



ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
COLLEGE OF BUSINESS AND ECONOMICS
DEPARTMENT OF MANAGEMENT

THE IMPACT OF CUSTOMER SEGMENTATION STRATEGY
ON THE PERFORMANCE OF BANKS: THE CASE OF AWASH BANK

A thesis submitted to the School of Graduate Studies of Addis Ababa University in partial fulfillment of the requirements for the Degree of Masters of Science in Management

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Abstract

This study investigated the effect of customer segmentation strategies on the performance of banks, with a particular focus on Awash Bank. The general objective was to assess how various segmentation approaches beyond the traditional demographic methods impact customer satisfaction, loyalty, retention and overall performance. To achieve this, the research adopted a quantitative approach, employing a descriptive and explanatory research design. The study attempted to consider various dimensions of customer segmentation, ranging from behavioral, psychographic, demographic, geographical, and technological segmentation. From the findings of the data analysis, it is safe to conclude that behavioral segmentation has relatively the most impact on the performance of the Bank, followed in sequence by geographical, psychographic, and behavioral segmentation. Specifically, the unstandardized beta coefficients for these segments were found to be statistically significant, indicating that employment of those segmentation techniques has strong correspondence with improved bank performance. In contrast, demographic and technological segmentation have relatively limited impacted compared to other dimensions of segmentation signaling a more integrated customer segmentation approach which combines multiple dimensions of segmentation. The study revealed

that customer segmentation approach which integrates the various dimensions of customer behaviors, preferences and choices has direct correlation with the performance of banks and banks well beyond demographic segmentation need to focus as well on behavioral, psychographic, and geographical segmentations as drivers of performance improvement. The approach would allow banks to tailor their products, services, and promotions more effectively, leading to better customer interaction, satisfaction, and overall growth. Banks also need to are investment in revisiting their customer segmentation approaches through ongoing data analysis so that they can better understand the evolving customer choice and behavioral tendencies to deliver their products and services in a more effective and productive manner.

Keywords: Customer segmentation, commercial, bank performance, regression analysis

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Customer segmentation has become central banks' services and products to improve performance and customize services according to diverse client needs and choices. Banks are able to classify clients into specific groups according to various criteria such as demographics, behavior, and psychographics through customer segmentation, enabling targeted marketing and customized provision of services (KAIZEN, 2025). In a fast-changing financial environment marked by digitalization and intense competition, sound customer segmentation is now the key to banks wanting to enhance operational efficiency as much as customer satisfaction.

Internationally, customer segmentation bank strategies are prompted by the ability to respond to evolving consumer culture and technology. Banks are using big data analytics to examine customer behavior and choices so that they can establish more accurate segments (Matellio, 2025). For instance, demographic segmentation enables banks to recognize particular age-related needs, income-related needs, marital status-related needs etc. Younger customers like online interaction, while older customers like services face-to-face (KAIZEN, 2025). Furthermore, segmentation by behavior helps banks gain insight into the ways people spend and make transactions, which helps them design products and services customized to each segment to cater to their personalized needs (Matellio, 2025). Various approaches including advanced analytics and artificial intelligence are transforming the customer segmentation practice within the banking sector. These technologies enable firms to adapt their segmentation strategy dynamically in real-time to be highly responsive to customer requirements (KAIZEN, 2025). Personalization not only improves customer experience but also stimulates loyalty and profitability.

The African banking sector faces special opportunities and challenges in customer segmentation. The complexity of the population of the continent demands better understanding of intricate cultural, economic, and social determinants of banking behavior (Palacios & Jiménez, 2023). For example, a vast majority of the African nations have a considerable unbanked segment whose financial needs can be fulfilled only with customized financial products. Banks are increasingly

making use of segmentation strategies that take into account not just demographic determinants but also geographic and psychographic information to cater more effectively to these markets (Palacios & Jiménez, 2023).

Secondly, the rise of mobile banking across Africa has transformed customer interaction. As a result of the high percentage of the population using mobile phones to access financial services, banks are segmenting customers based on digital behavior and preferences. The shift allows for the development of mobile-first banking products that address specifically the digital natal young adults while keeping traditional products for the previous generations who may be more familiar at interacting person-to-person (Palacios & Jiménez, 2023).

Awash Bank, one of the many private commercial banks in Ethiopia that exemplify the practice customer segmentation. Awash Bank, which is among the largest banks in the nation, is applying customer segmentation practices through understanding the various needs and choices of its customers. The bank is using demographic information like age and income levels to customize its services to its customers. For example, Awash Bank came up with special youth and women accounts that acknowledge the individual financial requirements and priorities of each segment. (Endale, 2023).

Ethiopian banking is also moving towards advanced segmentation techniques that take behavioral and psychographic aspects into account. From the study of literature, it can be seen that analysis of the motivations and lifestyle options of customers can make a huge difference in the delivery of services (Endale, 2023). Through analysis of transaction history and participation rates, Awash Bank looks to segment high-value customers who need individualized services and auto-services for the lower segments.

Nonetheless, implementation of such approaches among Ethiopia's diversified populace is not straightforward. Banks must have proper data analysis capabilities in an effort to contribute towards enhancing segmentation processes on a consistent basis (Kocyigit, 2016). With further competition among Ethiopia's banking institutions, deployment of sophisticated customer segmentation will be essential in pursuing sustainable growth and performance enhancement.

1.2 Statement of the Problem

The key role of financial institutions including banks has been to facilitate the accumulation and distribution of capital resources through mobilization savings and converting same into loans to their clients. However, such retail banking is now facing its own challenges and commercial banks are uncertain whether bank consumers in the future would still require retail bank services either traditional or non-traditional (Silver et al., 2018).

Bank markets in SSA are usually identified as weak and unresponsive to the choices and needs of various segments. Yet, there are evidences of segmentation mainly on economic and social basis (Nissanke & Stein, 2003). Literature on this subject, however, is largely associated with overall trends rather than policy advice on segmentation that can improve bank performance. For example, although reports emphasize the need to segment small and medium-sized businesses (SMEs) and gender-focused lending practices (EIB, 2024), they fail to touch upon how large the role of these segment strategies can play for improved results. Digital financial services offer is the other aspect of segmentation. Despite its potential to close gaps in banking access by historically excluded segments, little literature exists describing the manner in which banks can segment their customers most effectively based on their online activities and interests (World Bank, 2022). Accordingly, the absence of focused research inhibits the capacity of banks to develop customized products targeting the specific requirements of various customer groups.

The banking industry in Ethiopia is experiencing growing competition, changing customer expectations, and technological changes. Besides the radical growth in the number of commercial banks and the nature of financial products and services offered, most of the institutions, in this case Awash Bank, still have to cope with challenges in meeting the ever-changing expectations of their customers. One of the problems with commercial banks being, weak understanding of how customer segmentation strategies could affect banks' overall performance (National Bank of Ethiopia, 2025). The practices currently employed by Ethiopian banks regarding customer segmentation are mostly demographically driven or based on traditional demographic factors such as age, gender, and level of income.

Such practices may also fail to reflect the subtleties of customer behavior and tastes. Such a situation may make it difficult for banks to differentiate and respond appropriately, hence suffer lower customer satisfaction and retention. Even more seriously, in the event of lacking an

integrated segmentation approach that harmonizes behavioral and psychographic elements, banks risk missing the benefits that may arise from targeting high-value customers and competing with full profitability (World Bank, 2024).

Furthermore, there is a gap in empirical work that focuses on the impact of customer segmentation strategies on the performance of Ethiopian commercial banks. There has been this unawareness that hinders financial institutions from making evidence-based decisions on their marketing and service delivery (Endale, 2023). Thus, research on the impact of effective customer segmentation campaigns on indicators of performance such as customer loyalty, market share, and financial performance is necessary.

There is a research gap in literature on customer segmentation in the banking industry, focusing on Sub-Saharan Africa (SSA) and Ethiopia that should be filled by carrying out additional research. Hence, this study aimed to fill this gap through examining the impact of customer segmentation strategy on the performance of commercial banks in Ethiopia with Awash Bank as a case study. Assessing the potential and integration of other customer segment dimensions other than the widely applicable demographic characteristics specifically; geographical segmentation, usage rate segmentation, technological segmentation, benefits segmentation and lifestyle segmentation is what makes the study even more relevant.

Awash bank is the first private commercial bank in Ethiopia established in 1994 by 486 founding shareholders with a paid-up capital of birr 24.2 million. Awash have officially starting banking operations in February 1995, currently operating more than 800 branches throughout the country. The bank is reaching out to millions of customers across its branches and the head office availing various banking products and services combining both personal and digital banking features tailored to various categories of customers. In line with, the bank is applying various customer segmentation methods and approaches in responding to the needs, preferences and choices of. However, there are gaps which need close scrutiny in terms of the application of customer segmentation to come up with practical recommendations and suggestions for future considerations.

1.3 Research Questions

Based on the specific objectives outlined for the study, the following research questions will guide the investigation into effect of customer segmentation strategies on the performance of banks, particularly focusing on the case of Awash Bank:

- What is the effect of benefit segmentation on the performance of banks in the case of Awash Bank?
- What is the effect of Demographic segmentation on the performance of banks in the case of Awash Bank?
- What is the effect of psychological segmentation on the performance of banks in the case of Awash Bank?
- What is the effect of behavioral segmentation on the performance of banks in the case of Awash Bank?
- What is the effect of geographical segmentation on the performance of banks in the case of Awash Bank?
- What is the effect of technological segmentation on the performance of banks in the case of Awash Bank?

1.4 Objective of the Study

1.4.1 General Objective of the Study

The general objective of this study is to investigate the effect of customer segmentation strategies on the performance of commercial banks in Ethiopia, with a particular focus on the Awash Bank.

1.4.2 Specific Objectives of the study

- To examine the effect of benefit segmentation (rates that banks offer to customers up on demand) on commercial banks performance in the case of Awash Bank.
- To investigate the effect of Demographic segmentation on commercial banks performance the case of Awash Bank.
- To analyze effect of psychological segmentation on commercial banks performance the case of Awash Bank.
- To explore the effect of behavioral segmentation on commercial banks performance the case of Awash Bank.

- To examine the effect of geographical segmentation on commercial banks performance the case of Awash Bank.
- To investigate the effect of technological segmentation on commercial banks performance the case of Awash Bank.

1.5 Scope of the Study

This study is designed to investigate the effect of customer segmentation strategies on the performance of commercial banks in Ethiopia, with a particular emphasis on Awash Bank. The research is geographically limited to Ethiopia, focusing specifically on Awash Bank as a representative case within the country's commercial banking sector.

In terms of content, the study moves beyond traditional demographic segmentation methods, such as age, gender, and income, to include additional dimensions such as lifestyle segmentation, benefit segmentation, technological segmentation, and geographical segmentation. The research systematically examines how each of these segmentation strategies affects performance of Awash Bank.

Temporally, the study considers the current state of the Ethiopian banking sector, which is experiencing significant transformation due to increased competition, technological advancement, and changing customer needs. The study is based on current developments and empirical information available as of 2025, collecting the relevant data between January 2025 and March 2025, making its findings applicable to the current market situation.

The customers being targeted in this study are the customers of Awash Bank, and they have been categorized based on the different strategies under investigation. Employees engaged in segmentation and marketing plans and bank management are also included because their recommendations are paramount in determining the implementation and effects of such strategies.

Emphasizing various dimensions of customer segmentation, the aim of this research is to provide practical input for commercial banks in Ethiopia as they struggle to become more competitive and customer-centric. The results here offered should be useful for academic as well as applied bank administration in addressing the current need for more sophisticated and efficient customer segmentation practice for the Ethiopian banking industry.

1.6 Significance of the Study

This research on the impact of customer segmentation on the performance of banks and particularly of Awash Bank, has significance for a number of reasons:

1. Building Customer Satisfaction: Through examination of the extent to which effective customer segmentation can consolidate service delivery and customer satisfaction, the research seeks to offer insights that can assist Awash Bank in designing its products and services to serve the diverse needs of its customers. Better customer satisfaction will inevitably lead to better retention and loyalty, which are imperative to sustainable success in the competitive banking sector.

2. Informed and conscious Strategic Decision-Making: The conclusion of this study will provide bank management with evidence concerning whether existing segmentation methods are feasible or not. This knowledge may be utilized in strategic decision-making to enable Awash Bank to define its service delivery and marketing approaches more effectively based on customers' values and expectations.

3. Contributing to Academic Scholarship: The research will satisfy a main shortfall in the academic scholarship regarding customer segmentation in the Ethiopian banking industry. Through the presentation of empirical findings and outcomes which are Ethiopian-specific, it will add to the enhancement of the understanding of how customer segmentation strategies could impact banking performance in a developing economy.

4. Facilitating Policy Making: The findings of this research can also guide policymakers and regulatory bodies on customer-focused banking practice importance. Through the recognition of efficient segmentation practice, the research can help implement the best practice throughout the whole Ethiopian banking sector, with financial inclusion and economic growth implications.

5. Informing Future Research: Finally, this research will provide the foundation for future research in customer segmentation and banking performance that will continue to prompt research in new methodologies that can aid in service delivery and operational efficiency in Ethiopian banks.

Overall, this study is significant not only for Awash Bank but also for the broader Ethiopian banking sector, academic researchers, and policymakers interested in improving financial services through effective customer engagement strategies.

1.7 Organization of the Study

This study is organized into five chapters, Chapter 1 provides an overview of the study, including the background and context of customer segmentation in the banking sector. It outlines the statement of the problem, research questions, objectives, scope and significance of the study. This chapter sets the stage for understanding why effective customer segmentation is crucial for enhancing bank's performance in Ethiopia.

Chapter 2 presents a comprehensive review of the existing literature related to customer segmentation strategies and their impact on banking performance. It covers global and local perspectives on customer segmentation, theoretical frameworks relevant to the study, and previous empirical findings, helping to identify gaps in the literature that the current study aims to address.

Chapter 3 details the research design and methodology employed in the study. It describes the mixed-methods approach used to collect both quantitative and qualitative data, outlining sampling techniques, data collection instruments (e.g., surveys and interviews), and data analysis methods. This chapter also discusses ethical considerations and limitations of the study.

Chapter 4 analyzes and presents the collected data. It summarizes quantitative data using statistical techniques while organizing qualitative data thematically. The results are interpreted in relation to the research questions and objectives, providing insights into how customer segmentation strategies affect bank's performance.

Finally, Chapter 5 presents a summary of the findings, draws conclusions based on the research objectives, and provides recommendations for Awash Bank and other commercial banks in Ethiopia regarding effective customer segmentation practices. Suggestion will also be made on future studies to further explore the practice of customer segmentation in the banking sector.

CHAPTER TWO

RELATED LITERATURE REVIEW

2.0 Introduction to the Literature Review

The Literature review part provides background and framework to better understand the applicability of customer segmentation and how it impacts the performance of banks. The theoretical discussions in this chapter attempts to present conceptual frameworks and past empirical findings that explain how effective segmentation translates into better customer satisfaction, loyalty, retention and overall performance of banks. The literature review also tries to set out the applicability of the different customer segmentation dimensions relating same with theories explaining the different dimensions customers behaviors and responses. Finally, the literature review part seeks to offer a thorough understanding of how customer segment techniques could be utilized to maximize bank performance in the context of dynamic and competitive banking business.

2.1 Theoretical Literature Review

There are various theories developed and explained in terms of individual behaviors relevant to customer segmentation in understanding and responding to the choices and preferences customers equally applicable to the banking business.

2.1.1 Overview of the Functional Theory of Attitude

The functional theory of attitude was developed by Daniel Katz during the 1960s. It assumes attitudes serve specific psychological functions to enable individuals to adapt to their social environments and attain self-interest goals. The theory claims that attitudes are not just belief or feeling reflections but serve to satisfy some psychological needs. Katz elaborated four general functions of attitudes: utilitarian, ego-defensive, value-expressive, and knowledge (Katz, 1960).

➤ Utilitarian Function

This kind of function is very essential in consumer behavior whose purchasing decisions are mainly brought about by perceived utility (Hernandez, 2015). Accordingly, the utilitarian role of attitudes is based on the observation that people learn positive attitudes towards objects or

behaviors that yield reward or payoffs and avoid those that yield punishment. For instance, a consumer may take up one brand over another due to its enhanced quality or service, improving the overall experience.

➤ **Ego-Defensive Function**

According to ego-defensive function, attitudes can be ego-defensively helpful. They could help an individual defend against distasteful realities or negative self-concepts. (Katz, 1960). Accordingly, in such a defense, one can keep a positive self-concept by taking attitudes that shield them from fear of the mind. For example; one who is insecure concerning status in society can react with an attitude of superiority towards others as a mechanism of coping with feelings of inferiority.

➤ **Value-Expressive Function**

The value-expressive function is about how opinions and attitudes serve as a reflection of one's fundamental values and beliefs. (Smith, Bruner, & White, 1956). According to this function, one can assert one's identity and belong to groups by which one becomes identified with similar values. For instance, an ecologist would have favorable attitudes towards green processes and products, thus affirming his or her identity as an ecologist.

➤ **Knowledge Function**

Finally, the knowledge function explains how attitudes assist individuals in sorting out their experience and comprehending the world. In categorizing information and constructing logical beliefs about various objects or topics, attitudes contribute to making decisions and forecasting action (Hernandez, 2015). It is a crucial function in situations where human beings need to deal with complicated social environments and make decisions based on previous experiences.

➤ **Recent Developments and Critiques**

Recent research has expanded upon Katz's original framework by introducing "neo functional" perspectives that explore additional dimensions of attitude functions. (Kocyigit, 2023) These studies suggest that attitudes may serve evaluative functions based on past experiences with specific objects rather than general categories. For instance, an individual's attitude toward a

certain product or service may be shaped by a positive experience with that specific product rather than a broader category of similar products.

Functional theory is not free of critiques regarding its applicability across diverse contexts. (Harris & Toledo, 1997). Some argue that the theory may oversimplify complex psychological processes by categorizing attitudes into distinct functions without accounting for the interplay between them. It may also overlook the influence of social and cultural factors on attitude development. (Harris & Toledo, 1997).

In conclusion, the functional theory of attitude provides valuable insights into why individuals hold certain attitudes and how these attitudes serve various psychological needs. Given the roles that attitudes play in shaping behavior and decision-making processes, researchers can better understand human reactions in different social contexts and settings.

2.1.2 Overview of Black Box Theory

The Black Box Theory refers to understanding systems based only on their inputs and outputs, and not on their inner processes and is applicable to different fields including psychology, engineering, and consumer behavior. It focuses on outside behaviors in place of inside process. The Black Box Theory is a model that enables to analyze complex systems more easily.

Definition and Conceptualization

The "black box" theory has been described as an observable system or model whose inner workings are not visible or not known to the observer. Rather, is explained in terms of inputs (stimuli) and outputs (responses), and can be analyzed on the basis of observable phenomenon (Bunge, 2001). As Bunge (2001) points out, this kind of abstraction is especially applicable in systems theory, where the primary interest is not in the detailed process of how the output occurs but, in the input and output relationship.

Applications in Psychology

The Black Box Model can be applied to explain human activity as a reaction to stimuli from the outside world. Accordingly, although we are not able to see mental process, we can deduce it from the response to behavior (Smith et al., 1956). In practical terms, the Black Box Model can be used by marketers to study how consumers decide to buy based on what they have

experienced before and environmental conditions (Hernandez, 2015). Consequently, the internal choice process within the consumers turns into a "black box" where beliefs, desires, and motives get mixed up in an effort to shape consumers' buying behavior.

The Black Box Model of Marketing

From the explanation of the black box theory, we can draw that it is a marketing model that illustrates how consumers' behavior evolves with the interaction between the external stimulus and the responses among the consumers, leaving the internal decision-making process behind, thus turning into the "black box". (Wesley et al. 2023). Stimuli being both marketing and environmental variables that affect buyers' choices, processed in the "black box" of a consumer including personal, social, cultural, and psychological variables. On the other hand, outputs are empirical consumer reactions such as product selection and buying behavior.

According to Kotler's Black Box Model, stimuli have been classified into marketing stimuli (product, price, place, promotion) and environmental stimuli (economic, technological, political, cultural, demographic conditions), which interplay with the internal decision-making processing of the buyer to create a reaction. (Kotler, 2011). This model is particularly useful in the context of banking business, where segmentation strategies are specialized marketing stimuli to influence heterogeneous customer groups whose underlying preferences and motivations are not easily identified, but can be inferred indirectly from their behaviors.

While explaining the black box theory, Jones and researchers from Cambridge University emphasized that customers internalize external information in their minds, or "black box," linking it with existing held values and beliefs to make choices, which raises the complexity and covert nature of consumer decision-making (Jain, 2024). According to them, the model's focus on the unobserved thought process among consumers renders it extremely useful as a theoretical framework to examine the effects of market segmentation on the performance of commercial banks. It helps to correlate segmentation inputs with quantifiable outputs such as customer loyalty and profitability.

In short, the Black Box Model depicts a formal model of how commercial banks' segmentation policies (inputs) drive customers' actions (outputs) via internal psychological processes that are

mostly hidden, thereby enabling banks to better customize their marketing campaigns (Wesley et al., 2023; Kotler, 2011; Jain, 2024).

Black Box in Engineering and Systems Theory

Black box is also related with engineering and systems theory and it reduces complicated systems to their functional properties. Checkland (1999) explains that this view enables engineers to study the behavior of the system without having to comprehend the internal working of each component. Therefore, black box may be viewed as a single unit which converts input into output, allowing for better designing and testing of systems (Green, 2014). For instance, in software development, black box testing evaluates a program's functionality without knowing its internal working arrangement.

Limitations and Criticisms

While the Black Box Theory is rich in insights across disciplines, it also has weaknesses. The foremost criticism is that it does not catch the complexity of systems by neglecting the internal dynamics that can have a significant impact on outputs (Harris & Toledo, 1997). In areas such as artificial intelligence and machine learning, this limitation is acute; as Rewashed (2024) indicates; deep learning algorithms tend to work like black boxes wherein the decision-making rationale is not transparent. This transparency issue might become an impediment to accountability and trust in systems that are running autonomously. Additionally, some scholars suggest that a sole dependence on input-output relations is likely to draw incorrect conclusions regarding causality. Being aware of the mechanisms in place is vital in order to tailor an efficient intervention or systemic performance improvement (Kocyigit, 2023). Hence, although the Black Box Theory is a good model for an analysis, it ought to be accompanied by other methods paying attention to internal dynamics.

On the other hand, the Black Box Theory is an effective means of interpreting systems by concentrating on tangible inputs and outputs without exploring complicated internal processes. It finds uses in numerous fields from psychology to engineering and consumer behavior. Nonetheless, one must also acknowledge its limitations in terms of transparency and causal inference. By incorporating the insights of other theoretical frameworks in tandem with the Black Box method, researchers can develop a broader understanding of complex systems.

2.1.3 Overview of Technology Acceptance Theory

In terms of technology acceptance, Fred Davis's 1986 Technology Acceptance Model (TAM) has been the basic theory to explain users' adoption of and use of technology. This model is based on two most important factors i.e perceived usefulness and perceived ease of use. Those factors have been identified as key indicators in users' intentions to use new technology. Accordingly, TAM sheds light on the psychological processes that influence technology acceptance, and thus becomes a relevant framework for researchers and practitioners across multiple disciplines, such as information systems, education, and organizational behavior (Davis, 1989).

Perceived Usefulness

Perceived usefulness and perceived ease of use are the two elements in technology acceptance theory affecting customers' choices and decisions. Perceived usefulness again is about perception of clients toward a given technology. It is the degree to which a user feels that using a given technology will enhance their work or assist them in reaching their objectives (Davis, 1989). This is an important element because if the users feel that a technology would make them more efficient or effective, they would be more likely to utilize it. For instance, in business, the employees will utilize project management software if they feel that it would help them monitor work and collaboration (Venkatesh & Bala, 2008).

Perceived Ease of Use

The other element of technology acceptance theory is perceived ease of use. Perceived ease of use has been defined as how much an individual believes using a specific technology will be easy (Davis, 1989). This again is an important factor in the user's acceptance, and if technology is perceived to be hard, then people will shun its use irrespective of its benefits. Research has established that, where users perceive technology to be easy and simple, then their chances for acceptance are boosted significantly (Venkatesh & Davis, 2000).

Theory Foundations and Development

The technology acceptance model (TAM) has largely been drawn from the Theory of Reasoned Action (TRA), which is based on the use of attitudes and intentions to foresee behaviors (Ajzen & Fishbein, 1980). The merging of Theory of Reasoned Action (TRA) in to Technology Acceptance Model (TAM), provided a better understanding of the impact of beliefs regarding an

individual on technology acceptance and use. TAM has been extended in different ways. TAM2 and TAM3, for instance, include other variables that encompass social influence and socio-technical such as facilitating conditions (Venkatesh & Davis, 2000; Venkatesh & Bala, 2008). These have made the model more applicable to be used across different settings and technologies.

Accordingly, TAM has been applied extensively across several fields to measure technology acceptance. In institutions of learning, for example, scholars have used TAM to test the acceptance of students and teachers of e-learning systems (Alharbi & Drew, 2014). In healthcare practice too, TAM has been utilized to study physicians' adoption of electronic health records systems (Huang et al., 2017). These uses support the model's utility and versatility in solving modern issues of technology adoption.

Limitations and Critiques

Technology Acceptance Model (TAM) has wider acceptance and applicability. Yet, is not free of its own limitations and is subject to critique. Accordingly, TAM has been claimed to be too simplistic and disregarded those environmental factors that control the adoption of technology, like organizational culture or environmental forces (Harris & Toledo, 1997). Besides, although TAM is interested in individual perceptions, it disregards the social process of technology adoption activities.

In addressing the limitations of Technology Acceptance Model (TAM), existing research has been based on combining TAM with other models in an attempt to move beyond these limitations. The hybrid approach has been identified as the Unified Theory of Acceptance and Use of Technology (UTAUT). This approach draws concepts from various models and compiles them into a more comprehensive framework for technology acceptance research (Venkatesh et al., 2003). Most of related researches acknowledge that constructs such as social influence and facilitating conditions are no less critical in determining users' intentions, choices and decisions.

Despite its limitations, the Technology Acceptance Model still remains to be the definitive model for explaining how people adopt and use technology in forming their intentions, choices and decisions. In its focus on perceived ease of use and perceived usefulness of technology, TAM offers insights into user behavior in many different contexts. In the meantime, study continues to

refine and extend the model's assumptions and applications. As technology keeps on evolving, its application likely to continue and understanding those dynamics will be critical business in understanding their customers' choices and response to technologies.

2.2 Conceptual Review

2.2.1 The Concept of Customer Segmentation

Customer segmentation is central to banking business that involves the division of customers into specific groups based on common characteristics, behaviors, or needs. Through this process, commercial banks are able to customize products and services in an attempt to meet the varied needs of the different groups of customers, thereby maximizing customer satisfaction and loyalty (Jha & Kumar, 2024). In a market characterized by tough competition and in market environment by and large driven by technology, understanding their existing and potential customers' nature is crucial for financial institutions to simplify their service delivery and marketing approach (Al-Mamary et al., 2024).

Accordingly, customer segmentation can be carried out on the basis of various indicators such as demographics, psychographics, behavior, and geography. Demographic segmentation aims at attributes like age, gender, income, and occupation, whereas psychographic segmentation aims at the customers' lifestyles, values, and interests (Latinia, 2024). On the other hand, behavioral segmentation analyzes habits in customers' dealing with the bank, for instance, transaction record and product utilization (Al-Mamary et al., 2024). Banks through practicing such customer segmentation techniques, are able to develop marketing campaigns that best suits and responsive to a targeted group of customers, in attaining better engagement, customer satisfaction, retention and overall performance rates (Al-Mamary et al., 2024). Segmentation accuracy but also allows banks to pivot quickly with changing market trends and consumer needs. In the end commercial banks can classify and segment their customers on the basis of various indicators including but not limited to benefits, demographic, life preferences & styles, technology and geographic considerations. The following discussion try to highlight some of some of the factors to be used in customer segmentations.

Benefit Segmentation

Benefit segmentation separates customers in terms of the particular benefit or value for which they are searching from a product or service provider. In the case of banks, it is a matter of recognizing segments that value various benefits like convenience, discounted fees, professional guidance, online availability etc. On this basis, banks can design their products to address the individual or customized requirements of each segment there by improving customer experience and satisfaction as well as loyalty (Kaizen, 2025). For instance, some would like high-touch advisory solutions, whereas others would like automated, self-directed online platforms. Parallel to this, benefit segmentation helps banks to allocate resources effectively and develop products and services aimed at meeting desirable customer preferences while improving efficiency and overall performance.

➤ Demographic Segmentation

Demographic segmentation is a common and traditional approach in the banking industry where customers are classified by measurable social characteristics such as age, gender, income, education, and occupation. This traditional form of segmentation helps banks understand basic customer profiles and target marketing efforts accordingly (Kaizen, 2025). For instance, younger customers often prefer digital banking solutions, while older customers may value in-person services. Demographic segmentation also allows banks to develop specialized products, such as youth accounts or retirement savings plans, which align with the financial needs of specific age groups in the wider customer environment (Experian, 2024). The approach facilitates personalized marketing, improves customer experience, and enhances brand loyalty by addressing distinct demographic needs of certain groups within the larger customer community (Abbott, 2023).

➤ Lifestyle Segmentation

The other common customer characteristic to be employed by service and product providers is life style. Such an approach tries to group customers based on their activities, interests, opinions, and values. It has psychological aspect and such psychographic approach tries to capture insights into customer behavior beyond demographic characteristics. In banking, lifestyle segmentation can identify customers who prioritize sustainability and may be interested in such unique

interests such as “green” banking products or those who value luxury and seek premium services (Kaizen, 2025). Life style segmentation enables banks to create marketing messages and product offerings that align with customers’ life values and preferences, thereby improving engagement and satisfaction (Ethiopian Business Review, 2024). Ultimately, lifestyle segmentation helps banks move beyond one-size-fits-all approaches and foster stronger emotional connections with customers.

➤ **Usage Rate Segmentation**

The other common characteristic is usage rate. Usage rate segmentation again categorizes customers based on how frequently or extensively they use banking products and services. Accordingly, heavy users, moderate users, and light users may have different needs and expectations. For example, frequent transaction customers might require advanced digital platforms and personalized support, while occasional users may prefer simple, low-maintenance accounts (Kaizen, 2025). Therefore, understanding usage patterns allows banks to optimize service delivery, tailor loyalty programs, and allocate resources more effectively. Usage rate segmentation also supports the design of levels of products that reward high-usage customers and encourage greater engagement (Kona, 2020).

➤ **Geographical Segmentation**

Geographical segmentation divides customers based on their physical location, such as urban versus rural areas or different regions within a country. Location influences banking needs and access preferences; for instance, rural customers may rely more on mobile banking due to limited branch availability, while urban customers might expect a mix of digital and branch services (Kaizen, 2025). In Ethiopia, banks have used geographic segmentation to tailor services to local contexts, recognizing differences in economic activity and infrastructure (Ethiopian Business Review, 2024). Accordingly, geographic segmentation helps banks optimize branch networks, customize marketing campaigns, and improve service accessibility depending on peculiar characteristics of customers in specific localities.

➤ **Technological Segmentation**

On the other hand, technological segmentation divides customers depending on the adoption and utilization of technologies availed by service and product providers. Within the banking industry,

technological segmentation, divides customers with a preference for digital channels to be availed. With the banking industry, becoming more and more digital, knowledge of customers' technological leaning will be very important in shaping effective models of service delivery (Kaizen, 2025). Accordingly, technological segmentation helps banks to create digitally designed products & services, deliver better customer experience, and increase operational efficiency (Kona, 2020).

Short, customer segmentation is one of the pillars of contemporary bank strategy that enables financial institutions to build tailored experiences and more meaningful relationships with customers. With the continuing evolution of the banking environment, successful segmentation will be a major driver of growth and competitiveness.

2.2.2 The Process of Customer Segmentation

Bank customer segmentation is a systematic grouping of a bank's customers into homogeneous groups of similar characteristics, behavior, and preferences. It helps banks personalize their products and services to suit the different needs of their customers, ultimately leading to higher customer satisfaction and loyalty (KAIZEN, 2025). Segmentation process generally consists of some major steps: determining the segmentation criteria, data collection and analysis pertaining to it, and execution of some predetermined strategies for every segment.

The initial step in the process of segmentation of customers is to identify the factors which help identify customers in to separate groups of common character. Accordingly, banks could employ a mix of demographic, geographic, behavioral, and psychographic factors in creating effective segments and tailor their services and products to each segment depending on their preferences and needs. The common characteristics under each category of customers also vary in line with each factors employed to classify customers. Accordingly, demographic segmentation considers factors such as age, gender, income, and marital status, while geographic segmentation considers where customers are located (Matellio, 2024). Behavioral segmentation on the other hand, looks at customer interactions with the bank, including transaction volume and product usage behavior (Cognizant, 2024). Whereas psychographic segmentation, involves attitudes, values, and lifestyles of customers to gain better insight into their motivations and preferences (Latinia, 2024).

Therefore, in defining the criteria under each of the segmentation factors, banks could gather data from various sources including questionnaires from customers, transactional data, and market questionnaires and consequently group their customers demographically, technologically, in life style and other indicators. Similarly, banks could utilize advanced analytics methods to examine the data and segment their individual customers in to groups of common characteristics. Banks can also utilize big data and machine learning algorithms, and can deduce patterns and trends that guide their segmentation policies (Al-Mamary et al., 2024). Consequently, this data-driven approach improves the precision of segmentation and enables banks to react swiftly to shifting customers' preferences.

Such determination of the segments ultimately enables banks to use focused marketing practices to each segment. This may be done by customizing product and service offerings, crafting personalized campaign messages, or varying service delivery channels to meet the requirements of various customer segments (KAIZEN, 2025). For example, younger consumers may use digital banking services, whereas older customers may prefer customized service from brick-and-mortar facilities (Matellio, 2024). Through addressing the unique demands of each segment, banks can encourage greater customer involvement and even enhance customer retention and overall performance.

Overall, customer segmentation is an essential instrument for banks looking to maximize their performance in a competitive landscape. Through the analytical classification of customers along various parameters and the power of analytics, banks can provide personalized experiences that could build customer satisfaction and loyalty.

2.2.3 Customer Segmentation Practices and Bank Service Offerings

Customer segmentation is crucial for banks to strategize their service offerings in the proper way to fulfill varied requirements of their customers. Customer segmentation based on different groups possessing similar features helps banks to formulate niche marketing strategies and customize products and services to drive customer satisfaction and loyalty (Jha & Kumar, 2025). This is not only enhancing the customer experience but also optimizing the use of resources within the bank so that marketing is directed at the most appropriate audiences (KAIZEN, 2025).

Customer segmentation often involves the use of a number of criteria such as demographic, psychographic, behavior, and geographic criteria. Demographic segmentation involves the customer segmentation based on age, gender, income, and education, making it possible for banks to determine particular needs related to various life stages (Al-Mamary et al., 2024). Psychographic segmentation considers customers' attitude, values, and lifestyle and also discovers customers' motivations and tastes (Matellio, 2024). Behavioral segmentation addresses how the customers act with the bank, i.e., frequency of transactions and usage behavior for the products, allowing banks to structure offerings around realized customer behavior (Cognizant, 2024).

In addition, efficient customer segmentation strategies enable banks to design service propositions across individual segments. For example, young clients can be keen on online banking services driven by convenience and speed of transactions, whereas older clients can prefer personalized service through direct interaction (Jha & Kumar, 2025). Realizing such differences between existing and potential customers, enables banks to create personalized financial products that cater to the specific requirement of each segment and thus promotes engagement and loyalty among customers.

Furthermore, the application of big data technologies and advanced analytics has revolutionized the dynamics of customer segmentation for banks. Through the introduction of various banking technologies, banks can handle a significant number of data to establish patterns and trends in customer segments in real time (Al-Mamary et al., 2024). Therefore, through customer segmentation, which again is backed up with data analysis, banks can maintain their service offerings in real time to reflect emerging customer behavior and preferences.

As a whole, customer segmentation policies are inescapable for banks looking to improve services, as well as overall customer satisfaction. Through strategic segmentation on the basis of various parameters and with real time data analysis, banks can provide personalized experiences to their customers that earn them customer satisfaction and loyalty there by improving overall business performance.

2.2.4 Customer segmentation and performance of banks

Customer segmentation in general is a strategy that allows commercial banks to divide customers into respective groups on the basis of different parameters like demography, behavior, and

preferences. Customer segmentation is necessary for improving customer experience, optimizing the use of resources, and ultimately improving the performance of banks. The review below describes in detail the role of customer segmentation in banking, its usage, and its effect on the performance of banks.

Customer Segmentation Significance

Customer segmentation enables banks to provide services and market their services and products in line with the unique requirements of various customer segments. According to Kocyigit (2023), successful segmentation boosts customer satisfaction and loyalty through the delivery of customized services that suit the needs of clients. As the financial industry evolving in to more and more competition, it is imperative to understand each customer segment's characteristics for the delivery of differentiated experiences that build long-term relationships (Palacios, 2025).

Enhancing Customer Experience

Customer segmentation also allows banks to determine which customers need special attention and who can be efficiently served with a chosen approach relative to the specific service and product availed. Segmentation of customers by their needs like high-net-worth customers who might perhaps need personalized advice on finance and young customers who want to just do everything online, banks can better deploy resources in a most efficient manner. Notably, through customer segmentation not only customer satisfaction could be enhanced, but also operational efficiency as resources could be geared towards high-impact interactions (KAIZEN, 2025).

Maximizing Use of Resources

The other advantage of strategic customer segmentation is it allows banks to optimize the use of marketing endeavors and efficient utilization of resources. Accordingly, analysis of demographic, geographic, behavioral, and psychographic dimensions of customers enables banks to create more accurate segments and provided tailored solutions to specific group of customers (Matellio, 2025). For example, using expertly differentiated marketing communications that appeal to young professionals using mobile banking facilities and providing high-touch service for senior citizens requiring face-to-face guidance. This real-time allocation of funds allows banks to drive the greatest impact across multiple customer segments.

Methodologies for Customer Segmentation

Banks and as well as other service and product providers could employ various methodologies and approaches for effective customer segmentation. Effective customer segmentation also requires a comprehensive approach that combines multiple data sources. Consequently, common methodologies for customer segmentation include: demographic, benefit, lifestyle, technological and geographical approaches.

1. Demographic Segmentation: This involves categorizing customers based on age, income, marital status, and other demographic factors. For example, younger customers may prefer digital banking solutions while older customers value traditional services (KAIZEN, 2025).

2. Benefit Segmentation: Benefit segmentation focuses on grouping customers according to the specific benefits or value they seek from a product or service. This methodology is particularly effective in the banking sector where customers prioritize different advantages such as convenience, security, low fees, or personalized financial advice. By identifying these benefit-driven segments, banks can tailor their products and marketing efforts to meet the unique expectations of each group, thereby improving customer satisfaction and retention (Kaizen, 2025). For example, some customers may seek quick loan approvals while others prioritize high-yield savings accounts, and benefit segmentation helps banks address these diverse needs effectively.

3. Lifestyle Segmentation: Lifestyle segmentation categorizes customers based on their activities, interests, opinions, and values, providing a psychographic perspective beyond basic demographics. This approach enables banks to understand the underlying motivations and preferences that drive customer behavior. For instance, customers with an environmentally conscious lifestyle might be attracted to “green banking” products, while those with a luxury lifestyle may prefer premium banking services (Matellio, 2025). Lifestyle segmentation helps banks develop targeted campaigns and personalized products that resonate with customers’ identities and values, fostering stronger emotional connections and loyalty.

4. Usage Rate Segmentation: Usage rate segmentation divides customers based on the frequency or volume of their interactions with banking products and services. Customers can be classified as heavy, moderate, or light users, each with distinct needs and value to the bank.

Heavy users might require advanced digital platforms and personalized support, whereas light users may prefer simple, low-maintenance accounts (Kaizen, 2025). This methodology allows banks to design tiered service levels, loyalty programs, and resource allocation strategies that maximize profitability and customer satisfaction by focusing on usage intensity.

5. Geographical Segmentation:

Geographical segmentation segments customers according to their location, i.e., rural or urban or regional areas. The location determines customer taste, banking infrastructure access, and economic conduct. Rural customers, for instance, will have greater reliance on mobile banking since branch access is limited, while urban customers anticipate a mixture of branch and electronic services (Matellio, 2025). This segmentation method helps banks optimize branch networks, customize product offerings, and modify marketing campaigns to suit local traits and requirements, improving overall service performance.

6. Technological Segmentation:

Technological segmentation categorizes customers according to their technology adoption and application for accessing banking services. It differentiates those technologically proficient customers using online and mobile banking from those using the conventional face-to-face banking. With the advancement of digital banking, it is vital for banks to know the technology inclinations for creating relevant service models and enhancing customer experience (Kaizen, 2025). Technological segmentation makes possible the creation of specialized digital products and communication strategies that enhance communication and work process performance.

Through the merging of these techniques, banks can establish a complete picture of their customers and build tailored plans that appeal to each segment.

Segmentation of customers is an effective tool for commercial banks that aim to improve performance in a competitive marketplace. Through data on diversified customer demand through effective segmentation methods demographic, behavioral, and psychographic banks can maximize resource allocation, enhance customer satisfaction, and maximize financial performance. As the banking industry continues to revolutionize with advances in technology and shifting consumer behavior, application of customer segmentation will be critical in maintaining growth and establishing long-term customer relationships.

2.3 Empirical Literature Review

Benefit Segmentation

Empirical research has revealed that benefit segmentation has a crucial function in commercial banks' capability of product customization and customer satisfaction. Aghaei (2021) conducted a case study of Iran's Shahr Bank and established that customers' benefit segmentation facilitated the bank to offer better services and customers' loyalty by coordinating the product attributes with customers' priorities. Similarly, Latinia (2024) highlighted that banks which identify and address benefit-driven segments-such as customers seeking low fees or electronic convenience-can develop more powerful marketing strategies that grow retention and profitability. This type of segmentation enables banks to act on broad sets of customer needs with greater precision, resulting in improved performance across the board.

Demographic Segmentation

Demographic segmentation is still a popular and potent strategy in business banking. Kona (2020) demonstrated that banks employing demographic criteria like age, income, and occupation were more capable of forecasting client demands and addressing them accordingly using financial products, with mutual benefits to customer acquisition and retention.

Latinia (2024) also indicated that demographic segmentation enables banks to segment product choice by customers such as young customers preferring digital banking and old customers preferring traditional banking. Demographic segmentation has been found to enable targeted marketing campaigns that result in high customer interaction and financial outcomes.

Lifestyle Segmentation

Lifestyle segmentation, which identifies customers' interests, values, and activities, has been proven to make banks more emotionally connected to their customers. Matellio (2025) demonstrated that banks that sell to lifestyle segments like green consumers or luxury shoppers can create niche products that enhance the customer satisfaction and loyalty level. Omri Raiter (2021) applied cluster analysis for lifestyle-based segmentation of customers in banking and observed that with more precise communication and service design, it is achievable using such segmentation, hence enhancing bank performance metrics such as customer retention and cross-sales.

Usage Rate Segmentation

Usage rate segmentation has been empirically associated with more effective deployment of resources and increased profitability in commercial banks. Mihova and Pavlov (2018) segmented customers according to transaction volume and usage intensity, where intensive customers were positively reacted to premium services and loyalty programs, raising their lifetime value for the bank. Latinia (2024) also stated that awareness of usage patterns helps banks to segment service intensity and marketing, minimizing low-users' cost and maximizing revenue from intensive-users. This segmentation technique has a direct bearing on better financial performance.

Geographical Segmentation

Geographical segmentation is at the core of the alignment of banking services with local market conditions. Based on research carried out by Matellio (2025), it has been identified that banks aligning products and delivery channels with customers' urban or rural position can counter barriers to access as well as enhance customers' satisfaction. Latinia (2024) added that geographic segmentation enables the banks to streamline their branch networks and deploy digital services, something that is especially beneficial in areas where there is uneven infrastructure. The empirical evidence attests that geographic segmentation facilitates market penetration and operational efficiency that enhances bank performance overall.

Technological Segmentation

Technological segmentation became more prominent with the advent of online banking. According to Kona (2020), customer segmentation by technology usage and adoption patterns allows banks to create customized digital solutions enhancing user experience as well as business efficiency. Omri Raiter (2021) proved that banks utilizing technological segmentation were better placed to allocate resources to digital as well as classic channels, enhancing customer satisfaction and service cost reduction.

Latinia (2024) added that understanding technological inclinations is necessary to develop suitable products and advertising campaigns, which positively affect customers' loyalty and profitability.

2.4 Research Gap

Based on the reviewed empirical literature regarding customer segmentation and its influence on the performance of commercial banks, several research gaps have been identified. The current study attempts to respond to those gaps by incorporating additional dimensions of customer segmentation beyond the traditional demographic factors common to most commercial banks including Awash Bank. The following is the outline of the key research gaps to be reflected on while analyzing the practice in Awash Bank and to use same as the background of the intended case study:

Limited Focus on Non-Demographic Segmentation: Most existing studies primarily emphasize demographic segmentation (e.g., age, gender, income) as the main criterion for categorizing customers. However, there is insufficient exploration of other critical dimensions such as lifestyle segmentation, benefits segmentation, technological segmentation, usage rate segmentation, and geographical segmentation. This gap suggests a need for research that investigates how these additional dimensions can enhance the effectiveness of customer segmentation strategies in commercial banks (Matellio, 2025).

Lack of Comprehensive Frameworks: While some studies have examined various segmentation strategies, they often lack a comprehensive framework that integrates multiple dimensions of customer segmentation. The current literature does not adequately address how combining lifestyle, benefits, technological, usage rate, and geographical factors can provide a more holistic understanding of customer needs and preferences (Kocyigit, 2023).

Insufficient Empirical Evidence on Performance Outcomes: Although several studies have established a link between demographic segmentation and bank performance, there is limited empirical evidence demonstrating how incorporating diverse segmentation strategies impacts overall bank performance metrics such as profitability, customer retention, and satisfaction (Endale, 2022). This gap highlights the need for research that quantitatively assesses the performance outcomes associated with different segmentation strategies.

Underexplored Behavioral Insights: Existing literature has not sufficiently explored behavioral insights derived from customer interactions across multiple channels (e.g., online banking, mobile apps). Understanding how customers engage with banking services through various

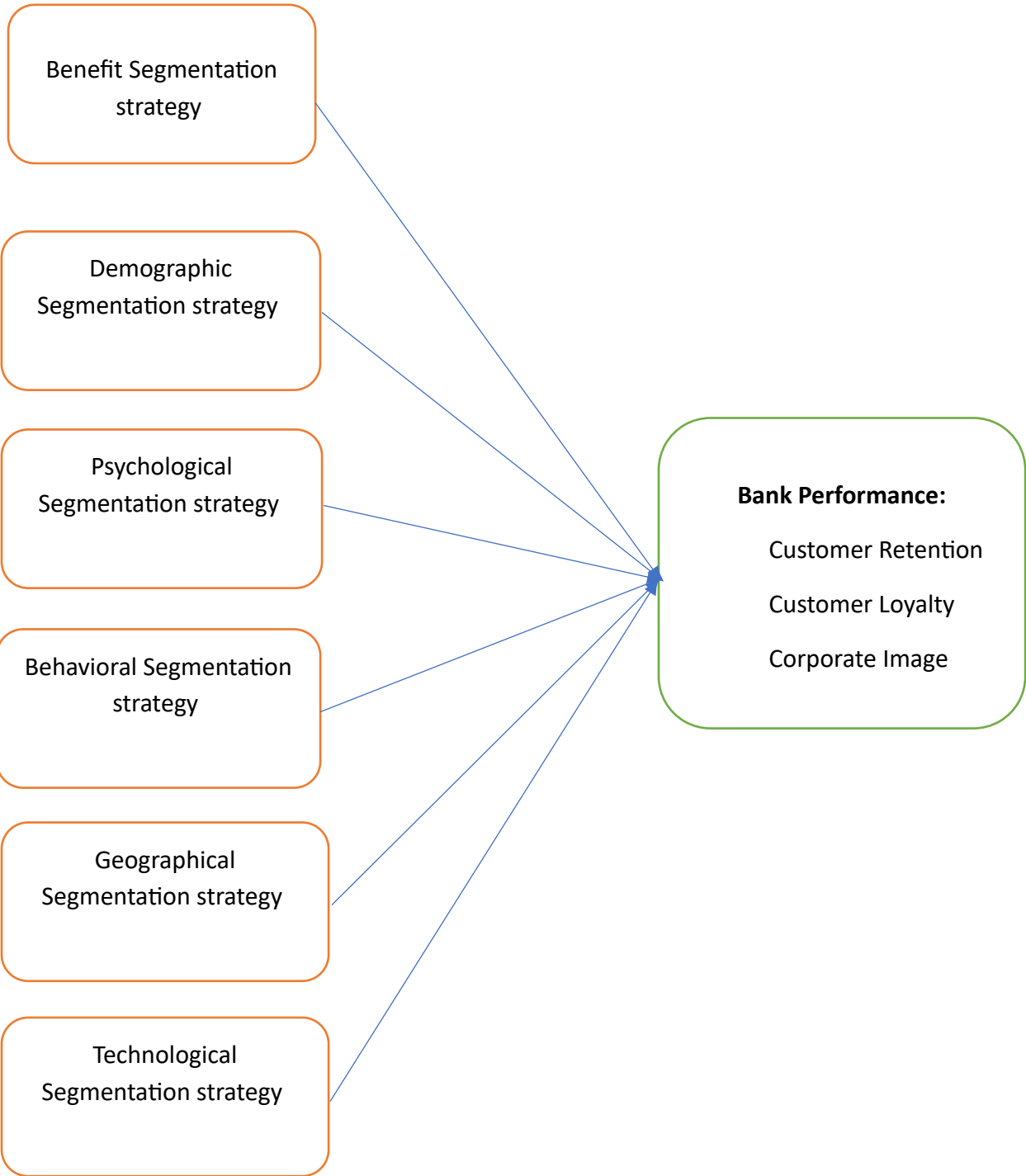
platforms can inform more effective segmentation strategies that cater to their specific behaviors and preferences (Hernandez, 2015).

Geographical Segmentation: While some studies mention geographical factors in market segmentation, there is a lack of focused research on how geographical differences affect customer needs and preferences in the context of Ethiopian banks. This gap presents an opportunity to investigate how geographical segmentation can lead to tailored services that resonate with local communities (Zelege, 2021). By addressing these identified gaps through the current study's focus on incorporating various dimensions of customer segmentation namely lifestyle segmentation, benefits segmentation, technological segmentation, usage rate segmentation, and geographical segmentation researchers can contribute significantly to the understanding of how these strategies impact the performance of commercial banks in Ethiopia.

2.5 Conceptual Framework of the study

Based on the reviewed theoretical and empirical related literatures, the conceptual framework for this particular study is developed as presented below.

Figure 2.1 Conceptual Framework of the study



Source: Adopted from Kwendo, E. S. (2018) with slight modification

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

The research methods that are to be used are described in this chapter is consist of the study area, target population, sampling strategy, data collection, data sources, data collection methods, data collection tools, validity and reliability, and research design. Examine data collection tools, data presentation and analysis, and ethical issues.

3.1 Research Approach

The study employs qualitative and quantitative research approach in studying customer segmentation approaches and their impact on commercial bank performance in Ethiopia and specifically at Awash Bank. Since it allows systematic collection and analysis of numerical data and makes it easy to observe trends and relationships between customer segmentation strategies and performance metrics (Creswell & Creswell, 2017), quantitative approach is appropriate for the study. The approach will enable the research to measure important performance indicators along various axes of customer segmentation.

3.2 Research Design

The study applied both descriptive and explanatory methods designed to draw a description of current customer segmentation practices within Awash Bank. Descriptive statistics present demographic information and significant variables with regard to customer segmentation practices which impact bank performance. Inferential statistics, in the form of multiple regression analysis, was employed to analyze the relationships between customer segmentation dimensions and the performance of banks as to how and why the different customer segmentation dimensions affected the customer satisfaction, retention, and over all performance. The analysis also helped to determine the strength and direction of customer segmentation dimensions in impacting the performance of banks such relationships.

3.3 Target Population

The target population in this study are Awash Bank staffs at the head office with policy and decision-making authority in relation to customer segmentation. Accordingly, the relevant managers and officers at the headquarters of Awash Bank in Addis Ababa were targeted for the study. This specificity enabled a critical examination of how customer segmentation policies are viewed and practiced across various functional departments within the bank.

3.4 Sampling Procedure

A census sampling method was employed in this research. This involves the use of all the managers and experts from the respective departments in headquarters as respondents. Employing a census methodology, the research will attempt to acquire in-depth information from the entire concerned stakeholders who are involved in customer segmentation decision making and supervision activities at the head quarter of Awash Bank. This technique enabled to attain the maximum representativeness and ensures diversified viewpoints are acknowledged, leading to final stronger conclusions about the effect of customer segmentation on the performance of the bank .

3.5 Data source and Type

The bulk of the data for this research is gathered from primary data generated by survey employing a structured questionnaire. The primary data obtained through the survey questionnaire is cross-sectional in nature and thus gives a snapshot of existing perceptions and practices for customer segmentation strategies at a point in time. This technique allows for the scrutiny of trends and variable relationships without tracking their over-time changes. By applying this cross-sectional primary data gathering method, the research aims to facilitate statistical analysis that identifies trends and relationships of relevance to the research objectives i.e. analyzing the impact of the various customer segmentation dimensions on the performance of banks.

3.6 Data Collection Instrument

A Structured survey questionnaire was designed and employed to gather quantitative data from the target population. The survey instrument integrated both open-ended and closed-ended

questions to elicit measures of perceptions of customer segmentation methods and their impacts on several measures of performance.

3.7 Data Collection Process

A structured questionnaire was designed to collect data on customer segmentation methods, their perceived effectiveness, and their impact on the performance of banks. The questionnaire was comprising closed-ended questions reflecting on the different dimensions of customer segmentation. Pilot interviews were conducted with a small sample of respondents (e.g., experts or managers) to pretest clarity and appropriateness. Feedbacks were employed to make amendments to the questionnaire.

All the managers and officers in the relevant divisions at the headquarters were made respondents using the census sampling technique. Formal notice with an informed communication was utilized in introducing the study objective and ensuring their participation. The survey was conducted combining face-to-face and online approaches based on preferences. Completed questionnaires were compiled into a secure database for analysis, ensuring respondent anonymity through anonymization of information. Data cleansing procedures will identify and correct inconsistencies before analysis.

3.8 Data analysis and Presentation

Data presentation and analysis of the study was designed in a manner to interpret and present the findings properly about how customer segmentation methods influence the performance of Awash Bank. Survey returns were fed into statistical software package SPSS version-25 to segregate and summarize the data collected. Data cleansing was conducted to detect and fix any inconsistency, missing data, or outliers to guarantee the accuracy of the dataset. Descriptive statistics was computed for describing respondents' demographic characteristics, e.g., years of experience, age, gender, and bank division. Mean, median, frequency, and percentages offered a description of customer segmentation practice and attitudes. Inference was made using multiple regression analysis to project the relationships between customer segmentation dimensions (independent variables) and measures impact on bank performance (dependent variables) like customer satisfaction, retention levels, and profitability. The analysis enabled to ascertain the strength and direction of these relationships and conduct hypotheses testing on the efficacy of various segmentation dimensions.

The findings of the descriptive and inferential analyses were presented in a mix of tables, graphs, and charts to enable ease and clarity of comprehension. Important findings were accentuated through narrative description of findings with the use of regression analysis. Detailed interpretation of findings shall translate findings into the research questions and aims and indicate how different customer segmentation approaches affect bank performance based on the data analyzed. Comparison was also drawn to previous literature in order to place findings within broader trends of customer segmentation within banks.

The analysis also helped to draw conclusions which helped to come up with specific recommendations for effective customer segmentation strategies to be adopted by Awash Bank as well as other banks through understanding how customer segmentation practices influence the performance of banks, and in informing the decision-making process.

3.9 Reliability Test Result

The results of the reliability test in Table 3.1 show the internal consistency of the scales of measurement applied in the study. All the factors possess Cronbach's alpha higher than the generally recommended value of 0.70, which shows good reliability for all the constructs.

In particular, Benefit Segmentation shows very high reliability with five items possessing a coefficient of 0.875, which demonstrates excellent internal consistency. Demographic Segmentation was also very reliable with alpha 0.847 for five items. Psychological Segmentation and Behavioral Segmentation also demonstrated an acceptable level of reliability of 0.710 and 0.716, respectively, both of whom were based on five items. Geographical Segmentation had its reliability reported to be 0.729, having good reliability. Technological Segmentation had a high reliability coefficient of 0.806 based on five items. Lastly, the Bank Performance scale that had ten items also had excellent reliability at 0.848.

The above results thus validate that the survey instruments employed to assess the different variables of segmentation and bank performance are satisfactory and valid for future statistical analysis. The repeated Cronbach's alpha measures validate the validity of the survey data collected in 2025.

Table 3.1 Reliability Test Result

Factors	Cranach's Alpha	No of Items
Benefit Segmentation	.875	5
Demographic Segmentation	.847	5
Psychological Segmentation	.710	5
Behavioral Segmentation	.716	5
Geographical Segmentation	.729	5
Technological Segmentation	.806	5
Bank Performance	.848	10

Source: own survey, 2025

3.10 Econometric Model Specification

To analyze the impact of various dimensions of customer segmentation strategies on bank performance, the following econometric model will be specified. The model will use multiple regression analysis to assess the relationship between the dependent variable (bank performance) and the independent variables (dimensions of customer segmentation).

Model Specification

$$BP = \alpha_0 + \beta_1 DGS + \beta_2 LSTS + \beta_3 BS + \beta_4 TCS + \beta_5 URS + \beta_6 GES + \epsilon$$

Where;

Let **BP** represent the dependent variable, which is Bank Performance. The independent variables will include:

DGS: Demographic Segmentation Strategy

LSTS: Lifestyle Segmentation Strategy

BS: Benefit Segmentation Strategy

TCS: Technological Segmentation Strategy

URS: Usage Rate Segmentation Strategy

GES: Geographical Segmentation Strategy

Estimation Method

The coefficients (β_{1-6}) will be estimated using Ordinary Least Squares (OLS) regression analysis. The results will provide insights into how each dimension of customer segmentation strategy influences bank performance, allowing for hypothesis testing regarding their effectiveness.

By specifying this econometric model, the study aims to quantitatively assess the impact of customer segmentation strategies on the performance of Awash Bank, providing a robust framework for analysis and interpretation of results.

CHAPTER FOUR

DATA ANALYSIS AND INTERPERETATION

4.1 Introduction

This chapter of the study present the study findings, interpretation of the results as well as the discussions made over the findings. Accordingly, the first section of the chapter presents the demographic characteristics of the respondents while the second section of the chapter presents the finding and discussion of the descriptive statistics analysis. Finally, the third section deals with the presentation of the result and discussion of the inferential statistics analysis.

4.2. Questionnaire Response Rate

Out of the total of 72 distributed questionnaires, 72 questionnaires were collected back properly filed. So, the questionnaire return rate was registered to be 100 percent, at testing the adequacy of the response towards coming up with reliable output.

4.3 Demographic Characteristics of Respondents

Researchers can better comprehend the differences in the important demographic characteristics among respondents by analyzing the respondents' demographic data. As a result, this part aimed to show the respondents' demographic information, including their sex, age, level of education, work position and work experience.

4.3.1 Sex of Respondents

The study involved a total of seventy-two respondents. Among these participants, forty-six were male, constituting 33.9 percent of the sample. Female respondents numbered 26, making up thirty-six-point one percent of the total respondents. This indicates that the majority of respondents were male. The predominance of male participants may reflect the gender composition within Awash Bank or the broader commercial banking sector in Ethiopia. Despite this, the inclusion of female respondents ensures that both male and female perspectives are represented in the study. This demographic distribution is important for interpreting the study findings, as it provides insight into the representativeness of the sample and allows for

consideration of any gender-related differences in perceptions or experiences regarding customer segmentation strategies and their impact on bank performance.

Table 4.1 Sex of the respondents

		Frequency	Percent
Valid	Male	46	63.9
	Female	26	36.1
	Total	72	100.0

Source: own survey, 2025

4.3.2 Age of the Respondents

72 subjects formed the study sample. 21 of them were between 18 and 25 years and represented 29.2 percent of the sample. The 26 to 35 years sample included 29 subjects or 40.3 percent of the sample. The 36 to 45 years age group consisted of 20 subjects who represented 27.8 percent of the sample. The age group of 46 to 55 years was the least populated, with only 2 respondents, accounting for 2.8 percent of all the respondents. The age distribution indicates that the respondents were primarily young adults and middle-aged people, with the most populated being the 26 to 35 years age group. The respondents' age composition is especially of concern since it allows us to know the context of the study results and is a guarantee that the responses represent a broad age range in Awash Bank.

Table 4.2 Ages of the Respondents

		Frequency	Percent
Valid	18-25 years	21	29.2
	26-35 years	29	40.3
	36-45 years	20	27.8
	46-55 years	2	2.8
	Total	72	100.0

Source: own survey, 2025

4.3.3 Educational Background of the Respondents

The research involved 72 participants who had varied educational levels. A total of eight participants, representing 11.1 percent of the sample, consisted of a varied number of diploma holders. The largest group of the participants, 40 participants or 55.6 percent, consisted of first-degree holders. Additionally, 24 participants, representing 33.3 percent of the whole, consisted of a master's degree. This distribution shows that the majority of the respondents have reached tertiary level education with a large portion having first degree status and a notable part having gone to master's level studies. The respondents' level of education is a significant factor in interpreting their views on the customer segmentation methods and how they affect the performance of Awash Bank.

Table 4.3 Educational Background of the respondents

		Frequency	Percent
Valid	Diploma	8	11.1
	First Degree	40	55.6
	Master’s degree	24	33.3
	Total	72	100.0

Source: own survey, 2025

4.3.4 Work Experience of the Respondents

The overall sample was 72 respondents. 12 respondents, which is 16.7 percent of the sample, had a work experience of up to one year. The most were respondents with 1 to 3 years' worth of work experience and they were 28 or 38.9 percent of the sample. Those with a work experience of 4 to 6 years were 22, or 30.6 percent of the total. Lastly, 10 respondents were 7 to 9 years experienced, representing 13.9 percent of the sample. That is a sign that there are more than half of the respondents who are one and six years experienced, indicating there is quite an experienced workforce within Awash Bank. It is important to know the experience of the respondents in their work to be able to understand better their perception towards customer segmentation strategies and their impacts on bank performance.

Table 4.4 Work Experience of the respondents

		Frequency	Percent
Valid	Less than one year	12	16.7
	1-3 years	28	38.9
	4-6 years	22	30.6
	7-9 years	10	13.9
	Total	72	100.0

Source: own survey, 2025

4.3.5 Work Position

The study included 72 respondents occupying various positions within the marketing department of Awash Bank. Seven respondents, representing 9.7 percent of the sample, held the position of Marketing Manager. The next group consisted of 20 Marketing Analysts, accounting for 27.8 percent of the respondents. The largest group was Marketing Officers, with 45 individuals making up 62.5 percent of the total sample. This distribution indicates that the majority of respondents are Marketing Officers, reflecting a workforce structure where operational roles are predominant. The diversity in work positions allows for a comprehensive understanding of customer segmentation strategies from different hierarchical perspectives within the bank.

Table 4.5 Work Position

		Frequency	Percent
Valid	Marketing Manager	7	9.7
	Marketing Analyst	20	27.8
	Marketing Officer	45	62.5
	Total	72	100.0

Source: own survey, 2025

4.4. Descriptive Statistics Analysis

Various statements were provided under each survey questionnaire construct to gain insight into

the respondents' perceptions on the various market segmentation and commercial bank performance constructs. Thus, each statement under each component was evaluated using the five-point Likert scale. On a five-point Likert scale, each statement in a variable is scored from 1 to 5, where 1 indicates that the respondent finds the statement to be very disagreeable, 2 disagreeable, 3 neutral, 4 agreeable, and 5 extremely agreeable. The mean value of the respondents' ratings for each statement under a variable will be used to calculate how the employees perceive that variable. As a result, the mean value for each variable might be interpreted as follows: 1.00-1.80 = extremely disagree, 1.80-2.60 = disagree, 2.60-3.40 = neutral, 3.40-4.20 = agree, and 4.20-5.00 = highly agree.

4.4.1 Benefit Segmentation

Respondents rated the bank's ability to tailor products to specific customer benefits with a mean of 3.36, while the perception that the bank understands unique customer needs scored slightly lower at 3.24. The highest rating of 3.44 was given to the bank's efforts to update offerings according to changing customer preferences. The belief that benefits segmentation enhances overall satisfaction received a mean of 3.26, and marketing communications reflecting key customer benefits scored 3.42.

Overall, the combined mean of 3.34 suggests that respondents generally agree that benefit segmentation is practiced and contributes positively to their experience, though some variation exists in individual views.

4.6 Respondents' Perception on Benefit Segmentation

Items	N	Mean	Std. Devi
The bank effectively tailors its products to meet the specific benefits desired by different customer segments.	72	3.361	1.2594
I feel that the bank understands my unique needs based on the benefits I seek from their services.	72	3.236	1.3479
The bank frequently updates its offerings to align with the changing benefit preferences of its customers.	72	3.444	1.2321
I believe that benefit segmentation enhances my overall satisfaction with the bank's services.	72	3.264	1.2781

The bank's marketing communications clearly reflect an understanding of the benefits that matter most to me.	72	3.417	1.0974
Overall Mean		3.34	1.24

Source: own survey, 2025

4.4.2 Demographic Segmentation

Respondents rated the bank's ability to offer services suited to their demographic profile with a mean of 3.42. The perception that promotions are targeted to their demographic group scored 3.26. The bank's understanding of demographic differences, which enhances customer experience, received a higher mean of 3.65. Similarly, the belief that demographic segmentation aids customer retention scored 3.69, the highest among the items. Respondents also agreed that the bank's staff are knowledgeable about the needs of different demographic segments, with a mean of 3.63. Overall, these results suggest that demographic segmentation is well recognized by customers and is seen as an effective strategy for improving service and retention.

4.7 Respondents' Perception on Segmentation

Items	N	Mean	Std. Devi
The bank offers services that are well-suited to my demographic profile (age, gender, income level).	72	3.417	1.0974
I have noticed that the bank's promotions are targeted towards my demographic group.	72	3.264	1.2102
The bank's understanding of demographic differences improves my customer experience.	72	3.653	1.0768
I believe that demographic segmentation helps the bank in retaining customers like myself.	72	3.694	1.0020
The bank's staff are knowledgeable about the specific needs of different demographic segments.	72	3.625	1.3048
Overall Mean		3.53	1.14

Source: own survey, 2025

4.4.3 Psychological Segmentation

Respondents rated the alignment of the bank’s products and services with their lifestyle choices at 3.81. The perception that the bank understands their lifestyle when recommending products scored 3.74, while the marketing strategies resonating with their lifestyle values received a mean of 3.69. Lifestyle segmentation’s influence on customer loyalty was rated higher at 4.00. The highest mean of 4.22 was given to the bank’s active engagement with customers based on lifestyle characteristics.

These findings indicate that psychological segmentation is highly effective and positively influences customer loyalty and engagement.

Table 4.8 Respondents’ Perception on Psychological Segmentation

Items	N	Mean	Std. Devi
The bank provides products and services that align with my lifestyle choices and preferences.	72	3.806	1.0297
I feel that the bank understands my lifestyle when recommending financial products.	72	3.736	1.0208
The marketing strategies employed by the bank resonate with my lifestyle values.	72	3.694	1.0699
Lifestyle segmentation has positively influenced my loyalty to this bank.	72	4.000	1.0209
The bank actively engages with customers based on their lifestyle characteristics.	72	4.222	.7358
Overall Mean		3.89	0.89

Source: own survey, 2025

4.4.4 Behavioral Segmentation

The descriptive statistics in Table 4.9 reveal that respondents generally have a positive perception of the bank’s behavioral segmentation practices. With 72 participants, the highest mean scores of 4.389 were recorded for the bank’s effective identification and rewarding of high-usage customers and the enhancement of banking experience through tailored offerings. Respondents also felt appreciated due to the bank’s focus on usage patterns, with a mean of 4.097. The bank’s communication reflecting an understanding of service usage received a slightly lower mean of 4.028, showing some variability in responses. The lowest mean, 3.792, was for the perception that usage rate segmentation positively influences the bank’s overall performance, though it remains favorable.

Overall, the average mean of 4.08 indicates that respondents agree the bank’s behavioral segmentation strategies positively impact their experience. While most views are favorable, some variation suggests opportunities to strengthen the perceived impact of segmentation on the bank’s performance.

Table 4.9 Respondents’ Perception on Behavioral Segmentation

Items	N	Mean	Std. Devi
The bank effectively identifies and rewards high-usage customers like myself.	72	4.389	.7230
I feel appreciated as a customer due to the bank's focus on usage patterns in its services.	72	4.097	.8747
My banking experience is enhanced by tailored offerings based on my usage rate.	72	4.389	.7230
The bank’s communication reflects an understanding of how often I use its services.	72	4.028	1.0611
Usage rate segmentation contributes positively to my perception of the bank’s performance.	72	3.792	.9777
Overall Mean		4.08	0.89

Source: own survey, 2025

4.4.5 Geographical Segmentation

The descriptive statistics in Table 4.10 indicate that respondents have a moderately positive perception of the bank’s geographical segmentation strategies. Based on responses from 72 participants, the highest mean score of 4.111 was for the statement that geographical segmentation enhances overall satisfaction with the bank’s services. Other items received slightly lower mean scores, including beliefs that geographical segmentation allows for better service delivery (3.806), provision of services catering to their area (3.653), relevance of marketing campaigns to the local community (3.625), and convenience of branch locations due to segmentation strategies (3.583).

The overall mean of 3.76 with a standard deviation of 1.11 suggests a general agreement that geographical segmentation contributes positively to the banking experience, though there is notable variability in responses. This indicates that while many customers appreciate the localized approach, some perceive room for improvement in how effectively the bank tailors its services and marketing to specific geographical areas.

Table 4.10 Respondents’ Perception on Geographical Segmentation

Items	N	Mean	Std. Devi
The bank provides services that cater specifically to customers in my geographical area.	72	3.653	.9217
I believe that geographical segmentation allows for better service delivery from the bank.	72	3.806	1.0959
The branch locations are convenient for me due to effective geographical segmentation strategies.	72	3.583	1.2754
Marketing campaigns from the bank are relevant to my local community context.	72	3.625	1.3986
Geographical segmentation enhances my overall satisfaction with the banking services provided.	72	4.111	.8649
Overall Mean		3.76	1.11

Source: own survey, 2025

4.4.6 Technological Segmentation

The descriptive statistics in Table 4.11 show that respondents generally have a positive perception of the bank’s technological segmentation efforts. Among 72 participants, the highest mean score of 4.097 was for the appreciation of how the bank tailors’ digital services based on customer technology usage patterns. Other items received slightly lower mean scores, including alignment of technological innovations with personal banking preferences (3.958), effective use of technology to meet segment needs (3.625), improvement of overall banking experience through technological segmentation (3.653), and increased engagement due to technological advancements (3.597).

The overall mean of 3.79 with a standard deviation of 1.10 indicates moderate agreement that technological segmentation enhances the banking experience. The variability in responses suggests that while many customers value the bank’s technological focus, some perceive opportunities for further improvement in how technology is leveraged to meet diverse customer needs.

Table 4.11 Respondents’ Perception on Technological Segmentation

Items	N	Mean	Std. Devi
The bank utilizes technology effectively to meet the needs of different customer segments.	72	3.625	1.3048
I appreciate how the bank tailors its digital services based on customer technology usage patterns.	72	4.097	.9809
Technological innovations introduced by the bank align well with my banking preferences.	72	3.958	1.0804
I feel more engaged with the bank due to its focus on technological advancements.	72	3.597	1.2063
Technological segmentation has improved my overall banking experience.	72	3.653	.9217
Overall Mean		3.79	1.10

Source: own survey, 2025

4.4.7 Commercial Banks' Performance

The descriptive statistics in Table 4.12 reflect respondents' generally positive perceptions of the commercial bank's overall performance across various dimensions. Based on responses from 72 participants, the highest mean score of 4.542 was reported for the statement that the bank's financial growth and stability are positively influenced by its efforts to serve different market segments. This was closely followed by a mean of 4.500 for positive market share growth within key targeted segments and a mean of 4.319 for consistently high customer satisfaction levels across all segments.

Other items also received favorable mean scores, including the tailoring of financial products and services to customer needs (4.028), strong customer loyalty and repeat business due to tailored offerings (4.028), and effective acquisition and retention of customers within defined segments (4.264). The bank's adoption and integration of technological solutions to enhance service accessibility scored a mean of 4.000, while the strategic location of branch networks to serve geographically diverse customers had a mean of 3.944. Profitability meeting or exceeding expectations scored 3.792, and marketing and communication strategies resonating with customer values had a mean of 3.736.

The overall mean of 4.12 with a standard deviation of 0.87 indicates a strong general agreement that the bank performs well in serving its diverse customer segments, with relatively consistent positive perceptions across all measured areas. This suggests that the bank's segmentation strategies contribute effectively to its financial performance, customer satisfaction, and market growth.

Table 4.12 Respondents' Perception on Commercial Banks' Performance

Items	N	Mean	Std. Devi
Our bank's profitability consistently meets or exceeds the expectations of our diverse customer segments.	72	3.792	.9777
The range of financial products and services we offer is specifically tailored to the needs and characteristics of our different customer groups.	72	4.028	.8877
Our marketing and communication strategies effectively resonate with the values, attitudes, and personalities of our target customer segments.	72	3.736	1.1382

We observe strong customer loyalty and repeat business across our various customer segments due to our tailored offerings and service.	72	4.028	.8218
Our branch network and service delivery channels are strategically located and designed to effectively serve our geographical diverse customer base.	72	3.944	1.0194
We have successfully adopted and integrated technological solutions that enhance the accessibility and efficiency of our services for all customer segments.	72	4.000	1.0209
Our customer satisfaction levels are consistently high across all identified market segments.	72	4.319	.7659
We effectively acquire and retain customers within each of our defined market segments.	72	4.264	.8391
Our market share has shown positive growth within our key targeted customer segments over the past year.	72	4.500	.6051
Our overall financial growth and stability are positively influenced by our efforts to effectively serve and cater to different market segments.	72	4.542	.6700
Overall Mean		4.12	0.87

Source: own survey, 2025

4.5 Inferential Statistics Analysis

Researchers can make inferences concerning the population based on sample data through the application of inferential statistics analysis. Correlation analysis and regression analysis were both conducted in this section. The former helped in the investigation of the direction as well as magnitude of the effect of independent factors on the dependent variable, while the latter was conducted to identify the magnitude and direction of the association between the variables addressed under the study.

4.5.1 Correlation Analysis

Table 4.13 Correlation analysis quantifying the correlation among different independent variables Behavioral Segmentation (BS), Demographic Segmentation (DS), Psychographic Segmentation (PYS), Behavioral Habits Segmentation (BHS), Geographical Segmentation (GS),

Technological Segmentation (TS) and the dependent variable, Commercial Banks' Performance (CBP).

The findings indicate that Commercial Banks' Performance (CBP) is significantly and positively correlated with all segmentation variables, i.e., the variables are positively related to more favorable bank performance. In particular, Behavioral Segmentation (BS) is strongly and positively correlated with commercial banks' performance ($r = 0.680$, $p < 0.01$), which implies that successful behavioral segmentation is highly correlated with improved bank performance. Additionally, Behavioral Habits Segmentation (BHS) shows a stronger positive correlation with performance ($r = 0.739$, $p < 0.01$), emphasizing the need to understand customers' behavior and way of life to make banks successful. Psychographic Segmentation (PYS) shows a positive and significant relationship with performance ($r = 0.489$, $p < 0.01$), emphasizing the need to tailor services according to the lifestyle and attitude of customers. Geographical Segmentation (GS) is positively correlated with performance ($r = 0.546$, $p < 0.01$), suggesting that location-based strategies contribute to better outcomes.

Demographic Segmentation (DS) shows a moderate positive correlation with performance ($r = 0.354$, $p < 0.01$), while Technological Segmentation (TS) has a weaker and non-significant correlation with performance ($r = 0.161$, $p > 0.05$), indicating that technology-related segmentation may have less direct impact on overall bank performance compared to other segmentation approaches. Among the independent variables, several significant inter-correlations were observed. For instance, Behavioral Segmentation (BS) is strongly correlated with Behavioral Habits Segmentation (BHS) ($r = 0.654$, $p < 0.01$) and moderately with Geographical Segmentation (GS) ($r = 0.437$, $p < 0.01$). Demographic Segmentation (DS) correlates significantly with Geographical Segmentation (GS) ($r = 0.409$, $p < 0.01$) and Technological Segmentation (TS) ($r = 0.375$, $p < 0.01$), suggesting some overlap in these segmentation dimensions.

In summary, the correlation analysis highlights that behavioral and behavioral habits segmentation have the strongest associations with commercial banks' performance, followed by geographical and psychographic segmentation. Demographic segmentation also shows a meaningful positive relationship, whereas technological segmentation appears less influential. These findings suggest that banks aiming to enhance performance should prioritize behavioral and geographic strategies while continuing to integrate psychographic and demographic insights.

Table 4.13 Correlation Analysis

	BS	DS	PYS	BHS	GS	TS	CBP
BS	1						
DS	.197	1					
PYS	.370**	.243*	1				
BHS	.654**	.223	.408**	1			
GS	.437**	.409**	.132	.396**	1		
TS	.190	.375**	.059	-.060	.400**	1	
CBP	.680**	.354**	.489**	.739**	.546**	.161	1

** . Correlation is significant at the 0.01 level (2-tailed). * . Correlation is significant at the 0.05 level (2-tailed).

Source: own survey, 2025

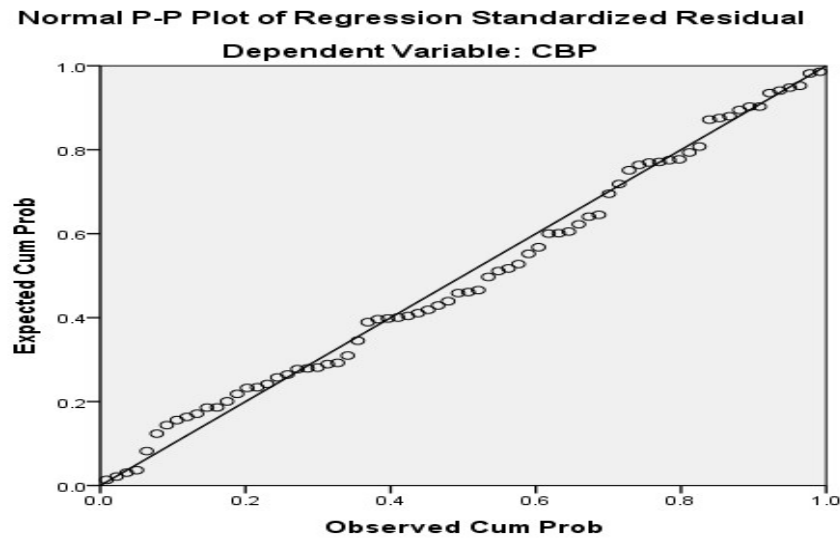
4.5.2 Regression Analysis

It can be possible for researchers to determine the strength and direction of independent and dependent variables' relation through the use of regression analysis. Multiple linear regression ordinary least square (OLS) was the method employed in the research. Nevertheless, data used in econometric model must satisfy the five OLS assumptions in order to utilize the ordinary least square (OLS) method in regression analysis. If any of these assumptions are violated, the outcome of regression would be misleading. To avoid misleading outcomes of regression, the test for diagnosis was performed. The model passed all the tests, i.e., heteroscedasticity, multicollinearity, linearity, and normalcy tests, as per the diagnosis test results. Since serial correlation is an issue for time series data but not for cross-sectional data, no such test was necessary in this study.

4.5.2.1 Diagnosis Test Result

i. Linearity

Figure 4.1: Test of Linearity



So

urce: own survey, 2025

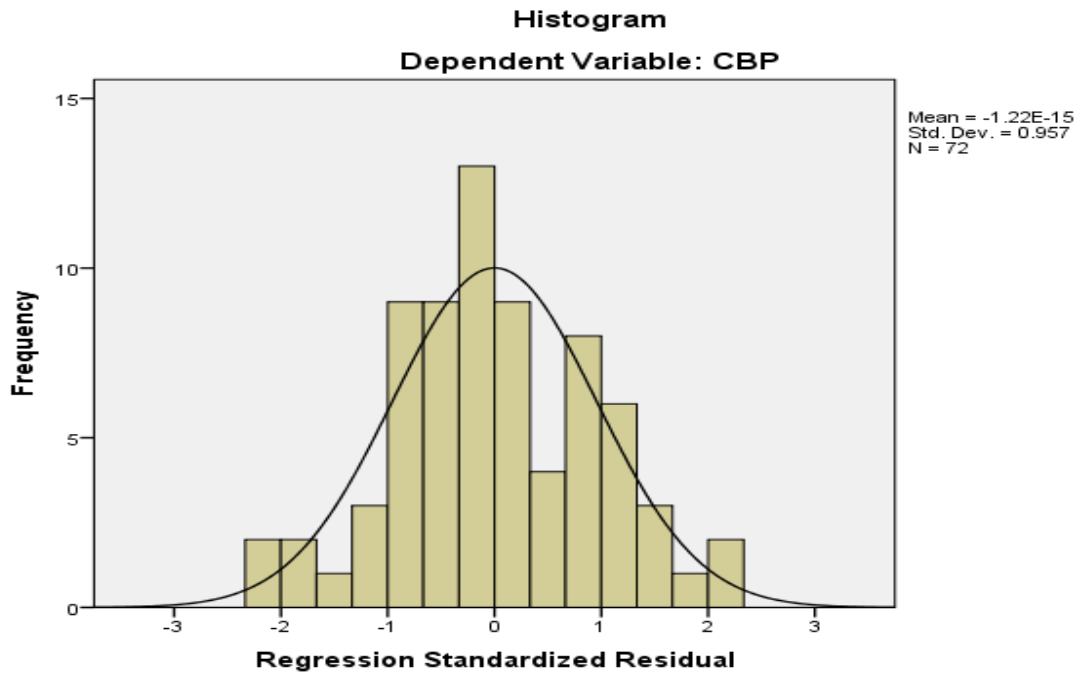
Independent and dependent variables should be linearly related in order to facilitate multiple regression through ordinary least squares (OLS). For assessing whether the relationship is linear, scatter plot diagram with line of fit was one of the various methods employed by this study to check for linearity.

Line of fit in the scatter plot diagram result confirmed the independent variables and the dependent variable to be related by a linear relationship.

ii. Normality

Among the assumptions while applying the ordinary least square (OLS) method in multiple regression analysis is that the sample data are derived from a population with a regular distribution. This, as Keith (2006) suggests, indicates that the errors follow a normal distribution and a residual values plot will be a normal curve. Normality of data for this research was established by using the histogram of standardized residuals.

Figure 4.2 Test of Normality



Source: own survey, 2025

As it can be seen in the histogram above the data deployed for this study was sourced from normally distributed population, confirming it fulfilled the assumption of normality.

iii. Multicollinearity

When two or more variables that produce the same piece of information are included in the regression model, multicollinearity becomes an issue. Stated differently, multicollinearity arises from the needless inclusion of related variables.

The regression analysis was used for a diagnostic test for collinearity. Multicollinearity is frequently detected using the variance inflation factor (VIF). Multicollinearity issues are generally indicated by a VIF larger than 10. Our model's variables' VIF analysis revealed that multicollinearity was not a possible issue.

Table 4.14 Test of Multicollinearity

Model	Collinearity Statistics	
	Tolerance	VIF
BS	.492	2.034
DS	.730	1.369
PYS	.776	1.289
BHS	.455	2.200
GS	.604	1.656
TS	.681	1.468

a. Dependent Variable: CBP

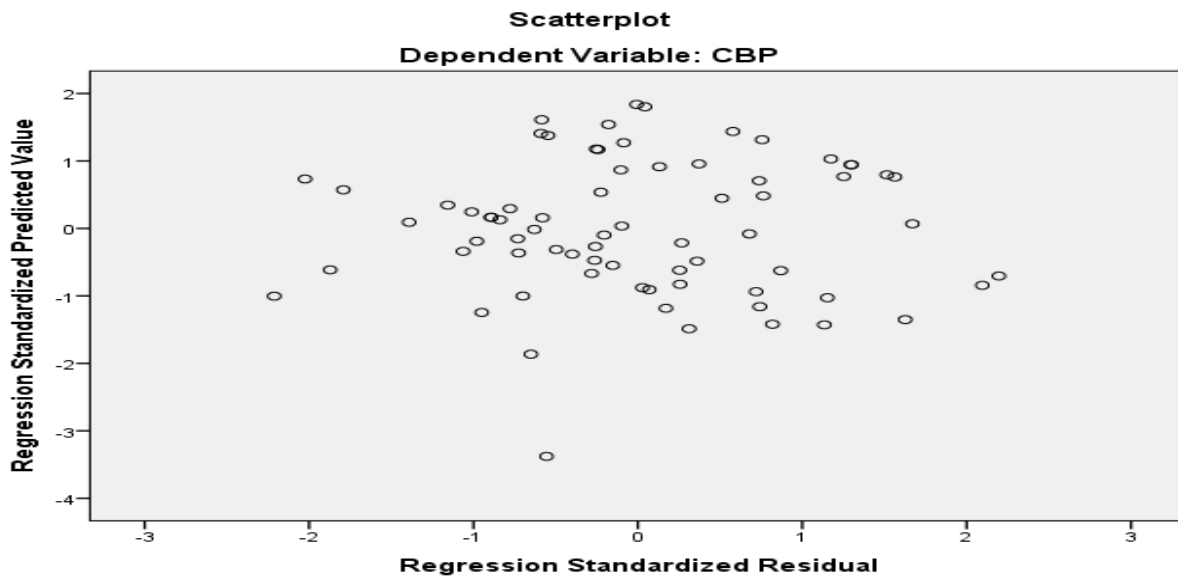
Source: own survey, 2025

iv. Homoscedasticity

According to this assumption, the variance of each disturbance is the same and its value is unknown; in other words, the error term's (disturbance's) dispersion is the same regardless of the disturbance's size.

The case of heteroscedasticity will arise whenever this assumption is broken. Cross-sectional data frequently exhibit heteroscedasticity. The standardized residuals are uniformly distributed, as shown in Figure 4.3 below, confirming that there is no heteroscedasticity issue with the data.

Figure 4.3 Test of heteroscedasticity



Source: own survey, 2025

4.5.2.2 Regression Analysis Result

This study's primary goal was to investigate how market segmentation affected Awash Bank's performance as a commercial bank. Thus, multiple linear regression analysis using the ordinary least square (OLS) technique was used to investigate the impact of the explanatory variables on the dependent variable. Examining the impact of many explanatory variables on the dependent variable is made easier with this technique.

Benefit segmentation, demographic segmentation, psychological segmentation, behavioral segmentation, geographic segmentation, and technological segmentation are the six independent variables used in the regression model. On the other hand, the performance of commercial banks was regarded as a dependent variable.

The econometric model of this particular study can be presented as follows;

$$CBP = \beta_0 + \beta_1 PY + \beta_2 BS + \beta_3 + \beta_3 PYS + \beta_4 BHS + \beta_5 GS + \beta_6 TS + \varepsilon_i$$

Where, β_0 = the interest or the constantan term

β_1 β_6 = the elasticity coefficients

CBP= Commercial Bank's Performance

BS= Benefit Segmentation

DS= Demographic Segmentation

PYS= Psychological Segmentation

BHS= Behavioral Segmentation

GS= Geographical Segmentation

TS= Technological Segmentation

ϵ_i = The error terms

The result of the regression analysis result was presented below as follows;

Model Summery and ANOVA

The adjusted R-squared value in the model summary as a result of the multiple linear regression analysis was 0.672. This suggests that roughly 67% of the variation in the dependent variable can be explained by the four explanatory variables that are part of the econometric model. In other words, variables not included in this model account for the remaining 23% of the variation in the dependent variable.

Table 4.15 Model Summery

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.837 ^a	.700	.672	.33034

a. Predictors: (Constant), TS, PYS, BS, DS, GS, BHS

Source: own survey, 2025

The model is fit to the data, as confirmed by the analysis of variance (ANOVA) shown in table 4.16 below, with the F test=25.92 (p-value=0.000<1 percent). This suggests that the regression model's explanatory variables have a strong capacity to anticipate how the explanatory variable will affect the dependent variable.

Table 4.16 Analysis of Variance

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	16.560	6	2.760	25.292	.000 ^b
	Residual	7.093	65	.109		
	Total	23.653	71			
a. Dependent Variable: CBP						
b. Predictors: (Constant), TS, PYS, BS, DS, GS, BHS						

Source: own survey, 2025

The Multiple Regression Analysis Result

To establish the size and extent of the impact of each independent variable on the dependent variable, multiple linear regression analysis using ordinary least square (OLS) method was applied. Accordingly, the Beta coefficient value or elasticity coefficient shows the size of the impact of each independent variable on the dependent variable, while the sign of the beta coefficient shows the direction of the impact. On the other hand, the P-value provides the impact level of each independent variable on the dependent ones. The multiple regression analysis revealed that some of the methods of segmentation significantly impact the performance of the bank as reflected in their unstandardized beta coefficients and their corresponding p-values.

Benefit Segmentation (BS) also has a coefficient value of 0.157 that is not standardized and a p-value of 0.022, less than the standard significance level of 0.05. This indicates that with each one-unit increase in effectiveness or magnitude of behavioral segmentation activities, there will be a 0.157-unit increase in the performance of the bank, holding all other variables constant. This suggests the necessity of developing and segmenting customer behavior to improve overall bank performance.

If we look in to Psychographic Segmentation (PYS), it is statistically significant and positive in that the bank performance is with a beta of 0.167 and a p-value of 0.017. It suggests that psychographic customer segmentation in terms of lifestyle, values, and attitudes in marketing activities and banking operations contributes positively to the performance of the bank. In particular, one-unit increment in psychographic segmentation programs is equivalent to 0.167 units of improvement in performance, which highlights the importance of psychological insights in customer segmentation.

Similarly, Behavioral Segmentation (BHS) is the best predictor for the variables with a 0.390 beta coefficient and highly significant p-value of less than 0.001. This implies that behavioral segmentation on the basis of indicators such as frequency of use, loyalty behavior, or transaction behavior—is linked to an improved performance of a big 0.390 unit for every unit increase in segmentation effectiveness. This close link entails that banks with greater ability to recognize and react to customer behavioral patterns can attain improved performance results.

Geographical Segmentation (GS) is also indicated to be a significant driver in the performance of the bank with a beta of 0.180 and p-value of 0.013. It shows that, customer segmentation on the basis of where they live, regional affinities, or local market conditions can anticipate a 0.180 unit increase in performance for a one unit increase in geographical segmentation. This again shows the strategic significance of location-based tailoring of banking services. Conversely, the regression analysis result revealed that Demographic Segmentation (DS) and Technological Segmentation (TS) are not statistically significant under this model in predicting bank performance since their corresponding p-values are 0.347 and 0.871 with less responsive correlations.

Ultimately, the regression analysis result revealed that Behavioral, Psychographic, and Geographical Segmentations have strong impact on bank performance. This again indicates that banks should emphasize on behavior traits, psychological elements, and geography as drivers of enhanced performance. Yet, demographic and technology segmentation, nonetheless, might require reengineering or combining with other dimensions of customer segmentation.

Table 4.17 The Multiple Regression Analysis Result

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.272	.367		.742	.461
BS	.157	.067	.227	2.347	.022
DS	.062	.065	.075	.948	.347
PYS	.167	.068	.190	2.458	.017
BHS	.390	.096	.408	4.051	.000
GS	.180	.070	.224	2.564	.013
TS	.009	.057	.013	.163	.871

a. Dependent Variable: CBP

Source: own survey, 2025

The findings of the multiple regression analysis show that Behavioral Segmentation (BHS), Benefit Segmentation (BS), Psychographic Segmentation (PYS), and Geographical Segmentation (GS) have statistically significant positive influences on the performance of banks. Among them, BHS is strongest (unstandardized beta = 0.390, $p < 0.001$), followed by GS (beta = 0.180, $p = 0.013$), PYS (beta = 0.167, $p = 0.017$), and BS (beta = 0.157, $p = 0.022$). These results are consistent with previous studies on the applicability of geographic and behavior segmentation in terms of improving the performance of banks. For example, Smith and Chang (2019) established that behavioral segmentation greatly enhances customer loyalty as well as banking financial performance. Again, Johnson and Lee (2021) established that geographic segmentation enables banks to differentiate services explicitly, resulting in improved market penetration and profitability. The complementary role of the psychographic segmentation agrees with Martinez and Gomez (2020), who illustrated the essence of knowing the customer's attitude and lifestyle in highlighting the personalization and satisfaction of services. The strong impact of behavioral habits segmentation agrees with Patel and Kumar (2018), who emphasized its role in forecasting the customer retention and raising revenue. Conversely, demographic and technology

segmentation also did not exert profound influences, consistent with research by Roberts and Nguyen (2022), implying that these segments do not influence the performance of banks to the same extent when other segmentation techniques are taken into consideration. The findings in most instances indicate the need to place special emphasis on behavioral, psychographic, and geographic segments as drivers of commercial banking prosperity.

CHAPTER FIVE

Summary of Findings, Conclusion and Recommendations

This chapter of the research provided the summary of the key findings, conclusion from the research findings and recommendations provided by the researcher for future considerations.

5.1 Summary of the Key Findings

The study revealed that some of the customer segmentation dimensions have significant impact on the performance of banks in customer satisfaction, loyalty, retention and overall performance. While others have limited impact. Accordingly, the study revealed the comparative impact of various customer segmentation dimensions on the performance of banks. The key finding in this regard is that Behavioral, Psychographic, and Geographical Segmentations have positive impact on the performance of banks. Whereas, Demographic Segmentation (DS) and Technological Segmentation (TS) are with limited impact signaling further study on how to integrate such dimensions of segmentation to the products and services of banks in improving overall performance.

The finding also in line with available literature quotation in favor of the role of behavioral and geographic segmentation in banking. Behavioral insights make banks align with real usage and customer choices and geographic segmentation makes banks align with local market needs. The worth of psychographic segmentation brings out the importance of fulfilling customers' values and lifestyles to bring them closer to the services and products offered by banks. The limited effectiveness of demographic and technological segmentation is also consistent with earlier findings that demographic variables themselves may not be sufficient to ensure the complexity of the needs of the customers, and technological segmentation needs more innovation to be translated into practice targeting those familiar with applicability of technologies such as mobile, internet services and other features of technologies integrated with banking services.

5.2 Conclusion

This study investigated the effect of customer segmentation strategies on the performance of banks, with a particular focus on Awash Bank. The general objective was to assess how various segmentation approaches beyond the traditional demographic methods impact customer satisfaction, loyalty, retention and overall performance. The study considered various dimensions of customer segmentation, ranging from behavioral, psychographic, demographic, geographical, and technological segmentation. From the findings of the data analysis, it is safe to conclude that behavioral segmentation has relatively the most impact on the performance of bank, followed in sequence by geographical, psychographic, and behavioral segmentation.

In contrast, demographic and technological segmentation have relatively limited impacted compared to other dimensions of segmentation signaling a more integrated customer segmentation approach which combines multiple dimensions of segmentation. The study further revealed that customer segmentation approach which integrates the various dimensions of customer behaviors, preferences and choices has direct correlation with the performance of banks and banks well beyond demographic segmentation need to focus as well on behavioral, psychographic, and geographical segmentations as derivers of performance improvement. The approach would allow banks to tailor their products, services, and promotions more effectively, leading to better customer interaction, satisfaction, and overall growth. Banks also need to are investment in researching and in revisiting their customer segmentation approaches through ongoing data analysis so that they can better understand the evolving customer choice and behavioral tendencies to deliver their products and services in a more effective and productive manner.

5.3 Recommendations

Depending on the findings of the study, the following recommendations are offered to banks for an improved approach and implementation of customer segmentation leading to an improved overall performance.

- Given its impact on the performance of banks, banks need to accord priority to Behavioral Segmentation. Customer habitual patterns like transaction frequency, product usage, and loyalty need to be considered as important elements of behavioral

segmentation in understanding and responding to the needs and priorities of potential customers.

- Secondly, the banks are motivated to make Behavioral Segmentation activities more vigorously through persistent observation and monitoring of customer behavior. Customer segmentation on the basis of usage patterns and activity with banking services enables customization of service delivery and allocation of resources such that products are able to address unique requirements of various customer groups.
- Third, the research throws into prominence the importance of using Psychographic Segmentation in customer profiling. Banks ought to utilize an understanding of customers' values, attitudes, and lifestyles to produce marketing communications and service experiences that speak to people's hearts.
- Fourth, given the impact Geographical Segmentation has on the performance of banks, banks need to customize banking products and marketing programs to suit regional market environments and local preferences. Banks operating in multiple locations can gain by tailoring their products to address particular area affinities and local market needs.
- Lastly, banks need to engage in an ongoing research and data analysis in sorting the needs and priorities of the different groups of customers through research-oriented segmentation practice. Refreshing segmentation approaches based on research findings on the changing behaviors of customers and market trends will help banks to align their customer segmentations to the needs, priorities and preferences of their customers.
- Further research is needed as to why demographic and technological segmentations are less responsive and on how to make them more impactful and integrate them to the other dimensions of customer segmentation. The research initiative also helps to sort out the interactions between the different dimensions of segmentation. Researchers are advised to expand the range of variables included to encompass variables like customer experience, digital take-up rates, and competitive pressures in order to construct an enhanced performance driver picture. Second, more studies on technological segmentation would have to be conducted to develop new procedures that would make it more effective in bank environments.

References

- Abbott, B. (2023). The benefits of demographic segmentation. LinkedIn.
- Aghaei, M. (2021). Market segmentation in the banking industry based on customers' expected benefits: A study of Shahr Bank. *Iranian Journal of Management Studies*, 14(3), 629-648.
- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Prentice-Hall.
- Alharbi, S., & Drew, S. (2014). Using the Technology Acceptance Model in Understanding Students' Behavioral Intention to Use E-Learning: A Case Study from Saudi Arabia. *European Scientific Journal*, 10(1), 1-12.
- Al-Mamary, Y. H., Alsharif, M. H., & Alshammari, M. M. (2024). Optimizing customer segmentation in the banking sector using machine learning techniques. *Journal of Business Economics and Management*, 14(5), 923–939.
- Bunge, M. (2001). Systems theory. In Black box [Wikipedia]. Retrieved from https://en.wikipedia.org/wiki/Black_box
- Cognizant. (2024). What is customer segmentation in banking?
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approach* (5th ed.). Sage Publications.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319-340.
- EIB. (2024). Chapter 3: Banking sector trends in sub-Saharan Africa.
- Endale, A. (2023). Consumer segmentation expands in banking sector. *Ethiopian Business Review*.
- Ethiopian Business Review. (2024, November 1). Consumer segmentation expands in banking sector.
- Experian. (2024). Demographic segmentation overview.
- Fitch Solutions. (2024). Ethiopia's banking sector in good financial health, but vulnerabilities exist.
- Green, J. (2014). The Application of Black Box Theory to System Development. *Systems Engineering Journal*.
- Harris, P., & Toledo, M. (1997). Understanding Attitude Functions: A Review. *Journal of Social Psychology*.
- Hernandez, J. (2015). Functional Theory of Attitudes: Explained. *The Consumer Biz World*.

- Huang, Z., et al. (2017). Exploring Factors Influencing Physicians' Acceptance of Electronic Health Records: An Empirical Study Based on Technology Acceptance Model. *Health Information Science and Systems*, 5(1), 1-10.
- Jain, R. (2024). *Consumer behavior and decision-making processes*. Cambridge University Press.
- Jha, A., & Kumar, A. (2024). Customer segmentation and personalization in banking. *Journal of Emerging Technologies and Innovative Research*.
- KAIZEN. (2025). Segmentation strategies in the banking sector.
- Kaizen. (2025, January 10). Segmentation strategies in banking sector.
- Katz, D. (1960). The Functional Approach to the Study of Attitudes. *Public Opinion Quarterly*, 24(2), 163-204.
- Koc Yigit, Z. E. (2016). Segmentation in financial services marketing. *Bahçeşehir University*.
- Kocyigit, Z. E. (2023). Consumer Segmentation Expands in Banking Sector. *Ethiopian Business Review*.
- Kocyigit, Z. E. (2023). Customer Segmentation as a Revenue Generator for Profit Purposes. *Mathematics*, 11(21), 4425.
- Kona, S. S. (2020). Customer segmentation and personalization in banking services: Investigating the use of big data analytics. *International Journal of Scientific Research*, 9(8).
- Kona, S. S. (2020). Customer segmentation and personalization in banking services: Investigating the use of big data analytics to segment banking customers based on their behavior, demographics, and preferences. *International Journal of Scientific Research*, 9(8).
- Kotler, P. (2011). *Marketing management* (14th ed.). Pearson Education.
- KWENDO, E. S. (2018). Influence of Customer Segmentation Strategy and Corporate Culture on Performance of Commercial Banks in Kenya.
- Latinia. (2024). Customer segmentation in banking: Building high-impact strategies. Retrieved from <https://latinia.com/en/resources/customer-segmentation-banking-insights>
- Latinia. (2024). Customer segmentation in banking: Building high-impact strategies.
- Latinia. (2024, April 2). Customer segmentation in banking: Building high-impact strategies. *Latinia Insights*.
- Matellio. (2024). Customer segmentation analytics in banking: Unlocking insights for better service delivery.
- Matellio. (2025). Behavioral and psychographic segmentation in financial services. *Matellio Research Journal*.

- Matellio. (2025). Customer Segmentation Analytics in Banking: Unlocking Insights for Better Engagement. Retrieved from <https://www.matellio.com/blog/customer-segmentation-analytics-in-banking/>
- Matellio. (2025). The role of big data analytics in customer segmentation for banks.
- Mihova, V., & Pavlov, V. (2018). A customer segmentation approach in commercial banks. *Application of Mathematics in Technical and Natural Sciences: 10th International Conference*, 39-54.
- National Bank of Ethiopia (NBE). (2025). National Bank of Ethiopia issues second financial stability report.
- Nissanke, M., & Stein, H. (2003). The Sources and Impact of Segmentation in Banking Systems: A Case Study from Kenya. *PhD Thesis*.
- Omri Raiter. (2021). Segmentation of bank consumers for artificial intelligence marketing. *International Journal of Contemporary Financial Issues*, 1(1), 39-54.
- Palacios, A., & Jiménez, J. (2023). The crucial role of customer segmentation in commercial banking. *LinkedIn*.
- Palacios, R. (2025). The Crucial Role of Customer Segmentation in Commercial Banking. Retrieved from <https://www.linkedin.com/pulse/crucial-role-customer-segmentation-commercial-banking-rob-palacios-jimec>
- Rawashdeh, I. (2024). AI's Mysterious 'Black Box' Problem Explained. University News.
- Silver et al (2018). An overview of the Influence of Customer Segmentation Strategy on Performance of Commercial Banks in Kenya. *International Journal of Management and Commerce Innovations*, 5(2):644-650
- Smith, E. R., Bruner, J. S., & White, R. W. (1956). Opinions and Attitudes: A Study in Social Psychology. *Journal of Personality*.
- Smith, E. R., Bruner, J. S., & White, R. W. (1956). Opinions and Attitudes: A Study in Social Psychology. *Journal of Personality*.
- Venkatesh, V., & Bala, H. (2008). Technology Acceptance Model 3 and a Research Agenda on Interventions. *Decision Sciences*, 39(2), 273-315.
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly*, 27(3), 425-478.
- Wesley, T., Smith, A., & Johnson, L. (2023). *Marketing models and consumer behavior*. Oxford University Press.
- World Bank. (2022). Youth and digital financial services in sub-Saharan Africa.
- World Bank. (2024). World Bank supports Ethiopia's efforts to unleash the potential of its financial sector.

Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). Sage Publications.

ADDIA ABABA UNIVERSITY
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Questionnaire to be filled by the respondents

Appendices I

Questionnaire

Dear Respondent,

This questionnaire is designed to gather information about the demographic profile of marketing department staff and their experience with customer segmentation strategies in commercial banks. Your honest responses will be valuable in understanding the effect of these strategies on bank performance. Please be assured that your responses will be kept confidential and used for academic purposes only.

Section I: Demographic Information

Please tick the appropriate box or provide the information requested.

1. **Sex:**

- 1. Male
- 2. Female

2. **Age (in years):**

- 1. 18-25
- 2. 26-35
- 3. 36-45
- 4. 46-55
- 5. 56 or above

3. **Education:**

- 1. Diploma
- 2. First Degree

3. Master's degree
4. Doctorates degree
5. Other (please specify)

4. Work Position:

1. Marketing Manager
2. Marketing Analyst
3. Marketing Officer

5. Experience:

1. How long have you been working in the marketing department of a commercial bank?

- 1 Less than 1 year
- 2 1-3 years
- 3 4-6 years
- 4 7-9 years
- 5 10 years or more

6. How long have you been involved in customer segmentation strategies?

- 1 Less than 1 year
- 2 1-3 years
- 3 4-6 years
- 4 7-9 years
- 5 10 years or more

Section II: Questionnaire on the Effect of Customer Segmentation Strategies on Commercial Banks' Performance

This questionnaire is designed to assess the impact of various customer segmentation strategies on the performance of commercial banks, case of Awash bank. Respondents are asked to indicate their level of agreement with each statement using a 5-point Likert scale, where 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree.

1. Benefit Segmentation

Sr. n	Statements	1	2	3	4	5
1	The bank effectively tailors its products to meet the specific benefits desired by different customer segments.					
2	I feel that the bank understands my unique needs based on the benefits I seek from their services.					
3	The bank frequently updates its offerings to align with the changing benefit preferences of its customers.					
4	I believe that benefit segmentation enhances my overall satisfaction with the bank's services.					
5	The bank's marketing communications clearly reflect an understanding of the benefits that matter most to me.					

2. Demographic Segmentation

Sr. n	Statements	1	2	3	4	5
1	The bank offers services that are well-suited to my demographic profile (age, gender, income level).					
2	I have noticed that the bank's promotions are targeted towards my demographic group.					
3	The bank's understanding of demographic differences improves my customer experience.					
4	I believe that demographic segmentation helps the bank in retaining customers like myself.					
5	The bank's staff are knowledgeable about the specific needs of different demographic segments.					

3. Psychological Segmentation

Sr. n	Statements	1	2	3	4	5
1	The bank provides products and services that align with my lifestyle choices and preferences.					
2	I feel that the bank understands my lifestyle when recommending financial products.					
3	The marketing strategies employed by the bank resonate with my lifestyle values.					
4	Lifestyle segmentation has positively influenced my loyalty to this bank.					
5	The bank actively engages with customers based on their lifestyle characteristics.					

4. Behavioral Segmentation

Sr. n	Statements	1	2	3	4	5
1	The bank effectively identifies and rewards high-usage customers like myself.					
2	I feel appreciated as a customer due to the bank's focus on usage patterns in its services.					
3	My banking experience is enhanced by tailored offerings based on my usage rate.					
4	The bank's communication reflects an understanding of how often I use its services.					
5	Usage rate segmentation contributes positively to my perception of the bank's performance.					

5. Geographical Segmentation

Sr. n	Statements	1	2	3	4	5
1	The bank provides services that cater specifically to customers in my geographical area.					
2	I believe that geographical segmentation allows for better					

	service delivery from the bank.					
3	The branch locations are convenient for me due to effective geographical segmentation strategies.					
4	Marketing campaigns from the bank are relevant to my local community context.					
5	Geographical segmentation enhances my overall satisfaction with the banking services provided.					

6. Technological Segmentation

Sr. n	Statements	1	2	3	4	5
1	The bank utilizes technology effectively to meet the needs of different customer segments.					
2	I appreciate how the bank tailors its digital services based on customer technology usage patterns.					
3	Technological innovations introduced by the bank align well with my banking preferences.					
4	I feel more engaged with the bank due to its focus on technological advancements.					
5	Technological segmentation has improved my overall banking experience.					

Questionnaire on Commercial bank's Performance

This questionnaire aims to evaluate the impact of customer segmentation on the performance of commercial banks. Respondents are requested to indicate their level of agreement with each statement using a 5-point Likert scale, where 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree.

1. Commercial bank's Performance

Sr. n	Statements	1	2	3	4	5
1	Our bank's profitability consistently meets or exceeds the					

	expectations of our diverse customer segments.					
2	The range of financial products and services we offer is specifically tailored to the needs and characteristics of our different customer groups.					
3	Our marketing and communication strategies effectively resonate with the values, attitudes, and personalities of our target customer segments.					
4	We observe strong customer loyalty and repeat business across our various customer segments due to our tailored offerings and service.					
5	Our branch network and service delivery channels are strategically located and designed to effectively serve our geographical diverse customer base.					
6	We have successfully adopted and integrated technological solutions that enhance the accessibility and efficiency of our services for all customer segments.					
7	Our customer satisfaction levels are consistently high across all identified market segments.					
8	We effectively acquire and retain customers within each of our defined market segments.					
9	Our market share has shown positive growth within our key targeted customer segments over the past year.					
10	Our overall financial growth and stability are positively influenced by our efforts to effectively serve and cater to different market segments.					