Disruptive Innovation: A Study of Fintechs' Disruption of Traditional Banking in Nigeria

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ABSTRACT

This study aimed to investigate the disruption of traditional banking by fintechs and their effects and influences in Nigeria. It examined various forms and dimensions of fintechs’ disruptive innovation activities and their specific effects on traditional banking. A descriptive survey research design was employed in this study. The sample of the study was drawn from three stakeholder groups consisting of industry professionals across banking, financial, fintechs and other non-banking/finance professionals; agency banking and PoS operators; and customers and end-users of banking and fintech products and services. The study relied mainly on primary data obtained through a structured questionnaire administered and received from 371 respondents. The data collected was analysed and presented using descriptive methods. The statistical techniques employed are the Analysis of Variance (ANOVA) and the regression analysis models. The hypotheses were tested using the one sample t-test and the regression coefficients. The findings showed statistical evidence that fintechs' technological innovations cause significant disruption to traditional banking in Nigeria. It also showed that the effects and influences of fintechs’ disruption of traditional banking are significant. The study concludes that fintechs have become a significant force that is changing Nigeria's traditional banking and financial system. Thus, banks should collaborate with fintechs to leverage their technological capabilities while maintaining their conventional risk management strenghts. Particularly, banks should further integrate fintechs’ innovations into their existing banking systems to improve service delivery.

Key words: Disruptive Innovation, Fintechs, Traditional Banking, Technological Innovation.

INTRODUCTION

The disruptive innovation revolution has continued to sweep across the entire business and corporate ecosystem. It is an innovation that not only disrupts an existing market but also creates new ones and displaces established market-leading firms and products (Liu & Wagner, 2021). Christensen and Raynor (2003) had stated that disruptive innovations are innovations that make products and services more accessible, affordable as well as available to a wider range of customers. Thus, disruptive innovation, driven mainly by technology, characterises the process whereby markets are changed by presenting affordable, simple, and accessible products and services, and after which they are changed and disrupted from what they used to be. It has posed great existential threats to organisations and industries, forcing them to either adapt to new technologies or risk their very existence as an organization (Nneji, 2024)

In Nigeria and indeed globally, the advances in technological innovation and digital technology have continued to transform and redefine banking and financial services delivery. According to Ashiru et al. (2023), disruptive innovations in financial services are altering the Nigerian banking system and the delivery of banking and financial service experience. The disruption is mainly driven by the growing emergence and activities of the financial technology companies generally referred to as fintechs. Fintechs are organisations that integrate financial services and digital technology to enhance financial systems, products and services (Schueffel, 2016).

Taking this further, Sanyaolu et al. (2024) explained that, though basically technology companies, fintechs provide basic financial and banking services that compare and compete with traditional banks in simpler and faster methods using innovative technologies. Fintechs' technological innovations facilitate such services as mobile payments, digital lending, peer-to-peer transfers, among other services (Arner et al., 2016). By so doing, fintechs disrupt and alter the banking landscape with simpler, faster and more convenient ways of delivering financial transactions that are basically provided by traditional banks. These are challenging and upsetting the traditional banking delivery of financial services, whilst providing businesses and consumers with unparalleled options in accessing financial services (Iyelolu and Paul, 2024).

A lot of factors contribute to fintechs' rapid growth and expansion. They include an increase in use of mobile telephones, growing internet penetration, and a large demography of young population who are technologically savvy (Osarose and Laoye, 2025). These factors have enabled fintechs to provide financial services both in the urban areas and particularly to the unbanked and underbanked populations in the many discrete areas where traditional banks are not able to reach and serve. By providing basic banking and financial services, fintechs thereby complement and disrupt the traditional banking system in Nigeria. Such fintech organisations operating in Nigeria include Opay, Moniepoint, Palmpay, Kuda, Carbon, MoMo, Fairmoney among others.

Significantly, fintechs have reduced traditional banks' market power and their monopolies in many areas of banking transactions (Bogaard et al., 2024). For instance, fintechs have changed such metrics for digital account opening, customer acquisition, bill payment, funds transfer etc. Specifically, fintechs offer an improved customer-centered approach to banking, reducing costs, enhancing customer service speed and improving customer experience; and thus, changing customer expectations, and introducing an altogether new operational model to modern banking. Ezeocha (2024) consequently noted that fintechs have improved and simplified the provision of basic banking and financial services, making them more easily and conveniently obtained by the Nigerian banking public.

In view of these developments, this study aims to identify and empirically validate the forms of fintechs' technological innovations and operational activities contributing to the disruption of traditional banking and financial services in Nigeria. It examines the various dimensions, processes, and mechanisms through which fintechs leverage technological innovations to deliver banking products and services hitherto characterised as complex, expensive and at times exclusive, in simpler, more affordable, and broadly accessible forms. It also features some of the effects and influences of fintechs' disruptions of the Nigerian banking and financial system.

This study on fintechs' disruption of traditional banking is justified by the need to provide a more dimensional understanding of the rapid growth of fintechs, how digital platforms are reshaping payment systems, and specific knowledge of the aspects of traditional banking being disrupted, among other factors. Its outcome will provide evidence-based insights for regulation and policy developments on how to deepen technology innovation for a healthier digital financial system. This study will thus contribute to the existing literature on fintechs and their roles and significance in the financial system and enhance a better understanding of the evolving relationship between fintechs and traditional banking in Nigeria.

Objective of the Study

The objective of this study is to examine the various forms and the effects of fintechs' disruption of traditional banking in Nigeria.

Research Questions

1. What are the forms of fintechs' disruption of traditional banking in Nigeria?
2. What are the effects of fintechs' disruption of traditional banking in Nigeria?

Research Hypotheses

At 95% confidence level, the following hypotheses stated in null forms are formulated:

H_0 Fintechs forms do not cause significant disruption of traditional banking in Nigeria.

H_0: Fintechs disruptions do not have significant effects on traditional banking in Nigeria.

LITERATURE REVIEW

Theoretical Framework of Disruptive Innovation

The theoretical basis of this study is the disruptive innovation theory as espoused by Clayton Christensen (1997). The theory remains the fundamental structure for understanding disruptive innovation concepts. According to Christensen (1997), disruptive innovation describes the process whereby smaller organisations with fewer resources can successfully challenge current big organisations in the market known as incumbents. He explains that incumbent organisations often focus on improving their products and services to serve their most demanding and profitable customers, and often overlooking the needs of some segments of the market. Thus, disruptive entrants, usually smaller organisations, take advantage of this gap and target the overlooked segments and gaining a foothold by delivering products and services at lower prices and making them more accessible.

Christensen (1997); Christensen and Raynor (2003) further explain that over time, the innovation, which usually starts as an inferior product of service, takes hold of the market, gradually gets improved with technology and moves upmarket, and ultimately delivers products and services acceptable to the original mainstream market as well, whilst preserving the advantages that drove their early success. Christensen and Overdorf (2000) posit that disruption takes place as mainstream customers begin to adopt the entrants' product and service offerings. This process summarises disruptive innovation as characterised by the ability to replace complex and costly systems using simpler, more affordable alternatives, and thereby increasing accessibility for a broader audience.

Significantly, disruptive innovation theory has been useful in explaining how new market entrants survive and gain footholds in various industries and markets. Supporting Christensen's explanation that existing bigger companies known as incumbents focus on improving their products and services for their most demanding and profitable customers and thus overlooking the needs of some segments, Terry (2020) posits that productive, successful companies can make a critical error by neglecting to keep up in a rapidly changing marketplace. Thus, corporate leadership must appreciate the potential impact and competition of low cost or in some way lesser products. Validating the concept of disruptive innovation, Yu and Hang (2010) confirmed the potential of disruptive innovation in how markets are transformed, and incumbent big organisations are displaced owing to their focus on sustaining innovations for customers in high end markets. The usefulness of the disruptive innovation was further affirmed by Govindaraj and Kopalle (2006), proposing it as a framework for identifying and measuring disruption in markets and industries.

Notwithstanding the acceptability of the disruptive innovation theory, there are few concerns amongst some management theorists about its simplistic explanation of market disruption. King and Baatartogtokh (2015) in their study found out that some disruptive innovation cases do not exactly fit into the description of the concept and its process as espoused. They questioned the empirical precision of the concept, as many of the examples do not conform to the standards and prescriptions as typified by Christensen, given that the stern realities of market disruption do not follow a straight-line model. In the same vein, Daneels (2004) also aligns with the position that the disruptive innovation theory over-generalises and simplifies the many variables that interplay in innovation-driven disruption of the market place and the response behaviours of the incumbent organisations. He calls for a more complex and situation-specific way of looking at how innovations drive and disrupt markets.

Disruptive Innovation of Banking and Financial Services Industry

Disruptive innovation has become a major issue in today's banking and financial services industry. The disruption is primarily driven by financial technology organisations known as fintechs who deploy technological and digital innovations and solutions to challenge the traditional banking model by offering faster, cheaper, and more user-centric services (Lee & Shin, 2018). Fintechs more rapidly than traditional banks adopt technological innovations powered by such digital capabilities as artificial intelligence, cloud computing, and blockchain

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technologies to enhance operational efficiency, reduce transaction costs, and support scalable digital services capabilities (Arner et al., 2020).

The disruption of traditional banking is tied to the availability of technology-enabled and digital-based financial ecosystems, which have caused a major shift in consumer preferences toward quick service delivery and convenience, undermining the dominance of traditional banks. According to Vives (2019), in both developing and developed economies, fintechs have altered both the competitive landscape and operational practices of traditional banks. Studies show that digital financial platforms reduce entry barriers, enable broader customer reach, and facilitate real-time service delivery, thereby challenging the physical-branch-centric architecture of conventional banking (Gomber et al., 2018).

In Nigeria, fintechs have proven disruptive to traditional banking as supported by evident literature. Fintechs' digital payment platforms, mobile money services, PoS agency banking, and app-based financial tools have expanded service reach, reduced transaction costs, and improved user experience, thereby challenging the conventional branch-based banking model (Gomber et al., 2018). Lending support to this, Iheanachor and Ozegbe (2020) found bidirectional causality between mobile money operations and banks' financial indicators, suggesting an interdependence typical of an industry undergoing technological disruption. This was similar to the Kenyan experience where mobile money organisations such as M-Pesa potentially bypass traditional banking structures by enabling low-cost financial transactions for underserved populations (Suri & Jack, 2016).

The Forms and Effects of Fintechs' Technological Innovation and Activities Causing Disruption of Traditional Banking in Nigeria.

In Nigeria, fintechs' technological innovations and range of service offerings disrupt traditional banking in a number of ways. One major form of fintechs' technological innovations and activities disrupting traditional banking in Nigeria is their ability to provide expanded and pervasive access to banking and financial services, and thus, filling the gaps left by traditional banks, whose physical branches are often limited in the rural and low-income areas (Adewoye, 2022; Ozili, 2020; Sanusi, 2018). Fintechs accomplish this through their agency networks and widespread PoS operators providing such basic banking services as account opening, money transfers, deposits, and bill payments outside conventional banking halls (Sanusi & Adelabu, 2021). Thus, fintechs provide wider access to basic banking and financial services fostering greater financial inclusion in the Nigerian economy.

The increasing use of fintechs' digital payment and transfer services for routine financial transactions, in preference to traditional banking services, constitutes a form of fintech disruption to traditional banking. This preference arises from the fact that in comparison to traditional banking systems, fintech platforms such as mobile wallets, USSD banking, and app-based transfers provide quicker, less expensive, and more accessible and more convenient services. These have increased the adoption rate of fintechs' digital payment and transfer services by the Nigerian banking public and their increasing use for routine financial transactions, in preference to traditional banking services. According to research, Nigerian customers are becoming less dependent on banks and now are more inclined to using fintechs channels and their agency banking networks and extensive PoS operations for payments, transfers and other regular banking services (Adelekan & Oni, 2020). This change is indicative of an increasing dependence on digital ecosystems as opposed to branch-based approaches.

Fintechs' delivery of real-time, efficient, accessible, and user-friendly financial services represents another form of disruption to traditional banking. The delivery of speedy, convenient, and user-friendly interfaces by fintechs earns them a lot of customer patronage and which is gradually shifting customer expectations across the financial sector (Gomber et al., 2018). Resultantly, there are noticeable declines in the customer satisfaction and customer loyalty levels of traditional banks. Fintechs' technological innovations and operational efficiencies enable them to serve more and wider customer bases with fewer resources, thus, creating significant productivity gains and challenging the labour and capital-intensive structures traditionally associated with conventional banks (Puschmann, 2017; Thakor, 2020). Fintechs' lean, technology-driven models, characterised by automation, lower overhead costs, and high scalability, exert competitive pressure on banks to modernize their operations, adopt digital technologies, and improve customer experience (Chiemeke & Agbomo, 2021).

Thus, this literature shows that fintechs' technological advancement and innovations are significantly upending known traditional banking in Nigeria. Idigo (2022) substantiated the impact of the technological advancement within Nigeria's banking sector as a core driver of contemporary banking services delivery. Increased financial inclusion, growing adoption rate, agency banking and widespread PoS operations, customer-friendly, faster, accessible, affordable and convenient services, leaner, more agile, cost-effective and operationally efficient models that reduce costs, serving more customers with fewer employees are among the varying effects and results of the fintechs disruptions of traditional banking in Nigeria.

RESEARCH DESIGN AND METHODOLOGY

Research Design

This study employed a descriptive design methodology. Descriptive research design involves the use of systematic and structured qualitative data and surveys to describe and portray phenomena or variables (Creswell & Creswell, 2018). It also involves the observation of what is happening to sample subjects or variables without attempting to control or manipulate them (Asika, 2008). In this study, the descriptive research design method was used to demonstrate the disruptive innovation of banking and financial services occasioned by fintech organisations. It was used to survey and collect structured data about the disruption of traditional banking and financial services by fintechs. Primary data was sourced from structured questionnaires addressed to a statistically-significant audience to obtain requisite information on the various ways fintechs disrupt the provision of banking and financial services.

Sample Size and Sampling Technique

The sample for this study was targeted at key stakeholders within the banking and financial services industry. Three major stakeholder groups consist the sample of this study. They are industry professionals across banking, financial, fintech and other non-banking/finance professionals; agency banking and PoS operators; and the customers and end-users of banking and fintech products and services. A sample of 400 respondents across the three major stakeholder respondents' groups drawn from urban, semi urban and rural areas of Nigeria was used for the study. Of the 400 questionnaires distributed, 371 were returned representing about 93% return. 11 questionnaires or 3% were rejected for being incorrectly filled, leaving 360 questionnaires or 90% of the respondent questionnaires used for the study.

Data Analysis

The questionnaire was used to generate the data. The degree of agreement or disagreement with a particular situation was measured using a 5-point Likert scale. Data from questionnaire instruments were examined and evaluated using descriptive methods of analysis, and the results were presented using weighted mean scores and percentages. To get and interpret the results, the one sample t-test, regression analysis and the analysis of variance (ANOVA) were used.

Validity and Reliability Analysis

The content validity of the questionnaire instruments was ensured by reviews from both academic and industry professionals both in banking and fintech organisations who helped in shaping the contents of the study and the questionnaires. In terms of construct validity, the questionnaire items were structured to align with the basic disruptive innovation construct of Christensen. About 10 copies of the questionnaire was pre-tested among identified bank and fintech customers and agency banking operators.

In terms of reliability of the questionnaire instrument, its internal consistency was measured using the Cronbach's alpha

Variables Alpha	No of Items	Cronbach's
Independent Variables Forms of fintechs' disruption	5	0.96
Dependent Variables: Effects of fintechs disruption	5	0.98

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The reliability of the questionnaire which is the major research instrument was tested and established through the Cronbach's Alpha Coefficient which tested the degree of correlation between questionnaire items. The Cronbach's Alpha obtained for each segment of the questionnaire are 0.96 and 0.98 respectively, both of which are above the 0.7 threshold and deemed acceptable; and indicating that the variables of the questionnaire were internally consistent and highly reliable in measuring the same underlying construct.

Data Presentation and Analyses

Forms of Fintechs Disruption of Traditional Banking in Nigeria

Table 1 Description of the Forms of Fintechs' Disruption of Traditional Banking

S/	**Description of Forms of Disruption**	Strongly Disagree (1)	Dis-Agree (2)	Un Decided (3)	Agree (4)	Strongly Agree (5)	**Weighted Mean Scores**
1	Fintechs' provision of banking services to the unbanked, underbanked, low-end customers, and in areas with no banks is a disruption of traditional banking	0 (0%)	8 (2.2%)	41 (11.4%)	106 (29.4%)	205 (57%)	**4.41** (88.2%)
2	Customers increasing use of fintechs faster digital payment and transfer services in preference to banks is a form of disruption of traditional banking.	8 (2.2%)	43 (11.9%)	66 (18.3%)	150 (41.6%)	92 (25.5%)	**3.76** (75.2%)
3	Use of fintech agents and widespread PoS for routine transactions, thus reducing need for visits to banks is a form of disruption of traditional banking.	3 (0.8%)	39 (10.8%)	35 (9.7%)	188 (52.2%)	95 (26.4%)	**3.93** (78.6%)
4	Fintechs' more customer-friendly, faster,accessible, affordable and convenient services than the banks is a form of disruption to traditional banking.	0 (0%)	8 (2.2%)	20 (5.6%)	164 (45.5%)	168 (46.6%)	**4.37** (87.4%)
5	Fintechs' leaner, more agile, cost-effective, efficient services, serving more customers with fewer staff as form of disruption to traditional banking	0 (0%)	4 (1.1%)	20 (5.6%)	102 (28.3%)	234 (65%)	**4.57**(91.4%)
	Total Mean Scores	2 (0.6%)	20 (5.7%)	37 (10.1%)	142 (39.4%)	159 (44.1%)	**4.21** (84.2%)

Source: Field Survey, 2025

Table 1 presents the descriptive analysis of respondents' perceptions regarding the various forms and dimensions of fintechs disruption to traditional banking in Nigeria. The findings are presented using weighted mean scores on a Likert scale of 1 to 5. From the results, the provision of banking and financial services by fintechs to the unbanked, underbanked, and low-end consumers in areas without physical bank branches perceived as a form of disruption of traditional banking, recorded a weighted mean score of 4.41, representing 88.2% of respondents. The disruption of traditional banking attributed to fintech-enabled digital payments and transfer services, and which is increasingly used for routine financial transactions instead of banks, returned a mean score of 3.76 or 75.2% of respondents. Similarly, the disruption of traditional banking caused by the growing use of fintech agents and the widespread deployment of Point-of-Sale (PoS) terminals, which reduce the need for physical visits to bank branches, had a mean score of 3.93 or 78.6% of respondents.

Furthermore, fintechs' provision of more customer-focused, faster, accessible, affordable, and convenient services as a form of disruption of traditional banking got a weighted mean score of 4.37 or 87.4% of respondents. Finally, the form of disruptive innovation arising from fintechs' digital technology models that enable leaner, more agile cost-effective services and operations, and serving more customers with fewer employees than banks, recorded a weighted mean score of 4.57 representing 91.4% of respondents. Thus, an overall mean score of 4.21 or 84.2% of the respondents strongly indicate that the various forms of fintechs' operational activities and technological innovations amount to a substantial and statistically significant disruption of traditional banking and financial service delivery in Nigeria.

Table 2 One-Sample t-Test Comparing Fintech Disruption Mean Score to the Neutral Value (μ_0=3.0) and Test of Hypothesis 1

Statistic	Sample Mean ($\bar{x}$)	Hypo Mean (μ_0)	Variance	Sample Size (n)	Degree of Freedom df	t-stat	P-value (one/two tail)	t Critical one-tail	Decision
Value	4.21	3.0	0.78	360	359	-38.5	< .001	1.65	Reject H_0

A one-sample t-test was conducted to assess whether the perceived level of fintech disruption differed significantly from the neutral test value of 3.0 on a 5-point Likert scale. The results revealed that the mean score for fintech disruption ($M = 4.21$, $SD^2 = 0.778$, $n = 360$) was significantly higher than the test value of 3.0, $t (359) = −38.54$, $p < 0.001$. Since the calculated t-statistic far exceeded the critical value ($t = 1.65$), the null hypothesis that fintechs' forms do not cause significant disruption of traditional banking in Nigeria was rejected. This finding indicates that fintechs' disruption is perceived to be both real and substantial within the Nigerian banking sector.

The Effects of Fintechs' Disruption of Traditional Banking in Nigeria

Table 3: Description of the Effects of Fintechs' Disruption of Traditional Banking in Nigeria.

S/	**Description**	Strongly Disagree (1)	Dis-Agree (2)	Un-De cided (3)	Agree (4)	Strongly Agree (5)	**Weighted Mean Scores**
1	Fintechs' delivery of core banking services to the unbanked/underbanked, low-end customers, and individuals in areas with no banks is enhancing financial inclusion in Nigeria	8 (2.2%)	16 (4.4%)	41 (11.4%)	106 (29.4%)	189 (52.5%)	**4.26** (85.2%)
2	Customers widespread adoption and use of fintechs faster digital-based banking and financial services is reducing customer patronage of traditional banks	13 (3.6%)	33 (9.17%)	76 (21.1%)	140 (38.9%)	98 (27.2%)	**3.89** (77.8%)
3	Fintechs' agency banking networks and widespread PoS are reducing customers dependence and necessity to visit bank branches	12 (3.3%)	28 (7.78%)	45 (12.5%)	181 (50.3%)	94 (26.1%)	**3.86** (77.2%)
4	Fintechs' real-time, efficient, accessible, user-friendly services are influencing and reducing customer satisfaction and loyalty levels to banks	6 (1.7%)	18 (5%)	24 (6.7%)	150 (41.7%)	162 (45%)	**4.23** (84.6%)
5	Fintechs technology for leaner, more agile, cost-effective services, serving of more customers with fewer employees, are pressuring banks to adopt new technologies and improve operational efficiency	15 (4.17%)	19 (5.28%)	28 (7.8%)	87 (24.2%)	211 (58.6%)	**4.28** (85.6%)
	Total Mean Scores	11 (3.1%)	23 (6.4%)	43 (11.9%)	132 (36.7%)	151 (41.9%)	**4.11** (82.1%)

Source: Field Survey, 2025

Table 3 displays the descriptive analysis of respondents' responses of the effects of the diverse forms of fintechs disruption of traditional banking in Nigeria. The results are shown in weighted mean values on a Likert scale ranging from 1 to 5. The effects of fintechs' delivery of core banking services to the unbanked and underbanked populations, low-end customers, and individuals in communities without bank branches and their impacts on enhancing the level of financial inclusion in Nigeria recorded a weighted mean score of 4.26 or 85.2% of the respondents. The disruption caused by customers widespread adoption and use of fintechs' digital-based platforms for basic banking transactions (including account opening, bill payments, deposits, and withdrawals) and its effects of reducing customer patronage of traditional banks yielded a mean score of 3.89, or 77.8% of the respondents.

The effect of fintechs' extensive agency banking network and widespread PoS operations, particularly on reducing customers' dependence on, and the necessity for bank branches in many areas, was 3.86 or 77.2% of the respondents. Similarly, the effects of fintechs' delivery of real-time, efficient, accessible, and user-friendly financial services, resulting in the decline in customer satisfaction and loyalty towards traditional banks recorded a weighted mean score of 4.23 (84.6% of respondents). Finally, the effect of fintechs' digital technology–driven operational models, characterised by lean, agile, and cost-effective service delivery that enables serving larger customer bases with fewer employees, and the resulting pressure on traditional banks to enhance their operational efficiency, was rated at 4.28, corresponding to 85.6% of respondents. Thus, the composite mean score of 4.11 (82.1%) indicates significant disruptive effects of fintechs' technological innovations and operational activities on traditional banking in Nigeria.

Table 4. Regression Analysis of the Forms of Fintech Disruption to Traditional Banking

Regression Statistics	
Multiple R	0.950114
R Square	0.902716
Adjusted R Square	0.902444
Standard Error	0.318879
Observations	359

Table 4 shows the regression statistics explaining the relationship between the forms of fintechs' technological innovation and activities causing disruption of traditional banking and their effects in Nigeria. The Multiple R confirms the correlation coefficient at 0.95 (95%), indicating a strong positive linear relationship between the forms of fintech disruption (predictor variable) and the effects of fintech disruption (outcome variable). The R-squared, denoting the coefficient of determination, is shown as 0.90 (90%), representing the percentage of variation in the effects of fintechs' disruption (outcome variable) that is explained by the prevalence of fintechs' technological innovation and activities causing disruption (predictor variable). The Adjusted R-Squared at 0.90 indicates about 90% in real and adjusted variation attributed to the effects of the forms of fintechs' technological innovation disrupting traditional banking in Nigeria.

Table 5: ANOVA of the Forms of Disruption and their Effects on Traditional Banking

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	336.8464	336.8464	3312.674	1E-182
Residual	357	36.30123	0.101684		
Total	358	373.1476			

Table 5 shows the Analysis of Variance (ANOVA) between the forms of fintechs' technological innovation and activities causing disruption of traditional banking and their various effects in Nigeria. The SS of 336.8 denotes the sum of squares explained by the regression as against the SS of 36.3 being the residual sum of squares due to random forces outside the model. The ANOVA value at ($F = 3312.67$, $p < 0.05$) at 1 degree of freedom indicates that the forms of fintech' technological innovation and activities disrupting traditional banking (predictor variable) is significant in explaining their effects (outcome variable). The Significance F (SF=1E-182<0.05) is an extremely small p-value and represents the strong probability value that the statistical significance of the F-Ratio is high; thus, indicating the high impact of the forms of fintechs' technological innovation and activities disrupting traditional banking and their effects in Nigeria. It also strongly demonstrates that the regression model is statistically significant.

Table 6: Regression Coefficients and Test of Hypothesis 2

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	-0.62963	0.083695	-7.52287	4.39E-13	-0.79423	-0.46503	-0.79423	-0.46503
1	1.118915	0.019441	57.55584	1E-182	1.080683	1.157147	1.080683	1.157147

From the analysis of the regression coefficients in table 6, the coefficient of 0.62963 indicates the direction of the relationship between the forms of fintechs' technological innovation and activities disrupting traditional banking and their effects. It indicates that a unit of positive change in the various forms of fintechs' technological innovation and activities disrupting traditional banking (predictor variable) would result in 62.9% of impact of the effects of the disruption. The t-Statistic further indicates the degree by which the coefficient of the dependent variable (the effects of disruption) differs from the null. Thus, the t-Statistics of 57.5, which is above 2, rejects the null hypothesis that fintechs' disruptions do not have significant effects on traditional banking in Nigeria. Resultantly, the alternate hypothesis that fintechs' disruptions have significant effects on traditional banking in Nigeria is accepted. This is further confirmed by the small P-value at 1E-182, which indicates that the probability of observing the data under the null hypothesis is almost zero; and which practically shows strong evidence to reject the null hypothesis and accept the alternate hypothesis that fintechs' disruption has significant effects on traditional banking in Nigeria.

DISCUSSION OF FINDINGS

The first finding of this study is that fintechs and their various forms cause significant disruption of traditional banking in Nigeria. A weighted mean score of 4.21 or 84.2% confirm the significant degree of disruption caused by fintechs' technological innovation and activities causing disruption to traditional banking in Nigeria. This finding reinforces the position of Iyelolu & Paul (2024) that the varied services of fintechs are disrupting traditional banking models in Nigeria. This disruption results from fintechs technological innovations and service offerings that alter the ways banking services are traditionally delivered. The authors support the position that fintechs are disrupting the banking industry, and this disruption can be measured in terms of changes in market share, increased productivity, operational efficiency and innovative business strategies among others. The insights from this finding lend support to the works of Judijanto (2025) in his bibliometric study that charts how fintechs' technological innovations profoundly disrupt traditional banking. It featured such thematic areas as digital transformation, regulatory innovation, artificial intelligence, and financial inclusion, reinforcing fintechs reshaping and disruption of traditional banking.

Furthermore, this finding upholds the works of Kou and Liu (2002), whose works demonstrate how fintechs have expanded beyond payments and lending services to take on core banking services. They conclude that the expansion of fintechs have compelled banks to implement open banking, make investments in technology and human resources, and adapt to shifting consumer demands, which are all signs of persistent disruptive pressure. The policy implication of this development brings to the fore the increasing policy need for the adequacy of regulatory framework that covers all aspects of fintechs operations in Nigeria. As the adoption rate of fintechs continues to grow with its disruptive innovation in the financial system, there is need to ensure relevant risk-based supervision of fintech organisations that will ensure sustainable stability in the Nigerian financial system.

Another major finding of this study is that fintechs' disruptions have significant effects on traditional banking in Nigeria. This is confirmed from an overall mean score of 4.12 on a Likert scale of 5. or 82.1% of the respondents, substantiating the effects of fintechs disruption on traditional banking in Nigeria. This finding is further validated by statistical evidence, which showed the correlation coefficient at 0.95, indicating a strong positive linear relationship between the various forms of fintechs' technological innovation and activities disrupting traditional banking and their effects. The regression coefficient indicates about 90.2% of positive impact on traditional banking in Nigeria by a unit of increase in the various forms of fintechs' technological innovation and activities causing disruption to traditional banking.

SUMMARY, CONCLUSION AND RECOMMENDATION

Summary

This study investigated disruptive innovation of traditional banking in Nigeria by the fintech organisations. Its findings confirm that the various forms of fintechs' technological innovation and activities ranging from providing banking services to the unbanked and underbanked; its growing adoption for basic financial transactions; agency banking and PoS operations; technology-enabled services that are more convenient, accessible, affordable and customer-friendly; and their technologically-driven operational models constitute significant disruption to traditional banking in Nigeria. It further confirms that the disruptive innovation caused by fintechs bear significant effects on traditional banking and the financial system which are evident from fintechs' enhancement of financial inclusion; reduction in traditional bank's customer patronage; reduction in the dependence on and need for bank branches in many areas; decline in levels of customer satisfaction and customer loyalty; and the increasing pressure on banks to improve on their operational efficiency.

Conclusion

This study has established that fintechs have become a significant force that is changing Nigeria's traditional banking and financial system. In addition to increasing access to financial services, their quick technology advancements and customer-focused business strategies have changed the competitive environment of Nigeria's banking and financial services sector, rather than just serving as supplementary financial service providers. Thus, fintech disruption in Nigeria is both significant and enduring, with implications for policy, regulation, and strategic business transformation within the financial services sector.

Recommendation

Based on the findings and conclusions of this study on the various forms of fintechs disruption to traditional banking and their effects, it is recommended that banks should cultivate collaborative partnerships with fintechs to leverage their technological capabilities while maintaining their traditional operational and risk management competences. In this regard, banks should further integrate fintechs' innovations into their existing banking systems to enhance service delivery. More importantly, banks should also invest in adequate digital infrastructure and foster a culture of innovation to adopt digital solutions, improve operational efficiency, enhance customer experience and adapt to evolving customer preferences or risk losing market relevance. Finally, the regulators should ensure relevant policies and frameworks that will foster the innovative activities of fintechs without compromising financial risks and good customer experience.

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