



**ST. MARY'S UNIVERSITY**

**SCHOOL OF GRADUATE STUDIES**

**THE IMPACT OF SERVICE QUALITY ON CUSTOMER SATISFACTION:  
THE CASE OF ZEMEN BANK S.C**

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**JUNE 2021**

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The Case of Zemen Bank S.C**

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**A Thesis Submitted to St. Mary's University, School of Graduate Studies in  
Partial Fulfillment of the Requirements for the Degree of Master of Business  
Administration**

**June 2021,**

**Addis Ababa, Ethiopia**

**St. Mary's University**  
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## **Acknowledgement**

First and foremost, I would like to thank the Almighty God for providing me with the strength and courage I have needed throughout this journey. My heartfelt gratitude and appreciation go to my advisor, Dr. Getie Andualem, for his excellent guidance and support from study conception to completion of the thesis. Thank you so much for your insightful feedback, comments, and suggestions. Zemen Bank S.C. deserves my heartfelt appreciation and special thanks for allowing me to contact their customers, as well as branch managers and customer service officers for their assistance throughout the data collection process. Finally, I would like to express my gratitude to my family and friends for their unwavering support, love, and understanding.

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## **Abstract**

*The objective of this study to examine the relationship between service quality dimensions and customer satisfaction, the effect of service quality on customer satisfaction, and to identify the dominant service quality dimension with the strongest effect on customer satisfaction. To achieve its purpose the study employed an explanatory research design based on SERVPERF model of service quality measurement. About 156 respondents from three branches of Zemen bank have participated in filling a self-administered questionnaire that contained 22 performance statements grouped into five service quality dimensions. The collected data is coded and analyzed using SPSS 25 statistical software. The analysis includes both descriptive and multiple regression analysis. The descriptive assessment revealed that the bank got the highest score in the tangibility dimension followed by the assurance and reliability dimensions. The responsiveness and empathy dimensions have gotten relatively lower scores. The Pearson correlation revealed a strong relationship between the quality dimensions and customer satisfaction. The regression result revealed that except for empathy the other four quality dimensions have a statistically significant and positive effect on customer service. The responsiveness dimension has the strongest effect on customer satisfaction followed by assurance and tangibility. Finally, the study suggested some recommendations based on the findings.*

**Key terms:** *Customer Satisfaction; Service Quality; SERVQUAL; SERVPERF*



# CHAPTER ONE

## 1. INTRODUCTION

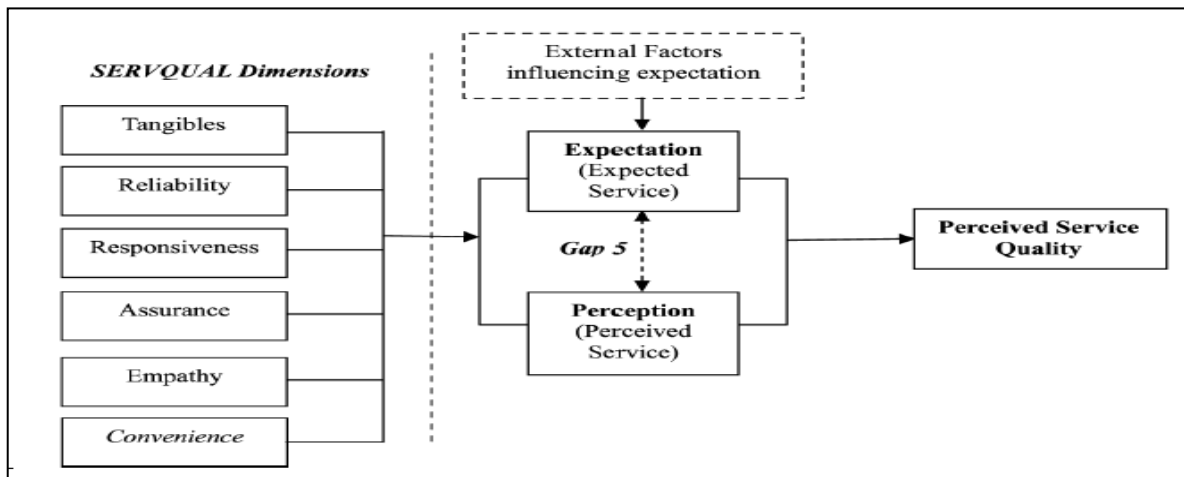
### 1.1. Background of the Study

Quality in service is very important especially for the growth and development of service sector business enterprises (Grönroos, 1982; Shaon & Rahman, 2015). It works as a factor of customer satisfaction (Josee Bloemer & Ruyter, 1998). With the increase of the importance of the service sector banking industry is highly competitive, with banks not only competing among each other; but also with non-banks and other financial institutions (Kaynak & Kucukemiroglu, 1992). Most bank product developments are easy to duplicate and when banks provide nearly identical services, they can only distinguish themselves based on price, service, product, and quality (Kaynak & Kucukemiroglu, 1992). Therefore, customer retention is potentially an effective tool that banks can use to gain a strategic advantage and survive in today's ever-increasing banking competitive environment.

The argument for customer retention is relatively straightforward. It is more economical to keep customers than to acquire new ones. The cost of acquiring customers to “replace” those who have been lost is high (Cohen et al., 2007; Gallo, 2014). This is because the expense of acquiring customers is incurred only in the beginning stages of the commercial relationship (Reichheld & Kenny, 1990). In addition, longer-term customers buy more and, if satisfied, may generate positive word-of-mouth promotion for the company. Additionally, long term-customers also take less of the company's time and are less sensitive to price changes (Oliver, 1999).

Parasuraman, Zeithaml, & Berry (1985) and Zeithaml, Parasuraman, & Malhotra (2000), noted that the key strategy for the success and survival of any business institution is the deliverance of quality services to customers. Multiple studies have confirmed that the quality of services offered determines customer satisfaction and long-term loyalty (Kang, 2006; Karatepe & Ekiz, 2004; Munawar & Mariam, 2014; Nautiyal, 2014; Parasuraman et al., 1988; Seth et al., 2005).

**Figure 1: SERVQUAL model**



Based on the figure above, Parasuraman et al., (1985), has initially identified 97 attributes that were found to have an impact on service quality. These 97 attributes were the important criteria to enhance the customers' expectations and perceptions of delivered service. However, all these attributes fit into ten dimensions and later being condensed into five dimensions of service quality Parasuraman et al., (1988), because of the overlap across the ten criteria. Finally, the best five dimensions to measure the service quality are; tangibility, reliability, responsiveness, assurance, and empathy (Parasuraman et al., 1988). Parasuraman et al. (1985) also found that the customer's perception of service quality depends on the range of gap distance between the customer expects before receiving a service in a service center and what he or she perceives after to see and use the service by their own. Thus, service quality is in fact defined as the gap between customers' expectation of service and their perception of the service experience. A service quality gap exists when there are shortfall occurs in which the service provider would like to close (Kang, 2006). This model is widely used to measure perceived service quality in various industries such as retailing, restaurants, banking, telecommunication, services, airline, catering, hotels, hospitals, automotive, education, and so on (Nahida, 2019; Nautiyal, 2014).

The study employed a modified version of SERVQUAL model called SERVPERF, which focuses only on the perception of customers instead of expectation-perception gap (Adil et al., 2013; Cronin & Taylor, 1994). Rasyida et al. (2016) and Tesfaye (2021), have applied the SERVPERF model for similar study.

The study focuses on the impact of service quality on customer satisfaction in the case of Zemen Bank. Zemen bank S.C. provides four major services; Credit or loan facility, International Banking,

Deposit Scheme, and Payroll services for business customers (Zemen-Bank, 2020). Moreover, the bank is providing ATM and other e-banking services. Some of the credit lines offered include mortgage loans, term loans, letters of credit facilities, merchandise loans, and personal loans. The other service the bank renders is deposit services including demand deposit, saving deposit, and time or fixed deposit. The bank also renders international banking services like; opening letters of credit for importers, handling of incoming LCs for exporters, purchase of outward bills, purchasing and selling of foreign currency-denominated notes, receiving and transferring foreign currency payment by swift and handling incoming and outgoing international letters of guarantee (Zemen-Bank, 2020). The bank has shown a strong performance in three key areas that are critical for any commercial banking operations, namely collecting deposits, providing loans, and securing foreign exchange to be able to offer international banking services (Zemen-Bank, 2020). Zemen Bank joined the financial industry with a unique model that emphasizes niche market by setting minimum average balance. Every account holder of the bank has to maintain the minimum average balance requirement or else they will be charged a fine which varies according to agreed minimum balance (Zemen-Bank, 2020).

## **1.2. Statement of the Problem**

The interest in focusing on long-term and profitable customers and the need to better understand their behaviors have changed the view of marketers about the marketplace. Traditionally, they have been trying to acquire new customers and currently other firm's customers, which needed heavy price-oriented promotions and mass advertising (Cohen et al., 2007; Gallo, 2014). Customers, on the other hand, have access to a diverse range of services and products, and if none of them meet their needs, they can choose companies that provide them with timely and high-quality goods or services. Therefore, companies need to use unique strategies to retain their current customers instead of customer acquisition which needs more investments. To reach this purpose new and different tools and mindsets are required (Winer, 2001). Also considering human and organizational resources as much as technological capabilities are necessary to manage good relationships with the customers by improving service quality (Keramati et al., 2010). Service quality and client satisfaction are becoming a lot of attention focus area of all banking establishments around the world as a result of it understood that service quality is also a vital live of firm performance.

One of the determinants of the success of a firm is how the customers perceive the resulting service quality, as the perceived service quality is the key driver of perceived value (Nautiyal, 2014). It is the perceived value, which determines customer satisfaction. Many firms including banking industries begin to track their customers' satisfaction by measuring their level of service quality perceived by

their customers. Holmlund & Soren Kock (1996), found five major categories of service quality problems in the retail banking industry. These are problems related to access lack of (ATM, branches, early closing hours); and; lack of information (exit barriers and customer orientation). These highly lower customers' perception of the quality of service offered and hence reduces the bank's profitability and credibility. As different works of the literature indicated in different countries, the gap between customers' perceptions and expectations showed that the customers' perceptions will constantly lower than their expectations. This may arise due to lack of technology, poor product and service quality, poor marketing strategy, unnecessary bureaucracy, and information gap.

The banking industry in Ethiopia is more competitive than ever. Furthermore, many banks are lining up to join the industry in the near future. Customer retention has become difficult as a result, particularly in urban areas where financial access has become oversaturated. Because of the high concentration of banks in urban areas, banks compete to retain as much of their existing customers business as possible. Zemen Bank, as an industry participant, faces the same challenge in retaining customers unless it significantly differentiates its service quality. As a result, it is critical to assess the bank's current service quality level and investigate the impact of service quality on customer satisfaction.

Spreng & Olshavsky (1993), stated that customer satisfaction or dissatisfaction is considered to be the result of comparison between the pre-use expectations that a customer has about the product or service and the post-use perception of product or service performance. The most widely used model to measure perceived service quality known as SERVQUAL was developed by Parasuraman et al. (1985, 1988). According to this model, the five dimensions of service quality are Tangibles, Reliability, Responsiveness, Assurance, and Empathy. However, as the SERVQUAL model include perception and expectation gap analysis; this study adopted the SERVPERF model which is based on the customer perception of the performance of the bank on the five dimensions of service quality (Cronin & Taylor, 1994; Tesfaye, 2021).

Overall, the study seeks to examine the effect of service quality on customer satisfaction, measure the service quality level, and identify the dimensions that have the strongest effect in the case of Zemen Bank. In doing so, the study will apply SERVPERF method.

### **1.3. Research Questions**

The research study seeks to address the following research questions:

1. To what extent customers are satisfied with the service quality of Zemen Bank?
2. What is the effect of service tangibility of Zemen bank on customer satisfaction?
3. What is the effect of service assurance of Zemen bank on customer satisfaction?
4. What is the effect of service responsiveness of Zemen bank on customer satisfaction?
5. What is the effect of service empathy of Zemen bank on customer satisfaction?
6. What is the effect of service reliability of Zemen bank on customer satisfaction?

### **1.4. The objective of the Study**

#### **1.4.1. General Objectives**

The general objective of the study is to measure the effect of service quality on customer satisfaction in Zemen Bank using the SERVQUAL/SERVPERF model.

#### **1.4.2. Specific Objectives**

The specific objectives of the study are:

- To evaluate the extent of customers' satisfaction with the service quality of Zemen Bank.
- To examine the effect of service tangibility of Zemen bank on customer satisfaction.
- To examine the effect of service assurance of Zemen bank on customer satisfaction.
- To examine the effect of service responsiveness of Zemen bank on customer satisfaction.
- To examine the effect of service empathy of Zemen bank on customer satisfaction.
- To examine the effect of service reliability of Zemen bank on customer satisfaction.

### **1.5. Significance of the Study**

The study is expected to provide insight into customer satisfaction of service quality at Zemen bank. The study findings could serve as decision input to the management of Zemen Bank in identifying the existing strength or weakness of service quality delivery and level of customers satisfaction experienced by customers during their visit to the company's, helpful to other employees to sight out their problem In addition to the above, this study contributes to existing theories by confirming or adding value to the relationships that are involved in customer satisfaction, service quality and SERVPERF dimensions. It provides results that could be useful to managers in business organizations for strategic planning.

## 1.6. Scope of the Study

As the topic indicates the research revolves around the concept of service quality and its relationship with customer satisfaction. The study examines banking service quality only from customers' perspective and due to lack of resource financial and time, the researchers decided to limit this study to three branches of Zemen Bank namely Arada, Bole, and Jemo branches. The data for the study is collected in the month of May, 2021.

## 1.7. Limitations of the Study

The researcher faced the following limitations; first, financial constraint, the insufficient fund tends to impede the efficiency of the researcher in sourcing for relevant materials, literature or information, and the process of data collection (internet, questionnaire, and interview). Second, time constraint as the researcher simultaneously engaged in this study with other academic work. This consequently cut down on the time devoted to the research work. As a result, the study confined to three branches of Zemen Bank which are the Arada branch, Bole branch, and Jemo branch.

## 1.8. Operational Definitions of Key Terms

- **Services:** service is an act or performance offered by one party to another. Although the process may be tied to a physical product, the performance is essentially intangible and does not normally result in ownership of any of the factors of production (Wirtz & Lovelock, 2016).
- **Customer satisfaction:** satisfaction in the banking industry means that the product or service which is offered to the customer makes him or her expectation (Wang et al., 2004).
- **Customer:** refers to a generic term that anybody who receives a service or product from some person or group of people. In this study customers are those who use banking services. (Parasuraman et al. 1988).
- **Loyalty:** loyalty has to be defined as an internal intensity of customers towards sticking with or switching from their current supplier-an inherent value (Abdollahi, 2007).
- **Service expectations:** desired services, adequate services, predicted services, and a zone of tolerance that falls between the desired and adequate service levels (Wirtz & Lovelock, 2016).
- **Perceptions:** refer to what bank customers experienced with the service quality of the bank (Wirtz & Lovelock, 2016).

- **Service quality:** can be defined as the difference between customers' expectations for service performed before the service encounter and their perceptions of the service received (Parasuraman et al. 1988).

## CHAPTER TWO

### 2. LITERATURE REVIEW

#### 2.1. Introduction

Customer satisfaction is often defined as the customers' post-purchase comparison between pre-purchase expectation and performance received (Oliver, 1980; Zeithaml et al., 1993). Many researchers present that service quality has a positive related relationship with customer satisfaction. In other words, service quality influence customer satisfaction and vice versa customer satisfaction influence quality (Jun and Cai, 2010). There is no doubt that in the world's today intensive competition, once a business wants to survive, they have to improve the service quality that helps them to achieve a different advantage over their rivalries. Service quality, therefore, has become one of the critical factors for satisfying and retaining valued customers in every industries and banking is not an exception. Many scholars indicate that high service quality results in customer satisfaction and loyalty to the product or service. A satisfied customer will have the willingness to recommend someone else, reduction in complaints and the bank can achieve customer retention. Furthermore, a satisfied customer is likely to be a loyal customer who will give repeating business to the firm (Heskett et al., 1997). More importantly, according to Bedi (2010), the cost of retaining existing customers by improving the quality of products and services is perceived to be significantly lower than the cost of achieving new customers.

There are many service quality models but scientists are not of one mind about these models and measurements. Service quality has different dimensions regarding the various service sectors (Pollack, 2009) Nevertheless, service quality measurement enables managers to recognize quality problems and enhance the efficiency and quality of services to exceed expectations and reach customer satisfaction. Service quality perception wildly has been studied in the last three decades. Zeithaml (1988) defines service quality as an assessment of customer from the overall excellence of service.

During the last three decades, a lot of scientists work on service quality and list out four major measurements of service quality Model

The literature section of the paper tries to look at the general literature concerning the concepts. Principles and characteristics service quality and customer satisfaction. In addition, different models,



public organization practices, and challenges were reviewed under theoretical literature. In the next parts, empirical literature that deals with an overview of what has been done so far on the specific area of the researcher's interest at hand.

## **2.2. Theoretical Literature Review**

During the last three decades, researchers work on service quality measurement and many measurements suggested.

### **2.2.1. Nordic Model**

Early conceptualization of service quality was formed by Gronroos (1982, 1984), he defined service quality by technical or outcome (what consumers receive) and functional or process-related (how consumers receive the service) dimensions (Gronroos, 1982, 1984, 1988). Image build-up by the technical and functional quality and effect of some other factors (marketing communication, word of mouth, tradition, ideology, customer needs, and pricing). Nordic model is based on the disconfirmation paradigm by comparing perceived performance and expected service. This was the first attempt to measure the quality of service. Gronroos model was general and without offering any technique on measuring technical and functional quality. Rust & Oliver (1994), tried to refine the Nordic model by The Three-Component Model. They suggest three components: service product (i.e., technical quality), service delivery (i.e., functional quality), and service environment but they did not test their model and just a few support have been found

### **2.2.2. Multilevel Model**

Because inconsistent reported in SERVQUAL factors, Dabholkar, Thorpe, & Rentz (1996), proposed the multilevel model for service quality. They suggest changing the structure of service quality models to a three-stage model: overall perceptions of service quality, primary dimensions, and Sub dimensions. This model was for evaluating service quality in a retail store. Although multilevel propose a new structure, it needs to generalize for different areas and consider the effect of some other factors such as environment, price, etc.

### **2.2.3. Hierarchical Model**

In 2001 Brady and Cronin adopted service quality perception based on evaluation by customers in three dimensions: 1. Interaction Quality (i.e., functional quality) 2. Physical Environment Quality 3. Outcome Quality (i.e., technical quality) (Gronroos, 1984; Rust & Oliver, 1994). In addition, they accept multilevel service quality perceptions and multidimensional (Dabholkar, et al., 1996). Service quality has three primary level dimensions in this conceptualization such as interaction, environment, and outcome with three sub-dimensions for each one: Interaction (Attitude – Behavior – Expertise),

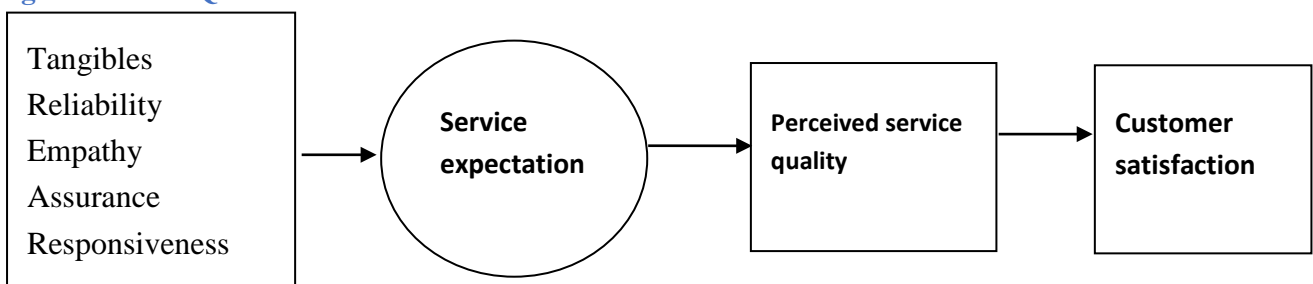
Environment (Ambient Conditions – Design – Social Factors), and Outcome (Waiting Time – Tangibles – Valence).

#### 2.2.4. SERVQUAL Model

Based on the disconfirmation paradigm, Parasuraman, Zeithaml, & Berry (1985) made the new model of service quality measurement. They try to cover the weakness of the Nordic model by offering a new way form ensuring service quality. In the SERVQUAL model, they suggest using the gap or difference between the expected level of service and delivered level of service for measuring service quality perception with five dimensions: Reliability, Responsiveness, Assurances, Empathy, and Tangibility (Figure 2). SERVQUAL is an analytical tool, which can help managers to identifying the gaps between variables affecting the quality of the offering services (Seth et al., 2005). This model is the most used by marketing researchers and scientists, although it is an exploratory study and does not offer a clear measurement method for measuring gaps at different levels.

SERVQUAL is a multi-item scale developed to assess customer perceptions of service quality in service and retail businesses. Originally developed from the GAP model, SERVQUAL took shape and was developed during the '80s by Parasuraman, Zeithaml, and Berry. These dimensions mainly focus on the human aspects of service delivery (responsiveness, reliability, assurance, and empathy) and the tangibles of service.

**Figure 2: SERVQUAL model**



The tangibility of service is a scale that measures how dependable a customer views a service provider to be based upon the quality of its most visible attributes. Tangibles can include physical facilities, equipment, and staff appearance. Physical quality refers to the tangible aspects of the service. Corporate quality refers to how current and potential customers, as well as other public, view (image) of the service provider. Interactive quality concerns the interactive nature of the service and refers to a two-way flow that occurs between the service provider and the customer Reliability of service can be defined as the ability of the service provider to perform the promised service dependably and accurately. For example, for the customers who come to Zemen bank to deposit, the Bank promised that the service only takes an hour, so the company needs to keep the promise and

cannot make the customer wait long for their depositing. Responsiveness is reflected in the willingness to help customers and provide prompt service. Besides that, assurance quality is knowledge and courtesy of employees and their ability to inspire trust and convey confidence among customers. For example, the customer service officer at Zemen Bank can show respect for any customer who comes to the Bank and being polite to them. Empathy quality which is the last dimension of the SERVQUAL Model is caring, the ability to be approachable, and giving individual attention that the company can provide to the customers.

#### **2.2.5. Related Theories**

As a management philosophy, the Theory of constraints (TOC), as described by Holmstrom (2007), states that the use of the principles underlying the problem-solving paradigm leads to significantly increased customer service quality with respect to all five dimensions of customer service quality. By using the principles underlying this paradigm, problems encountered as a result of incorporating new technology or problems with the assessment of proposed changes to the service system can be minimized or eliminated, leading to improved customer service quality. The use of the principles underlying the logistics paradigm was found to have a significant effect on each of the dimensions with the exception of tangibles. Under the logistics paradigm, a system-wide view must be taken. Having this broad perspective leads to better customer service quality.

The other theory related to quality service is the generic theory of service quality. According to Senge et, al. (1993), the generic theory of service quality and capacity has been elaborated in a systems dynamic model. The service quality/capacity model stimulates a service center where customers enter the system and after a waiting time, are served by the center "s employees. Service capacity i.e., service personnel, years of experience, skill, and motivation is required to provide that service; the desired amount of capacity is determined by the desired level of quality, and the desired throughput of the service center. If a particular request is not satisfied with the customer's standard, it comes back into the service backlog and has to be reprocessed as rework.

The other important theory in relation to the issue is disconfirmation theory, which argues that satisfaction is related to the size and direction of the disconfirmation experience that occurs as a result of comparing service performance against expectations". Ekinci et, al., (2004) clarify that it is a judgment that a product or service feature, or the product or service itself, provided a pleasurable level of consumption-related fulfillment, including levels of under-or over-fulfillment.

## **2.3. Empirical Review**

### **2.3.1. Customer Loyalty**

In defining the loyalty concept, we first have to differentiate between repeat purchasing behavior and brand loyalty. In our view, repeat purchasing behavior is the actual rebuying of a brand. Only the behavior of rebuying is important, regardless of the consumer's degree of commitment to the brand. However, brand loyalty not only concerns the behavior of rebuying but also takes into account that actual behavior's antecedents. Bloemer & Ruyter (1998), supported the notion that repeat purchasing or visiting sequence, as a method for measuring loyalty, must not be the only factor for assessing loyalty. For instance, the low degree of repurchasing could mean that the customers do not need any other products (i.e. mortgage loan) or that the variety of products can not satisfy their needs. Of course, this factor is very important but it is not the only one needed to be analyzed.

### **2.3.2. Customer Satisfaction**

Drucker, (1954), underpinned that the principal purpose of a business is to create satisfied customers. According to Oliver (1999), "Customer satisfaction is generally described as the full meeting of one's expectations". Fornell (1992), defined customer satisfaction as an overall evaluation of the total purchase experience compared with pre-purchase expectations over time. Oliver (1999) regarded satisfaction as a fulfillment judgment, focused on a product or service, which is evaluated for one time or repeated consumption. Oliver (1999) claimed that satisfaction is derived from the Latin *satis* (enough) and *facere* (to do or make). Karatepe & Ekiz (2004), argued that unresolved problems may lead to permanent loss of customers and negative word-of-mouth. Empirical research conducted by Maxham & Netemeyer (2002), proved that satisfied complainants tend to have the intention to repurchase, to recommend new customers and feel, in general, satisfied from the entire organization. Peter & Olson (2010), argued that pre-purchase expectations are believes about the expected quality and functionality of the product while disconfirmation deals with the differences between pre-purchase expectations and post-purchase opinion. This means that when the perceived opinion, after the purchase of the product/service, is higher than the pre-purchase expectation the customers are satisfied. When happens the opposite, then the customers are dissatisfied, and the company deals with "negative disconfirmation".

### **2.3.3. Service Quality**

As it is already referred, research in customer satisfaction is often associated with service quality dimensions. Bitner and Hubbert (1994) defined service quality as the customer's overall impression about the perceived superiority of a company and its products/services while satisfaction is defined

as the feeling of a customer after the usage and the purchase of a product or service. Many authors have argued about the relationship between customer satisfaction and service quality. Some of them like Taylor & Baker (1994) considered them as totally different elements that should be treated as equivalents in models of customer decision-making. Levesque & McDougal (1996) stated that there are two overriding dimensions of service quality. The first concerns the core aspects of the service (e.g. reliability) and the second concerns the process aspects of the services (e.g. responsiveness, assurance). The outcome of the analysis of this survey confirms that these two dimensions are antecedents of customer satisfaction. Banking services are intangible and due to this, it is very difficult for the customers to assess service quality. This is why (Bitner 1990) stated that the customers make conclusions about service quality based on tangible things like the premises and the physical layouts which surround the service environment. Bloemer et al. (1998)

#### **2.3.4. Relationship between Satisfaction and Service Quality**

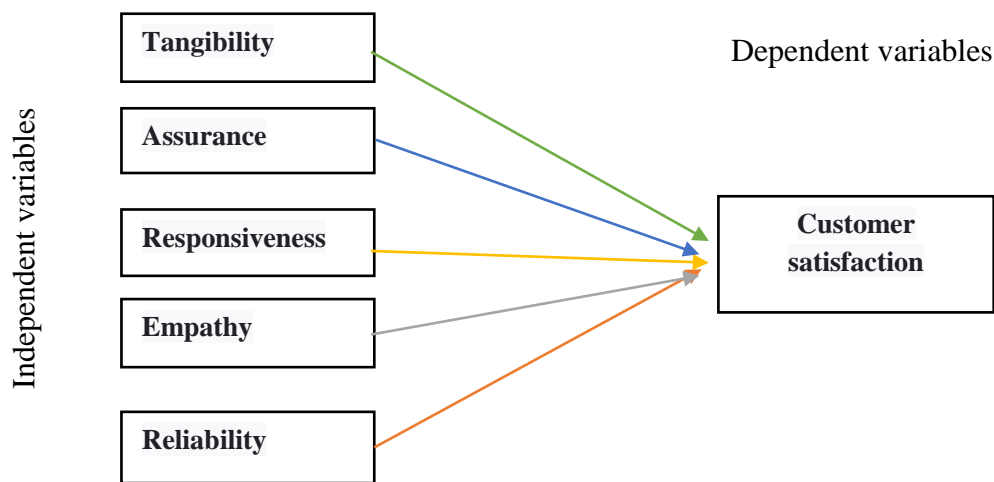
Bloemer et al. (1998) argued that there is literature confusion about the relationship between customer satisfaction and service quality. They found that service quality can be taken as a determinant of customer satisfaction. The bank customers have certain expectations before their contact with the bank. They develop perceptions during their service from the bank and they compare these perceptions with their expectations. While customer satisfaction and service quality have similar characteristics they have some basic differences. In the first place, it is argued that to form a satisfaction perception, usage of service is a prerequisite, whereas service quality does not need necessarily the experience of the service provided. Hallowell (1996), assumed that there is a positive relationship between customer satisfaction, service quality, and loyalty. Bebli (2005), argued that a respective number of researchers have found that service-related factors like speed, efficiency, access, and services are ways of attracting, satisfying, and retaining customers. The overall bank customer perceived satisfaction is confirmed and reflected in switching behavior and customer loyalty. Bloemer et al. (1998) used multivariate regression analysis, and they proposed a model that describes the relationship between service quality, satisfaction with the bank, and loyalty, taking into account the effect of the image that a bank has in the market. Their results reveal that image is indirectly related to bank loyalty via perceived quality. Service quality is both directly and indirectly related to bank loyalty via satisfaction, and finally, that satisfaction has a direct effect on bank loyalty.

## 2.4. Conceptual Framework

The conceptual framework elucidates the underlying process, which is applied to guide this study. The SERVQUAL model is the most widely applied model for measuring service quality and customer satisfaction using the service quality dimensions. To know the perceived service quality, customers' service perception and expectation will be measured using service quality dimensions. And finally, the perceived service quality indicates the level of customer satisfaction.

However, SERVQUAL requires measuring the gap between perception and expectation which is cumbersome. Cronin & Taylor (1994), after in-depth analysis and investigation, come up with SERVPERF as a higher measurement of service quality for service providing industry. Primary, SERVPERF is found to be superior to the SERVQUAL scale for having the ability to clarify greater variance within the overall service quality measured through the utilization of a single-item scale (Cronin & Taylor, 1994). SERVPERF is efficient in reducing the number of things to be measured by five-hundredths than SERVQUAL (Babakus & Boller, 1992). Moreover, in line with Cronin and Taylor (1994), their performance-based mostly SERVPERF scale may be a higher technique of measurement service quality.

**Figure 3: Conceptual framework of the study**



Adopted from Cronin and Taylor (1994), (Parasuraman et al., 1985)

The five dimensions of SERFVERF (SERVQUAL's too) are defined as follows.

**Tangibility:** Represents the service physically. This includes physical facilities, equipment, and therefore the physical look of an employee. Parasuraman (1985) outlined corporeality as the look of physical facilities, equipment, personnel, and written materials.

**Reliability:** Represents delivering on a promise. Parasuraman et al (1988) outlined reliability as the most important consider conventional service. This refers to the ability to supply the precisely needed service in step with given specifications and conditions. Reliability depends on handling customers' service problems; playing services right the first time; give services at the promised time and maintaining error-free records (Parasuraman et al, 1988).

**Responsiveness:** Represents the willingness to help customers. The inclination and disposition of the workers to serve clients quickly and properly, responsiveness outlined as the disposition or readiness of staff to provide service. It involves the timeliness of services (Parasuraman, 1985).

**Assurance:** Represents inspiring trust and confidence. Feelings of trust and confidence in addressing the organization reflect the workers' information and skill and their ability to create sureness also as confidence in the within the. Assurance is information and courtesy of the staff and their ability to inspire trust and confidence (Parasuraman, 1985).

**Empathy:** Represents treating customers as an individual. It includes understanding the customers' desires, taking care of them individually, and showing them all styles of sympathy and feeling, observing them as shut friends and distinguished clients (Parasuraman, 1985). It involves giving customers individual attention and staff who perceive the wants of their customers and convenience business hours (Parasuraman, 1985).

## **2.5. Hypotheses of the Study**

Based on the literature the following alternative hypothesis is developed. The literature suggest mostly all the service quality dimensions have a significant and positive effect on customer satisfaction (Bethelihem, 2015; Dejene, 2017; Tesfaye, 2021; Yarimoglu, 2014).

H1: Tangibility has a significant positive effect on customer satisfaction.

H2: Assurance has a significant positive effect on customer satisfaction.

H3: Empathy has a significant positive effect on customer satisfaction.

H4: Responsiveness has a significant effect impact on customer satisfaction.

H5: Reliability has a significant positive effect on customer satisfaction.

## **CHAPTER THREE**

### **3. RESEARCH METHODOLOGY**

#### **3.1. Introduction**

This chapter of the study will describe the type and design of the research, population and sampling techniques, instruments of data collection, a procedure to follow to collect the data, and methods used to analyze the data.

#### **3.2. Description of the Study Area**

Zemen bank S.C. is a private company that emerged in Ethiopia and started its operation in the year 2008 (Zemen-Bank, 2020). Currently, Zemen bank S.C. renders four major services; Credit or loan facility, International Banking, Deposit Scheme, and Payroll services for business customers (annual report, 2009). Short opening hours of bank branches and long waiting times dissatisfied customers. But Zemen bank's working hours are long compared to some banks (from Monday to Friday 8:00 AM to 7:00 PM and Saturdays 8:00 AM to 5:00 PM). Currently, the Bank has a total of 58 branches the study area is focused on the Arada , Bole, and Jemo branches.

#### **3.3. Research Approach**

In this study, a quantitative approach of doing research is employed as recommended by Creswell (2009) as the study variables are quantifiable using Likert Scale method. The study examined the impact of service quality on customer satisfaction. Both service quality and customer satisfaction are measured using SERVPERF instrument. The instrument is used to record perception of the respondents about the quality of service they receive in their respective banks and their satisfaction.

#### **3.4. Research Design**

A research design is the overarching research framework that guides the logical enquiry that fits the research questions (Kothari, 2004; Vaus, 2001). Therefore, it is imperative to consider the nature of the research questions raised the objectives of the study as well as the overall context of the research problem when deciding on a study approach and design (Kothari, 2004). Therefore, the study employed an explanatory study design. Explanatory design involves investigation of the cause and effects relationship between a set of independent variables and dependent variable. It also serves to test hypothesis (Creswell, 2013).



### **3.5. Sample Size and Sampling Procedure**

#### **3.5.1. The Target Population of the Study**

The population targeted for the study comprised of about 20,600 customers at three branches of Zemen bank namely Arada, Bole, and Jemo banking centers.

#### **3.5.2. Sample Size and Selection**

Since it is not possible to contact all the target customers its apparent that taking a representative sample respondent for the study. There are various formulas to determine the sample size for a given population. Among these Yamane's formula is widely used to determine sample size (Israel, 1992; Yamane, 1967). The sample size for this study is computed as follows considering a 5% error margin.

$n = \frac{N}{1+N(e)^2}$ , Where n is the sample size, N is the population size, and e is the error margin.

$$n = \frac{20,600}{1 + 20,600 (0.005)^2} = 177$$

Therefore, for this study 177 sample size is determined.

#### **3.5.3. Sampling Technique**

The study employed a convenience sampling method because of the study's budget and time constraints, as well as the feasibility of taking a random sample in a service environment like a bank. As a result, the sample respondents will be approached at the three targeted branches based on their convenience.

### **3.6. Data Collection Methods and Source of Data**

There are two classifications for collected data which are primary and secondary data. Primary data can be collected for instance through an interview, observation, and questionnaire. On the other hand, secondary data is the information collected from the studies done before and can be collected from the internet or libraries. The data for this study is primary data which is collected through a well-designed and exhaustive questionnaire administered to customers of Zemen bank. The questionnaire is Likert scales of 1-5 (1 strongly disagree, 5strongly agree), and distributed to the respondents from customers of Zemen Bank. The Questionnaire had two sections, the first part

captured demographic information of the respondent and the second part entailed the effect of service quality on customer satisfaction on service delivery. The questionnaire is anonymous as no personal information of the respondents is collected.

### 3.7. Reliability and Validity

Bless & Higson-Smith (2016) highlight that reliability is “concerned with the consistency of measures”, thus, the level of an instrument’s reliability is dependent on its ability to produce the same score when used repeatedly. The validity on the other hand refers to whether an instrument measures what it is supposed to measure, given the context in which it is Applied (Bless & Higson-Smith, 2016). To assure validity, questionnaires were designed based on previous studies’ questionnaires and review of related literature. In addition, a reliability test is undertaken using Cronbach’s alpha.

### 3.8. Data Analysis Methods

The study largely depends on primary data, which is collected through survey method by using SERVPERF instrument. The respondents are asked to rate each statement using Likert scales of 1 to 5 (1 strongly disagree, 5 strongly agree). The secondary data are collected from the internet, Zemen bank annual report, brochures, and NBE is used to support the primary data analysis. The mean and standard deviation of each SERVPERF statement is calculated for perception of customers on the service quality of Zemen bank. The average dimension SERVPERF scores (for all five dimensions) are divided by five to obtain the unweighted score of service quality. The five dimensions are ranked by the respondents on the level of importance for determining the quality of Zemen bank service.

The regression analysis is undertaken based on the average unweighted SERVPERF scores. The regression model includes customer satisfaction as a dependent variable and service quality dimensions as independent variables. The hypothesized relationship is expressed as follows:

$$CustSatfn = \alpha + \beta_1tangible + \beta_2assure + \beta_3ephath + \beta_4respons + \beta_5reliabl + \varepsilon$$

### 3.9. Ethical Clearance

The researcher has sought voluntary participation and consent of the respondents before they engage in the research. Protect the privacy of the participants-confidentiality (respondents are ensured that personal information will not be shared). The respondents remained anonymous throughout the study using ID numbers. In the interpretation of data, researchers provided an accurate account of the in-

formation and do not use language or words that are biased against persons because of gender, sexual orientation, ethnic group, disability, or age.

## CHAPTER FOUR

### 4. DATA ANALYSIS

#### 4.1. Introduction

This chapter deals with the analysis of data collected from respondents using both descriptive and inferential statistics and the discussion of findings and results. A total of 177 questionnaires have been distributed and 163 of the questionnaires have been filled and returned. Among the returned questionnaires 7 questionnaires were incomplete to be considered for the study. Therefore, a total of 156 questionnaires have been correctly filled and used for the analysis. The collected data is coded and analyzed using IBM SPSS 25 software. The demographic information of the respondents is summarized using frequencies and percentages. Descriptive statistics analysis is made for each dimension of service quality and customer loyalty. Regression analysis, correlation, and hypothesis testing is conducted. Finally, the findings of the study and implications are discussed.

#### 4.2. Demographic Information of the Respondents

The respondents of the study are composed of various demographic backgrounds. The following table summarizes the demographic characteristics of the participants of the study.

Table 1: Demographic profile of respondents

Item	Category	Frequency	Percent	Cumulative Percent
Sex	Male	97	62.2	62.2
	Female	59	37.8	100.0
	Total	156	100.0	
Age	18-30	23	14.7	14.7
	31-50	122	78.2	92.9
	Above 50	11	7.1	100.0
	Total	156	100.0	
Education level	Primary	8	5.1	5.1
	Highschool	10	6.4	11.5
	Certificate	14	9.0	20.5
	Diploma	17	10.9	31.4
	Degree	77	49.4	80.8
	Postgraduate	30	19.2	100.0
	Total	156	100.0	

Source: Own survey May 2021.

The gender composition of the survey indicates that among the total participants, 62.2 % are males and 38.8% females. This composition may reflect that the economic participation of females compared to males is limited and financial inclusion disparities. Nonetheless, this kind of composition is somehow expected considering the above-discussed factors, hence, would not be an issue of underrepresentation. The age composition of the sample respondents indicates that 14.7% are in the range of 18 to 30 years, 78.2 % are in the range of 31 to 50 years, and 7.1% are above 50 years. Regarding the educational background of respondents, 68.6% of sample respondents are graduate and postgraduate, whereas 19.9% hold a college diploma or certificate, and 11.5% are high school graduates and below. This composition seems to suggest that Zemen Bank due to its niche market model, targets the upper middle class to the upper class, whom most are well educated.

In terms of customer profile, 59% of the respondents are customers that subscribed for saving account service, 38.8% of them have a current account that uses the bank service for a business service, and 3.2% subscribed for other services. The respondents' service experience with Zemen bank ranges from 1 year to 8 years. The frequency of using the bank service high of which 86% of the respondents use Zemen bank's service either weekly or monthly.

A total of 156 respondents have filled the questionnaire properly, which is 88% of the sample size of 177. The gender composition of the survey indicates that 62.2 % are males and 38.8% females. The age composition of the sample respondents indicates that 14.7% are in the range of 18 to 30 years, 78.2 % are in the range of 31 to 50 years, and 7.1% are above 50 years. The educational background of respondents indicates that 68.6% of sample respondents are graduate and postgraduate, whereas 19.9% hold a college diploma or certificate, and 11.5% are high school graduates and below. In terms of customer profile, 59% of the respondents are customers that subscribed for saving account service, 38.8% of them have a current account that uses the bank service for a business service, and 3.2% subscribed for other services. The respondents' service experience with Zemen bank ranges from 1 year to 8 years. The frequency of using the bank service high of which 86% of the respondents use Zemen bank's service either weekly or monthly.

Table 2: Customer profile

<b>Items</b>	<b>Category</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
Frequency of using Zemen	Daily	6	3.8	3.8
	Weekly	66	42.3	46.2

bank	Monthly	68	43.6	89.7
	Occasionally	16	10.3	100.0
Type of account	Saving account	92	59.0	59.0
	Current account	59	37.8	96.8
	Others	5	3.2	100.0
Service experience with Zemen bank	1 to 3 years	76	48.7	48.7
	4 to 6 years	71	45.5	94.2
	Above 7 years	9	5.7	100.0

Source: Own survey, May 2021.

### 4.3. Reliability Test

The reliability of the data collection instrument is summarized in the table below. A Cronbach's alpha coefficient greater than 0.9 indicates excellent, greater than 0.8 is good, greater than 0.6 is acceptable, greater than 0.5 is poor, and less than 0.5 is unacceptable (Mooi & Sarstedt, 2014). As a result, the Cronbach's alpha of the instrument used in this study ranges from 0.59 for the reliability dimension of service quality to 0.948 for empathy, which is in the acceptable range for consideration in the analysis.

Table 3: Cronbach's alpha

Variables	No. of items	No. of respondents	Cronbach's alpha
Tangibility	4	156	0.844
Assurance	4	156	0.934
Empathy	5	156	0.948
Responsiveness	4	156	0.945
Reliability	5	156	0.590
Satisfaction	5	156	0.927

Source: Own survey, May 2021.

### 4.4. Descriptive Statistics

The respondents' service quality perception and their satisfaction has been collected using five points Likert scale. Accordingly, the respondents have ranked their perception of each item listed under the dimensions. This information is analysed using descriptive statistics such as frequency, mean, mode, and standard deviation. The analysis helps to understand and make some conclusions regarding customers' scores of Zemen bank's service quality.

#### 4.4.1. Dimensions of Service quality

Tangibility is a key factor in measuring customer satisfaction (Parasuraman et al., 1988). Customers are sensitive to the physical environment where the service is given, and it is considered as one of the key strategies in the service business. In this view, the data revealed that Zemen Bank seems to have made a successful effort as sizable respondents strongly agree with the questionnaire statements that describe tangibility. Particularly, 62% of respondents strongly agree that Zemen bank has modern-looking equipment. On the other hand, the mean score ranges from 3.65 to 3.79 in the tangibility dimension indicating that the average score is above neutral close to an agreement. However, it should be noted that about ¼ of the respondents still gave a score below neutral (see the detail in table 4 below).

The assurance dimension of service quality of Zemen bank appeared to be good as evidenced in the table below. The mode for the three items is 4 and it is 5 for the fourth item. The average score is also above a neutral perception. However, compared to the tangibility aspect assurance has got a lower score. Regarding the empathy dimension, the majority of Zemen bank customers expressed their agreement. However, the average score is lower than tangibility and assurance dimensions. This signals that the bank should work on personalized attention and should provide training to its employees in this regard. The score on responsiveness and reliability is also similar to the empathy dimension. The mode of the score given is 4 which shows that there are significant customers that expressed their agreement. While the average score tends to be slightly higher than neutral as presented in the following table.

Table 4: Descriptive analysis of tangibility dimension

Service quality dimensions		Score Frequency (%)					Statistics		
		SD	D	N	A	SA	Mode	Mean	Std. Deviation
Tangibility	Zemen bank has modern looking equipment	13.0	20.0	19.0	42.0	62.0	5	3.77	1.319
	Zemen bank's physical facilities are visually appealing.	10.9	9.6	12.8	32.7	34.0	5	3.69	1.323
	Zemen reception desk employees are neat appearing.	3.8	19.9	19.9	20.5	35.9	5	3.65	1.259
	Materials associated with the service (such as pamphlets, forms) are visually appealing at Zemen bank	5.1	10.9	25.6	16.7	41.7	5	3.79	1.239
Assurance	The behavior of employees at Zemen bank instill confidence in customers	10.3	12.2	13.5	37.2	26.9	4	3.58	1.285
	You feel safe in your transactions with Zemen bank	7.7	9.6	14.7	34.6	33.3	4	3.76	1.229
	Employees of Zemen Bank are consistently courteous with customers	13.5	10.9	17.3	33.3	25.0	4	3.46	1.336
	Employees of Zemen bank have the knowledge to answer your questions	4.5	14.1	12.8	29.5	39.1	5	3.85	1.214
pa-	Zemen bank gives customers individual attention	12.2	12.8	16.0	41.7	17.3	4	3.39	1.258
	Zemen bank has operating hours convenient to all its	14.1	19.2	10.3	28.8	27.6	4	3.37	1.424

	customers								
	Zemen bank employees give customers personal attention	17.3	16.67	12.2	35.9	17.9	4	3.21	1.381
	Zemen bank has your best interest at heart	7.1	16.0	16.0	26.3	34.6	5	3.65	1.293
	The employees of Zemen bank understand your specific needs	17.3	12.8	12.8	35.9	21.2	4	3.31	1.394
<b>Responsiveness</b>	Employees at Zemen bank tell you exactly when services will be performed	10.9	10.9	12.8	39.7	25.6	4	3.58	1.28
	Employees of Zemen bank give you a prompt service	12.8	17.3	14.1	37.8	17.9	4	3.31	1.303
	Employees of Zemen bank are always willing to help you	8.3	17.3	14.7	28.2	31.4	4	3.57	1.315
	Employees of Zemen bank are never too busy to respond to your request	10.9	21.8	10.9	42.9	13.5	4	3.26	1.25
	When Zemen bank promises to do something by a certain time it does so	11.5	13.5	16.7	36.5	21.8	4	3.44	1.286
<b>Reliability</b>	When you have a problem Zemen bank shows a sincere interest in solving it	3.2	16.0	21.8	30.1	28.8	4	3.65	1.151
	Zemen bank performs the service right the first time	6.4	23.1	8.3	34.0	28.2	4	3.54	1.292
	Zemen bank provides the service at the time promised to do so	3.8	19.9	16.7	35.9	23.7	4	3.56	1.165
	Zemen bank insists on error free records	10.3	16.7	10.9	30.1	32.1	5	3.57	1.359

Source: Own survey, May 2021.

#### 4.4.2. Customer Satisfaction

The average score of customer satisfaction shows that Zemen banks customers tend to agreement in their satisfaction.

Table 5: Descriptive statistics of customer satisfaction

Satisfaction	Score Frequency (%)					Statistics		
	SD	D	N	A	SA	Mode	Mean	Std. Deviation
Overall, I am satisfied with the bank services	10.3	13.5	7.7	39.1	29.5	4	3.64	1.31
I am satisfied with the security of the bank services	5.8	14.1	12.8	45.5	21.8	4	3.63	1.142
I am satisfied with the communicative ability of the employee of the bank	13.5	1.9	17.9	38.5	28.2	4	3.66	1.283
I will encourage friends and relatives to use the service offered by the bank	6.4	17.9	13.5	39.1	23.1	4	3.54	1.209
I will continue being a customer of the bank for a long time to come	7.1	16.7	12.2	35.3	28.8	4	3.62	1.256

Source: Own survey, May 2021.

#### 4.5. Correlation Analysis

Correlation coefficients are used to assess the strength of a relationship between two variables. Pearson's correlation (Pearson's R) is a common correlation coefficient in linear regression. The Pearson's R ranges from -1 to 1, indicating the direction and strength of the relationship. In general, the higher the Pearson's R (closer to 1 in absolute value), the strong the relationship, whereas a



negative R implies a negative relationship and positive R implies a positive relationship. The study applied a correlation analysis using Pearson's correlation coefficient and the result is presented in the following table.

Table 6: Pearson correlation analysis

	Tangibility	Assurance	Empathy	Responsiveness	Reliability	Satisfaction
Tangibility	1					
Assurance	.707**	1				
Empathy	.817**	.817**	1			
Responsiveness	.807**	.815**	.925**	1		
Reliability	-.441**	-.381**	-.440**	-.445**	1	
Satisfaction	.742**	.779**	.811**	.817**	-.292**	1

\*\* . Correlation is significant at the 0.01 level (2-tailed). Source: Own survey, May 2021.

There is a strong and positive correlation between customer satisfaction and the four quality dimension namely tangibility (0.742), empathy (0.779), responsiveness (0.811), and assurance (0.817\*\*). The reliability dimension appeared to have a negative and weaker (0-.292) correlation with customer satisfaction. The positive between two or more variables imply there is a direct relationship between service quality dimensions and customer satisfaction, while a negative correlation indicates a negative relationship between variables. In this sense, it can be concluded that delivering better service quality ensures higher customer satisfaction. The empathy and responsiveness service quality dimension has the strongest correlation followed by assurance and tangibility. This indicates improvement in empathy for customers and responsiveness of service would yield better results in ensuring customer satisfaction. Similarly, making the service environment and physical appearance appealing and improving assurance would have a significant contribution in increasing customer satisfaction levels. Overall, the correlation analysis justified the notion that satisfaction of customers goes in tandem with service quality (Brady & Cronin, 2001; Grönroos, 1982).

#### 4.6. Regression Analysis

In this study, multiple regression analysis is employed to examine the effect of service quality dimensions on customer satisfaction. Regression analysis is the major analysis method use to analyze cause and effect relationships between an outcome or dependent variable and explanatory variables (Wooldridge, 2016).

#### 4.6.1. Assumptions

Before undertaking the regression analysis, the fundamental assumptions of multiple regression analysis must be checked if they hold or not to provide valid results (Mooi & Sarstedt, 2014). These assumptions include the linear relationship between the dependent and independent variables, expected mean error is zero, the variance of the error term is constant (homoscedasticity), the errors are independent (no autocorrelation), and the error term should be normally distributed (Mooi & Sarstedt, 2014; Wooldridge, 2016). The assumption of expected zero means error is not testable (Mooi & Sarstedt, 2014). The other can be tested using a statistical method.

##### 4.6.1.1. Multicollinearity

Multiple regression assumes that there is no collinearity between the independent variables. The variance inflation factor (VIF), which quantifies the severity of multicollinearity in regression analysis, is used in this study to test for multicollinearity issues. The tolerance statistics, which is the reciprocal of VIF ( $1/VIF$ ), also used to test multicollinearity. Multicollinearity occurs when there are high intercorrelations among some set of independent variables. As a rule of thumb when tolerance value is less than 0.1 and the VIF is greater than 10 signals the presence of multicollinearity issue, which may lead to misleading and/or inaccurate results (Field, 2013; Mooi & Sarstedt, 2014). The result of multicollinearity is summarized in the table below.

**Table 7: Collinearity Statistics**

<b>Independent variables</b>	<b>Tolerance</b>	<b>VIF</b>
Tangibility	0.308	3.251
Assurance	0.307	3.260
Empathy	0.122	8.218
Responsiveness	0.127	7.854
Reliability	0.782	1.279

Source: Own survey, May 2021.

The analysis of the multicollinearity test depicted that the tolerance level is well above 0.1 for all variables and VIF is less than 10. This implies that there is no multicollinearity issue in the predictor variables in the data set.

##### 4.6.1.2. Linearity

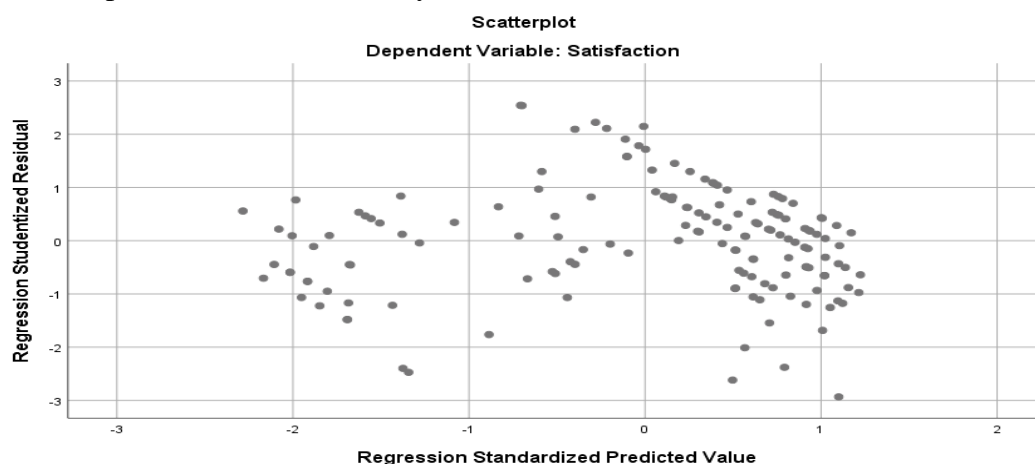
Multiple regression assumes that there is a linear relationship between the dependent and independent variables. The linearity test result indicated that there is a linear relationship between the independent variables and the dependent variables. The null hypothesis that claims deviation from

linearity is rejected at a 1% significance level for tangibility, assurance, empathy, and responsiveness. While for reliability the significance level is 10.9%, which indicates that it tends to be relatively non-linear. For the full result of the linearity test please refer to the appendix section of the study.

#### 4.6.1.3. Homoscedasticity

Homoscedasticity is an assumption that the variance of the error term is constant. If this does not hold it affects the standard error of the regression coefficient hence automatically affect the significance level (p-value). A scatterplot of the dependent variable against the standardized residual can be used to test if heteroscedasticity exists. If the points are typically funnel-shaped or exhibit variance as the independent variable increases or decreases, there is a heteroscedasticity issue. The scatter plot below does not exhibit a funnel-shaped variance as they move along the dependent variable access, hence the assumption of homoscedasticity holds for this study.

Figure 4: Scatterplot for homoscedasticity test

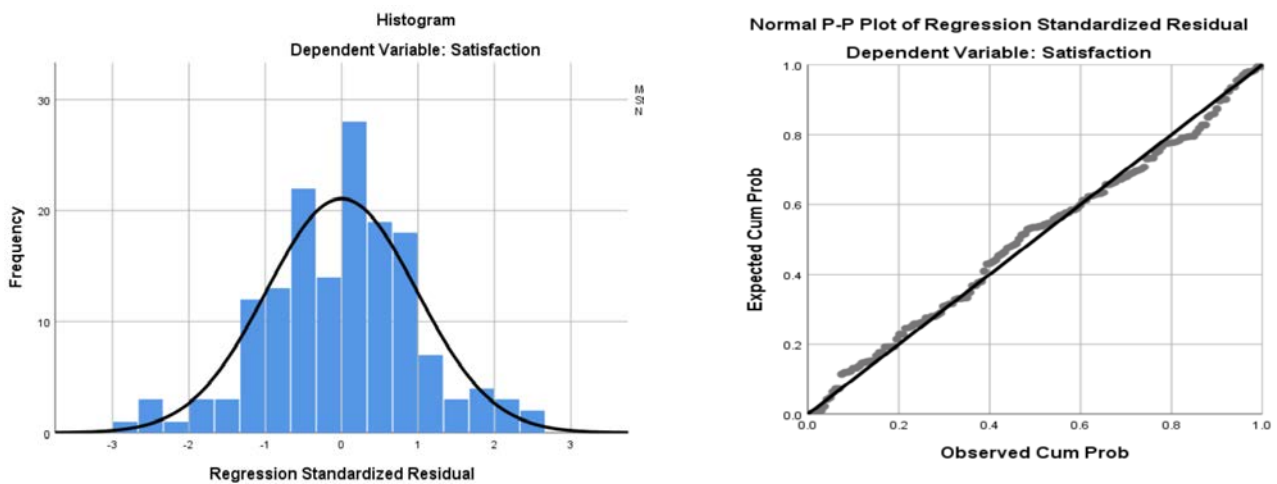


Source: Own survey, May 2021 (SPSS output).

#### 4.6.1.4. Normality

One of the assumptions of linear regression is that the residuals are normally distributed. This can be checked using the histogram of the standardized residual. The histogram of the standardized residuals below suggests that the residuals have only a minor departure from normality. Similarly, the normal P-P plot can also be used to assess the normality of the standardized residuals. This plot contains plots of the relationship between the observed residuals against those expected under the condition of normality. The closer the observed residuals fall about the regression line, the more evidence of normality. The plot below provides good support for evidence of normally distributed residuals.

Figure 5: Normal P-plot and histogram for normality test



S

Source: Own survey, May 2021 (SPSS output).

#### 4.6.2. The Effect of Service Quality on Customers Satisfaction

##### 4.6.2.1. Descriptive

	N	Mean	Std. Deviation
Satisfaction	156	3.6205	1.09289
Tangibility	156	3.7244	1.06111
Assurance	156	3.6619	1.15731
Empathy	156	3.3846	1.22943
Responsiveness	156	3.4311	1.18953
Reliability	156	3.5526	1.05735

Source: Own survey, May 2021.

##### 4.6.2.2. Regression Result

The model summary below indicates the level of variance in the dependent variable (customer satisfaction) that is explained by the model (predictors). Accordingly, the adjusted R<sup>2</sup> is 72.5% implying that the model explains 72.5% of the variation in customer satisfaction. The ANOVA result also shows that the combined effect of the independent variables is significant as evidenced by F statistics.

Table 8: Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.857 <sup>a</sup>	0.734	0.725	0.57322

ANOVA<sup>a</sup>

	Sum of Squares	df	Mean Square	F	Sig.
Regression	135.848	5	27.170	82.689	.000 <sup>b</sup>
Residual	49.286	150	0.329		
Total	185.134	155			

a. Dependent Variable: Satisfaction

b. Predictors: (Constant), Reliability, Assurance, Tangibility, Responsiveness, Empathy

Source: Own survey, May 2021 (SPSS output).

As observed from the ANOVA table above, the significance value of F statistics shows a value of 82.689 and p-value (.000), which is less than  $p < 0.01$ , the model is significant. This confirmed that independent variables taken together have a statistically significant relationship with the dependent variable under study.

Table 9: Regression result (coefficients)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error			
(Constant)	-0.078	0.312	Beta	-0.249	0.804
Tangibility	0.193	0.078	0.187	2.463	0.015
Assurance	0.266	0.072	0.282	3.702	0.000
Empathy	0.169	0.107	0.190	1.570	0.118
Responsiveness	0.289	0.108	0.315	2.666	0.009
Reliability	0.125	0.049	0.121	2.537	0.012

a. Dependent Variable: Satisfaction Source: Own survey, May 2021 (SPSS output).

In a nutshell, the regression result shows that tangibility, assurance, responsiveness, and reliability are significant at a  $p < 0.5$ . This confirms that the four service quality dimensions have a significant impact on customer satisfaction. The empathy dimension appeared to be insignificant in all the three conventional significant levels. Therefore, the regression model can be written as follows.

$$\text{Customer satisfaction} = -0.078 + 0.193(\text{tangibility}) + 0.266(\text{assurance}) + 0.289(\text{responsiveness}) + 0.125(\text{reliability})$$

Among the four significant variables, responsiveness has the strongest effect on customer satisfaction with a beta coefficient value of 0.289. Assurance is the second strongest dimension having a beta coefficient value of 0.266. The tangibility and reliability appeared to have a lower effect relative to the responsiveness and assurance.

### 4.6.3. Hypothesis Testing and Discussion of Result

The multiple regression results can be used to test the hypothesis. As indicated in the table below, the null hypothesis for the dimension of tangibility, responsiveness, reliability, and assurance is rejected at 1% and 5% significance level and the alternative hypothesis is accepted instead. For the empathy dimension, there is no enough evidence to reject the null hypothesis hence the alternative hypothesis is rejected.

Table 10: Hypothesis testing

Hypothesis	Coefficient and significance level	Decision
<b>H<sub>0</sub></b> : Tangibility has no significant positive effect on customer satisfaction <b>H<sub>1</sub></b> : Tangibility has a significant positive effect on customer satisfaction	$\beta=0.193$ , $P=0.015$ $(p<0.05)$	$H_0$ is rejected $H_1$ is accepted
<b>H<sub>0</sub></b> : Assurance has no significant positive effect on customer satisfaction <b>H<sub>1</sub></b> : Assurance has a significant positive effect on customer satisfaction	$\beta=0.266$ , $P=0.000$ $(p<0.01)$	$H_0$ is rejected $H_1$ is accepted
<b>H<sub>0</sub></b> : Empathy has no significant positive effect on customer satisfaction <b>H<sub>1</sub></b> : Empathy has a significant positive effect on customer satisfaction	$\beta=0.169$ , $P=0.118$ $(p>0.10)$	$H_0$ is accepted $H_1$ is rejected
<b>H<sub>0</sub></b> : Responsiveness has no significant effect impact on customer satisfaction <b>H<sub>1</sub></b> : Responsiveness has a significant effect impact on customer satisfaction	$\beta=0.289$ , $P=0.009$ $(p<0.01)$	$H_0$ is rejected $H_1$ is accepted
<b>H<sub>0</sub></b> : Reliability has no significant positive effect on customer satisfaction. <b>H<sub>1</sub></b> : Reliability has a significant positive effect on customer satisfaction.	$\beta=0.125$ , $P=0.012$ $(p<0.05)$	$H_0$ is rejected $H_1$ is accepted

The regression coefficients of the independent variables represent the mean change in the dependent variable for a unit change in the corresponding independent variable while holding the other predictors constant in the model. This statistical control provided by regression is important because it alienates the net effect of a variable in the model by controlling the effect of the remaining variables.

Accordingly, a unit increase intangibility will increase customer satisfaction by 0.193 units keeping the other factors constant. This positive effect indicates that the bank should invest in making branches attractive and appealing by installing state-of-the-art office equipment, modernizing office

layout, and making employees more presentable. The responsiveness dimension has the strongest effect followed by the assurance dimension. A unit change in responsiveness leads to a 0.289 increase in customer satisfaction keeping other factors constant. Similarly, customer satisfaction responds by 0.266 units for a unit increase in the assurance dimension of service quality. This implies that the bank will be better off if it invests to improve the responsiveness and assurance aspects of its service. In particular, customer-centric service, proper handling of complaints, and adequate customer supports are some of the measures that the bank could take. Furthermore, a unit increase in the reliability dimension of service quality leads to a 0.125 unit increase in customer satisfaction while keeping other things constant. As a result, the Bank should make a concerted effort to keep its pledges and meticulously record its transactions, allowing it to increase its trustworthiness, which leads to increased customer satisfaction.

Studies conducted in Ethiopian banks case have reported that most of the quality dimensions have a positive and significant effect on customer satisfaction. In this regard, Mesay (2012), found that all the dimensions are significant with empathy and responsiveness having the strongest dimensions in determining customer satisfaction level followed by tangibility, assurance, and finally the bank reliability. In a study based on the Dashen bank case, Dejene (2017), found that all quality dimensions are significant except responsiveness, assurance being the dominant dimension. A study conducted in the case of the Bank of Abyssinia revealed that all the five dimensions have a significant and positive effect with assurance having the strongest impact (Meron, 2015). Similarly, Bethelihem (2015), in a study conducted on Commercial Bank of Ethiopia found that except empathy, all the other dimensions to be significant. The finding of Bethelihem (2015), is in tandem with the finding of the current study. Overall, studies are in agreement on the impact of service quality dimensions on customer satisfaction, all concluding there is a significant and positive effect with few exceptions (Bethelihem, 2015; Dejene, 2017; Meron, 2015). However, there is a considerable difference in the magnitude of the effect from study to study which could be a result of the difference in the case of the study, and sample size difference, among others.

## CHAPTER FIVE

### 5. CONCLUSION AND RECOMMENDATION

#### 5.1. Summary of Findings

The objective of this study is to examine the impact of service quality on customer satisfaction. It aimed to understand the relationship between service quality dimensions and customer satisfaction, the effect of service quality on customer satisfaction, and to identify the dominant service quality dimension with the strongest effect on customer satisfaction. To achieve its purpose the study took a sample of respondents from three branches of Zemen bank to collect data using SERVPERF model-based self-administered questionnaire that contained 22 performance statements related to the five service quality dimensions. The collected data is coded and analysed using SPSS 25 statistical software. The analysis includes both descriptive and inferential statistics such as frequency, mean, correlation, and regression analysis. The major findings of the study are summarized as follows:

- The descriptive assessment revealed that customers of the Bank are satisfied with an average score of 3.6 out of Five. From the quality dimensions tangibility has the highest average score of 3.7 followed by assurance and reliability which have a 3.6 and 3.5 average score, respectively. The average score for responsiveness and empathy is 3.4 and 3.38, respectively which is relatively lower.
- The Pearson correlation coefficient between customer satisfaction and the four quality dimension namely tangibility (0.742), empathy (0.779), responsiveness (0.811), and assurance (0.817\*\*) is strong. While reliability dimension appeared to have a negative and weaker (0-.30) correlation with customer satisfaction.
- The regression result revealed that tangibility, assurance, responsiveness, and reliability are significant at a  $p < 0.5$ . The empathy dimension appeared to be insignificant in all the three conventional significant levels.
- The responsiveness dimension has the strongest effect on customer satisfaction with a beta coefficient value of 0.289. Assurance is the second strongest dimension having a beta coefficient value of 0.266. The tangibility and reliability appeared to have a lower effect relative to the responsiveness and assurance.



## **5.2. Conclusion**

The following conclusions are made based on the findings of the study.

From the descriptive statistics, it can be concluded that the majority of Zemen bank customers seem to express their agreement with the level of satisfaction they get from the bank service. In addition, the bank seems to have done well in terms of availing modern and physically appealing service environments such as front desk appearance, branch office layout, furniture, and other service equipment. The majority of the customers rate the bank good at delivering the service as per the promise made and in terms of building the trust and confidence of its customers. However, employee responsiveness to provide unreserved customer support appears to be weak. Furthermore, the bank seems to have gaps in terms of providing individualized and emphatical service to its customers.

The service quality dimensions and customer satisfaction have strong relationship as the correlation coefficient suggests. The regression result revealed that except for empathy the other four quality dimensions have a statistically significant and positive effect on customer service. The result implies that the investment in quality improvement has a potential return in increasing customer satisfaction which is critical for customer retention and hence profit. Particularly responsiveness and assurance yield the highest impact.

As a result, in today's dynamic business environment, high service quality is an important strategy for winning the competition and meeting company business goals. Zemen Bank should make a concerted effort to influence those dimensions in order to ensure that their customers are satisfied and remain loyal.

## **5.3. Recommendation**

The banking sector in Ethiopia is growing rapidly. The intensity of competition is getting higher as the existing banks rush to maintain the larger customer base and market share on one hand, and the entry of several new banks that are currently under formation. This study concluded that service quality has a detrimental effect on customer satisfaction and thereby customer retention. Therefore, among the key strategies that banks could follow, service quality improvement should get proper emphasis. Specifically, the following recommendations are provided for Zemen bank based on the analysis of the study while not disregarding the need to keep its current strength.

- The bank should invest in improving employee's responsiveness towards customers' needs and requests. Proper complaint handling and customer support should be put in place

uniformly across branches. Similarly, the bank has got a lower score on the empathy dimension which indicates that the practice of individualized attention to customers must be improved. Overall, the bank should improve its customer relationship management practices.

- Employees of the bank should be trained adequately regarding soft skills such as communication handling, emotional intelligence, and conflict handling that are key in the process of service delivery and customer interaction.
- The bank should invest more in all the quality dimensions with particular emphasis on responsiveness and assurance as they have a strong impact on customer satisfaction.
- The bank should give a personalized attention to individual customers, as the needs of various customers might differ.

## References

- Abdollahi, G. (2007). *Creating a model for customer loyalty in banking industry of Iran* [Luleå University of Technology Master]. <https://www.diva-portal.org/smash/get/diva2:1029546/FULLTEXT01.pdf>
- Adil, M., Falah, O., Al, M., & Albkour, A. M. (2013). SERVQUAL and SERVPERF: A Review of measures in services marketing research. *Global Journal of Management and Business Research Marketing*, 13(6). [https://globaljournals.org/GJMBR\\_Volume13/5-SERVQUAL-and-SERVPERF.pdf](https://globaljournals.org/GJMBR_Volume13/5-SERVQUAL-and-SERVPERF.pdf)
- Babakus, E., & Boller, G. W. (1992). An empirical assessment of the SERVQUAL scale. *Journal of Business Research*, 24(3), 253–268. [https://doi.org/10.1016/0148-2963\(92\)90022-4](https://doi.org/10.1016/0148-2963(92)90022-4)
- Bebli, R. S. (2005). *The impact of internet banking service quality on customer satisfaction in the banking sector of Ghana* [Blekinge Institute of Technology]. <http://www.diva-portal.org/smash/get/diva2:833400/FULLTEXT01.pdf>
- Bethelihem, T. (2015). *The Impact of Service Quality on Customer Satisfaction the Case of Commercial Bank of Ethiopia*. St. Mary's University.
- Brady, M. K., & Cronin, J. J. (2001). Some new thoughts on conceptualizing perceived service quality : A hierarchical approach. *The Journal of Marketing*, 65(3), 34–49. <http://www.jstor.org/stable/3203465> .
- Cohen, D., Gan, C., Yong, H. H. A., & Chong, E. (2007). Customer retention by banks in New Zealand. *Banks and Bank Systems*, 2(1), 40–55. [https://www.businessperspectives.org/images/pdf/applications/publishing/templates/article/assets/1612/BBS\\_en\\_2007\\_01\\_Cohen.pdf](https://www.businessperspectives.org/images/pdf/applications/publishing/templates/article/assets/1612/BBS_en_2007_01_Cohen.pdf)
- Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (L. Habib (ed.); 3rd ed.). SAGE Publications, Inc.
- Cronin, J. J., & Taylor, S. A. (1994). *SERVPERF versus SERVQUAL : Reconciling performance-based and measurement of service quality*. 58(1), 125–131. <https://psycnet.apa.org/doi/10.2307/1252256>
- Dabholkar, P. A., Thorpe, D. I., & Rentz, J. O. (1996). A measure of service quality for retail stores: Scale development and validation. *Journal of the Academy of Marketing Science*, 24(1), 3–16. <https://doi.org/10.1007/bf02893933>
- Dejene, G. (2017). *The effect of service quality on customer satisfaction : The case of Dashen Bank*. Addis Ababa University.
- Drucker, P. F. (1954). *The practice of management*. Harper & Row.
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (M. Carmichael (ed.); 4th editio). SAGE Publications.
- Fornell, C. (1992). Satisfaction barometer: The Swedish experience. *Journal of Marketing*, 56(1), 6–21. <http://www.jstor.org/stable/1252129>

- Gallo, A. (2014). The value of keeping the right customers. *Harvard Business Review*.  
<https://hbr.org/2014/10/the-value-of-keeping-the-right-customers>
- Grönroos, C. (1982). An applied service marketing theory. *European Journal of Marketing*, 16(7), 30–41. <https://doi.org/10.1108/EUM0000000004859>
- Hallowell, R. (1996). The relationships of customer satisfaction, customer loyalty, and profitability: An empirical study. *International Journal of Service*, 7(4), 27–42.  
<https://doi.org/10.1108/09564239610129931>
- Holmlund, M., & Soren Kock. (1996). from the SAGE Social Science Collections . All Downloaded Rights Reserved . *International Small Business Journal*, 15(1), 26–40.  
<http://dx.doi.org/10.1177/0266242696151002>
- Israel, G. D. (1992). Determining sample size. In *PEOD6*. University of Florida.  
<https://www.tarleton.edu/academicassessment/documents/Samplesize.pdf>
- Josee Bloemer, & Ruyter, K. de. (1998). On the relationship between store image, store satisfaction and store loyalty. *European Journal of Marketing*, 32(5), 499–513.  
 10.1108/03090569810216118
- Kang, G. Du. (2006). The hierarchical structure of service quality: Integration of technical and functional quality. *Managing Service Quality*, 16(1), 37–50.  
<https://doi.org/10.1108/09604520610639955>
- Karatepe, O. M., & Ekiz, E. H. (2004). The effects of organizational responses to complaints on satisfaction and loyalty : a study of hotel guests in Northern Cyprus. *Managing Service Quality*, 14(6), 476–486. <https://doi.org/10.1108/09604520410569810>
- Kaynak, E., & Kucukemiroglu, O. (1992). Bank and product selection: Hong Kong. *International Journal of Bank Marketing*, 10(1), 3–16. <http://dx.doi.org/10.1108/02652329210007858>
- Keramati, A., Mehrabi, H., & Mojir, N. (2010). A process-oriented perspective on customer relationship management and organizational performance: An empirical investigation. *Industrial Marketing Management*, 39(7), 1170–1185.  
<https://doi.org/10.1016/j.indmarman.2010.02.001>
- Kothari, C. R. (2004). *Research methodology: Methods and techniques* (2nd ed.). New Age International Publishers.
- Maxham, J. G., & Netemeyer, R. G. (2002). A longitudinal study of complaining customers ' evaluations of multiple service failures and recovery. *Journal of Mar*, 66(October), 57–71.  
<http://dx.doi.org/10.1509/jmkg.66.4.57.18512>
- Meron, A. (2015). *Impact of service quality on customer satisfaction: The case of Bank of Abyssinia*. (Issue December). Addis Ababa University.
- Mesay, S. S. (2012). Bank Service Quality, Customer Satisfaction and Loyalty in Ethiopian Banking Sector. *Journal of Business Administration and Management Sciences Research*, 1(1), 1–9.  
<http://www.apexjournal.org/JBAMSR>
- Mooi, E., & Sarstedt, M. (2014). A concise guide to market research: The process, data, and methods

using IBM SPSS statistic. In *the process, data, and methods using IBM SPSS statistics* (Third). Springer-Verlag GmbH Germany. <https://doi.org/10.1007/978-3-642-12541-6>

- Munawar, K. M., & Mariam, F. (2014). *Impact of service quality on customer satisfaction and customer loyalty: Evidence from banking sector*.
- Nahida, N. A. (2019). Effect of Service Quality on Customer Satisfaction Evidence from Banks in Tangail. *Management Studies and Economic Systems (MSES)*, 4(2), 145–159.
- Nautiyal, G. (2014). Impact of Service Quality on Customer Satisfaction in the Retail Banking Sector. *Global Journal Of Commerce & Management Perspective*, 3(3), 77–80.  
<http://www.macrothink.org/journal/index.php/jmr/article/viewArticle/418>
- Oliver, R. L. (1999). Whence consumer loyalty? *Journal of Marketing*, 63(special issue 1999), 33–44. <https://doi.org/10.2307/1252099>
- Parasuraman, A., Berry, L. L., & Zeithaml, V. A. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12–40.  
<https://bit.ly/34W2J5i>
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49(4), 41–50.  
<https://doi.org/10.2307/1251430>
- Peter, J. P., & Olson, J. C. (2010). *Consumer behavior & marketing strategy* (9th editio). McGraw-Hill/Irwin.
- Rasyida, D. R., Ulkhaq, M. M., Setiowati, P. R., & Setyorini, N. A. (2016). Assessing service quality: A combination of SERVPERF and importance of performance alysis. *MATEC Web of Conferences (ICIEA 2016)*, 68(06003), 146–155. [https://www.matec-conferences.org/articles/mateconf/pdf/2016/31/mateconf\\_iciea2016\\_06003.pdf](https://www.matec-conferences.org/articles/mateconf/pdf/2016/31/mateconf_iciea2016_06003.pdf)
- Reichheld, F. F., & Kenny, D. W. (1990). The hidden advantages of customer retention. *Journal of Retail Banking*, 12(4), 19+.  
<https://go.gale.com/ps/anonymous?id=GALE%7CA9295626&sid=googleScholar&v=2.1&it=r&linkaccess=abs&issn=01952064&p=AONE&sw=w>
- Rust, R., & Oliver, R. (1994). Service quality: Insights and managerial implications from the frontier. *Service Quality: New Directions in Theory and Practice*.  
<http://dx.doi.org/10.4135/9781452229102.n1>
- Seth, N., Deshmukh, S. G., & Vrat, P. (2005). Service quality models: A review. *International Journal of Quality and Reliability Management*, 22(9), 913–949.  
<https://doi.org/10.1108/02656710510625211>
- Shaon, K. I., & Rahman, H. (2015). A theoretical review of CRM effects on customer satisfaction and loyalty. *Central European Business Review*, 4(1), 23–36.  
<https://doi.org/10.18267/j.cebr.108>
- Spreng, R. A., & Olshavsky, R. W. (1993). A desires congruency model of consumer satisfaction. *Journal of the Academy of Marketing Science*, 21(3), 169–177.  
<http://dx.doi.org/10.1177/0092070393213001>

- Tesfaye, M. (2021). *The effect of Service quality on customer satisfaction: The case of Hibret Bank Four Selected Branches*. Addis Ababa University.
- Vaus, D. de. (2001). *Research design in social research*. SAGE Publications, Inc. [https://doi.org/10.1016/s0020-7489\(01\)00040-2](https://doi.org/10.1016/s0020-7489(01)00040-2)
- Wang, Y., Lo, H.-P., & Yang, Y. (2004). An integrated framework for service quality, customer value, satisfaction: Evidence from China's telecommunication industry. *Information Systems Frontiers*, 6, 325–340. <https://doi.org/10.1023/B:ISFI.0000046375.72726.67>
- Winer, R. S. (2001). A framework for customer relationship management. *California Management Review*, 43(4), 89–105. <https://doi.org/10.2307/41166102>
- Wirtz, J., & Lovelock, C. (2016). Services marketing: people, technology, strategy. In *Services Marketing* (8th ed.). World Scientific. <https://doi.org/10.1142/y0001>
- Wooldridge, J. M. (2016). Introductory econometrics. In *Introductory econometrics: A modern approach* (6th ed.). Cengage Learning. <https://doi.org/10.1007/9783319659169>
- Yamane, T. (1967). *Statistics: An introductory analysis* (2nd ed.). Harper & Row.
- Yarimoglu, E. K. (2014). A Review on Dimensions of Service Quality Models. *Journal of Marketing Management*, 2(2), 79–93.
- Zeithaml, V. A., Parasuraman, A., & Malhotra, A. (2000). A Conceptual Framework for Understanding e-Service Quality: Implications for Future Research and Managerial Practice - Marketing Science Institute. *Marketing Science Institute*, 00–115. [https://www.msi.org/wp-content/uploads/2020/06/MSI\\_WP\\_00-115.pdf](https://www.msi.org/wp-content/uploads/2020/06/MSI_WP_00-115.pdf)
- Zemen-Bank. (2020). *Zemen bank annual report 2020*. <https://www.zemenbank.com/images/2021-Zemen-Bank-Report-2020-Final-CIB.pdf>

## **Appendix**

## Appendix 1: Data Collection Instrument

### St. Mary's University School of Graduate Studies

#### MBA Program

#### (Questionnaire for Customers)

#### Dear Respondent,

I am a graduating student at St.Mary's University School of Graduate Studies. The purpose of this questionnaire is to enable me to research the partial fulfillment of the requirement for a Master of Degree in Business Administration (MBA). The research focuses on the investigation of the effect of service quality on customer satisfaction in the case of ZEMEN Bank S.C. Hence, to gather information, I kindly request your assistance in responding to the questions listed below. Any information you present will be kept confidential and will only be used for academic purposes. Your cooperation and prompt response will be highly appreciated. In case of any question, you may contact me through the address below.

Thank you very much in advance!

Zemene Gumata (A Graduating student)

Phone: 0936440744

Email: zemenegumata79@gmail.com

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#### General Instructions

- Please return the completed questionnaire in time
- There is no need of writing your name.
- In all cases where answer options are available, please tick (√) in the appropriate box.

#### Section I: Demographic information

1. Sex: Male  Female
2. Age: 18 to 30  31 – 50  51 and above
3. Educational level: Primary  Highschool  Certificate  Diploma  Degree   
Postgraduate  Other \_\_\_\_\_
4. Frequency of using the bank: Daily  Weekly  Monthly  Occasional
5. Type of account: Saving account  Current account  Other services
6. Years of service experience at Zemen Bank: \_\_\_\_\_



## Section II: Service Quality Items

The following statements relate to your perception of Zemen bank's service quality. Please show the extent to which you believe Zemen bank has the feature described in the statement. Here, we are interested in a number from 1 to 5 that shows your perception score about the bank.

You should rank each statement as follows:

**1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree, 5-Strongly Agree**

No	Statements	Strongly Degree	Disagree	Neutral	Agree	Strongly agree
		1	2	3	4	5
<b>I. Tangibility</b>						
1	Zemen bank has modern-looking equipment					
2	Zemen bank's physical facilities are visually appealing.					
3	Zemen reception desk employees are neat appearing.					
4	Materials associated with the service (such as pamphlets) are visually appealing at the bank.					
<b>II. Assurance</b>						
5	The behavior of employees at Zemen bank instill confidence in customers					
6	You feel safe in your transactions with Zemen bank					
7	Employees of Zemen Bank are consistently courteous with customers					
8	Employees of Zemen Bank know to answer your questions					
<b>III. Empathy</b>						
9	Zemen bank gives customers individual attention					

10	Zemen bank has operating hours convenient to all its customers					
11	Zemen bank has employees who give customers personal attention					
12	Zemen bank has your best interest at heart					
13	The employees of Zemen bank understand your specific needs					
<b>IV. Responsiveness</b>						
14	Employees at Zemen bank tell you exactly when services will be performed					
15	Employees of Zemen bank gives you a prompt service					
16	Employees of Zemen bank are always willing to help you					
17	Employees of Zemen bank are never too busy to respond to your request					
<b>V. Reliability</b>						
18	When Zemen bank promises to do something by a certain time it does so					
19	When you have a problem Zemen bank shows a sincere interest in solving it					
20	Zemen bank performs the service right the first time					
21	Zemen bank provides the service at the time it promises to do so					
22	Zemen bank insists on error-free records					

### Section III: Customer Satisfaction Items

Please rate your level of satisfaction after reading the statements

No	Statements	Strongly Degree	Disagree	Neutral	Agree	Strongly agree
		1	2	3	4	5

1	Overall, I am satisfied with the bank services					
2	I am satisfied with the security of the bank services					
3	I am satisfied with the communicative ability of the employee of the bank					
4	I will encourage friends and relatives to use the service offered by the bank					
5	I intend to continue being a customer of the bank for a long time to come					



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3	0000 000 00000000 0000 0000 000 000					
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<b>VII. 000000000/Assurance/</b>						
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<b>VIII. □□□□ /Empathy/</b>						
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**Appendix 2: SPSS Output**

### Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.857 <sup>a</sup>	.734	.725	.57322

a. Predictors: (Constant), Reliability, Assurance, Tangeblity, Responsiveness, Empathy

b. Dependent Variable: Satisfaction

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	135.848	5	27.170	82.689	.000 <sup>b</sup>
	Residual	49.286	150	.329		
	Total	185.134	155			

a. Dependent Variable: Satisfaction

b. Predictors: (Constant), Reliability, Assurance, Tangeblity, Responsiveness, Empathy

### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-.078	.312		-.249	.804	-.695	.539
	Tangeblity	.193	.078	.187	2.463	.015	.038	.347
	Assurance	.266	.072	.282	3.702	.000	.124	.408
	Empathy	.169	.107	.190	1.570	.118	-.044	.381
	Responsiveness	.289	.108	.315	2.666	.009	.075	.504
	Reliability	.125	.049	.121	2.537	.012	.028	.222

a. Dependent Variable: Satisfaction



## Multicollinearity test

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions					
				(Constant)	Tangeblity	Assurance	Empathy	Responsiveness	Reliability
1	1	5.717	1.000	.00	.00	.00	.00	.00	.00
	2	.215	5.162	.01	.00	.01	.01	.01	.18
	3	.025	14.977	.09	.40	.42	.00	.00	.12
	4	.021	16.518	.21	.01	.44	.13	.09	.36
	5	.014	20.534	.66	.57	.13	.02	.09	.33
	6	.008	26.275	.03	.01	.00	.84	.81	.01

a. Dependent Variable: Satisfaction

## Linearity test

ANOVA Table			Sum of Squares	df	Mean Square	F	Sig.
<b>Satisfaction * Tangeblity</b>	Between Groups	(Combined)	113.045	13	8.696	17.129	0.000
		Linearity	101.863	1	101.863	200.647	0.000
		Deviation from Linearity	11.181	12	0.932	1.835	0.048
	Within Groups		72.090	142	0.508		
<b>Satisfaction * Assurance</b>	Between Groups	(Combined)	134.636	16	8.415	23.162	0.000
		Linearity	112.439	1	112.439	309.494	0.000
		Deviation from Linearity	22.197	15	1.480	4.073	0.000
	Within Groups		50.499	139	0.363		
<b>Satisfaction * Empathy</b>	Between Groups	(Combined)	147.827	20	7.391	26.747	0.000
		Linearity	121.633	1	121.633	440.144	0.000
		Deviation from Linearity	26.194	19	1.379	4.989	0.000
	Within Groups		37.307	135	0.276		
<b>Satisfaction * Responsiveness</b>	Between Groups	(Combined)	149.478	16	9.342	36.419	0.000
		Linearity	123.562	1	123.562	481.684	0.000
		Deviation from Linearity	25.915	15	1.728	6.735	0.000
	Within Groups		35.657	139	0.257		
<b>Satisfaction * Reliability</b>	Between Groups	(Combined)	40.855	17	2.403	2.299	0.004
		Linearity	15.826	1	15.826	15.137	0.000
		Deviation from Linearity	25.029	16	1.564	1.496	0.109
	Within Groups		144.280	138	1.046		
Total		185.134	155				