilized to further complement the data with reports and available assessments on the subject and to have deep insight about the subject area. Accordingly, data for literature review part and questionnaire preparation were gathered using document analysis. This questionnaire was designed to gather data from primary sources i.e. from sample customers about their own personal experience and attitudes toward the effect of banking innovation on their satisfaction in Abyssinia. It is composed of descriptive questions and five point Likert scale questions. Descriptive questions were used to gather respondent customers "basic profiles and their relationship with the bank. Likert scale questions were utilized to collect the very important part of data about the effect of banking innovation on customers" satisfaction in Abyssinia. The questionnaire used for this study was prepared by the researcher from literatures based on five major dimensions namely product, marketing, process, service and technological innovations. A

total of 29 Likert scale questionnaire items were developed and used under these mentioned five dimensions and customer satisfaction (dependent variable).

#### 3.9. Data sources

The data was gathered from primary sources i.e. from sample customers of Abyssinia bank of Addis Ababa in which the new virtual machine was founded. The respondents fill the questionnaire based on their own personal experience and attitudes toward the effect of banking innovation on their satisfaction.

# 3.10. Data Analysis

Data analysis consists examining, categorizing, tabulating, or otherwise recombining the evidence, to address the initial proposition of a study (Kothari, 2004). The data analysis was conducted by using the Statistical Package for the Social Sciences (SPSS v10) computer program. Regression analysis is applied to analyze the empirical date and Pearson Product Moment Correlation will be added to conclude the regression analysis. These statistical measures contributed to test the research model validity. The data analysis of this research is based on descriptive statistics such as frequency, percentage, mean and standard deviation and inferential statistics multiple regression. The descriptive statistics used mainly to understand the customers" profiles demographic concentration. In order to explain the relationship between the variables of the study, correlation and multiple regressions is used. Moreover, tests of, multi collinearity were conducted and distributions of data were checked.

# 3.11. Reliability

Reliability refers to a degree to which measurements used can yield suitable results because they are free from errors. According to (Hair, Black, & Babin, 2010) reliability is the assessment of the degree of consistency between multiple measurements of a variable. This study used the Cronbach's alpha to assess the reliability of the variables. According to Field (2005) and Tan &Teo, (2000), Cronbach's alphas of the sub-scales ranged from 0.690 to 0.925 which indicate an acceptable internal consistency and reliability measures for the questionnaire meaning that if the results exceed the minimum alpha of 0.7 the constructs measures will be deem reliable. In this study the measures have been taken as reliable when the Cronbach's alpha value is found to be the range of  $0.7 \le \alpha \le 0.9$  category indicating that the survey instrument was good in terms of internal consistency.

Table 3. 2. Reliability Statistic

**Reliability Statistics** 

Cronbach's Alpha	N of Items
.864	29

Source: Own Survey June, 2021

More specifically, coefficients of alpha for particular dimensions of an independent variable and for the dependent variable were tested. Therefore, in this study, since all alpha values are above 0.7, that is 0.864 and are considered as acceptable and good levels.

# 3.12. Validity

Validity is the ability of an instrument to measure what it is designed to measure; the degree to which the researcher has measured what he has set out to measure" (Smith, 1991). (Babbie, 1989) wrote in his book that, "validity refers to the extent to which an empirical measure adequately reflects the real meaning of the concept under consideration"). Often, when discussing the validity of a questionnaire, researchers refer to content validity, criterion-related validity (predictive validity) and construct validity. Content validity refers to the extent to which the measurement device, in our case the measurement questions in the questionnaire, provides adequate coverage of the investigative questions (Saunders, Lewis, & Thomhill, 2009). For this research, validity of the questionnaire was assured in two ways. First, samples of questionnaire papers were delivered to colleagues who also working their thesis, and we had discussed on the ability of the questionnaire items to reflect what was intended and what is intended to measure. Secondly, pilot test was conducted to check whether items were clearly understandable by target respondents to respond without defect. In doing that, before administering the major data collection task, twenty-five questionnaires were distributed for customers to test its validity and to correct any defects. After appropriate corrections were made, based on pilot respondents" comments, data were gathered.

#### 3.13. Ethical Consideration

As this study require the participation of human respondents, specifically Abyssinia Bank of Ethiopia, customers, certain ethical issues like consent and confidentiality will be considered. In order to secure the consent of the selected participants, all important details of the study, including its aim and purpose relayed. By explaining these important details, the respondents are able to understand the importance of their role in the completion of the research. With this, the participants are not force to participate in the research. The confidentiality of the participants also ensures by

not disclosing their names or personal information in the research. Only relevant details that help in answering the research questions will include. Finally, ethical consideration of proper and due referencing and acknowledgement also made during the entire research process.

# CHAPTER FOUR RESULTS AND DISCUSSIONS

#### 4.1. Introduction

In this chapter, the results of data analyzed using Statistical Package for Social Sciences (SPSS version 20.0). Accordingly, survey response rate, respondents' profile, and validity and reliability measures are presented. Results of descriptive statistics analysis of the survey, distribution tests, and correlation and regression analyses are also covered in this chapter. Finally, proposed hypotheses were tested and presented.

# 4.2. Analysis of data

The analysis was based on the data gathered from 380 customers of Abyssinia Bank which are working with Addis Ababa branches. So as to get a representative data, 384 questionnaires were prepared and distributed to customers of the bank by non-random sampling procedure.

Accordingly, 380 questionnaires were collected representing 98.7% response rate. This is consistent with Fowlers (2009) stipulation that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent. Therefore, the response rate for this study is considered as an excellent one.

# 4.3. Respondents' Demographic and Socio-Economic Characteristics

The respondents demographic and socio economic characteristics are stated below.

Table 4. 1. Characteristics of Background Variables

		Frequency	Percent	Valid Percent	Cumulative Percent
	male	228	60.0	60.0	60.0
Gender	female	152	40.0	40.0	100.0
	Total	380	100.0	100.0	
	26-35	76	20.0	20.0	20.0
٨٥٥	36-45	228	60.0	60.0	80.0
Age	40and above	76	20.0	20.0	100.0
	Total	380	100.0	100.0	
	single	95	25.0	25.0	25.0
Marital Status	married	228	60.0	60.0	85.0
iviai itai Status	divorced	57	15.0	15.0	100.0
	Total	380	100.0	100.0	
	certificate	57	15.0	15.0	15.0
	Diploma	133	35.0	35.0	50.0
Educational level	Degree	114	30.0	30.0	80.0
	MA and above	76	20.0	20.0	100.0
	Total	380	100.0	100.0	
Frequency of visiting	daily	38	10.0	10.0	10.0
the bank	weekly	152	40.0	40.0	50.0

	two times a month	171	45.0	45.0	95.0
	monthly	19	5.0	5.0	100.0
	Total	380	100.0	100.0	
	1-5	133	35.0	35.0	35.0
	6-10	171	45.0	45.0	80.0
Years of relationship	111-15	38	10.0	10.0	90.0
with the bank	16 and above	38	10.0	10.0	100.0
	Total	380	100.0	100.0	

Source: Own Survey, June, 20201

As Table 4.1 Shows, frequency and percentage of background variables of participants who were participated in this study. A total of 380 participants involved in which almost more than half (60%) were male, and the remaining 40% were female. This implies that majority of the respondents were males.

Regarding the age is concerned, the majority of participants (60%) were in the age group of 36-45 years old. 20% of participants were in the age range of 26-35 years old whereas the remaining participants, 20%, were in the age group of 46 and above years old respectively. This indicates that more of the respondents are young and have keen interest to use new innovations from the bank.

As far as educational level of participants is concerned, 35% of the respondents were having Diploma educational qualification, and 30% of participants were having educational level of Degree, and 20% were having educational level MA and above. The remaining 15% were having certificate in their educational level. This indicates that most of the respondents of the customers have a good educational background to evaluate the banks new product and understand to fill the questionnaire carefully.

As far as frequency of visiting the bank is concerned, 45% of the respondents were visiting the bank two times a month, 40% visited weekly and 10% of the respondents were visiting daily. Whereas, 5% visited the bank monthly. This indicates that most of the respondents visited the bank two times a month and weekly respectively.

Finally, as far as year of relationship with the bank is concerned, 45% of the participants were having 6-10 years' relationship with Abyssinia Bank. Whereas 35%, respondents were having 1-5 years' relationships. The remaining 6-10 years 10% and 10 to 15 years 10% in their organization respectively. This infers that most of the respondents are using service of the bank for longer period.

# 4.4. Survey Response Rate

Response rate for the study is presented in table 4.2 below and discussed as follows.

Table 4. 2: Response rate for the study

No	Name of the Branch	#of	# of questionnaires	Response Rate
		questionnaires	Returned	%
		distributed		
1	Africa Avenue	150	149	99.33
2	Century Mole	105	102	97.14
3	Airport	130	129	99.23
	Total	385	380	

Source: Own Survey, June, 2021

# 4.5. Descriptive analysis for Banking Innovation

Product innovations, customer centricity, and price are dimensions selected for testing the impact of banking innovation on customer satisfaction. Means and standard deviations of responses on each dimension are discussed as follows.

#### 4.5.1. Product Innovation and attractiveness

Table 4. 3 Product Innovation and attractiveness

The following table depicts how far the bank tried to fulfill the needs and wants of its customer by innovating a new product.

**Descriptive Statistics** 

	N	Mean	Std. Deviation
AtI1	380	4.00	.896
AtI2	380	4.00	.896
AtI3	380	4.30	.844
AtI4	380	4.00	.950
AtI5	380	4.10	1.092
AtI6	380	4.05	.975
AtI7	380	3.85	.911
Valid N (list wise)	380	4.04	0.9377

Source: Own Survey, June, 2021

As it can be seen from the above table, product innovation and attractiveness has a mean score of 4.04 and standard deviation of 0.9377 out of the seven statements used to measure the product innovation of Abyssinia Bank. Usefulness of New products introduced by the bank score the highest mean 4.30 and standard deviation of 0.844 followed by the item that "I recommend new banking products to my friend" with a mean value of 4.10 and standard deviation 1.092. Out of the seven statements the new products of Abyssinia bank are friendly in making of universal

payments score 4.05 mean value and 0.975 standard deviation relatively lower than the other statements. However, compared to the mean scores, responses are slightly diversified. This implies that respondents are almost agreed about the existence of product innovation in Abyssinia Bank.

# 4.5.2. Customer centric new product

The following table depicts how far the bank tried to fulfill the needs and wants of its customer.

Table 4. 4 Descriptive Statistics of customer centric in innovation of products

<b>Descriptive Statistics</b>						
	N	Mean	Std. Deviation			
Custc1	380	4.60	.584			
Custc2	380	4.40	.664			
Custc3	380	4.00	.896			
Custc4	380	4.00	.950			
Custc5	380	4.60	.584			
Custc6	380	4.40	.664			
Custc7	380	4.00	.896			
Custc8	380	4.00	.950			
Custc9	380	4.40	.664			
Custc10	380	4.00	.950			
Valid N (list wise)	380	4.2	0.780			

Source: Own Survey, June, 2021

As the above table shows that respondents are well aware that New Products of Abyssinia bank are targeted on deep knowledge of their need and wants (Mean = 4.60, SD = 0.584). Moreover, the participants are aware that the new products of the bank are assisting the bank to retain its customers (Mean = 4.60, SD = 0.584).

# 4.5.3. Price of the new product

As we can see from the table below there are seven statements presented for respondents to evaluate price of the product.

Table 4. 5 Descriptive Statistics of price of innovated products

**Descriptive Statistics** N Mean Std. Deviation Price1 380 4.60 .584 Price2 4.40 380 .664 Price3 380 4.00 .896 Price4 380 4.00 .950 Price5 380 4.60 .584 price6 380 4.00 .896 price7 380 4.60 .584 0.737 Valid N (list wise) 4.314

Source: Own Survey, June, 2021

Of the seven statements, the statements that are: "Prices charged on new products of Abyssinia bank are based on your expectations, the current price of new products of Abyssinia bank are more expensive than other banks and price of Abyssinia bank product is easily affordable" have the highest mean score 4.60 each and standard deviation 0.584. Whereas, the other three statement like "You will be loyal whatever Abyssinia bank charges you on new products, The Current price of Abyssinia bank on new products are appropriate and Prices for new products are clearly stated to minimize customer dis satisfaction" have the lowest score mean 4.00 and standard deviation of 0.896. Over all the price of the new product has a mean score 4.314 and standard deviation 0.737.

### 4.5.4. Descriptive Statistics of customer satisfaction

The following table shows how far customers are satisfied with new product innovation.

**Descriptive Statistics** 

	N	Mean	Std. Deviation
Custsa1	380	4.6500	.57303
Custsa2	380	4.5500	.49815
Custsa3	380	4.7000	.45886
custsa4	380	4.6000	.49054
Custsa5	380	4.5500	.59027
Valid N (list wise)	380	4.61	0.522

Source: Own Survey, June, 2021

As we have seen above, Customer satisfaction Mean is 4.61 and Std. 0.522 Deviation of Abyssinia banks shows how far the customers are satisfied in the introduction of the new product to the customer. From the respondent's point of view, "I found the virtual banking instruction quite pleasant" has 4.7 mean and 0.45886 Std. On the other hand, "I am completely satisfied with the use of virtual banking and overall, I really satisfied the service quality of virtual banking provided by Abyssinia Bank have 4.55 mean, SD 0.49815 and 4.55 mean and 0.59027 SD respectively. This implies that, customers of Abyssinia bank are satisfied with the new innovated product. Therefore, it is decided that banking innovation has an impact on customer satisfaction using descriptive analysis.

#### 4.5.5. Relation between the independent Variables

According to Reimann, Filzmoser, Garrett and Dutter (2008) correlation analysis estimates the extent of the relationship between any pair of variables (Reimann, Filzmoser, Garrett, & Dutter, 2008). The extent of the relationship between any two variables is expressed in terms of correlation coefficient. The correlation coefficient is a measure of this relationship and depends on the

variability of each of the two variables. Correlation coefficient has both magnitude and direction. As a result, correlation coefficient can take a number with + or - sign (Reimann et.al, 2008).

Pearson product moment correlation is one of the commonly used methods to calculate a correlation coefficient. This method results in a number between -1 and +1 that expresses how closely the two variables are related,  $\pm 1$  shows a perfect 1:1 relationship (positive or negative) and 0 indicates that no systematic relationship exists between the two variables (Reimann et.al, 2008). Regarding the magnitude of correlation coefficient, Cohen (1988) stated that a correlation coefficient between 0.10 - 0.29 can be considered as small or weak, from 0.30 to 0.49 medium and from 0.50 to 1.0 large or strong.

Table 4. 6. Correlation Analysis of the Independent Variables

Correlations						
		ATPI	CUCT	PRICE		
	Pearson Correlation	1	.436**	.557**		
ATPI	Sig. (2-tailed)		.000	.000		
	N	380	380	380		
	Pearson Correlation	.436**	1	.798**		
CUCT	Sig. (2-tailed)	.000		.000		
	N	380	380	380		
	Pearson Correlation	.557**	.798**	1		
PRICE	Sig. (2-tailed)	.000	.000			
	N	380	380	380		

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

Source: Researcher's survey findings

Table 4.6 shows correlation among the independent variables. As can be seen in the table there was a statistically positive significant relationship among all variables. The correlation between Customer centricity (CC) and attractive and innovative (AI) was moderate, r=0.436, p<0.01. This implies that as one variable increase, for example as customer centricity increases, the other variable attractive and innovative also increases and vise-versa. Similarly, there was a moderate correlation between Customer centricity and price of the new product, r=0.798, p<0.01. The correlation between attractive and innovative and price of the new product was strong, r=0.798, p<0.01.

# 4.6. Tests of Assumptions

Statistical assumptions that must be met for the analysis of correlation and regression are tested and the results are presented in this section. Accordingly, basic assumptions, multi collinearity were checked and found acceptable and their results are discussed as follows.

# 4.6.1. Multi – collinearity Test

Multi-collinearity is an unacceptably high level of inter-correlation among the independents, such that the impacts of the independents cannot be separated (Garson 2012). Under multi collinearity, estimates are unbiased but assessments of the relative strength of the explanatory variables and their joint effect are unreliable. The two known techniques for collinearity diagnostics are variance inflation factor (VIF) and tolerance. The VIF indicates whether a predictor has a strong linear relationship with the other predictor(s). Although there are no hard and fast rules about what value of the VIF should cause concern, there are some general guidelines: If the largest VIF is greater than 10 then there is cause for concern (Bowerman & O"Connell, 1990; Myers, 1990 cited in Field, 2013). If the average VIF is substantially greater than 1 then the regression may be biased (Bowerman & O"Connell, 1990 cited in (Field, 2013). VIF may be used in lieu of tolerance as VIF is simply the reciprocal of tolerance. The rule of thumb is that VIF > 4.0 when multi-collinearity is a problem. If the tolerance value is less than some cutoff value, usually 0.20, the independent should be dropped from the analysis due to multi collinearity. Tolerance below 0.1 indicates a serious problem. Tolerance below 0.2 indicates a potential problem (Menard, 1995, cited in (Field, 2013).

Table 4. 7. Tolerance and variance inflation factor (VIF) Model Collinearity Statistics

	Coefficients						
N	Iodel		Collinearity Statistics				
			Tolerance VIF				
		CUCT	.362	2.759			
1		PRICE	.308	3.243			
		ATPI	.689	1.451			

a. Dependent Variable: CUSTS

Dependent Variable: Customer Satisfaction Source: Own survey and SPSS v20.0 (June, 2020)

Tolerance and VIF of Customer centricity 0.362 and 2.759. Price 0.308 and 3.243 and Attractiveness and product innovation has .0.689 and 1.451 respectively.

As shown in table 4.7. Multi-collinearity among independent variables is tested and results reveal that there is no problematic level multi-collinearity among variable in target. One tolerance level is above 0.4 and VIF found to be less than cutoff level. Regarding this study, the tolerance value ranges from 0.556 to 0.870 and the values of VIF for all the independent variables are below 4 showing no indications of multi-collinearity. Hence it is verified that all dimensions of an independent variable can be included in regression analysis.

# 4.7. Correlation Analysis

This study employs the correlation analysis, which investigates the strength of relationships between the studied variables. A correlation coefficient expresses quantitatively the magnitude and direction of the liner relationship between two variables (either positive or negative) and the intensity of the relationship (-1 to 1. General guidelines for correlations, correlation level of .10 to .30 are considered small, correlations of .30 to .70 are considered moderate correlations of .70 to .90 are considered large, and correlations of .90 to 1.00 are considered very large. The researcher used one of the most commonly used types of correlation coefficient which is Pearson correlation coefficient methods because of the statistical accuracy that usually results from this method and the result is presented in the table below.

Table 4. 8. Correlations between variables

Correlations **ATPI CUCT PRICE CUSTS** Pearson .408\*\* 1 .436\*\* .557\*\* Correlation **ATPI** Sig. (2-tailed) .000 .000 .000 N 380 380 380 380 Pearson .436\*\* .798\*\* .478\*\* 1 Correlation **CUCT** Sig. (2-tailed) .000 .000 .000 380 380 380 380 Pearson .557\*\* .798\*\* .846\*\* 1 Correlation **PRICE** .000 .000 .000 Sig. (2-tailed) 380 380 380 380 Pearson .408\*\* .478\*\* .846\*\* 1 Correlation **CUSTS** Sig. (2-tailed) .000 .000 .000 380 380 380 380

Source: Own survey and SPSS v20.0 (May, 2020)

As it can be seen from the table 4.8 below all banking innovation and its dimensions (product attractiveness, price and customer centricity have significant and positive correlation with customer satisfaction with the range of .408 to .846 and customer centricity and product innovation have moderate with 0.478 and 408 respectively.

# 4.7.1. Relationship between Product Innovation and Customer Satisfaction

From the above table 4.8. We can see that product innovation is positively correlated with customer satisfaction ( $r=.408^{**}$ ) at a significant level less than P<0.00. This indicates that product innovation

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

is moderately correlated with customer satisfaction in the case of BOA customers in Addis Ababa. So introducing new banking products can help to satisfy BOA customers.

#### 4.7.2. Relationship between Customer Centricity and Customer Satisfaction

Regarding Customer Centricity is concerned, the correlation is positive and moderate with the value  $R = .478^{**}$  at a significant level less than P<0.00. Of all the independent variables emotional value has the second highest correlation value with customer satisfaction considering BOA customers.

#### 4.7.3. Relationship between Price and Customer Satisfaction

As the table predict that price has higher correlation with the value R= .846\*\* at a significant level less than P<0.00. This indicates that price has the highest correlation value for customer satisfaction in BOA customers in Addis Ababa.

# 4.8. Linear Regression Analysis

Regression analysis can be used to predict the values of a dependent variable given the values of one or more independent variables by calculating a regression equation (Saunders, Lewis, & Thomhill, 2009). Multiple regression is used when we want to predict the value of a dependent variable (target or criterion variable) based on the value of two or more independent variables (predictor or explanatory variables). Multiple regression analysis allows us to determine the overall fit (variance explained) of the model and the relative contribution of each of the predictors to the total variance explained (Kothari, 2004). Hence, for the purpose of examining the effects of the dimensions of banking innovation (independent variable) on customers' satisfaction in BOA (dependent variable), multiple regression analysis is employed, and the results are presented and interpreted in this section.

# 4.8.1. Model Summary

In this model, the coefficient of determination (R2) indicates the degree of the goodness of fit for the estimated multiple regression equation. It can be interpreted as how good a predictor the multiple regression equation is likely to be (Saunders, Lewis, & Thomhill, 2009). According to (McDaniel & Gates, 2013), the adjusted R2 statistic is preferred by some researchers as it helps to avoid overestimating the impact of adding an independent variable on the amount of variability explained by the estimated regression equation. Thus, the adjusted R2 value tells us the proportion of variance in the dependent variable customer satisfaction accounted for predictors that are: dimensions of banking innovation (Field, 2013).

Table 4. 9. Model Summary of the Study

#### **Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.910a	.828	.827	.19435	

a. Predictors: (Constant), PRICE, ATPI, CUCT

Source: Own survey and SPSS v20.0 (June, 2021)

As the model summary table shows that the adjusted R2 value is 0.828. This implies that 82.8% of the variation in customers' satisfaction can be explained by the dimensions of banking innovation (namely product innovation, customer centricity and price value) i.e., independent variables. The remaining 17.2% of variation is due to other variables that are not included in this study.

# 4.8.2. ANOVA of the Study

ANOVA tests whether the model is significantly better at predicting the outcome than using mean as a "best guess" (Field, 2013); and it also shows the main and interaction effects of categorical independent variables. Put it in other words, ANOVA tells us whether the model, overall, is acceptable from a statistical perspective i.e. whether the independent variables are in a significantly good degree of prediction of the outcome variable (Hair, Bush, & Ortinau, 2004). In multiple regression analysis, the t-test is used to find out the probability of the relationship between each of the individual independent variables and the dependent variable occurring by chance (Saunders, Lewis, & Thomhill, 2009). In contrast, the F-test is used to find out the overall probability of the relationship between the dependent variable and all the independent variables occurring by chance (Saunders, Lewis, & Thomhill, 2009). If F test is greater than one, F>1, and larger enough, the variable under study is considered significant (Field, 2013).

Table 4. 10. ANOVA Result

#### **ANOVA**<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	68.599	3	22.866	605.355	.000b
1	Residual	14.203	376	.038		
	Total	82.802	379			

a. Dependent Variable: CUSTS

b. Predictors: (Constant), PRICE, ATPI, CUCT

Source: Own survey and SPSS v20.0 (June, 2021)

As the above table 4.10 of the Analysis of Variance (ANOVA) indicates, the F value of 605.355 with significance level of 0.000 implies that, the dimensions of the banking innovation (independent variable) significantly predict the customers" satisfaction to save (dependent variable). Since the F-test result of the study is 605.355 which is by far greater than one with significance of p=0.000<0.05, the probability of these results occurring by chance is less than 0.05 i.e. the variation that is explained by the model is not simply by chance. Therefore, the overall regression model is significant.

# 4.8.3. Coefficients of the Regression

Despite the fact that ANOVA is a useful test of the model's ability to explain any variation in the dependent variable, it does not directly address the strength of that relationship (Hair, Bush, & Ortinau, 2004). Thus it is better to see coefficients of the regression line to explain the strength of relationship among each dimensions of banking innovation and customer satisfaction. The sign of the coefficient indicates whether the predicted response increases or decreases when the predictor increases, keeping all other predictors constant (Hair, Bush, & Ortinau, 2004). As per Field (2013), beta values indicate the individual contribution of each predictor to the model. Similarly, standardized coefficient (beta value) indicates the degree of importance of each of independent variables dimensions.

Table 4. 11. Coefficient of Regression

#### Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval f		
		В	Std. Error	Beta			Lower Bound Upper Bo		
ľ		(Constant)	1.540	.118		13.042	.000	1.307	1.772
ı	1	ATPI	100	.026	100	-3.873	.000	151	049
ı	1	CUCT	656	.043	545	-15.364	.000	740	572
L		PRICE	1.451	.042	1.336	34.743	.000	1.369	1.533

a. Dependent Variable: CUSTS

Source: Own survey and SPSS v20.0 (June, 2021)

As the table shows that, the significant level of all variables are 0.000. This indicates that, all of them are a good predictor in influencing customer satisfaction.

According to table 4.11, the regression result shows that the price dimension of new product innovation is found to be the largest predictor ( $\beta$ =1.451) of customer satisfaction followed by attractiveness and product innovation ( $\beta$ = -0.100) and customer Centricity ( $\beta$ = -0.656). This is interpreted as, other variable remaining constant, a one-unit increase in price increases

satisfaction by 1.451 units. Contrary to these product innovation and attractiveness together with customer centricity has negative contributor with  $\beta$ = -.100 and  $\beta$ = -.656 respectively with significant at P=0.000<0.05.

# 4.9. Hypothesis Testing and Discussion of Results

To end of this chapter, hypothesis testing and its results is presented and discussed. In the beginning, five hypotheses were proposed to test the effect of banking innovation on customers' satisfaction in BOA, and based on the analysis conducted so far these hypotheses are tested and results are discussed as follows.

#### Null H.1: Product innovation has no positive significant impact on customer satisfaction.

# Alt. H: Product innovation has a positive significant impact on customer satisfaction.

Banking product innovation, with standardized Beta value of  $\beta$ = -.100 at p<0.000, is proved to have significant negative effect on customer satisfaction. This implies that, other variables held constant, a one-unit increase in product innovation decrease customers" satisfaction by -.100% units. In other words, as banking innovation increases or decreases by 1%, customer satisfaction increases or decreases by -.100%. This also implies that an improvement in product innovation negatively affects the effectiveness of banking innovation in customer satisfaction. These are not surprising effects taking into account some results found by (Pan& Zinkhan, 2006) who found that the willingness to innovate of a company did not necessarily turn into positive customer satisfaction and customer retention results. However, most studies conducted by (Dotzel, Shankar, & Berry, 2013), (Benjamin & Gustavo, 2017) and (Agolla J. E & Van Lill, 2016) proves service innovation has a direct effect on customer satisfaction. As banking innovation become more and more focused on service innovation, customer satisfaction reduces significantly, other things kept constant. Moreover, with the advancement of technology many new products are introduced in the marketplace. These products represent the manufacturer's ability to produce the product rather than satisfying the existing demand. Hence, they are technology pushed but not market-pulled. When facing the new technology, consumers ask: "Can I get it cheaper?" "Is this working fast enough or is it likely to perform well?" (King, 1995). These questions, combined with technophobia, typically affect the acceptance process of technical new products. Consumers may have some anxiety and therefore may resist dealing with a new technology (Ram et al., 1996). The higher the technological complexity of a new product, the more hesitant the consumers are in accepting it. Therefore, the null hypothesis is not rejected.

# Null H.2: Customer centricity has no Positive Significant Relationship with Customer Satisfaction

# Alt. H: Customer centricity has a Positive Significant Relationship with Customer Satisfaction

With a beta value of 0 -.656, p0.000<0.05, **Customer centricity** is found to have a significant effect on customer satisfaction in BOA. This confirms that, controlling other dimensions, an increase in the marketing innovation by one unit can enhance customer satisfaction by 0 -.656, units. Put it differently, if customer centricity increased by 100%, customer satisfaction decreased by 65.6%. According to Mello (2001) 'contemporary authors, consultants and top managements uses phrases such as customer orientation, customer-driven, listen to the voice of the consumer. However, there is a yawning gap between how well senior management think, they address customer concerns and how well they actually do'. The customers are becoming more influential as a factor in product development process, however as stated by Mello (2001) there are still issues concerning on how it is implemented in the development process. Hence, the null hypothesis is not rejected.

### Null H.3: Price has no direct positive significant relationship with customer satisfaction

# Alt. H: Price has a direct positive significant relationship with customer satisfaction

The hypothesis was formulated that price of new product innovation has positive and significant effect on customer satisfaction. The statistical regression analysis showed that Price of a new product has a positive effect of  $\beta$ = 1.451 at p=0.000<0.000 on customer satisfaction. This also implies that an improvement in price in new product innovation positively affects the effectiveness of banking innovation in customer satisfaction. Therefore, the null hypothesis is rejected. This tells us that price has a positive significant relationship with customer satisfaction.

# **CHAPTER FIVE**

# SUMMARY, CONCLUSION AND RECOMMENDATION

This chapter summarizes major findings of the study, concludes them and, based on these findings and conclusions, forwards some appropriate recommendations. Finally, limitations of the study and areas for future research are also highlighted.

# **5.1. Summary of Major Findings**

The primary aim of the study was to assess the effect of banking innovation on customer satisfaction in Abyssinia Bank of Ethiopia. For this study questionnaire was used to collect data from sample customer respondents, and out of 385 questionnaires papers was distributed to 3 purposely selected branches in Addis Ababa districts in which the new technology (virtual Banking) has been launched. From this 380 of them were returned and found usable for analysis. The collected data was analyzed using SPSS version 20 software. Overall reliability test shows Cronbach's alpha of 0.865, and other assumptions, like, correlation and multi collinearity tests that were necessary for the analysis purpose. Moreover, correlation and multiple linear regression analysis were checked and confirmed acceptable. Based on the analyses, the following major findings are summarized: Of the respondents in the sample 228 (60%) were male and the remaining 152 (40%) are female. The demographic profile of the respondents tells us that the respondents are comprised of different age, education and marital status groups. By comparing the mean value of each item it was found that respondents gave highest aggregate mean score (4.04, 4.2, and 4.314) for product innovation, customer centricity and price respectively.

The result of inferential statistics indicates that three variables product, centricity, and price of innovated product have a positive and moderate correlation with customer satisfaction in Abyssinia bank Addis Ababa district. Of this price has the highest correlation coefficient followed by product innovation and attractiveness respectively.

#### 5.2. Conclusion

This study has demonstrated that the dimensions of innovation can predict customer satisfaction, at least in the Abyssinia Bank of Ethiopia specifically around Addis Ababa District. Therefore, this study has proved that customer can be satisfied by paying a close attention to issues of product innovation, centricity and price of product innovation.

Result from Pearson correlation analysis revealed that all of the dimensions used to measure the effect of banking innovation were found to be positively correlated to customers" satisfaction with varying degrees of correlation. Centricity in innovation and price of product innovation value dimensions were found to have strong positive correlation with customer satisfaction, whereas product, centricity and price of innovated dimensions were confirmed to have significant moderate positive correlation with customer satisfaction. Therefore, it is concluded that banking innovation is positively correlated with customers' satisfaction. From multiple linear regression analysis, it is revealed that two of the proposed banking innovation dimensions have negative and significant effect on customers" satisfaction in Abyssinia. As the interview made with some customers, some of the customers are not interested in the place where the bank launched the new technology because it is limited and not found in every branches of Abyssinia Bank. On the other hand, one of the dimensions proposed, namely price dimensions of banking innovation are concluded to be positive contributors to banking innovation effectiveness and this in turn positively affects customers" satisfaction.

#### **5.3. Recommendations**

Based on the findings from the study, the discussion that followed and the conclusion drawn in line with the study objectives, the following points are recommended for Abyssinia bank of Ethiopia to its customers in the growing market both in demand and competition.

- It is suggested that managers should adopt innovative marketing strategies to enhance customer satisfaction, especially with regard to optimizing perceived product and technology to meet and exceed customers" expectations.
- Since product innovation was found to be the most important determinant of banking innovation success, it will be very fundamental to revise the place where the technology has been launched should be under study to make it more acceptable by the public in terms of accessibility, convenience and meets the needs and wants of the customer.
- Customer centricity dimension was found to have positive effect on customer satisfaction through banking innovation. Therefore, as Kotler (2013) and other suggested that companies should give considerable attention to customer needs and wants to enhance customers and maximize their profit.

- As for the managerial implications, management of Abyssinia Bank who desire to improve
  on customer satisfaction should invest much of the company's resources into product
  innovation and address other branches of the country.
- As far as the empirical finding of the research, Abyssinia Bank top management should maintain its strategy regarding attractive and innovative nature of the new product to satisfy their customer.
- The study revealed that majority of the bank customers were males. This is unfair, especially in a country where feminist groups are fighting for women empowerment. It is therefore, recommended that the banks take notice of this phenomenon and revert it to at least create some gender balance in their future.
- Banks should work much in increasing the number of users from all aspects that is from age, educational status and occupationally should do great job in making to be the users of e-banking.
- Banks need to increase the confidence of their customers as well as develop their skills and knowledge in using e-banking services. They could also employ the use of video presentations at bank branches and on television to showcase the user friendliness of such services. This will help customers to be more familiar with the e-banking services

#### 5.4. Limitation and Recommendation for Future Research

This research assessed the impact of banking innovation on customers' satisfaction in Abyssinia Bank of Ethiopia. The study focused on assessing the demand side perception on the subject and hence supply side analysis is not included. Thus one of its limitations is its single sidedness. The second limitation is associated with the representativeness of the study area. It was focused on branches located in and around Addis Ababa in which the new technology has been launched. Therefore, it is difficult to generalize to the whole country. The third limitation emanates from the complexity associated with exactly measuring the impacts of banking innovation on bank's performance, customer attraction, and retention.

Electronic banking services have become one of the mainstream banking strategies globally. Inspire of it numerous advantages there have been some challenges which hinders it optimum usage both to the public and the bank themselves. The complexities associated with e-banking patronage are so large that a single study could not discover all. Again, due to limited resources

and time this study could only sample 3 branches of Abyssinia bank of Ethiopia even though the study could have tried to cover the area in which the new technology has been launched.

This study also investigates the impact of new product innovation that have major effects on customer satisfaction of the Abyssinia bank of Ethiopia. But, the variables included in the study were not exhaustive. Future researchers could include other variables which are not included under this study.

Moreover, future researches may focus on both side analyses which are from both management and customer's perspectives. Similar studies may also be done by incorporating the influence of gender, occupation, and other demographic variables on customers" satisfaction.

Further research could also be conducted to a different marketing category, such as customer attraction, attitude and retention expanded to a larger sampling size or geographical area so that the result can generate higher outcomes of the confidence level.

The customers are becoming more influential as a factor in product development process, however as stated by Mello (2001) there are still issues concerning on how it is implemented in the development process. Therefore, it needs further research on this issues.

Further research has to be done on the issue that higher the technological complexity of a new product is, the more hesitant the consumers are in accepting it. As far as the technology issues is concerned, the customer may be hesitant in using it. This indicates that it needs further research what the reason is.

# Reference

- Abu Noman Sohel. 2013. Rana Technological implementation and online banking have increased customer service, satisfaction but reduced costs in the Banking sector of Bangladesh. World Bank (2008), World Development Report: Agriculture for development (Washington, DC). School of Management Blekinge Institute of Technology
- Ahmed, F. and Islam, M. T. (2008): E-Banking: Performance, Problems and Potentials in Bangladesh", Business Review, Vol.06, No.1&2, January to December.
- Ahamed, M. (2012), "Market Structure and Performance of Bangladesh Banking industry: A Panel Data Analysis", Bangladesh Development Studies Vol. XXXV, September 2012, No. 3
- Ahmad, A. M. (2011, February). E-banking Functionality and Outcomes of Customer Satisfaction: An Empirical Investigation. International Journal of Marketing Studies, 3(1).
- Ali, M. M. (2003):" E-Business in the age of Globalization: Bangladesh perspective", The Bangladesh Observer, September, 13.
- Ali, M., Mahboob, M. C., Sifat, E. and Yasmeen F. (2004), E-Business in the Globalized world with special reference to Bangladesh: An analysis', Business Review, Vol.4, No.1&2.
- Ali, M. M., Ahmed, R., Rahman, A., Azam, M. M. (2007), Electronic Banking in Bangladesh: Potential and Constraints, D. U. Journal of Marketing, Vol. No. 10.
- Ali, M.M., (2010). E-Business and on line banking in Bangladesh: An Analysis. AIUB Business and Economics Working Paper Series. Retrieved on November 27, 2011 from http://orp.aiub.edu/FileZone/OtherFiles/orpadmin8589994138230180310/AIUB-BUSECON-2010-03.pdf
- Ankrah, E. (2012). Technology and Service Quality in the Banking Industry in Ghana. Information and Knowledge Management, 2(8), 52 60.
- Anuar MM, Adam F, Mohammad Z (2012) Muslim consumers' perception on Internet Banking services, International Journal of Business and social Science 3: 63-71
- Andreessen, W.; Gilled, K.; Juggins, J.; Loffler, H.; Oosterveer, P.; Woodhill, J. (2007), The role of agriculture in achieving MDG1: an expert survey, (Wageningen, The Netherlands, Wageningen International).
- Annavarjula, M. and Beldona, S. 2000. Multinational-performance relationship: A review and reconceptualization. International Journal of Organizational Analysis, Vol.8 (1), PP. 48-67.
- Asgarian, F. (2009). A Comparative Study on Service Quality and Customer Satisfaction of Public Banks and Private Banks in Iran. Las Vegas International Academic Conference.

- Aunders, A., & Scholnick B. (2006), Frontiers in Payment and Settlement SystemsJournal of Banking and Finance, 30(6), 1613-1630.
- Awad EM (2000) The Structure of E-commerce in the Banking industry: An Empirical Investigation, SIGCPR2000 Evanston Illinois USA.
- Azaze A. & Haji A. (2005). The Impact of Strategic and Environmental Factors on the Malaysian Furniture Industry Export Marketing Performance. Unpublished Master's Thesis, School of Management, Selangor, Universiti Putra Malaysia.
- Balachandher KG, Santha V, Norhazlin I, Rajendra P (2001) Electronic Banking in Malaysia: A Note on Evolution of. pp: 135-147.
- Bangladesh Bank Annual Reports. 2008. "Banking Sector Performance, Regulation and Bank Supervision", Chapter 5, Dhaka.
- Bank Indonesia. (2004), Risk management application to bank services through Internet (Internet banking) (No.6/ 18 /DPNP). Jakarta: Bank Indonesia
- Batiz-Lazo, B. & Woldesenbet, K. (2006). The dynamics of product and process innovation in UK banking. International Journal of Financial Services Management, 1 (4), pp. 400-421.
- BBS (2013), Bangladesh Bureau of Statistics: Economic Census 2013 [online], Available at: <a href="http://www.bbs.gov.bd/PageWebMenuContent.aspx?MenuKey=487">http://www.bbs.gov.bd/PageWebMenuContent.aspx?MenuKey=487</a> [Last Accessed 18th July, 2013]
- Bernstel, J. B. (2000), keeping competitiveness in cyberspace. Bank Marketing, 32(2), 34-37.
- Bhattacharya, D. and T. A. Chowdhury. (2003), "Financial Sector Reforms in Bangladesh: The Next Round." Occasional Paper 22, Centre for Policy Dialogue, Dhaka.
- Blaxter, L. Hughes, C. and Tight, M. (2006) How to Research, 3rd edition, Open University Press: London
- Brac (2011), BRAC Bank's bKash Launches Mobile Banking Services in Bangladesh Proceedings of 3rd
- Berger, A. N. (2003). The economic effects of technological progress: Evidence from the banking industry. Journal of Money, Credit, and Banking, 35, 2003.
- Bryman A. and Bell E. (2007), Business Research Methods. (2nd Edn), New York: Oxford University Press.
- Bryman, A. (2008) Social Research Methods, Oxford: Oxford University
- Brew, A. (2001). 'Conceptions of research': A phenomenographic study. Studies in Higher Education, Vol. 26(3), PP. 271–285.
- Bruene J. (2002), Online banking by the numbers. Available at: <a href="http://www.online-bankingreport.com">http://www.online-bankingreport.com</a>

- Bryman A. and Bell E., (2007), Business Research Methods. (2nd Edn), New York: Oxford University Press.
- Bryman, A. (2008) Social Research Methods, Oxford: Oxford University
- Cameron, S and Price, D (2009), 'Business Research Methods', Chartered Institute of Personnel and Development, UK
- Cox, J. and Dale, B. J., (2001). Key Quality Factors in Website Design and Use: An Examination, International Journal of Quality and Reliability Management, Vol. 19, No. 7, pp. 862-888.
- Cooil, B., Keiningham, T.L., Aksoy, L. and Hsu, M. (2007), "A longitudinal analysis of customer satisfaction and share of wallet: investigating the moderating effect of customer characteristics", Journal of Marketing, Vol. 71, January, pp. 67-83
- CEPHEUS. 2019. Ethiopia's Banking Sector. RESEARCH & ANALYTICS.
- Daniel, E. (1999). Provision of electronic banking in the UK and Republic of Ireland. International Journal of Bank Marketing, 17(2), 72-82
- DBBL (2013), Dutch Bangla Bank: ATM Locations [online] available at; < http://www.dutchbanglabank.com/DBBLWeb/atmlocation.jsp> [Accessed 27th August, 2013]
- Delgado, J. and Nieto, M. J., (2004). Internet Banking in Spain some stylized Facts: Monetary Integration, Market and Regulation, I. Hasan, W. Hunter, L. Becchetti and M. Bagella (eds.), Research in Banking and Finance, Vol. 4, pp. 187-209.
- De Vaus, D. A. 2001. Research Design in Social Research. London: SAGE, Trochim, William M.K.
- https://libguides.usc.edu/writingguide/researchdesignshttps://www.google.com/search?client=opera&q=target+population&sourceid=opera&ie=UTF-8&oe=UTF-8
- Delgado, J., Hernando, I. and Nieto, M. J., (2006). Do European Primarily Internet Banks Show Scale and Experience Efficiencies, European Financial Management
- Denzin, N.K. and Lincoln, Y.S. (2000) 'The discipline and practice of qualitative research' In Denzin, N.K. and Lincoln, Y.S., (Eds) Handbook of Qualitative research 2nd Edition, London: Sage
- DeYoung, R., (2005). The Performance of Internet-based Business Models: Evidence from the Banking Industry. Journal of Business, Vol. 78, No. 3, pp. 893–947.
- Dhekra A (2009), "The adoption of electronic banking in Tunisia: an exploratory study". J. Int. Bank. Comm.Vol.14 (3), pp. 1-11.

- Donavan, D.T., Brown, T.J. and Mowen, J.C. (2004), "Internal benefits of service-worker customer orientation: job satisfaction, commitment, and organizational citizenship behaviors", Journal of Marketing, Vol. 68, pp. 128-46.
- Dr. V.K. ShobhanaAnd Ms. D. Poornima, Analysis of Gap in Service Quality Of Banks Through Servqual, Asian Journal Of Research In Banking And Finance, Vol.2.
- Easterby-Smith Mark, Thorpe Richard and Lowe Andy, (1991) Management Research: An Introduction. London: Sage Publications Ltd.
- Encarta MSN. (2007). Internet banking [Online]. Available at: <a href="http://encarta.msn.com/dictionary\_701706860/Internet\_banking.html">http://encarta.msn.com/dictionary\_701706860/Internet\_banking.html</a>.> [Accessed 25th July, 2013]
- Eriksson, K. and Vaghukt, A.F. (2000), "Customer retention, purchasing behavior and relationship substance in professional services", Industrial Marketing Management, Vol. 29, pp. 363-72.
- Ettlie, J. E., Bridges, W. P. & O'Keefe, R. D. (1998). Organization Strategy and Structural Differences for Radical versus Incremental Innovation, Management Science Journal, (12):4-11.
- Evans, P. B., and Wurster, T. S. (1997). Strategy and the new economics of information. Harvard Business Review, September-October, 71-82.
- Fasanghari M, Roudsari FH (2008) The Fuzzy Evaluation of E-Commerce Customer Satisfaction. World Applied Science Journal 4: 164-168
- Festus Olorunniwo and Maxwell K. Hsu, —A typology analysis of service quality, customer satisfaction and behavioral intentions in mass services, Managing Service Quality Vol. 16
- Fox, S. (2006). Online banking jumps 47% in 2 years. Pew Internet and American life project [Online]. Available: http://www.pewInternet.org/pdfs/PIP\_Online\_Banking\_2005.pdf.
- Gates B. (2008). Banking is essential, banks are not. Available at: <a href="http://www.slideshare.net/">http://www.slideshare.net/</a> Carolederks/banking-is-essential-banks-are-not presentation>.
- Gerrard, P., and Cunningham, J. (2003). The diffusion of internet banking among Singapore consumers. International Journal of Bank Marketing, 21, (1), 16-28
- Geroski, P. (1995). Innovation and competitive advantage. 159, OECD, Paris
- Gloria K.Q Agyapong, The Effect of Service Quality on Customer Satisfaction in the Utility Industry a Case of Vodafone (Ghana), International Journal of Business and Management Vol. 6.
- Goodwin-Jones, B. (2001). Emerging technologies accessibility and web design why does it matter? Language Learning and Technology, 5, 11-19.
- Graven M.P. (2000). Electronic money, PC magazine. August

- Grundiche, Y. (2004). Marketing Strategy and Plans: Organizational Perspectives, 2nd ed. Chicago. The Dryden Press.
- Guimaraes, T., Brandon, B. & Guimaraes, E. R. (2009, November). Empirically Testing Some Major Factors for Bank Innovation Success. Journal of Performance Management, 22(3), 20 34.
- Hackett, S and Parmanto, B. (2009), Homepage not enough when evaluating web site accessibility. Internet Research, 19, (1), 78 87.
- Halperin K (2001). Balancing act, company business and marketing. February.
- Hasan, A.H.M.S., Baten, M. A., Kamil, A. A. and Parveen, S. (2010), "Adoption of ebanking in Bangladesh: An exploratory study" African Journal of Business Management Vol. 4(13), pp. 2718-2727
- Howcroft, J.B. and Durkin, M. (2003), Relationship marketing in the banking sector: impact of new technologies. Marketing Intelligence and Planning, Vol. 21(1), Page 61.
- https://www.icommercecentral.com/open-access/impact-of-internet-banking-service-quality-on-customer-satisfaction.php?aid=85570

https://www.bankofabyssinia.com/about-bank-of-abyssinia-first-bank/

https://addisfortune.news/news-alert/abyssinia-bank-launches-virtual-banking-terminals/

https://innovationcloud.com

https://topreviewuri.com/

https://www.assemblymag.com/

- https://innovatingsociety.com/product-innovation-and-process-innovation-characteristics-differences-and-examples/
- Huda, S., Momen, M. A. and Ahmed, M. (2004):" On Line Banking System", Finance and Banking, Vo.6, No.1 and 2.
- HuseyinArasli, SalimeMehtap-Smadi, SalihTuranKatircioglu, (2005) "Customer servicequality in the Greek Cypriot banking industry", Managing Service Quality, Vol. 15.
- Jayanthy M, Umarani R (2012) Customers' perception and satisfaction towards internet banking services. International Journal of Multidisciplinary Research 2.
- Jun, M., and CAI, S. (2001). The key determinants of internet banking service quality: a content analysis. International Journal of Bank Marketing, 19, (7), 276-91.
- Katri K (2003) Adoption of electronic banking: underlying consumer behaviour and critical success factors. Case of Estonia. Retrieved on [March, 2010] from World Wide Web: http://www.lse.ac.uk/collections/EMTEL/Conference/papers/Kerem.pdf

- Keeton, W.R., (2001). The Transformation of Banking and its Impact on Consumer and Small Business. Economic Review, Vol. 86, No. 1, pp. 25-29.
- Kimery, K.M., and McCord, M. (2002). Third-party assurances: mapping the road to trust in eretailing. Journal of Information Technology Theory and Applications, 4, (2), 63-82.
- Kotler, P. (1986). Marketing Management: Analysis, Planning and Control. New Jersey: Prentice-Hall international.
- Kotler, P. (2000). Marketing Management Millennium Edition. India: Prentice House.
- Kotler, PHILIP and Armstrong, GARY. 2012. Principles of Marketing. Pearson Education, Inc., publishing as Prentice Hall, One Lake Street, Upper Saddle River, New Jersey
- Kotler, PHILIP and Armstrong, GARY. 2018. Principles of Marketing. Pearson Education, Inc., publishing as Prentice Hall, One Lake Street, Upper Saddle River, New Jersey
- Kombo, D. K., & Tromp, D. L. A. (2009). Proposal and Thesis Writing: An Introduction. Nairobi: Pauline Publications Africa.
- Kothari C R (2004) Research Methodology: Methods and techniques. New Delhi: New Age International (P) Ltd Publishers
- Kolsaker, A Payne, C. (2002). Engendering trust in e-commerce: a study of gender based concerns. Marketing Intelligence and Planning, 20 (4), 206 214.
- Kothari C R (2004) Research Methodology: Methods and techniques. New Delhi: New Age International (P) Ltd Publishers
- KPMG (1999). Internet Financial Services Survey.
- Krishnan M S, Ramaswamy V., Meyer Mary C. and Paul, D. (1999), "Customer Satisfaction for Financial Services: The Role of Products, Services and Information Technology", Management Science, Vol. 45, No. 9.
- Krishnan M. S., Ramaswamy V., Meyer M. C. and Damien P. (1999), "Customer Satisfaction for Financial Services: The Role of Products, Services and Information Technology", Management Science, Vol. 45, No. 9
- Kumbhar VM (2011) Factors affecting the customer satisfaction in e-banking: some evidences from Indian banks, Management research and practice 3: 1-14.
- Liao, Z., and Cheung, M. T. (2002). Service quality in Internet e-banking: A user-based core framework. Paper presented at IEEE International Conference on e-Technology, e-Commerce and e-Service (IEEE"05), 628-631.
- Liu, C. C. (2008). The relationship between digital capital of Internet banking and business performance. International Journal of Electronic Finance, 2(1), 18-30.

- Lin CC (2003) A critical appraisal of customer satisfaction and e-Commerce. Managerial Auditing Journal 18.
- Liu C, Arnett KP (2000) Exploring in the Factors Associated with Web Site Success in the Context of Electronic Commerce. Information and Management 38: 23-34.
- Llevwellyn, D. T. (1997). Banking in the 21st century: The transformation of an industry. Bulletin Economic and Finance, 49(11), 5-27.
- Lo Liang Kheng, The Impact of Service Quality on Customer Loyalty: A Study of Banks in Penang, Malaysial, International Journal of Marketing Studies Vol. 2.
- Lociacono E, Watson RT, Goodhue D (2000) WebQual <sup>TM</sup>: A web site Quality Instrument, Working Paper. Worcester Polytechnic Institute.
- Macharia, S. W. (2012). Relationship between service quality and customer satisfaction in retail banking in Kenya. Unpublished.
- Maenpaa, K. (2006). Clustering the consumers on the basis of their perceptions of the Internet banking services. Internet Research, 16(3), 304-322.
- Mols NP (1999) The Internet and the banks' strategic distribution channel decisions. International Journal of Bank Marketing 17: 295-300.
- Methlie, L. B. (1998). A business model for electronic commerce (1st ed.). Bergen, Norway: Norwegian School of Economics and Business Administration.
- Mishra, J. K. (2007). Constitute Dimensions of Customer Satisfaction: A Study of Nationalized and Private Banks. Revista Tinerilor Economisti (The Young Economist Journal) vol. 1, issue 8, pages 40-47
- Mollik, A. T. and M. K. Bepari. 2009. "Banking System in Bangladesh: Stable or Vulnerable? A Macro-Prudential Assessment." Journal of Business Administration, 34(3 and 4). Available at SSRN: http://ssrn.com/abstract=1513822
- Musiime A, Malinga R (2011) Internet banking, Consumer adoption and Customer satisfaction. African Journal of Marketing Management 3: 261-269.
- Mukherjee, A., and Nath, P. (2003). A model of trust in online relationship banking, International Journal of Banking Marketing, 21(1), 5-15
- Neghab MP, Heravi SM, Kahani M (2013) Simulation and Optimization of Affective Causes on Quality of Electronic Services. Journal of Mathematics and Computer Science 7: 23-32.
- Nupur JM (2010) E-Banking and Customer Satisfaction in Bangladesh: An Analysis. International Review of Business Research Papers 6: 145-156.
- Oliver, R. L. (1981), "Measurement and Evaluation of Satisfaction Process in Retail Setting", Journal of Retailing, Vol. 57, Fall, pp. 25-48.

- Oliver, R.L. (1993), "A conceptual model of service quality and service satisfaction: compatiblegoals, different concepts", Advances in Service Marketing and Management, Vol. 2.
- Ouma, B. O., Ndirangu, A. W., Munyaka, F. G., George, G. E., Mandere, E. N., Nguthuri, J. M., . . . Maswari, E. (2013). Organizational Customers' Retention.
- Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1985), "A conceptual model of service qualityand its implications for future research", Journal of Marketing, Vol. 49(4). 41-50
- Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1988), "SERVQUAL: a multiple item scale for measuring consumer perception of service quality", Journal of Retailing, Vol. 64(1).12-40.
- Parasuraman, A., Berry, L.L. and Zeithaml, V.A. (1991), "Refinement and reassessment of the SERVQUAL scale", Journal of Retailing, Vol. 67.
- Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1994), "Reassessment of expectations as acomparison standard in measuring service quality: implications for further research", Journal of Marketing, Vol. 58.
- Parasuraman A, Zeithaml Valarie A, Malhotra A (2005) E-S-QUAL-A Multiple-Item Scale for Assessing Electronic Service Quality. Journal of Service Research 7: 1-21.
- Paul J. Lavrakas, 2008. Target Population. Encyclopedia of Survey Research MethodsS https://methods.sagepub.com/reference/encyclopedia-of-survey-researchethods/n571.xml
- Pikkarainen, T., Pikkarainen, K., Karjaluoto, H., and Pahnila, S. (2004). Consumer acceptance of online banking: an extension of the technology acceptance model. Internet Research, 14, (3).
- Polatoglu, V. N., and Ekin, S. (2001). An empirical investigation of the Turkish consumers" acceptance of Internet banking services. International Journal of Bank Marketing, 19(4), 156-165.
- Qayyum A, Khan S (2007). X-efficiency, Scale Economies, Technological Progress and Competition: A Case of Banking Sector in Pakistan. Islamabad Pakistan Institute of Development.
- Rahman M (2003). Present status of e-banking in Bangladesh. Journal of the Ins. of Bankers Bangladesh. 50(1).
- Rahman M. M (2007). Innovative technology and bank profitability: The Bangladesh experience. Policy Analysis Unit (PAU), Bangladesh Bank WP 0803
- Rahman, A. (2010): "Digital Bangladesh Bank", the Daily Star, January, 13.
- Raihan, A. (2001), Privatization of Telecom Industry and Development of IT Industry in Bangladesh, A roundtable paper presented at BIBM, April 08, 2001

- Ramakrishnan, G. (2001): "Risk Management for Internet Banking", Information Systems Control Journal, Volume 6.
- Ramaseshan B., Caruana A., & Loo S. P. (2002). The Effect of Market Orientation on New Product Performance: a Study among Singaporean Firms. Journal of Product and Brand Management Journal, 11(5):45-52.
- Reserve Bank of India. (2007). Report on Internet banking [Online]. Available: http://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/21595.pdf.
- Rubera, B., & Kirca, A. (2012). Firm innovetiveness and its performance outcomes. SAGE Journal.
- Rust R. T. and Oliver R. L. (1994), Service Quality: New Directions in Theory and Practice, Sage Publications, Thousand Oaks, CA
- Saeidipour B, Vatandost T, Akbari P (2012) Study the Effect of Development of Electronic Banking on Customer Satisfaction Levels by Using Kano Model (Case study: Refah Bank of Kermanshah, Iran). International Research Journal of Applied and Basic Sciences 3: 950-960.
- Saha P, Zhao Y (2005) Relationship between online Service Quality and Customer Satisfaction, Lule University of Technology M.Sc. Program me in Electronic Commerce.
- Sakhaei SF, Afshari AJ, Esmaili E (2014). The Impact of Service Quality on Customer Satisfaction in Internet Banking. J Math Computer Sci 9: 33-40.
- Salehi M, Alipour M (2010). E-banking in emerging economy: empirical evidence of Iran. Int. J. Econ. Fin., 2(1): 201-209
- Saunders, M., Lewis, P. and Thornhill, A. (2000) Research Methods for Business Students. (3rd edn.) Pearson Education Limited
- Saunders, M.K, Lewis P. and Thornhill, A. (2007) Research Methods for Business Students, (4th edn) Essex: Pearson Education Limited
- Santomero, A. M., & Trester, J. J. (1998, March). Financial innovation and bank risk taking. Journal of Economic Behavior & Organization, 35(1), 25 37.
- Sciulli, L. M. (1998). Innovations in the Retail Banking Industry: The Impact of Organizational Structure and Environment on the Adoption Process. New York. NY: Garland.
- Soderlund, M. (2006), "Measuring customer loyalty with multi-item scales: a case for caution", International Journal of Service Industry Management, Vol. 17 No. 1, pp. 76-98.
- Siaw, I, and Yu, A. (2004). An analysis of the impact of the internet on competition in the banking industry, using porter's five forces model. International Journal of Management, Vol. 21(4), PP. 514-522.
- Silverman, D. (2010) Doing Qualitative Research, 3rd. London: Sage Publications Ltd.

- Siriluck, R., and Speece, M. (2003). Barriers to internet banking adoption: a qualitative study among corporative customers in Thailand. International Journal of Bank Marketing, 21, (6), 312-The Office of the Comptroller of the Currency. [OCC]. (1999). Internet banking: A controller's handbook [Online]. Available: <a href="http://www.occ.treas.gov/">http://www.occ.treas.gov/</a> handbook/intbank.pdf.
- Thomas, R.M. (2003) Blending Quantitative and Qualitative Research Methods in Thesis and Dissertations, Corwin Press, Inc, Sage Publications Company
- Timothy A (2012) Electronic Banking Services and Customer Satisfaction in the Nigerian Banking Industry. International Journal of Business and Management Tomorrow 2: 1-8.
- Toosi NM, Kohanali RA (2011). The study of airline service quality in the Qeshm free Zone by fuzzy logic. Journal of Mathematics and Computer Science 2: 171-183.
- Trochim, W. M.K. (2006), Research methods. [Online] Available at: <a href="http://www.socialresearchmethods.net/kb/ethics.php">http://www.socialresearchmethods.net/kb/ethics.php</a>>. [Accessed 29th December, 2012]
- United Nations Conference on Trade and Development (UNCTAD) (2002), E-commerce and development report. New York and Geneva: United Nations.
- Woodruff, R.B. (1997), "Customer value: the next source for competitive advantage", Journal of the Academy of Marketing Sciences, Vol. 25 No. 2, pp. 139-53.
- Zeithaml, V.A., Berry, L.L. and Parasuraman, A. (1988), "Communication and control processes in the delivery of service quality", Journal of Marketing, Vol. 52.
- Zeithaml Valarie A, Parasuraman A, Malhotra A (2000) A Conceptual Framework for Understanding e-Service Quality: Implications for Future Research and Managerial practice: Working Paper, Cambridge M.A, Marketing Science Institute, Report Number 00-115.
- Zeithaml Valarie A, Parasuraman A, Malhotra A (2002) Service Quality Delivery through Web Sites: A Critical Review of Extant Knowledge. Journal of the Academy of Marketing Science 30: 358-371.
- Zafar M, Zaheer A, Rehman KU, Rahman SU (2011) Impact of online service quality on customer satisfaction in banking sector of Pakistan. African Journal of business management 5: 11786-11793.

# Appendix 1 Questionnaire

#### BAHIR DAR UNIVERSITY COLLEGE OF BUSINESS AND ECONOMICS

# **Department of Marketing Management**

# Questionnaire for customers of Abyssinia Bank of Ethiopia in Addis Ababa branch

### Dear customers,

I am Master's student of Bahir Dar University department of marketing management and I am interested in studying the impact of new product innovation in Virtual Banking services in Abyssinia especially in Addis Ababa branch that may lead to higher quality of services and customer satisfaction. The first section of the questionnaire is focused on your personal profile. The second section of the questionnaire is focused on your expectation of the service quality of new product that is virtual banking in Abyssinia bank. The third part of the questionnaire focuses on your overall satisfaction and perception of the new product quality of the new product in the bank. Your responses are important for me and I would like to appreciate if you would take few minutes of your time and complete this questionnaire. Your responses will be treated confidential and used for only academic purpose.

I thank you for your concern and time. Use the following responses from 1 to 5 to answer, where, strongly Disagree to Strongly Agree. If you feel a product is not at all essential for excellent bank companies, make a "\sqrt{"}" mark in number "1". If you feel a feature is absolutely essential, make a "\sqrt{"}" in number "5". If your feelings are less strong, select one of the numbers in the middle.

#### Section I: Respondent's profile.

Please circle the appropriate letter for your answers. Please circle only one answer.

1. Please, what is your gender/sex? a. Male b. Female 2. Please select your age group below a. 20 - 29 b. 30 - 39c. 40 - 49 d. 50 and above 3. Marital status b. married c. divorced a, single 4. Select your highest academic qualification? a. Certificate b. Diploma c. Degree d. MA and above 5. What is your frequency of visiting the branch to use its service? a) Daily b. Weekly c. Two times a month d. Monthly e. More than a month 6. How long is the period, since you established relationship with the bank? a. 1-5 years b. 6-10 years c. 10-15 years d. More than 15 years

# SectionII: Questions related to new product innovation (Virtual Banking) services of BOA.

Please select the appropriate answer and make an (  $\checkmark$  ) mark in the table in front of the question answer.

1= Strongly Agree 2=Agree 3=Neutral 4=Disagree 5=Strongly Disagree

Dimensions	Q.	Statement of evaluation					
	No		1	2	3	4	5
Product	1	The new products are a minor improvement over what you currently use					
innovation	2	New products of Abyssinia bank are attractive enough and I am satisfied with them.					
	3	New products introduced by my bank are always useful to me					
	4	The technology on new products has de-motivated me not to use the products.					
	5	I recommend new banking products of Abyssinia bank to my friend					
	6	The new products of Abyssinia bank are friendly in making of universal payments.					
	7	The new products are attractive to send and receive money without limitation.					
Customer Centricity	1	New Products of Abyssinia bank are targeted on deep knowledge of your need.					
	2	New Products of Abyssinia bank are simple to use.					
new product	3	Abyssinia bank is successful in its new products in satisfying of customer needs.					
	4	New products of Abyssinia bank have created a unique experience to customers.					
	5	New products of the bank are assisting the bank to retain its customers					
	6	New products of Abyssinia bank have added value to you.					
	7	New products of Abyssinia bank have the power to attract new customers.					
	8	Customer centric new products can make you loyal to Abyssinia bank.					
	9	New products of Abyssinia bank have assisted you to save time.					
	10	New Products of your bank are aligned with your bank account security.					
Price of new	1	Prices charged on new products of Abyssinia bank are based on your expectations					
product	2	Prices of new products of Abyssinia bank are customer focused.					
1	3	You will be loyal whatever Abyssinia bank charges you on new products.					
	4	The Current price of Abyssinia bank on new products are appropriate.					
	5	The current price of new products Abyssinia bank are more expensive					
		than other banks.					
	6	Prices for new products are clearly stated to minimize customer dis satisfaction.					

	7	price of Abyssinia bank product is easily affordable			
Customer	1	My expectation before the use of virtual banking have been met with the			
satisfaction		current experience			
	2	I am completely satisfied with the use of virtual banking			
	3	I found the virtual banking instruction quite pleasant			
	4	I am satisfied the service delivery of virtual banking			
	5	Overall, I really satisfied the service quality of virtual banking provided by			
		Abyssinia Bank.			

Thank You!