

Impact of FinTech on the Traditional Banking System

"A Comparative Study on Customer Preferences, Adoption Trends, and Future Prospects"

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Abstract:

The financial sector has witnessed transformative changes over the past decade due to the emergence of Financial Technology (FinTech). This research paper explores the impact of FinTech on the traditional banking system, focusing on consumer behaviour, service preferences, technological integration, and future banking models. Through primary data collected from a structured survey and secondary data from credible sources, this study highlights the rapid shift in customer preference toward digital platforms, the strengths and limitations of both FinTech and traditional banks. It offers recommendations for a collaborative and sustainable banking ecosystem.

Keywords: FinTech, traditional banking, digital transformation, consumer behaviour, financial services, hybrid banking model

1.Introduction

The global banking and financial services industry is undergoing a paradigm shift due to rapid technological advancements. FinTech, a term encompassing innovative digital financial services, is reshaping how individuals and businesses interact with money. In contrast, traditional banks, with their long-established systems and infrastructures, are now compelled to adapt or risk obsolescence. This study investigates how FinTech has disrupted conventional banking, changed consumer expectations, and forced traditional banks to reevaluate their service models.

2. Objectives of the Study

- To understand the changing trends in banking preferences among users
- To analyse the factors influencing the adoption of FinTech services
- To compare the perceived strengths and weaknesses of FinTech versus traditional banks

3. Literature Review

3.1 Traditional Banking Systems: Traditional banking relies on physical branches, in-person transactions, and paper-based processes. While online banking introduced digital convenience, traditional banks still operate with regulatory constraints, slower transaction processing, and high operational costs.

3.2 Evolution and Growth of Fintech: Fintech encompasses a broad range of financial innovations, including mobile payments, robo-advisors, blockchain-based transactions, and digital lending platforms. Companies like PayPal, Google Pay, and neobanks have revolutionized banking by offering seamless, low-cost financial solutions.

3.3 Fintech vs. Traditional Banking: Fintech services emphasize speed, automation, and personalization, whereas traditional banks focus on stability, regulatory compliance, and trust. While fintech companies disrupt conventional models, traditional banks are increasingly adopting fintech solutions to remain competitive.

4. Research Methodology

A mixed-method approach was used in this study:

- **Primary data:** Collected through a survey involving 100 respondents, primarily aged between 18 and 25. The questionnaire focused on usage patterns, preferences, perceived benefits, and challenges in using FinTech and traditional banking services.
- **Secondary data:** Derived from scholarly articles, financial reports, and credible websites like the Reserve Bank of India and World Economic Forum.

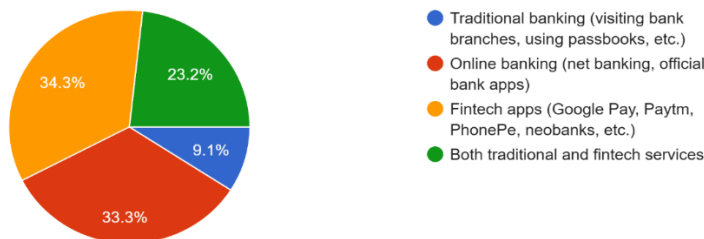
4. Data Analysis

The analysis involves both quantitative and qualitative data, gathered through surveys and secondary research, and interpreted using appropriate statistical tools. This analysis aims to validate the hypotheses and address the research objectives outlined in earlier chapters.

Primary Data

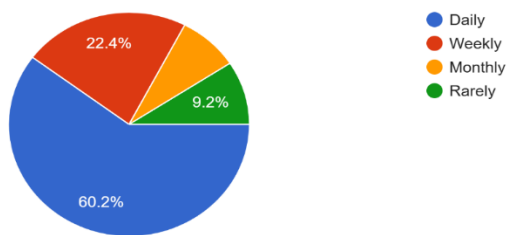
2. Which type of banking service do you use most frequently?

99 responses



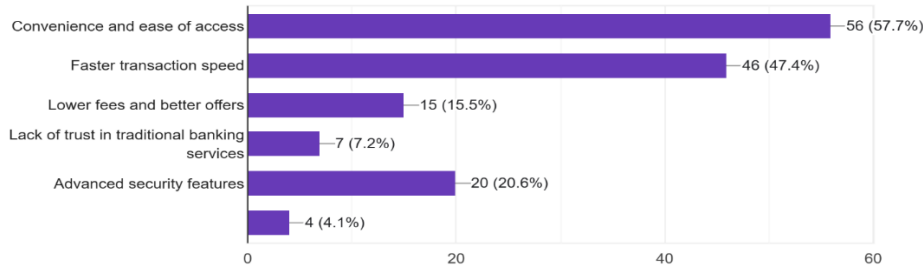
3. How often do you use fintech services (e.g., digital wallets, online payments, robo-advisors, etc.)?

98 responses



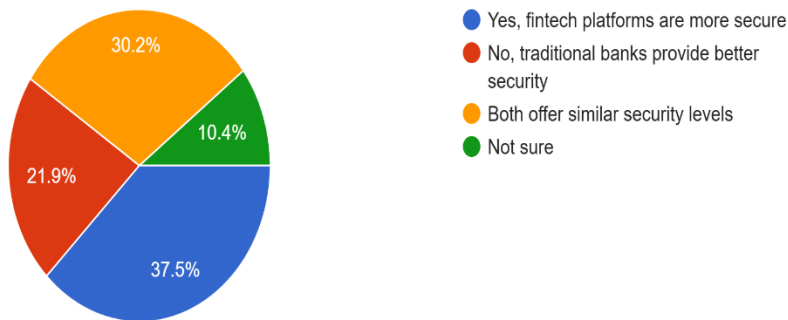
4. What factors influenced your shift from traditional banking to fintech services?

97 responses



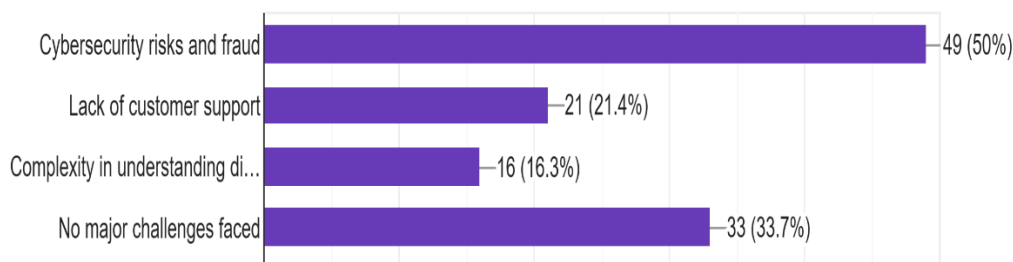
5. Do you believe fintech services offer better security and privacy compared to traditional banks?

96 responses



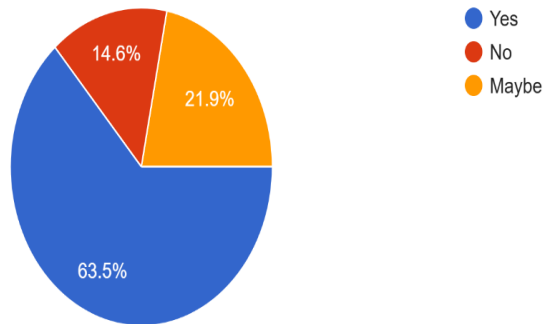
6. What challenges do you face while using fintech services?

98 responses



7. Do you think traditional banks should collaborate with fintech companies to improve their services?

96 responses



Secondary Data

Appendix Table IV.1: Indian Banking Sector at a Glance

(Amount in ₹ crore)

Sr. No	Items	Amount Outstanding (As at end-March)		Percentage Variation	
		2019	2020 (P)	2018-19	2019-20
1	2	3	4	5	6
1	Balance Sheet Operations				
1.1	Total Liabilities/assets	1,66,01,045	1,80,14,875	8.8	8.5
1.2	Deposits	1,28,86,643	1,39,75,095	9.3	8.4
1.3	Borrowings	17,09,670	16,96,046	1.6	-0.8
1.4	Loans and advances	96,76,183	1,03,01,914	10.6	6.5
1.5	Investments	43,22,464	46,89,842	4.8	8.5
1.6	Off-balance sheet exposure (as percentage of on-balance sheet liabilities)	122.8	125.3	-	-
1.7	Total consolidated international claims	6,29,621	5,78,412	-1.3	-8.1
2	Profitability				
2.1	Net profit	-23,397	10,911	-	-
2.2	Return on Asset (RoA) (Per cent)	-0.09	0.15	-	-
2.3	Return on Equity (RoE) (Per cent)	-1.9	0.8	-	-
2.4	Net Interest Margin (NIM) (Per cent)	2.7	2.8	-	-
3	Capital Adequacy				
3.1	Capital to risk weighted assets ratio (CRAR) @	14.3	14.7	-	-
3.2	Tier I capital (as percentage of total capital) @	85.5	85.5	-	-
3.3	CRAR (tier I) (Per cent) @	12.2	12.6	-	-
4	Asset Quality				
4.1	Gross NPAs	9,36,474	8,99,803	-9.9	-3.9
4.2	Net NPAs	3,55,068	2,89,531	-31.8	-18.5
4.3	Gross NPA ratio (Gross NPAs as percentage of gross advances)	9.1	8.2	-	-
4.4	Net NPA ratio (Net NPAs as percentage of net advances)	3.7	2.8	-	-
4.5	Provision Coverage Ratio (not write-off adjusted) (Per cent)**	60.5	66.2	-	-
4.6	Slippage ratio (Per cent)	4.0	3.8	-	-
5	Sectoral Deployment of Bank Credit				
5.1	Gross bank credit	95,26,932	1,00,98,420	13.4	6.0
5.2	Agriculture	12,17,594	12,39,575	10.0	1.8
5.3	Industry	32,93,638	32,52,801	5.2	-1.2
5.4	Services	26,02,287	27,54,824	25.1	5.9
5.5	Retail loans	23,04,313	26,59,250	18.6	15.4
6	Technological Development				
6.1	Total number of credit cards (in lakhs)	471	577	25.6	22.5
6.2	Total number of debit cards (in lakhs)	9,058	8,286	5.2	-8.5
6.3	Number of ATMs	2,02,196	2,10,760	-2.3	4.2
7	Customer Services				
7.1	Total number of complaints received during the year	1,84,730	3,06,702	22.7	66.0
7.2	Total number of complaints addressed	1,82,602	3,05,592	23.3	67.4
7.3	Percentage of complaints addressed	89.1	92.9	-	-
8	Financial Inclusion				
8.1	Credit-deposit ratio (Per cent)	75.1	73.7	-	-
8.2	Number of new bank branches opened	4,516	4,116	14.6	-8.9
8.3	Number of banking outlets in villages (Total)	5,97,155	5,99,217	4.8	0.3

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(Amount in ₹ crore)

Sr. No	Items	Amount Outstanding (At end-March)		Percentage Variation	
		2023	2024*	2022-23	2023-24*
1	2	3	4	5	6
1	Balance Sheet Operations				
	1.1 Total Liabilities/assets	2,43,18,429	2,80,80,550	12.2	15.5
	1.2 Deposits	1,90,68,238	2,17,33,443	11.0	14.0
	1.3 Borrowings	19,57,241	25,40,474	17.7	29.8
	1.4 Loans and advances	1,43,19,353	1,71,42,340	17.4	19.7
	1.5 Investments	64,36,540	72,70,365	11.4	13.0
	1.6 Off-balance sheet exposure (as percentage of on-balance sheet liabilities)	144.8	138.6		
	1.7 Total consolidated international claims	6,65,899	6,32,852	-8.7	-5.0
2	Profitability				
	2.1 Net profit	2,63,214	3,49,603		
	2.2 Return on Asset (RoA) (Per cent)	1.2	1.2		
	2.3 Return on Equity (RoE) (Per cent)	12.3	13.4		
	2.4 Net Interest Margin (NIM) (Per cent)	3.7	3.3		
3	Capital Adequacy				
	3.1 Capital to risk weighted assets ratio (CRAR) @	17.2	16.9		
	3.2 Tier 1 capital (as percentage of total capital) @	86.8	87.8		
	3.3 CRAR (Tier 1) (Per cent) @	15.0	14.8		
4	Asset Quality				
	4.1 Gross NPAs	5,71,546	4,80,818	-23.1	-15.9
	4.2 Net NPAs	1,35,320	1,06,732	-33.7	-21.1
	4.3 Gross NPA ratio (Gross NPAs as percentage of gross advances)	3.9	2.8		
	4.4 Net NPA ratio (Net NPAs as percentage of net advances)	0.9	0.6		
	4.5 Provision Coverage Ratio (Per cent)**	74.9	76.6		
	4.6 Slippage ratio (Per cent)	1.8	1.5		
5	Sectoral Deployment of Bank Credit				
	5.1 Gross bank credit	1,36,75,235	1,64,32,164	15	20.2
	5.2 Agriculture	17,26,410	20,71,251	15.4	20.0
	5.3 Industry	33,66,406	36,52,804	5.8	8.5
	5.4 Services	37,18,805	45,92,227	19.5	23.5
	5.5 Personal loans	41,82,767	53,31,290	20.7	27.5
6	Technological Development				
	6.1 Total number of credit cards (in lakhs)	853	1,018	15.9	19.3
	6.2 Total number of debit cards (in lakhs)	9,613	9,649	4.8	0.4
	6.3 Number of ATMs and CRMs (in lakhs)	2.59	2.58	2.7	-0.3
7	Customer Services				
	7.1 Total number of complaints received during the year ^	2,34,690	2,93,924	-22.9	25.2
	7.2 Total number of complaints handled during the year ##	2,45,391	2,99,022	-22.7	21.9
	Of 7.2 Total number of complaints addressed/disposed during the year	2,40,453	2,84,355	-22.7	18.3
	Of 7.2 Percentage of complaints addressed/disposed during the year	98	95		
8	Financial Inclusion				
	8.1 Credit-deposit ratio (Per cent)	75.1	78.9		
	8.2 Number of new bank branches opened	5,308	5,379	63.1	1.3

Comparison of Key Banking Indicators: FY 2019–20 vs. FY 2023–24

Indicator	FY 2019–20	FY 2023–24	Change (%)
Gross Advances (SCBs)	₹109.19 lakh crore	₹173.34 lakh crore	↑ 58.7%
Total Deposits (SCBs)	₹139.74 lakh crore	₹217.17 lakh crore	↑ 55.4%
Gross NPAs (SCBs)	₹8.96 lakh crore	₹4.81 lakh crore	↓ 46.3%
GNPA Ratio (SCBs)	8.2%	2.7%	↓ 5.5 percentage points
Net NPAs (SCBs)	₹2.8 lakh crore (approx.)	₹1.01 lakh crore	↓ 63.9%
Net NPA Ratio (SCBs)	2.8%	0.57%	↓ 2.23 percentage points
CRAR (SCBs)	14.8%	16.8%	↑ 2.0 percentage points
Return on Assets (RoA)	0.1%	1.4%	↑ 1.3 percentage points
Return on Equity (RoE)	Data not available	14.6%	—
Net Profit (SCBs)	Data not available	₹3.50 lakh crore	—

Note: SCBs = Scheduled Commercial Banks; Data for FY 2019–20 is as of March 31, 2020, and for FY 2023–24 is as of March 31, 2024.

Key Observations

- **Credit and Deposit Growth:** Gross advances and total deposits significantly increased over the four-year period, indicating robust growth in banking activities.
- **Asset Quality Improvement:** Gross NPAs reduced by 46.3%, and the GNPA ratio declined from 8.2% to 2.7%, reflecting improved asset quality across banks. [Vision IAS+3Drishti IAS+3adda247+3](#)
- **Profitability Enhancement:** The Return on Assets improved from 0.1% to 1.4%, and banks collectively reported a net profit of ₹3.50 lakh crore in FY 2023–24, showcasing enhanced profitability.
- **Capital Adequacy Strengthening:** The Capital to Risk-Weighted Assets Ratio (CRAR) increased by 2 percentage points, indicating a stronger capital position to absorb potential losses.

6. Findings

FinTech is the Most Preferred Mode of Banking

- ✓ A majority of respondents use **FinTech apps (e.g., Google Pay, PhonePe, Paytm)** more frequently than traditional banks or even online banking portals.
- ✓ This indicates a strong shift in preference toward **digital and mobile-first financial services**.

Young Adults Drive FinTech Adoption

- ✓ Most respondents fall within the **18–25 age group**, showing that **younger, tech-savvy individuals are leading the transition** from traditional banking to FinTech.

Frequent Usage Indicates Deep Integration

- ✓ Many respondents use FinTech services **daily or weekly**, suggesting that these platforms are not just alternatives but have become **essential tools** for financial transactions.

Speed, Convenience, and Accessibility Are Top Drivers

- ✓ Users cited **faster transactions, 24/7 availability, user-friendly interfaces, and easy access** as the main reasons for adopting FinTech services over traditional banks.

Mixed Perception of Security and Privacy

- ✓ While some users believe **FinTech offers better security**, others consider it on par with traditional banks, highlights **security concerns still exist**.

Challenges Include Cybersecurity and Complexity

- ✓ Reported issues include **cyber threats, fraud risk, and complicated app interfaces**.
- ✓ A few respondents also mentioned the **lack of personal interaction or customer support** as a drawback.

Strong Support for Bank-FinTech Collaboration

- ✓ Most participants believe that **traditional banks should collaborate with FinTech companies** to improve their services and adapt to changing consumer needs.

Hybrid Banking Model Preferred for the Future

- ✓ Respondents favored a **hybrid model** that combines the **innovation of FinTech with the stability of traditional banks**

General Satisfaction with Digital Transformation

- ✓ The majority of respondents are **satisfied with the ongoing digital transformation** in the financial sector, reflecting successful modernization efforts.

Improvement Areas Identified

- ✓ Respondents suggested improvements in:
 - **Security and fraud protection**
 - **Simplification of user interfaces**

- **Faster services in traditional banking**
- **Better customer education and support**

7. Discussion

The data reveals a significant behavioural shift toward FinTech solutions. Traditional banks are no longer the sole custodians of financial services. However, FinTech is not without its limitations, especially in areas such as personalized support and regulatory compliance. A collaborative model appears to be the most practical solution to ensure innovation without compromising on trust and security.

8. Recommendations

- Encourage strategic partnerships between banks and FinTech firms
- Improve cybersecurity infrastructure and user awareness
- Simplify digital interfaces to increase accessibility
- Develop hybrid banking solutions that integrate both physical and digital experiences
- Enhance customer support in FinTech platforms
- Promote digital literacy through community education programs

9. Conclusion

The FinTech revolution is undeniably reshaping the banking sector. As customer expectations evolve, both FinTech companies and traditional banks must adapt to offer secure, efficient, and personalized services. A hybrid model that leverages the strengths of both systems appears to be the most viable path forward. This integration will not only benefit consumers but also contribute to a more inclusive and innovative financial ecosystem.

10. References

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