

Assessing The Effect of Digital Banking Services on Retail Banking Customers' Satisfaction Levels in Lusaka's Central Business District



Yvonne Chibulu Mwababa¹, Chrine, C. Hapompwe²

^{1,2}ZCAS University, School of Business, 10101

ABSTRACT: Digital banking platforms have improved the way banks deliver their services to clients which has resulted in the gradual movement from brick and mortar to the use of digital applications such as mobile phones, iPads, laptops and ATM machines. The purpose of this study was to assess the effect of digital banking on retail banking customer service satisfaction levels in Lusaka Town. The study was guided by three objectives which were; to determine customers' perception of the reliability of digital banking services in Lusaka Central Business District; to assess customers' perception of the responsiveness of digital banking services in Lusaka Central Business District and, to examine customers' perceptions of the security of digital banking services in Lusaka Central Business District. This study investigated customers' perceptions of digital banking services, focusing on reliability, responsiveness, and security, using a quantitative approach. Simple random sampling was used to collect data using a structured questionnaire with 5-point Likert scale. The researcher ensured that the respondents remained anonymous to avoid bias and that whatever information they provided would be treated with confidentiality. The researcher did not influence the responses provided by the respondents in anyway. The sample size was 150 and 140 respondents who are bank customers in Lusaka Central Business District responded. The response rate was 93.33%. The data was analysed using descriptive statistics, ANOVA, hierarchical regression, and correlation analysis. The findings reveal that customers generally perceive digital banking services positively in terms of reliability and responsiveness, with significant associations found between these factors and overall customer satisfaction. However, concerns remain regarding security, despite moderate confidence in digital banking security measures. The study underscores the importance of trust, transparency, and technological advancement in shaping customer perceptions. Recommendations for further research include exploring the impact of AI technologies, regulatory frameworks, and demographic differences on digital banking adoption and satisfaction. These findings contribute to understanding customer behaviour in digital banking and inform strategies for enhancing service delivery and customer experience in the financial sector.

KEYWORDS: Effect, Digital Banking, Services, Customers' Satisfaction, Lusaka CBD.

1. INTRODUCTORY BACKGROUND

The advent of digital banking platforms has revolutionized the banking industry by enabling users to access banking services and conduct transactions on their phones and laptops (Gasser, et al., 2017). This has eliminated the need for physical bank buildings, allowing banks to focus on enhancing customer experience and leveraging the advancement of digital technologies. The advent of Artificial Intelligence (AI), for instance, can be of great use in revolutionizing service provision by the public sector which is mostly marred with delays, bureaucratic inertia and red tapeism (Hapompwe, Banda & Chalwe, 2024). Digital banking services offer automation, convenience, and competition from non-banking entrants, enhancing customer satisfaction and retention (Rajput, 2019; Kaur et al., 2021).

The increased demand for digital banking services from retail clients is a result of digital innovations, leading to a gradual shift from brick-and-mortar to digital applications on various devices. Digital banking innovations have been found to enhance customer experience, satisfaction, and loyalty in Africa's retail banking sector, but there is limited research on customer perceptions of innovation and its direct impact on digital banking experience (Liu, 2021; Mbama and Ezepue 2017). Digital banking has revolutionized banking services by allowing clients to conduct transactions online, download statements, and conduct transactions without physical visits to the bank. Banks must integrate information, functionality, and services across all channels, ensuring a single, unified view of a customer's various bank relationships is available on all channels (Boniface & Ambrose, 2015).

Assessing The Effect of Digital Banking Services on Retail Banking Customers' Satisfaction Levels in Lusaka's Central Business District.

The increased use of digital technology has led to bank digital services being on high demand from non-corporate bank customers, such as retail banking clients (Liu, 2021).

In Zambia, commercial banking began in 1938 with the establishment of the Southern Rhodesia Currency Board, which eventually became the Bank of Northern Rhodesia and was the predecessor of the Bank of Zambia (BOZ). The central bank has duties that extend to all banks and its aim is to ensure that banks operate within the confines of the law. In 1970, Zambia had five banks namely, Standard Chartered, Barclays Bank, ANZ Grindlays, the Commercial Bank of Zambia, and the National Commercial Bank. Today, Zambia has 17 commercial banks with 288 branches spread across the 10 provinces (BAZ, n.d; Bank of Zambia, 2022).

Zambia's banking sector has undergone significant changes since the introduction of ATMs in 1992 by Zanaco (Nsabika, 2001). The bank introduced agency banking and mobile banking innovation Xapit in 2008 (ZANACO, n.d.). First National Bank Zambia introduced an electronic wallet in 2012 (ZANIS, 2012). The Cheque Truncation System (CTS) was introduced in 2013 to eliminate the need for physical cheque exchange (Bank of Zambia, 2012).

In 2013, Standard Chartered Bank opened its first digital branch in Zambia, featuring advanced technology like ATMs, Internet Banking kiosks, iPads, and Wi-Fi connectivity (Stanchart, 2013). The National Financial Switch (NFS) was launched in 2018 to support electronic payment transactions and integrate with regional payment systems (ZECHL, n.d.). In 2019, Standard Chartered Bank launched the first digital bank in Zambia, allowing customers to open accounts using a mobile app (Standard Chartered Bank, 2019).

In response to COVID-19, the Bank of Zambia (BOZ) took steps to decrease cash transactions and encourage the use of mobile money, raising limits for individuals, small-scale farmers, and unincorporated businesses, and lowering processing fees for the Zambia Interbank Payment and Settlement System (ZIPSS). The Zambia Electronic Clearing House Limited (ZECHL) manages common payment gateways and facilitates transactions across various networks. The banking sector is governed by the National Payment and Services Act of 2007 and the Banking and Financial Services Act of 2017. The National Payment Systems Act (NPSA) No. 1 of 2007 provides a legal foundation for Zambia's various payment systems, while the Banking and Financial Services Act of 2017 controls all Zambian banks.

Over the last four years, the banking sector has seen tremendous expansion in technology infrastructure, electronic transactions, and deposit accounts, notably following the Covid-19 outbreak. ATM infrastructure has grown, and automated Teller Machines and networked computers have transformed the banking industry by eliminating manual transactions (Bank of Zambia, 2022; Mandi, 2022). Telephone and internet banking volumes have also increased owing to transactions initiated using digital platforms processed and transmitted across different banks through electronic funds transfers and real-time gross settlement.

The global banking sector is evolving due to digital solutions and personalized services, with North America's market consolidating as larger banks acquire regional banks, Europe is prioritizing sustainable banking practices, the Asian market is competitive and innovative, and Africa facing rural service issues, prompting banks to expand branch networks and invest in mobile banking (Statista, 2024). Banks are adapting their strategies to provide digital banking services due to competition from Fin-techs and changing customer expectations. This research considered the effect of digital banking services on retail customers' satisfaction levels in Lusaka Central Business District, focusing on the rise in mobile technology usage among Zambians. The research emphasizes the need for banks to improve the quality and usage of digital banking services to meet customer demands and expectations. The study aims to identify factors influencing customer satisfaction in the competitive digital banking sector in Lusaka Central Business District.

1.1. Problem Statement

The transition from traditional to digital banking services has revolutionised the banking sector, with online banking becoming the future as technology advances. The COVID-19 pandemic has accelerated digitisation, forcing banks to reimagine operations to maintain customer relationships and compete with technological corporations. In the modern era, banks must digitize their goods and services to remain viable (Udobi-Owoloja, 2022). Zambia's banking sector is experiencing rapid growth due to digital technologies, financial inclusion programs, and environmentally friendly practices. However, access to excellent financial services remains limited, with only 5% of Zambians using mobile phones for bill payments or money transfers while over 40% of Zambia's adult population is formally financially included, up from 23% in 2009 (Trading Economics, 2024; Statista, 2024).

The COVID-19 pandemic has accelerated Zambia's digital transformation, leading to bank closures and long queues. Despite a 45% digital economy score, 47% of the population is digitally excluded, with 56% of rural residents and 34% of women lacking internet access. Digital technology is Zambia's top development priority, with 69% of adults having active mobile money accounts. Financial inclusion improved from 59.3% in 2015 to 69.4% in 2022, indicating the necessity of digital financial services (Makumba & Phiri,

Assessing The Effect of Digital Banking Services on Retail Banking Customers' Satisfaction Levels in Lusaka's Central Business District.

2023;UNCDF,

2022).

Specifically, in reaction to COVID-19, the Bank of Zambia (BOZ) in March 2020 took steps to decrease cash transactions and encourage the use of mobile money. The bank raised limits for individuals, small-scale farmers, and unincorporated businesses while removing restrictions on agents and corporate accounts. In an effort to promote real-time gross settlement, the central bank also lowered processing fees for the Zambia Interbank Payment and Settlement System (ZIPSS), (Bank of Zambia, 2020). All these were mechanisms the bank put in place to reduce physical cash transactions during the peak of Covid-19.

It is abundantly clear that Government through the Bank of Zambia has put necessary legislation and policy frameworks necessitating the revolution of digital banking across all commercial banks in the recent past as demonstrated. However, it is not clear how these technological developments or digital banking policies implemented in these banks has impacted the end beneficiaries who are customers from the Zambian perspective in terms of service delivery. The study by Musheba and Hapompwe (2024) found that technological integration enhanced service efficiency and effectiveness in procurement processes. Zambian commercial banks have shifted their business strategy to offer digital banking services, including mobile platforms, internet banking, electronic card banking solutions, and agency banking. However, it is not clear how these products affect profitability effectiveness and efficiency (Makumba & Phiri, 2023) which should be a consequence of customer satisfaction.

Zambia is enhancing financial inclusion and utilizing technology in banking, but there is a lack of literature on how digital banking innovations meet customer expectations and satisfaction, which is the focus of this study.

1.2. Study Objectives

- 1.2.1. To determine customers' perception of the reliability of digital banking services in Lusaka's Central Business District.
- 1.2.2. To assess customers' perception of the responsiveness of digital banking services in Lusaka's Central Business District.
- 1.2.3. To examine customers' perception of the security of digital banking services in Lusaka's Central Business District.

2. LITERATURE REVIEW

2.1. Introduction

Digital banking has significantly impacted retail customer satisfaction by providing convenience, efficiency, reliability, and security. It lowers costs for banks and consumers through ATMs and cashless transactions, enabling data-driven decisions and reducing human error. Digital banking also eliminates the need to handle large amounts of cash, closing the gap between rural and urban areas, and reducing the risk of counterfeit money (Harchekar, 2018).

As customer preferences and service techniques shift, self-service solutions have gained popularity. Digitization has altered communication, information, and service delivery, reduced time and streamlined administration, making banking more efficient and user-friendly (Scherpen, Draghici, & Niemann, 2018). Banks worldwide are enhancing their internet banking channels, transforming financial services and increasing investments in technology and innovation (Mbai, Ngui, & Ndiao, 2018). Digital transformation is a primary goal for banks, with investments in technology and innovation increasing as deposit margins shrink, competition rises, and customer attitudes shift, making it a must-have for both businesses and financial institutions (Haralayya, 2021).

Customer Satisfaction refers to an individual's opinion of a product or service's performance in comparison to their expectations. It is an evaluation process in which consumers compare their experiences (Narteh & Kuada, 2014). Customer satisfaction is considered one of the most important competitive factors and is the best indicator of a company's profitability. Increasing customer satisfaction will force a business to boost its focus on the needs of its clients, enhance its reputation and image. Customer satisfaction is critical for obtaining a competitive advantage, and online banking attributes help with this. Customers now hold a dominating position and may exert pressure on financial institutions to enhance services through competition. The quality of service is an important measure of the banking system's competitiveness, separating it from rivals. Sustaining client satisfaction and a competitive edge depend heavily on the quality of the services provided. It enhances customer satisfaction judgement, particularly on banking websites where users access a range of financial transactions (Firdous, 2017).

It is very evident that there is a need for banks to provide digital banking services to customers. However, what needs to be taken into consideration is whether the services banks are offering to clients via digital platforms are meeting customers' needs and that clients are satisfied with the services they are receiving. The literature reviewed by different writers' show that banks need to adopt digital banking services in order to meet clients' needs for them to stay relevant.

Assessing The Effect of Digital Banking Services on Retail Banking Customers' Satisfaction Levels in Lusaka's Central Business District.

2.2. Empirical Review

2.2.1. Customers' Perception of the Reliability of Digital Banking Services.

To compete in unregulated markets, companies and banks must innovate and digitize to meet 21st-century expectations. Financial institutions must invest in business transformation, updating outdated systems to offer digital services while reducing risks and ensuring regulatory compliance (Dasho, et.al., 2017). Digital banking offers customers better solutions and allows staff to focus on other duties.

Kaur et al.'s 2021 using the SERVQUAL model assessed the impact of digital banking service quality study on customer satisfaction in Northern India and found that reliability is a significant factor in the quality of digital banking services. The study done by Hammoud, Bizri, & Baba (2018) in Lebanon also found that efficiency, security, privacy, responsiveness, ease of use, and reliability are key factors affecting customer satisfaction in electronic banking. Reliability was found to be a common dimension between the two countries, highlighting the importance of e-banking services in boosting customer satisfaction.

The study in Ethiopia found that young, educated individuals, students, and company owners are the primary users of electronic banking, with demographic factors such as age, employment, and education significantly influencing clients' perceptions of digital banking services (Worku, Tilahun, & Tafa, 2016). Customers are satisfied with these services due to control over their transactions. Research on CRDB Bank, a leader in Tanzania's online banking sector, has been improving services since the early 2000s. Customers prefer internet banking for its time-saving features, fast feedback, reliability, and convenience. 70% of respondents find it reliable and available for money transfers. Partners and service providers have worked to reduce obstacles, including technological issues and service outages (Sikira, 2021). A case study of Stanbic Bank Zambia found a slight positive correlation between online banking use and customer satisfaction. While more clients are satisfied with internet banking service delivery, around 65% of clients do not use the bank's services, indicating a lack of satisfaction with customer service performance. Factors like gender, secondary education, negative behavioral beliefs, attitude, and intention also impact customer satisfaction (Sambaombe & Phiri, 2022). The 2024 study by Chibwe and Mwanza examined the impact of digitisation on bank consumer satisfaction in Zambia, highlighting the need for accessible physical ATMs, mobile banking apps, voice control functionality, and responsiveness. Adoption was positively impacted by affordability, security, accessibility, user-friendliness, and integration with Fin-Tech services. Banks should invest in technology that makes clients feel important and be reliable so as to meet their needs and expectations at all times.

2.2.2. Customers' Perception of the Responsiveness of Digital Banking Services

Banks must provide clients with uncomplicated banking experiences through digital banking, which reduces transaction turnaround times, improves efficiency, and facilitates smoother transactions (Nayak, 2018). Analytics enable banks to update their systems by analyzing data collected to create tailored solutions that cater to customers' needs. Digital platform usage in the UK is influenced by demographics, education, employment, income, and age. Internet banking services are popular among highly educated individuals, employees, and younger age groups. Private sector banks offer higher-quality services but need to simplify to attract lower-literate customers. The large gap between public and private sector banks suggests that public sector banks must enhance their services to meet customer expectations and remain competitive (Mbama & Ezepue, 2017). A study in Sri Lanka analyzed customer satisfaction in retail banking using the SERVQUAL model revealed that human-related factors of perceived service quality had a greater impact on customer satisfaction, with responsiveness and reliability being the most influential factors. Sri Lankan retail customers also feel that reliability of services is required for satisfaction. Digital banking services in Morocco, Ghana, and Malawi are influenced by factors such as functional quality, brand trust, privacy, security, enjoyment, attitudes, and customer satisfaction. Enjoyment is a significant determinant of customer intentions, while attitudes positively influence satisfaction. However, brand trust, privacy, security, and some aspects of enjoyment do not significantly impact satisfaction or intentions (Bouafi, 2020). In Ghana, consumer knowledge about mobile banking, usefulness of mobile banking services, and awareness provided by banks like Access Bank Ghana Limited influence customer perceptions (Cudjoe, Anim, Nii, & Nyanyofio, 2015). In Malawi, research focuses on demand-side factors like financial inclusion and barriers to access, but not specifically digital banking services (Nkuna, Lapukeni, Kaud, & Kabango, 2018). This shows that continentally there is no sufficient literature to show how customers perceive responsiveness of digital banking services.

In Zimbabwe, customers' perception of digital banking services is influenced by convenience, urban-centered travel, and mobile banking availability. Rural residents credit ECONET's Eco cash product for enabling low-value money transfers, potentially reducing poverty (Ndlovu & Ndlovu, 2013). In Botswana, customers have positive perceptions of digital banking services, focusing on e-customer service platforms. These platforms increase customer satisfaction and reduce costs for banks. However, challenges like language barriers and lack of personalization impact the overall customer experience (Chiguvu, 2018). Despite these challenges, banks in Zimbabwe and Botswana have helped clients appreciate the benefits of digital banking services.

Assessing The Effect of Digital Banking Services on Retail Banking Customers' Satisfaction Levels in Lusaka's Central Business District.

In Zambia customers generally have positive perceptions of the responsiveness of digital banking services, but there are concerns about system downtime, internet banking, and ATMs. The study recommends addressing these issues promptly and seeking customer feedback to ensure satisfaction (Raj & Muthuswamy, 2022). Although the specific perceptions of bank customers on digital banking services in Zambian banks were not addressed in the provided sources, electronic banking services like online/digital banking and mobile banking have been widely adopted, indicating a shift towards digital services in the banking industry (Ayinaddis, Taye, & Yirsaw, 2023). It is for this reason that this research seeks to use responsiveness dimension to see how Zambians view digital banking services. According to Siwale, Hapompwe, Kukano, & Mwiikisa (2021), the banking sector is known as one of the most stressful industry, particularly due to the nature of work and work hours. Therefore, the digitalization of the sector can improve banks' work life balance and thereby enhancing quality service delivery to the satisfaction of customers.

2.2.3. Customers' Perception of the Security of Digital Banking Services

Digital banking has transformed the banking industry by eliminating the need for customers to carry large amounts of cash and offering individualized online services, even for businesses operating outside their home country. This secure system allows clients to check account status without fear of fraud (Mbai, Ngui, & Ndiao, 2018). Time and money savings, as well as freedom from location, are the primary drivers of digital banking acceptance (Bandara, 2016; Skinner, 2014).

Banks worldwide are transitioning into digital banking, combining traditional branch-based companies with direct banks and advanced financial technology providers. Trust, security, and perceived risk are key factors influencing adoption. In the US, trust leads to increased usage, while negative perceptions may hinder adoption (Hassan & Wood, 2020). In Mexico, customers prioritize service quality, functionality, value, engagement, usability, and risk. However, the COVID-19 pandemic highlighted the benefits and drawbacks of internet banking, particularly among older individuals, raising concerns about cyber security, data privacy, and passwords (Moreno-García, 2023).

Tunisian clients prioritize service quality and Shariah compliance in Islamic banking, with digital banking playing a significant role in satisfaction, especially among Generation Y. Tunisian Islamic banks should focus on digital services, convenience, security, and human engagement to improve client satisfaction (Zouari & Abdelhedi, 2021). A study in Egypt found that perceived utility and convenience of use significantly influence users' propensity to use internet banking, based on the Technology Acceptance approach (TAM). This study, involving 200 Egyptian bank clients, highlights the importance of user adoption in internet banking success. The findings indicated that perceived utility and convenience of use have a substantial effect on users' propensity to use internet banking (Hussein & Saad, 2016). Internet banking adoption is crucial for success, with perceived utility and convenience of use influencing users' propensity. Mobile banking adoption in Nigeria is influenced by factors such as ease of use, security, cost, and accessibility of mobile devices (Siano, Raimi, Palazz, & Panait, 2020).

A Namibia study found that demographic factors like gender, age, qualification, and work position affect internet banking adoption, with varying effects on adoption. This suggests that considering these factors can improve bank penetration rates, operating costs, profitability, convenience, speed, and availability, potentially leading to increased internet banking usage (Sichone, 2017). Electronic banking is revolutionizing the banking industry, but customer satisfaction rates in Uganda are low. The study reveals a strong correlation between transaction security and satisfaction, with fear of fraud causing customers to avoid online banking. Modern security standards are crucial for improving security and customer satisfaction, with electronic banking's advantages potentially surpassing traditional banking services (Mukuuma, Kyeyune, Mwase, & Benard, 2020).

Kawimbe's (2020) study highlights the importance of security in service quality, examining SERVQUAL dimensions. Despite the internet's influence, customers still worry about bank security and privacy, notwithstanding sophisticated security measures like codes, passwords, and personal numbers. Banks can raise customer satisfaction levels and service standards by addressing these concerns.

2.3. Theoretical Framework

This study was guided by E-SERVQUAL Model by Zeithaml, Parasuraman, & Malhorta, (2002).

E-SERVQUAL, developed by Zeithaml, Parasuraman, and Malhotra, measures the quality of electronic services using seven dimensions: efficiency, dependability, fulfillment, privacy, responsiveness, compensation, and contact. It creates two service scales: one for recovery and one for core services. The core scale evaluates customers' opinions of online retailers' service quality, while the recovery scale addresses customer concerns or problems. The scale also considers website technical operation and user satisfaction. Key dimensions used in this research include reliability, responsiveness, security, ease of use, and efficiency, ensuring a simple, structured site with minimal customer input (Zeithaml, Parasuraman, & Malhorta, 2002).

The E-SERVQUAL model is suitable for this study as it assesses the impact of digital banking services on customer satisfaction. Poor service quality leads to dissatisfaction, making clients avoid using a particular product or service.

Assessing The Effect of Digital Banking Services on Retail Banking Customers' Satisfaction Levels in Lusaka's Central Business District.

2.4. Gaps in the Literature

The literature reviewed reveals that while there are numerous studies on digital banking globally and regionally, few have focused on how it affects customer satisfaction in the retail banking segment. In Zambia, a study by Mwiya et.al (2017) found that perceived usefulness, ease of use, and trust significantly influence attitudes towards e-banking. Another study by Mwiya et al. (2022) examined the effects of electronic service quality on online banking customer satisfaction using E-SERVQUAL, involving 314 bank customers from Lusaka and Kitwe. This study looked at e-service quality effects on online banking satisfaction which is different from this study.

Kawimbe (2020) examined the impact of digital disruption on service delivery by banks in Zambia using SERVQUAL dimensions, concluding that reliability was the most important service quality dimension. However, this study was limited to a limited number of respondents in Lusaka, only some of whom were ZCAS University employees. Sambaombe and Phiri (2022) used Stanbic Bank as a case study to suggest that negative attitudes towards innovations offered by the bank resulted in customer dissatisfaction. The SERVQUAL model was used to assess customer retention abilities in the retail banking sector, but this study was based on a specific bank in Lusaka. Makumba and Phiri (2023) evaluated the effect of digital banking channels on the performance of commercial banks in Zambia, focusing on First National Bank Zambia, which has a generally digitalized banking system with high-quality services. Chibwe and Mwanza (2024) explored the impact of digitisation on customer satisfaction in a Zambian bank, revealing that convenience, accessibility, speed, transaction alerts, and real-time feedback are key factors determining satisfaction.

These studies are a clear evidence that the aspect of customer satisfaction with digital banking in Zambia is limited. The studies conducted in other countries answer the research question better than the research results for digital banking services in Zambia. That is the gap this research hopes to address. This research will help identify how these factors have a bearing on customer satisfaction for those clients using digital banking services in Zambia.

2.5. Conceptual Framework

Figure 1 below shows the conceptual framework and identifies the independent variables namely: tangibility, reliability, responsiveness, assurance and empathy of digital banking with the dependent variable being customer satisfaction. The independent and intervening variables are derived from the E-SERVQUAL model.

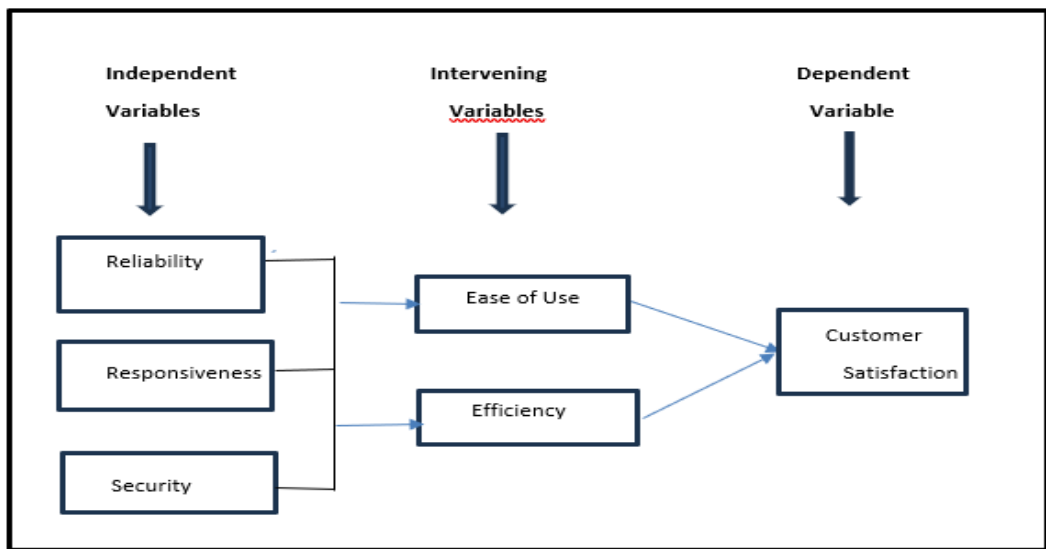


Figure 1. Conceptual Framework
Source: Authors Construction (2024)

Reliability: digital banking services should be reliable and enable clients to perform their transactions anytime.

Responsiveness: the bank staff should respond to customer needs and challenges in a timely manner.

Security: includes assurance that customer data are not shared and that their personal information is secure.

Intervening Variables

Ease of Use: customers should be able to navigate the system without challenges

Efficiency: The online platforms should provide communication materials that customers can access with regards to available services.

Assessing The Effect of Digital Banking Services on Retail Banking Customers' Satisfaction Levels in Lusaka's Central Business District.

3. METHODOLOGY

Research methodology is a systematic approach to research that directs procedures, steps, processes, emphasises constraints, resources, and opportunities, provides tools, promotes critical thinking, improves the process and encourages in-depth study. It also improves decision-making, and improves critical reading and thinking skill (Igwenagu, 2016, p. 6). The research onion model designed by Saunders, Lewis, & Thornhill, (2016) is a systematic approach to the research methodology. The layers of the research onion are interconnected. Functionalist paradigm is the paradigm within which most business and management research operates. Research in this paradigm is concerned with rational explanations and developing sets of recommendations within the current structures. This paradigm goes well with the positivism research philosophy which has been chosen for this research (Saunders, Lewis, & Thornhill, 2016). It can also be viewed as a guide for conducting research, outlining ways for sampling, how to collect data, and how to analyse that data. This research adopted a deductive approach. Developing a theory that will be adequately supported by your evidence is your goal if you begin your research project with an deductive technique. Typically, the deductive technique is linked to the survey strategy. Surveys are widely used because they provide an extremely cost-effective means of gathering a substantial amount of data from a sizable population (Saunders, Lewis, & Thornhill, 2016). This research used a mono-method which would be quantitative in nature. This form of research adheres to the rigorous requirements of a research design that was prepared before the actual investigation and was based on the methodological principles of positivism. When for quantitative measurement is used, statistical analysis is employed (Adams, et.al., 2007). Due to time constraints, data collection was done within a specific time hence the reason this study was cross-sectional (Melnikovas, 2018). Since the study focused on bank account holders in Lusaka Central Business District, a sample was used as opposed to the entire population. The target population comprised retail banking customers with accounts at any of the 17 banks in Zambia (BAZ), focusing on individual customers in the Lusaka Business District. Simple random sampling was used for quantitative data. The calculator used was the Raosoft Online calculator (Raosoft, 2004) which gave a sample size of 148. The researcher distributed 150 questionnaires and 140 were returned representing 93.33% response rate. This response rate was considered to be excellent according to (Mugenda & Mugenda, 2008). Primary and secondary sources provided data for this project. Primary data was collected through questionnaires. The information centered on respondents' experience with digital banking services. Secondary data (literature review) was sourced from books, journal articles, reports, and websites, forming the theoretical foundation for the study. Ethical consideration was adhered to.

4. STUDY FINDINGS AND ANALYSIS

4.1. Customers' Perception of the Reliability of Digital Banking Services

The study shows that a majority of respondents prefer digital banking services over physical branches, primarily due to convenience and efficiency. However, there are some differences in service availability, with 41 respondents remaining neutral and 17 disagreeing. Overall, confidence in digital banking services is high, with 54 respondents agreeing and 42 strongly agreeing. However, there is still a significant neutral response and some lack of confidence, with 9 respondents disagreeing and 2 strongly disagreeing. The mean scores for preference and overall confidence show a wide range of opinions, with the highest score for preference at 4.42, indicating strong agreement, and a lower mean score for overall confidence at 3.53, indicating moderate agreement with some variation.

4.2. Customers' Perception of the Responsiveness of Digital Banking Services

The survey reveals that customer satisfaction with digital banking services is influenced by various factors. The majority of respondents (51 out of 140) believe that digital banking services are available 24/7, with a mean score of 3.79. However, some respondents remain neutral, suggesting occasional access issues. The response to digital service requests is more evenly distributed, with 54 respondents agreeing that the bank responds promptly, while 13 strongly agree. The majority of respondents disagree, with a mean score of 3.25. The bank effectively manages complaints, with 54 respondents agreeing, but 47 remain neutral. The promptness of assistance during challenges is the least favorable, with only 10 respondents strongly agreeing and 37 agreeing, while 55 respondents are neutral. The survey also shows mixed feedback and considerable dissatisfaction among a significant proportion of customers.

4.3. Customers' Perceptions of the Security of Digital Banking Services

The study examines customer perceptions of security concerns in digital banking services, focusing on confidentiality of personal information, transaction security, and protection against hackers and fraudsters. The majority of respondents expressed high confidence in the security measures implemented by digital banking platforms, but a significant number expressed neutral or negative sentiments about transactional security. The security of digital banking services against hackers and fraudsters was

Assessing The Effect of Digital Banking Services on Retail Banking Customers' Satisfaction Levels in Lusaka's Central Business District.

assessed with mixed sentiments, with 18 respondents strongly agreeing and 39 agreeing that these services are secure and safe from cyber threats, while 42 respondents expressed neutral or negative views. The efficiency and usability of electronic banking services were also analyzed, with 61 respondents stating that these services are quick and transaction completion time was largely positive. However, 8 respondents indicated some difficulty or uncertainty, highlighting the need for intuitive design and user-friendly interfaces. The study suggests that regional differences and technological infrastructures may influence variations in perceived efficiency.

The study reveals that internet banking platforms are user-friendly, saving customers time and improving their banking experience. While most respondents agree that internet banking is user-friendly, there are still opportunities for banks to optimize service delivery mechanisms to meet evolving customer expectations. Customer satisfaction policies are perceived as important for bank growth, with 87 respondents strongly agreeing or strongly agreeing that their bank has good policies. However, continuous improvements in policy implementation and customer-centric practices are essential to maintain competitiveness in the digital era. Customer satisfaction plays a critical role in driving business growth and customer retention strategies, and regional differences in internet infrastructure and regulatory environments may influence perceived service enhancements and overall customer experience.

Regression analysis revealed that reliability, responsiveness, and security are all significant predictors of customer perceptions in digital banking. Reliability alone has a modest but significant influence, accounting for 9.1% of the variance in customer perceptions. When responsiveness is added, it shows a positive relationship with customer perceptions, accounting for 12.1% of the variance. Security, on the other hand, is the strongest predictor, explaining 25.8% of the variance in customer perceptions.

5. DISCUSSION OF FINDINGS

The findings from the comprehensive analysis of customer perceptions in digital banking reveal several critical insights into the factors influencing user satisfaction and trust. Across various dimensions including security, efficiency, ease of use, and overall customer satisfaction, the data provide a nuanced understanding of how these elements interact and contribute to shaping the digital banking experience.

From the study findings, reliability, responsiveness, and security are all crucial in shaping customer perceptions globally. Research in North America and Europe has also highlighted the importance of these factors in enhancing customer trust and satisfaction (Smith, 2022; Jones, 2021). However, regional nuances may influence the relative importance of these factors. For example, studies in Asia have highlighted responsiveness as a key determinant of customer loyalty and satisfaction in digital banking services (Taylor, 2020).

The hierarchical regression analysis reveals the significant impact of reliability, responsiveness, and security on customer perceptions in digital banking. This information can help banks tailor their strategies to meet global customer expectations, improving service quality and customer satisfaction. The Analysis of Variance revealed that reliability, responsiveness, and security significantly influence customer perceptions in digital banking services. These factors are crucial determinants of customer satisfaction and trust. Reliability and security are key drivers of positive customer experiences, but regional differences may affect their importance. Studies in Europe emphasize the role of responsiveness in enhancing customer satisfaction, alongside reliability and security measures (Smith, 2022)

Resilience to customer needs and concerns can differentiate service quality and customer loyalty. Banks can enhance customer perceptions by prioritizing improvements in reliability, responsiveness, and security, addressing concerns related to service quality and security vulnerabilities, fostering greater trust and satisfaction. The ANOVA provides robust evidence of the impact of these factors on customer perceptions in digital banking, allowing institutions to better understand global trends and regional nuances. ANOVA revealed that reliability, responsiveness, and security significantly influence customer perceptions in digital banking services. These factors are crucial determinants of customer satisfaction and trust. Reliability and security are key drivers of positive customer experiences, but regional differences may affect their importance. Studies in Europe emphasize the role of responsiveness in enhancing customer satisfaction, alongside reliability and security measures (Smith, 2022). Resilience to customer needs and concerns can differentiate service quality and customer loyalty. Banks can enhance customer perceptions by prioritizing improvements in reliability, responsiveness, and security, addressing concerns related to service quality and security vulnerabilities, fostering greater trust and satisfaction. The ANOVA analysis provides robust evidence of the impact of these factors on customer perceptions in digital banking, allowing institutions to better understand global trends and regional nuances.

Reliability consistently emerged as a key predictor, indicating its foundational role in shaping positive customer perceptions. This result aligns with the findings of (Kawimbe, 2020) that used the SERVQUAL model and found that reliability was the most important

Assessing The Effect of Digital Banking Services on Retail Banking Customers' Satisfaction Levels in Lusaka's Central Business District.

service quality dimension. The research conducted by (Hammoud, et al., 2018) in Lebanon and (Kaur, et.al 2021) in India also shows showed that reliability was a determining factor for use of electronic banking services.

On the other hand, research on responsiveness and reliability in digital banking services reveals similarities and regional nuances. Studies from North America, Europe, and Asia consistently underscore the critical importance of reliability, security, and user-centric design are crucial for customer satisfaction and trust. Responsiveness is more emphasized in Asian markets where personalized customer service is highly valued (Chen, 2020; Taylor, 2020). This highlights the importance of responsiveness in enhancing service quality and driving customer satisfaction in digital banking services.

6. CONCLUSION AND RECOMMENDATIONS

6.1. Conclusion

In conclusion, the study reveals that customers have a high level of confidence in the reliability of digital banking services, with a high mean score and significant regression coefficients in the hierarchical regression analysis. They perceive these services as consistent, with minimal technical glitches and prompt issue resolution. The study also highlights the importance of responsiveness in enhancing service satisfaction and customer loyalty. Despite the majority of customers expressing confidence in the security measures implemented by digital banking platforms, there are concerns about data confidentiality and protection against cyber threats. The ANOVA and regression analyses show that perceived security significantly influences overall customer satisfaction, emphasizing the critical role of robust security protocols in maintaining trust and loyalty. The study's findings are crucial for financial institutions to enhance service delivery and customer experience in the digitalized banking landscape. Continuous efforts to strengthen security measures, improve service responsiveness, and ensure reliable service delivery will be essential for meeting evolving customer expectations and maintaining a competitive advantage in the digital banking sector

6.2. Recommendations

Based on the findings and conclusion drawn from this study on customers' perceptions of digital banking services, it is hereby recommended that:

- 6.2.1. financial institutions (banks) should focus on improving the reliability of their digital banking services through robust IT infrastructure, regular system audits, and proactive maintenance protocols. This will not only boost customer trust but also reduce user frustration and dissatisfaction.
- 6.2.2. banks should optimize customer service processes by utilizing AI-powered chat boards and automated systems to handle routine queries promptly, while ensuring human agents are available for complex issues. Training staff to provide consistent, knowledgeable, and empathetic support is also crucial for maintaining high customer satisfaction.
- 6.2.3. financial institutions should prioritize cyber security measures, adopting advanced encryption technologies, conducting regular audits, and educating customers about online safety best practices. Transparent communication and prompt notification of security incidents are crucial for maintaining customer confidence and mitigating cyber threats.

7. SUGGESTIONS FOR FURTHER RESEARCH

Building on the findings of this study, several avenues for further research can be explored to deepen our understanding of customers' perceptions and experiences with digital banking services:

- 7.1. Firstly, this study suggests that the integration of Artificial Intelligence (AI) and machine learning technologies in digital banking could significantly improve customer satisfaction, service delivery efficiency, and user experience. This could lead to better customer interactions and enhanced service personalization, thus enhancing overall banking efficiency.
- 7.2. Secondly, additional research is needed to understand the impact of trust and transparency on digital banking relationships. This could involve understanding how banks communicate their security measures and data privacy policies effectively, and how trust affects customer loyalty and retention, ultimately fostering long-term relationships.
- 7.3. Thirdly, the growing use of mobile banking applications necessitates a comparative analysis of the challenges and opportunities associated with mobile banking versus traditional online platforms. This would help in optimizing the design and functionality of mobile banking apps to better meet customer needs and expectations.

REFERENCES

- 1) Adams, J., Khan, H. T., Raeside, R., & White, D. (2007). *Research Methods for Graduate Business and Social Science Students*. Sage.

Assessing The Effect of Digital Banking Services on Retail Banking Customers' Satisfaction Levels in Lusaka's Central Business District.

- 2) Arkkelin, D. (2014). Using SPSS to Understand Research and Data Analysis. Psychology Curricular.
- 3) Ayinaddis, S. G., Taye, B. A., & Yirsaw, B. G. (2023). Examining the Effect of Electronic Banking Service Quality on Customer Satisfaction and Loyalty: An Implication for Technological and Innovation. *Journal of Innovation and Entrepreneurship*, 12-22.
- 4) Bandara, H. H. (2016). Digital Banking: Enhancing Customer Value. In 28th Anniversary Convention. 123-133.
- 5) Bank of Zambia . (2022, 12). Bank of Zambia . Retrieved from Bank of Zambia Web site: <https://www.boz.zm/financial-inclusion-indicators.htm>
- 6) Bank of Zambia. (2012, 08 7). Bank of Zambia. Retrieved 05 26, 2024, from Bank of Zambia Website: <https://www.boz.zm/13-2012.pdf>
- 7) Bank of Zambia. (2020, 03 20). Bank of Zambia. Retrieved from www.boz.zm: https://www.boz.zm/Press_statement_measures_covid19.pdf
- 8) Bank of Zambia. (n.d.). <https://www.boz.zm/national-payment-systems-act.htm>. Retrieved 04 23, 2024, from Bank of Zambia: <https://www.boz.zm/national-payment-systems-act.htm>
- 9) BAZ. (n.d.). Bankers Association of Zambia. Retrieved 04 2024, from BAZ Web Site: <https://baz.co.zm/>
- 10) Boniface, R. M., & Ambrose, J. (2015). Mobile Banking and Financial Performance of Commercial Banks in Kenya. *International Journal of Finance and Current Business Studies*, 4 (12), 16-31.
- 11) Bouafi, S. (2020). The Effects of Digital Banking on Customer Experience, Customer Satisfaction, and Customer Loyalty in Morocco. Master's thesis. Morocco: Eastern Mediterranean University (EMU)-Doğu Akdeniz Üniversitesi (DAÜ)).
- 12) Brown, A. (2021). Security Perceptions in Digital Banking: A UK Perspective. *Banking Trends Review*, 18(2), 45-56.
- 13) Chen, B. (2020). Security Concerns in Digital Banking: An Analysis of User Perceptions and Technological Safeguards. *International Journal of Financial Services Management*, 12(1), 34-48.
- 14) Chibwe, C., & Mwanza, B. G. (2024). The Effect of Digitalization on Customer Satisfaction-A Case of a Bank in Zambia. 1-9.
- 15) Chiguvu, D. (2018). Analysis of the Effectiveness of e-Customer Service Platforms on Customer Satisfaction at ABSA, Botswana. *Open Journal of Business and Management*, 6,, 812-832.
- 16) Cooper, D. R., & Schindler, P. S. (2008). *Business Research Methods*. New York: McGraw- Hill.
- 17) Cudjoe, A. G., Anim, P. A., Nii, J. G., & Nyanyofio, T. (2015). Determinants of Mobile Banking Adoption in the Ghanaian Banking Industry: A Case of Access Bank Ghana Limited. *Journal of Computer and Communications*, 3,, 1-19.
- 18) Dasho, A., Meka, E., Sharko, G., & Indrit, B. (2017). Digital Banking the Wave of the Future . *International Conference Proceedings*, 1-6.
- 19) Davis, , F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*,, 319-340.4.
- 20) Deshpande, B. N. (2018). Digitilization in banking Sector. *International Journal of Trend in Scientific Research and Development (IJTSRD)*, 80-85.
- 21) Firdous, S. (2017). Impact of Internet Banking Service Quality on Customer Satisfaction. <http://www.icommercecetral.com>: *Journal of Internet Banking and Commerce*, April 2017, vol. 22, no. 1.
- 22) Gasser , U., Gassmann, O., Hens, T., Leifer, L., Puschmann, T., & Zhao, L. (2017). Digital banking 2025. <http://www.dv.co.th/blog-th/digital-banking-trend>.
- 23) Githuku Wanjiku, M. (2018). DIGITAL BANKING AND CUSTOMER RELATIONSHIP. *International Academic Journal of Human Resource and Business Administration*, Volume 3, Issue 2, pp. 14-32.
- 24) Hammoud, J., Bizri, R. M., & Baba, I. E. (2018). The Impact of E-Banking Service Quality on Customer Satisfaction: Evidence From the Lebanese Banking Sector. *SAGE Open*, 1-12.
- 25) Hapompwe, C.C., Banda, N., and Chalwe, A.N. (2024). Examining Critical Success Factors for Africa's Sustainable Industrial Development with Special Reference to Zambian Manufacturing Sector – Challenges, Prospects & Opportunities. *Journal of Economics, Finance and Management Studies*. Volume 07 Issue 01, 571-584. DOI: 10.47191/jefms/v7-i1-59. ISSN (print): 2644-0490, ISSN (online): 2644-0504
- 26) Haralayya, B. (2021). How Digital Banking has Brought Innovative Products and Services to India. *Journal of Advanced Research in Quality Control and Management* Volume 6, Issue 1, 16-18.
- 27) Harchekar, J. S. (2018). Digitalization in Banking Sector. *International Journal of Trend in Scientific Research and Development (IJTSRD)*, 103-108.

Assessing The Effect of Digital Banking Services on Retail Banking Customers' Satisfaction Levels in Lusaka's Central Business District.

- 28) Hassan, H. E., & Wood, V. R. (2020). Does Country Culture Influence Consumers' Perceptions Toward Mobile Banking? A Comparison Between Egypt and the United States. *Telematics and Informatics* 46, 1-14.
- 29) Hennayake, H. M. (2017). Impact of Service Quality on Customer Satisfaction of Public Sector Commercial Banks: A Study on Rural Economic Context. *International Journal of Scientific and Research Publications*, Volume 7, Issue 2,, 1-7.
- 30) Hussein, A., & Saad, M. (2016). Perceived Risk and Behavioral Determinants of Using Internet Banking in Egypt. *Journal of Behavioural Economics, Finance, Entrepreneurship, Accounting and Transport*, 4(3), 40-48.
- 31) Igwenagu, C. (2016). *Fundamentals of Research Methodology and data collection*. LAP Lambert Academic Publishing .
- 32) Jones, C. (2021). Responsiveness in Digital Banking: How Real-Time Service Impacts Customer Loyalty. *Global Finance Journal*, 17(2) , 99-112.
- 33) Kaur, B., Kiran, S., Grima, S., & Rupeika-Apoga, R. (2021). Digital Banking in Northern India: The Risks on Customer Satisfaction. *Risks*, 9; 209., 1-18.
- 34) Kaur, S. J., Ali, L., Hassan, M. K., & Al-Emran, M. (2021). Adoption of digital Banking Channels in an Emerging Economy: Exploring The Role of In-Branch Efforts. *Journal of Financial Services Marketing* 26, 107–121.
- 35) Kawimbe, S. (2020). Digital Disruption and the Impact on Service Delivery by Banks in Zambia: Customers Perspective. *International Journal of Information Research and Review* Vol. 07, Issue, 06,, 6968-6972.
- 36) Kellmereit, B., Gog, M., Graue, C., Tumele, E., & Göttfert, S. (2016). *Research Methodology*. *International Journal of Sales, Retailing and Marketing*, 1-97.
- 37) Kothari, C. R. (2004). *Research Methodology: Methods and Techniques*, Second Revised Edition. New Dehli: New Age International (P) Limited.
- 38) Kumbhar, V. (2011). Kumbhar, Vijay : Service quality perception and customers' satisfaction in internet banking service: a case study of public and private sector banks. . Published in: *Cyber Literature: The International Online Journal* ,Vol. 2, No. 4 , 21-30.
- 39) Liu, E. X. (2021). IMF Working Paper Stay Competitive in the Digital Age: The Future of Banks.
- 40) Musheba, L.L., & Hapompwe, C.C. (2024). Assessing the Effect of Technological Integration on Procurement Efficiency of Zamtel, Lusaka, Zambia. *Journal of Economics, Finance and Management Studies*. Volume 07 Issue 07. ISSN (print): 2644-0490, ISSN (online): 2644-050 Article DOI: 10.47191/jefms/v7-i7-41,
- 41) Makumba, L., & Phiri, J. (2023). An Evaluation of the Effect of Digital Banking Channels on the Performance of Commercial Banks in Zambia. *Open Journal of Business and Management*, 11 , 1624-1637.
- 42) Mandi, V. C. (2022). Key Shared Successes and Obstacles in the Use of E-banking in Developing Countries: A Case Study of the Bank of Tanzania Website Evaluation. *Journal of Global Economy, Business and Finance (JGEBF)*. Volume 44 Issue 7, 8-12.
- 43) Mbai, E., Ngui, T., & Ndiao, O. (2018). Competitive strategies implementation and quality service delivery in Standard Chartered Bank (K) Ltd.,. *International Academic Journal of Human Resource and Business Administration*, 3, 1, 246-265.
- 44) Mbama, C. I., & Ezepue, P. O. (2017). Digital Banking, Customer Experience and Bank Financial Performance: UK Customers' Perceptions. *Statistics, Information Modelling & Financial Mathematics Research Group*, 1-44.
- 45) Melnikovas, A. (2018). Towards an Explicit Research Methodology: Adapting Research Onion Model for Futures Studies. *Journal of Futures Studies*, 23(2), 29-44.
- 46) Moreno-García, E. (2023). Internet Banking Service Perception in Mexico. *Journal of Risk and Financial Management* 16(8), 364;, 1-13.
- 47) Mugenda, O., & Mugenda, A. G. (2008). *Social Sciences Research: Theory and Principles*. Scientific Research.
- 48) Mukuuma, K., Kyeyune, R., Mwase, A., & Benard, E. (2020). Examining The Influence of e-Banking Security on Customer Satisfaction in Uganda - A Case of Ugandan Commercial Banks. *ICTACT Journal On Management Studies*, Volume: 06, Issue: 02, 1225-1232.
- 49) Mwiya, B., Felix, C., Shikaputo, C., Kabala, E., Kaulung'ombe, B., & Siachinji, B. (2017). Examining Factors Influencing E-Banking Adoption: Evidence from Bank Customers in Zambia. *American Journal of Industrial and Business Management*, 7, 741-759.
- 50) Mwiya, B., Katai, M., Justice, B., Kayekesi, M., Sekela, K., Kasanda, E., . . . Mwenya, D. (2022). Examining the Effects of Electronic Service Quality on Online Banking Customer Satisfaction: Evidence from Zambia. *Cogent Business & Management*, 1-23.
- 51) Narteh, B., & Kuada, J. (2014). Customer Satisfaction with Retail Banking in Ghana. *Thunderbird International Business Review*, 353-371.

Assessing The Effect of Digital Banking Services on Retail Banking Customers' Satisfaction Levels in Lusaka's Central Business District.

- 52) Nayak, R. (2018). A Conceptual Study on Digitalization of Banking- Issues and Challenges in Rural India. *International Journal of Management, IT & Engineering*, , 186-191.
- 53) Ndlovu, I., & Ndlovu, M. (2013). Mobile Banking the Future to Rural Financial Inclusion: Case Study of Zimbabwe. *IOSR Journal Of Humanities And Social Science (IOSR-JHSS)*, 70-75.
- 54) Nkuna, O., Lapukeni, A. F., Kaud, P., & Kabango, G. (2018). The Role of Commercial Banks on Financial Inclusion in Malawi. *Open Journal of Business and Management*,, 812-832.
- 55) Nsabika, N. (2001, 04 09). The Post. Retrieved 05 08, 2024, from All Africa Web Site: <https://allafrica.com/stories/200104090295.html>
- 56) Parasuraman, A., Ziethaml , V., & Berry, L. L. (1988). SERVQUAL: A Multiple- Item Scalefor Measuring Consumer Perceptions of Service Quality. *Journal of Retailing*, Vol.. 62, no. 1,, 12-40.
- 57) Patel, A. (2019). Digital banking and Customer Satisfaction: A Study on the Impact of Technological Advancements on Banking Services. *Journal of Banking & Finance*, 45(3), 215-230.
- 58) Raj, H. S., & Muthuswamy, S. (2022). Assessing Customer's Retention Abilities in the Retail Banking Sector:A Case Study of Private Bank in Lusaka, Zambia. *Bulletin of Social Sciences (ISSN: 2348-7992)*, 7 (1):, 08-14.
- 59) Rajput, S. S. (2019). The Impact of Online Banking Attributes on Customer Satisfaction: A Study from the Irish Retail Banking Customer Perspective. Dublin: Doctoral dissertation, National College of Ireland.
- 60) Raosoft . (2004). Retrieved from Raosoft, Inc. Web Site: <http://www.raosoft.com/samplesize.html>
- 61) Sambaombe, J. K., & Phiri, J. (2022). An Analysis of the Impact of Online Banking on Customer Satisfaction in Commercial Banks Based on the TRA Model (A Case Study of Stanbic Bank Lusaka Main Branch). *Open Journal of Business and Management*, Vol.10 No.1, , 369-386.
- 62) Saunders, M., Lewis, P., & Thornhill, A. (2016). *Research Methods for Business Students*, 7th Edition. Harlow: Financial Times Prentice Hall.
- 63) Scherpen, F., Draghici , A., & Niemann, J. (2018). Customer Experience Management to Leverage Customer Loyalty in the Automotive Industry. *Procedia - Social and Behavioral Sciences*, 238(1) , 374–380.
- 64) Shabani, L., Behluli, A., Qerimi, F., Pula, F., & Dalloshi, P. (2022). The Effect of Digitalization on the Quality of Service and Customer Loyalty. *Emerging Science Journal*Vol. 6, No. 6,, 1274-1289.
- 65) Siano, A., Raimi, L., Palazz, M., & Panait, M. C. (2020). Mobile Banking: An Innovative Solution for Increasing Financial Inclusion in Sub-Saharan African Countries: Evidence from Nigeria. *Sustainability* 2020, 12(23), 10130, 1-12.
- 66) Sichone, N. M. (2017). Factors Influencing Customer Perceptions on Adoption of Internet Banking in Namibia. Namibia: University of Namibia.
- 67) Sikira, R. (2021). Customers' Opinions on Reasons for Using Online Banking: Experience of Customers in Tanzania. *International Journal of Scientific Research and Management* Volume 09 Issue 05, 2185-2195.
- 68) Singh, S. (2019). Measuring E-Service Quality and Customer Satisfaction with Internet Banking in India. *Theoretical Economics Letters*, 9,, 308-326.
- 69) Siwale, L. (2022). Effects of Electronic Banking on Service Delivery: A Case of Barclays Bank plc . Doctoral dissertation. Lusaka, Zambia: The University of Zambia.
- 70) Siwale, J., Hapompwe, C., Kukano, C., & Mwiikisa, F.L. (2021). Exploring the Effects of Work Life Balance on Employee Performance in the Banking Sector: A Case study of AB Bank in Lusaka-Zambia. *International Journal of Scientific and Research Publications*, Volume 11, Issue 6. ISSN 2250-3153. DOI: 10.29322/IJSRP.11.06.2021.p11416 <http://dx.doi.org/10.29322/IJSRP.11.06.2021.p11416>
- 71) Skinner, C. (2014). *Digital bank: Strategies to launch or become a digital bank*. Marshall Cavendish International,Pte Ltd.
- 72) Smith, J. (2022). Consumer Trust in Digital Banking: A Comparative Study. *Journal of Banking and Finance*, 25(3), 112-125.
- 73) Stanchart. (2013, 11 12). Standard Chartered Bank. Retrieved from Standard Chartered Bank Website: <https://www.sc.com/global/av/zm-news-media-121129.pdf>
- 74) Standard Chartered Bank. (2019). Retrieved from Standard Chartered Bank Web site: <https://www.sc.com/zm/about-us>
- 75) Statista. (2024, 3). Banking - Africa. Retrieved 04 12, 2024, from Statista: <https://www.statista.com/outlook/fmo/banking/africa>
- 76) Statista. (2024, 03). Banking Worldwide. Retrieved 04 12, 2024, from Statista: <https://www.statista.com/outlook/fmo/banking/worldwide#analyst-opinion>
- 77) Statista. (2024, 03). Banking-Zambia. Retrieved 04 12, 2024, from Statista: <https://www.statista.com/outlook/fmo/banking/zambia>

Assessing The Effect of Digital Banking Services on Retail Banking Customers' Satisfaction Levels in Lusaka's Central Business District.

- 78) Taylor, M. (2020). Cyber Security Measures and Customer Perception: Insights from Australia. *Journal of Financial Technology*,12(4), 210-225.
- 79) Trading Economics. (2024, 04). Bank-Accounts-Per-1000-Adults-. Retrieved 04 12, 2024, from Trading Economics: <https://tradingeconomics.com/zambia/>
- 80) Udobi-Owoloja, P. (2022). Digital Banking: Importance,Challenges and Prospects. *The Frontiers of Management Sciences in Nigeria*, 70-91.
- 81) UNCDF. (2022). United Nations Children Fund. Zambia's Digital Transformation Will Strengthen the Economy and Create More Equitable Society.
- 82) Worku, G., Tilahun, A., & Tafa, M. A. (2016). The Impact of Electronic Banking on Customers' Satisfaction in Ethiopian Banking Industry (The Case of Customers of Dashen andWogagen Banks in Gondar City. *Journal of Business & Financial Affairs*, 1-18.
- 83) World Bank . (2017). Retrieved 04 12, 2024, from Fourth-economic-brief-financial-services-reaching-every-zambian: <https://www.worldbank.org/en/country/zambia/publication/zambia>
- 84) www.boz.zm. (n.d.). Retrieved 04 23, 2024, from Bank of Zambia: <https://www.boz.zm/>
- 85) ZamStats. (2022). 2022 Census of Population. Lusaka: Zambia Statistics Agency.
- 86) ZANACO. (n.d.). Retrieved 05 09, 2024, from ZANACO Website: <https://www.zanaco.co.zm/our-history.php>
- 87) ZANIS. (2012, 02 14). Lusaka Times. Retrieved 05 09, 2024, from Lusaka Times: <https://www.lusakatimes.com/2012/02/14/fnb-zambia-launches-ewallet/>
- 88) ZECHL. (n.d.). Retrieved 05 26, 2024, from ZECHL Web Site: <https://www.zechl.co.zm/services/>
- 89) Zeithaml, V., Parasuraman, A., & Malhorta, A. (2002). Service Quality Deliver through Web Sites: A Critical Review of Extant Knowledge. *Journal of the Academy of Marketing Sc*,30(4), 362-375.
- 90) Zouari, G., & Abdelhedi, M. (2021). Customer satisfaction in the digital era:evidence from Islamic banking. *Journal of Innovation and Entrepreneurship* 10:9, 1-8.



There is an Open Access article, distributed under the term of the Creative Commons Attribution – Non Commercial 4.0 International (CC BY-NC 4.0) (<https://creativecommons.org/licenses/by-nc/4.0/>), which permits remixing, adapting and building upon the work for non-commercial use, provided the original work is properly cited.