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# *Fintech For Small Businesses:* Unlocking Responsible Growth With Alt.Data

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***Problem of practice***

*Traditional lenders serve only a fraction of India's millions of small businesses. Conventional banks do not meet this massive demand for credit since their assessment methods do not apply to this segment. Regulations cause banks to exclude small businesses as they lack formal financial data filing. However, the lack of formal data does not mean that small businesses do not have a digital data footprint. In fact, small businesses generate data through mobile payments, utility bills, social media activity and digital transactions—these data points reveal credit worthiness that traditional scoring cannot work with. Recent research by Maximilian Tigges, Sonke Mestwerdt, Sebastian Tschirner and Rene Mauer demonstrates how AI and alternative data adoption reduce this frustrating information gap between lenders and borrowers.[1] Here is the critical insight: alternative data sources enable real-time creditworthiness assessment that works. This promising application of AI can potentially turbocharge the prosperity of small businesses. It can also significantly benefit fintech leaders, venture capitalists, and policymakers driving India's digital lending transformation.[2] It can also overcome the lack of geographical reach of traditional lenders. To successfully capitalise on this opportunity, fintech companies must resolve data quality issues, triangulate beyond single data sources, and tailor new financial products.*

[1] The article 'Who gets the money? A qualitative analysis of fintech lending and credit scoring through the adoption of AI and alternative data' by Maximilian Tigges, Sonke Mestwerdt, Sebastian Tschirner and Rene Mauer, featured in Volume 205 of *Technological Forecasting and Social Change*, explores how AI and alternative data improve credit scoring by reducing information asymmetry, enhancing prediction, and expanding access. It also highlights ethical concerns like bias, transparency, and data consent that fintechs must address.

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## A US$32 billion opportunity

Traditional lenders serve only 5 million of India's 64 million MSMEs.[3] This creates a massive unmet credit demand of US$32 billion, the most significant fintech opportunity in emerging markets.[4] According to recent government estimates, India's MSME sector represents approxi-mately US$300 billion in total debt demand.[5] Traditional lenders currently serve approximately $130 billion, thus creating a massive gap.

Fintech companies that have been early adopters of alternative data-based systems have increased their market share and reduced operational costs through an automated decision– making process. Access to credit has been shown to improve small business outcomes such as business continuity, solvency, net profit margin, return on investment, cash flow management, and revenue growth.

The caveat in capitalising on this opportunity is proper implementation. Examples from Asia are discussed below to illustrate key success factors in pursuing alternative credit data and automated lending processes.

## Credit where credit is due

Ant Group's Alipay is currently the world's largest digital payment platform, serving 1.3 billion users and processing $18 trillion annually.[6] In comparison, PayPal processes US$1.52 trillion annually.[7] Alipay's automated credit decision model, '3-1-0', demonstrates the use of alternative data, analysing 10,000 indicators through machine learning models. The application processing time is only 3 minutes, with decisions made in a single second without any human intervention.[8] This comprehensive credit assessment approach enables instant credit using alternative data such as small business owners' shopping patterns, social connections, mobile usage, location data, and payment timing. Alipay's unmatched process has reduced operational costs while expanding credit access to underserved segments in China's incredibly diverse economic landscape, which traditional bankers have ignored. However, there is an over-reliance on social scoring, which may create serious privacy concerns and pushback from concerned authorities. Still, this case study can guide the creation of a practical blueprint for Indian fintech companies, factoring in regulatory concerns.

In the Indian market, the Non-Banking Finacial Company (NBFC), Capital Float, now known as axio, has served over one million customers from over 300 cities, with their lifetime disbursals exceeding $1.2 billion.[9] Their evolution journey is a story about their remarkable transformation journey from analysing just 200 to over 2,000+ data points (including bank statements, sales tax returns, digital transactions, supplier payments and inventory turnover). In their earlier transactions, reliance on unverified merchant data had led to higher default rates in select customer segments. This early feedback helped them streamline their processes, with each additional data layer significantly improving credit

assessment accuracy with proper validation and cross-referencing. This impressive shift through learning enabled unmatched rapid market growth and customer acquisition, illustrating how alternative data can create a sustainable competitive advantage. These alternative credit assessment models benefit India's fragmented credit market, if implemented systematically through proper data governance and validation processes.

With 20,000 crore credit disbursement, LendingKart is another NBFC that has served more than 300,000 borrowers across 4,100+ locations throughout India.[10] They utilise a machine learning driven underwriting approach on data points from multiple sources, to deliver loan decisions within 72 hours, which is remarkably fast compared to the traditional banking timeline. Their portfolio performance remains strong across tier-2 and tier-3 cities, where traditional banks cannot operate profitably due to infrastructure and cost constraints. This geographic penetration demonstrates how alternative data enables fintech companies to serve markets that conventional lenders consider too risky or unprofitable.

The above examples illustrate that alternative digital data can enable application processing in minutes rather than the weeks required by traditional, manual verification. This resulted in lower customer acquisition costs and improved portfolio performance by continuously updating credit scoring algorithms, which adapt to changing market conditions. Successful implementation of data-driven models requires a structured, phased approach that balances innovation with regulatory compliance, operational readiness, and customer trust. Each phase addresses a critical component of the transformation journey—from enhancing predictive capabilities to empowering borrowers, ensuring that the adoption of alternative data and automation leads to sustainable, inclusive growth. The following section outlines these key phases in detail.

**Five phases of data-driven lending:**

PHASE
- **1:** Predictive enhancement
- **2:** Market expansion
- **3:** Product innovation
- **4:** Financial empowerment
- **5:** Responsible credit scaling

## Data-led credit - Five phases

**Phase 1: Predictive enhancement**

Compared to traditional methods, alternative data integration improves creditworthiness assessment when implemented correctly. However, AI models should use alternative data along with existing scoring models rather than replacing them entirely. This approach reduces information asymmetry between lenders and borrowers while maintaining regulatory compliance.

The process should start with verified data sources. Bank account analysis, GST filings, and digital payment histories provide stronger predictive power than social media or location data, which are prone to manipulation or inconsistencies. AI models must be trained on clean, representative datasets to avoid algorithmic bias that has plagued early alternative assessment implementations across multiple markets.

**Phase 2: Market expansion**

Assessment of alternative data indicators might reveal actual behaviour patterns of previously unbanked populations who lack traditional credit histories but demonstrate financial responsibility. Rural entrepreneurs, young professionals and small business owners constitute an untapped market segment that alternative data can serve effectively through deliberate expansion strategies designed for local market conditions.

Smaller cities without physical branch networks with manageable operational costs should be targeted for financial services. Due to digital literacy gaps and inconsistent data, rural markets will require a modified, tailored approach and local partnerships for effective implementation.

**Phase 3: Product innovation**

Innovative products emerge when alternative data reveals customer behaviour patterns that traditional scoring misses. Insights from analysis of non-traditional data points can help develop tailored financial products

and personalised lending solutions that traditional banks, with their legacy systems and rigid processes, simply cannot offer.

Invoice financing based on marketplace seller ratings, inventory loans using digital transaction volumes, and working capital tied to subscription revenue, all these products become possible through comprehensive alternative data analysis that goes beyond basic demographics. Innovation drives differentiation, but product complexity increases operational risks that must be managed carefully.

**Phase 4: Financial empowerment**

Increased use of alternative data sources in financial services incentivises responsible financial behaviour among borrowers, who understand the importance of their digital footprint in determining creditworthiness. When borrowers understand that timely utility payments, consistent mobile top-ups, and regular e-commerce activity improve their credit profiles and access to better rates, behaviour modification follows naturally, creating positive feedback loops that benefit everyone involved in the lending ecosystem. Enhanced financial literacy leads to better credit profiles and expanded access to formal financial services. Customer education and transparency about data usage builds trust and engagement with the platform.

**Phase 5: Responsible credit scaling**

The successful scaling of alternative data-based credit rating applications requires a core technology stack that integrates robust data platforms, machine learning infrastructure, automated decision engines, and real-time monitoring systems to ensure observability, auditability, and compliance. These systems must handle thousands of applications simultaneously while maintaining high data security, privacy, and regulatory compliance standards. Cloud-based solutions offer scalability without heavy upfront investment, but also introduce vendor dependency risks.

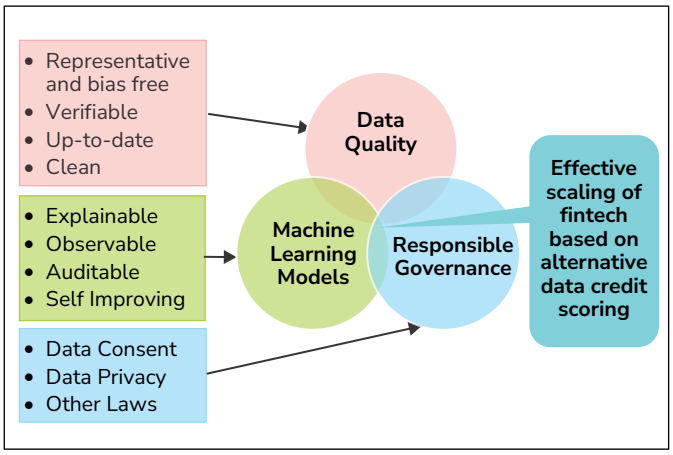
Fintech companies must embed regulatory compliance, privacy safeguards, data accuracy, and fair lending practices from the outset to ensure long-term sustainability and avoid regulatory setbacks. This includes precise consent mechanisms, data minimisation, algorithmic transparency, bias testing, and regular model validation. Regulatory engagement—such as alignment with Reserve Bank of India guidelines and state-specific consumer protection laws—is essential before launching operations. Establishing dedicated compliance teams and conducting periodic regulatory reviews can prevent enforcement actions that may otherwise derail growth and destroy stakeholder value.

## Alternative data constraints

Alternative data is best utilised for established businesses with 12+ months of digital transaction history, which provides sufficient data for meaningful analysis. However, such data might fail for start-ups, seasonal enterprises, or companies in rapidly changing

industries where historical patterns cannot accurately predict future performance. Rural markets with limited digital footprints require modified approaches that account for infrastructure limitations and local market conditions. However, over-reliance on telecom data might be inadequate during economic downturns, as shifting payment patterns in rural markets underscore the need for diversified data.

***Figure 1: The Trust Stack: Data, Models, and Regulation***




*Source: Developed by authors*

Data quality remains a critical limiting factor that may restrict fintech innovation's adoption and economic impact across all market segments, if not appropriately managed. Successful implementation requires robust data governance, quality control processes, and continuous monitoring to ensure accuracy and regulatory compliance throughout operations. Companies prioritising rapid growth at the expense of data quality often face regulatory setbacks and deteriorating portfolio performance, which can undermine long-term viability and erode investor confidence. DMI Finance is an example of poor data governance.[11] RBI, in October 2024, barred DMI Finance from disbursing loans. One of the key reasons was that it "failed to assess household income properly" and did not transparently disclose its interest rates or fees to customers.

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## The fintech moat

Alternative data implementation represents a significant opportunity for fintech leaders to capture a share of India's substantial unmet credit demand market. The convergence of regulatory support, technology maturity, and market demand creates a unique window for fintech companies to establish market leadership positions that will be difficult for competitors to challenge once established. This model's success requires carefully balancing innovation with risk management through proper governance and compliance frameworks. Financial technology must serve its ultimate purpose of expanding credit access while maintaining system stability and regulatory compliance that protects all stakeholders. The potential rewards far outweigh the implementation challenges for early movers in this segment, creating a defensible moat that safeguards long-term competitive advantage.

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