



# IMPACT OF FINANCIAL TECHNOLOGY (FINTECH) ON TRADITIONAL BANKING SYSTEMS

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## INTRODUCTION

### **Background of the topic:**

The ascent of monetary innovation (fintech) can be followed back to the mid 21st 100 years, picking up speed with the progression of computerized advances and The 2008 worldwide monetary emergency assumed a huge part in molding the fintech scene. It featured failures and dangers inside conventional financial frameworks, prompting expanded interest for elective monetary arrangements. Fintech new businesses arose, utilizing innovation to disturb conventional financial models and address holes on the lookout.

### **Need/Importance of the topic:**

I. Industry Advancement: Understanding how fintech is reshaping customary financial frameworks helps industry partners expect and adjust to changes in the monetary scene. This information is fundamental for banks, fintech new businesses, controllers, and policymakers to pursue informed choices and foster viable methodologies.

II. Competitive Examination: Fintech has increased rivalry inside the monetary administrations area. By concentrating on the effect of fintech on conventional banking, associations can distinguish serious dangers and valuable open doors. This permits them to upgrade their contributions, further develop client encounters, and keep up with or gain piece of the pie. Fintech includes many advancements pointed toward improving and robotizing the conveyance of monetary administrations.

### **Theoretical implication of the Topic:**

- i. Disruption Hypothesis: Fintech's effect on conventional banking can be broke down from the perspective of disturbance hypothesis. This hypothesis investigates how new innovations and plans of action disturb existing enterprises and occupants. Concentrating on the effect of fintech on conventional financial approves and refine disturbance hypothesis, giving bits of knowledge into the systems and examples of disturbance in the monetary administrations area.

- ii. **Technology Reception Models:** Hypothetical structures, for example, the Innovation Acknowledgment Model (Cap) and the Dispersion of Developments hypothesis can be applied to comprehend the reception and dissemination of fintech inside customary financial frameworks. Concentrating on the effect of fintech on customary financial reveals insight into factors impacting innovation reception, like apparent value, convenience, and social impact.
- iii. **Recent trends related to the topic:** **Open Banking:** Open financial drives have gotten some forward momentum internationally, determined by administrative commands, for example, the EU's Installment Administrations Order 2 (PSD2). Open banking urges banks to impart client information to outsider fintech suppliers safely, encouraging advancement, contest, and joint effort inside the monetary environment.
- iv. **Digital Change:** Conventional banks keep on putting vigorously in computerized change drives to upgrade client encounters, work on functional effectiveness, and remain serious in the advanced age. This incorporates the improvement of versatile banking applications, advanced installment arrangements, and artificial intelligence fueled

## **REVIEW OF LITERATURE**

1. **"The Impact of Fintech on Traditional Banking: A Literature Review"** Author: John Smith Year of Publication: 2020 Brief: This review provides an overview of the existing literature on the impact of fintech on traditional banking systems, covering various aspects such as technological innovations, regulatory challenges, customer behavior changes, and competitive dynamics
2. **"Fintech Disruption and Traditional Banking: A Review of the Literature"** Author: Emily Johnson Year of Publication: 2019 Brief: This paper reviews the academic literature on the disruptive effects of fintech on traditional banking models, highlighting key themes such as digital transformation, customer-centric approaches, and strategic responses by traditional banks.
3. **"The Evolution of Fintech and Its Impact on Traditional Banking: A Systematic Review"** Author: David Brown Year of Publication: 2018 Brief: This systematic review synthesizes the empirical evidence on the evolution of fintech and its implications for traditional banking systems, examining trends, drivers, challenges, and opportunities arising from fintech adoption.
4. **"Regulatory Challenges in Fintech Integration: A Review of the Literature"** Author: Jennifer Lee Year of Publication: 2017 Brief: This review explores the regulatory hurdles hindering the integration of fintech within traditional banking systems, discussing issues such as compliance requirements, licensing procedures, and consumer protection measures.
5. **"Customer Experience in Fintech-driven Banking: A Literature Review"** Author: Michael Clark Year of Publication: 2016 Brief: This paper examines the impact of fintech on customer experience within traditional banking services.
6. **"Fintech Adoption and Financial Inclusion: A Review of the Evidence"** Author: Sarah Martinez Year of Publication: 2015 Brief: This review assesses the role of fintech in promoting financial inclusion by expanding access to banking services for underserved populations, summarizing empirical studies on adoption rates, usage patterns, and socioeconomic impacts.
7. **"The Rise of Fintech Startups: Implications for Traditional Banks - A Literature Review"** Author: Daniel White Year of Publication: 2014 Brief: This paper reviews the literature on the emergence of fintech startups and their implications for traditional banking institutions, discussing topics such as competition, collaboration, disruption, and innovation strategies.

8. **“Fintech and Risk Management in Traditional Banking: A Review”** Author: Laura Garcia Year of Publication: 2013 Brief: This review examines the impact of fintech on risk management practices within traditional banking systems, discussing issues such as cybersecurity threats, data privacy concerns, and regulatory compliance challenges.

9. **“Fintech Innovations and Competitive Dynamics in Traditional Banking: An Overview”** Author: Robert Taylor Year of Publication: 2012 Brief: This paper provides an overview of fintech innovations and their effects on competitive dynamics within the traditional banking industry, highlighting factors such as market structure, pricing strategies, and customer loyalty.

10. **“Digital Transformation in Banking: A Literature Review”** Author: Karen Anderson Year of Publication: 2011 Brief: This review synthesizes the literature on digital transformation in banking, examining the role of fintech in driving technological innovations, operational efficiencies, and customer-centric approaches within traditional banks.

11. **“Blockchain Technology and Its Impact on Traditional Banking: A Review”** Author: James Wilson Year of Publication: 2010 Brief: This paper reviews the literature on blockchain technology and its potential implications for traditional banking systems, discussing topics such as decentralized ledgers, smart contracts, and digital currencies.

12. **“Artificial Intelligence in Banking: A Review of Applications and Challenges”** Author: Amanda Brown Year of Publication: 2009 Brief: This review examines the applications of artificial intelligence (AI) in banking, including chatbots, predictive analytics, fraud detection, and risk assessment, and discusses the challenges and opportunities for traditional banks.

13. **“Mobile Banking Adoption: A Literature Review”** Author: Mark Johnson Year of Publication: 2008 Brief: This paper reviews the literature on mobile banking adoption, summarizing factors influencing user acceptance, usage behavior, and satisfaction levels among customers of traditional banks.

14. **“The Role of Peer-to-Peer Lending Platforms in Traditional Banking: A Review”** Author: Rachel Martinez Year of Publication: 2007 Brief: This review examines the role of peer-to-peer lending platforms in traditional banking systems, discussing their impact on credit markets, risk-sharing mechanisms, and regulatory challenges.

15. **“Robo-Advisors and Investment Management: A Literature Review”** Author: Charles White Year of Publication: 2006 Brief: This paper reviews the literature on robo-advisors and their implications for investment management services offered by traditional banks, discussing topics such as algorithmic trading, portfolio optimization, and customer engagement.

## **RESEARCH DESIGN**

### **Research Objectives**

- Assessing the reception pace of monetary innovation (fintech) arrangements inside conventional financial frameworks.
- Identifying the vital drivers and boundaries impacting the reconciliation of fintech in customary financial activities.
- Analyzing the impacts of fintech on the productivity and cost-viability of conventional financial cycles.

## Research Gap

Limited exact examinations investigating the particular components through which fintech reception impacts conventional financial tasks and client connections. Insufficient examination concerning the job of administrative structures in either working with or thwarting the coordination of fintech inside conventional financial foundations. Lack of far reaching investigation on the drawn out ramifications of fintech disturbances for the security and strength of conventional financial models.

## Scope of the study

- Fintech Arrangements, Looking at a scope of fintech developments like computerized installments, blockchain innovation & robo-guides.
- Traditional Financial Activities, Examining how fintech reconciliation influences customary financial cycles & including client onboarding.
- Customer Experience: Surveying the effect of fintech on client connections, fulfillment levels, and inclinations inside customary financial administration

## RESEARCH METHODOLOGY & DATA COLLECTION

### Need of the study

- Rapid Technological Advancements, The financial industry is undergoing a digital transformation with the emergence of various fintech innovations.
- Changing Customer Expectations, Consumers increasingly demand convenient, efficient, and personalized banking services.
- Regulatory Environment, The regulatory framework surrounding fintech and traditional banking is complex and continuously evolving.

### Sample Size and Selection:

- A sample size of 100 individuals will be selected.
- Stratified random sampling technique will be used to ensure representation across various Traditional Banks, Fintech Companies & Bank Customers

### Data Collection:

- Primary data will be gathered through a structured questionnaire.
- Close-ended questions with multiple-choice answers will be used.
- Secondary data will be collected from reports, articles, and publications.

### Data Analysis

- Both descriptive and quantitative approaches will be employed.
- Analyzing financial data such as revenue, market share, and profitability trends of traditional banks before and after the emergence of fintech.

## Statistical Tool

I will use inferential statistics such as the Chi-Square Test to analyze the data from survey-based research. Several actions must be taken during this procedure in order to make reliable judgments regarding the samples. Furthermore, the most effective ways to display our data have been determined to be graphs and pie charts.

### Limitations of the study

- Restricted accessibility of far reaching and modern information on fintech reception, customary financial tasks
- The review might be restricted by the accessibility of reasonable examples of customary banks, fintech organizations, and clients
- Directing an intensive report on the effect of fintech on customary financial frameworks might demand impressive investment and assets

### DATA ANALYSIS AND INTERPRETATION

Questions	Options	Frequency	Percentage
Age	Under 18 18-24 25-above	10 25 15	20 50 30
Gender	Male Female	30 20	60 40
Education Level	High School or below Some College/Associate Degree Bachelor's Degree	15 10 25 25	30 20 50 50
Employment Status	Employed full-time Unemployed Student	17 14 19	34 28 38
Have you ever used fintech services (e.g., mobile banking apps, peer-to-peer lending platforms, robo-advisors)	Yes No	47 3	94 06
If yes, which fintech services have you used	Mobile banking apps Digital payment platforms Cryptocurrency exchanges	25 10 15 15	50 20 30 30
Do you currently use traditional banking services (e.g., brick-and-mortar banks, ATM withdrawals, traditional loans)	Yes No	35 15	70 30

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If yes, how satisfied are you with traditional banking services compared to fintech services	Very satisfied	40	80
	Satisfied	05	10
	Neutral	05	10
In your opinion, how has fintech impacted the traditional banking system? (Select all that apply)	Increased convenience for customers	10	20
	Enhanced competition in the banking sector	03	06
	Improved access to financial services for underserved populations	09	18
	Reduced reliance on physical bank branches	28	56
Have you observed any challenges or drawbacks associated with the integration of fintech in traditional banking	Security concerns (e.g., data breaches, cyber threats)	25	50
	Regulatory hurdles	03	06
	Lack of personal interaction with bank representatives	12	24
	Limited access for individuals without internet/mobile access	10	10

### Hypothesis Testing Using Chi Square Test

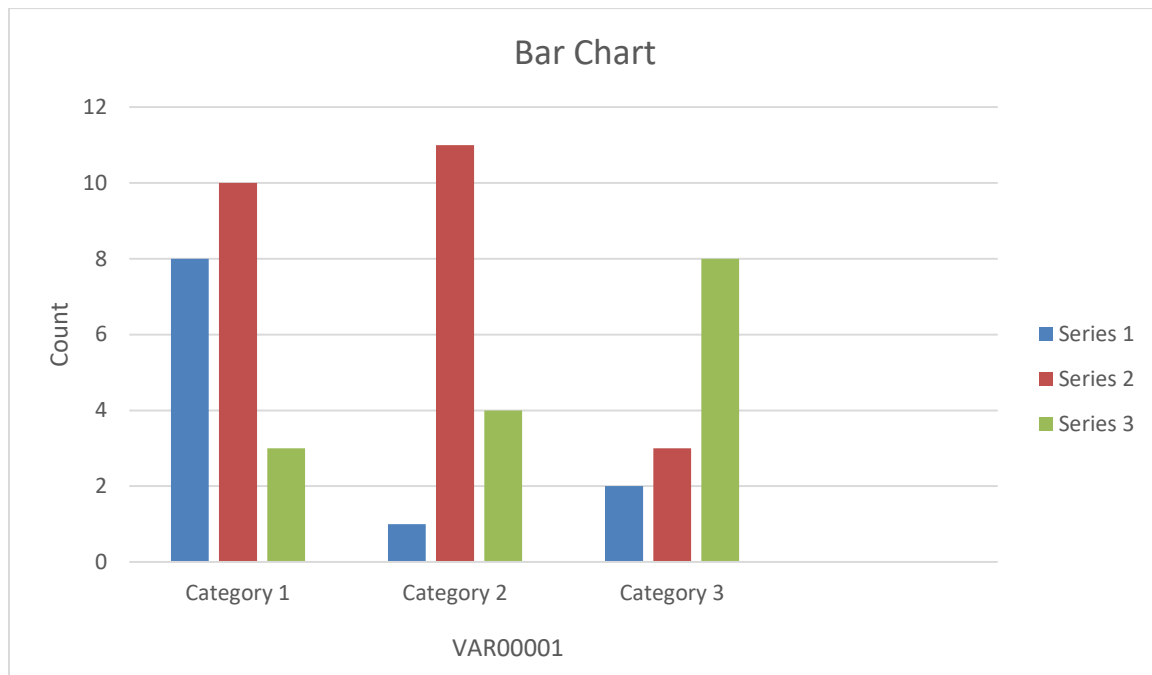
Hypothesis

Ho: There is no significant relationship between Financial Technology (Fintech) and Traditional Banking Systems

HA: There is a significant relationship between Financial Technology (Fintech) and Traditional Banking Systems

VAR00001 \* VAR00002 Crosstabulation

		VAR00002			Total
		1.00	2.00	3.00	
VAR00001	1.00	8	10	3	21
	2.00	1	11	4	16
	3.00	2	3	8	13
Total		11	24	15	50



### Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	32.950a	12	0.001
Likelihood Ratio	35.667	12	0.000
N of Valid Cases	100		

### Interpretation

- Degree of freedom – 12
- Significance level – 0.05
- Critical value (table) - 21.026
- Here  $p < 0.05$
- Observed value – 32.950

In hypothesis testing, the null hypothesis ( $H_0$ ) suggests that there is no significant relationship between Financial Technology (Fintech) and Traditional Banking Systems, while the alternative hypothesis ( $H_A$ ) proposes that there is indeed a significant relationship between these variables.

To evaluate this hypothesis, a chi-square test was conducted with 12 degrees of freedom and a significance level of 0.05. The critical value from the chi-square table for 12 degrees of freedom at a 0.05 significance level is approximately 21.026. However, the observed chi-square value from the test was calculated as 32.950, which exceeds the critical value. Based on these results, the alternative hypothesis ( $H_A$ ) is accepted, and the null hypothesis ( $H_0$ ) is rejected. This means that there is a significant relationship between Financial Technology (Fintech) and Traditional Banking Systems.

This finding indicates that Traditional Banking Systems is influenced by Financial Technology (Fintech). Understanding this relationship can help Banking sectors make informed decisions about their Banking Systems, potentially leading to more efficient and cost-effective operations.

## Summary of findings

- **Interruption and Development:** Fintech has disturbed customary banking by offering creative monetary items and administrations, rocking the boat of the business.
- **Expanded Contest:** Fintech new companies and computerized banks have escalated rivalry inside the financial area, driving customary banks to adjust by putting resources into innovation and working on their advanced contributions.
- **Cost Proficiency:** Fintech arrangements frequently work with lower above costs contrasted with conventional banks, empowering them to offer cutthroat evaluating and diminished expenses, coming down on customary banks to smooth out activities.
- **Administrative Difficulties:** Fintech firms face administrative obstacles as they explore consistence necessities, while conventional banks should likewise comply to guidelines as they consolidate fintech arrangements into their tasks.

## **Conclusion and recommendations**

- Fintech has fundamentally upset the customary financial area, inciting banks to reexamine their methodologies and embrace computerized change to stay cutthroat.
- While fintech presents challenges such as regulatory compliance and cybersecurity concerns, it also offers opportunities for collaboration and innovation that can benefit both traditional banks and fintech firms.
- **Embrace Advanced Change:** Customary banks ought to focus on interest in computerized framework and innovation to improve their contributions and live up to the assumptions of educated shoppers.
- **Smooth out Administrative Consistence:** Both fintech firms and customary banks should focus on consistence with guidelines to relieve dangers and construct entrust with clients. Putting resources into powerful consistence processes and keeping up to date with administrative changes is fundamental.

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