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TECHNOLOGICAL CAPABILITY AND MARKET PERFORMANCE OF SELECTED DEPOSIT MONEY BANKS IN LAGOS STATE, NIGERIA

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ABSTRACT

Deposit-taking institutions are crucial for economic stability as they ensure funds flow to sectors in need and facilitate transfers between economic units. However, deposit money banks often struggle to meet expectations due to underutilization of technology, resulting in reduced customer satisfaction, decreased trust, market share decline, and operational inefficiencies. This study examines the impact of technological capability on market performance in selected deposit money banks in Lagos State, Nigeria. Using a survey research design, the study involved 3,098 top, middle, and low-level management from five banks in Lagos State. Data was collected through a reliable questionnaire, and descriptive and inferential analyses were conducted using SPSS. The response rate was 69.11%. Multiple regression analyses revealed that technological capability significantly influenced market performance (Adj. R2 = 0.377; F (4, 306) = 47.983, p < 0.05). Specifically, technology had a significant effect on customer satisfaction, trust, market share, and operational efficiency. In conclusion, technological capability significantly impacts market performance in deposit money banks in Lagos State, Nigeria. The study advises banks to recognize technology as a key driver of overall performance and develop comprehensive strategies aligned with business goals and customer needs. Staying updated on emerging technologies and industry trends is also vital for maintaining competitiveness.

Keywords: *Customer satisfaction, Customer trust, Market share, Market performance, Mobile banking.*

Introduction

Deposit money banks play a crucial role in economies by ensuring the flow of funds to sectors in need and facilitating financial transactions between economic units. Maintaining strong market performance is essential as it reflects the bank's overall performance over a specific period. Despite efforts to improve market performance through measures like risk management and capital reserves, deposit money banks often face challenges due to inadequate implementation of technological capabilities. This leads to decreased customer satisfaction, diminished trust, declining market share, and inefficient operations. This study aims to investigate the impact of technological capability on the market performance of selected deposit money banks in Lagos State, Nigeria. It is important to examine how technological advancements can enhance the performance of these banks to address the observed issues.

Globally, deposit money banks have experienced positive market performance in recent years, with steady increases in deposits, profits, and customer satisfaction. The adoption of technology has allowed banks to expand their customer base, offer new services, and improve efficiency. The trend of consolidation within the banking industry has also contributed to increased efficiency and profitability, ensuring competitiveness in the changing global market (A. Awogbami et al., 2020). Additionally, stringent regulations imposed by governments and central banks have contributed to the safety and security of the banking system, reducing the risk of financial losses. In the Nigerian context, deposit money banks have faced challenges related to liquidity, capital adequacy, and non-performing loans (Nacetem et al., 2015). However, despite the economic downturn caused by the COVID-19 pandemic, the banking sector has maintained profitability, with total assets increasing and non-performing loan ratios decreasing (Oladele & Opele, 2022). The sector has embraced digitalization, offering online banking services and mobile banking apps to enhance convenience and security for customers. Measures such as two-factor authentication and biometric authentication have been implemented to ensure customer security. However, issues related to poor service delivery, including long queues and slow processing times, have adversely affected customer satisfaction and trust. Therefore, this study aims to explore how technological capabilities can impact the market performance of deposit money banks in Lagos State, Nigeria. By addressing the challenges and leveraging technological advancements, it is possible to improve customer satisfaction, trust, and overall financial performance in the banking sector.

Research Hypotheses

The following hypotheses were tested at 0.5 level of signicant

H_{01}: Technological capability has no significant effect on customer satisfaction
H_{02}: There is no significant effect of technology capability on customer trust.

Technology Capability: Technological capability refers to an individual or organization's ability to develop, deploy, and effectively utilize technological resources (Li & Chan, 2019). It encompasses both

hardware and software capabilities, as well as the supporting infrastructure and resources necessary for the technology to function optimally (Al Dari et al., 2020). Technological capability can also encompass the adaptability of a technology to new tasks and its capacity to scale to meet increasing demands. It represents an organization's capacity to acquire, create, and deploy technologies to enhance its operations, efficiency, effectiveness, and competitive advantage (Castro, 2019).

The effectiveness of a technology's capability can be measured by various features such as speed, accuracy, reliability, scalability, security, and usability (Mikalef et al., 2020). Speed refers to the technology's ability to process data and deliver results quickly, while accuracy ensures that the technology consistently produces the desired results (Tirastittam et al., 2020). Reliability indicates that the technology consistently performs without errors or inconsistencies. Scalability refers to the technology's ability to adapt to different contexts and purposes. Security measures protect data from unauthorized access, manipulation, or corruption, and usability refers to the ease of use of a technology (Khin & Ho, 2018).

Technological advancements have provided businesses with numerous advantages, enabling increased efficiency and productivity. Automation and digital systems save time and resources by automating mundane tasks, allowing businesses to focus on more critical aspects (Mikalef et al., 2018). Real-time communication capabilities have facilitated quicker problem-solving, faster decision-making, and improved customer service by connecting businesses with customers, suppliers, and partners worldwide (Fernando et al., 2019). Enhanced security measures protect businesses from cyber threats, ensuring the safety of data and systems (Ca, 2019). Technology has also reduced costs through automation and cloud-based services, resulting in savings on labor and materials (Singh & El-Kassar, 2019; Soto-Acosta et al., 2018). Furthermore, data collection and analysis enable businesses to make informed decisions by gaining insights into customer behavior and market trends (Singh & El-Kassar, 2019; Soto-Acosta et al., 2018). However, there are potential disadvantages associated with technology. Staying updated with evolving technologies can be challenging for organizations lacking the necessary resources or expertise (Mikalef et al., 2019); (Opele, 2020). Data security becomes a significant concern as businesses must protect their systems and data from cyber-attacks and adhere to privacy regulations (Ashrafi et al., 2019). Implementing new technologies may face resistance from users, necessitating proper training and support (Ashrafi et al., 2019); (Awogbami et al., 2021). Additionally, technology investments can be costly, requiring careful consideration of implementation and maintenance expenses (Jiang & McCabe, 2021). In this study, technology capability will be measured by evaluating the use of specific technologies such as point-of-sale systems, mobile banking, debit cards, and chatbots. These technologies serve as indicators of an organization's ability to utilize technology effectively to achieve desired outcomes.

Customer Satisfaction: Researchers have provided various definitions of customer satisfaction. Kurdi et al. (2020) define it as the degree to which a customer is pleased with a product or service, while Hamzah and Shamsudin (2020) describe it as the extent to which customers are contented with their acquisitions. Customer satisfaction is derived from customers' assessment of the perceived value of a product or service in relation to their expectations. It encompasses customers' emotional reactions and serves as a metric for evaluating how well a company meets or exceeds customer expectations (Kurdi et al., 2020; Yi & Nataraajan, 2018). Methods for assessing customer satisfaction include surveys, interviews, and Net Promoter Score (NPS) evaluations (Suchánek & Králová, 2018). Key features of customer satisfaction include reliability and consistency of products or services, trust in the company, effective communication, respect and appreciation, personalized experiences, prompt issue resolution, and building strong customer relationships (Farisa et al., 2019; Lin et al., 2020; Budur & Poturak, 2021; Dam & Dam, 2021).

Customer satisfaction brings several benefits to businesses. Satisfied customers are more likely to exhibit loyalty, leading to reduced customer turnover and increased customer lifetime value (Gajewska et al., 2019). They also tend to share positive feedback, resulting in recommendations and the acquisition of new customers. Satisfied customers may engage in repeat purchases, boosting sales revenue, and contribute to enhancing the company's brand image and reputation. Additionally, satisfied customers typically require less customer support and refunds, leading to cost savings (Al-Omari et al., 2020). Positive word-of-mouth communication from satisfied customers can further enhance the company's overall reputation (Mohammed & Rashid, 2018). However, there are potential challenges associated with customer satisfaction. Unrealistically high customer service expectations can lead to disappointment and negative reviews if not met. Without clear goals and measurement metrics, it becomes challenging to assess success and make improvements. Improving customer satisfaction may require additional resources, which can be costly. Furthermore, despite best efforts, there will always be some unsatisfied customers who may leave negative reviews and harm the company's reputation (Vasić et al., 2019; Dam & Dam, 2021).

In summary, customer satisfaction refers to the level of happiness and contentment experienced by customers with the products or services provided by a company. It is an important indicator of a company's performance in meeting customer expectations, and high levels of customer satisfaction can lead to various benefits such as customer loyalty, positive word-of-mouth, increased sales, and enhanced brand reputation. However, challenges such as unrealistic expectations and the cost of improvement should be considered in managing customer satisfaction.

Customer Trust: Customer trust is the belief and confidence customers have in a company or brand to deliver on its promises and meet their needs and expectations. It encompasses the assurance and reliability customers feel towards a business, its products, and services.

Trust is built on openness, consistency, reliability, security, privacy, and responsiveness to customer feedback. Openness and transparency involve providing readily accessible information about products, customer service policies, and company history. Consistency ensures that customers can expect the same level of quality each time they engage with the company. Reliability means delivering on promises in a timely manner and providing products of good quality. Security involves protecting customer data and ensuring the safety of transactions. Respecting customer privacy means not sharing information without permission and using customer data only for intended purposes. Lastly, listening to customer feedback and acting upon it demonstrates a customer-centric approach.

Building and maintaining customer trust has several benefits. Trusted companies are more likely to retain customers and benefit from positive word-of-mouth recommendations. Trust also contributes to increased sales and revenue as customers are more willing to purchase from a brand they trust. Trust fosters customer satisfaction, loyalty, and long-lasting relationships. A good reputation gained through trust enhances a company's standing in the marketplace and boosts employee morale. Trust also facilitates customer feedback and helps businesses better understand their customers' needs, leading to more efficient service. However, not respecting customer trust can result in higher churn rates, reduced sales, and a damaged reputation. Legal risks may arise if customer data is mishandled, and customers may become more vulnerable to security threats. To establish and maintain trust, businesses should prioritize transparency, consistency, reliability, security, privacy, and responsiveness to customer feedback. Therefore, customer trust is the mutual feeling of confidence and assurance between customers and businesses. It is built on openness, consistency, reliability, security, privacy, and responsiveness. Trust leads to improved customer retention, increased sales and revenue, positive reputation, better employee morale, and enhanced customer understanding. Failing to respect customer trust can result in negative consequences such as higher churn rates, reduced sales, damaged reputation, legal risks, and increased vulnerability to security threats.

Empirical Review

Technological Capability and Customer Satisfaction: Numerous studies have examined the relationship between technological capabilities and customer happiness, yielding mixed results. Khin and Ho (2018) found a positive relationship between digital technology, digital capabilities, and organizational performance. Lidiya (2020) observed a correlation between customer satisfaction and effectiveness, assurance, pricing, and reliability. Alzaidi (2018) and PWC (2018) highlighted the use of artificial intelligence in the banking industry to automate tasks and improve customer service (Adewole & Opele, 2019). Prentice et al. (2020) showed that both AI and service quality are significant factors in customer happiness and loyalty.

Andarwati et al. (2020) found no functional flaws in the tested POS information system, and Nilesh and Sachin (2020) demonstrated that a point-of-sale (POS) system positively

impacts the profitability of the food and beverage industry. Ekwutosi (2020) determined that POS businesses reduce unemployment rates. Baabdullah et al. (2019) identified factors influencing actual usage behavior, while Singh and Srivastava (2018) developed a model predicting the intention to use mobile banking. Boonsiritomachai and Pitchayadejanant (2019) found that Generation Y's adoption of mobile banking is driven by hedonic motivation. Königstorfer and Thalmann (2020) highlighted the potential of AI in the commercial banking sector, and Mor and Gupta (2021) documented a decrease in inefficiency due to AI implementation in Indian banks. Yun (2021) and Shankar et al. (2020) explored the relationship between technological capability and innovation, and the impact of trust on mobile banking adoption was observed in studies by Kwateng et al. (2018) and Zhang et al. (2018). Okoye (2018) found that cashless banking has an insignificant effect on unemployment rates in Nigeria, and Omotayo (2015) examined factors influencing the adoption of POS systems.

Diffusion of innovation theory

The diffusion of innovation theory, proposed by Everett Rogers, explains how new ideas, products, or services spread through social systems. It considers factors such as comparative benefit, compatibility with values, complexity, and trialability. This theory has been applied in various fields, including marketing, public health, technology, and social movements. In summary, research has shown the positive impact of digital technology, AI, and POS systems on organizational performance, customer satisfaction, and profitability (Opele et al., 2015). Factors influencing adoption include trust, usability, security, and hedonic motivation. The diffusion of innovation theory provides insights into the spread of new ideas and technologies across different contexts.

Research Method

A survey was conducted in Lagos State, Nigeria, involving 3098 individuals who have deposited money in selected banks: First Bank of Nigeria Plc, United Bank of Africa, Guaranty Trust Bank, Access Bank, and Zenith Bank Plc (collectively referred to as FUGAZ). The sample size of 450 was determined using a sampling table, and standardized questionnaires were used to collect the data. The findings showed that the Cronbach alpha coefficient exceeded the threshold of 0.7, indicating good reliability. Descriptive and inferential methods were employed to analyze the data. Additionally, a preliminary investigation was conducted in Ogun State, where the survey instrument was distributed to deposit money banks for reliability and validity assessment using SPSS version 25. These banks were chosen due to their reliability, protected environment, and diverse financial services offered. Strict regulatory measures instill confidence in clients regarding the safety of their funds. The pilot study was conducted in Wema Bank with a sample size of 45, representing 10% of the total population. The questionnaire used an ordinal interval scale with response options ranging from Very High (6) to Very Low (1). The reliability of the instrument was assessed using the Cronbach alpha, where a value of 0.7 is considered reliable (Taber, 2018).

Table 1: Reliability Statistics Result.

S/N	Variables	No. of Items	Cronbach alpha Coefficient	Composite Reliability
1.	Customer Satisfaction	5	0.875	0.916
2.	Customer Trust	5	0.892	0.923

Source: SPSS Output Result (2023)

The results of the internal consistency test of the questionnaire are presented in Table 1. The purpose of this study was to assess the questionnaire's ability to maintain consistency across various studies and circumstances. The Cronbach alpha coefficient was employed to evaluate both the internal consistency and reliability of the measure. The resulting values were above the alpha benchmark of 0.70, and the composite reliability (CR) was more significant than 0.6. This confirms that the questionnaire and its variables successfully passed the internal consistency test.

Testing of hypotheses

H_{01}: Technological capability has no significant effect on customer satisfaction

Table 2: Summary of multiple regression between technological capability components and customer satisfaction of selected deposit money banks in Lagos State, Nigeria.

(Constant)	0.795	0.000	4.129				
Point of sales	0.132	0.008	2.676				
Mobile banking	0.077	0.137	1.492				
Debit card	0.204	0.000	3.954	0.000[b]	0.621[a]	0.385	47.983
Chatbot	0.178	0.000	4.096				
Predictors: (Constant), Point of sales, Mobile banking, Debit card, Chatbot,							
Dependent Variable: Customer satisfaction							

Source: Author's computation, 2023 underlying data from field survey

The findings of the multiple regression analysis, as presented in Table 2 illustrate the impact of several components of technological capability on customer satisfaction within a sample of deposit money banks located in Lagos State, Nigeria. The findings of the study indicate that there is a positive and statistically significant relationship between point of sales (β = 0.132, t = 2.676, $p<0.05$), debit card (β = 0.204, t = 3.954, $p<0.05$), and chatbox (β = 0.178, t = 4.096, $p<0.05$) with customer satisfaction. However, the effect of mobile banking (β = 0.206, t = 3.210, $p>0.05$) on customer satisfaction was found to be positive but not statistically significant. This suggests that point-of-sales, debit cards, and chatbots serve as indicators of customer happiness within the chosen deposit money institutions.

The correlation coefficient of 0.621 suggests that there exists a moderate positive association between the components of technological capability and customer satisfaction among the chosen deposit money banks in Lagos State, Nigeria. The coefficient of multiple determination refers to a statistical measure that quantifies the proportion of the variance in the dependent variable that the independent variables can explain in a multiple regression model. The

adjusted R^2 value of 0.385 suggests that approximately 38.5% of the variability observed in customer satisfaction within deposit money banks in Lagos State, Nigeria, can be explained by factors related to technological capability. The remaining 61.5% of the observed changes are attributed to other variables that were not included in the model. The predictive and prescriptive multiple regression models are expressed as follows:

$CS = 0.795 + 0.132POS + 0.077MB + 0.204DC + 0.178CB + U_i$ ---Eqn(i) (Predictive Model)

$CS = 0.795 + 0.132POS + 0.204DC + 0.178CB + U_i$ ---Eqn(ii) (Prescriptive Model)

Where:

CS = Customer satisfaction
POS = point of sales
MB = Mobile banking
DC = Debit card
CB = Chatbot
U_i = Stochastic Error Term

The regression model reveals that when all technological capability components are held at a constant value of zero, the predicted customer satisfaction score would be 0.795, which is a positive value. The predictive model reveals that all sub-factors of technological competence, with the exception of mobile banking, exhibit a positive and statistically significant impact on customer satisfaction. Consequently, the company's management can prioritise these variables, which is why they are incorporated into the prescriptive model. The findings of the multiple regression analysis, as observed in the prescriptive model, indicate that a one-unit rise in point of sales for mobile banking is associated with corresponding increases of 0.132, 0.204, and 0.178 in customer satisfaction. Conversely, a decrease in point of sales would result in declines of the same magnitudes in customer satisfaction. This suggests that the implementation of additional point of sales systems, debit card services, and chat box features would result in a higher level of customer satisfaction among chosen deposit money banks in Lagos State, Nigeria. The F-statistics (df = 4, 306) = 47.983, with a significance level of p = 0.000 ($p<0.05$), suggests that the overall model is statistically significant in predicting the impact of technological capability components on customer satisfaction. This finding implies that technological capability components play a crucial role in determining the level of customer satisfaction among selected deposit money banks in Lagos State, Nigeria. The results indicate that it would be beneficial for chosen deposit money banks in Lagos State to prioritise the enhancement of their technical capabilities, specifically focusing on the development of point of sales systems, debit card services, and chatbot functionality. This strategic approach is expected to lead to an improvement in customer satisfaction levels. As a result, the null hypothesis (H01) asserting that technological capability does not have a substantial impact on consumer satisfaction was rejected.

H_{02}: There is no significant effect of technology capability on customer trust.

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Table 3 Summary of multiple Regression of technological capability components and Customer trust of selected deposit money banks in Lagos State, Nigeria**.**

Model	B	Sig.	T	ANOVA (Sig.)	R	Adjusted R^2	F (4,306)
(Constant)	0.866	0.002	3.074				
Point of sales	0.151	0.037	2.091				
Mobile banking	0.154	0.042	2.047				
Debit card	0.263	0.001	3.485	0.000[b]	0.565[a]	0.310	35.859
Chatbox	0.182	0.004	2.863				
Predictors: (Constant), Point of sales, Mobile banking, Debit card, Chatbot							
Dependent Variable: Customer trust							

Source: Researcher's Findings, 2023

Table 3 displays the findings of a multiple regression analysis of the association between technological capability components and customer trust in selected deposit money institutions in Lagos State, Nigeria. The results of the study reveal that there is a substantial positive relationship between consumer trust and the use of point of sales ($\beta = 0.151$, $t = 2.091$, $p < 0.05$), mobile banking ($\beta = 0.154$, $t = 2.047$, $p < 0.05$), debit card ($\beta = 0.263$, $t = 3.485$, $p < 0.001$), and chatbox ($\beta = 0.182$, $t = 2.863$, $p < 0.01$). This implies that the technological capabilities components have a significant impact on fostering trust among customers of the chosen deposit money banks. The coefficient of determination (R) is 0.565, suggesting a modest positive correlation between the components of technological competency and customer trust. The obtained corrected R-squared value of 0.310 indicates that around 31% of the variability in customer trust can be accounted for by the technological capacity components incorporated in the model. The remaining 69% of the variation is probably impacted by additional factors that were not taken into account in the present investigation.

$CT = 0.866 + 0.151POS + 0.154MB + 0.263DC + 0.182CB + U_i$ ---Eqn(i) (Predictive Model)

$CT = 0.866 + 0.151POS + 0.154MB + 0.263DC + 0.182CB + U_i$ ---Eqn(ii) (Prescriptive Model)

Where:

CT = Customer Trust
POS = point of sales
MB = Mobile banking
DC = Debit card
CB = Chatbot
U_i = Stochastic Error Term

The regression model demonstrates that when the technological capability components are held constant at zero, the estimated value for customer trust is 0.795, indicating a positive relationship. The predictive model reveals that all sub-factors of technological capabilities exhibit a positive and statistically significant impact on customer satisfaction. Consequently, the company's management can prioritise these variables, which justifies their inclusion in the prescriptive model. The findings of the multiple regression analysis, as demonstrated in the prescriptive model, indicate that enhancing point of sales, mobile banking, debit card, and chatbot by one unit is associated with a corresponding rise in customer trust by 0.151, 0.154, 0.263, and

0.182, respectively. Conversely, a decrease in these factors by one unit would result in a decrease in customer trust by the same magnitude. This suggests that the use of point of sales systems, mobile banking services, debit card usage, and chatbot technology would result in a higher level of client trust among chosen deposit money banks in Lagos State, Nigeria.

Additionally, the statistical analysis reveals that the F-statistic (df = 4, 306) is 35.859, with a significance level of $p < 0.001$. This finding suggests that the entire model has statistical significance in its capacity to forecast the impact of technological capability components on consumer trust. This indicates that the technological competence components play a significant role in influencing client trust in the chosen deposit money institutions in Lagos State, Nigeria. The findings suggest that deposit money institutions should prioritise the enhancement of technical capabilities, specifically focusing on areas such as point of sales, mobile banking, debit cards, and chatbots. Their findings agrees with (Onayinka et al., 2022). This strategic approach is crucial for fostering increased consumer trust. As a result, null hypothesis two (H02), which posits that technological capability does not have a significant impact on customer trust, was shown to be rejected.

Discussion of Findings

The findings of this study align with previous research. Yun (2021) found that business size, technological aptitude, and current research and development (R&D) spending are positively associated with innovation. The age of the firm showed a positive correlation but was not statistically significant, suggesting that deliberate technological efforts hold greater importance for fostering innovation compared to experiential learning alone. The combination of economies of scale and technological prowess highlights the potential significance of government support for technologically disadvantaged enterprises, although existing evidence suggests that such support has been inadequate (Onuoha & Opele, 2022).

Similarly, Shankar et al. (2020) found that argument quality, valence, and consistency positively influence the adoption of mobile banking. The level of initial trust in mobile banking plays a mediating role in this relationship. Kwateng et al. (2018) identified habit, price value, and trust as primary determinants of mobile banking adoption in Ghana. The impact of gender, age, educational level, and user experience on the adoption of mobile banking varies among individuals. Zhang et al. (2018) highlighted the importance of perceived usefulness, perceived ease of use, and technology safety in influencing consumer adoption of mobile banking. Innovative features and enjoyable aspects of the technology also contribute to adoption, along with the establishment of trust in financial institutions. Similarly, Okoye (2018) examined the impact of cashless banking on the unemployment rate in Nigeria and found that it had a statistically non-significant and negative effect. Contrary to popular belief, the study suggests that the implementation of a cashless banking system does not significantly contribute to the rise in unemployment rates. Additionally, the system generates employment opportunities for individuals with specialized skills in

operating machines such as ATMs, POS devices, and those used in internet and mobile phone transactions (D et al., 2020).

Omotayo (2015) investigated the factors influencing the adoption of point-of-sale (POS) systems in urban areas of Nigeria. The study found a significant association between subjective norms, perceived ease of use, and the deployment of POS machines by organizations. However, there was no significant correlation between company attributes, image, and perceived utility in relation to POS system usage. The study provides a comprehensive framework for banks to consider when implementing POS machines. In summary, these studies provide insights into the factors influencing innovation, mobile banking adoption, the impact of cashless banking on unemployment, and the adoption of POS systems. They emphasize the importance of technological capabilities, trust, perceived usefulness, and ease of use in shaping customer behavior and organizational outcomes (Opeke & Opele, 2014)..

Conclusion

This study investigated the impact of technical capabilities on the market performance of a specific group of deposit money banks located in Lagos State, Nigeria. Several significant findings resulted from the study. The studies mentioned above provide insight into the notable impact of technology competence on multiple facets of banks' operations and performance. The study findings indicate a notable correlation between technical capability and customer satisfaction among a specific group of deposit money banks in Lagos State, Nigeria. The study also found a notable correlation between the technological capabilities of deposit money banks in Lagos State, Nigeria and the level of trust customers place in them. The findings of the study revealed a statistically significant relationship between the technological capabilities and market performance of the chosen deposit money banks in Lagos State, Nigeria and agrees with the findings of (Central et al., 2019)s. The banks that effectively utilise technology have demonstrated superior market performance outcomes in comparison to their peers with limited technical skills. The findings mentioned above jointly underscore the significance and beneficial influence of technological capabilities within the chosen deposit money banks situated in Lagos State, Nigeria.

Limitations of the Study

The study's limitations can be evaluated in terms of the methodology employed throughout the investigation. The reliance on a survey methodology restricts the scope of understanding the relationship between technology capabilities and bank performance metrics within a specific timeframe. Moreover, the data collected for this study relied on self-reported measures, which introduces the potential for response bias and subjectivity. To enhance the validity of future studies, it is recommended to incorporate objective measurements or utilize multiple data sources. Additionally, the findings of this research may be influenced by contextual factors specific to the Nigerian banking sector, such as regulatory frameworks, cultural variables, and market conditions.

REFERENCES

Adewara O., Opele, J. K., Oyewumi, F. A., & Abdulraheem, J. W. (2019). Information Behaviour and Quality of Life of Agronomists in the North Central, Nigeria. International Journal of Information Processing and Communication (IJIPC) Vol. 7(2);248-255 (2), 248–255.

Adewole, G.O & Opele, J.K (2019). Demographic change and industry-specific innovation patterns in Nigeria: the implication for knowledge management practices. *Noble International Journal of Social Sciences Research, 4(2):25-32. URL:https://ideas.repec.org/a/nap/nijssr/2019p25-32.html*

Al Dari, T., Jabeen, F., Hussain, M., & Al Khawaja, D. (2020). How types of organisational culture and technological capabilities contribute to organisational learning. *Management Research Review*, *1*(2), 259-281. https://doi.org/10.1108/MRR-02-2020-0090

Al-Ansi, A., Olya, H. G., & Han, H. (2019). Effect of general risk on trust, satisfaction, and recommendation intention for halal food. *International Journal of Hospitality Management*, *8(3)*, 210-219. https://doi.org/10.1016/j.ijhm.2018.10.017

Al-Omari, Z., Alomari, K., & Aljawarneh, N. (2020). The role of empowerment in improving internal process, customer satisfaction, learning and growth. *Management Science Letters*, *10*(4), 841-848. *DOI: 10.5267/j.msl.2019.10.013*

Alzaidi, A. A. (2018). Impact of artificial intelligence on performance of banking industry in Middle East. *International Journal of Computer Science and Network Security*, *18*(10), 140-148. http://paper.ijcsns.org/07_book/201810/20181021.pdf

Andarwati, M., Amrullah, F., Thamrin, E., & Muslikh, A. R. (2020). An Analysis of Point of Sales (POS) Information Systems in SMEswith The Black Box Testing and PIECES Method. *Artic. IOSR J. Bus. Manag.*, *22*(9), 20-25. DOI: 10.9790/487X-2209052025

Antoni, D., Jie, F., & Abareshi, A. (2020). Critical factors in information technology capability for enhancing firm's environmental performance: case of Indonesian ICT sector. *International Journal of Agile Systems and Management*, *13*(2), 159-181. https://doi.org/10.1504/IJASM.2020.107907

Ashrafi, A., Ravasan, A. Z., Trkman, P., & Afshari, S. (2019). The role of business analytics capabilities in bolstering firms' agility and performance. *International Journal of Information Management*, *4(7)*, 1-15.

Awogbami, P.A., Opele, J.K., & Awe, T.P. (2020). Health Records Management Practices and Patients' Satisfaction in Selected University Medical Centres in South-West, Nigeria. *Global Journal of Social Sciences Studies*, *6*(2), 106–114. https://doi.org/10.20448/807.6.2.106.114

Awogbami, P.A., Opele, J.K & Lawal, A.J(2020). Benefits and challenges of using ICTS in health information management at Olabisi Onabanjo University Teaching Hospital, Sagamu, Ogun State,

Nigeria.Journal of applied Information Science and Technology 13 (1), 307-318, 2020

Awogbami, P.A., Opele, J. K., & Adeoye, R. (2021). Staff Development Program and Service Delivery in Academic Library: Implication for Knowledge Management in The University of Lagos, Nigeria. *Global Journal of Applied, Management and Social Sciences (GOJAMSS), 21*(January), 273–279. https://www.researchgate.net/publication/351972057

Baabdullah, A. M., Alalwan, A. A., Rana, N. P., Kizgin, H., & Patil, P. (2019). Consumer use of mobile banking (M-Banking) in Saudi Arabia: Towards an integrated model. *International Journal of Information Management, 4(4)*, 38-52.

Boonlertvanich, K. (2019). Service quality, satisfaction, trust, and loyalty: the moderating role of main-bank and wealth status. *International Journal of Bank Marketing*, *1*(3), 117-135.

Boonsiritomachai, W., & Pitchayadejanant, K. (2019). Determinants affecting mobile banking adoption by generation Y based on the Unified Theory of Acceptance and Use of Technology Model modified by the Technology Acceptance Model concept. *Kasetsart Journal of Social Sciences*, *40*(2), 349-358.

Budur, T., & Poturak, M. (2021). Employee performance and customer loyalty: Mediation effect of customer satisfaction. *Middle East Journal of Management*, *8*(5), 453-474.

Ca, T. N. (2019). *Technological capability and learning in firms: Vietnamese industries in transition*. Routledge.

Carranza, R., Díaz, E., & Martín-Consuegra, D. (2018). The influence of quality on satisfaction and customer loyalty with an importance-performance map analysis: Exploring the mediating role of trust. *Journal of Hospitality and Tourism Technology*, *9*(3), 380-396.

Castro, R. (2019). Blended learning in higher education: Trends and capabilities. *Education and Information Technologies*, *24*(4), 2523-2546.

Cheshin, A., Amit, A., & Van Kleef, G. A. (2018). The interpersonal effects of emotion intensity in customer service: Perceived appropriateness and authenticity of attendants' emotional displays shape customer trust and satisfaction. *Organisational Behavior and Human Decision Processes*, *14(4)*, 97-111.

Dam, S. M., & Dam, T. C. (2021). Relationships between service quality, brand image, customer satisfaction, and customer loyalty. *The Journal of Asian Finance, Economics and Business*, *8*(3), 585-593.

Dearing, J. W., & Cox, J. G. (2018). Diffusion of innovations theory, principles, and practice. *Health affairs*, *37*(2), 183-190.

Ekwutosi, G. E.(2020). Impact of POS business in reducing unemployment rate in Anambra State. *International Academic Journal of Management and Marketing*, 7(2), 50-62.

El-Adly, M. I. (2019). Modelling the relationship between hotel perceived value, customer satisfaction, and customer loyalty. *Journal of Retailing and Consumer Services*, *50*, 322-332.

Erin, O., Asiriuwa, O., Olojede, P., Ajetunmobi, O., & Usman, T. (2018). Does risk governance impact bank performance? Evidence from the Nigerian banking sector. *Academy of Accounting and Financial Studies Journal*, *22*(4), 1-14.

Farisa, A., Rita, P., & Oliveira, T. (2019). The impact of e-service quality and customer satisfaction on customer behavior in online shopping. *Heliyon*, *5*(10), 26-39.

Fauzi, A. A., & Suryani, T. (2018). Measuring the effects of service quality by using CARTER model towards customer satisfaction, trust and loyalty in Indonesian Islamic banking. *Journal of Islamic Marketing*, *1(2)*, 19-32.

Fernando, Y., Jabbour, C. J. C., & Wah, W. X. (2019). Pursuing green growth in technology firms through the connections between environmental innovation and sustainable business performance: does service capability matter?. *Resources, Conservation and Recycling*, *14(1)*, 8-20.

Fijałkowska, J., Zyznarska-Dworczak, B., & Garsztka, P. (2018). Corporate social-environmental performance versus financial performance of banks in Central and Eastern European countries. *Sustainability*, *10*(3), 772-786.

Følstad, A., Nordheim, C. B., & Bjørkli, C. A. (2018, October). What makes users trust a chatbot for customer service? An exploratory interview study. In *International conference on internet science* (194-208). Springer, Cham.

Gajewska, T., Zimon, D., Kaczor, G., & Madzík, P. (2019). The impact of the level of customer satisfaction on the quality of e-commerce services. *International Journal of Productivity and Performance Management*, 1(5), 153-174.

Glaveli, N. (2020). Corporate social responsibility toward stakeholders and customer loyalty: Investigating the roles of trust and customer identification with the company. *Social Responsibility Journal*, *17*(3), 367-383.

Godswill, O., Ailemen, I., Osabohien, R., Chisom, N., & Pascal, N. (2018). Working capital management and bank performance: Empirical research of ten deposit money banks in Nigeria. *Banks & bank systems*, 1(2), 49-61.

Hamzah, A. A., & Shamsudin, M. F. (2020). Why customer satisfaction is important to business? *Journal of Undergraduate Social Science and Technology*, *1*(1), 1-13.

Iglesias, O., Markovic, S., Bagherzadeh, M., & Singh, J. J. (2020). Co-creation: A key link between corporate social responsibility, customer trust, and customer loyalty. *Journal of Business Ethics*, *163*(1), 151-166.

Islam, T., Islam, R., Pitafi, A. H., Xiaobei, L., Rehmani, M., Irfan, M., & Mubarak, M. S. (2021). The impact of corporate social responsibility on customer loyalty: The mediating role of corporate reputation, customer satisfaction, and trust. *Sustainable Production and Consumption*, *2(5)*, 123-135.

Jiang, Q., & McCabe, S. (2021). Information technology and destination performance: Examining the role of dynamic capabilities. *Annals of Tourism Research*, *9(1)*, 103-112.

Khin, S., & Ho, T. C. (2018). Digital technology, digital capability and organisational

performance: A mediating role of digital innovation. *International Journal of Innovation Science*, 1(1), 1-14.

Königstorfer, F., & Thalmann, S. (2020). Applications of artificial intelligence in commercial banks–a research agenda for behavioral finance. *journal of behavioral and experimental finance*, *2(7)*, 103-115.

Kumra, R., Mittal, R. K., & Gunupudi, L. (2019). Trust and its determinants in internet banking: A study of private sector banks in India 1. In *Information Systems* (pp. 141-158). Routledge India.

Kurdi, B., Alshurideh, M., & Alnaser, A. (2020). The impact of employee satisfaction on customer satisfaction: Theoretical and empirical underpinning. *Management Science Letters*, *10*(15), 3561-3570.

Kwateng, K. O., Atiemo, K. A. O., & Appiah, C. (2018). Acceptance and use of mobile banking: an application of UTAUT2. *Journal of enterprise information management*, 32(1), 118-151.

Lee, J. W. (2021). Diffusion of innovations. In *Encyclopedia of Sport Management* (pp. 137-138). Edward Elgar Publishing.

Li, M. W., Teng, H. Y., & Chen, C. Y. (2020). Unlocking the customer engagement-brand loyalty relationship in tourism social media: The roles of brand attachment and customer trust. *Journal of Hospitality and Tourism Management*, *44*, 184-192.

Li, T. C., & Chan, Y. E. (2019). Dynamic information technology capability: Concept definition and framework development. *The Journal of Strategic Information Systems*, *28*(4), 101-115.

Lidiya, B. (2020). The effect of point of sale (pos) service quality on customer satisfaction: the case of commercial bank of ethiopia. (Unpublished thesis Submitted to the School of Graduate Studies of Addis Ababa).

Lin, H. C., Han, X., Lyu, T., Ho, W. H., Xu, Y., Hsieh, T. C., ... & Zhang, L. (2020). Task-technology fit analysis of social media use for marketing in the tourism and hospitality industry: a systematic literature review. *International Journal of Contemporary Hospitality Management*, 4(1), 136-148.

Mikalef, P., Boura, M., Lekakos, G., & Krogstie, J. (2019). Big data analytics capabilities and innovation: the mediating role of dynamic capabilities and moderating effect of the environment. *British Journal of Management*, *30*(2), 272-298.

Mikalef, P., Krogstie, J., Pappas, I. O., & Pavlou, P. (2020). Exploring the relationship between big data analytics capability and competitive performance: The mediating roles of dynamic and operational capabilities. *Information & Management*, *57*(2), 103-116.

Mikalef, P., Pappas, I. O., Krogstie, J., & Giannakos, M. (2018). Big data analytics capabilities: a systematic literature review and research agenda. *Information Systems and e-Business Management*, *16*(3), 547-578.

Min, S., So, K. K. F., & Jeong, M. (2019). Consumer adoption of the Uber mobile application: Insights from diffusion of innovation theory and technology acceptance model. *Journal of Travel & Tourism Marketing*, *36*(7), 770-783.

Mohammadi, M. M., Poursaberi, R., & Salahshoor, M. R. (2018). Evaluating the adoption of evidence-based practice using Rogers's diffusion of innovation theory: a model testing study. *Health promotion perspectives*, *8*(1), 25.

Mohammed, A., & Rashid, B. (2018). A conceptual model of corporate social responsibility dimensions, brand image, and customer satisfaction in Malaysian

hotel industry. *Kasetsart Journal of social sciences*, *39*(2), 358-364.

Mor, S., & Gupta, G. (2021). Artificial intelligence and technical efficiency: The case of Indian commercial banks. *Strategic Change*, *30*(3), 235-245.

Nilesh, N., Patwardhan, I., Narang, J., & Chaudhari, S. (2022, October). IoT-based AQI Estimation using Image Processing and Learning Methods. In *2022 IEEE 8th World Forum on Internet of Things*.

Nordheim, C. B., Følstad, A., & Bjørkli, C. A. (2019). An initial model of trust in chatbots for customer service—findings from a questionnaire study. *Interacting with Computers*, *31*(3), 317-335.

Okoye. A. P (2018). Effect of cashless banking on unemployment rate in Nigeria. *Asian Journal of Economics, Business and Accounting*, 6(4), 1-18.

Oladele, H. O., & Opele, J. K. (2022). The perception and attitude of nursing students towards online learning during the Covid-19 lockdown in South West Nigeria. *Knowledge Management & E-Learning: An International Journal*, *14*(1), 30–45. https://doi.org/10.34105/j.kmel.2022.14.003

Omotayo, F. (2015) Factors affecting adoption of point of sale terminals by business organisations in Nigeria. *International Journal of Academic Research in Business and Social Sciences*, 5(10), 115-129.

Onayinka, T. S., Opele, J. K., James, A. J., & Rufai, M. O. (2022). *Social Media-Inspired Information : The Nigerian COVID-19 Experience*. *13*(1), 47–73.

Onuoha, O & Opele, J.K (2022). Influence of Entrepreneurship Education on Youth Empowerment in Nigeria. *Asian Journal of Education and Social Studies*, 30(1):1-7. Available@ https://www.sdiarticle5.com/review-history/87939

Opele. J.K & Obadare S.O. (2015). *Information Needs and Dissemination of National Centre for Technology* Management (NACETEM), Obafemi Awolowo University, Ile-Ife, Nigeria. Elixir Library Science., 34448-34451., 2015

Opeke, R.O & Opele, J.K. (2014). Assessment of knowledge sharing behaviours of postgraduate students in selected Nigerian Universities - *Journal of Information and Knowledge Management*, 4 (11). Available online at www.iiste.org. DOI:10.7176/IKM

Opele, J. K., Iyanda, D. F., & Opele, A. M. (2015). A Study of Commonly Shared Knowledge among Postgraduate Students in. *Elixir Educational Technology*, *85*(2), 34443–34447.

.Opele, J. K. (2020). *Knowledge management practices, interprofessional collaboration, information technology application and quality health service delivery in Federal Tertiary Hospitals In Nigeria b.... May*. https://doi.org/10.13140/RG.2.2.24381.90081

Opele, J. K., Iyanda, D. F., & Opele, A. M. (2015). A Study of Commonly Shared Knowledge among Postgraduate Students in. *Elixir Educational Technology*, *85*(2), 34443–34447.

Otto, A. S., Szymanski, D. M., & Varadarajan, R. (2020). Customer satisfaction and firm performance: insights from over a quarter century of empirical research. *Journal of the Academy of Marketing science*, *48*(3), 543-564.

Paparoidamis, N. G., Katsikeas, C. S., & Chumpitaz, R. (2019). The role of

supplier performance in building customer trust and loyalty: A cross-country examination. *Industrial marketing management*, *7(8)*, 183-197.

Poh, L. T., Kilicman, A., & Ibrahim, S. N. I. (2018). On intellectual capital and financial performances of banks in Malaysia. *Cogent Economics & Finance*, *6*(1), 145-162.

Prentice, C., Dominique Lopes, S., & Wang, X. (2020). The impact of artificial intelligence and employee service quality on customer satisfaction and loyalty. *Journal of Hospitality Marketing & Management*, *29*(7), 739-756.

Punyatoya, P. (2018). Effects of cognitive and affective trust on online customer behavior. *Marketing Intelligence & Planning*, *1*(2), 167-183.

Rather, R. A., Tehseen, S., Itoo, M. H., & Parrey, S. H. (2019). Customer brand identification, affective commitment, customer satisfaction, and brand trust as antecedents of customer behavioral intention of loyalty: An empirical study in the hospitality sector. *Journal of Global Scholars of Marketing Science*, *29*(2), 196-217.

Schirmer, N., Ringle, C. M., Gudergan, S. P., & Feistel, M. S. (2018). The link between customer satisfaction and loyalty: the moderating role of customer characteristics. *Journal of Strategic Marketing*, *26*(4), 298-317.

Shankar, A., Jebarajakirthy, C., & Ashaduzzaman, M. (2020). How do electronic word of mouth practices contribute to mobile banking adoption?. *Journal of Retailing and Consumer Services*, *5(2)*, 101-119.

Shao, Z., Zhang, L., Li, X., & Guo, Y. (2019). Antecedents of trust and continuance intention in mobile payment platforms: The moderating effect of gender. *Electronic Commerce Research and Applications*, *3(3)*, 108-23.

Shulga, L. V., Busser, J. A., Bai, B., & Kim, H. (2021). The reciprocal role of trust in customer value co-creation. *Journal of Hospitality & Tourism Research*, *45*(4), 672-696.

Singh, S. K., & El-Kassar, A. N. (2019). Role of big data analytics in developing sustainable capabilities. *Journal of cleaner production*, *21(3)*, 1264-1273.

Singh, S., & Srivastava, R. K. (2018). Predicting the intention to use mobile banking in India. *International Journal of Bank Marketing*, 36(2), 357-378.

Soto-Acosta, P., Popa, S., & Martinez-Conesa, I. (2018). Information technology, knowledge management and environmental dynamism as drivers of innovation ambidexterity: a study in SMEs. *Journal of Knowledge Management*, *22*(4), 824-849.

Suchánek, P., & Králová, M. (2018). Customer satisfaction and different evaluation of it by companies. *Economic research-Ekonomska istraživanja*, *31*(1), 1330-1350.

Syahadiyanti, L., & Subriadi, A. P. (2018). Diffusion of innovation theory utilisation online financial transaction: Literature review. *International Journal of Economics and Financial Issues*, *8*(3), 219-233.

Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in science education*, *48*(6), 1273-1296.

Tabrani, M., Amin, M., & Nizam, A. (2018). Trust, commitment, customer intimacy and customer loyalty in Islamic banking relationships. *International Journal of Bank Marketing*, *1(4)*, 197-211.

Tirastittam, P., Jermsittiparsert, K., Waiyawuththanapoom, P., & Aunyawong, W. (2020). Strategic Leadership, Organizational Innovativeness and the Firm Supply Performance: The Mediating Role of Information Technology Capability. *Int. J Sup. Chain. Mgt*, *9*(2), 291.

Tulung, J. E., & Ramdani, D. (2018). Independence, size and performance of the board: An emerging market research. *Corporate Ownership & Control*, *15*(2), 1-12.

Vasić, N., Kilibarda, M., & Kaurin, T. (2019). The influence of online shopping determinants on customer satisfaction in the Serbian market. *Journal of theoretical and applied electronic commerce research*, *14*(2), 70-89.

Yi, Y., & Nataraajan, R. (2018). Customer satisfaction in Asia. *Psychology & Marketing*, *35*(6), 387-391.

Yun, M. (2022). The impact of technological capability on MSME innovation: a case study of

Vietnam. *Asian Journal of Technology Innovation*, *30*(3), 491-518.

Zhang, C. B., & Li, Y. N. (2019). How social media usage influences B2B customer loyalty: roles

of trust and purchase risk. *Journal of Business & Industrial Marketing*, *1*(3), 217-236.

Zhang, T., Lu, C., & Kizildag, M. (2018). Banking "on-the-go": examining consumers' adoption of mobile banking services. *International Journal of Quality and Service Sciences*, 10(3), 279-295.