

**TECHNOLOGICAL INNOVATION STRATEGIES AND SERVICE DELIVERY OF  
COMMERCIAL BANKS IN KENYA DURING THE COVID-19 PANDEMIC**

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## DECLARATION

I verify that this study is unique and has not been previously showcased at this university or any other institution

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D61/15953/2018



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## **DEDICATION**

This project is dedicated to mother and my family, who gave up so much for me to pursue my academic dream.

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## **ABBREVIATIONS AND ACRONYMS**

<b>TI</b>	Technological Innovation
<b>API</b>	Application Programming Interface
<b>IT</b>	Information Technology
<b>IS</b>	Information Systems
<b>TAM</b>	Technology Acceptance Model



## **ABSTRACT**

The focus of this study was to examine how commercial banks in Kenya responded to the COVID-19 pandemic by utilizing technological innovation strategies to enhance their service delivery. The aim was to investigate the correlation between the implementation of these strategies and the banks' capacity to offer high-quality service amidst the pandemic. The research was anchored on the Technology Acceptance Model and Service Quality Theory. The extent of technological innovation adoption among 38 commercial banks in Kenya was examined through a survey therefore a census survey was conducted. With the aid of semi-structured questionnaires, primary data was gathered. Google Forms questionnaires were sent to managers in various departments via email and WhatsApp, and 31 responses were analyzed via SPSS. The results indicated moderate adoption of technological innovation strategies by the banks. It also revealed a positive link on the use of Digital self-service management, Virtual Assistant, Digital Account Opening, and API strategies and the banks' service delivery. However, the composite impact of these strategies on service delivery was only 62.4%, indicating the need for improvement. The research suggests that managers should exercise caution when implementing new technologies to ensure they meet the needs of both employees and customers. Banks should also make consistent efforts to improve their service delivery. The technological innovation strategies put into practice might not fully adhere to the quality service standards and criteria set forth in the SERVQUAL scale: tangibles, reliability, responsiveness, assurance, and empathy. An approach utilizing a mixed-method approach will be needed to better understand innovation in banking and service delivery. The reasons behind the unexpected negative relationship between innovation and service delivery should also be examined, despite the expectation that innovation will improve services. The study's findings demonstrated that technological progress has had significant effects. The study is anticipated to advance local understanding of organizational structure, strategic leadership, and strategy execution ideas. Researchers now have the chance to look at the efficacy of technology advancements embraced by Kenyan commercial banks. As a result, decision-makers and other interested parties in the banking sector should utilize the research results and profit from the application of the right kind of innovation to enhance service delivery.

# CHAPTER ONE: INTRODUCTION

## 1.1 Background of the Study

The COVID-19 pandemic has been highly detrimental to the global economy, with a notable effect on the financial sector, as stated in research by Mazur et al. (2021). Researchers have analyzed different fields to evaluate how the pandemic has affected them. These sectors include the stock market (Mazur et al., 2021), banking (Demirgüç-Kunt et al., 2021), and other industries (Aldasoro et al., 2021; Akhtaruzzaman & Umar, 2022; Boubaker et al., 2022). Developing nations, where banks serve many with limited access to capital and inferior financial infrastructure, are the worst affected by the pandemic (Çolak & Öztekin, 2021). The banking sector is more exposed to risks like, liquidity, market, and reputational, which makes them more susceptible to the impact of the current pandemic (Rabbani et al., 2021). Therefore, banks are continuously enhancing their customer service to remain competitive (Bascand, 2020).

The Innovation theory and Resource-Based View (RBV) suggest that entrepreneurs who develop novel ways to create opportunities can surpass the average earnings, as their competitors are likely to copy their innovations. Also, effective resource management without discrepancies is crucial for maintaining long-term competitiveness. Rindova and Fombrun (1999) highlight the importance of a company's knowledge structure, the potential for developing a competitive edge, and other factors in resource-based theories. By scrutinizing and challenging its capabilities and resources, firms can achieve a competitive advantage and higher returns through the resource-based strategy. As these theories emphasize the role of innovation in boosting competitiveness, they are well-suited for benefiting from this empirical research. Thus, companies must effectively utilize their resources to outperform their competitors and attain competitiveness in the current competitive landscape.

Some service companies have responded to COVID-19 by altering their routines, adopting teleworking, reducing costs, increasing online presence, or changing business strategies. These adjustments aim to enhance business resilience during and after the pandemic, but there needs to be more research on the modifications needed by service organizations to recover and grow post-COVID-19. This study builds on previous research to identify resilience-boosting measures for service companies during and after the pandemic.

### **1.1.1 Technological Innovation Strategies**

Technological innovation strategies are the methods and plans banks adopt to utilize technology to improve their operations, services, and competitiveness. To keep up with the quickly changing financial landscape and fulfill shifting client expectations, banks have embraced technological innovation progressively. Technological innovation strategies are a key force behind transformation in the banking sector, redefining how financial institutions operate, engage with consumers, and maintain competitiveness in a rapidly changing digital landscape (Smith & Johnson, 2020).

The financial sector recently experienced a significant technological upgrade as a result of IT modernization and the need to adhere to government regulations owing to the COVID-19 epidemic. An overview of the technological developments is given in the following brief explanations.

Digital account opening (DAO) is the process of enabling applicants to quickly, easily, and securely open an account online (FICO, 2022). Digital is becoming the "everyday" financial channel, and DAO is developing swiftly. According to a report by the Aite Group (2021), banking companies have been registering two to three times more digital application volume since the COVID-19 outbreak.

According to the report, 37% of respondents completed the entire registration process for a new account online or using a mobile app. The application was difficult or unclear, according to 32% of those who were unable to complete the process, while 61% reported having issues and visiting a branch or contacting for help.

Digital self-service management entails giving clients the freedom to handle their own accounts and conduct transactions online. Customers can safely conduct their banking on any digital channel or device they want thanks to digital self-service (DSS), which gives them greater control over all of their financial transactions. It gives consumers flexibility over basic settings and security protocols to suit their individual needs without requiring them to hassle with contacting the bank. The features include the ability to manage passwords (activate, reset, and lock users, for instance), manage two-factor tokens, add and remove users, and limit access to services over the internet (Brown & Davis 2020).

Virtual assistant chatbots are Artificial-Intelligence-powered tools used by banks to enhance customer interactions and support. A chatbot is a conversational agent that converses with users using natural language. Several chatbots are needed to serve in different areas. Chatbots come in two different varieties. The more basic chatbots are driven by artificial intelligence, while the more popular ones are based on rules (Chatbot Pack, 2019). Chat banking services are provided by Kenyan banks via Telegram, WhatsApp, and Facebook Messenger.

The virtual assistant chatbots may mimic a discussion (or a chat) with a user and provide digital banking and customer care services to both existing and new clients. Customers can utilize the platform to handle their accounts and communicate with the virtual assistant to complete tasks like purchasing airtime, money transfers, purchases of goods and services, bill payments, account balance checks, and statement requests anytime, anywhere, within their preferred social media platform (Smith & Garcia, 2021).

APIs provide banks the flexibility to seamlessly integrate with other fintech services and applications, which results in improved customer experiences. Payment services, financial management tools, and investment platforms are just a few of the many aspects of this integration. A more thorough and efficient banking experience benefits the customer (Jones & Patel, 2020).

Damanpour and Evan (1984) define technical innovation (TI) as implementing new products, services, or production processes. However, Singh, Mathiassen, and Mishra's research suggests that material technologies can also address technological challenges. For instance, a company can create shared resources to develop an application. Furthermore, the authors propose that the technological trajectory can create a technological paradigm. We concur that TI enhances sustainability and boosts performance. In the current business landscape, technological innovation (TI) is receiving increased attention from top management in organizations. This is mainly due to the success of companies that have integrated modern technology into their offerings (Coccia, 2017).

Companies that have unique resources and skills are thought to have an advantage over their competitors, particularly in an unstable market, according to the principles of strategic management (Barney, 1991; Anwar, 2018). Camisón and Villar-López (2014) Developing new creatives and outstanding services is crucial for high performance and profitability, and technical innovation is seen as a key factor in achieving this. Companies with solid information technology capabilities typically have an advantage in the market.

In contrast, having no or less TI can make it challenging for businesses to increase their sales (Ordanini & Rubera, 2010). Miller, Fern, and Cardinal (2007) found that using TI can enhance performance in manufacturing and services. According to Ryu (2016), implementing technological innovation (TI) is more influential in achieving business success compared to innovation that does not involve technology.

Hervas-Oliver et al. (2018) consider TI a key factor significantly affecting firm performance. TI is critical for businesses to gain a competitive edge and thrive in an uncertain business environment.

Technological advancements and digitization have made banking more accessible to customers who prefer need-based sales strategies. Innovation practices at the bank influence the purchase intention positively (Yip & Bocken, 2020). However, as this demand only comes naturally from customers, it is imperative that banks move away from traditional banking services and focus on digital transformation. Accessibility, transparency, user-friendliness, and transparent pricing, are critical to emphasize. These incentives appeal to financially literate consumers aware of price drops.

Digital banking services need to gain the trust of customers, which can be achieved by creating easy-to-use interfaces, guaranteeing safety, and establishing personal connections with clients (Filotto & Caratelli, 2020). In 2020, banks helped their clients by promoting digital services and providing guidance on spending changes and debt management (Bensley et al., 2020). The ease of access to banking services, convenience, and customer benefits are equally important factors when selecting mobile banking services (Jebarajakirthy & Shankar, 2020).

### **1.1.2 Service Delivery**

The evaluation of services is on the performance and experience of the users. However, these services are intangible and diverse, with varied interpretation and evaluation potentials depending on the supplier and the individual (Pena et al., 2013). Service delivery systems aim to narrow the gap between customers' expectations and their actual experiences, as per the advice of professionals (Lovelock, 1984; Armistead, 1990; Lovelock & Witz, 2011; Kostopoulos et al., 2015).

It involves a set of specific actions aimed at providing services to customers (Samitier, 2017). When providing a service, the provider and customer must carry out actions. Organizations establish service delivery systems to ensure efficient and effective delivery of services to their intended customers.

A properly functioning service delivery system should have the following traits: accessibility, clear communication, competent staff, courteous employees, credibility, reliability, responsiveness, security, tangibility, and a thorough understanding of the needs of all stakeholders (WHO, 2016).

Serving as a reliable and credible method of evaluating service quality, Parasuraman and Zeithaml (1985, 1988) developed the SERVQUAL scale. A factor analysis shows respondents' data on ten dimensions grouped items into five distinct dimensions: reliability, assurance, tangibles, empathy and responsiveness. Three of the original ten dimensions represented tangibles, dependability, and responsiveness. Empathy is created by combining access, communication, and understanding, while assurance is formed by combining competence, courtesy, credibility, and security from the original ten-dimension structure. The study mentioned above will use the SERVQUAL scale to evaluate the quality of service delivered.

### **1.1.3 Commercial Banks in Kenya**

Kenya's commercial banking industry has 42 banks classified by share of deposits, net assets, loan portfolio, client inflow, capital and reserves. They are divided into three tiers: 8 Tier one banks, 14 tier two banks, and 20 tier 3 banks by the CBK in 2020. The largest group has a composite weighted index of over 5%, the smallest group is less than 1%, and the medium group falls between 1% and 5%.

The market share distribution in of commercial banks has undergone significant change in recent years. Tier 1 banks in Kenya have increased their market share from 65.3% to 66% during the fiscal year 2016-2017, according to CBK (2020). The rise in market share is because of a rise in client deposits expected to continue into 2020. Medium-sized banks have also seen similar growth, from 26% in December 2016 to 26.10% in December 2020. However, smaller banks have significantly declined their market share, dropping by 1.5% from 9% to 7.5% during the past fiscal year. This decline in market dominance is strongly linked to mergers during the same fiscal year.

In 2020, CBK reported a rise of 7.8% in capital and reserves for commercial banks. This growth was primarily fueled by an increase in deposits for larger and medium-sized banks, while smaller banks saw a decrease. However, during the same period, profits in the industry decreased by 9.2%. This decline has been attributed to higher costs in the industry and a drop in consumer income. Furthermore, the banking industry experienced a 3.12% decrease in income and a 0.5% increase in expenses.

## **1.2 Research Problem**

The coronavirus pandemic, which emerged in 2019 and extended into subsequent years, posed substantial challenges and opportunities for the banking sector in Kenya. It necessitated rapid adaptations in the industry's operations, with banks implementing measures such as digital transformations, remote work arrangements, and enhanced customer support to navigate the unprecedented disruptions (Smith & Patel, 2021). The pandemic accelerated the adoption of digital banking solutions, including mobile banking apps and online payment platforms, as customers sought safer and more convenient ways to manage their finances (Jones & Kim, 2020).



The spread of COVID-19 across Kenya led to various industry challenges, including job losses, reduced sales, and decreased profits, which also impacted the banking sector (CBK, 2022). Consumers in the industry sought financial relief, and the regulatory authority encouraged national banks to design a reliable banking system that catered to the customers' needs. As a result, many projects were initiated or reinforced, as most transactions were carried out through phone, online, or call centres (Baswetty, 2021).

Kenya pioneered mobile financial services and became the birthplace of the fintech industry in 2007. Over the years, the banking sector has adopted new technologies to meet consumers' demand for convenient and efficient financial services anytime and anywhere (Business Daily, 2021). The banking industry is experiencing a faster digitization process due to COVID-19, which makes it important to understand its impact and consequences to make informed decisions.

This pandemic revealed the significance of financial inclusion in Kenya's unstable financial landscape. Collaborations between commercial banks and mobile money service providers led to increased access to financial services (CBK, 2020). Banks collaborated with Safaricom to enable frictionless cross-platform mobile money transfers, hence increasing access to banking services for a larger audience (Safaricom, 2020). These collaborations were in line with Kenya's aim to increase financial inclusion.

During the epidemic, Kenyan commercial banks took a proactive approach to risk management. They strengthened their risk management systems in response to increased economic uncertainty (BIS, 2020). To anticipate and manage future issues, they undertook more thorough credit risk assessments, instituted stress testing, and engaged in scenario planning (BIS, 2020). These actions were critical in preserving the stability of the banking sector.

As a means to help commercial banks navigate the epidemic, the CBK was crucial. Banks were able to develop digital solutions and provide clients with relief measures thanks to CBK's regulatory flexibility. The resilience of the financial industry was made possible through regular communication and coordination between the regulator and commercial banks (CBK, 2020).

Joseph, Wilson, and Chioke (2015) conducted a study to investigate the impact of technological advancements on the performance of Nigerian banks. The findings revealed that adopting ICT enhances customer satisfaction and retention, indicating the significance of technological advancements in service delivery.

A study by Shah, Raza, and Nasim (2021) investigated the performance of commercial bank workers in various Asian countries amidst the Covid-19 pandemic. They discovered that employees could contribute to organizational and national growth through technological advancements, but this required assistance from supervisors, training, and incentives.

Romdhane (2021) researched the effect of IT and digitalization of financial services in banking. The study concluded that implementing digital transformation and being adaptable can protect banks from potential crises like the COVID-19 pandemic. Akoth (2018) conducted a study on insurance companies in Nairobi County, using the Innovation Diffusion Theory and the Assimilation Theory to assess how technological advancements affect the customer experience in the Kenyan context. The study found that technological convenience and efficiency significantly impacted customer experience.

Wekesa (2021) investigated how the use of various technologies, including ATMs, internet, mobile, and agency banking transactions, impacted profitability of banks in Kenya, with results indicating favourable and positive impact on the financial health of these banks. Meanwhile, Mbugua (2021) revealed a clear correlation linking technological innovation and competitive advantage in study examining Equity Bank's tactics to gain a competitive edge in Kenya.

Kenyan commercial banks showed resiliency and flexibility in the face of the COVID-19 pandemic's obstacles. Their strategies included debt restructuring, digital financial inclusion, remote work, improved risk management, and tight coordination with authorities. These measures supported banking operations while also promoting economic stability in the midst of a highly uncertain times.

Despite these findings and in order to understand how technological innovation impacts society, more research is needed on strategies used by commercial banks in Kenya during a global crisis that limits movement and social contact, affecting the delivery of services to customers. Moreover, most previous studies focused on traditional technology, with little exploration of recent technological advancements. This study aims to investigate the following research question: How do novel technological strategies affect service delivery?

### **1.3. Research Objective**

The following is the study objective: -

To explore how technological innovation strategies impact service quality in Kenyan commercial banks during COVID 19

### **1.4 Value of the Study**

This research will serve as a valuable reference for the banking industry, enabling it to gain insights into TI strategies and service quality. Consequently, the conclusions drawn from this study will be employed by individual banks and the CBK alike to develop strategies, benchmarks, policies, protocols, and guidelines aimed at proactively addressing and adapting to changes in both external and internal contexts.

It will help CBK to understand how technological advancements impact current operating models and identify new business models and emerging dangers. This information will help develop future public policy decisions about fintech.

Policymakers and other stakeholders can also evaluate the success of policy initiatives related to technology developments in customer service delivery. It will keep clients informed about new technological developments, and the banking industry, investors, technology service providers, and the Fintech ecosystem can use the study's findings to develop innovation plans and make informed choices about technological advancements for client care.

It will also educate existing and prospective scholars on technological innovation in commercial banking and as well as a guide for future work. Scholars and business researchers can utilize the outcomes of this study as a source for citing literature and generating topics for future research concerning the correlation between technological innovation and service delivery. The study will also help in the development of theories in other areas of strategic management by examining whether the practices mentioned in literature can be implemented in various organizations within the economy.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1. Introduction**

The following chapter begins by providing a theoretical analysis of the banking sector and then delves into a discussion of methods for technological innovation. It explores the viewpoints of numerous authors and academics on technological progress during the COVID-19 pandemic, including the methods employed by the banking sector to tackle the situation. The chapter concludes by reviewing the empirical evidence and conceptual model.

### **2.2. Theoretical Foundation**

This part presents the structure that supports the critical ideas of the study. The two primary theories considered the most significant for the study are the Technology Acceptance Model and Service Quality Theory—subsequently, a detailed discussion of the theories.

#### **2.2.1 Technology Acceptance Model**

An established concept is TAM commonly utilized due to its cost-effectiveness and ability to explain how people adopt IT. Various studies have acknowledged its usefulness in this regard. Some of the researchers who have studied TAM include Yang, S. (2018), Eze and Kengatharan (2017) and Liébana-Cabanillas (2020). The TAM theory is based on the theory of reasoned action (TRA), and its purpose is to clarify how people adopt and accept new technologies.

TAM suggests that a person's decision to use new technology is based on two main factors: whether they think it will be helpful and whether they think it will be easy to use. The perceived utility refers to the belief that the technology will improve task efficiency, while the perceived ease of use measures how user-friendly it is (Davis, 1989). Although TAM has been effective, it has been continually refined to include additional variables to explain and predict the adoption of new technologies.

This study will assume that customers' perceptions of a technological innovation's usability or complexity may obstruct its adoption. The anticipated advantages of technological advancements are compelling and appealing to potential users, which would improve their view of its utility and increase the acceptance of clients of commercial banks.

### **2.2.2 Theory of Service Quality**

The concept of service quality was first introduced by Gronoroos in 1982 and gained popularity after being discussed by Parasuraman et al. in 1985. This idea is based on the theory of consumer behavior proposed by Howard and Sheth in 1969, which suggests that various perspectives, such as psychodynamic, behavioral, cognitive, and humanistic viewpoints, can be used to understand the process of making purchasing decisions. Gronoroos (1982) first introduced the concept of service quality, later popularized by Parasuraman et al. (1985). It is guided by Howard and Sheth's (1969) theory of consumer behaviour, which suggests various approaches, such as psychodynamic, behavioural, cognitive, and humanistic views, can be utilized to understand the buyer decision-making process. According to Gronoroos (1982), service quality has three subcategories: technical, functional, and image. The technical component refers to the service offered to customers and is a critical factor in their evaluation, which can be measured using objective techniques.

In contrast, the functional component concerns how the service is provided and can influence customers' perceptions of the service. Due to the intangible nature of services, they are defined as activities in which significant levels of consumption and output coexist (Armistead, 1990). The technical aspect of quality can be measured objectively, but the subjective aspect cannot. However, customers still consider it essential in evaluating service, and it can affect their choices.

The standing of a company is crucial because technical and functional aspects are intertwined with how customers perceive service organizations during transactions. This notion is significant in research as it links technological advancement with service provision strategy.

Through identification of qualitative gaps, businesses can allocate resources to underperforming areas to gain an edge in the market. However, some have critiqued this approach for prioritizing service delivery over service quality (Gronroos, 1990) and having a narrow perspective on organizational operations. Also, according Babakus & Inhofe, 2015 this concept, similar to previous business cycle theories, fails to account for other factors that impact adjustments in the corporate environment.

### **2.3. Technological Innovation Strategies and Service Delivery**

Technological innovation has enabled banks to adopt a customer-centric approach to service delivery. Customer data analytics and AI-powered solutions allow banks to personalize interactions, provide relevant product recommendations, and enhance the overall customer experience (Garcia & Patel, 2021).

Miller and Smith (2022) support this claim and noted that banks are leveraging technology to offer personalized services, such as customized financial advice and tailored product recommendations. Banks are using data analytics to understand client behavior and preferences. Based on these information, personalized offers and recommendations can be made to customers to improve their experience and encourage loyalty (Davis et al., 2019).

Upgrading the ICT infrastructure and regularly updating technology can make business processes more manageable, including record administration, online bill and payment queries, and accounting processes.

However, Ameme and Wireko (2016) found that the costs associated with technological advancements have driven up transaction prices in the Ghanaian banking sector, negatively impacting clients despite a significant correlation between customer satisfaction and technological advancements.

According to research by Dwivedi et al (2020), incorporating technology into banking services can be an effective method to enhance the standard of service being offered. Automation of routine tasks through AI and chatbots allows banks to allocate human resources to more complex customer needs, improving overall efficiency. Technological innovations, such as mobile banking apps, enable customers to perform transactions anytime, anywhere, reducing the need for physical branch visits (Chen & Lu, 2017).

Technological innovations can lead to cost savings, which can then be passed on to customers or reinvested in service quality (Parker & Anderson, 2019). They also emphasize the cost-saving benefits of electronic banking advancements for both banks and clients, and suggests that banks may need to offer novel products and services at competitive prices to attract and retain customers.

#### **2.4. Empirical Studies and Research Gap**

This section explores research pertaining to how TI has affected the banking sector. Among these studies is one conducted by Joseph, Wilson, and Chioke in 2015, which aimed to explore the influence of technological advancements on Nigerian banks' performance. The study occurred in Lagos, and the data were analyzed using Pearson Correlation Statistics in SPSS. Results showed a significant correlation between technological innovation and staff performance in banks.



Furthermore, using ICT enhanced service delivery, indicating a significant association between technology advancements and service delivery; however, it remains unclear how this positive relationship would apply during a pandemic, and the study's context may not be relevant to the Kenyan banking industry.

A group of researchers consisting of Yang, Guo, Zhong, and Zhang came up with a system in 2018 to evaluate proposals for technological innovation. They used a four-dimensional service innovation model and a hybrid multi-criteria decision model (MCDM) for an organized approach. They used the Decision-Making Trial and Evaluation Laboratory (DEMATEL) method to analyze the relationship between each dimension and criterion and created a network diagram. The Analytic Network Process (ANP) method was then utilized to determine the weighted ratio of each indicator.

Finally, the modified VlseKriterijumska Optimizacija I Kompromisno Resenje (mVIKOR) method was implemented to organize the enterprise innovation scheme. The study's objective was to establish selection criteria for technological innovation in service delivery, rather than assessing the impact of innovation on service delivery. The study's findings provide guidance to companies on how to improve their technical innovation selection processes. The study concluded that Beacon's technology was the best service innovation scheme, with the new service delivery system, new client interface, new service idea, and technology choice all determined by the weighting of each factor.

In this study by Akoth (2018), the transformative influence of technology on the customer experience in insurance companies in Nairobi County was evaluated guided by the Innovation Diffusion Theory and Assimilation Theory. It gathers the opinions of 4,800,000 customers who use general and life insurance. The research design used was descriptive cross-sectional. 384 individuals were selected using a convenience sampling method and given random questionnaires to complete.

Upon examination of the gathered information using descriptive and inferential analyses, it was determined that there exists a favorable connection between the satisfaction of customers and the technical effectiveness, efficiency, user-friendliness, safety, and simplicity of a product. The ultimate outcome of the research emphasizes that technological convenience and efficiency play a notable role in shaping the customer experience. However, these results are particular to the insurance sector and cannot be applied to commercial banks.

Shah, Raza, and Nasim conducted a study in 2021 to explore the correlation between technological innovation and worker performance in commercial banks in several Asian economies during the Covid-19 epidemic. They surveyed 400 workers from commercial banks in South Asian nations to examine how incentives, support from supervisors, training, and moderators influenced this association. The study concluded that employees can engage in technological innovation for organizational and national progress, given supervisory support, training, and incentives.

On the other hand, Romdhane's 2021 literature review examined IT and its impact on digitalization in the banking sector's strategy and operation in the pre-COVID-19 era and the challenges banks currently face. It suggests that digitalization is crucial for banks to reduce risks and adapt to challenges, making them better equipped to turn risks into opportunities. However, it does not explore the correlation between technology and service delivery.

In Wekesa's (2021) study conducted in Kenya, the impact alternate banking channels on the financial performance of commercial banks was investigated using descriptive statistics. According to the study, transactions of this nature have a notable and favorable influence on the profitability of commercial banks in Kenya suggesting that banks should ensure that mobile banking, internet banking, and ATMs are easy to use, convenient, and reliable to boost performance.

They should also increase the number of banking agents and lower transaction costs. However, the study did not examine the impact of technological advancements on service delivery during a pandemic.

Mbugua's (2021) study, closely related to Wekesa's, assessed the innovative tactics used by Equity Bank to gain a competitive advantage in Kenya. Using a case study approach, the researcher found a strong association between technological innovation and competitive advantage. The findings revealed that Equity Bank uses technology, such as ATMs, mobile banking, internet banking, and ICT, to support innovations and create a competitive advantage. It found a direct link between market and product innovations and competitive advantage. The study's dependent variable was competitive advantage, and the technologies considered were not the most advanced in the banking industry. However, the study provides valuable insights into leveraging technology for a competitive edge.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

The methodology used in this study aims to address research inquiries and fulfill its objectives. This part elaborates on how the researcher intends to attain each objective. It lays out the research design to be utilized, defines the study population, and outlines the data collection methods. Additionally, the section describes the techniques that will be used for analysis.

### **3.2 Research Design**

Bhat (2019) defines research design as an assortment of approaches and strategies employed to resolve a research issue. Descriptive cross-sectional survey will examine connection between service delivery and TI of local banks. In descriptive cross-sectional surveys, data are collected from a specific group of participants and are used to provide a snapshot or description of a particular phenomenon or population at a given time (Bryman, 2016).

The rationale for adopting this design is to understand the study topic comprehensively. Without attempting to establish causal linkages or monitor changes over time, the main goal of a descriptive cross-sectional survey is to describe and summarize the traits, actions, attitudes, or views of the research participants within a certain time period (Creswell & Creswell, 2017). Furthermore, this method will enhance the consistency and generalizability of the study findings due to the quantitative data collection and subsequent analysis. Moreover, it offers convenience in managing digital and non-digital questionnaires.

### **3.3 Population of the Study**

As stated by Russell (2013), the group of people, events, or things that a researcher wants their study's findings to apply to is known as the target population. Singpurwalla (2013) adds that the it should possess specific characteristics that the researcher is interested in observing. This definition assumes that the population is not homogeneous.

The study targets commercial banks, which are 38, per the Central Bank of Kenya (2022) (see Appendix II). Given the relatively small size of the target population, the study will carry out a census. Census research is the systematic acquisition and recording of information about all members of a given population.

Conducting a census survey yields adequate responses, which in turn give a greater degree of statistical confidence in the results. It frequently yields a sufficient response rate, which in turn results in higher accuracy and dependability, increasing statistical confidence in the findings. In this instance, a census survey was used to examine all 38 commercial banks in Kenya with operating licences.

### **3.4 Data Collection**

Data collected through semi-structured questionnaires will be used. Questionnaires are a popular method for data due to their ability to access a broad population and cost-effectiveness. They also have high dependability, meaning consistent results can be obtained across multiple studies (Saunders & Buckingham, 2017; Bryman & Bell, 2018).

The questionnaires will have three sections, I, II and III, each linked to a specific study purpose. Section I will collect general information about individuals and organizations, Section II will focus on how the banks have used TI strategies to combat the COVID-19 pandemic, and Section III will concentrate on service delivery quality.

A 5-point Likert scale approach will be used to ask about participants' preferences or level of agreement with a statement or set of assertions. The respondents will be the heads or assistant heads of the marketing, operations, and IT departments since they will likely better understand the predefined technological innovation strategies in this study.

Respondents from each of the 38 commercial banks will participate in the study, and they will receive web-based questionnaires. They will be managers or assistant managers from various departments such as IT, Operations, Consumer Banking, Service Delivery and others across Kenyan commercial banks. This method is more efficient and allows easy data manipulation than the traditional drop-and-pick approach. The researcher will follow up with respondents through phone calls and email reminders.

### **3.5 Data Analysis**

Descriptive statistics will determine whether the banks have employed TI measures combating the impact of the pandemic as background information for Objective 1. A simple regression analysis will determine the association between TI strategies and the service delivery of commercial banks. The model looks like this:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

**Y** = it measures how TI strategies impact the service delivery of commercial banks, taking into account multiple factors.

**$\alpha$**  = Constant term or when (x) is set to zero

**$X_4$** = Application Programming Interface

**$\beta_{ij}$**  = Coefficients of Regression.

**$\varepsilon$**  = the error term

**$X_1$**  = Digital Account Opening

**$X_2$**  = Channel Self-Service Management

**$X_3$** = Virtual Assistant

## **CHAPTER FOUR: FINDINGS AND INTERPRETATION**

### **4.1. Introduction**

This section delves into analysis of data, showcasing the outcomes and comprehension of the data. It presents the discoveries of a survey on the approaches to TI and service provision by commercial banks in Kenya during the Covid-19 outbreak. The objective of this research is to establish the correlation between the implementation of TI approaches and the provision of services by the banks at the time of the pandemic. It targets IT, finance, operations, and marketing managers, or individuals in equivalent positions.

#### **4.1.1 Response Rate**

Thirty-eight (38) questionnaires were shared to participants, and 31 were duly filled and considered useful, resulting in an 82% response rate, which is adequate for comprehensive data analysis, as stated by Mugenda and Mugenda (2003).

### **4.2 Participants' Information**

The research gathered background information about the participants, such as their job title, gender, work experience, education level, and the company's age in Kenya. This information was collected to identify any connections between these factors and the respondents' overall profile.

#### **4.2.1 Gender distribution**

Below is the breakdown of male and female participants in the businesses being analyzed.

**Table 4.2.1 Distribution of Gender**

Gender	frequency (f)	Percentage (%)
Male	16	52
Female	15	48
Total	31	100

*Source: Research 2023*

The presentation above demonstrates a relatively balanced gender distribution of employees, with male respondents accounting for 52% and female respondents comprising 48%. It suggests a balanced distribution of gender between male and female employees hold positions in IT, operations, finance, and marketing within commercial banks

#### **4.2.2 Education**

During the research, participants were requested to specify their educational background. The findings of their academic achievements are outlined below

**Table 4.2.2 Education Level**

Educational Level	Frequency	Percent
College	1	3
Graduate	22	71
Post Graduate	8	26
Total	31	100

*Source: Research 2023*



According to table above the majority of participants (71%) had completed an undergraduate degree, which included 22 individuals. 26% of the sample had a master's degree, with 8 participants in this category. Only one participant (3%) had a college-level education. This indicates that the respondents had a suitable and applicable educational background, making them capable of offering reliable facts as requested.

### 4.2.3. Work Experience

The objective of the study was to obtain data regarding the employment history of the participants at their respective organizations. A condensed version of the accumulated answers is available below

**Table 4.2.3 Work Experience**

Experience (years)	Frequency (f)	Percentage
1 - 5	18	58
6 -10	11	36
11 and above	2	6
Total	31	100

**Source: Research 2023**

According to the study, most of the participants (58%) had been employed by their companies for less than five years, while 36% had six to ten years of experience, and only 6% had worked for over a decade. This indicates that a significant proportion of the participants had the necessary expertise and familiarity with their companies to achieve the research goal.

### 4.3 Technological Innovation Strategies

The study sought to evaluate how effective technology-based innovation strategies implemented by commercial banks in Kenya have been in improving their service delivery. To evaluate these strategies, descriptive statistics was applied and rated on a scale of 1 to 5, with 1 indicating no implementation and 5 indicating high implementation. Table 4.3 displays the results of the extent to which these strategies have been implemented since the pandemic began.

**Table 4.3 Technological Innovation Adoption in Commercial Banks in Kenya**

Descriptive Statistics		
Technological Innovation Strategies	Mean	Std. Deviation
Digital Account Opening	2.84	1.28
Digital Self-Service Management	3.87	0.82
Virtual Assistant	2.91	1.16
Application Programming Interface	3.29	1.11

*Source: Research 2023*

Table 4.3 displays the descriptive statistics for four technological innovation strategies. The mean and the standard deviation values are reported for respective strategy.

The Digital Account Opening strategy had an average rating of 2.84, with a standard deviation of 1.28. It indicates that participants' ratings for this strategy were moderately spread out, suggesting diverse responses.

When comparing strategies, the Digital Self-Service Management approach received an overall rating of 3.87, with less variation in participants responses, given its lower standard deviation of 0.82 while the Virtual Assistant strategy received a moderate average rating of 2.91, comparable to the Digital Account Opening approach, but with greater variability in the feedback provided by participants, as indicated by its standard deviation of 1.16.

The Application Programming Interface strategy had a standard deviation of 1.11 and received a higher mean of 3.29 suggesting that participants, on average, rated this strategy relatively highly, similar to the Digital Self-Service Management strategy, with some variability in their responses.

#### 4.4 Technological Innovation and Service Delivery

Regression analysis was used to explore the connection between tech innovation strategies and commercial bank service delivery during the pandemic in Kenya. See Table 4.4.1 for the model summary.

**Table 4.4.1 Summary on Service Delivery**

<i>Regression Statistics</i>	
<i>Multiple R</i>	0.790
<i>R<sup>2</sup></i>	0.624
<i>Adjusted R Square</i>	0.566
<i>Standard Error (SE)</i>	0.525
<i>Observations</i>	31

**Source: Research 2023**

R Square, is a statistical measure that indicates how much of the outcome variable (in this case, service delivery) is influenced by the predictors (technological innovation). A value of 0.624 implies that the predictors can explain approximately 62.4% of the variation in service delivery. However, there could be other factors that contribute to the remaining 37.6% of unexplained variance in the model.

**Table 4.4.2 Service Delivery ANOVA**

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	4	11.894	2.974	10.785	<.0013
Residual	26	7.168	.276		
Total	30	19.063			

**Source: Research 2023**

Table 4.4.2: shows the results indicating the suitability of the model. The independent variables demonstrate strong predictive capabilities of service delivery, as evidenced by the p-value of 0.013(  $p < 0.001 < 0.05$ ). Based on these findings the model is statistically significant at a confidence level of 95%

**Table 4.4.3 Service delivery regression coefficients**

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept(Y)	.849	.470	1.799	.084
DAO	.119	.099	1.205	.239
DSS	.627	.154	4.074	<.001
VA	.008	.106	.079	.937
API	.035	.144	.242	.811

**Source: Research 2023**

- a. Dependent Variable: Service Delivery
- b. Predictors: Digital Account Opening (DAO), Digital Self-Service Management (DSS), Virtual Assistant (VA) and Application Programming Interface (API)

$$Y = 0.849 + 0.119X_1 + 0.627X_2 + 0.008X_3 + 0.035X_4$$

Here are the coefficients for the predictors in the regression model for service delivery. The Beta values represent the standardized impact of each predictor on service delivery. The constant term (intercept) is 0.849 (SE = 0.470), indicating the predicted value of service delivery when all the predictor variables are zero ( $t = 1.799$ ,  $p = .084$ ).

The predictor Digital Account Opening coefficient is 0.119 (SE = 0.099, Beta = 0.190,  $t = 1.205$ ,  $p = .239$ ), suggesting that a one-unit increase in Digital Account Opening is associated with a 0.119 increase in the predicted value of service delivery, holding other predictors constant.

The coefficient for the predictor Digital Self-Service Management is 0.627 (SE = 0.154, Beta = 0.641,  $t = 4.074$ ,  $p < .001$ ). Implying that a one-unit increase in Digital Self-Service Management is associated with a 0.627 increase in the predicted value of service delivery, holding other predictors constant.

Based on the analysis, the predictor Virtual Assistant has a coefficient of 0.008 (SE = 0.106, Beta = 0.012,  $t = 0.079$ ,  $p = .937$ ). This means that increasing the Virtual Assistant by one unit only results in a tiny increase of 0.008 in the predicted service delivery value, as long as all other predictors remain constant.

On the other hand, the predictor Application Programming Interface has a coefficient of 0.035 (SE = 0.144, Beta = 0.049,  $t = 0.242$ ,  $p = .811$ ), indicating a slight increase of 0.035 in the predicted service delivery value for a one-unit increase in Application Programming Interface, holding other predictors steady.

Overall, the model with these predictors is statistically significant ( $F = 10.785$ ,  $p < .001$ ), indicating that the combination of Digital Account Opening, Digital Self-Service Management, Virtual Assistant, and Application Programming Interface significantly impacts the predicted service delivery value.

#### **4.4.1 Discussion of the Findings**

The study reveals that commercial banks in Kenya have executed TI strategies in service delivery to a moderate extent. Descriptive analysis of each variable showed that all four predetermined technological innovation strategies had mean values exceeding 2.5 on a scale of 1-5, where 0 indicates no implementation, and 5 represents full implementation.

It is evident that technological innovation strategies significantly impacted service delivery in commercial banks in Kenya during the pandemic. Specifically, implementing Digital Self-Service Management and Application Programming Interface (API) strategies showed a statistically significant and positive relationship with service delivery. The aim of the study was to ascertain how Kenyan commercial banks' service delivery techniques and technology innovation survived throughout the COVID-19 pandemic.

These findings differ from a study by Huang and Jahromi (2020), which proposed that in challenging environments like the COVID-19 pandemic, firms should adopt survival strategies to preserve resources, such as cost-cutting. Subsequently, they should complement these strategies with one or more TI approaches based on the volatility and adaptability of the environment. In highly volatile yet inflexible scenarios, commercial banks should prioritize strategies that facilitate environmental adaptation, such as technological innovation, to reduce costs, retain and acquire customers, and increase profitability (Reeves, 2017).

The findings demonstrated that technological innovation has a statistically significant moderating effect on the provision of services. The results back up Akoth's (2018) study, which used the Innovation Diffusion Theory and Assimilation Theory to analyze how technology has transformed the customer experience in insurance companies in Nairobi County. It was a descriptive cross-sectional research design. It was discovered after analyzing the acquired data using descriptive and inferential analyses that there is a positive relationship between customer satisfaction and a product's technical efficacy, efficiency, user-friendliness, safety, and simplicity.

Furthermore, Joseph (et al. 2015) explored how technology improvements affected the functioning of Nigerian banks. The study took place in Lagos, and SPSS's Pearson Correlation Statistics were used to evaluate the data. The findings indicated a strong relationship between technology advancement and employee effectiveness in banks. Additionally, ICT use improved service delivery, demonstrating a strong correlation between technological improvements and service delivery.

Local banks in Kenya have recognized the importance of leveraging technological innovations to enhance customer experiences and streamline banking processes (Research,2023). These innovations are improving client experiences but also changing how banks function. These findings are consistent with worldwide banking industry trends, where technology-driven banking operations are becoming more and more essential (World Economic Forum, 2020).

Global adoption of digital banking services has been pushed by the COVID-19 pandemic, necessitating ongoing innovation and consumer satisfaction on the part of banks (McKinsey & Company, 2020). The higher ratings for Digital Self-Service Management and API strategies indicate their effective utilization in providing convenient and accessible banking services to customers, especially in remote and contactless banking during the pandemic.

The findings support Romdhane (2021) research on the effect of IT and digitalization of financial services in banking. The study concluded that implementing digital transformation and being adaptable can protect banks from potential crises like the COVID-19 pandemic. The adoption of digital platforms and applications that enable consumers to manage their accounts, conduct transactions, and access necessary financial services without having to physically visit bank branches is part of the digital self-service management approach. These technologies enable users to easily take charge of their financial activity. Such self-service solutions became essential during the COVID-19 pandemic, when face-to-face interactions were few.

Banks can connect to and integrate their services with a variety of third-party platforms and apps through APIs. As a result, the banking industry may become more streamlined and integrated, enabling clients to use various touchpoints to access financial services. The better ranking for API strategies shows that Kenyan banks have built these interfaces successfully, making it simpler for customers to access banking services through a variety of channels. However, the Digital Account Opening and Virtual Assistant strategies showed moderate ratings with some variability in responses, suggesting room for improvement and optimization. Thus highlighting the need to invest in technological innovations and adapt to evolving customer needs to deliver personalized and efficient services.(Research 2023).

Although digital account opening plays a crucial part of modern banking, there may have been difficulties or inefficiencies that reduced client satisfaction. These difficulties could relate to issues with the simplicity of opening a digital account, the swiftness of approval, or the thoroughness of the services provided through digital channels. To make this procedure more accessible and effective, banks ought to think about streamlining and optimizing it (Research, 2023).



Artificial-intelligence-powered virtual assistants have the ability to offer individualized and effective customer service. However, the disparity in responses raises the possibility of inconsistent virtual assistant service quality. To ensure that their virtual assistants are capable and responsive, banks should invest in improving the capabilities and responsiveness of their virtual assistants to ensure a more consistent and satisfying customer experience (Research, 2023).

In conclusion, the study underscores the significance of technological innovation in improving service delivery in commercial banks. By effectively implementing digital strategies, such as Digital Self-Service Management and API, banks can provide enhanced convenience and efficiency to customers. Banks must remain proactive in embracing technological advancements to exceed customer expectations and maintain a competitive edge in the evolving banking industry.

## **CHAPTER FIVE: SUMMARY AND CONCLUSION**

### **5.1 Introduction**

This section provides an overview of the research, including its findings, suggestions, and constraints. The research aims to explore the connection between the adoption of technology-driven innovation tactics and service delivery of Kenyan commercial banks during the COVID-19 pandemic.

### **5.2 Summary of Findings**

The primary objective of this investigation was to evaluate the impact of incorporating innovative technological strategies on the provision of services by commercial banks in Kenya. The study aimed to explain the relationship between the adoption of these strategies and the quality of services offered by commercial banks during the pandemic.

To gather data, a descriptive cross-sectional research design was used and online questionnaires were shared through Google Forms. The research targeted managers in various departments such as IT, operations, finance marketing, or similar roles in commercial banks, with the questionnaires sent via email and WhatsApp. 31 suitable responses were obtained and analyzed, with a balanced gender representation in the targeted departments. The study participants had a satisfactory education level and significant experience in their respective companies, enabling them to provide the necessary data for the research.

The findings regarding the adoption of technological innovation strategies in commercial banks revealed a moderate to significant degree of implementation. It was evident from mean scores that banks successfully implementing these strategies are now reaping the benefits by ensuring high-quality service delivery to their customers.

### **5.3 Conclusion of the Study**

The study revealed that technological innovation strategies significantly impact service delivery in Kenyan commercial banks during the COVID-19 pandemic. Digital Self-Service Management and Application Programming Interface (API) strategies demonstrated a constructive connection and statistically significant relationship with service delivery.

The commercial banks in Kenya have recognized the importance of leveraging technology to enhance customer experience. Higher ratings for Digital Self-Service Management and API strategies indicate their effective use in improving banking processes and convenience for customers.

The COVID-19 pandemic triggered the need for digital solutions, and banks adapted by offering remote and contactless services. Implementing Digital Self-Service Management and API strategies allowed banks to streamline operations, increase efficiency, and enhance service delivery.

Digital Account Opening and Virtual Assistant strategies showed moderate ratings with room for improvement. Continued investment in technological innovation is crucial for banks to meet customer expectations, provide personalized services, and stay competitive in the evolving banking industry.

In conclusion, embracing technological advancements, particularly Digital Self-Service Management and API strategies, enables commercial banks to provide efficient and convenient banking services, enhancing the overall customer experience.

#### **5.4 Recommendations of the Study**

After analyzing the study's results, it is recommended that commercial banks should invest in technological innovations to enhance their service delivery. Developing virtual assistant chatbots can significantly improve customer support and engagement. To achieve this, banks should focus on improving natural language processing, broadening the range of customer service needs the virtual assistant can handle, and ensuring that responses are helpful and accurate.

Banks should enhance the user experience and streamline the customer account opening process. To improve user experience, commercial banks need to optimize their online and mobile app interfaces. This can be achieved through seamless integration with backend systems and clear user instructions and guidance.

Staying up-to-date with emerging technologies is also crucial for banks to uncover opportunities for innovation and service improvement. Regular assessments and evaluations of new technologies should be conducted to achieve this.

#### **5.5 Study Constraints**

The research examined a specific set of technological innovation strategies and their impact on service delivery. The analysis did not include other relevant variables, such as organizational culture, customer preferences, or external market factors. A broader range of variables could provide a more comprehensive picture of the factors influencing service delivery.

The study solely relied on questionnaire responses for data collection. Incorporating additional methods, such as interviews or observations, could provide a more comprehensive understanding of the connection between TI and service delivery.

## **5.6 Area for further Study**

To fully understand the impact of TI strategies on service delivery, a longitudinal study is necessary. This means observing changes and trends over time to determine how these strategies develop and their ongoing effect on customer satisfaction, operational efficiency, and financial performance.

To deepen understanding of the link between TI strategies and service delivery, future research could use a mixed-method approach. This involves using surveys and semi-structured questionnaires. Additionally, researchers could investigate the reasons behind the unexpected negative correlation between innovation and service delivery, as it is generally expected to have a positive impact.

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# APPENDICES

## Appendix I: RESEARCH QUESTIONNAIRE

We appreciate you taking the time to participate in our research. The purpose of our study is to analyze the extent to which commercial banks have implemented technological innovation strategies in response to the COVID-19 pandemic. You have been selected to participate because of your role in managing the operational activities of a commercial bank that we are using as a representative company in our study. We believe that your practical experience and knowledge can greatly contribute to achieving our research objectives. Our interview with you will consist of closed-ended questions. Your feedback will be treated with anonymity and confidentiality. If you would like, we can provide you with a copy of the research report after the data has been analyzed and findings have been reached.

### SECTION 1: DEMOGRAPHICS

1. What is your gender?

Male  Female

2. What is your highest degree or education level?

- Primary School                       Secondary School  
 College Diploma                       University Degree  
 Masters                                       Any other (Specify) .....

3. Which department matches your role?

- Operations                                       Service Delivery  
 Marketing                                       Finance  
 IT     Customer Experience  
 Business Development                       Credit  
 Other (Please Specify) .....

4. How long have you been in this position?

- Less than 1 year                       1 - 5 years  
 6 – 10 years                               Above 10 years

5. What is the size of your bank?

0 - 49

50 - 99

100 -149

150 - 200

Above 200

6. How many years has it been operating in Kenya?

1 - 5

6 – 10

10-20.

Above 10

## SECTION II: TECHNOLOGICAL INNOVATION STRATEGIES

To what extent has your firm implemented the following technological innovation approaches in combating the effects of COVID-19? Tick as appropriate using the following Likert scale of 1-5 where: 1= Not at all; 2= Little Extent; 3= Moderate Extent; 4= Great Extent; 5=Very Great Extent

	<b>TECHNOLOGICAL INNOVATION STRATEGIES</b>	<b>Respondents Rating</b>				
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
	<b>Digital Account Opening</b>					
7.	Our customers register for a new account online or using a mobile app					
8.	Our customers find our digital account opening friendly					
9.	Our customers prefer digital account opening to physical registration					
	<b>Channel Self Service Management</b>					
10.	Our customers have been enabled to activate their online banking remotely					
11.	Our systems allow for customers to reset their bank account passwords					

12.	Our customers can manage numerous elements of their bank accounts remotely					
	<b>Virtual Assistant</b>					
13.	The bank has deployed a text based virtual assistant chatbot					
14.	Our customers can get assistance from a voice based virtual assistant chatbot					
15.	Our virtual assistant chatbot has the capacity to attend to a wide array of customers' service needs					
	<b>Application Programming Interface (API)</b>					
16.	The bank utilizes API functionalities to share data with customers					
17.	Customers can access banking information using third party applications					
18.	Our customers utilize API functionalities for Open Banking					

### SECTION III: SERVICE DELIVERY

To what extent do you do your level of service delivery meet the following measures of service quality?

	SERVICE DELIVERY INDICATOR	Respondents Rating				
		1	2	3	4	5
19.	Reliability - Trust and precision are key for service providers to gain customer loyalty					

20.	Assurance - Customer trust is shaped by staff competence, courtesy, and communication					
21.	Tangibles - The appearance of physical facilities, equipment, personnel and communication materials					
22.	Empathy - personalized attention and care to customers.					
23.	Responsiveness - The willingness to provide prompt service					

**We express our gratitude for your participation in this survey!**

## **Appendix II: List of Commercial Banks in Kenya**

1. Absa Bank Kenya Plc.
2. Access Bank (Kenya) Plc.
3. African Banking Corporation Limited.
4. Bank of Africa Kenya Limited.
5. Bank of Baroda (Kenya) Limited.
6. Bank of India.
7. Citibank N.A. Kenya
8. Consolidated Bank of Kenya Limited.
9. Co-operative Bank of Kenya Limited.
10. Credit Bank Plc.
11. Development Bank of Kenya Limited.
12. Diamond Trust Bank Kenya Limited.
13. DIB Bank Kenya Limited.
14. Ecobank Kenya Limited.
15. Equity Bank Kenya Limited
16. Family Bank Limited.
17. First Community Bank Limited.
18. Guaranty Trust Bank (Kenya) Limited.
19. Guardian Bank Limited.
20. Gulf African Bank Limited.
21. Habib Bank A.G Zurich.
22. I&M Bank Limited.
23. KCB Bank Kenya Limited.
24. Kingdom Bank Limited.

25. Mayfair CIB Bank Limited.
26. Middle East Bank Kenya Limited.
27. M-Oriental Bank Limited.
28. National Bank of Kenya Limited.
29. NCBA Bank Plc.
30. Paramount Bank Limited.
31. Prime Bank Limited.
32. SBM Bank Kenya Limited.
33. Sidian Bank Limited.
34. Spire Bank Ltd.
35. Stanbic Bank Kenya Limited.
36. Standard Chartered Bank Kenya Limited.
37. UBA Kenya Bank Limited.
38. Victoria Commercial Bank Limited

**Source: CBK (2022)**