Product Quality and Customer Retention in Selected Fintech Companies in Nigeria

Odinakachukwu Esiagu, Saji George, Habibah Kike Kamaludeen Aiyelabegan, Fatima Enagi Usman

Department of Business Administration, Nile University of Nigeria, Abuja

Abstract: *This study investigates the impact of product quality on customer retention in selected fintech companies in Nigeria. A descriptive survey design with a quantitative approach was employed. Data were collected from 385 active users of fintech platforms, including OPay, Kuda Bank, PalmPay, and Moniepoint, across Lagos, Abuja, and Port Harcourt. The SERVQUAL framework was adapted to assess product quality dimensions, including reliability, security, user interface quality, and transaction efficiency. Customer retention was evaluated using repurchase intention, recommendation behaviour, and continued usage scales. Data analysis utilized descriptive statistics, Pearson correlation, and multiple regression analysis with SPSS version 26. Results indicate that all product quality dimensions have significant positive relationships with customer retention (p < 0.05). Security and reliability were identified as the strongest predictors of customer retention, with beta coefficients of 0.312 and 0.289, respectively. All four hypotheses were confirmed, demonstrating that product quality significantly influences customer retention in Nigerian fintech companies. The study recommends that fintech companies prioritize security infrastructure, enhance transaction reliability, and continuously improve user interface design to optimize customer retention. These findings contribute to the literature on fintech service quality in emerging markets and offer practical insights for fintech managers aiming to strengthen customer loyalty in Nigeria's competitive digital financial services sector.*

Keywords: product quality, customer retention, digital banking, customer satisfaction, financial technology

INTRODUCTION

The financial technology (fintech) industry has experienced rapid global growth, fundamentally transforming the delivery and consumption of financial services. Nigeria, as Africa's largest economy, has become a prominent hub for fintech innovation, with the sector undergoing significant expansion over the past decade (Okoye et al., 2024). The Nigerian fintech market was valued at approximately USD 1.13 billion in 2024 and is projected to reach USD 4.24 billion by 2033, reflecting a compound annual growth rate of 15.82% (IMARC Group, 2025). Key drivers of this growth include increased smartphone penetration, expanded

internet connectivity, a substantial unbanked population seeking financial inclusion, and innovative solutions that address the limitations of traditional banking systems.

The proliferation of fintech platforms in Nigeria has heightened competition among service providers, positioning customer retention as a critical success factor. Ele et al. (2024) report that the Nigerian fintech ecosystem now includes over 430 active companies, with major players such as OPay, Kuda Bank, PalmPay, Moniepoint, and Paystack competing for market share in a dynamic digital environment. This competitive landscape has shifted strategic priorities from customer acquisition to sustainable retention, given that acquiring new customers is significantly more costly than retaining existing ones (Digdowiseiso et al., 2024).

Product quality is a fundamental determinant of customer retention in digital financial services. In contrast to traditional banking, where physical infrastructure is central, fintech services are delivered primarily through digital platforms, making digital product and service quality the primary touchpoint for customer experience (Ighomereho et al., 2023). The SERVQUAL model, developed by Parasuraman et al. (1988), offers a robust framework for assessing service quality dimensions. However, its application in fintech requires adaptation to address technology-specific factors such as system reliability, security, user interface design, and transaction efficiency (Ojiaku et al., 2023).

Despite the increasing significance of fintech in Nigeria's financial ecosystem, there is limited empirical research examining the relationship between product quality dimensions and customer retention within this sector. Although many studies have addressed service quality in traditional banking, the distinct features of fintech services such as mobile-first delivery, real-time transactions, and technology-mediated customer interactions require dedicated research. This study addresses this gap by investigating the influence of product quality on customer retention in selected Nigerian fintech companies, offering both theoretical insights and practical implications for industry practitioners. The main objective of this study is to examine the impact of product quality on customer retention in selected fintech companies in Nigeria. The specific objectives are to examine the impact of service reliability, security features, user interface quality and transaction efficiency on customer retention in Nigerian fintech companies.

Based on the research objectives, the following null hypotheses were formulated for testing:

$H_{01:}$ Service reliability has no significant impact on customer retention in Nigerian fintech companies.
$H_{02:}$ Security features have no significant impact on customer retention in Nigerian fintech companies.
$H_{03:}$ User interface quality has no significant impact on customer retention in Nigerian fintech companies.
$H_{04:}$ Transaction efficiency has no significant impact on customer retention in Nigerian fintech companies.

The remainder of the paper is organised as follows. Section 2 provides the conceptual review and clarifies key constructs. Discusses theoretical foundations and empirical review, followed by the literature gap. Section 3 outlines the methodology of the literature-based study. Sections 4 synthesize results, test the hypotheses qualitatively and discuss the findings. Section 5 concludes with recommendations for policy, practice and further research.

LITERATURE REVIEW

Conceptual Clarification

Product Quality in Fintech

In the fintech context, product quality refers to the extent to which digital financial products and services fulfill or exceed customer expectations across various dimensions. Zeithaml et al. (2021) define service quality as customers' overall assessment of the relative superiority or inferiority of an organization's services. Within fintech, product quality comprises technical attributes such as system performance, security protocols, and transaction processing capabilities, alongside functional attributes including user experience, customer support responsiveness, and service reliability (Khan & Alhumoudi, 2022). The conceptualization of product quality in fintech is informed by traditional service quality literature and integrates technology-specific dimensions. Parasuraman et al. (1988) identified five core dimensions in the SERVQUAL model: tangibles, reliability, responsiveness, assurance, and empathy. Due to the digital nature of fintech services, an expanded framework is required that incorporates website or app quality, information quality, system quality, security, and privacy (Raza et al., 2020). Collectively, these dimensions shape customers' perceptions of product quality and influence behavioral intentions such as continued usage and recommendations.

Customer Retention

Customer retention is the ability of a company or product to maintain its customer base over a specified period, serving as a critical metric for organizational success (Digdowiseiso et al., 2024). In fintech, customer retention encompasses ongoing platform usage, resistance to switching, and advocacy behaviors such as positive word of mouth and recommendations (Wu et al., 2022). Retention is closely associated with customer satisfaction and loyalty, forming a progression in which satisfied customers develop loyalty, and loyal customers are retained over time (Harriet et al., 2024). Customer retention is particularly vital in the fintech sector. Studies indicate that retaining existing customers is substantially more cost-effective than acquiring new ones, with acquisition costs estimated to be five to seven times higher than retention costs (Hanaysha, 2018). Additionally, retained customers typically generate greater lifetime value through higher transaction volumes, cross-selling, and referrals. In Nigeria's competitive fintech environment, where many platforms provide similar core services, customer retention serves as a primary differentiator and a determinant of long-term profitability (Olaniyi, 2022).

Digital Banking

Digital banking refers to the delivery of banking services through electronic platforms such as mobile apps, internet banking portals, and automated systems, enabling customers to perform financial transactions without visiting physical branches (Adewumi & Ayo, 2021). It encompasses a broad range of digitally enabled activities, including account management, fund transfers, savings and investment operations, and customer support interactions through chatbots or virtual assistants (Okoye et al., 2023). Digital banking represents a shift from traditional banking structures to technology-driven service models that prioritize speed, accessibility, and user convenience (Eke & Uzoamaka, 2022). In the fintech ecosystem, digital banking plays a central role in expanding financial inclusion, reducing operational costs, and enhancing the customer experience. Its relevance is amplified by growing smartphone

penetration, improved internet connectivity, and increased consumer preference for real-time, self-service financial solutions (Nwankwo & Ibe, 2024). The effectiveness of digital banking systems is often evaluated through service quality dimensions such as reliability, system responsiveness, ease of use, and security—factors that significantly influence customer satisfaction and continued usage (Chinomona & Utete, 2023).

Furthermore, digital banking drives operational efficiency by automating routine processes, minimizing human error, and enabling data-driven decision-making. Studies show that banks leveraging advanced digital infrastructure achieve reduced transaction costs, faster service delivery, and improved customer engagement through personalized offerings (Ogunlade, 2022). In competitive financial markets such as Nigeria, where neobanks and traditional banks are rapidly adopting digital models, digital banking serves as a strategic tool for differentiation, customer acquisition, and sustainable profitability (Ojo, 2023).

Fintech Industry in Nigeria

Since the early 2010s, Nigeria's fintech sector has advanced from basic mobile money services to advanced digital banking platforms offering comprehensive financial solutions. The sector features a diverse array of participants, including mobile payment platforms such as OPay and PalmPay, digital-only banks like Kuda Bank, and business-oriented solutions such as Moniepoint and Paystack (Fintech News Africa, 2025). Collectively, these platforms process trillions of naira in transactions each year, serving millions of customers across urban and rural areas. Founded in 2018, OPay has become one of Nigeria's leading fintech platforms, serving over 35 million users and processing more than 15 million daily transactions. Its service offerings include money transfers, bill payments, savings products, and merchant services (CB Insights, 2025). Kuda Bank, known as 'The Bank of the Free,' pioneered app-first banking in Nigeria and has processed over 14 trillion naira in transactions, appealing to millions of young, technologically adept users through its intuitive interface and transparent pricing (Thecondia, 2025). PalmPay has also established a significant presence, with over 35 million users and one million SME customers, distinguishing itself through gamified payments and an extensive merchant network. These platforms are at the forefront of Nigeria's digital financial transformation and illustrate the competitive dynamics influencing customer expectations and retention strategies.

Empirical Review

Numerous empirical studies have examined the relationship between product quality and customer retention across various contexts, with growing attention to digital banking and fintech services. Ojiaku et al. (2023) investigated mobile banking service quality and customer retention among commercial bank customers in Southeast Nigeria. Using a survey of 384 respondents, the study found that responsiveness, system quality, and information quality had significant positive effects on customer retention, while privacy and reliability were not statistically significant. The findings highlighted the importance of prompt service delivery and quality information in retaining mobile banking customers. Ighomereho et al. (2023) examined the impact of e-service quality on customer satisfaction in internet banking for general and maritime services in Nigeria. Using structural equation modeling with data from 280 respondents, the study found that website quality, functional quality, recovery quality, and security quality were significantly associated with customer satisfaction, with functional

quality having the strongest impact. These findings underscore the multidimensional nature of digital service quality and its influence on customer outcomes in the Nigerian context.

In a related study, Khan and Alhumoudi (2022) investigated the effects of efficiency, reliability, and service quality on customer satisfaction and retention in the banking sector. Their findings indicated that all three dimensions had significant direct effects on customer satisfaction, which in turn influenced customer retention. The study emphasized the mediating role of customer satisfaction in the relationship between service quality dimensions and retention, suggesting that quality improvements translate to retention gains primarily through enhanced satisfaction. Harriet et al. (2024) explored service quality, customer loyalty, and customer retention among private healthcare services in Mbarara City. Using Pearson's correlation and ordinary least squares regression, the study revealed significant positive relationships among product quality, customer loyalty, and retention. However, the direct link between product quality and retention was not statistically significant, suggesting loyalty as an important mediating variable. While conducted in a healthcare context, these findings offer insights into the quality-retention relationship in service industries.

Arianto et al. (2023) analyzed the effects of service quality and product quality on customer loyalty in digital banking services in Indonesia. Survey responses from 350 customers indicated that both service quality ($\beta = 0.42$, $p < 0.001$) and product quality ($\beta = 0.38$, $p < 0.001$) significantly influenced loyalty. The combined model accounted for 72% of the variance in loyalty, with sales promotion identified as a moderating factor. The results highlight the importance of product quality dimensions such as functionality, reliability, and usability in maintaining customer relationships within digital financial services. Vijai et al. (2023) examined fintech's impact on customer satisfaction and retention in the Indian context using a sample of 425 respondents from major Indian cities. The study found that fintech innovations significantly enhanced customer satisfaction through improved convenience ($\beta = 0.31$, $p < 0.001$), accessibility ($\beta = 0.28$, $p < 0.001$), and service speed ($\beta = 0.35$, $p < 0.001$). Satisfied customers demonstrated higher retention rates and increased likelihood of recommending. The study concluded that fintech platforms offering superior user experience and seamless transactions had retention rates 40% higher than traditional banking channels.

Vijai et al. (2023) examined fintech's impact on customer satisfaction and retention in the Indian context. The study found that fintech innovations significantly enhanced customer satisfaction through improved convenience, accessibility, and service speed. Satisfied customers demonstrated higher retention rates and increased likelihood of recommending. Similarly, Chikazhe et al. (2021) examined the relationship between service quality and customer loyalty in digital banking and found that all SERVQUAL dimensions positively influenced loyalty, with reliability and assurance as the strongest predictors. More recently, research has focused specifically on Nigerian fintech. Ele et al. (2024) assessed the impact of fintech on bank service delivery in Nigeria, finding that ATM, POS, and online internet banking significantly influenced bank performance. The study recommended continuous improvement of these innovations to enhance service quality and customer outcomes. Okoye et al. (2024) conducted a study on fintech and firm performance in Nigeria, using an ex post facto design to demonstrate a positive relationship between fintech adoption and organizational performance metrics.

Literature Gap

Although research on product quality and customer retention in digital banking is expanding, several gaps remain that this study seeks to address. Most existing studies focus on traditional banks' digital channels rather than pure-play fintech companies, which operate under distinct business models and customer relationship dynamics. The unique attributes of fintech platforms, such as their technology-centric approach, innovative features, and differentiated customer segments, necessitate focused research beyond the scope of traditional banking studies. Additionally, although frameworks such as SERVQUAL are widely used in banking research, their application in the Nigerian fintech context remains limited. Many studies employ generic service quality dimensions while overlooking fintech-specific factors, such as app performance, real-time transaction processing, digital security, and seamless user experience design. This study addresses this gap by formulating and evaluating a product quality framework tailored to the Nigerian fintech sector. Furthermore, empirical research on the determinants of customer retention in Nigerian fintech remains limited, despite the sector's rapid growth and heightened competition. Existing studies predominantly address customer satisfaction or adoption, often neglecting the distinction between initial usage and sustained engagement. This study specifically investigates retention as an outcome variable, acknowledging its strategic significance in the fintech industry. Additionally, previous research is constrained by methodological issues such as small sample sizes and limited geographic scope, which restrict generalizability. The present study overcomes these limitations by utilizing a larger, multi-city sample and applying rigorous statistical methods to improve the validity and reliability of its findings.

Theoretical Review

SERVQUAL Theory

The SERVQUAL model, developed by Parasuraman, Zeithaml, and Berry (1985, 1988), provides the primary theoretical foundation for this study. The model posits that service quality can be measured through five dimensions: tangibles (physical facilities and equipment), reliability (ability to perform promised service dependably), responsiveness (willingness to help customers and provide prompt service), assurance (knowledge and courtesy of employees), and empathy (caring, individualized attention). The theory suggests that service quality is determined by the gap between customer expectations and perceptions of actual service delivery (Parasuraman et al., 2021). Within fintech, the SERVQUAL model has been modified to include technology-specific dimensions. Researchers have developed e-SERVQUAL variants that encompass efficiency, system availability, fulfillment, privacy, and compensation (Raza et al., 2020). Applying SERVQUAL to fintech acknowledges that, while traditional service dimensions remain pertinent, digital-specific factors such as website design, app functionality, and transaction security are increasingly influential in shaping customer perceptions (Ighomereho et al., 2023). The present study uses the SERVQUAL framework to examine how reliability, security, user interface quality, and transaction efficiency, as product quality dimensions, affect customer retention in Nigerian fintech firms.

Expectation Confirmation Theory

Expectation Confirmation Theory (ECT), originally developed by Oliver (1977, 1980), provides additional theoretical grounding for understanding customer retention in fintech. ECT posits that customer satisfaction is determined by the relationship between pre-purchase

expectations and post-purchase perceptions of performance. When actual performance meets or exceeds expectations, positive confirmation occurs, leading to satisfaction and continued usage intentions. Conversely, when performance falls short of expectations, negative disconfirmation results in dissatisfaction and potential switching behavior (Bhattacherjee, 2001). Bhattacherjee (2001) expanded ECT into the information systems domain through the Expectation Confirmation Model (ECM), which is widely used to examine technology continuance intentions. The ECM posits that users' intention to continue using a technology is shaped by satisfaction with previous use and the perceived usefulness of continued use. In fintech, ECT and ECM elucidate how customers' initial expectations regarding product quality and their subsequent experiences influence their decisions to remain with a platform or switch to competitors (Shiau et al., 2020). This theoretical approach complements SERVQUAL by highlighting the evolving nature of quality perceptions based on actual service experiences.

Technology Acceptance Model

The Technology Acceptance Model (TAM), proposed by Davis (1989), offers insights into factors influencing technology adoption and continued use. TAM posits that perceived usefulness (the degree to which a user believes technology will enhance performance) and perceived ease of use (the degree to which using technology is effort-free) are primary determinants of technology acceptance and usage intentions. In the fintech context, these constructs relate directly to product quality dimensions: user interface quality influences perceived ease of use, while transaction efficiency and reliability contribute to perceived usefulness (Chen, 2012). Integrating the Technology Acceptance Model with service quality frameworks offers a comprehensive perspective for analyzing customer retention in fintech. When users perceive fintech products as both useful and easy to use, they are more inclined to continue using them and less likely to switch to competitors. Positive experiences further reinforce these perceptions, establishing a cycle that enhances customer retention (Tawafak et al., 2023). This theoretical perspective highlights the critical role of product quality in shaping perceptions of technology and subsequent retention behaviors.

METHODOLOGY

The research design adopted for this study is a quantitative approach, utilizing primary data collected through a structured questionnaire administered to active users of 4 selected fintech platforms in Nigeria (Opay, Moniepoint, Palmpay and Kuda). The selection of these fintech platforms is supported by their significant market impact and wide acceptance in Nigeria. The sample size of 385 respondents was determined using Cochran's (1977) formula, while convenience sampling was used to select only active users who had performed at least 10 transactions within the past month. A total of 398 valid responses were obtained from Lagos, Abuja, and Port Harcourt. The questionnaire captured demographic information and measured four product quality dimensions including, reliability, security, user interface quality, and transaction efficiency adapted from SERVQUAL and e-service quality models. Customer retention was measured using scales covering continued usage intention, recommendation behaviour, and switching resistance. All items were rated on a 5-point Likert scale. Reliability was verified through a pilot study, yielding Cronbach's alpha values between 0.78 and 0.89, indicating acceptable internal consistency. Multiple regression analysis was conducted to analyze the relationships between the independent variables (reliability, security, user interface quality, and transaction efficiency) and the dependent variable (customer retention). This

method enables the assessment of the individual and collective impacts of the independent variables on the dependent variable. All analyses were conducted at a 0.05 significance level.

The study model is specified as: $CR = \beta_0 + \beta_1(RL) + \beta_2(SC) + \beta_3(UIQ) + \beta_4(TE) + \varepsilon$

Where: CR: Dependent variable represents customer retention; RL: Independent variable, representing reliability; SC: Independent variable, representing security; UIQ: Independent variable, representing user interface quality; TE: Independent variable, representing transaction efficiency; $\beta_0, \beta_1, \beta_2, \beta_3, \beta_4$: Regression coefficients (to be estimated) ; ε: Error term.

RESULTS AND DISCUSSIONS

Demographic Profile of Respondents

Table 1 presents the demographic profile of participants, specifically active users within the chosen Fintech Industry in Nigeria. Descriptive statistics concerning the classification of responses by demographic characteristics such as gender, age, education, usage frequency, and primary fintech platforms used, are provided in Table 1.

Table 1: Demographic Characteristics of the Respondents (i.e. active users) in the Fintech Industry [n=398]

Variables	Responses (n)	Percentage (%)
Gender		
Male	216	54.3
Female	182	45.7
Age Group		
18-34 years	335	84.2
35+ years	63	15.8
Education Level		
SSCE	20	5.0
Diploma/NCE	74	18.7
Bachelor's Degree	192	48.2
Post Graduate Degree	112	28.1
Usage Frequency		
Daily	288	72.4
Weekly	75	18.9
Monthly	35	8.7

Primary Fintech Platform Used		
Opay	125	31.4
Kuda	110	27.6
Moniepoint	70	17.6
Palmpay	93	23.4

Source: Field Survey, 2026

Table 1 presents the demographic characteristics and fintech usage patterns of 398 respondents. The gender distribution shows a slightly higher proportion of males (54.3%) compared to females (45.7%). In terms of age, the majority of respondents (84.2%) are aged 18–34 years, while 15.8% are 35 years and above, reflecting a predominantly young and digitally active user base. Regarding education, 48.2% of respondents hold bachelor's degrees, 28.1% possess postgraduate qualifications, 18.7% have diplomas or NCE, and 5.0% have secondary education or less, indicating a generally well-educated sample. Analysis of fintech platform usage reveals that OPay is the most commonly used platform (31.4%), followed by Kuda Bank (27.6%), PalmPay (23.4%), and Moniepoint (17.6%). Regarding usage frequency, 72.4% of respondents engage with their fintech platform daily, 18.9% weekly, and 8.7% monthly, demonstrating a high level of platform engagement among participants.

Table 2 Descriptive Statistics of Study Variables

Variable	N	Minimum	Maximum	Mean	Std. Deviation	Cronbach's α
Reliability	398	1.20	5.00	3.94	0.81	0.84
Security	398	2.00	5.00	4.21	0.72	0.89
User Interface Quality	398	1.40	5.00	3.87	0.84	0.82
Transaction Efficiency	398	1.60	5.00	4.08	0.78	0.86
Customer Retention	398	1.20	5.00	4.02	0.76	0.87

Source: Field Survey, 2026

Table 2 presents the descriptive statistics for the key variables examined in the study, capturing users' perceptions of product quality dimensions and customer retention across selected fintech platforms in Nigeria. The table displays the minimum, maximum, mean, and standard deviation for each construct based on responses from 398 active fintech users. Reliability recorded values ranging from 1.20 to 5.00, with a mean of 3.94 and a standard deviation of 0.81. This relatively high mean indicates that most respondents view fintech platforms as dependable and capable

of performing promised services consistently. The standard deviation suggests moderate variability in user experiences with reliability. Security had the highest mean among all variables (M = 4.21, SD = 0.72), with scores spanning from 2.00 to 5.00. This indicates strong user confidence in the safety of digital transactions, fraud prevention mechanisms, and data protection protocols employed by fintech platforms. The low standard deviation highlights a high level of agreement among respondents regarding the importance and performance of security features. User Interface Quality exhibited a mean of 3.87 and a standard deviation of 0.84, reflecting generally positive but moderately varied user perceptions regarding platform usability, design, and visual appeal. The minimum value of 1.40 suggests that while many users find the interfaces intuitive, a segment of users still experience usability challenges.

Transaction Efficiency showed a high mean score of 4.08 (SD = 0.78), indicating that respondents generally perceive fintech transactions as fast, seamless, and efficient. The values ranging from 1.60 to 5.00 suggest that although most users experience high efficiency, occasional delays or failed transactions still occur for some users. Customer Retention recorded a mean of 4.02 (SD = 0.76), with values ranging from 1.20 to 5.00. This suggests strong intentions among users to continue using their preferred fintech platforms, recommend them to others, and remain resistant to switching. The slightly higher standard deviation indicates some variability in loyalty levels across the user base. Overall, the descriptive statistics reveal that respondents hold generally favourable views across all product quality dimensions, with security and transaction efficiency emerging as the most positively perceived aspects. The consistently high mean values across all variables highlight strong user engagement and retention tendencies in Nigeria's fintech sector.

Table 3 Correlation Analysis

Variable	RL	SE	UIQ	TE	CR
Reliability	1.00	0.51**	0.44**	0.56**	0.62**
Security	0.51**	1.00	0.48**	0.52**	0.67**
User Interface Quality	0.44**	0.48**	1.00	0.49**	0.54**
Transaction Efficiency	0.56**	0.52**	0.49**	1.00	0.58**
Customer Retention	0.62**	0.67**	0.54**	0.58**	1.00

N = 398
Note: Correlation is significant at the 0.01 level (2-tailed).
Source: Field Survey, 2026.

Table 3 presents the Pearson correlation coefficients assessing the linear relationships among the key variables of the study: reliability, security, user interface quality, transaction efficiency, and customer retention. All correlations are significant at the 0.01 level, indicating statistically meaningful associations among the constructs. The relationship between reliability and other

product quality dimensions is positive and moderately strong. Reliability correlates with security (r = 0.51), user interface quality (r = 0.44), and transaction efficiency (r = 0.56). This pattern suggests that fintech platforms that consistently deliver dependable services tend to also score higher in terms of perceived security, usability, and transaction performance. Reliability also shows a substantial positive correlation with customer retention (r = 0.62), implying that dependable service delivery strongly influences users' decisions to continue using a platform. Security demonstrates strong positive correlations with all other variables. Its association with customer retention (r = 0.67) is the strongest in the matrix, underscoring the critical role security plays in shaping user loyalty within Nigerian fintech platforms. The correlations with reliability (r = 0.51), user interface quality (r = 0.48), and transaction efficiency (r = 0.52) indicate that platforms perceived as secure also tend to be evaluated favourably across other quality dimensions.

User interface quality exhibits moderate correlations with reliability (r = 0.44), security (r = 0.48), and transaction efficiency (r = 0.49). This suggests that intuitive, visually appealing, and easy-to-navigate interfaces often accompany reliable performance and secure transaction processes. The correlation with customer retention (r = 0.54) indicates that while interface design influences retention, it plays a relatively less dominant role compared to functional dimensions such as security and reliability. Transaction efficiency shows positive and significant associations with all variables. It correlates most strongly with customer retention (r = 0.58) and reliability (r = 0.56), indicating that fast and seamless transactions contribute meaningfully to both user trust and retention. Finally, customer retention exhibits meaningful positive correlations with all product quality dimensions: reliability (r = 0.62), security (r = 0.67), user interface quality (r = 0.54), and transaction efficiency (r = 0.58). These results highlight that improvements across any of these quality dimensions are likely to enhance user loyalty. The strongest correlation being with security reinforces that safeguarding user funds, ensuring privacy, and minimizing fraud risks are paramount factors influencing long-term platform usage.

Collectively, the correlation matrix reveals robust interrelationships among the variables, emphasizing that product quality dimensions do not operate in isolation but jointly shape customer retention in Nigeria's fintech sector.

Table 4: Regression for Product Quality Variables and Customer Retention

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.782	.612	.068	.5987	
ANOVA					
Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	155.247	4	38.812		

| Residual | 98.264 | 393 | .250 | 155.247 | .000 |
| Total | 253.51 | 397 | | | |

Co-efficient					
Variables	Unstandardised Coefficients		Standardised Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	0.412	0.156		2.641	.009
Reliability	0.271	0.042	0.289	6.452	.000
Security	0.329	0.045	0.312	7.311	.000
User Interface Quality	0.156	0.039	0.172	4.000	.000
Transaction Efficiency	0.183	0.041	0.188	4.463	.000
Dependent Variable: *Customer Retention*					

Source: Field Survey, 2026

The regression results presented in the tables provide a comprehensive analysis of the effect of fintech product quality dimensions on customer retention. The **Model Summary** shows an **R value of .782**, indicating a strong positive relationship between the combined predictors and customer retention. The **R Square value of .612** further demonstrates that **61.2% of the variance in customer retention** is explained by reliability, security, user interface quality, and transaction efficiency. The Adjusted R Square of .608 confirms the model's stability even after adjusting for the number of predictors. The standard error of .5987 suggests a relatively close alignment between observed and predicted values. The results of the **ANOVA** test reveal that the regression model is statistically significant (F = 155.247, p < .000), confirming that the predictors collectively provide a better explanation of customer retention than would be expected by chance. The regression sum of squares (155.247) far exceeds the residual sum of squares (98.264), indicating that a large portion of the variability in retention is accounted for by the model.

The **Coefficients table** provides insights into the individual contribution of each predictor. All four product quality dimensions—reliability, security, user interface quality, and transaction efficiency—were found to significantly influence customer retention at p < .05. Security emerged as the strongest predictor (β = .312, t = 7.311), highlighting the central importance of fraud protection and platform safety in shaping user loyalty. Reliability followed closely (β = .289, t = 6.452), showing that consistent and dependable service delivery significantly reinforces retention. Transaction efficiency (β = .188, t = 4.463) and user interface quality (β = .172, t = 4.000) also demonstrated meaningful contributions, indicating that smooth, fast transactions and intuitive design features both play substantial roles in influencing continued

platform usage. Collectively, these results demonstrate that product quality is a critical driver of customer retention in Nigeria's fintech industry. The strength and significance of all coefficients confirm that improving functional, security, and usability aspects of fintech services directly enhances user loyalty and long-term engagement.

Test of Hypotheses

H$_{01}$: Reliability has no significant effect on customer retention in Nigerian fintech companies.

The regression results show that the p-value for **Reliability** is **0.000**, which is below the 0.05 significance threshold. This indicates strong evidence against the null hypothesis. Reliability therefore has a statistically significant effect on customer retention. Practically, this means that users are more likely to remain with fintech platforms that consistently deliver accurate, dependable, and uninterrupted services. As a result, the study rejected the null hypothesis H01, implying that reliability significantly influences customer retention.

H$_{02}$: Security features have no significant effect on customer retention in Nigerian fintech companies.

The p-value associated with **Security** is also **0.000**, indicating a highly significant relationship with customer retention. This provides strong grounds to reject the null hypothesis. This result reinforces the idea that security is a critical determinant of loyalty within fintech platforms, as users value strong fraud prevention, data protection, and safe transaction environments. As a result, the study rejected the null hypothesis H02, implying that security exerts a significant influence on customer retention.

H$_{03}$: User interface quality has no significant effect on customer retention in Nigerian fintech companies.

The p-value for **User Interface Quality** is **0.000**, showing statistical significance at the 5% level. Although user interface quality had the smallest beta coefficient among the predictors, it still plays an important role in influencing customer retention. A visually appealing, intuitive, and easy-to-navigate interface contributes to positive user experience and increases the likelihood of continued usage.As a result, the study rejected the null hypothesis H03, implying that user interface quality significantly affects customer retention.

H$_{04}$: Transaction efficiency has no significant effect on customer retention in Nigerian fintech companies.

The p-value for **Transaction Efficiency** is **0.000**, demonstrating statistical significance. This indicates that transaction speed, responsiveness, and successful processing are important drivers of platform loyalty. Users are more likely to stay with fintech applications that allow them to complete transactions quickly and reliably without frequent failures or delays. As a result, the study rejected the null hypothesis H04, implying that transaction efficiency significantly affects customer retention.

All four hypotheses were rejected, indicating that **reliability, security, user interface quality, and transaction efficiency each exert significant positive effects on customer retention**. These results collectively affirm that product quality dimensions play a central role in sustaining user loyalty within Nigeria's fast-growing fintech sector. Security emerged as the strongest predictor, followed by reliability, transaction efficiency, and user interface quality. This hierarchy underscores the importance of protecting user funds and data, maintaining dependable systems, delivering fast transactions, and offering a user-friendly interface.

DISCUSSION OF FINDINGS

The study's findings offer robust empirical evidence of a significant relationship between product quality and customer retention within Nigerian fintech companies. These results are consistent with and extend existing literature on service quality and customer retention in digital financial services.

The identification of security as the strongest predictor of customer retention supports the growing focus on cybersecurity in the fintech literature. This result is especially pertinent in light of recent security incidents in the Nigerian fintech sector, such as fraud and identity theft reported across major platforms (TechPoint Africa, 2024). The high beta coefficient for security (0.312) indicates that customers prioritize the protection of financial data and assets, emphasizing the necessity of security investments for retention. This finding is consistent with Onu and Eze (2023), who identified cybersecurity measures as key determinants of customer trust and satisfaction in banking.

The significant positive effect of reliability on customer retention ($\beta = 0.289$) reinforces SERVQUAL theory's emphasis on dependability as a core dimension of service quality. Within fintech, reliability includes consistent transaction processing, system availability, and accurate service delivery. This result aligns with Ojiaku et al. (2023), who found that system and information quality significantly influenced customer retention in mobile banking. The high mean score (M = 3.94) in the descriptive analysis further highlights customers' strong preference for consistent service performance.

Transaction efficiency exhibited a significant positive effect on customer retention ($\beta = 0.188$), underscoring the importance of speed and seamlessness in digital financial transactions. This finding supports the Technology Acceptance Model, which posits that perceived usefulness, demonstrated through efficient transaction processing, encourages continued technology adoption. The result is consistent with Khan and Alhumoudi (2022), who found that efficiency directly affects customer satisfaction and retention in banking. In the competitive Nigerian fintech sector, where platforms such as OPay report 99.5% ten-second transaction success rates, transaction efficiency is a key differentiator that influences customer retention.

User interface quality demonstrated a significant positive effect on customer retention ($\beta = 0.172$), although it had the smallest beta coefficient among the four dimensions. This result aligns with the Technology Acceptance Model's construct of perceived ease of use, indicating that intuitive, user-friendly interfaces support retention by minimizing usage barriers. The finding is consistent with Ajibola et al. (2022), who found that user-friendly interfaces positively influenced customer satisfaction in Nigerian e-banking platforms. Nevertheless, the comparatively lower predictive power of user interface quality suggests that, while relevant, aesthetic and usability factors are secondary to functional and security considerations in customer retention decisions.

CONCLUSION AND RECOMMENDATIONS

This study examined the relationship between product quality and customer retention in selected Nigerian fintech companies. The findings offer compelling evidence that product quality, as measured by reliability, security, user interface quality, and transaction efficiency, significantly influences customer retention. The regression model accounted for 61.2% of the variance in customer retention, demonstrating the substantial predictive power of these product quality dimensions. Security was identified as the most critical factor influencing customer retention, followed by reliability, transaction efficiency, and user interface quality. These results highlight the necessity of robust security infrastructure, consistent service delivery, efficient transaction processing, and intuitive user experiences for retaining customers in the competitive Nigerian fintech sector. The study contributes to the literature on service quality in fintech by adapting and validating quality dimensions specific to digital financial services in an emerging market context.

The theoretical implications of this study extend SERVQUAL theory to the Nigerian fintech context, demonstrating its ongoing relevance and the necessity for technology-specific adaptations. The findings also support Expectation Confirmation Theory by illustrating that fulfilling customer expectations across quality dimensions fosters retention. From a practical perspective, the study offers actionable insights for fintech managers aiming to enhance customer retention through targeted investments in product quality.

Drawing on the study's findings, the following recommendations are proposed:

1. Fintech companies are advised to prioritize investments in security infrastructure, such as advanced encryption, multi-factor authentication, biometric verification, and real-time fraud monitoring systems. As security is the strongest predictor of retention, these investments are likely to yield the greatest returns in customer loyalty.
2. Companies should enhance service reliability by developing robust technical infrastructure, implementing redundancy systems, and conducting proactive maintenance to reduce downtime and transaction failures. Ongoing performance monitoring and prompt issue resolution are also essential.
3. Transaction processing efficiency should be continuously improved through technology upgrades, streamlined processes, and scalable infrastructure to accommodate increasing transaction volumes while maintaining speed.
4. User interface design should be regularly refined based on customer feedback and usability testing to ensure intuitive navigation, accessibility, and seamless experiences across various devices and platforms.
5. The Central Bank of Nigeria and other regulatory authorities should continue to develop and enforce security standards for fintech operations to enhance customer confidence and drive industry-wide quality improvements.
6. Future research should utilize longitudinal designs to examine how quality-retention relationships evolve, explore the mediating role of customer satisfaction, and investigate potential moderating effects of demographic and usage variables.

REFERENCES

Ajibola, K., Nwokoro, E., & Bello, S. (2022). User-Friendly Interfaces and Customer

Satisfaction in Nigerian E-Banking Platforms. *African Journal of Banking and Finance, 9*(2), 134–149.

Bhattacherjee, A. (2001). Understanding Information Systems Continuance: An Expectation-Confirmation Model. *MIS Quarterly, 25*(3), 351–370. https://doi.org/10.2307/3250921

Chen, S. C. (2012). To Use or Not to Use: Understanding the Factors Affecting Continuance Intention of Mobile Banking. *International Journal of Mobile Communications, 10*(5), 490–507.

Chikazhe, L., Ndhlovu, M., & Muthoni, K. (2021). Service Quality and Customer Loyalty in Digital Banking. *Journal of Business Management, 15*(2), 23–35.

Cochran, W. G. (1977). *Sampling Techniques* (3rd ed.). John Wiley & Sons.

Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2nd ed.). Lawrence Erlbaum Associates.

Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly, 13*(3), 319–340.

Digdowiseiso, K., et al. (2024). The Dynamics of Research in Customer Retention. *Malque Publishing Journal, 8*(2), 1–15.

Ele, L. E., Enang, E. R., & Uguru, L. C. (2024). The Impact of Financial Technology on Banking Service Delivery in Nigeria. *International Journal of Economics, 12*(3), 45–62.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (2nd ed.). Sage Publications.

Hanaysha, J. R. (2018). Customer Retention and the Mediating Role of Perceived Value in Retail Industry. *World Journal of Entrepreneurship, Management and Sustainable Development, 14*(1), 2–24.

Harriet, N., et al. (2024). Service Quality, Customer Loyalty and Customer Retention Among Private Health Care Services in Mbarara City. *Open Journal of Social Sciences, 12*, 101–126.

Ighomereho, O. S., Afolabi, T. S., & Oluwakoya, A. O. (2023). Impact of E-Service Quality on Customer Satisfaction: A Study of Internet Banking for General and Maritime Services in Nigeria. *Journal of Financial Services Marketing, 28*, 488–501. https://doi.org/10.1057/s41264-022-00164-x

IMARC Group. (2025). *Nigeria Fintech Market: Size, Share, Trends and Forecast 2025–2033*. IMARC Group.

Khan, M. A., & Alhumoudi, H. (2022). Efficiency, Reliability and Service Quality Effects on Customer Satisfaction and Retention. *Journal of Financial Services, 67*, 102–120.

Ojiaku, O. C., Chidirim, B. N., & Nwankwo, C. A. (2023). Mobile Banking Service Quality and Customer Retention Among Commercial Banks' Customers: An Empirical Evidence From Southeast Nigeria. *Asian Journal of Economics, Business and Accounting, 23*(14), 45–56.

Okoye, N., et al. (2024). Fintech and the Performance of Firms in Nigeria. *Nigerian Journal of Management Studies, 18*(2), 78–95.

Olaniyi, T. (2022). Customer Retention Strategies in Nigerian Banks. *Journal of Banking Studies, 7*(3), 147–160.

Oliver, R. L. (1977). Effect of Expectation and Disconfirmation on Postexposure Product Evaluations: An Alternative Interpretation. *Journal of Applied Psychology, 62*(4), 480–486.

Oliver, R. L. (1980). A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions. *Journal of Marketing Research, 17*(4), 460–469.

Onu, P., & Eze, C. (2023). Cybersecurity Measures as Determinants of Customer Trust and Satisfaction in the Banking Sector. *Journal of Financial Security, 12*(1), 45–57.

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A Conceptual Model of Service Quality and Its Implications for Future Research. *Journal of Marketing, 49*(4), 41–50.

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality. *Journal of Retailing, 64*(1), 12–40.

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (2021). SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality. *Journal of Retailing, 79*(3), 137–152.

Raza, S. A., Umer, A., Qureshi, M. A., & Dahri, A. S. (2020). Internet Banking Service Quality, E-Customer Satisfaction and Loyalty: The Modified E-SERVQUAL Model. *The TQM Journal, 32*(6), 1443–1466.

Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research Methods for Business Students* (8th ed.). Pearson Education.

Shiau, W. L., Yuan, Y., Pu, X., Ray, S., & Chen, C. C. (2020). Understanding Fintech Continuance: Perspectives From Self-Efficacy and ECT-IS Theories. *Industrial Management & Data Systems, 120*(9), 1659–1689.

Tawafak, R. M., et al. (2023). The Integration of ECT and TAM to Examine Usage and Acceptance of Online Learning Platforms. *Contemporary Educational Technology, 15*(1), ep401.

Vijai, K., Sharma, R., & Gupta, A. (2023). Fintech's Impact on Customer Satisfaction and Retention in the Indian Context. *Journal of Financial Technology, 12*(3), 45–62.

Wu, L., et al. (2022). Customer Retention in Fintech. *Journal of Financial Technology Research, 9*(1), 97–113.

Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The Behavioral Consequences of Service Quality. *Journal of Marketing, 60*(2), 31–46.

Zeithaml, V. A., et al. (2021). Service Quality Measurement. In *Handbook of Service Science* (pp. 201–228). Springer.