REVIEW ARTICLE

IMPACT OF GOOGLE PAY (GPAY) ON DIGITAL BANKING TRENDS AND THE CASHLESS ECONOMY IN INDIA

Anthony Savio Herminio da Piedade Fernandes

Philu's Farm, Goa

*Corresponding author E-mail: anthonysaviodapiedadefernandes@gmail.com

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Abstract:

Since the launch of the Unified Payments Interface (UPI) and the entry of tech platforms such as Google Pay (GPay), India's payments and banking landscape has experienced rapid transformation. This paper examines the impact of GPay on digital banking trends and the broader movement towards a cashless economy in India. It synthesizes transaction and regulatory data, industry analysis, academic studies, and news reporting to evaluate: (1) how GPay influenced consumer and merchant payment behavior; (2) the responses of traditional banks and regulators; (3) macro indicators related to cash usage; and (4) risks and policy implications emerging from rapid digitalization. Findings show that GPay accelerated consumer adoption of instant mobile payments, increased digital transaction velocity, and catalyzed merchant digitization — thereby advancing the cashless agenda in practical terms — while not eliminating cash usage. The rapid uptake also revealed systemic challenges: fraud vectors, concentration risks, gaps in credit inclusion for digitally onboarded users, and new regulatory trade-offs. The paper concludes with recommendations for policymakers, banks, and platform operators to maximise inclusion and innovation while strengthening consumer protection and financial stability.

Keywords: Google Pay, GPay, UPI, Digital Banking, Cashless Economy, India, Financial Inclusion, Payments Policy, Fraud, NPCI.

Introduction:

India's financial ecosystem has been reshaped over the past decade by two interlocking forces: public-sector infrastructure (notably the Unified Payments Interface, UPI) and private-sector innovation (third-party apps that leverage UPI). Among those apps, Google Pay has been especially consequential. Launched as Tez in 2017 and rebranded Google Pay in 2018, GPay combined Google's product design ethos and distribution reach with UPI's bank-to-bank rails to create a fast, low-friction payments experience for millions of Indian users (Google/Tez launch and rebrand; case studies). The market response has been dramatic: UPI monthly volumes reached record levels in 2025, surpassing 20 billion

transactions in August 2025, reflecting how embedded app-led UPI payments have become in everyday life.

This study investigates how GPay specifically shaped digital banking trends — including user behavior, merchant adoption, bank–fintech relationships, product innovation, and regulatory responses — and evaluates whether these trends point to a genuinely cashless Indian economy or rather to a more complex coexistence of cash and digital payments.

Literature Review and Context

Research on digital payments in India establishes UPI as a pivotal public-good infrastructure that dramatically lowered transaction costs and enabled interoperability across banks and third-party apps (NPCI statistics and academic work). Studies using behavioral and technology-acceptance frameworks (TAM, UTAUT) show that perceived usefulness, ease of use, trust, and facilitating conditions predict adoption of mobile payments — factors that UPI plus polished apps like GPay effectively addressed. Several empirical papers and sector reports connect the rise of UPI with improved merchant record-keeping, increased formalization of small retailers, and greater convenience for consumers (academic preprints and industry analyses).

Concurrently, policy and academic critiques have warned about emerging risks: concentration of transaction volumes among a few private apps, the rising incidence of social-engineering frauds enabled by instant transfers, and the challenge of translating transactional inclusion into access to credit and long-term financial services. The RBI and NPCI have reacted with a set of operational and policy measures addressing fraud detection, liability frameworks, and proposals to limit market concentration among third-party app providers. Reuters reporting and regulatory notices document these ongoing deliberations.

Methodology

This paper adopts a qualitative-analytic method built on triangulation of:

- Primary transaction statistics from NPCI (monthly UPI volumes and values);
- Public reports and press releases from the Reserve Bank of India (RBI) and the Ministry of Finance;
- Industry analysis (PwC, PaymentsCMI, TechCrunch, Mint, DataNext case studies) and reputable news coverage (Reuters, Economic Times); and
- Peer-reviewed and preprint academic work on UPI's adoption effects and digital fraud trends.

Because the topic is fast-moving, emphasis was placed on the most recent reliable metrics (2023–2025) and on regulatory announcements that directly affect the platform–bank relationship and consumer protections. The analysis is interpretive rather than econometric; where numerical evidence is cited it relies on published NPCI and RBI sources.

GPay's Role in Shaping Digital Banking Trends

1. Rapid user adoption and behavioural change

GPay capitalised on a design-first, incentives-driven launch (Tez cash mode, referral rewards) that accelerated viral adoption in urban and peri-urban India. Its focus on a simplified user experience (single tap P2P transfers, QR payments, integration with Google accounts and Android's ecosystem)

lowered cognitive and technical friction for user uptake. The result: GPay became one of the largest UPI apps, contributing materially to UPI's explosive growth — NPCI reported monthly UPI volumes exceeding 20 billion transactions in August 2025. The platform's reach encouraged habit formation: users began preferring instant mobile transfers for everyday transactions (groceries, utilities, rent) that historically relied on cash or cheque. Behaviorally, ease-of-use plus low or zero transaction fees meant users who were previously occasional digital-payments users began transacting regularly. Several studies show UPI's introduction (and its consumer-facing apps) increased frequency of digital payments and shifted small-value cash payments to digital rails. This lowered the marginal cost of accepting and making electronic payments and helped create a new default for day-to-day commerce.

2. Merchant digitization and MSME impacts

GPay's QR-based merchant onboarding and simplified reconciliation tools made it easy for micro, small and medium enterprises (MSMEs) and informal merchants to accept digital payments almost overnight. Case studies, industry surveys, and NPCI data point to rapid merchant adoption, with small retailers reporting increased footfall and easier bookkeeping after digital acceptance. For many merchants, the UPI-GPay combo offered lower transaction costs and faster settlement than card acceptance or cash handling, reducing reconciliation time and improving cash flow predictability for small businesses.

3. Platform-to-bank partnerships: distribution without balance sheet

Crucially, GPay operates as a third-party app (TPAP) that connects users to underlying banks' accounts; it does not take deposits itself. This model created a potent distribution channel for banks: large numbers of users could be reached through the app while the banks retained financial intermediation functions (deposits, loans, capital). Google's partnerships with PSP banks (e.g., HDFC, Axis, ICICI, SBI for UPI facilitation) and later collaborations with lenders and asset managers enabled GPay to distribute savings, loans, and investment products through APIs while leaving risk-bearing on regulated entities. This facilitated rapid product rollout (merchant loans, small consumer loans, mutual fund distribution talks) without requiring Google to hold regulated balance-sheet functions directly.

4. Product innovation and convergence with digital banking

GPay's evolution from pure payments to a platform offering financial services (mutual funds, BNPL integrations, merchant lending facilitation and small loans via partner banks/NBFCs) mirrors the broader trend of "platformisation" in financial services: non-bank firms become front-end distribution layers while banks and NBFCs provide regulated financial products on the back end. This convergence accelerated digital banking trends: traditional banks responded by strengthening digital channels, improving app UX, and entering co-branded offerings or API partnerships to retain customer relationships. The net effect: a hybrid service architecture where retail banking and fintech distribution mutually reinforce each other.

Impact on the Cashless Economy: Evidence and Limits

1. Strong increase in digital transaction volumes

The most visible metric of GPay's—and UPI's—impact is transaction volume. NPCI's official product statistics recorded UPI volumes reaching 20.01 billion transactions in August 2025 (value ≈

₹24.85 lakh crore), a year-on-year volume growth of roughly 34%. These numbers indicate not only increased adoption but repeated usage — the hallmark of payments habit formation necessary for any meaningful shift toward cashlessness.

2. Cash persists — coexistence rather than elimination

Despite soaring UPI volumes, macro indicators show that physical currency in circulation (CiC) has not collapsed; it has continued to grow at a modest clip. RBI/market reports show that currency in circulation rose (for example, data through mid-2025 show CiC in the multi-lakh crore range and year-on-year increases), meaning cash remains an essential medium for many transactions (savings hoarding, informal transfers, and certain small-ticket exchanges). The coexistence of high digital volume and persistent currency suggests that India is moving toward a dual economy in practice: one increasingly digitized in routine retail flows, but where cash continues to be demanded for certain uses and by certain demographic cohorts.

3. Financial inclusion vs. credit inclusion

GPay and UPI have demonstrably increased transactional inclusion: more individuals have digital transaction histories and more small merchants accept electronic payments. However, translating transactional footprints into credit access remains uneven. Many newly digitized users lack formal credit histories or collateral, and while fintechs/platforms have begun to extend small-ticket credit via partner banks/NBFCs, comprehensive credit inclusion requires robust risk models, regulatory clarity, and responsible underwriting — capabilities principally held by banks. Hence, while transactional inclusion is high, structural financial deepening (savings mobilization, long-term credit) is progressing more slowly.

Risks and Unintended Consequences

1. Fraud and consumer protection challenges

Rapid adoption has coincided with a sharp rise in social-engineering fraud and authorised-push-payment scams. Government and industry reports pointed to hundreds of thousands of UPI fraud complaints in recent periods; for FY2024–25, some government summaries and reporting placed fraud cases in the hundreds of thousands with crores of rupees lost cumulatively. Surveys indicated that a significant share of UPI users have experienced fraud or know someone who has, and many incidents go unreported — complicating recovery and deterrence. These trends led the RBI and NPCI to strengthen device-binding rules, transaction caps, and fraud-detection tools (AI/ML platforms) and to push policy measures such as domain name controls and liability clarifications. Recent NPCI and RBI initiatives also included discontinuing certain ‘pull’ use-cases and introducing real-time fraud-monitoring platforms to curb misuse.

2. Concentration and systemic dependency

A small number of apps (including PhonePe and Google Pay) processed a dominant share of UPI volumes in late 2024 and 2025, provoking regulatory concern about market concentration and the risks of single-platform failures or misuse. NPCI deliberated market-share caps and user-onboarding restrictions (with phased implementations and postponements) to avoid destabilizing the ecosystem. Reuters reported that Google Pay and PhonePe together accounted for a major share of UPI activity,

leading to policy debates about caps and fair competition. Concentration raises questions about gatekeeper power, data governance, and market abuse risks.

3. Data governance and privacy

Platformization centralizes significant user data with private firms. While data helps personalize services and improve underwriting, it also raises privacy concerns, cross-border data flow questions, and the need for strong data-protection frameworks. India's evolving privacy and data-protection policy architecture must reconcile innovation with users' rights and national security considerations.

Regulatory and Industry Responses

1. NPCI and RBI operational changes

Regulators have responded with a combination of infrastructure upgrades (fraud detection and transaction analytics), operational rule changes (device binding, transaction caps), and market governance (consultations on market-share limits). NPCI also adjusted UPI rules to phase out certain pull payment flows that were misused and to mandate stronger authentication for higher-value transfers. The RBI also accelerated plans for centralized fraud intelligence platforms and took steps to restrict deceptive domain names used in phishing. These interventions are explicitly designed to retain the advantages of rapid, interoperable payments while reducing systemic and consumer risks.

2. Banks' strategic shifts

Traditional banks have doubled down on digital services to remain relevant in a UPI-dominated retail payments world. Banks have invested in improved mobile apps, API capabilities, instant onboarding workflows, and partnerships with fintech platforms for distribution. Many banks now see third-party apps as essential distribution partners and compete by offering better backend services (faster settlements, co-branded savings/offers, digital loans) and by leveraging transaction data for customer insights.

3. Platform governance and accountability

Market participants, including GPay, have scaled up education campaigns, in-app warnings, and one-click reporting mechanisms to reduce fraud losses and help users who fall victim to scams. Platforms increasingly work with banks and law enforcement to facilitate faster remediation and track scam networks.

Policy Recommendations

Based on the findings above, the following policy and industry steps would help consolidate gains while reducing risk:

1. ***Strengthen Shared Fraud-Response Mechanisms:*** Expand real-time fraud-intelligence platforms accessible to banks, NPCI, and major TPAPs so suspicious patterns are detected and acted upon promptly. The RBI's Digital Payments Intelligence initiatives can be central here.
2. ***Clarify Liability & Streamline Redressal:*** Create clear, fast liability rules for scams (with consumer-friendly processes) and one-click grievance reporting that triggers immediate provisional credit where merchant error is not provable. Surveys note underreporting and slow recovery — both erode trust.

3. ***Manage Concentration Using Graduated Measures:*** Maintain open-access and interoperability while phasing in anti-concentration measures (market-share ceilings, fair-conduct rules) with sufficient lead time to avoid disrupting service continuity. NPCI's cautious phasing reflects this balance.
4. ***Enable Credit Linkages for Digitally Onboarded Users:*** Support regulated sandboxes and data-consent frameworks that allow transactional footprints to feed responsible credit scoring (with privacy safeguards), helping MSMEs and individuals access small-ticket credit. Partnerships between TPAPs and NBFCs/banks should be facilitated under transparent underwriting oversight.
5. ***Invest in Digital Literacy & Inclusion:*** Public–private programs should target digital literacy, emphasising scam avoidance, complaint filing, and basic digital finance concepts — especially for rural and older cohorts still reliant on cash. Evidence suggests user education reduces social-engineering susceptibility.
6. ***Reinforce Data-Protection & API Governance:*** Ensure strong data-protection rules for payment platforms (consent, portability, local storage standards as appropriate) and require security audits for high-volume TPAPs.

Discussion: Has GPay Made India Cashless?

The evidence supports a nuanced conclusion: GPay, together with UPI, has dramatically advanced digital payments in India and materially reduced reliance on cash for many daily retail interactions — particularly in urban, semi-urban, and digitally connected small merchants. The sheer scale of UPI transaction volumes (20+ billion transactions per month by Aug 2025) indicates that India's payment fabric is highly digitized for many transactions.

However, India is not purely cashless. Currency in circulation metrics and RBI reporting show continued demand for cash; certain transactions (large purchases, informal lending, some rural markets, and culturally embedded cash behaviors) remain cash-centric. The transition toward fewer cash transactions is real and accelerating, but it coexists with pockets of cash dependence. Thus, the practical policy goal should be to enable safe, affordable digital choices while preserving liquidity and access for those who prefer or need cash.

Conclusion:

Google Pay's role in India exemplifies how platform-led innovation — when interoperable with robust public infrastructure like UPI — can accelerate financial inclusion, digitize commerce, and reshape banking distribution channels. GPay helped create everyday habits of instant mobile payments, catalysed merchant digitization, and pressured banks to upgrade digital services and distribution models. At the same time, the rapid shift revealed vulnerabilities: fraud, concentration, and an incomplete translation of transactional inclusion into access to formal credit. Policymakers and industry must therefore combine continued innovation with stronger consumer protection, clearer liability rules, privacy safeguards, and inclusive credit pathways to convert the convenience of digital payments into durable welfare gains. In this evolving ecosystem, the future is not "cashless" in the absolute sense but

increasingly digital — with success measured by safety, inclusion, and the equitable distribution of benefits.

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