

# International Journal of Research in Finance and Management

#### P-ISSN: 2617-5754 E-ISSN: 2617-5762 IJRFM 2020; 3(2): 92-96 Received: 04-09-2020 Accepted: 24-09-2020

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## Digital transformation in the financial sector: Operational impacts and customer experience

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#### **Abstract**

Digital transformation has reshaped the financial sector globally, offering enhanced operational efficiency and enriched customer experiences. With technological advancements like blockchain, big data analytics, and cloud computing, financial institutions are redefining their service delivery, risk management, and customer engagement practices. This study explores the operational impacts and customer experience implications of digital transformation in the financial sector. Using both primary and secondary data sources, the research analyzes key dimensions such as speed of service, personalization, security, cost-efficiency, and customer satisfaction. Statistical tools like chi-square and regression analysis are employed to interpret the data collected from 150 respondents and published industry reports. The findings indicate a significant correlation between digital innovation and customer satisfaction, while also shedding light on operational challenges and gaps.

**Keywords:** Digital transformation, financial services, operational efficiency, customer experience, Fintech, big data, blockchain, customer satisfaction

## Introduction

The financial services industry has been undergoing an unprecedented digital transformation over the past two decades. This transition has been driven by rapid advancements in digital technologies, changing consumer expectations, and the need for more agile and cost-effective service delivery mechanisms. Digital transformation refers to the integration of digital technology into all areas of a business, fundamentally altering how organizations operate and deliver value to customers.

In the financial sector, digital transformation involves the adoption of technologies like blockchain, big data analytics, mobile banking, and cloud computing. These innovations have revolutionized traditional banking, insurance, and investment services by improving operational efficiency, enabling real-time transactions, and personalizing customer interactions.

Financial institutions are increasingly focusing on leveraging digital tools to streamline internal operations, reduce costs, and enhance customer satisfaction. For instance, chatbots powered by Blockchain is being explored for secure, transparent, and fast transaction processing, which reduces the dependency on intermediaries.

Customer expectations have also evolved significantly. Today's customers demand seamless, fast, and personalized services, available 24/7 across digital platforms. In response, financial firms have launched mobile apps, digital wallets, robo-advisors, and online platforms to meet these demands. Moreover, customer experience has become a strategic priority as financial institutions recognize its direct impact on customer loyalty and profitability.

However, this transformation is not without challenges. Issues such as cybersecurity risks, data privacy concerns, regulatory compliance, and the digital divide remain significant obstacles. Moreover, legacy infrastructure in traditional banks poses a hindrance to the full adoption of digital capabilities.

This research seeks to evaluate the operational impacts of digital transformation in the financial sector and analyze how these changes are influencing customer experience. By examining the experiences of both financial institutions and consumers, the study aims to provide a comprehensive understanding of the benefits and challenges associated with digital transformation.

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#### **Review of Literature**

- **1. Brynjolfsson & McAfee** (2014): Emphasized the role of digital technologies in reshaping business models, particularly in service sectors like finance.
- **2. Deloitte** (2017): Found that digital transformation enhances efficiency but requires substantial investment in IT infrastructure and change management.
- **3. PwC** (**2018**) Reported that 72% of financial institutions considered customer expectations as the key driver of digital transformation.
- **4.** Capgemini (2019) [3]: Highlighted the increasing use of AI and machine learning to deliver personalized financial services.
- **5.** Accenture (2018): Identified that operational agility and customer-centric strategies are outcomes of effective digital adoption.
- **6.** Arner, Barberis & Buckley (2016): Introduced the concept of RegTech, focusing on how regulatory technologies support compliance.
- 7. World Economic Forum (2018): Noted that blockchain could redefine asset transfer mechanisms in banking.
- **8.** Chen, Chiang & Storey (2012): Explored how big data analytics contributes to risk management and fraud detection in banking.
- Rogers (2016): Discussed the five domains of digital transformation and their impact on customer value creation.
- **10. KPMG (2019):** Pointed out that many banks struggle to integrate new digital platforms with legacy systems.
- **11. Gomber, Koch & Siering (2017):** Analyzed how FinTech disrupts traditional financial service delivery.
- **12. McKinsey & Company (2019):** Found that firms with advanced digital strategies are 23% more profitable.
- **13. EY** (**2018**): Suggested that digital onboarding and mobile-first strategies significantly boost customer satisfaction.
- **14. Statista (2020):** Documented the global adoption rates of mobile banking and digital payment platforms up to January 2020.
- **15. IDC** Financial Insights (2019): Predicted digital transformation spending to reach \$310 billion in the financial sector by 2020.

#### **Objectives of the Study**

- 1. To examine the extent of digital transformation in the financial sector.
- 2. To analyze its operational impacts on financial institutions.
- 3. To assess the effect of digital services on customer experience.
- 4. To identify challenges and limitations faced by financial organizations in adopting digital technologies.
- 5. To provide suggestions for enhancing digital financial services.

## **Research Methodology**

- **Research Design:** Descriptive and analytical.
- **Data Type:** Primary and secondary.
- **Sample Size:** 150 respondents (bank customers and financial professionals).
- Sampling Technique: Stratified random sampling.

- **Tools for Analysis:** Percentage analysis, chi-square test, correlation analysis, regression.
- Collection of Data
- **Primary Data:** Structured questionnaire distributed to customers and bank officials.
- **Secondary Data:** Reports from Deloitte, PwC, RBI publications, industry databases, academic journals, and financial websites.

## Scope of the Study

The study covers banks, insurance companies, and FinTech firms operating in urban India. It focuses on digital applications such as mobile banking, online investment platforms.

## Hypotheses of the Study

- **H**<sub>0</sub>: Digital transformation has no significant impact on customer satisfaction in the financial sector.
- **H**<sub>1</sub>: Digital transformation significantly improves customer satisfaction in the financial sector.

### Analysis and interpretation of data

Table 1: Awareness of Digital Financial Services

| Awareness Level | Frequency |
|-----------------|-----------|
| High            | 80        |
| Moderate        | 40        |
| Low             | 20        |
| None            | 10        |

**Interpretation:** A majority (80 out of 150) of respondents are highly aware of digital financial services, indicating successful outreach and adoption campaigns.

Table 2: Usage of Digital Banking Services

| Service Type     | Users |
|------------------|-------|
| Mobile Banking   | 120   |
| Internet Banking | 110   |
| ATM              | 100   |
| UPI/Wallets      | 130   |

**Interpretation:** UPI/Wallets are the most used digital service, closely followed by mobile banking.

Table 3: Frequency of Use

| Usage Frequency | Number of Users |
|-----------------|-----------------|
| Daily           | 50              |
| Weekly          | 60              |
| Monthly         | 30              |
| Rarely          | 10              |

**Interpretation:** Most users access digital services weekly or daily, suggesting regular engagement.

Table 4: Customer Satisfaction Levels

| Satisfaction Level | Count |
|--------------------|-------|
| Highly Satisfied   | 60    |
| Satisfied          | 55    |
| Neutral            | 25    |
| Dissatisfied       | 10    |

**Interpretation:** 77% of respondents expressed satisfaction, reflecting positively on digital banking services.

**Table 5:** Perceived Operational Efficiency

| Efficiency Rating | Responses |
|-------------------|-----------|
| Excellent         | 50        |
| Good              | 70        |
| Average           | 20        |
| Poor              | 10        |

**Interpretation:** 80% of users rate operational efficiency as good or excellent post-digital transformation.

Table 6: Impact on Transaction Time

| Transaction Speed Perception | Count |
|------------------------------|-------|
| Much Faster                  | 70    |
| Faster                       | 50    |
| Same                         | 20    |
| Slower                       | 10    |

**Interpretation:** Over 80% of respondents feel that transaction times have improved.

**Table 7:** Security Concerns in Digital Transactions

| Security Concern Level | Number of Respondents |
|------------------------|-----------------------|
| Very High              | 30                    |
| High                   | 40                    |
| Moderate               | 50                    |
| Low                    | 30                    |

**Interpretation:** Security remains a significant concern, with 70 respondents expressing high to very high worry.

Table 8: Correlation between Awareness and Usage

| <b>Awareness Level</b> | Average Usage (Services/Week) |
|------------------------|-------------------------------|
| High                   | 6                             |
| Moderate               | 4                             |
| Low                    | 2                             |

**Interpretation:** A clear positive correlation exists between awareness and usage frequency.

 Table 9: Regression Analysis Summary

| Variable           | Coefficient | p-value |
|--------------------|-------------|---------|
| Digital Experience | 0.45        | 0.001   |
| Security Trust     | 0.30        | 0.020   |
| Customer Support   | 0.25        | 0.040   |

**Interpretation:** All three predictors significantly influence customer satisfaction, with digital experience having the strongest effect.

Table 10: Chi-Square Test Result

| Test                                    | Chi-Square | Degree of | p-    |
|---|------------|-----------|-------|
|   | Value      | Freedom   | value |
| Customer Satisfaction vs. Digital Usage | 18.62      | 3         | 0.001 |

**Interpretation:** A statistically significant relationship exists between satisfaction and usage level.

Table 11: Demographic Profile of Respondents

| Age Group | Number of Respondents |
|-----------|-----------------------|
| 18-25     | 40                    |
| 26-35     | 50                    |
| 36-50     | 35                    |
| 51+       | 25                    |

**Interpretation:** Majority of respondents fall in the age bracket of 26-35 years, ideal for digital adoption.

Table 12: Device Preference for Digital Banking

| Device     | Users |
|------------|-------|
| Smartphone | 100   |
| Laptop     | 30    |
| Tablet     | 10    |
| Desktop    | 10    |

**Interpretation:** Smartphones dominate as the primary device for digital banking access.

Table 13: Preferred Banking Mode Post-Digitalization

| Mode         | Preference Count |
|--------------|------------------|
| Branch Visit | 20               |
| Mobile App   | 90               |
| Website      | 30               |
| Call Centre  | 10               |

**Interpretation:** Mobile apps are the preferred choice for banking, indicating a shift from physical branches.

#### Main findings of the study

- 1. High Awareness of Digital Financial Services: A majority (over 50%) of respondents exhibit a high level of awareness regarding digital banking services, demonstrating successful outreach and literacy efforts by financial institutions.
- 2. Widespread Usage of Digital Platforms: UPI/Wallets and mobile banking emerged as the most frequently used services. The adoption of these tools indicates a strong consumer shift towards convenient, real-time transaction modes.
- **3. Frequent Use among Users:** Around 73% of users engage with digital services on a daily or weekly basis, suggesting strong integration of these platforms into their financial routines.
- **4. Positive Customer Satisfaction:** Approximately 77% of respondents reported being either satisfied or highly satisfied with digital banking services, highlighting the success of digital transformation in enhancing user experience.
- **5. Improved Operational Efficiency:** Most respondents rated the operational efficiency of digital services as 'Good' or 'Excellent'. Faster transaction times were a significant factor contributing to this perception.
- **6. Increased Speed of Transactions:** Over 80% acknowledged that digital transformation has made their transactions faster or significantly faster compared to traditional banking methods.
- 7. Security Concerns Remain Prominent: Despite high usage, 70 out of 150 respondents expressed moderate to very high concerns regarding the security of digital transactions, suggesting trust is still a sensitive area.

- **8.** Positive Correlation between Awareness and Usage: Higher awareness levels were directly linked with increased usage of digital services, underscoring the need for continuous digital education and outreach.
- 9. Digital Experience and Support Drive Satisfaction: Regression analysis showed that digital experience ( $\beta$  = 0.45), security trust ( $\beta$  = 0.30), and customer support ( $\beta$  = 0.25) all significantly impact satisfaction, with p-values < 0.05.
- 10. Statistically Significant Relationship between Usage and Satisfaction: The Chi-square test confirmed a strong association between customer satisfaction and their level of digital usage (p = 0.001), validating the impact of digital engagement on service perception.
- **11. Youth-Dominated User Base:** Most digital banking users were aged between 18 and 35 years, indicating that younger demographics are the key adopters of financial digitization.
- **12. Smartphones as the Preferred Access Point:** Smartphones were identified as the primary device for accessing digital banking services, emphasizing the importance of mobile-first strategies.
- 13. Preference for Mobile Banking Apps Post-Digitalization: Mobile apps are now the preferred mode of banking for 60% of users, showing a significant behavioral shift from traditional channels like branch visits or call centers.

#### **Suggestions Based on the Findings**

- 1. Enhance Cybersecurity Frameworks: Financial institutions must continue to invest in advanced security technologies and user education to address persistent concerns about transaction safety.
- **2. Expand Digital Literacy Programs:** Awareness positively influences usage. Hence, targeted campaigns—especially for older age groups and rural populations—can accelerate adoption.
- 3. Optimize Mobile Application Interfaces: With smartphones being the preferred medium, banking apps must offer simple, secure, and intuitive user experiences to maintain user satisfaction.
- **4. Focus on Customer Support Channels:** Since customer support is a significant determinant of satisfaction, enhancing multi-channel customer service (chat, call, email) is critical.
- 5. Promote Financial Inclusion via Digital Means: Policy-makers and banks should jointly work to increase digital penetration in underserved regions by providing incentives for digital transactions and ensuring infrastructure support.
- **6. Balance Automation with Human Touch:** While automation is beneficial, a hybrid approach that retains human interaction for complex queries will enhance trust and satisfaction.
- 7. Conduct Regular Feedback and Satisfaction Surveys: Periodic customer feedback can guide the continuous improvement of digital offerings and help address issues proactively.
- 8. Monitor and Update Security Protocols: Regular audits, real-time monitoring, and updates to digital infrastructure will help in building a more secure ecosystem.

**9. Ensure Inclusive Design for All Age Groups:** Simplifying digital interfaces and providing support for less tech-savvy users will broaden the user base and promote inclusivity.

#### References

- 1. Agarwal R. Digital India: Reflections and practice. New Delhi: McGraw-Hill Education; 2016.
- 2. Bansal A, Aggarwal G. Digital transformation in banking: The role of emerging technologies. Global Journal of Enterprise Information System. 2019;11(1):21-28.
- 3. Capgemini. World FinTech report 2019. Available from: https://www.capgemini.com
- 4. Chaffey D. Digital business and e-commerce management. 6th ed. Harlow: Pearson Education; 2015.
- 5. Deloitte. Digital banking maturity report: Benchmarking the digital transformation of retail banks 2019. Available from: https://www2.deloitte.com
- 6. Ghosh A. Digital transformation: A strategic pathway to business success. International Journal of Management and Applied Science. 2018;4(9):12-17.
- 7. KPMG India. Customer experience in the digital era: Banking on the future 2018. Available from: https://home.kpmg/in
- 8. Kapoor R, Vij M. Role of digital banking in enhancing customer satisfaction: A review. Journal of Banking and Finance. 2017;6(2):1-9.
- 9. Laudon KC, Laudon JP. Management information systems: Managing the digital firm. 15th ed. Harlow: Pearson Education; 2018.
- 10. McKinsey & Company. Digital India: Technology to transform a connected nation 2018. Available from: https://www.mckinsey.com
- 11. Mehta A, Mehta B. Consumer perception towards internet banking services. International Journal of Business and Management Invention. 2017;6(6):53-59.
- 12. Ministry of Electronics and Information Technology. Digital India programme 2019. Available from: https://www.digitalindia.gov.in
- 13. PwC India. Financial services technology 2020 and beyond: Embracing disruption 2019. Available from: https://www.pwc.in
- 14. Rao S. Digital revolution in Indian banking sector: A customer perspective. IOSR Journal of Business and Management. 2016;18(10):28-34.
- 15. Reserve Bank of India. Report on trend and progress of banking in India 2019. Available from: https://www.rbi.org.in
- 16. Sharma R. Digital transformation in financial services: A case study of Indian banks [Master's thesis]. Noida: Amity University; 2018.
- 17. Sharma S, Malhotra D. Impact of digitalization on customer satisfaction in banking sector. International Journal of Research in Finance and Marketing. 2019;9(2):45-52.
- 18. Singh A. Impact of e-banking on customer satisfaction and loyalty in Indian banking sector [dissertation]. Delhi: University of Delhi; 2017.
- 19. Statista. Digital payments in India Statistics & facts 2020. Available from: https://www.statista.com
- 20. Turban E, Pollard C, Wood G. Information technology

- for management: On-demand strategies for performance, growth and sustainability. 11<sup>th</sup> ed. Hoboken: Wiley; 2018.
- 21. Verma M, Singh R. E-banking services and customer satisfaction: A study of Indian banks. Asian Journal of Research in Banking and Finance. 2018;8(3):1-15.
- 22. World Bank. The Global Findex Database 2017: Measuring financial inclusion and the fintech revolution 2018. Available from:
  - https://globalfindex.worldbank.org