

Digital Banking and Its Impact on Financial Accessibility in India

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Abstract

Digital banking—mobile and internet banking, UPI-based payments, Aadhaar-enabled services, and fintech-led onboarding—has reshaped financial accessibility in India by lowering transaction costs, expanding reach beyond physical branches, and enabling real-time, low-value payments at scale. This paper assesses how digital banking contributes to financial access across three dimensions: **availability** (reach and touchpoints), **affordability** (cost and convenience), and **usage** (regular adoption for payments, savings, and credit). Using official scheme and system indicators, we show that India has built a large base for access via financial inclusion (PMJDY) and rapid expansion of digital payments (UPI). Evidence indicates UPI transaction volumes rose from **92 crore (FY2017–18)** to **13,116 crore (FY2023–24)**, while total digital payment transaction volume increased from **2,071 crore (FY2017–18)** to **18,737 crore (FY2023–24)**. ([Department of Financial Services](#)) We also document enabling infrastructure: **57.52 crore PMJDY beneficiaries as of 28/01/2026**, a large national internet subscriber base, and expanded payment touchpoints supported by policy initiatives like PIDE. ([pmjdy.gov.in](#)) The paper concludes that digital banking has materially improved day-to-day financial access, but persistent barriers—digital divide, capability gaps, fraud risks, and uneven rural infrastructure—still constrain equitable outcomes.

Keywords: Digital banking, financial accessibility, UPI, PMJDY, digital payments, Aadhaar, fintech, India, inclusion.

1. Introduction

Financial accessibility means more than owning a bank account. It includes the ability to **open, use, and benefit** from formal financial services—payments, savings, insurance, and credit—at reasonable cost and with adequate consumer protection. In India, the rise of digital banking has created a new access pathway where **smartphones/feature phones + identity rails + payment infrastructure** can substitute for physical branch dependence.

India’s digital banking ecosystem grew on the foundation of large-scale inclusion (Jan Dhan), identity verification, interoperable payments (UPI), and public–private innovation. The result is a shift from “branch-led access” to “device-led access,” where transactions can happen anywhere and anytime.

2. Digital Banking in India: What it Includes

Digital banking in India can be viewed as four functional layers:



1. **Digital onboarding and account access:** e-KYC, account opening, mobile/internet banking login and service delivery.
2. **Digital payments:** UPI, cards, QR acceptance, wallets, and bank transfers (NEFT/IMPS).
3. **Assisted digital models:** Business Correspondents (BCs), AePS/micro-ATMs (critical for cash-in/cash-out).
4. **Digital credit and financial products:** app-based small loans, BNPL, micro-insurance distribution, and platform-based financial marketplaces.

3. Conceptual Framework: How Digital Banking Improves Accessibility

This paper uses an economic access framework:

- **Availability (Reach):** Are services physically or digitally reachable (internet, BCs, QR/POS, interoperable rails)?
- **Affordability (Cost & Convenience):** Are transaction costs low (fees, travel time, paperwork)?
- **Usage (Adoption & Frequency):** Do households/SMEs use services regularly for payments, savings, and credit?
- **Quality & Safety:** Are services reliable, secure, and protected from fraud/mis-selling?

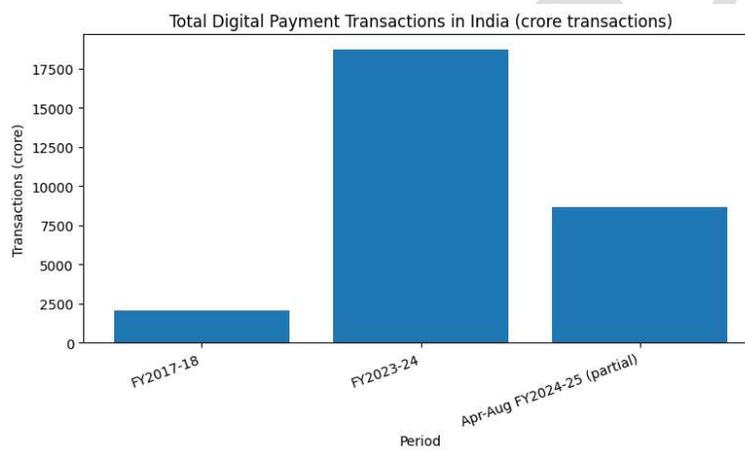
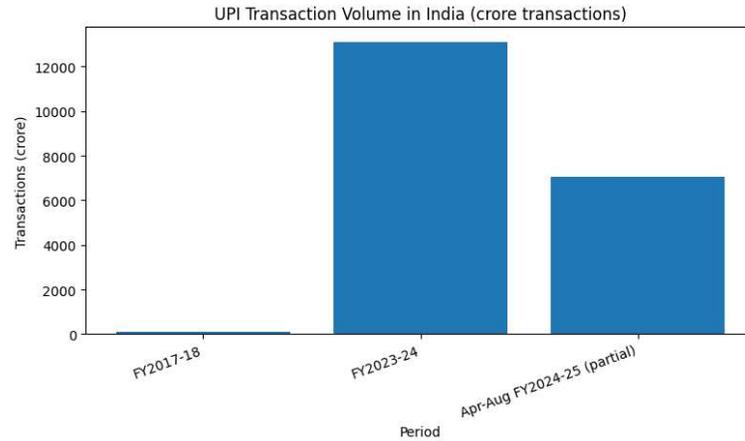
Digital banking improves access by reducing **fixed costs** (no branch visit), reducing **marginal costs** (cheap micro-transactions), and improving **trust and safety** when consumer protection is strong.

4. Evidence from India: Digital Banking Scale and Access Indicators

4.1 Explosion of digital payments (UPI and overall digital transactions)

Official government reporting shows UPI grew from **92 crore transactions in FY2017–18** to **13,116 crore in FY2023–24**. ([Department of Financial Services](#)) Over the same period, **total digital payment transactions** rose from **2,071 crore (FY2017–18)** to **18,737 crore (FY2023–24)**. ([Press Information Bureau](#))

This scale matters for accessibility: low-value digital payments make formal finance “everyday usable,” not just “available.”



4.2 Financial inclusion base: Jan Dhan (PMJDY)

PMJDY remains a key access backbone. The official dashboard reports **57.52 crore beneficiaries banked** (as of **28/01/2026**) along with large aggregate balances. Digital banking builds on this base by enabling low-cost transactions and remote access for account holders—especially when paired with RuPay cards, UPI, and BC-assisted services.

4.3 Connectivity and “digital readiness”

Connectivity is a precondition for purely self-service digital access. A government press note reports **1,002.85 million internet subscribers** as of **April–June 2025**, and notes rural internet penetration challenges. ([Press Information Bureau](#)) This is critical: growth in digital banking can outpace connectivity quality and device access, creating uneven outcomes.

4.4 Expansion of acceptance infrastructure (touchpoints)

A key bottleneck in digital inclusion is merchant acceptance. A PIB release on UPI’s global recognition notes that the **Payments Infrastructure Development Fund (PIDF)** helped deploy **~5.45 crore digital touch points** in tier 3–6 centres as of **31 Oct 2025**.

5. Impact Pathways: What Digital Banking Changes Economically

5.1 Lower transaction costs and time costs

Digital banking reduces the need for travel to branches, cuts waiting time, and enables micro-transactions that were previously uneconomical. This particularly benefits:

- rural households (distance costs),
- daily wage workers (high opportunity cost of time),
- micro-merchants (small ticket size).

5.2 Greater usage intensity, not just account ownership

Account access becomes meaningful when people transact frequently. The rapid growth in UPI volumes and overall digital payments reflects movement from “account presence” to “account usage.”

5.3 Support to small businesses and informal sector formalization

QR-based payments, interoperable transfers, and digital statements can improve record-keeping and cash-flow visibility. Over time, this can support:

- credit assessment (transaction history),
- tax compliance convenience (where applicable),
- reduced cash-handling risk.

5.4 Inclusion via assisted digital (BCs + Aadhaar-enabled models)

For populations with limited digital literacy or device access, assisted models bridge gaps. While this paper focuses on macro evidence, policy focus on expanding touchpoints (e.g., PIDF) indicates recognition that inclusion is not purely smartphone-led.

6. Constraints and Risks (Why Access is Still Unequal)

1. **Digital divide (device/internet gaps):** Even with high aggregate subscriber numbers, rural and low-income households face access constraints.
2. **Digital literacy and trust:** First-time users may struggle with app onboarding, language barriers, and fear of fraud.
3. **Fraud and consumer protection:** As digital volumes rise, fraud risk becomes a key inclusion barrier (people stop using systems they don't trust). A recent Reuters report notes RBI plans to compensate customers for small-value digital fraud losses under a proposed framework—showing policy emphasis on trust and protection.
4. **Intermittent infrastructure:** Network reliability, power supply, and device affordability influence sustained use.
5. **Over-indebtedness risk via digital credit:** Easy app-based credit can create debt stress without strong underwriting and disclosures.



7. Policy Recommendations to Deepen Financial Accessibility

1. **Strengthen rural connectivity and affordability:** prioritize last-mile broadband and low-cost device access (especially in low-penetration districts).
2. **Scale assisted digital responsibly:** expand BC networks and acceptance infrastructure in underserved areas (PIDF-like deployment plus local grievance redress).
3. **Payment safety as inclusion policy:** reduce fraud through stronger authentication, faster dispute resolution, and customer compensation mechanisms for small losses to preserve trust.
4. **Targeted digital financial literacy:** local-language, use-case-based training (pensions, scholarships, bill pay, merchant QR).
5. **Outcome-based inclusion metrics:** move beyond “accounts opened” to “active accounts,” “frequency of use,” and “successful dispute resolution rates.”

8. Conclusion

Digital banking has transformed financial accessibility in India by making transactions cheaper, faster, and more widespread than branch-centric models. Official data demonstrates massive growth in UPI and total digital payments, underpinned by a large inclusion base (PMJDY), expanding internet connectivity, and policy-driven acceptance infrastructure. However, digital divides and rising fraud risks remain binding constraints—meaning the next phase of inclusion must focus on **equity, safety, and capability**, not only scale.

References:

- [1]. Ministry of Finance / DFS: Digital payments and UPI growth figures across fiscal years. ([Department of Financial Services](#))
- [2]. PMJDY official dashboard: beneficiaries and balances (as of 28/01/2026). ([pmjdy.gov.in](#))
- [3]. PIB: Internet subscriber base and rural penetration context (Apr–Jun 2025). ([Press Information Bureau](#))
- [4]. PIB: PIDF deployment of digital touchpoints in tier 3–6 centres (as of 31 Oct 2025). ([Press Information Bureau](#))
- [5]. Reuters: RBI proposal to compensate customers for small digital fraud losses (policy direction). ([Reuters](#))