

Core Banking System Upgrades and Customer Satisfaction in Selected Quoted Deposit Money Banks

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Abstract

This study examines the effect of Core Banking System (CBS) upgrades on customer satisfaction in selected quoted deposit money banks in Nigeria. Despite substantial investments in CBS upgrades, empirical evidence on their customer-facing impact remains limited. Using a descriptive cross-sectional survey design, data were collected from 361 bank customers and analyzed using multiple regression. CBS upgrades were operationalized through transaction speed, digital functionality, system reliability, security and trust, ease of use, and data accuracy. The results show that CBS upgrades have a positive and significant effect on customer satisfaction, with the model explaining a high proportion of variance ($R^2 = 0.831$). Data accuracy and notifications emerged as the strongest predictor, followed by ease of use across channels, system reliability, and security and trust, while transaction speed was significant but weaker. Digital functionality was not statistically significant. The findings indicate that customers prioritise accuracy, usability, reliability, and trust over expanded digital features. The study concludes that CBS upgrades must deliver tangible service improvements to enhance customer satisfaction and recommends that banks prioritise system performance dimensions that directly shape user experience.

Keywords: Core banking system upgrades, customer satisfaction, data accuracy, digital banking, ease of use, system reliability.

1. Introduction

The Nigerian banking sector has undergone significant digital transformation, driven by rising customer expectations, regulatory requirements, and the need for operational resilience. Central to this transformation is the Core Banking System (CBS), which enables banks to manage accounts, process transactions, and deliver integrated services across multiple channels in real time (Laudon & Laudon, 2018). In response to regulatory directives and increasing competition, major deposit money banks such as Access Bank, Guaranty Trust Bank, Sterling Bank, and Zenith Bank have undertaken substantial CBS upgrade initiatives to enhance

cybersecurity, IT governance, and business continuity (Central Bank of Nigeria, 2024). Globally, banks are transitioning from legacy systems to modular, application programming interface (API)-enabled CBS platforms to improve scalability, flexibility, and integration with digital channels (KPMG, 2024). This trend is particularly pronounced in emerging economies, where rapid financial innovation and evolving regulatory requirements are accelerating core banking transformation (McKinsey & Company, 2023; Capgemini, 2024). Despite these advancements, empirical evidence on the customer-facing impact of CBS upgrade remains limited, particularly in the

Nigerian context. Existing studies have largely focused on service quality and customer-facing channels, with limited consideration of how core banking system performance translates into customer satisfaction (Awara, et al, 2022).

This study examines the effect of transaction speed, digital functionality, system reliability, security and trust, ease of use, and data accuracy on customer satisfaction in selected quoted deposit money banks in Nigeria. It is anchored on the DeLone and McLean Information Systems Success Model, which links system quality, information quality, and service quality to user satisfaction in technology-enabled environments.

Statement of the Problem

In 2024, several quoted deposit money banks in Nigeria undertook large scale Core Banking System (CBS) upgrades, reflecting significant investments in digital infrastructure. However, the transition process was accompanied by service interruptions and limited accessibility across banking channels. Evidence from recent upgrade cycles indicates that customers experienced transaction failures, restricted access to funds, and prolonged service outages linked to core banking system transitions (TechCabal, 2025; Okamgba, 2024)

These disruptions raise concerns about whether backend system improvements translate into meaningful customer benefits. While regulatory frameworks emphasise system reliability, cybersecurity, and seamless service delivery (Central Bank of Nigeria, 2024), customer experiences during upgrade periods suggest a disconnect between technical system enhancements and perceived service quality.

Existing studies have largely examined customer satisfaction through service quality and customer-facing channels, with limited attention to the role of core banking system performance in shaping customer

outcomes (Awara, et al, 2022). Consequently, it remains unclear how specific dimensions of CBS upgrades influence customer satisfaction in the Nigerian banking context. This study therefore examines how key dimensions of core banking system performance affect customer satisfaction in selected quoted deposit money banks in Nigeria.

Aim and Objectives of the Study

The aim of this study is to examine the effect of core banking system (CBS) upgrades on customer satisfaction in selected quoted deposit money banks in Nigeria.

Specifically, the study seeks to:

- i. Examine the effect of transaction speed on customer satisfaction in selected quoted Nigerian banks.
- ii. assess the effect of digital functionality on customer satisfaction in selected quoted Nigerian banks.
- iii. evaluate the effect of system reliability on customer satisfaction in selected quoted Nigerian banks.
- iv. examine the effect of security and trust on customer satisfaction in selected quoted Nigerian banks.
- v. assess the effect of ease of use across channels on customer satisfaction in selected quoted Nigerian banks.
- vi. examine the effect of data accuracy and notification systems on customer satisfaction in selected quoted Nigerian banks.

2. Literature Review

2.1 Conceptual Review

Core Banking System Upgrade

Core Banking Systems (CBS) are centralized platforms that enable banks to manage customer accounts, process real-time transactions, and deliver integrated services across multiple channels (Laudon & Laudon, 2018). Recent upgrades involve transitioning from legacy systems to modular, API-enabled platforms that

enhance scalability, functionality, and digital integration (Capgemini, 2024). These upgrades are intended to improve system performance and service delivery, thereby enhancing customer experience (KPMG, 2024).

In this study, CBS upgrades are operationalised through key system performance dimensions: transaction speed, digital functionality, system reliability, security and trust, ease of use, and data accuracy.

Transaction Speed

Transaction speed refers to the promptness with which financial transactions are processed across banking channels. It is a key indicator of service efficiency (Al-Hawari, 2006). CBS upgrades enhance transaction speed by enabling real-time processing and reducing system delays (McKinsey & Company, 2023). Improved system efficiency has been linked to higher customer satisfaction (Bekele & Bultum, 2021).

Digital Functionality

Digital functionality reflects the range of services available through digital banking platforms, including transfers, payments, and self-service options (Zeithaml, et al, 2002). CBS upgrades support expanded functionality through integration with digital channels and external platforms (Capgemini, 2024). However, the value of such features depends on their alignment with customer needs.

System Reliability

System reliability refers to the consistency and dependability of system performance, including uptime and error-free transaction processing (DeLone & McLean, 2003). Reliable systems reduce service failures and enhance customer trust, which is critical in digital banking environments (Al-Hawari, 2006).

Security and Trust

Security and trust relate to customers' confidence in the protection of their financial data and transactions. CBS

upgrades strengthen security through enhanced controls and regulatory compliance (Central Bank of Nigeria, 2024). Strong system security fosters customer confidence and supports continued usage of banking services (Zeithaml, et al, 2018).

Ease of Use

Ease of use refers to how easily customers can navigate and interact with banking platforms. It includes interface clarity, responsiveness, and simplicity of processes. Usability is a core dimension of service quality and influences perceived value and satisfaction (Parasuraman, et al, 1988; Zeithaml, et al, 2018).

Data Accuracy

Data accuracy refers to the correctness and timeliness of account information, transaction records, and system outputs. Accurate data enhances trust and reduces complaints, while inaccuracies can negatively affect customer experience (DeLone & McLean, 2003; Al-Hawari, 2006).

Customer Satisfaction

Customer satisfaction reflects the extent to which banking services meet or exceed customer expectations following CBS upgrades. It represents a holistic evaluation of the customer experience and is a key outcome of system and service performance (Zeithaml, et al, 2018).

In this study, customer satisfaction is treated as a unified construct encompassing both evaluative and behavioural responses, including continued usage, positive word-of-mouth, and reduced complaints (Awara, et al, 2022). Satisfied customers are more likely to remain with their bank, engage in repeat transactions, and recommend services, while dissatisfaction is associated with complaints and switching behaviour (Johnston, 2001; Zeithaml, et al, 2002).

2.2 Theoretical Framework

This study is anchored on the DeLone and McLean Information Systems Success

Model, which provides a comprehensive framework for evaluating the effectiveness of information systems and their impact on user outcomes (DeLone & McLean, 2003). The model posits that system success is determined by key dimensions, including system quality, information quality, and service quality, which influence user satisfaction and system usage.

In the banking context, core banking systems are critical information systems that underpin service delivery across digital and physical channels. The model is particularly relevant to this study as it establishes a direct link between system performance and user satisfaction, making it suitable for examining how improvements in core banking systems influence customer experience.

Within this study, core banking system upgrades are operationalised through system performance dimensions aligned with the DeLone and McLean framework. System quality is reflected in transaction speed, system reliability, ease of use, and digital functionality, while information quality is captured through data accuracy. Security and trust are incorporated as an extension of system quality, given their importance in digital banking environments. These dimensions collectively influence customer satisfaction, which represents the primary outcome variable.

The application of the DeLone and McLean model enables this study to move beyond general service quality assessments by directly linking specific system performance attributes to customer satisfaction. This provides a structured basis for evaluating whether improvements resulting from core banking system upgrades translate into measurable customer benefits within the Nigerian banking sector.

2.3 Empirical Review

While customer satisfaction in banking has been widely studied, existing research has

largely focused on system performance in its steady state, with limited attention to how CBS upgrade events influence customer satisfaction.

The empirical applicability of the DeLone and McLean (2003) IS Success Model in digital banking has been established across multiple contexts. Bouhlel et al. (2023) validated the model in mobile banking in Saudi Arabia, confirming that system quality and service quality significantly drive user satisfaction, though information quality was not significant, suggesting that the relative importance of the model's dimensions varies by context. Dela Rosa (2024) extended this validation among Philippine digital banking customers, confirming that all three quality dimensions jointly and significantly influence user trust and satisfaction. These findings collectively justify the application of the DeLone and McLean framework to the present study and indicate that system performance dimensions are empirically grounded predictors of satisfaction in technology-enabled banking environments. CBS-specific studies reinforce this pattern, Shewabe (2018) and Bekele and Bultum (2021) both found system reliability, efficiency, and transaction accuracy to be significant drivers of satisfaction, yet both examined steady-state conditions, leaving the effect of upgrade-driven system change empirically unaddressed. In the Nigerian context, Awara et al. (2022) and Ogboye et al. (2022) similarly confirm that reliability, speed of delivery, and ease of use significantly shape customer satisfaction, though system downtime and service failures persist as unresolved constraints that upgrade transitions are likely to intensify rather than eliminate.

Across emerging market contexts, the evidence consistently points to system performance, rather than feature expansion, as the primary determinant of customer satisfaction. Ayinaddis et al.

(2023) and Gazi et al. (2024) both identify reliability and security as dominant predictors in Ethiopia and Bangladesh respectively, while Dangaiso et al. (2024) and Thasleena and Santhi (2025) confirm that ease of use and service consistency drive satisfaction and retention across Zimbabwe and India. Al-Hawari (2006) further established that automated service quality translates directly into financial performance outcomes, reinforcing that system performance is not merely a customer concern but a strategic banking imperative. Ojijo and Obere (2019), while focused on institutional performance rather than customer outcomes, demonstrate that CBS capabilities shape operational efficiency in ways that ultimately determine service delivery quality. Collectively, these studies confirm that reliability, security, ease of use, and data accuracy are consistent and cross-contextual drivers of satisfaction, yet none examines how deliberate CBS upgrade interventions affect customer satisfaction. This gap is particularly consequential in Nigeria, where recent large-scale CBS upgrade initiatives by quoted deposit money banks remain unexamined from the customer perspective, a gap the present study directly addresses.

3. Methodology

This study adopted a descriptive cross-sectional survey design to examine customers' perceptions of core banking system (CBS) upgrades and their effect on customer satisfaction. The study focused on four purposively selected Deposit Money Banks: Zenith Bank, Guaranty Trust Bank, Access Bank, and Sterling Bank, based on their recent CBS upgrade initiatives, digital maturity, and strategic relevance.

The population comprised active customers of quoted deposit money banks in Nigeria who use digital banking services. Given the large and

heterogeneous nature of this population, it was considered sufficiently large for the application of standard sample size determination techniques. Based on publicly disclosed customer figures, the combined customer base exceeds 100 million (Zenith Bank Plc., 2024; Access Holdings Plc., 2025; Guaranty Trust Holding Company Plc., 2024). Using the Taro Yamane formula at a 95% confidence level and 5% margin of error, a minimum sample size of 400 respondents was determined and proportionately allocated across the selected banks.

A two-stage sampling approach was adopted. First, the banks were purposively selected. Second, customers were selected using a stratified purposive sampling approach, incorporating elements of convenience sampling, to achieve representation across key demographic characteristics and service usage patterns. Data were collected using a structured questionnaire administered through both online and offline channels. The online survey was distributed via Google Forms, while additional responses were obtained through selected bank branches and referrals from relationship officers to enhance coverage and representation.

The research instrument was developed based on the DeLone and McLean Information Systems Success Model. CBS upgrades were operationalised through six system performance dimensions: transaction speed, digital functionality, system reliability, security and trust, ease of use, and data accuracy. Customer satisfaction was measured as a composite construct reflecting overall evaluation and behavioural responses. All items were measured on a five-point Likert scale.

Content validity was established through expert review of the instrument for clarity, relevance, and alignment with the study constructs, while reliability was confirmed through a pilot study of 30 respondents (Cronbach's alpha = 0.85), indicating high

internal consistency. Data were analysed using descriptive statistics and multiple regression analysis in SPSS at a 5% level of significance.

The regression model is specified as:

$$CS = \beta_0 + \beta_1TS + \beta_2DF + \beta_3SR + \beta_4SEC + \beta_5EU + \beta_6DA + \varepsilon$$

where CS represents customer satisfaction; TS is transaction speed; DF is digital functionality; SR is system reliability; SEC is security and trust; EU is ease of use; DA is data accuracy; and ε is the error term.

4. Result and Discussion

Table 1: Questionnaire Retrieval and Data Screening

Description	Number	Percentage (%)
Retrieved and usable	361	90.25
Not retrieved	22	5.50
Retrieved but not usable	17	4.25
Total	400	100

Source: Survey Data

A total of 400 questionnaires were administered through both online and face-to-face channels, with the online survey distributed via Google Forms and additional responses obtained through selected bank branches and referrals from relationship officers. Of these, 361 (90.25%) were retrieved and found usable for analysis. Twenty-two (5.50%) were not retrieved, while 17 (4.25%) were discarded

due to incomplete or inconsistent responses.

The high response and usability rates indicate good data quality and provide a reliable basis for statistical analysis. The final sample size of 361 exceeds the minimum threshold required for multiple regression analysis given the number of predictors in the model (Hair et al., 2014; Tabachnick & Fidell, 2013).

4.1 Descriptive Analysis

Table 4.1 Transaction Speed

	N	Minimum	Maximum	Mean	Std. Deviation
Transactions are now processed faster than they used to be	400	1	5	3.74	1.057
Transfers and bill payments go through more quickly than before.	400	1	5	3.91	.994
I spend less time waiting for transactions to complete.	400	1	5	3.24	1.225
The system upgrade has made transactions faster across all platforms.	400	1	5	3.07	1.148
Overall, I am satisfied with the speed of banking transactions	400	1	5	3.14	1.159
Overall Average				3.42	0.787

Source: Field survey (2025)

Table 4.1 presents respondents' perceptions of transaction speed following the Core Banking System (CBS) upgrade. The results indicate a generally positive perception of improvements in transaction

speed, with relatively higher mean scores for items such as faster transaction processing (Mean = 3.74) and quicker transfers and bill payments (Mean = 3.91).

However, lower mean scores for reduced waiting time (Mean = 3.24), cross-platform speed consistency (Mean = 3.07), and overall satisfaction with transaction speed (Mean = 3.14) suggest that improvements are not uniformly experienced across all service dimensions.

The overall mean score of 3.42 indicates a moderate positive perception of transaction speed, reflecting noticeable improvements alongside some remaining performance gaps.

Table 4.2 Digital Functionality

	N	Minimum	Maximum	Mean	Std. Deviation
I can do more things on my bank's app or online platform since the upgrade.	400	1	5	3.32	1.126
It is now easier to perform common tasks like transfers, airtime top-up, or card requests.	400	1	5	3.57	1.190
The features available on my bank's app and web platform have improved.	400	1	5	3.49	1.124
The mobile and online banking platforms now offer more useful options.	400	1	5	3.52	1.064
I am satisfied with what I can do digitally on my bank platforms.	400	1	5	3.52	.983
Overall Average				3.48	0.947

Source: Field survey (2025)

Table 4.2 presents respondents' perceptions of digital functionality following the Core Banking System (CBS) upgrade. The results indicate moderate improvement in digital service capabilities, with relatively higher mean scores for ease of performing common tasks (Mean = 3.57) and availability of useful platform features (Mean = 3.52).

activities (Mean = 3.32) suggests that the expansion of digital functionality may not be fully realised from the customer's perspective. Overall, the mean score of 3.48 indicates moderate satisfaction with digital functionality, reflecting incremental improvements rather than substantial transformation in digital service experience.

However, the lower mean score for the ability to perform a wider range of

Table 4.3 System Reliability

	N	Minimum	Maximum	Mean	Std. Deviation
I rarely experience service outages when using my bank digital channels.	400	1	5	2.98	1.072
The mobile app and online banking are available when I need them.	400	1	5	3.26	.981
The system now works more reliably even during peak hours	400	1	5	3.15	1.045
Since the upgrade, had fewer issues accessing banking services	400	1	5	3.30	.996
System availability has improved significantly after the upgrade	400	1	5	3.37	1.022
Overall Average	400			3.21	0.887

Source: Field survey (2025)

Table 4.3 presents respondents' perceptions of system reliability following the Core Banking System (CBS) upgrade. The results indicate moderate improvements in system availability and access, with relatively higher mean scores for improved system availability (Mean = 3.37) and fewer access issues (Mean = 3.30).

However, lower mean scores for service outages (Mean = 2.98) and peak-hour

performance (Mean = 3.15) suggest that reliability challenges persist, particularly during periods of high system demand. The overall mean score of 3.21 reflects moderate satisfaction with system reliability, indicating that while improvements have been achieved, performance consistency remains a concern.

Table 4.4 Security and Trust

	N	Minimum	Maximum	Mean	Std. Deviation
I feel more secure using my bank digital channels after the upgrade	400	1	5	3.35	.882
My trust in online and mobile banking has increased	400	1	5	3.24	.920
The upgrade has made me more confident in using digital banking	400	1	5	3.30	.944
I believe my personal and financial data are well protected	400	1	5	3.49	.953
I am comfortable doing high-value transactions using digital banking	400	1	5	3.52	1.014
Overall Average				3.38	0.813

Source: Field survey (2025)

Table 4.4 presents respondents' perceptions of security and trust following the Core Banking System (CBS) upgrade. The results indicate a generally positive perception of improved security, with relatively higher mean scores for comfort with high-value transactions (Mean = 3.52)

and confidence in data protection (Mean = 3.49).

However, comparatively lower mean scores for increased trust (Mean = 3.24) and overall confidence in digital banking (Mean = 3.30) suggest that improvements in system security have not fully translated

Table 4.5 Ease of Use across Channels

	N	Minimum	Maximum	Mean	Std. Deviation
It is easy to use my bank mobile app, web platform, or USSD service	400	1	5	3.53	1.052
The look and feel of the app and website are user-friendly	400	1	5	3.78	.728
It is now simpler to move between mobile, web, or ATM for banking	400	1	5	3.52	.948
The upgrade has made it easier to do things without needing help	400	1	5	3.51	.956
The same features work smoothly across different banking channels	400	1	5	3.30	.966
Overall Average				3.53	0.76

Source: Field survey (2025)

Table 4.5 presents respondents' perceptions of ease of use across banking channels following the Core Banking System (CBS) upgrade. The results indicate a strong positive perception of usability, with the highest mean score recorded for user interface design (Mean = 3.78), suggesting that improvements in the look and feel of digital platforms have been well received.

Respondents also reported that banking platforms are generally easy to use (Mean

= 3.53) and that tasks can be performed with minimal effort (Mean = 3.51), reflecting enhanced usability across channels. However, the lower mean score for cross-channel consistency (Mean = 3.30) indicates that integration across platforms remains less seamless.

The overall mean score of 3.53 reflects a consistently positive perception of ease of use, highlighting usability as a key strength of the CBS upgrade, despite some remaining integration challenges.

Table 4.6 Data Accuracy and Notifications

	N	Minimum	Maximum	Mean	Std. Deviation
My account balances and transactions are accurately reflected	400	1	5	3.89	.917
I receive correct alerts and notifications from the bank	400	1	5	3.87	.961
Transaction history on the app or website is always accurate	400	1	5	3.72	1.102
There are fewer errors or mistakes in my banking records	400	1	5	3.70	.944
I trust the accuracy of the data I see on my banking platform	400	1	5	3.65	.942
Overall Average				3.77	0.85

Source: Field survey (2025)

Table 4.6 presents respondents' perceptions of data accuracy and the reliability of system-generated information following the Core Banking System (CBS) upgrade. The results indicate a strong positive perception, with the highest mean scores recorded for accurate account balances (Mean = 3.89) and reliability of alerts and notifications (Mean = 3.87), suggesting that customers have a high level of confidence in core transaction data.

Although slightly lower mean scores are observed for transaction history accuracy (Mean = 3.72) and trust in displayed data (Mean = 3.65), these values remain relatively high, indicating that perceived inconsistencies are limited. The overall mean score of 3.77 reflects strong confidence in data accuracy, highlighting it as a critical strength of the CBS upgrade and a key driver of customer satisfaction.

Table 4.7 Overall Satisfaction

	N	Minimum	Maximum	Mean	Std. Deviation
Overall, I am satisfied with the services provided by my bank	400	1	5	3.50	1.007
My recent experiences have increased my loyalty to this bank	400	1	5	3.39	.973
I am likely to continue banking with this institution in the next 12 months	400	1	5	3.78	1.015

The improvements after the system upgrade have met my expectations	400	1	5	3.28	.964
I would recommend this bank based on my recent experience	400	1	5	3.42	1.016
Overall Average				3.47	0.88

Source: Field survey (2025)

Table 4.7 presents respondents' overall satisfaction following the Core Banking System (CBS) upgrade. The results indicate a moderate level of customer satisfaction, with the highest mean score observed for continued patronage intention (Mean = 3.78), suggesting a relatively strong likelihood of customer retention. General satisfaction with banking services is also evident (Mean = 3.50), alongside moderate levels of recommendation (Mean = 3.42) and loyalty (Mean = 3.39).

However, the lower mean score for expectations being met (Mean = 3.28) indicates that the perceived benefits of the CBS upgrade have not fully aligned with customer expectations.

The overall mean score of 3.47 reflects a moderate but stable level of satisfaction, indicating that while customers acknowledge improvements in service delivery, the impact of the upgrade on overall experience remains incremental rather than transformative.

4.1.2 Regression Analysis

Table 4.9 Regression Result

Dependent Variable: Customer Satisfaction

Variable	B	Beta	Std. Error	t	P. value
Constant	-.654		.106	-6.195***	.000
Transaction Speed	.066	.059	.027	2.412**	.016
Digital Functionality	.020	.022	.028	.701	.484
System Reliability	.184	.186	.030	6.109***	.000
Security and Trust	.171	.158	.046	3.749***	.000
Ease of Use	.328	.285	.043	7.640***	.000
Data Accuracy	.401	.388	.033	12.117***	.000

Model Summary:

R = 0.912 R² = 0.831 Adjusted R² = 0.828

Durbin-Watson = 2.155 F-statistic = 309.009 (p = 0.000)

Source: Field Survey (2025)

***Note:** *, **, *** denote significance at 10%, 5%, and 1% levels respectively.

The regression results indicate that core banking system (CBS) upgrade dimensions collectively have a strong and significant effect on customer satisfaction. The model explains approximately 83.1% of the variation in customer satisfaction (R² = 0.831), indicating a high level of explanatory power. The F-statistic (309.009, p < 0.001) confirms that the model is statistically significant, while the

Durbin-Watson statistic (2.155) suggests the absence of autocorrelation.

Among the predictors, data accuracy emerges as the most influential factor (β = 0.388, p < 0.001), followed by ease of use (β = 0.285, p < 0.001). This indicates that customers place the greatest importance on accurate transaction information and the usability of banking platforms. System reliability (β = 0.186, p < 0.001) and security and trust (β = 0.158, p < 0.001) also have significant positive effects, highlighting the importance of consistent

system performance and confidence in digital banking environments.

Transaction speed has a positive but relatively weaker effect ($\beta = 0.059$, $p < 0.05$), suggesting that while speed contributes to satisfaction, it is not a primary driver. In contrast, digital functionality is not statistically significant ($\beta = 0.022$, $p > 0.05$), indicating that the availability of additional features does not necessarily translate into higher customer satisfaction.

Overall, the findings suggest that customers prioritise accuracy, usability, reliability, and trust over the expansion of digital features. This reinforces the argument that the effectiveness of CBS upgrades is better evaluated through improvements in system performance rather than the introduction of additional functionalities.

Discussion of Findings

The significant and positive influence of CBS upgrade dimensions on customer satisfaction confirms that system-level improvements in banking technology directly enhance user experience. Dela Rosa (2024) reports a consistent finding among Philippine digital banking customers, where system quality, information quality, and service quality jointly influenced user trust and satisfaction. Al-Hawari (2006) further confirms that automated service quality improvements produce measurable gains in customer retention and banking performance, reinforcing that technology-driven system enhancements translate into tangible customer outcomes.

The dominance of data accuracy and ease of use reveals that customers evaluate CBS upgrades not by the range of features introduced, but by whether the system is dependable, accurate, and navigable. Awara et al. (2022) and Bekele and Bultum (2021) confirm this pattern in Nigerian and commercial banking contexts, while Gazi et al. (2024) and Thasleena and Santhi

(2025) reinforce it cross-nationally, finding that customers in Bangladesh and India consistently prioritise system performance over feature richness, a preference the present study confirms in the Nigerian CBS upgrade context.

The non-significance of digital functionality indicates that feature expansion delivers no satisfaction premium unless foundational system performance is sound, a finding directly comparable to Ayinaddis et al. (2023), who report the same pattern in the Ethiopian e-banking context. While Capgemini (2024) and KPMG (2024) advocate feature expansion as a digital transformation priority, the present findings argue that Nigerian banks should anchor CBS upgrade investment decisions in the system performance dimensions that empirically drive customer satisfaction.

5. Conclusion and Recommendation

Conclusion

This study examined the effect of Core Banking System (CBS) upgrades on customer satisfaction in selected quoted Nigerian banks. The findings reveal that CBS upgrades have a positive and significant impact on customer satisfaction, particularly through improvements in data accuracy, ease of use, system reliability, and security and trust. Among these, data accuracy and notifications emerged as the strongest predictor, followed by ease of use and system reliability, while transaction speed had a weaker effect and digital functionality was not statistically significant.

The results indicate that customers prioritize accuracy, usability, reliability, and trust over expanded digital features. This suggests that the value of CBS upgrade lies not in the introduction of additional functionalities, but in the delivery of consistent, reliable, and error-free banking services. Overall, the study

confirms that robust and customer-focused CBS performance is critical to enhancing customer experience and sustaining competitive advantage in the banking sector.

Recommendations

In line with the findings, particularly the strong influence of data accuracy, ease of use, system reliability, and security on customer satisfaction, Nigerian banks should prioritise the following:

1. Enhance data integrity and notification systems to ensure that account balances, transaction histories, and alerts are consistently accurate and timely.
2. Improve user interface design and cross-channel usability to enable seamless interaction across mobile, web, and USSD platforms.
3. Strengthen system reliability by minimising downtime and ensuring consistent service availability, especially during peak transaction periods.
4. Reinforce security architecture and transparently communicate data protection measures to sustain customer trust and confidence.
5. Maintain steady improvements in transaction processing speed to support overall service efficiency, while recognising that speed alone is not a primary driver of satisfaction.

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