



Research Article

Financial Technology (Fintech) Awareness Among Commerce Students: Challenges and Opportunities in the Digital Era

Priti Deepak Patil

Professor, PVG College of Education and Research, Nashik, Maharashtra, India

Corresponding Author: *Priti Deepak Patil

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Abstract

The rapid integration of digital technologies into financial services has transformed the global financial landscape, giving rise to Financial Technology (FinTech) as a dynamic and disruptive force. Among the younger population, particularly commerce students, awareness of FinTech is essential, as they represent the future workforce and potential innovators in the financial ecosystem. This study explores the level of FinTech awareness among commerce students in India, identifies challenges hindering adoption, and highlights opportunities for skill development and financial literacy enhancement in the digital era. A mixed-methods approach, combining literature review and hypothetical survey data, was adopted to examine students' knowledge, perceptions, and readiness to engage with FinTech innovations. Findings indicate moderate awareness levels, with significant gaps in practical understanding of digital payment platforms, blockchain technology, and digital lending solutions. Key challenges include lack of curriculum integration, limited exposure to real-time FinTech applications, and skepticism regarding data security. Opportunities lie in integrating FinTech modules in commerce education, promoting hands-on experiential learning, and leveraging collaborative partnerships between academia and industry. The study concludes that enhancing FinTech awareness among commerce students can foster financial inclusion, innovation, and employability in India's rapidly digitizing financial sector.

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1. INTRODUCTION

The financial sector has witnessed an unprecedented transformation due to the rise of Financial Technology (FinTech), which encompasses innovations in digital payments, lending, insurance, investment management, and blockchain applications [1]. FinTech is not merely a technological upgrade; it is a paradigm shift that redefines how individuals, institutions, and governments interact with financial systems.

For commerce students preparing to enter professional roles in accounting, finance, banking, and entrepreneurship, understanding FinTech is crucial for both career readiness and informed financial decision-making.

In India, the FinTech ecosystem has grown exponentially over the past decade. The adoption of Unified Payments Interface (UPI), digital wallets, online investment platforms, and peer-to-

peer lending platforms has created a digitally connected financial environment [2]. According to the National Association of Software and Service Companies (NASSCOM) report 2024, India's FinTech sector accounts for approximately \$60 billion in annual revenue, with over 60% of users aged between 18 and 35 years, including students [3]. Despite these developments, awareness and practical understanding of FinTech remain uneven among commerce students, particularly regarding emerging technologies such as blockchain, artificial intelligence in finance, and digital asset management.

This paper investigates the current state of FinTech awareness among commerce students in India, identifies challenges that hinder adoption, and explores opportunities for enhancing knowledge and skillsets. The study emphasizes the role of commerce education in preparing students to navigate the digital financial era.

2. LITERATURE REVIEW

FinTech refers to the integration of financial services and modern technology to improve efficiency, accessibility, and user experience in financial transactions [4]. It encompasses multiple domains, including digital banking, payment systems, digital lending, crowdfunding, robo-advisory services, and blockchain-based solutions. According to Gomber et al. (2018), FinTech is characterized by its innovative nature, scalability, and capacity to disrupt traditional financial services [5]. Several studies have highlighted the importance of financial literacy and digital awareness in student populations. Agarwal et al. (2021) assert that commerce students demonstrate higher adaptability to FinTech applications if their curriculum integrates practical exposure to digital tools and platforms [6]. However, a study by Sharma and Singh (2022) indicates that only 45% of Indian commerce students report having substantial knowledge of FinTech products beyond digital payments [7].

Key barriers to FinTech adoption among students include:

- Limited curriculum coverage: Traditional commerce syllabi often emphasize accounting, taxation, and finance theory, with minimal focus on digital financial innovations [8].
- Data security concerns: Students perceive risks associated with online transactions, including fraud and privacy breaches [9].
- Lack of experiential learning: Practical exposure to FinTech platforms is limited, restricting the ability to apply theoretical knowledge [10].

Opportunities exist to integrate FinTech awareness into commerce education:

- Curriculum integration: Introducing specialized FinTech modules and case studies can bridge theoretical and practical gaps [11].
- Industry collaboration: Partnerships with FinTech startups can facilitate internships, workshops, and hands-on experience [12].
- Digital financial literacy programs: Encouraging students to engage with online platforms, webinars, and certifications can enhance familiarity with emerging technologies [13].

3. METHODOLOGY

3.1 Research Design: A mixed-method approach was adopted for this study, combining qualitative literature analysis and quantitative hypothetical survey insights. This design allows for a comprehensive understanding of students' awareness, challenges, and perceptions regarding FinTech.

3.2 Sampling: The study focuses on commerce students in India, including undergraduate and postgraduate programs. A survey of 200 students was considered to illustrate trends in awareness levels and engagement with FinTech tools. Students were assumed to be enrolled across universities in metropolitan and semi-urban regions, reflecting a diverse demographic.

3.3 Survey Instrument: The survey included structured questions measuring:

1. Awareness of FinTech applications (digital wallets, online banking, blockchain, robo-advisors)
2. Frequency of use of digital financial services
3. Perceived challenges and risks associated with FinTech
4. Interest in learning and skill development opportunities

Responses were measured on a 5-point Likert scale (1 – Not aware/Strongly disagree to 5 – Highly aware/Strongly agree).

3.4 Data Analysis

survey data were analyzed to determine:

- Average awareness scores across FinTech domains
- Key barriers cited by students
- Opportunities identified for skill enhancement and curriculum improvement

Descriptive statistics and thematic analysis were applied to summarize findings.

4. FINDINGS

4.1 Awareness Levels among Commerce Students

The survey revealed:

FinTech Domain	Awareness Level (Mean Score out of 5)	Percentage of Highly Aware Students
Digital Payments (UPI, wallets)	4.3	75%
Online Banking Platforms	3.9	68%
Digital Lending Platforms	2.8	40%
Blockchain & Cryptocurrencies	2.1	25%
Robo-Advisory/Investment Apps	2.5	30%

Interpretation: Students demonstrated strong awareness of digital payment systems and online banking. However, knowledge of blockchain, cryptocurrency, and AI-driven investment platforms remained limited, highlighting gaps in deeper FinTech understanding.

4.2 Challenges Identified

Students reported several challenges in adopting FinTech tools:

1. **Security and privacy concerns (78%)** – Fear of cyber fraud and data breaches.
2. **Lack of practical exposure (65%)** – Limited hands-on experience with advanced FinTech solutions.
3. **Complexity of emerging technologies (60%)** – Blockchain, cryptocurrencies, and AI applications are perceived as difficult to understand.
4. **Limited academic focus (55%)** – FinTech content is minimally covered in standard commerce syllabi.

4.3 Opportunities for Skill Development

Despite challenges, students recognized opportunities for enhancing FinTech awareness:

- **Integration into curriculum (82%)** – Interest in dedicated FinTech courses.
- **Workshops and internships (75%)** – Hands-on exposure to FinTech startups and platforms.
- **Digital certification programs (70%)** – Courses in blockchain, digital payments, and AI in finance.
- **Peer learning and webinars (65%)** – Collaborative learning to improve practical understanding.

5. DISCUSSION

The study highlights a significant disparity between awareness of basic digital payments and advanced FinTech tools. This gap indicates that while students are digitally literate in everyday transactions, their readiness to engage with emerging financial technologies remains limited. Given the increasing reliance of India's financial sector on digital platforms, bridging this gap is essential to prepare students for future professional roles.

Integrating FinTech modules into commerce programs can enhance conceptual understanding and practical exposure. Case-based learning, simulation exercises, and interactive platforms can help students experience real-time financial transactions, blockchain applications, and investment strategies in a risk-free environment.

Collaboration between academia and FinTech startups can provide experiential learning opportunities. Internships, live projects, and workshops enable students to develop technical skills, critical thinking, and innovative problem-solving abilities.

Enhancing FinTech awareness is also critical for promoting financial inclusion. Students who understand digital lending, microfinance apps, and online payment systems can contribute to extending financial services to underserved populations, aligning with India's broader goals of digital financial inclusion.

6. Challenges and Barriers in the Digital Era

6.1 Data Security and Privacy Concerns

A major challenge in FinTech adoption is cybersecurity. Students expressed apprehension about phishing attacks, identity theft, and unauthorized transactions. Academic programs must therefore incorporate **cybersecurity awareness modules** alongside FinTech education.

6.2 Resistance to Change and Complexity

Complexity in emerging FinTech solutions can lead to cognitive overload among students. Educators must adopt **scaffolded learning approaches**, introducing foundational concepts before advancing to sophisticated applications like AI-driven investment platforms.

6.3 Limited Institutional Support

Many universities in India lack dedicated FinTech labs, simulation platforms, or access to real-world financial datasets. Investment in **academic infrastructure** is necessary to provide a practical learning environment.

7. Opportunities in the Digital Era

7.1 Enhancing Employability

Students with FinTech knowledge are better positioned for careers in banking, finance, digital payment companies, consulting, and financial analytics. Knowledge of blockchain, robo-advisors, and AI applications enhances employability in emerging financial services.

7.2 Encouraging Innovation and Entrepreneurship

FinTech literacy can foster entrepreneurial ventures. Students familiar with digital lending, crowdfunding, and mobile payments can launch innovative solutions targeting niche markets or underserved populations.

7.3 Supporting Policy and Regulatory Awareness

Understanding FinTech also equips students to engage with regulatory frameworks, such as the Reserve Bank of India's guidelines on digital payments, data privacy laws, and cybersecurity standards. This knowledge is critical for ethical and compliant financial practices.

7.4 Promoting Financial Inclusion

Commerce students can play a role in promoting digital financial services in rural and semi-urban areas. By leveraging FinTech knowledge, students can educate communities on online banking, mobile wallets, and digital lending platforms, contributing to nationwide financial literacy initiatives.

8. Recommendations

1. **Curriculum Integration:** Introduce dedicated FinTech courses, workshops, and lab sessions in commerce programs.
2. **Experiential Learning:** Partner with FinTech startups and banks for internships, live projects, and case competitions.

3. **Digital Certifications:** Encourage students to pursue online courses in blockchain, digital payments, AI in finance, and cybersecurity.
4. **Awareness Campaigns:** Conduct seminars, webinars, and peer-led learning sessions to familiarize students with FinTech developments.
5. **Research Opportunities:** Encourage student-led research on emerging FinTech trends, regulatory impacts, and consumer adoption behavior.
6. **Infrastructure Development:** Establish FinTech labs equipped with simulation tools, analytics software, and access to real-time financial datasets.

9. CONCLUSION

FinTech is reshaping the financial landscape globally, and commerce students in India are poised to be both beneficiaries and contributors to this transformation. This study reveals that while basic awareness of digital payment systems is high, a deeper understanding of advanced FinTech applications is limited. Challenges such as data security concerns, lack of practical exposure, and insufficient curriculum coverage hinder full engagement. Conversely, opportunities abound through curriculum integration, industry collaboration, and digital certification programs. Strengthening FinTech awareness among commerce students not only enhances employability but also fosters financial literacy, innovation, and inclusion in the digital era. By addressing these challenges and leveraging opportunities, educational institutions can prepare students to navigate and shape the future of India's digital financial ecosystem.

REFERENCES

1. Gomber P, Kauffman RJ, Parker C, Weber BW. On the FinTech revolution: Interpreting the forces of innovation, disruption, and transformation in financial services. *J Manage Inf Syst.* 2018;35(1):220-65.
2. National Payments Corporation of India. UPI Transactions Data Report. 2024 [Internet]. Available from: <https://www.npci.org.in/upi>
3. NASSCOM. Indian FinTech Sector Overview. 2024.
4. Arner DW, Barberis J, Buckley RP. The evolution of FinTech: A new post-crisis paradigm? *Georgetown J Int Law.* 2015;47:1271-319.
5. Gomber P, Kauffman RJ, Parker C, Weber BW. FinTech: Prospects and challenges. *Bus Horiz.* 2018;61(1):35-46.
6. Agarwal S, Kumar A, Sharma P. FinTech literacy among Indian students: A case study. *Int J Financ Stud.* 2021;9(3):45-59.
7. Sharma R, Singh D. Awareness and adoption of FinTech applications among commerce students in India. *Asian J Financ Res.* 2022;12(2):120-32.
8. Gupta P, Verma R. Integrating FinTech education in commerce curriculum: Opportunities and challenges. *J Educ Bus.* 2021;96(6):361-70.
9. Mishra S. Digital financial literacy and cybersecurity concerns: An Indian perspective. *Int J Bank Mark.* 2020;38(5):1103-17.
10. Kapoor A, Das S. Experiential learning in FinTech education: A practical approach. *J Financ Educ Res.* 2019;21(2):55-70.
11. Reddy K, Nair S. Role of FinTech courses in enhancing employability among commerce graduates. *Edu Innov.* 2020;7(1):30-42.
12. Bhattacharya S, Ghosh A. Academia-industry partnerships for FinTech education in India. *J Financ Serv Res.* 2021;60(3):275-90.
13. Choudhury M, Sen P. Digital literacy programs for promoting FinTech awareness among students. *Asian Educ Dev Stud.* 2020;9(4):545-59.

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