INDIA FINTECH FOUNDATION

DECODING INDUSTRY INSIGHTS

For AI led Growth & Innovation in Fintech

Survey Report   September, 2025

Prepared By.
India Fintech Foundation

Executive Summary

This briefing document summarizes the key findings and recommendations from the "AI Readiness Assessment of the Indian Fintech Sector" survey conducted by the India Fintech Foundation. The online survey, involving > 50+ members and industry leaders, **aimed to evaluate AI readiness, identify adoption priorities, understand regulatory challenges, and pinpoint areas requiring clarity** within the Indian fintech landscape.

Challenges and Urgent Needs in Indian Fintech AI Adoption

The Indian fintech sector, while demonstrating a sophisticated understanding of AI's potential, faces significant hurdles in its responsible and innovative deployment.

1. The primary operational challenges revolve around **demonstrating measurable ROI from AI initiatives, recruiting and retaining specialized talent, and scaling infrastructure** while maintaining cost efficiency.
2. Regulatory compliance, though **ranking fourth among immediate concerns**, acts as a substantial barrier, with **approximately one-third of respondents having paused or modified** their AI deployment plans **pending clearer regulatory guidance.**
3. **The most urgent need for regulatory clarity is in **data protection compliance, particularly with the Digital Personal Data Protection Act (DPDP Act) requirements**, identified by **75% of** respondents. Other critical areas include responsibilities for third-party and open-source model usage, alternative data applications in **credit decisions, and cross-border data flows.**
4. Systemic risk perceptions reveal particular concern about **concentration risks from major technology platforms**, identified by 36% of respondents as the greatest threat requiring supervisory intervention. **Algorithmic bias** in credit scoring and opaque decision-making processes each garnered twenty-five percent of responses, indicating diverse risk perspectives that require balanced regulatory consideration.
5. **The survey captures the sentiment that current regulatory timelines do not match the pace of fintech innovation, with respondents unanimously rating regulatory responsiveness as inadequate. This feedback indicates urgent need for **more agile regulatory processes** and **interim guidance mechanisms** to prevent innovation stagnation while maintaining appropriate oversight.

4 Key Actionable Industry Recommendations:

1. **Immediate focus on clear AI compliance playbooks and explicit explainability standards** to bridge the confidence gap and provide actionable guidelines.
2. **Urgent clarification of DPDP Act requirements for AI systems,** covering consent, logging, data retention, and cross-border data flows.
3. **Medium-term development of proportionate, risk-based frameworks aligned** with international best practices and India's unique financial services landscape. Regulatory sandboxes should complement, not replace, clear compliance frameworks.

4. **Balance competitive considerations with innovation enablement** to prevent regulatory frameworks from inadvertently favoring large platforms.

Main Themes and Key Insights:

1. Perceptions and Maturity of AI Adoption:

- **Sophisticated Understanding:** The industry recognizes AI's potential across various functions, including automation, operational efficiency, customer experience, and risk management. The prominence of 'Trust' and 'Regulatory compliance' in responses to "What comes to your mind when you think of AI for fintech?" indicates a mature understanding of governance requirements.
- **Top Operational Challenges:** "ROI demonstration and talent shortage are top concerns, reflecting India's competitive fintech landscape." Regulatory compliance, while important, ranks fourth.

2. Regulatory Uncertainty and its Impact on Innovation:

- **Innovation Stagnation:** A significant finding is that "31% have modified plans due to regulatory concerns, while 27% lack definitional clarity." This directly quantifies how regulatory uncertainty is "materially impacting innovation deployment."
- **Urgency for Agile Regulation:** There is "universal disagreement that regulatory timelines match innovation pace," with respondents unanimously rating regulatory responsiveness as inadequate. This highlights a critical need for faster, more flexible regulatory processes.

3. Critical Need for Regulatory Clarity:

- **Data Protection is Paramount:** "Data protection compliance (75%) is top concern, reflecting DPDP Act implementation challenges." This includes specific concerns around "DPDP consent artifacts & logging expectations" and "cross-border training/inference (data & model flows)."
- **Explainability Gap:** The moderate confidence score of 3.0/5 (with only 44% rating 4-5) for "I can explain my AI algorithm to the regulator" indicates that a "significant portion of industry may struggle with explainability requirements." This necessitates "clearer regulatory guidance on what constitutes adequate AI explainability."
- **Third-Party and Alternative Data:** High concern about "responsibilities when using third-party or open-source models (57%)" and "use of alternative data for credit decisions (54%)" underscores the need for guidance in these prevalent areas.

4. Systemic Risks and Supervisory Intervention:

- **BigTech Concentration Risk:** "Concentration risk from BigTech (36%) emerges as top systemic concern, possibly reflecting fears about Google Pay and Amazon Pay dominance."

- **Algorithmic Governance:** Algorithmic bias in credit scoring and opaque AI decision-making processes each garnered 25% of responses, emphasizing the need for a balanced regulatory approach that addresses both market structure and algorithmic governance.

5. Preferred Regulatory Approaches:

- **Preference for Clear Guidance:** The "overwhelming preference (52%) for clear compliance guidance over sandbox approaches" signifies the industry's maturity and desire for "certainty over experimentation flexibility."
- **International Benchmarking:** "Strong preference for Singapore's balanced approach (39%)" suggests the Indian industry favors pragmatic regulation that combines innovation facilitation with structured oversight. Awareness of the EU AI Act's "high risk" classification for consumer credit scoring (74% correct) indicates industry knowledge of global standards.

Conclusion:

- The survey results provide a clear feedback based evidence for the regulators and policy makers to foster responsible AI innovation within the Indian fintech sector.

- Addressing the twin challenges of regulatory uncertainty and the demand for clear, **actionable compliance frameworks, particularly concerning data protection and explainability, comes out to be paramount.**

- The India Fintech Foundation's ongoing dialogue and collaborative policy refinement will be crucial in ensuring these frameworks are balanced and industry-aligned.

Annexure (below):

Survey results and interpretation.

Annexure : Survey results and interpretation

Question 1: **What comes to your mind when you think of AI for fintech?**

- **Relevance for Indian Fintech:** This question gauges the maturity and awareness level of Indian fintech players regarding AI applications. It helps understand whether the industry views AI as a tactical tool or strategic enabler.

- **What Results Indicate:** The diverse responses show sophisticated understanding of AI's potential across automation, operational efficiency, customer experience, and risk management. The prominence of 'Trust' and 'Regulatory compliance' indicates the industry is cognizant of governance requirements, which is crucial for India's regulated financial sector.

Question 2: **AI problems occupying your mind space - Rank in order of importance (1-5).**

- **Relevance for Indian Fintech:** Identifies primary barriers to AI adoption in Indian fintech, helping regulators understand where policy interventions could be most impactful.

- **What Results Indicate:** ROI demonstration and talent shortage are top concerns, reflecting India's competitive fintech landscape. Regulatory compliance ranks 4th, suggesting it's a significant but not overwhelming concern. Low concern about BigTech competition may reflect Indian players' confidence in domestic market positioning or regulatory protection.

Question 3: RBI's FREE AI Report says AI should be "Understandable by design - Ensure explainability for trust". Rate your confidence level on "I can explain my AI algorithm to the regulator" (1-low, 5 – high)
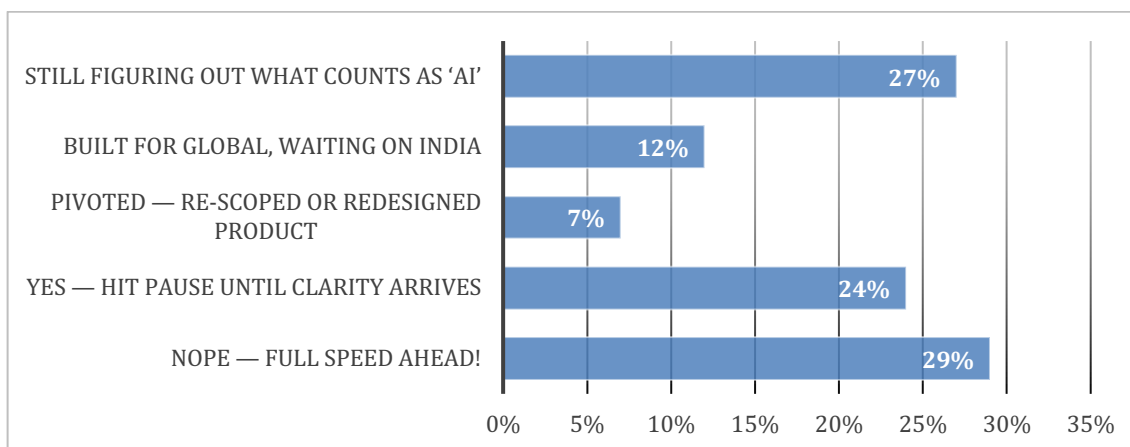
- **Relevance for Indian Fintech:** Critical for RBI's upcoming AI governance framework. Measures industry readiness for regulatory scrutiny and explainability requirements under potential AI regulations.
- **What Results Indicate:** Moderate confidence levels suggest significant portion of industry may struggle with explainability requirements. This indicates need for clearer regulatory guidance on what constitutes adequate AI explainability in Indian context.
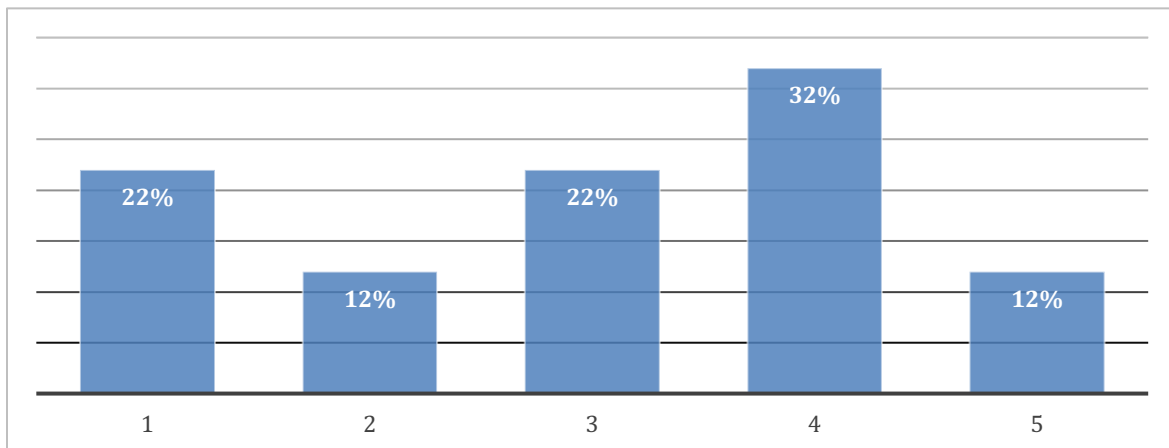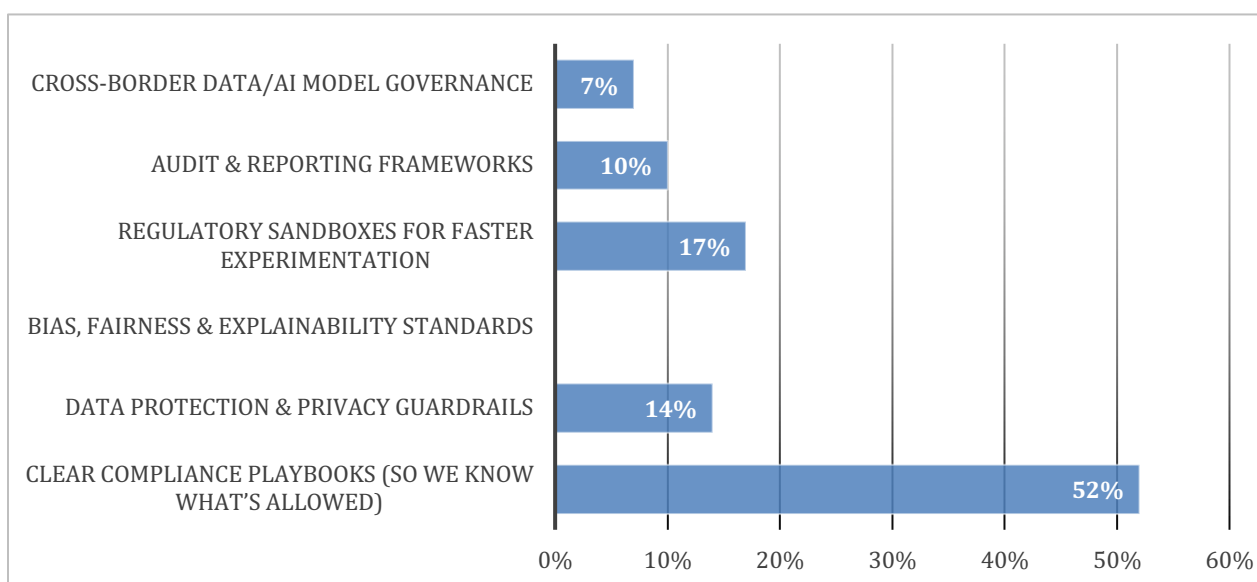

Results: Score 3.0/5 (only 44% rating 4-5)

Question 4: Have you had to pivot your AI product deployment plans because of regulatory uncertainty?

- **Relevance for Indian Fintech:** Quantifies the innovation impact of regulatory uncertainty in Indian fintech, directly relevant to RBI's policy timeline and approach.
- **What Results Indicate:** 31% have modified plans due to regulatory concerns, while 27% lack definitional clarity. This shows regulatory uncertainty is materially impacting innovation deployment, suggesting urgent need for frameworks to unlock India's fintech potential.
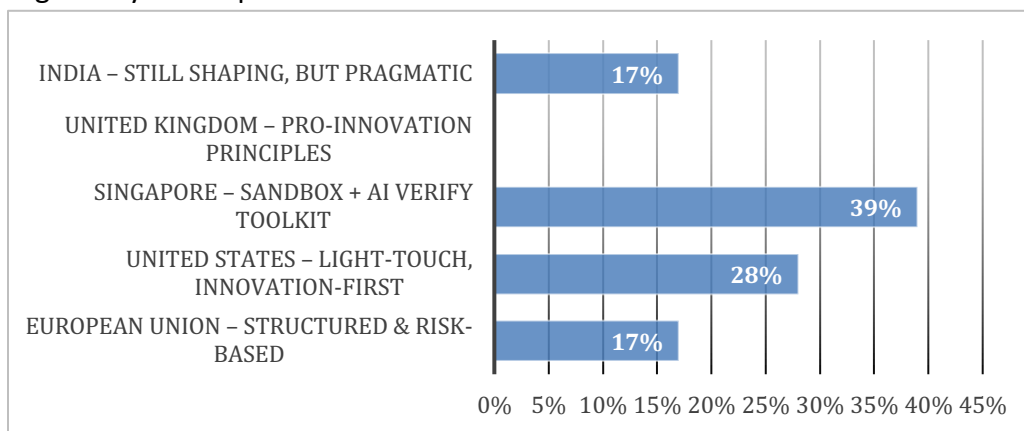
Question 5: What would you like our regulators to focus on first wrt to AI deployment in fintech?

- **Relevance for Indian Fintech:** Direct industry input on regulatory priorities for RBI and other Indian regulators. Shows what industry believes will best enable responsible AI deployment.
- **What Results Indicate:** Overwhelming preference (52%) for clear compliance guidance over sandbox approaches indicates industry maturity and readiness to operate within defined boundaries. This suggests Indian fintech prefers certainty over experimentation flexibility.

Category	Percentage
CROSS-BORDER DATA/AI MODEL GOVERNANCE	7%
AUDIT & REPORTING FRAMEWORKS	10%
REGULATORY SANDBOXES FOR FASTER EXPERIMENTATION	17%
BIAS, FAIRNESS & EXPLAINABILITY STANDARDS	
DATA PROTECTION & PRIVACY GUARDRAILS	14%
CLEAR COMPLIANCE PLAYBOOKS (SO WE KNOW WHAT'S ALLOWED)	52%

Question 6: In your opinion, which country is getting their AI regulations right for fintech?
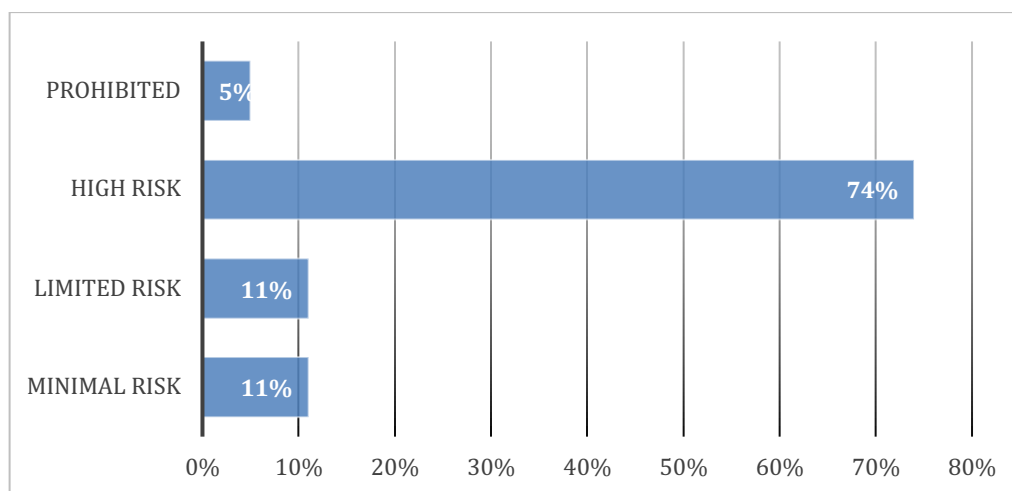
- **Relevance for Indian Fintech:** Indicates preferred regulatory models for India to benchmark against. Shows industry perspective on global best practices relevant for Indian context.
- **What Results Indicate:** Strong preference for Singapore's balanced approach (39%) suggests Indian industry favors pragmatic regulation combining innovation facilitation with structured oversight. Equal rating of India and EU (17% each) shows cautious optimism about domestic regulatory development.
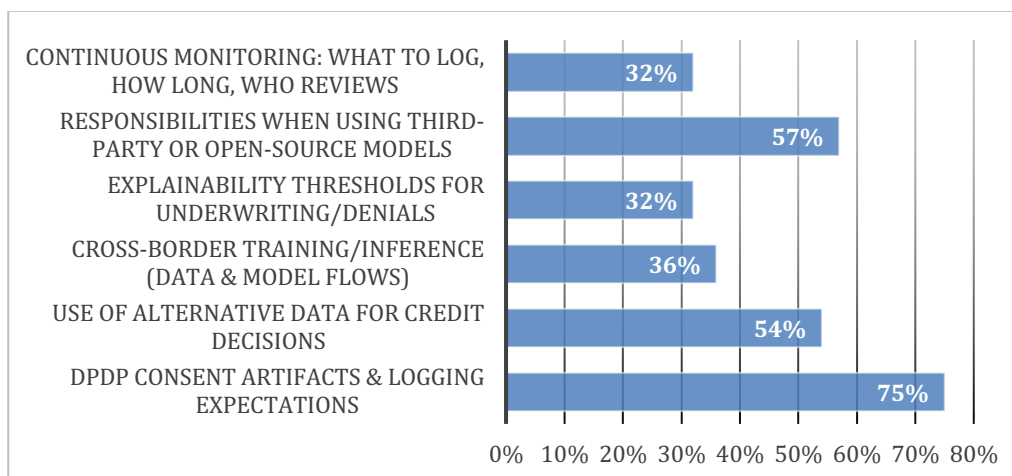

Category	Percentage
INDIA – STILL SHAPING, BUT PRAGMATIC	17%
UNITED KINGDOM – PRO-INNOVATION PRINCIPLES	
SINGAPORE – SANDBOX + AI VERIFY TOOLKIT	39%
UNITED STATES – LIGHT-TOUCH, INNOVATION-FIRST	28%
EUROPEAN UNION – STRUCTURED & RISK-BASED	17%

Question 7: Under the EU AI Act, AI used for consumer credit scoring is considered

- **Relevance for Indian Fintech:** Tests industry awareness of international AI risk classifications, important as India develops its own risk-based framework potentially influenced by global standards.
- **What Results Indicate:** Good awareness of international regulatory trends provides foundation for informed policy dialogue and helps Indian regulators engage effectively with knowledgeable industry stakeholders.

Category	Percentage
PROHIBITED	5%
HIGH RISK	74%
LIMITED RISK	11%
MINIMAL RISK	11%

## Question 8: Where do you most need regulatory clarity to ship AI responsibly (select all that apply)?

- **Relevance for Indian Fintech:** Identifies specific areas where regulatory guidance is most urgently needed for Indian fintech AI deployment. Directly actionable for RBI policy development.
- **What Results Indicate:** Data protection compliance (75%) is top concern, reflecting DPDP Act implementation challenges. High concern about third-party models (57%) indicates prevalence of vendor/cloud-based AI solutions in Indian fintech requiring immediate regulatory attention.

Category	Percentage
CONTINUOUS MONITORING: WHAT TO LOG, HOW LONG, WHO REVIEWS	32%
RESPONSIBILITIES WHEN USING THIRD-PARTY OR OPEN-SOURCE MODELS	57%
EXPLAINABILITY THRESHOLDS FOR UNDERWRITING/DENIALS	32%
CROSS-BORDER TRAINING/INFERENCE (DATA & MODEL FLOWS)	36%
USE OF ALTERNATIVE DATA FOR CREDIT DECISIONS	54%
DPDP CONSENT ARTIFACTS & LOGGING EXPECTATIONS	75%

Question 9: **Which area poses the GREATEST systemic risk requiring immediate supervisory intervention?**

- **Relevance for Indian Fintech:** Industry perspective on systemic risks helps RBI prioritize supervisory focus and resource allocation for AI-related financial stability concerns.
- **What Results Indicate:** Concentration risk from BigTech (36%) emerges as top systemic concern, possibly reflecting fears about Google Pay and Amazon Pay dominance. Equal concern about bias and explainability suggests need for balanced regulatory approach addressing both market structure and algorithmic governance.
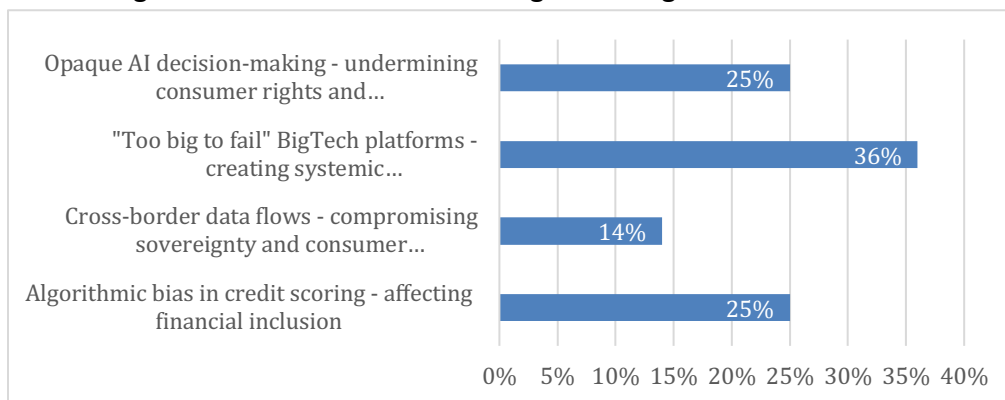
Question 10: **Yes/No: Current regulatory timelines match the pace of fintech innovation**

- **Relevance for Indian Fintech:** Measures perception of regulatory agility in Indian fintech ecosystem. Critical feedback for RBI on regulatory process effectiveness and innovation enablement.
- **What Results Indicate:** Universal disagreement that regulatory timelines match innovation pace indicates urgent need for more agile regulatory processes. This suggests current regulatory approaches may be constraining India's fintech competitiveness and innovation potential.