

The Effect of Digitalization on Customer Satisfaction-A Case of a Bank in Zambia

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ABSTRACT

This study examines how digitization affects customer satisfaction in a Bank in Zambia. With the financial industry rapidly changing due to technology, digital banking services have become crucial. Zambia's banking sector has seen significant digitization in recent years, including mobile banking, online transactions, and ATM access. Therefore, it is essential for banks and policymakers to understand the impact of digitization on customer satisfaction. The aim of the study was to investigate the effect digitalization has on customer satisfaction at a local bank in Zambia. A survey strategy using structured questionnaires was employed to gather data. The findings highlight the importance of factors such as convenience, accessibility, speed, customer alerts for transactions, and real-time feedback in determining customer satisfaction in a digitized banking environment. The results of this study have valuable implications for both the bank and policymakers. Understanding how digitization influences customer satisfaction provides insights that drive strategic decisions to enhance customer experiences and loyalty in the digital era. The significance of digitization in the banking sector its ability to transform customer satisfaction is emphasized in the conclusion. Through an examination of the different aspects of this correlation, it provides insight into the obstacles and prospects that digitization offers to banks. These findings are crucial for remaining competitive and guaranteeing customer satisfaction in a constantly evolving and technology-driven industry, as digital banking continues to progress.

Keywords: digitization, customer satisfaction, banking sector, digital platforms

I. INTRODUCTION

Digitalization refers to the process of moving to a digital business, and it has brought about significant changes in various industries, including banking (Gartner, 2016). The banking industry has been heavily affected by digital transformation, with banks modifying their products, processes, and organizational structure to keep up with the digital change. According to (Napoletano & Foreman, 2021), Digital banking allows customers to access banking products and services through online channels, such as desktop or laptop computers, tablets, and smartphones. The COVID-19 pandemic has accelerated the adoption of digital banking, with banks encouraging customers to use digital channels to limit face-to-face contact. Banking institutions have closed branches and invested in digital platforms, such as online banking, mobile banking, and ATMs (Bank Of Zambia, 2021).

Digital transactions account for a significant portion of total transactions, and the majority of service demands are processed digitally rather than manually in branches. The Zambian banking sector has been pushed to digitize interactions with customers, and this move towards digitalization has impacted customer satisfaction and the quality of online services (Nkomesha, 2020). The purpose of the study is to investigate the effect of digitalization on customer satisfaction at a Bank in Zambia, considering factors such as mobile phone penetration and government initiatives to promote digital financial services. The findings of the study can help improve digital banking services, enhance customer experience, and inform policy makers and regulators about the effectiveness of digitalization efforts in promoting financial inclusion. Electronic banking has a positive relationship with bank financial performance, and the adoption of electronic banking has made the banking industry more productive and effective (Lasmini, et al., 2019). Previous studies have focused on the benefits of digitalization for banks, but this research aims to determine the effect of digitalization on customer satisfaction.

This research had the following objectives;

- i. To determine the factors that lead to customer satisfaction in digitized banks.
- ii. To determine how easy it is to access the digital banking platforms.
- iii. To establish how the adoption of digital banking services has impacted customer satisfaction levels.

II. LITERATURE REVIEW

In this section, an examination of pertinent literature was conducted to explore the customer experience with contemporary technologies when handling sensitive financial information. The structure of this section aims to highlight the interplay between banking, customers, and technology, with the ultimate goal of evaluating the impact of digital banking on customer satisfaction.

2.1 Digitalization and Customer Satisfaction

Ensuring that banking services are accessible to all, regardless of physical ability, promotes a sense of inclusivity and demonstrates the bank's commitment to serving a diverse customer base (Muluka, 2015). Accessible ATMs, online banking and mobile banking allow customers to manage their finances on their terms, improving convenience and overall satisfaction (Balkan, 2021). The accessibility commitment demonstrates the bank's commitment to the welfare and needs of its customers, leading to increased customer trust and positive sentiment (Ugwuanyi, et al., 2021). A positive experience with accessible banking services increases customer loyalty and reduces the likelihood of customers turning to a competitor out of frustration or dissatisfaction (Ibid, n.d.).

In short, accessibility to physical ATMs and digital banking channels is key to providing a complete and satisfying banking experience to all customers, regardless of ability. Banks that prioritize accessibility demonstrate how a customer-centric approach can contribute to long-term customer retention and growth (Ugwuanyi, et al., 2021).

2.2 Access to Digital Platforms

Online banking platforms should be designed with accessibility in mind, incorporating features such as easy-to-read fonts, clear navigation, and high color contrast for visually impaired users (Kifle, 2021). All functions and functions of the online banking platform must be accessible via keyboard navigation to users who cannot use a mouse (Kingu, 2021). Screen reader software compatibility allows visually impaired users to access and navigate the online banking interface efficiently (Ibid, n.d.). Videos and multimedia content must include captions or transcripts to meet the needs of hearing impaired users (Ibid, n.d.). In contrast to conventional brick-and-mortar banks that have restricted operating hours, digital banking services are accessible round the clock, enabling customers to oversee their financial affairs at any given moment (Kifle, 2021). Mobile banking applications must have a responsive design that adapts to different screen sizes and orientations to ensure the best user experience for all devices (Kifle, 2021). Integrating voice control functionality into mobile apps benefits users with mobility impairments who may have difficulty using touchscreens (Ibid, n.d.). Providing alternatives to complex touches allows users with dexterity problems to navigate the application more comfortably (Ibid, n.d.). The clean, neat user interface improves usability for users with cognitive impairments by reducing distractions and confusion (Hanafizadeh, et al., 2014). The integration of the text-to-speech function helps visually impaired users convert text on the screen into speech (Harb, et al., 2022). Ensuring a wide ATM network operating 24/24h helps increase convenience for customers, helping them to access cash when they need it. ATMs should be located in well-lit and secure areas to enhance customer safety, especially during nighttime transactions (Brusnahan, 2019).

2.3 Adoption of Digital Services in the Bank

A study in Ghana conducted on behalf of the World Bank by Financial Sector Deepening (FSD, 2013) discovered that digital financial services improve payment systems, at the same time it showed how enabling legislative environment has a crucial impact on the adoption and active use of digitized financial services which, for example, allow for savings and insurance purchases using mobile money services. The study explicates how in just three years the changes in rules contributed to the turnaround of mobile money and banking services in Ghana. Inasmuch as the study does not relate to this research in forthright manner, it moves into foreground to make more visible the fact that digitalization improves payment systems which produce as a result in adoption of banking services and customer satisfaction (FSD, 2013)

However, this study specifically focuses on the impact of digitalization on customer satisfaction at a Bank in Zambia. It is important to note that no previous research has been conducted on this relationship in this particular context. Therefore, the study aims to address this gap by investigating the factors that contribute to customer satisfaction after the implementation of digitalization, evaluating the ease of access to digital banking platforms, and examining the effects of adopting digital banking services on customer satisfaction.

III. METHODOLOGY

A quantitative survey was used to conduct the study. Quantitative research collected data to address the research objectives that were set. This approach provided a balanced view of the effect of digitalization on customer satisfaction. The

researcher used structured questionnaires. The questionnaires included Likert scale questions to quantify customer satisfaction with different aspects of digital banking. The data collected was analyzed quantitatively. The target population for this research was in the Lusaka District of Zambia, focusing on a bank in Zambia. In 2022, the Bank had 120,394 customers.

$$n = \frac{N}{1+N(e^2)}$$

Where n= sample size
 N= Population which is 120,394
 e= margin of error which is 5%

$$n = \frac{120394}{1+120394(0.05^2)}$$

$$n = \frac{120394}{301.985}$$

$$n = \underline{400}$$

The sample size was determined using the Tronchim formula, with 400 responses obtained from customers who predominantly use digital banking services. Purposive and simple random sampling techniques were used to select respondents.

Data was collected using a structured questionnaire and they were distributed to bank customers. Online questionnaires were used for convenience and efficiency. Data analysis involved descriptive analysis, the quantitative data collected underwent a thorough process of verification, purification, and categorization. Subsequently, it was subjected to analysis utilizing the Statistical Package for Social Sciences (SPSS) in order to generate descriptive statistics. A portion of these statistics was then inputted into Microsoft Excel to create graphical representations, figures that effectively present the research findings.

IV. RESULTS

4.1 Response Rate

On a small group of chosen respondents, a pilot survey representing 4% of the sample size was carried out. The study did not include the people who took the pilot survey. The pre-testing of the data collection instrument was done as part of the pilot survey to make sure it was measuring what it was supposed to measure. Before conducting the actual survey, the questionnaire was appropriately amended based on the input from the pilot survey.

Table 1: Response Rate

| Questionnaires | Frequency | Percentage (%) |
|------------------------|------------|----------------|
| Successfully Completed | 432 | 108 |
| Pilot Responses | -16 | -4 |
| Cleaned Out | -16 | -4 |
| <u>Final Responses</u> | <u>400</u> | <u>100</u> |

4.2 Demographic Characteristics

Table 2 illustrates that the research encompassed a sample consisting of 57% females and 43% males. A significant proportion of participants, amounting to 71%, fell within the age range of 30 to 49. The predominant educational attainment among the respondents was a bachelor's degree, with master's degrees and diplomas following suit.

Table 2: Demographic Factors

| Description | Mode | | | |
|-------------|-----------------|----------------|----------------|-----------|
| Gender | Female 57% | Male 43% | | |
| Age | 30-39yrs 35.5% | 40-49yrs 35.5% | 50-59yrs 16.2% | |
| Education | Bachelors 45.8% | Masters 30.8% | Diploma 15.2% | PHD 3.25% |

4.3 Digitalization and Customer Satisfaction

Table 3 presents an overview of the distribution of satisfaction scores among the participants of the survey. The majority of daily users, accounting for 47.8% of the total digital channel usage, prefer mobile banking as their primary digital banking service. The most commonly cited reason for utilizing digital banking services is convenience, which is also the most preferred service among all digital services. Among the challenges faced, network issues are the most frequently reported. In terms of customer support, the majority of respondents categorized it as good, indicating a high level of satisfaction in this aspect. Furthermore, addressing queries or concerns promptly is affirmed to have the highest frequency among the participants.

Table 3: Digitalization and Customer Satisfaction Findings

| Objective | Description | Mode |
|---|--|--|
| Digitalization and Customer Satisfaction | Frequency Distribution of Digital Channel Usage | Mode: Daily user 47.8%. |
| | Digital Banking Services Frequently Used | Mode: Mobile Banking |
| | Digital Banking Services Motivation | • The mode indicates that Convenience is the most frequently cited motivator. |
| | Digital Services Preferred | • The mode indicates that Convenience is the most frequently preferred service. |
| | Challenges Faced | • Mode: Network Challenges |
| | Level of Customer Support | • Mode: Good |
| | Queries or Concerns Addressed Promptly | • Mode: Yes |
| | Quality of Products /Services | • Mode: Good |
| | Customer Support for Digital Platform Queries/Issues | • Mode: Good |
| | Overall Satisfaction | • Mode: 8 |
| | Satisfied With Services | • Mode: Satisfied |
| | Likelihood to Recommend Bank's Digital Platforms | • Mode: Likely to Recommend |

4.4 Access to Digital Platforms

Table 4 presents the mode of the findings obtained from various descriptions with the objective of finding the accessibility of digital platforms. The mode of accessibility and ease of use was found to be highly convenient, as it had the highest frequency among users. Users expressed satisfaction with the speed and efficiency of transactions when using this mode. Furthermore, they found it easy to find information or services on digital platforms using this mode. However, some users encountered delays in their transactions when utilizing this mode. In terms of real-time updates and notifications, the

mode provided updates to users. The mode was perceived to be somewhat responsive in terms of customer service. Lastly, users found convenience to be the most satisfying aspect of the products or services offered through this mode.

Table 4: Access to Digital Platforms Findings

| Objective | Description | Mode |
|---|--|------------------------------------|
| Accessibility of Digital Platforms | Accessibility and Ease of Use | • Mode: Very Convenient |
| | Satisfaction with Speed and Efficiency of Transactions | • Mode: Satisfied |
| | Ease of Finding Information or Services on Digital Platforms | • Mode: Easily Found |
| | Encountering Delays in Transactions | • Mode: Encountered Delays |
| | Perception of Real-Time Updates and Notifications | • Mode: Provided |
| | Perception of Customer Service Responsiveness | • Mode: Somewhat Responsive |
| | Most Satisfying Products/Services | • Mode: Convenience |

4.5 Adoption of Digital Services in the Bank

Table 5 displays the mode of findings derived from different descriptions in order to determine the Attitude Towards Technology. The research found that users were satisfied with the ease of navigation and user-friendliness of the digital banking services. They also felt confident in the reliable security measures implemented by the bank. Privacy was adequately maintained, and clear channels of communication for assistance were available. Participants expressed a high likelihood of continuing to use the digital platforms and recommended them to others.

Table 5: Adoption to Digital Services Findings

| Objective | Description | Mode |
|------------------------------------|---|--------------------------------------|
| Attitude Towards Technology | Ease of Navigation & User-friendliness | • Mode: Good |
| | Perception of Security in Digital Banking Services | • Mode: Perceived Secure |
| | Confidence in Security Measures | • Mode: Confident |
| | Perception of Privacy Maintenance on Digital Platforms | • Mode: Adequately Maintained |
| | Perception of Clear Channels of Communication for Digital Platform Assistance | • Mode: Clear Channels |
| | Likelihood to Continue Using Bank's Digital Platforms | • Mode: Very Likely |
| | Likelihood to Recommend Bank to Others | • Mode: Very Likely |

V. DISCUSSION OF RESULTS

5.1 Demographic Characteristics

The study sample consisted of 57% women and 43% men, indicating a higher participation rate of women in the survey. The majority of participants held a bachelor's degree, accounting for 45.8% of the sample, followed by those with

master's degrees at a rate of 30.8%. The level of education of the respondents has a significant influence on the quality of their responses. The five individuals who were interviewed for the study were all in managerial roles and had a minimum of 15 years of experience in the banking industry. This indicates that they are well-versed in the area of digital banking. Out of the total respondents, there were 2 individuals who identified as female and 3 individuals who identified as male.

5.2 Digitalization and Customer Satisfaction

47.8% of respondents use digital channels daily while 84% of respondents use mobile banking apps. Digital banking is widely used and mobile banking apps are popular. 56.75% of respondents face challenges with digital banking, 57.75% of respondents prefer digital banking for its convenience. Convenience is a major driver for digital banking adoption. This agreed with the findings in the research by (Balkan, 2021) which states that digital banking improves convenience and overall satisfaction. 45.3% rate customer support as good, while 44.2% rate digital platform support as good. There is room for improvement in the digital banking experience, particularly in addressing challenges and improving customer support. 80.6% of respondents are satisfied with their overall banking experience. Overall satisfaction with digital banking is high, contributing to improved customer experience. Customers have a positive perception of the bank's offerings and are likely to recommend both the bank and its digital platforms. 89.8% rate the bank's products/services as good or excellent. Some customers struggle with technology and security misconceptions. Addressing technology and security misconceptions can increase customer confidence in digital banking. The text highlights the intensification of competition in the banking sector due to the emergence of digital-only banks and fintech startups. This aligns with the research conducted by Lasmini et al. (2019). Traditional banks are compelled to improve their digital offerings in order to stay competitive and adapt to the changing landscape. Customer satisfaction is measured through surveys on onboarding, utilization, and net promoter scores.

5.3 Access to Digital Banking Platforms

The exponential growth of mobile banking applications has made it easier for customers to manage their financial affairs, retrieve account details, and conduct transactions through handheld devices like smartphones or tablets. According to survey findings, digital banking services are considered very convenient and easy to use by 76% of respondents. Additionally, 52.8% perceive these services as providing a secure environment. The majority of respondents (93%) find that the information or services they need are easily found on digital platforms. In terms of speed and efficiency, the majority of respondents (85.3%) are satisfied with the transactions conducted through digital platforms. While there may be issues or delays encountered when performing transactions online, this can be beneficial in detecting and acting quickly in the event of fraud. Customer service representatives have been rated as somewhat and very responsive, with a total rating of 83.5%. Convenience, quality of products, customer service, variety of options, and price are the aspects of products or services that respondents find most satisfying. The statement concurs with the research conducted by (Brusnahan, 2019). Which suggests that a wide ATM network operating 24 hours helps increase convenience for customers

Challenges faced by banks in implementing and promoting digital banking services include system-related issues, difficulties in technology adoption among senior citizens, challenges faced by visually impaired individuals, fraud, and misconceptions surrounding digital platforms. Collaboration and integration with financial technology companies (Fintechs) is common among digital banks, allowing them to expand their range of financial services. Digitalization has resulted in reduced costs for banks, leading to increased revenue, improved efficiencies, and enhanced accessibility. Customers also benefit from reduced transaction costs, convenience, and improved accessibility. These findings align with the studies conducted by (Kifle, 2021) and (Kingu, 2021) who both suggest that digital banking platforms should be designed with accessibility in mind. The study by (Muluka, 2015) suggests that digital banking diminishes the necessity for physical infrastructure and personnel, resulting in cost savings for banks which agrees with the findings above on reduced costs. The utilization of AI and big data is an emerging trend in the industry, enabling businesses to analyze customer behaviors and predict future customer requirements. The future of banking lies in digital banking services, with more banks transitioning from traditional brick and mortar structures to digital platforms. Local Fintech companies play a role in aiding system integration.

5.4 Adoption of Digital Banking Services

89% of respondents rated the ease of navigation and user-friendliness of digital banking services as good/excellent. The findings align with a study by Harb et al. in 2022 which emphasizes user-friendly and convenient banking experiences. These services are accessible 24/7 on various devices and strong security measures are implemented to build trust in users. This finding agrees with the research conducted by (FSD, 2013) which said that enabling legislative environment has a crucial impact on the adoption and active use of digitized financial services as it gave them confidence to use the service. Security measures implemented by banks on digital platforms inspire confidence in the majority of users. This also agrees with Balkan (2021) that digital banking services often prioritize security by implementing advanced encryption and authentication measures to safeguard customers' financial information. Privacy is adequately maintained on digital platforms, according to 85% of respondents. There is a need to improve channels of communication for seeking assistance on digital platform related matters.

97.8% of respondents are likely to continue using their banks' digital platforms in the future. Suggestions for improving digital banking services include making applications more user-friendly, introducing contactless ATM withdrawals, improving internet security, and integrating mobile banking and online banking. Digital adoption of banking services is more common in urban areas, but it has helped bridge the gap between urban and rural areas. People aged 20-40 are more likely to use digital banking services, particularly in urban areas with reliable internet infrastructure. Banks integrating financial literacy into marketing see more customers adopting digital services. Security and customer trust concerns are addressed through fraud and risk awareness campaigns, security measures, and upgrading digital applications. Digital banking platforms utilize data analytics and artificial intelligence to deliver tailored financial guidance and suggestions. The adoption of digital banking services is a global trend driven by technology, consumer preferences, convenience, and security. Different regions and demographics may exhibit varying levels of adoption and acceptance of digital banking. The utilization of digital banking services has been rising due to technological advancements, consumer preferences, and convenience factors.

VI. CONCLUSION

Digitalization has both positive and negative effects on customer satisfaction in digitized banks. The convenience and 24/7 accessibility of digital banking positively impact customer satisfaction. Digital banking has streamlined processes, resulting in quicker service delivery and cost saving, which improves customer satisfaction. Digitalization has promoted financial inclusion by offering banking services to previously underserved populations, positively impacting customer satisfaction. Digital banking has introduced innovative features and services that enhance customer experience and satisfaction. Technological barriers, data security concerns, and occasional service disruptions are challenges that need to be addressed for digitalization to continue enhancing customer satisfaction.

The primary focus of digital banking platforms is to provide a user friendly experience and seamless navigation, ensuring that users can easily access the required information and carry out transactions efficiently. Nevertheless, there may be occasional disruptions and delays in online transactions, which can be attributed to network or internet issues as discussed earlier in the context of Digitalization and customer support. Despite these challenges, the digital platforms are equipped with effective communication channels to assist clients in need. In conclusion, although clients may face occasional difficulties, the process of accessing digital banking platforms remains uncomplicated.

The adoption of digital banking services has positively impacted customer satisfaction levels in SCB due to factors such as accessibility, round-the-clock availability, cost effectiveness, security measures, user friendly interfaces, mobile applications, personalized experiences, and integration with fintech services. The COVID19 pandemic and market competition have also influenced adoption.

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