

A Mixed-Methods Investigation into Digital Public Infrastructure-Led Financial Inclusion, Stakeholder Trust, and Policy Governance in India's Emerging FinTech Ecosystem

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Abstract

India's FinTech landscape has advanced from a payments-led experiment to the operating backbone of the country's financial economy, propelled by Digital Public Infrastructure (DPI) instruments such as Aadhaar, the Unified Payments Interface (UPI), Account Aggregators, the Unified Lending Interface (ULI), and the Reserve Bank of India's expanding retail and wholesale Central Bank Digital Currency (e₹) pilots (RBI, 2025). Despite this infrastructural depth, the persistent gap between financial *access* and financial *usage*, uneven adoption across rural and low-income segments, an evolving artificial-intelligence risk surface, and a fragmented regulatory-sandbox architecture continue to constrain the full realisation of an inclusive digital financial ecosystem (Boro, 2025; Ghosh & Kulkarni, 2025). This proposal outlines a three-year post-doctoral research programme, to be undertaken under the AICTE Post-Doctoral Fellowship (PDF) Scheme 2026–27 in the discipline of Management, proposing the original SETU Framework – an acronym denoting Stakeholder-alignment, Ecosystem infrastructure, Trust-and-technology governance, and Universal financial upliftment – as an integrative, multi-level lens for examining India's FinTech ecosystem. Employing a pragmatist, sequential explanatory mixed-methods design that triangulates a large-scale structured survey (analysed through Partial Least Squares Structural Equation Modelling), semi-structured key-informant interviews (analysed thematically), and secondary policy-document analysis of Reserve Bank of India, National Payments Corporation of India, and Government of India datasets, the study will generate empirically grounded, stakeholder-specific policy recommendations for regulators, financial institutions, FinTech enterprises, Micro, Small and Medium Enterprises (MSMEs), and citizen-users. The research is positioned to make a distinctive scholarly and policy contribution at the intersection of financial inclusion, digital governance, and responsible artificial-intelligence adoption in India's FinTech ecosystem, in direct alignment with the nation's Viksit Bharat 2047 vision.

Keywords

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1. Introduction

Financial technology, or FinTech, has moved decisively from the periphery of financial services to their very core, reshaping how households, micro-enterprises, and institutions across the world save, borrow, invest, insure, and transact. India's experience of this transformation is distinctive in both scale and design. Rather than allowing FinTech to develop purely as a market-led phenomenon, the Government of India and the Reserve Bank of India (RBI) have deliberately architected a layered Digital Public Infrastructure (DPI) – comprising Aadhaar-based digital identity, the Unified Payments Interface (UPI), Direct

Benefit Transfer rails, e-KYC, DigiLocker, and the Account Aggregator framework – upon which private and public FinTech innovation is built (Ghosh & Kulkarni, 2025). This “India Stack” approach has enabled UPI alone to process over ₹199 lakh crore in transaction value during FY 2025–26, making it the world's largest real-time retail payment system by volume (Bankopedia, 2026), while the RBI's composite Digital Payments Index rose from 465.33 in September 2024 to 516.76 by late 2025, reflecting sustained deepening of digital financial infrastructure across both urban and rural India (RBI-DPI Index, 2025).

The frontier of India's FinTech ecosystem has since moved well beyond payments. The RBI Governor's October 2025 address at global fora identified data aggregation, the Digital Rupee, asset tokenisation, artificial intelligence, and fraud prevention as the five priorities shaping the “next phase” of India's digital financial journey (*RBI Governor's Address, 2025*). The retail Central Bank Digital Currency (e₹-R) pilot, launched in December 2022, has since scaled to sixteen cities, five million users, and roughly four hundred thousand merchants by early 2026, while programmable CBDC pilots such as Gujarat's G-SAFAL and Andhra Pradesh's DEEPAM 2.0 demonstrate targeted-subsidy use cases (*Bankopedia, 2026*). The Unified Lending Interface, the Digital Payments Intelligence Platform, tokenised deposit pilots, and successive cohorts of the RBI's Regulatory Sandbox – spanning retail payments, cross-border payments, MSME lending, fraud mitigation, and now theme-neutral innovation – collectively signal a regulatory architecture attempting to keep pace with a rapidly compounding pace of technological change (*ICLG, 2026; ORF, 2025*).

Financial inclusion remains the most consequential lens through which this transformation must be evaluated. India's fintech ecosystem is frequently ranked among the largest globally, and empirical research affirms that its digital rails have measurably widened access to formal financial services among historically underserved populations (*Sandhu et al., 2025; Asif et al., 2023*). Yet a growing body of Indian and international scholarship converges on a more nuanced diagnosis: access has consistently outpaced usage. Boro (2025), drawing on Global Findex, RBI, NPCI, SEBI, and PMJDY dashboards, demonstrates that while the JAM Trinity (Jan Dhan–Aadhaar–Mobile) and UPI have dramatically expanded account ownership, meaningful and sustained usage – particularly among rural, low-income, and women account-holders – continues to lag. Complementary qualitative evidence from in-depth interviews with FinTech founders, investors, and policy experts similarly finds that *lack of trust, financial literacy gaps, and behavioural resistance to digital transacting* remain the binding constraints on inclusion, even where infrastructure and regulatory accommodation are strong (*Ghosh & Kulkarni, 2025*).

Parallel to this inclusion narrative, a second and increasingly urgent research frontier has emerged around the governance of artificial intelligence within FinTech. As generative and predictive AI systems are embedded into credit scoring, fraud detection, robo-advisory, and customer-facing services, scholars have begun mapping the resulting risk surface against India's existing regulatory architecture, cautioning that consumer-facing and institution-facing AI-induced

vulnerabilities may outpace the current pace of supervisory adaptation (*IJCRT, 2025*). This concern is compounded by the rapid diffusion of generative AI tools across Indian banking operations, where empirical surveys report that a majority of banks are actively exploring enterprise-grade AI adoption even as governance, explainability, and model-risk-management practices remain uneven (*IJARST, 2025*). Regulatory sandboxes, RBI's Innovation Hub, and the DPDP Act 2023 collectively constitute an evolving, but still maturing, governance response to these risks (*ORF, 2025*).

It is within this convergence of infrastructural maturity, persistent inclusion gaps, and emergent technological risk that the present research is situated. A systematic review of the FinTech-and-financial-inclusion literature confirms that while empirical studies proliferate, they remain disproportionately siloed – quantitative studies privilege individual-level adoption constructs, qualitative studies privilege ecosystem narratives, and policy analyses privilege regulatory description – with comparatively few studies attempting a triangulated, multi-level, and contemporaneously grounded account that spans macro-level DPI architecture, meso-level ecosystem-stakeholder dynamics, and micro-level user and MSME adoption behaviour within a single, coherent research design (*Mittal & Singh, 2025; Kishor et al., 2025*). The proposed post-doctoral research programme is designed precisely to fill this integrative space, and to translate its findings into a stakeholder-specific policy roadmap consistent with the Government of India's Viksit Bharat 2047 vision for an inclusive, resilient, and technologically sovereign financial system.

2. Review of Literature and Theoretical Foundations

The scholarly literature on FinTech and financial inclusion in India can be organised into four broadly overlapping streams, each of which informs a distinct dimension of the proposed SETU Framework.

2.1 Access-versus-Usage and Macro-Level Infrastructure Studies

Drawing on large secondary datasets – the World Bank Global Findex, RBI, NPCI, SEBI, and PMJDY – this stream documents the dramatic expansion of formal-account ownership under the JAM Trinity and UPI, while demonstrating that the intensity and diversity of *usage* (digital payments, investments, credit, insurance) remains considerably more uneven across geography, gender, and income (*Boro, 2025*). Bibliometric and systematic-review studies corroborate this pattern at a global scale, identifying mobile money, digital lending, and cost-reduction as the dominant mechanisms through which FinTech advances inclusion, while flagging income inequality, digital

literacy, and regulatory capacity as recurring moderating variables (Mittal & Singh, 2025; Kishor et al., 2025).

2.2 Individual and MSME Adoption Behaviour

A second stream applies technology-acceptance and unified-theory-of-acceptance constructs – perceived usefulness, perceived ease of use, social influence, and financial literacy – to explain adoption intention among under-banked and rural populations. Recent structural-equation-modelling evidence from rural India confirms that financial literacy functions as both a direct driver and a moderating variable shaping trust and behavioural intention, particularly among first-time and low-income users (Jena, 2025; Rafat et al., 2026). Sandhu et al. (2025) extend this line of inquiry through a Partial-Least-Squares model dissecting the direct and indirect determinants of FinTech-driven inclusion in the Indian context, offering a validated empirical instrument on which the present study's quantitative phase can build and extend.

2.3 Ecosystem, Stakeholder, and Regulatory Dynamics

A qualitative and policy-oriented stream examines the FinTech ecosystem as a network of interdependent stakeholders – start-up founders, incumbent banks, investors, and regulators – whose collaborative and regulatory postures jointly determine sector sustainability and inclusiveness. Thematic analysis of key-informant interviews identifies collaboration, trust-building, and an “assisted model” combining digital rails with human intermediation as central to overcoming rural adoption resistance, while also revealing that India's regulatory response, though broadly accommodative, has not always kept pace with the velocity of technological disruption (Ghosh & Kulkarni, 2025). Legal and policy scholarship on the RBI's cohort-based Regulatory Sandbox further documents its evolution from theme-specific to theme-neutral cohorts, and its expanding remit across digital lending, alternate credit scoring, and emerging technologies such as artificial intelligence and blockchain (ICLG, 2026; ORF, 2025).

2.4 Artificial Intelligence, Risk, and Governance

The most recent and rapidly evolving stream examines the diffusion of generative and predictive artificial intelligence across FinTech and banking, and the adequacy of India's regulatory architecture in addressing the resulting algorithmic, cybersecurity, and consumer-protection risks. Emerging Indian scholarship maps AI-induced threats against existing RBI regulatory instruments and finds significant coverage gaps, particularly regarding model governance, explainability, and outsourcing risk (IJCRT, 2025), while parallel work on generative AI adoption within Indian banking operations documents high institutional readiness

alongside comparatively immature governance practice (IJARSCT, 2025).

Taken together, this literature establishes a robust empirical foundation, yet also reveals the absence of a single, theoretically integrated framework capable of connecting macro-level DPI architecture, meso-level stakeholder ecosystem dynamics, micro-level adoption behaviour, and the emergent AI-governance dimension within one triangulated, mixed-methods research design – the precise space this proposal is designed to occupy.

3. Statement of the Research Problem

India's FinTech ecosystem stands at a structurally paradoxical juncture. On one hand, an unprecedented Digital Public Infrastructure – Aadhaar, UPI, Account Aggregators, the Unified Lending Interface, and an expanding Central Bank Digital Currency pilot – has produced world-leading metrics of financial access and transaction volume (Bankopedia, 2026). On the other hand, converging empirical evidence demonstrates that meaningful financial usage, sustained trust, and equitable adoption across rural, low-income, and women-headed households remain persistently below the potential implied by this infrastructure (Boro, 2025; Ghosh & Kulkarni, 2025). Simultaneously, the rapid embedding of artificial intelligence into credit-scoring, fraud-detection, and advisory functions introduces a new and imperfectly governed risk surface that could, if left unaddressed, erode the very trust on which inclusive adoption depends (IJCRT, 2025).

The central research problem this study addresses may therefore be stated as follows: *despite substantial Digital Public Infrastructure investment and an accommodative regulatory posture, India's FinTech ecosystem continues to exhibit a measurable and persistent gap between financial access and financial usage, compounded by uneven stakeholder trust, fragmented regulatory-sandbox coverage of emerging technologies, and an absence of an integrated, empirically validated framework capable of guiding coordinated policy action across regulators, financial institutions, FinTech enterprises, MSMEs, and citizen-users.*

4. Research Gap

A structured reading of the extant literature – spanning macro-level secondary-data studies, individual-adoption surveys, qualitative ecosystem research, systematic and bibliometric reviews, and emergent AI-governance scholarship – reveals four specific and interrelated gaps that this research is designed to address.

1. Fragmentation across levels of analysis. Existing studies overwhelmingly examine either the macro (infrastructure/policy), meso (ecosystem/stakeholder), or micro (individual/MSME adoption) level in isolation; very few studies triangulate all

three levels within a single, methodologically integrated design (Mittal & Singh, 2025; Kishor et al., 2025).

2. Post-2025 policy currency gap. The most recent wave of Government of India and RBI initiatives – the Unified Lending Interface, the Digital Payments Intelligence Platform, tokenised-deposit pilots, expanded retail CBDC coverage, and the theme-neutral Regulatory Sandbox cohort – postdates the majority of published empirical studies, leaving their inclusion and governance implications largely unexamined (ORF, 2025; RBI-DPI Index, 2025).
3. Under-theorised AI-risk–trust nexus. While AI-induced risk in FinTech and financial-inclusion trust have each been studied independently, their interaction – whether emergent AI governance gaps are beginning to erode the hard-won trust dividends of DPI-led inclusion – remains empirically unexplored, particularly for rural and first-time users (IJCRT, 2025; Rafat et al., 2026).
4. Absence of a unified, actionable stakeholder framework. Despite rich descriptive and thematic findings, the literature has not yet produced a validated, acronymic conceptual framework capable of translating triangulated empirical evidence into differentiated, stakeholder-specific policy prescriptions for regulators, banks and NBFCs, FinTech enterprises, MSMEs, and citizen-users simultaneously.

The proposed SETU Framework, and the sequential explanatory mixed-methods design through which it will be empirically validated, is expressly constructed to close these four gaps in a single, coherent programme of post-doctoral research.

5. Research Objectives:

The study is guided by the following six objectives, sequenced to move from descriptive mapping through explanatory modelling to prescriptive policy formulation:

1. To map the current state and trajectory of India's Digital Public Infrastructure-led FinTech ecosystem, with specific reference to UPI, Account Aggregators, the Unified Lending Interface, and the retail and wholesale Central Bank Digital Currency pilots.
2. To empirically examine the determinants of FinTech adoption and sustained usage among individual users and MSMEs across urban, semi-urban, and rural strata, integrating financial literacy, trust, perceived

usefulness, and ease of use as core constructs.

3. To investigate the perspectives and strategic responses of key FinTech ecosystem stakeholders – regulators, banks and NBFCs, FinTech enterprises, and policy experts – regarding collaboration, regulatory sandbox participation, and artificial-intelligence governance.
4. To assess the adequacy of India's current regulatory-sandbox and AI-governance architecture in addressing emerging consumer-facing and institution-facing risks in the FinTech sector.
5. To develop and empirically validate the SETU Framework as an integrative, multi-level model linking Digital Public Infrastructure, stakeholder ecosystem dynamics, trust-and-technology governance, and universal financial inclusion.
6. To formulate differentiated, evidence-based policy recommendations for the Reserve Bank of India, the Government of India, financial institutions, FinTech enterprises, MSMEs, and citizen-users to advance inclusive and responsibly governed FinTech innovation.

5.1 Research Questions

1. RQ1: What is the current architecture and growth trajectory of DPI-led FinTech infrastructure in India, and how has it evolved since 2025?
2. RQ2: What individual- and MSME-level factors most significantly determine sustained FinTech usage (as opposed to mere access) across urban, semi-urban, and rural India?
3. RQ3: How do FinTech ecosystem stakeholders perceive the effectiveness of current collaboration models, regulatory sandboxes, and AI-governance mechanisms?
4. RQ4: To what extent does India's current regulatory architecture adequately address AI-induced risks emerging within FinTech services?
5. RQ5: Can a validated, multi-level SETU Framework meaningfully explain the relationship between DPI infrastructure, stakeholder trust, and universal financial inclusion outcomes?
6. RQ6: What differentiated policy interventions would most effectively advance inclusive, secure, and trusted FinTech adoption across the ecosystem's principal stakeholder groups?

6. Conceptual Framework: The SETU Framework:

In Sanskrit and Hindi, *setu* means “bridge.” The proposed SETU Framework is offered as an original, empirically testable model that bridges the macro-level Digital Public Infrastructure of India's FinTech ecosystem with the micro-level lived experience of citizens and MSMEs, and the meso-level governance choices of regulators and institutions. It comprises four interlocking pillars, each corresponding to a construct that will be operationalised, measured, and triangulated across the study's quantitative, qualitative, and secondary-data phases.

S	Stakeholder-Alignment	The degree of collaborative alignment among regulators, banks/NBFCs, FinTech enterprises, investors, and consumer-protection bodies, measured through perceived collaboration quality, regulatory-sandbox participation, and conflict/friction indicators identified in ecosystem interviews.
E	Ecosystem Infrastructure (DPI)	The depth, reliability, and interoperability of India's Digital Public Infrastructure – UPI, Aadhaar, Account Aggregators, the Unified Lending Interface, and CBDC rails – as the structural substrate on which FinTech innovation and inclusion are built.
T	Trust and Technology Governance	The extent to which artificial-intelligence-enabled FinTech services are perceived as transparent, secure, and adequately regulated, capturing both consumer trust and

		institutional model-risk-governance maturity.
U	Universal Financial Upliftment	The realised outcome dimension – sustained usage (not mere access), financial well-being, and equitable inclusion across geography, income, and gender – that the preceding three pillars are hypothesised to jointly determine.

The SETU Framework is hypothesised as a sequential, mediated model: Ecosystem Infrastructure (E) provides the structural precondition for Stakeholder-Alignment (S) and Trust-and-Technology-Governance (T), which jointly mediate the pathway to Universal Financial Upliftment (U). This mediated structure will be empirically estimated using Partial Least Squares Structural Equation Modelling (PLS-SEM) in the quantitative phase, refined through thematic insights from the qualitative phase, and contextualised against secondary regulatory and infrastructure data – constituting the study's core theoretical contribution.

7. Significance and Unique Selling Proposition of the Study

This research is positioned to make a distinctive contribution to Indian FinTech scholarship and policy for the following reasons:

- Theoretical originality: The SETU Framework is a novel, acronymic, empirically testable multi-level model – the first, to the researcher's knowledge, to integrate DPI infrastructure, stakeholder-alignment, AI-trust governance, and inclusion outcomes within a single mediated structural model specific to the Indian context.
- Methodological rigour and triangulation: The sequential explanatory mixed-methods design combines PLS-SEM-validated quantitative modelling with thematic qualitative analysis and secondary policy-document review, exceeding the single-method designs that dominate the existing literature.
- Contemporaneous policy relevance: The study is deliberately timed to examine the post-2025 generation of Government of India and RBI initiatives – the Unified Lending Interface, the Digital Payments

Intelligence Platform, tokenised deposits, and the theme-neutral Regulatory Sandbox cohort – that remain empirically under-examined in published research.

- Direct engagement with the AI-governance frontier: By explicitly incorporating artificial-intelligence trust and governance as a core construct, the study addresses an emerging risk dimension of direct relevance to RBI's stated FinTech priorities for 2026 and beyond.
- Stakeholder-differentiated, actionable outputs: Rather than generic recommendations, the study will produce a stakeholder-specific policy matrix addressing regulators, financial institutions, FinTech enterprises, MSMEs, and citizen-users individually and jointly.
- Alignment with national policy priorities: The research programme is explicitly framed around India's Viksit Bharat 2047 vision, the G20 Digital Public Infrastructure agenda, and the AICTE mandate to advance research with direct developmental relevance.
- Institutional and disciplinary fit: Conducted from the Faculty of Management at an AICTE-approved institution, the study combines management-research rigour with the interdisciplinary breadth (finance, technology governance, and public policy) that the FinTech domain demands.

8. Research Methodology

The study adopts a pragmatist research philosophy and a sequential explanatory mixed-methods design (quantitative → qualitative → integration), selected specifically because the research questions require both the generalisable, variable-based explanatory power of quantitative modelling and the contextual, interpretive depth needed to understand stakeholder trust, behavioural resistance, and regulatory perception. This design also directly answers the AICTE PDF Scheme's expectation of methodologically robust, empirical, and evidence-based doctoral-level research.

8.1 Overall Research Design

The design unfolds across three integrated phases over the three-year fellowship period:

7. Phase I – Quantitative (Explanatory). A structured, validated survey instrument will be administered to individual FinTech users and MSME owners/managers to test the hypothesised SETU structural model.
8. Phase II – Qualitative (Explanatory Follow-up). Semi-structured key-informant interviews with regulators, bankers, FinTech founders, and policy experts will be conducted to explain,

contextualise, and enrich the quantitative findings, with particular attention to unexpected or counter-intuitive results.

9. Phase III – Secondary Data and Policy-Document Triangulation. Systematic content and trend analysis of RBI Financial Stability Reports, the RBI Digital Payments Index, NPCI transaction data, PMJDY dashboards, Union Budget documents, and Regulatory Sandbox cohort reports will contextualise both preceding phases within the current policy landscape.

8.2 Population, Sampling, and Sample Size

8.2.1 Quantitative Phase

The target population comprises adult FinTech users and MSME proprietors across Telangana and a purposively selected set of comparator states representing high, medium, and low digital-financial-inclusion intensity (as classified by the RBI Financial Inclusion Index). A stratified random sampling technique will be employed, with strata defined by geography (urban / semi-urban / rural), gender, and income band, to ensure representativeness. Based on standard PLS-SEM sample-size guidance (10× the largest number of structural paths pointing to a construct, cross-validated using GPower), *a minimum effective sample of 500–600 valid responses will be targeted, oversampled to approximately 700 to accommodate attrition and incomplete responses.*

8.2.2 Qualitative Phase

Twenty to twenty-five key informants will be purposively selected using maximum-variation sampling, spanning RBI/regulatory-adjacent policy experts, senior bankers and NBFC officials, FinTech founders/CXOs, and financial-inclusion consultants, with the final number determined by the principle of thematic saturation.

8.3 Data Collection Instruments

- Structured questionnaire (Phase I): a validated, multi-item, seven-point Likert-scale instrument operationalising the four SETU constructs – Ecosystem Infrastructure, Stakeholder-Alignment, Trust-and-Technology-Governance, and Universal Financial Upliftment – alongside financial-literacy and demographic control variables, adapted and extended from established TAM/UTAUT-based instruments validated in prior Indian FinTech research.
- Semi-structured interview guide (Phase II): open-ended protocol covering ecosystem collaboration, regulatory-sandbox experience, AI-governance perception, and inclusion strategy, administered via video conferencing and telephone.

- Secondary data protocol (Phase III): a structured data-extraction template applied to RBI, NPCI, SEBI, PMJDY, Union Budget, and Regulatory Sandbox cohort publications for the period 2022–2026.
- Pilot study: the quantitative instrument will be pilot-tested on 40–50 respondents prior to full deployment, with item refinement guided by Cronbach's alpha and exploratory factor analysis.

8.4 Data Analysis Techniques

- Quantitative analysis: Partial Least Squares Structural Equation Modelling (PLS-SEM) using SmartPLS 4, encompassing measurement-model assessment (convergent validity, discriminant validity via the Heterotrait–Monotrait ratio, composite reliability), structural-model assessment (path coefficients, R^2 , Q^2 , effect sizes), and multi-group analysis to test moderation by geography, gender, and income band.
- Qualitative analysis: Thematic analysis following the Braun and Clarke six-phase framework, supported by NVivo software, with an initial deductive coding frame derived from the SETU constructs and an inductive layer permitted to surface emergent themes.
- Secondary data analysis: Trend and content analysis of policy documents and administrative datasets, triangulated against both quantitative and qualitative findings to contextualise results within the current regulatory timeline.
- Integration: Joint-display matrices will be used to systematically integrate quantitative, qualitative, and secondary-data findings at the interpretation stage, following established mixed-methods integration practice.

8.5 Validity, Reliability, and Rigour

- Content validity of the survey instrument will be established through expert-panel review (five to seven academic and industry reviewers) prior to piloting.
- Construct reliability will be assessed via Cronbach's alpha (≥ 0.70) and composite reliability; convergent validity via Average Variance Extracted (≥ 0.50).
- Qualitative rigour will be ensured through investigator triangulation, member-checking of interview transcripts, and an audit trail of the coding process.
- Common-method bias will be assessed using Harman's single-factor test and a full collinearity VIF assessment.

8.6 Ethical Considerations

- Informed consent will be obtained from all survey respondents and interview

participants before data collection, with clear disclosure of the study's purpose, voluntary participation, and right to withdraw.

- All personal and financial data will be collected, stored, and processed in compliance with the Digital Personal Data Protection Act, 2023, with anonymisation applied at the point of data entry.
- Institutional ethical clearance will be obtained from the host institution's Research Ethics Committee before fieldwork commencement.

8.7 Scope and Delimitations

The study is delimited to India's retail and MSME-facing FinTech ecosystem (payments, digital lending, and CBDC-linked services); wholesale/inter-bank FinTech applications, cryptocurrency markets outside the RBI's regulatory perimeter, and cross-border FinTech regulation fall outside its scope. Primary data collection will be geographically anchored in Telangana with comparator sampling from two to three additional states to enable cross-regional generalisation without diluting analytical depth.

9. Expected Outcomes and Stakeholder-Specific Policy Recommendations

The study's outputs are intended to lend themselves directly to actionable policy recommendations across the FinTech ecosystem's principal stakeholder groups. Illustrative, hypothesis-informed recommendation directions – to be finalised and evidenced upon completion of empirical analysis – include:

Stakeholder	Illustrative Policy Direction
Reserve Bank of India / Regulators	Extend theme-neutral Regulatory Sandbox cohorts to explicitly cover generative-AI credit and advisory applications; formalise AI-specific model-risk-management guidance calibrated to FinTech scale.
Government of India (MeitY, DFS, MSME Ministry)	Integrate financial-literacy and “assisted-model” human-touch interventions into existing DPI rollout programmes to close the access–usage gap identified in rural and first-time-user

	segments.
Banks and NBFCs	Deepen structured collaboration frameworks with FinTech enterprises to jointly address trust deficits and underwriting-data gaps among MSME borrowers, informed by SETU stakeholder-alignment findings.
FinTech Enterprises	Prioritise transparent, explainable AI design and localised, human-assisted onboarding to convert access into sustained usage, particularly for rural and women users.
MSMEs	Adopt structured digital financial-record practices to strengthen creditworthiness under emerging alternate-data lending models such as the Unified Lending Interface.
Citizen-Users / Civil Society	Benefit from evidence-based recommendations on digital-literacy programme design, informing NGO and community-based financial-education interventions.
Academia and Future Researchers	Gain access to a validated SETU measurement instrument and dataset for replication, extension, and cross-country comparative research.

9.1 Anticipated Scholarly Contributions

- A validated, publishable structural model (the SETU Framework) contributing an original theoretical construct to the FinTech and financial-inclusion literature.

- A peer-reviewed, Scopus/Web-of-Science-indexed measurement instrument for DPI-led FinTech inclusion, available for replication across Indian states and comparator emerging economies.
- A policy brief, formally submitted to relevant Government of India and RBI stakeholders, translating empirical findings into actionable recommendations.

10. Conclusion

India's FinTech ecosystem occupies a rare position among the world's digital economies: infrastructurally advanced, policy-supported, and globally observed, yet still contending with the deeper, more difficult work of converting access into equitable, trusted, and sustained usage. This proposal has outlined a three-year, mixed-methods post-doctoral research programme – anchored in the original SETU Framework – designed to generate rigorous, triangulated, and contemporaneously grounded evidence on how Digital Public Infrastructure, stakeholder collaboration, and technology governance jointly shape inclusive financial outcomes in India. By combining structural-equation modelling, qualitative stakeholder inquiry, and systematic policy-document analysis, the study is designed not merely to describe India's FinTech transformation, but to actively inform the next generation of regulatory and institutional interventions required to realise its full developmental promise, in keeping with the Government of India's vision of a digitally empowered, financially inclusive Viksit Bharat by 2047.

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