



The Rise of the Algorithmic Advisor: How Artificial Intelligence Is Reshaping Financial Decision-Making in India

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Abstract

Artificial intelligence (AI) has moved from the periphery to the centre of financial decision-making in India, reshaping how individuals invest, borrow, and manage money, and how institutions underwrite risk and serve customers. This paper examines the extent and character of AI's influence on financial decisions in India across three domains: retail investment and wealth management, credit assessment and digital lending, and core banking operations including fraud detection and customer engagement. Drawing on regulatory reports, industry data, and secondary literature, the paper finds that AI-enabled robo-advisory platforms, algorithmic trading tools, and alternative-data credit scoring models have expanded financial access and lowered costs, particularly for younger, first-time, and previously underserved participants. At the same time, the Reserve Bank of India's Framework for Responsible and Ethical Enablement of Artificial Intelligence (FREE-AI) reflects growing regulatory recognition of risks such as algorithmic bias, reduced explainability, and overconfidence in automated advice. The paper concludes that AI is not replacing human financial judgement in India but is compressing the distance between institutional and retail decision-making, while regulatory and behavioural safeguards remain works in progress.

Keywords: artificial intelligence, financial decision-making, India, robo-advisory, credit scoring, RBI, fintech

Introduction

Financial decision-making in India has historically been mediated by intermediaries: bank managers who approved loans, brokers who executed trades, and wealth advisors who designed portfolios for a narrow, affluent clientele. Over the past five years, this intermediation model has been substantially altered by the deployment of artificial intelligence (AI) across banks, non-banking financial companies (NBFCs), fintech platforms, and capital market intermediaries. AI-driven systems now underwrite loans in minutes rather than days, recommend investment portfolios without a human advisor, screen transactions for fraud in real time, and answer customer queries through conversational agents. This shift is occurring against the backdrop of India's broader digital-finance transformation, in which the Unified Payments Interface (UPI) and the Aadhaar-linked digital identity stack have created an unusually rich data environment for AI-based decision systems to operate within.



This paper investigates how AI models are influencing financial decisions taken by individuals and institutions in India. It addresses three questions. First, in which segments of the financial system is AI most actively shaping decisions? Second, what evidence exists on the scale and direction of this influence? Third, what risks and regulatory responses have emerged as AI's role has grown? The paper argues that AI's influence is most visible in three interconnected areas: retail investing and wealth management, credit assessment and lending, and banking operations centred on fraud prevention and customer service, and that India's regulatory apparatus, led by the Reserve Bank of India (RBI) and the Securities and Exchange Board of India (SEBI), is only now catching up to the pace of adoption.

Literature Review

A growing body of regulatory and industry research documents the pace of AI adoption in Indian finance. A text-mining study by RBI staff, published in the RBI's monthly bulletin, examined AI-related language in the annual reports of major public and private banks between 2015-16 and 2022-23 and found that references to AI in private bank reports increased roughly sixfold over that period, while public sector banks saw more than a threefold increase, indicating that adoption has accelerated fastest among private lenders with greater capital and risk appetite.

In August 2025, the RBI released the report of its FREE-AI Committee, which had surveyed regulated entities across banks, NBFCs, and fintechs. The survey found that a large share of institutions were already deploying AI in customer support, sales, credit underwriting, and cybersecurity, while a much larger share expressed active interest in expanding AI use further. The committee estimated that AI could improve banking efficiency substantially and projected that India's generative AI market in financial services would grow into a multi-billion-dollar segment before the end of the decade. Academic work on the banking sector, including a 2025 study in *Frontiers in Artificial Intelligence*, similarly documents that a majority of leading Indian banks have deployed at least one AI-enabled operational system spanning customer engagement, fraud analytics, or credit processing, with projected annual investment growth in the range of 20 to 25 percent.

On the investment side, industry analysis of India's robo-advisory market values the segment in the hundreds of millions of dollars as of 2025, with projections of substantial multi-fold growth by the mid-2030s, driven by younger investors in smaller cities seeking low-cost, algorithm-driven portfolio guidance. Scholarly comparative work on Indian robo-advisory platforms such as Kuvera, Zerodha Coin, and Groww notes that, unlike the fully automated portfolio-management model common in the United States, Indian platforms operate a hybrid model that combines execution services, limited advisory functions constrained by SEBI regulation, and behavioural nudges such as goal calculators and systematic investment plan (SIP) reminders. On the lending side, literature on alternative credit scoring describes how NBFCs and fintechs increasingly combine traditional bureau data with non-traditional signals, including utility and mobile-bill payment histories and UPI transaction patterns, to assess borrowers who lack a formal credit history.

Methodology

This paper adopts a qualitative, document-based research design appropriate for an emerging and fast-evolving policy area. It synthesises secondary sources published between 2024 and 2026, including the RBI's FREE-AI Committee Report, RBI bulletin research, SEBI regulatory guidance, industry and consulting analyses (including from PwC India and Deloitte India), academic journal articles, and market research on India's fintech and robo-advisory sectors. Sources were selected for relevance to three domains of financial decision-making: retail investment, credit and lending, and core banking operations. Because primary survey data on individual decision-making is not yet widely available in the public domain, this paper relies on institutional disclosures, regulatory reports, and market data as proxies for behavioural change, a limitation discussed further in the conclusion.



Findings and Discussion

Retail Investment and Robo-Advisory

The clearest evidence of AI reshaping individual financial decisions in India lies in retail investing. SEBI data show that the total number of demat accounts reached approximately 21.6 crore by the end of December 2025, with close to three-quarters of new accounts opened by investors under 30 years of age, many of whom have never consulted a human wealth manager. Platforms such as Jarvis Invest offer continuous portfolio monitoring, automated risk profiling, and algorithmic rebalancing, while Zerodha's Streak platform enables retail clients to design and test trading strategies without manual coding. The average fee for robo-advisory services in India, at roughly 0.5 percent of assets under management, compares favourably with the 1 to 2 percent typically charged by traditional advisors, lowering the cost barrier to professional-grade portfolio guidance.

Monthly contributions to systematic investment plans rose to over Rs 31,000 crore in December 2025, alongside growth in total mutual fund folios, suggesting that AI-supported platforms are reinforcing, rather than replacing, disciplined retail investing habits. However, industry commentary cautions that access to AI-driven tools is not equivalent to the judgement required to use them well: SEBI data on losses in futures and options trading show that the most active traders are frequently under 30 years of age and earning modest incomes, many having begun trading after the COVID-19 pandemic through easily accessible mobile applications. This suggests that AI's influence on investment decisions is double-edged, expanding access to markets while also lowering the friction involved in high-risk, speculative trading.

Credit Assessment and Digital Lending

AI's influence on credit decisions in India is substantial and growing. Traditional underwriting, reliant on CIBIL bureau scores and manual document review, typically required three to five days per application; AI-based systems now compress this process to minutes by combining bureau data with bank-statement analysis, GST returns, Account Aggregator data, and UPI transaction patterns. NBFCs, which collectively manage a large share of India's outstanding credit and account for a growing share of new digital lending disbursements, have been early and aggressive adopters. Large lenders such as Tata Capital report digital onboarding rates above 95 percent, while Muthoot Finance has deployed machine-learning-based gold valuation models that reduce per-transaction appraisal time from roughly 45 minutes to under five minutes.

Alternative credit scoring, which incorporates non-traditional data such as mobile and utility bill payments, digital footprints, and, in some cases, psychometric assessments, is increasingly used to extend credit to gig workers, new-to-credit borrowers, and micro, small, and medium enterprises that lack a formal credit history. Most lenders now combine bureau scores with these alternative signals in a hybrid model intended to reduce false rejections while maintaining risk discipline. This shift materially changes financial decision-making at the household level: individuals who would previously have been excluded from formal credit, or relegated to informal lenders charging high interest rates, are increasingly able to access regulated credit products, with the underlying decision of creditworthiness made substantially by AI-driven models rather than a human loan officer.

Banking Operations, Fraud Detection, and Customer Engagement

Beyond investment and lending, AI has become embedded in the operational core of Indian banking. State Bank of India's chatbot handles a large volume of routine customer queries, reducing the transactional burden on branch staff, while private banks have integrated AI into fraud analytics given the scale of India's digital payments ecosystem, which surpassed 180 billion transactions in the 2024-25 financial year, driven largely by UPI. Because fraud detection systems flag suspicious transactions in real time, they directly shape decisions



such as whether a payment is blocked, a card is frozen, or a customer is asked for additional authentication, decisions that were previously made through slower, rules-based or manual review.

Regulatory Response: The RBI's FREE-AI Framework

The scale of AI adoption has prompted a direct regulatory response. In December 2024, the RBI constituted a committee to examine AI use in the financial sector, culminating in the August 2025 release of the Framework for Responsible and Ethical Enablement of Artificial Intelligence (FREE-AI). The framework is organised around seven guiding principles, described as "Sutras," which emphasise public trust, human primacy in final decision-making, protection of human safety and interests in AI-customer interactions, prioritisation of responsible innovation over blanket restriction, and non-discriminatory, unbiased AI behaviour, alongside accountability for entities deploying AI regardless of the model's degree of autonomy. Operationally, the committee's 26 recommendations span six pillars: infrastructure, policy, capacity-building, governance, consumer protection, and independent assurance, and include a proposed public fund of roughly 575 million dollars to support shared AI infrastructure, datasets, and a regulatory sandbox intended to help smaller lenders keep pace with larger institutions.

The FREE-AI report also directs regulated entities to disclose AI governance frameworks in their annual reports, to maintain board-approved AI policies, and to build inventories of AI models and their associated risks. Legal commentary has noted that while the framework is broadly aligned with India's Digital Personal Data Protection Act, formal model-risk-management guidelines and minimum data-privacy standards specific to AI remain to be finalised, meaning that as of mid-2026 the framework functions primarily as a set of recommendations rather than binding regulation.

Risks and Limitations

Several risks accompany AI's growing role in Indian financial decision-making. First, explainability remains limited: complex machine-learning credit models can be difficult for regulators, and even the lending institutions themselves, to fully interpret, complicating efforts to demonstrate that decisions are free of bias. Second, the same accessibility that has broadened financial inclusion, particularly in retail trading, appears correlated with rising losses among young, lower-income, first-time traders, suggesting a gap between access to AI-powered tools and the financial literacy needed to use them prudently. Third, India's robo-advisory sector remains regulated primarily as an extension of existing investment-adviser rules, with SEBI treating automated platforms similarly to human advisors rather than under a bespoke regulatory regime, which some legal commentators argue leaves gaps around algorithm auditing and conflict-of-interest disclosure. Finally, because much of the evidence available on AI's influence comes from industry and institutional disclosures rather than independent, peer-reviewed behavioural research, the precise causal contribution of AI, as distinct from broader digitisation and smartphone penetration, is difficult to isolate.

Conclusion

Artificial intelligence has become a material force in Indian financial decision-making, not by replacing human judgement outright but by compressing the distance between institutional-grade analysis and the ordinary retail investor or borrower. In wealth management, AI-enabled robo-advisory platforms have lowered costs and broadened access, particularly among younger and non-metropolitan investors. In lending, AI-based credit scoring that draws on alternative data has extended formal credit to previously excluded borrowers. In core banking, AI now shapes real-time decisions around fraud prevention and customer service at a scale no manual process could match. The RBI's FREE-AI framework signals that Indian regulators view this shift as significant enough to warrant a dedicated, principles-based governance structure, even as many of its specific recommendations remain to be operationalised. Future research would benefit from primary behavioural data on how individual Indian consumers actually weigh AI-generated financial recommendations against their



own judgement, and from longitudinal tracking of outcomes, such as loan default rates and investment returns, among users of AI-driven platforms, to determine whether expanded access is translating into durable financial wellbeing rather than simply faster access to risk.

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