

The background of the entire page is an abstract, artistic photograph. It features a close-up of a person's face, primarily the eye and cheek area, which is partially obscured by a dense network of glowing fiber optic cables. The cables are illuminated with vibrant blue and orange light, creating a sense of digital connectivity and data flow. The overall color palette is dark, with the bright lights from the cables providing a high-contrast, futuristic aesthetic.

Past Perfect, Future Tense?

Themes shaping the future of Fintechs in India

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Will India's Fintech growth story continue to hold true in the future?

India's Fintech growth story continued to hold strong in 2021, with a 157%¹ y-o-y growth in funding. The sector received funding worth USD 8 Billion¹ in 2021 led by payments at ~USD 2.7 Billion¹ closely followed by lending at ~USD 2.6 Billion¹. India's digital payment success story is evidenced by the digital transaction volume of over 28 Billion² and a gross value over INR 320 Tn in FY 2021². Going forward, lending is likely to become even more valued given the democratization of data, and the valuation profile of Indian Fintechs is expected to shift from payments to lending. (See Exhibit 1)

However, last few quarters in 2022 have witnessed multiple shifts in the Indian Fintech space owing largely to macroeconomic conditions. The possibility of an impending recession and inflationary pressures across key markets have impacted the economy at large and Fintechs have been no exception. Indian Fintechs saw a drop of ~30%¹ in funding in quarter ending June 2022

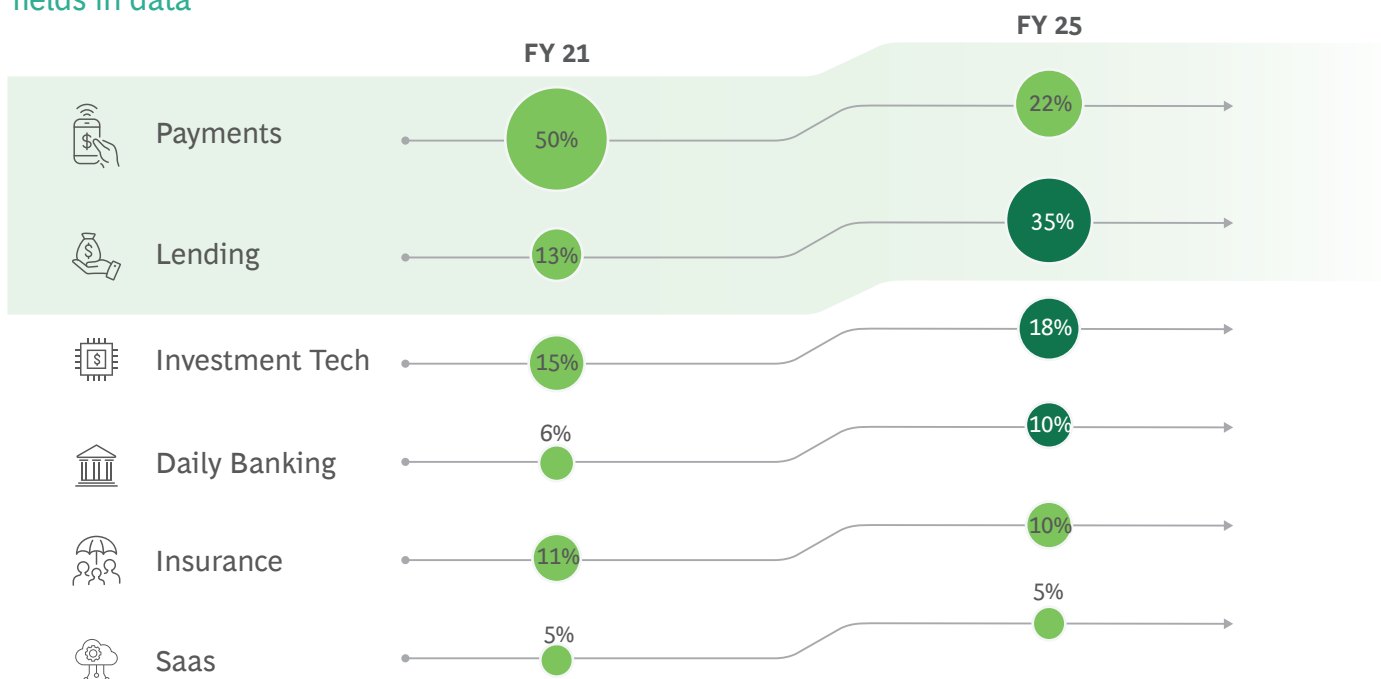
compared to quarter ending June 2021. On the other hand, the amount of dry powder with institutional investors (PE/VCs) has increased by USD 3.2 Billion³ in the last 6 months⁴, indicating the potential flow of capital with improvement in macroeconomic fundamentals. This balanced indicators suggests, the future of Fintech will continue to be shaped by three kinds of themes

▶ Existing secular themes that will continue to propel the Fintech growth story

▶ Emerging secular themes that will shape the future landscape of Fintechs

▶ Vertical-specific themes that will shape business models and operating models

Exhibit 1 - Valuation profile of Fintech to tilt towards Lending from Payments with level playing fields in data



Source: Capital IQ, Tracxn, Press Search, BCG analysis.

Notes: 1. In case of listed companies, latest market capitalization is taken for valuation, for unlisted companies the valuation is per last funding round; 2. 2025 projections done considering the growth rates by segments and further expected trends; 3. Total fintech valuation in FY 2021 Rs 5.6 Lac Cr, projected valuation in FY 2025 is Rs 15 Lac Cr

1. Source: BCG Fintech Control Tower

2. Digital transactions include NEFT, IMPS and UPI; Source: RBI

3. Source: Preqin

4. Increase is counted from December 21 to June 22

Secular themes that will shape the future of the Fintechs

1. Existing secular themes that will continue to propel the Fintech growth story

- ⦿ **Large addressable demand** on the back of an expanding middle-class⁵ (46% of all Indian households in 2025 vs. 37% in 2018)⁶ and rising urbanization (~36% of the population in urban areas in 2022 vs 33% in 2017)⁷.
- ⦿ **Unprecedented growth in data access** with growing smartphone penetration (1130 Million smartphones by 2025 vs. 600 Million in 2020)⁷, rising internet penetration (900 Million internet users in 2025)⁷ and declining cost of data.
- ⦿ **Maturing digital infrastructure, constituted by India stack, JAM trinity, UPI** has been pivotal to the Fintech growth story, building a strong core for the open-API infrastructure to follow.
- ⦿ **Pandemic-aided explosion in UPI, leading to acceleration of digital credit.** UPI transaction volumes grew 2.6x⁸ between April 20 and April 21 from ~1 Billion transactions to ~2.6 Billion transactions, within a year of pandemic post March 2020. UPI held over 60%⁸ volume share of total non-cash transactions⁹ in FY22. Increase in proportion of digital payments driven by UPI has created more digital data that enables robust underwriting for lending. **The pandemic also resulted in an increase in investments.** Share of active clients in digital discount brokers (Zerodha, Upstox, 5paisa) grew from 43% to 57%¹⁰ in the same timeframe.
- ⦿ **Formalization of MSME economy driven by structural reforms** like Goods and Service Tax Network (GSTN) and Trade Receivables Electronic Discounting System (TReDS). Active tax base for GST has increased from ~10M¹¹ in July 2017 (when reforms were introduced) to ~14M¹¹ in May 2022. The consequent digitization of MSME payments has enabled sharper credit decisioning.
- ⦿ **RBI's thematic push on responsible innovation through its regulatory sandbox framework** to enable live testing of financial innovations at scale, while controlling risks. Notable innovations from the first three sandbox cohorts include NFC, sound waves and IVR technology to enable offline P2M payments in rural India. A fourth cohort on fraud mitigation is currently in flight.

2. Emerging secular themes that will shape the future landscape of Fintechs

- ⦿ **The open architecture of Account Aggregator, OCEN, ONDC is expected to lead to a dramatic explosion in machine-readable data, transform data into a utility and democratize payments, credit, commerce, and savings.** As shown in [Exhibit 2](#), the AA framework will enable seamless and secure access to standard-format data and enable portability between service providers. ONDC is expected to democratize commerce, reduce acquisition costs, improve competitiveness of small sellers and enhance price and merchant discovery of buyers; whereas OCEN is expected to dramatically improve credit access to MSMEs by enabling cash-flow-led underwriting for MSMEs, given data proliferation. In its end state, digital service providers will connect to the ringfence of regulated entities and source customers for payments, credit, and savings, while leveraging the architecture across journey stages.
- ⦿ **Fintechs seek greater value capture by integrating upstream in credit, wealth, and investment value chains; yet to see proof of concept in savings.** After successfully breaching a threshold of active customers, Fintechs aim to move upstream by seeking licenses to manufacture financial products. Key examples include Navi (from MF distribution to AMC), Slice (from co-brand credit card origination to providing capital via own NBFC) and Acko (from pure-play distribution into manufacturing motor insurance). This will significantly unlock value pools in form of lending spreads, fund management fees, insurance premia, that are multiple times larger than distribution fees. However, manufacturing will also increase regulatory scrutiny and add compliance costs. Neobanks are yet to be approved to store deposits / lend on own balance-sheet given RBI's selectivity in handing licenses and the absence of a 'Digital Banking License' in India.
- ⦿ **Large non-FIs are seeking to monetize their captive customer base and maximize lifetime value by building a financial superstore, inspired by global success stories.** WeBank (China; 300 Million users)⁸, MyBank (China; 45 Million users)⁸, Kakao Bank (South Korea; 17 Million users)⁸ and others as in [Exhibit 3](#) are some global success stories which Indian examples

5. Middle class households include households with annual income between 3-10L

6. Source: CCI City Income database, Statista

7. Source: Press Search

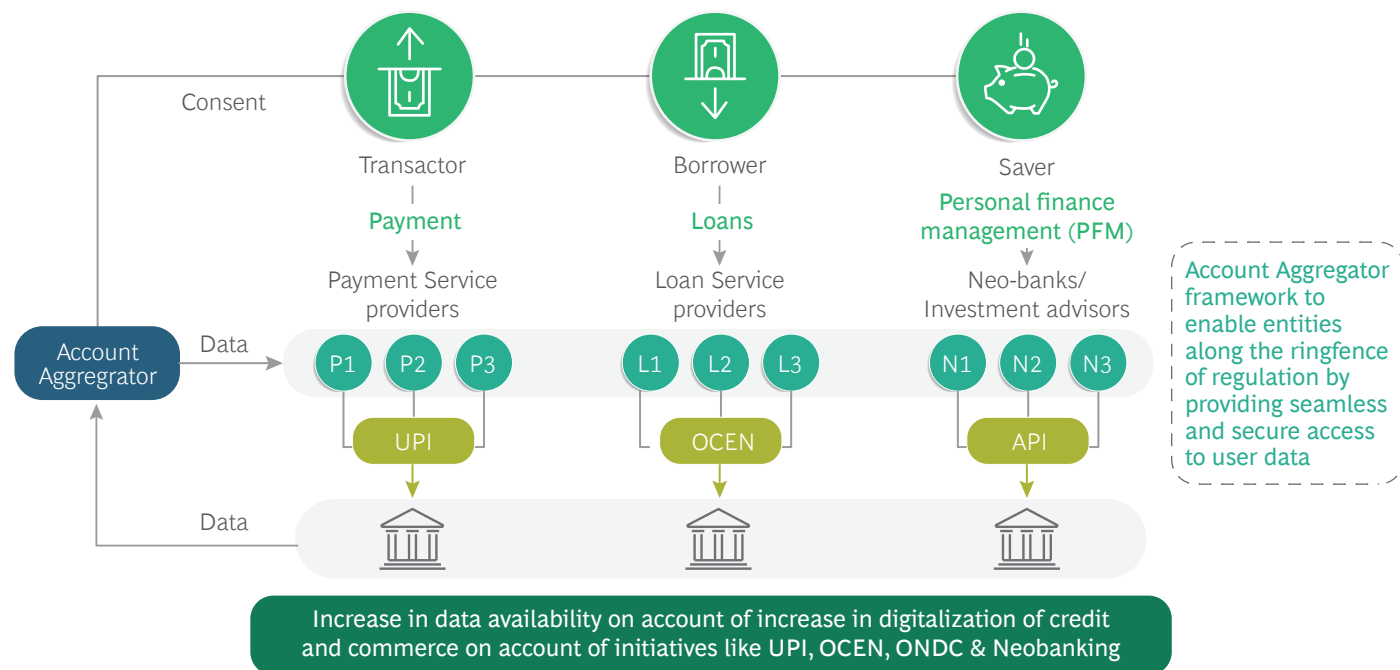
8. Source: RBI data, NPCI, BCG Analysis

9. Non-cash transactions exclude cash transactions and cash transactions at branches includes cash transactions at ATMs

10. Source: NSE handbook, HDFC Sec Inst. Research

11. Source: Press search, GST website

Exhibit 2 - Open Stack along with Account Aggregator framework to lead to increased availability of data across Digital Service Providers



Source: BCG analysis

like Paytm, Bajaj Markets, Tata Neu etc., might be seeking to emulate. These superstores aim to offer a suite of payments, lending, investments and insurance products under a single app via an ecosystem of partnerships with FIs and merchants.

Two factors that stand out amongst profitable global superstores

- 1 Their ability to activate and engage their captive user base at scale
- 2 An effective lending business backed by a robust underwriting engine

Therefore, traditional conglomerates (for e.g, Tata, Reliance) and digital platforms (for e.g, Swiggy, Zomato, Cred, Ola) with their large base of engaged user base are likely to gain prominence with superstore plays in the future.

☉ **Fintechs are responding to the demographic shift and improving affluence of the 'mass' segment by offering innovative, 'sachetized' products across verticals.** for e.g, players like Bajaj Markets and Ola embed bite-sized insurance products (insurance for cab rides, mobile screen, pets, missed flights, lost baggage, etc.) in their native apps via partnership with

insurers. Kreditbee offers micro personal loans starting from INR 1,000 to new-to-credit customers in less than 15 minutes. Players like Jar, Stack, Multipl, Fello offer micro-investments (starting from INR 10), or round-up spare change from purchases and allocate into savings accounts, mutual funds, digital gold, etc.)

Three factors are key to monetize this segment

- 1 Turbocharge transaction volumes to reach critical mass of monetizable base
- 2 Offer vernacular support in UI/UX/servicing to improve accessibility, and
- 3 Sharper understanding of customers to improve portfolio quality/manage credit losses in lending

☉ **The regulatory stance is increasingly nationalistic, pro-innovation and pro-consumer.** The RBI continues to limit the ringfence of deposit-taking institutions in its selectivity of handing out banking / NBFC licenses. However, it seeks to complement this ringfence by opening it up to service providers via an open architecture.

Exhibit 3 - Super Apps in Asia-pacific have evolved from different starting positions and have had a transaction-led foray into financial services

Non - FI Businesses						FI Businesses					
Geo	App	Ride Sharing	Travel	Messaging	E-Comm	Grocery Delivery	Loyalty	Food	E-Wallet	Banking & Insurance	Lending
China	WeChat	✓	✓	✓	✓			✓	✓	✓	✓
	Alipay	✓	✓	✓	✓	✓		✓	✓	✓	✓
	Meituan	✓	✓		✓	✓	✓	✓	✓	✓	✓
South East Asia	Grab	✓	✓	✓	✓	✓		✓	✓	✓	✓
	Gojek	✓	✓		✓	✓	✓	✓	✓	✓	✓

 Core-Offering
  Starting Point

Source: App Annie, Statista

All ecosystem players have a transaction-led category play for their financial businesses



Vertical-specific themes that will shape the future of Fintechs

1. PAYMENTS is likely to be further disrupted with UPI and Credit Cards at the forefront

UPI-enablement of credit cards is set to turbocharge UPI's ubiquity in India's digital payments ecosystem.

This move seeks to increase the use of credit cards at POS terminals via UPI, which was earlier limited only to linked accounts. While the scope is limited to RuPay credit cards as of now (dominated by public sector banks), adoption will witness a step jump when the doors are opened to Visa and Mastercard (holding over 81%¹² of the total active credit cards in India), which will also bring in private sector banks. Third party apps (like PhonePe, GooglePay) would have to upgrade their merchant KYC modules given Credit Card norms are more stringent versus that for accepting QR-based UPI payments.

Ultimately, the power of acceptance will materialize at scale with the right economic models. Therefore, the question of who bears the cost of 'acquiring' will need to be resolved between issuers, merchants, and card networks, given UPI is positioned as 'zero MDR.' Additionally, the monetization models and ownership of customer data also remains to be resolved between card networks and third-party apps.

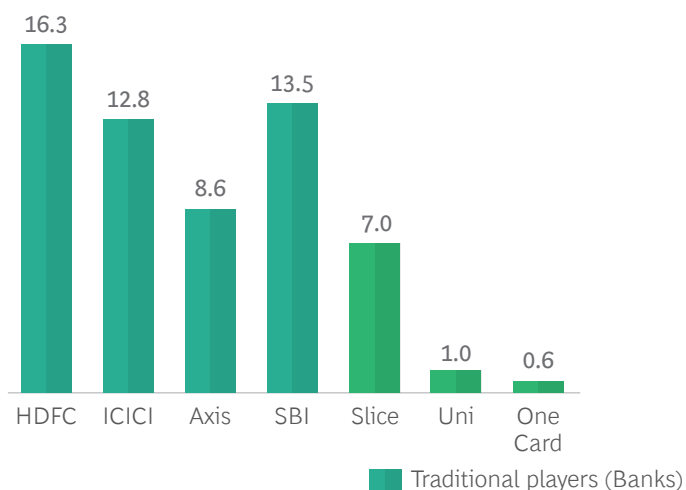
The role of non-banks in driving credit card penetration remains unclear, given the evolving regulatory stance on issuance of credit cards.

As seen in Exhibit 4, monthly issuance volumes for non-banks like Slice and Uni were comparable with that of incumbents like ICICI Bank, SBI and HDFC Bank. Until now, these companies issued credit cards in partnership with NBFCs (Non-Bank Financial Companies) (who provided capital) and banks (who handled clearing, settlement and hosting the PPI). However, RBI's recent direction, effective Jul 1st 2022¹³, limits non-banks from loading credit lines on to PPIs unless they have a dedicated license to issue credit cards. The direction further limits non-banks' role to marketing and distribution of credit cards. While the regulator could potentially remain open to licensing NBFCs for issuance, the stance raises questions on the viability of these Fintech business models and their role in driving credit card penetration.

Exhibit 4 - New age players catching up fast with traditional banks so far, regulatory curbs to define future growth



Total # cards issued till date (Mn)¹



cards issued every month (Mn)²



Source: BCG analysis; Investor Presentations

¹ "Till date" in Total # cards issued till date as "As of 31st March 22"

² "# cards issued every month (M)" as "For the month of March 22"

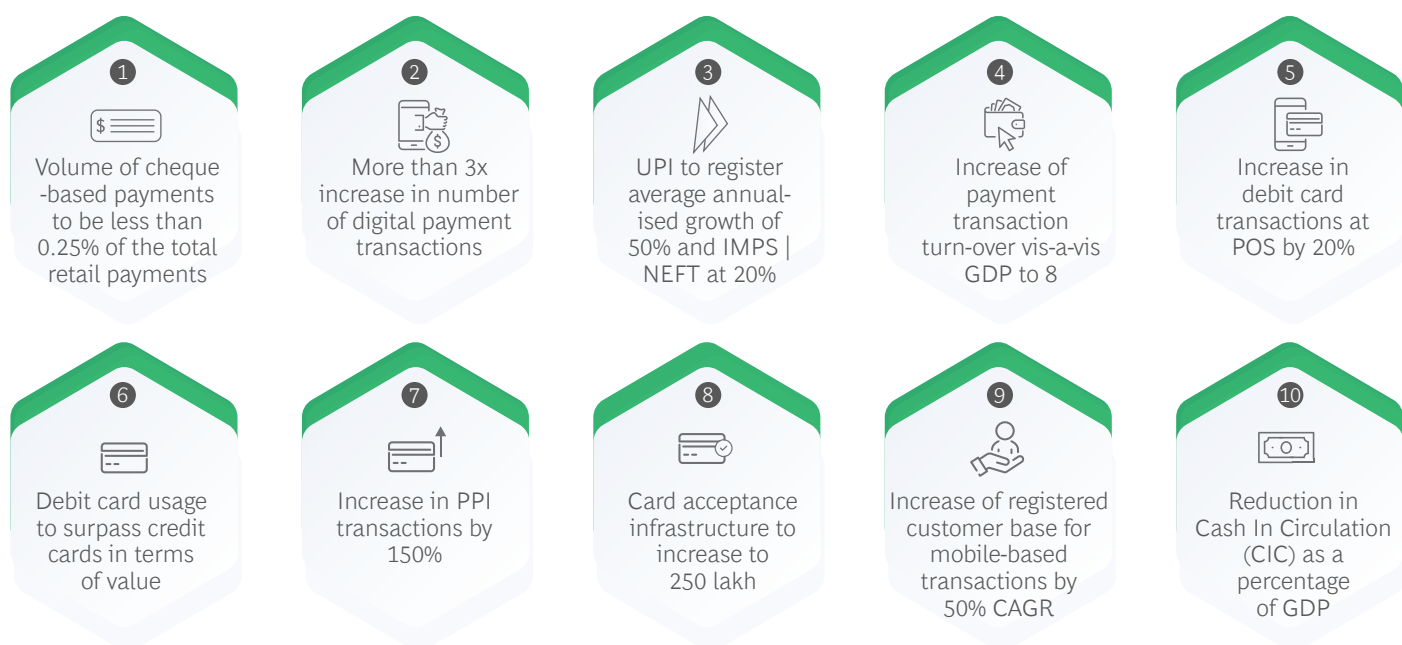
12. As of Aug 21, Source: Press search

13. Direction dt June 20, 2022, on Loading of PPIs through credit lines to authorised Non-bank PPI issuers

Explosion in P2M payments, driven by rapid deployment of QR codes in offline merchants and higher activation and adoption of the already acquired merchants, will increase the prominence of transaction data in underwriting credit to these merchants. Digital merchant payments value is set to grow from USD 0.3–0.4 Trillion in 2021 to USD 2.5-2.7 Trillion by 2026¹⁴. This will be driven by an increase in number of merchants using QR—from 30 Million in 2021 to 40 Million in 2026¹⁴. Consequently, the relative weight of transaction data is set to increase from 10%¹⁵ (in traditional credit assessment) to about 50%¹⁵ in new-gen assessment for credit underwriting. Easy availability of merchant transaction data will lead to wider possibilities to lend to them through innovative underwriting models formulated by Fintechs.

RBI's Payment Vision 2025 on the theme of 'E-Payments for Everyone, Everywhere, Everytime' defines several goalposts along themes of Integrity, Inclusion, Innovation, Institutionalization, and Internalization. Exhibit 5 lists down the intended outcomes of the vision. From a Fintech perspective, this vision signals a clear regulatory lean towards innovation and growth, while potentially followed by increasing scrutiny and audit. This will consequently push Fintechs to build and strengthen capabilities like risk management, compliance, etc. which were hitherto the responsibility of licensed entities. From a regulatory perspective, the governance model for enforcing this vision is crucial to realizing the defined outcomes.

Exhibit 5 - Expected outcomes from Payment Vision 2025



Source: RBI-Press release

14. Source: BCG and PhonePe Pulse Analysis

15. Fintech & NBFCs taken together to avoid any skew owing to FLDG arrangements by Fintechs

2. While access to **LENDING** is set to be democratized, the lending models will be subject to greater regulatory scrutiny

◎ The rise of embedded finance is expected to drive digital payments and credit penetration.

E-commerce marketplaces (Amazon, Flipkart), e-commerce enablers (Shopify, WooCommerce), traditional lenders (Bajaj Markets), and merchant discovery platforms (Zest, Simpl) now capture multiple stages in the journey from product discovery consideration, purchase, fulfilment and financing via BNPL. India's BNPL disbursements are expected to grow from ~INR 100,000 Cr.¹⁹ in FY21 to over INR 700,000 Cr.¹⁹ by FY26. Increasing e-commerce penetration (~8% in FY22 to ~15% in FY25¹⁶) and the maturity of ONDC will act as key catalysts to this topline growth.

However, the viability of embedded finance remains to be proven globally. Global BNPL players (Afterpay, Affirm, Sezzle) lost 30%¹⁷ of their market cap between September to December 2021, following rising defaults and tighter regulations in Australia, UK, and rest of Europe. In India, BNPL economics hinges on subvention and / or interest incomes compensating for credit costs, customer acquisition cost and operating costs. On one hand, pureplay Fintechs continue to splurge on customer acquisition (rewards, deals) and face higher credit costs (high approval rates, NTC customers); on the other hand, existing digital platforms (for e.g., Tata Neu, Swiggy, Paytm, Ola) have an advantage in customer acquisition, credit underwriting, cost of funds. Therefore, incumbent platforms enjoy an advantage over pure-play Fintechs, who are in turn seeking to build a financial superstore platform.

◎ The combination of increasing MSME formalization, exploding machine-readable data and maturing OCEN is set to dramatically democratize credit for MSMEs. Increasing GST penetration and the AA framework is set to drive 100x growth in machine-readable

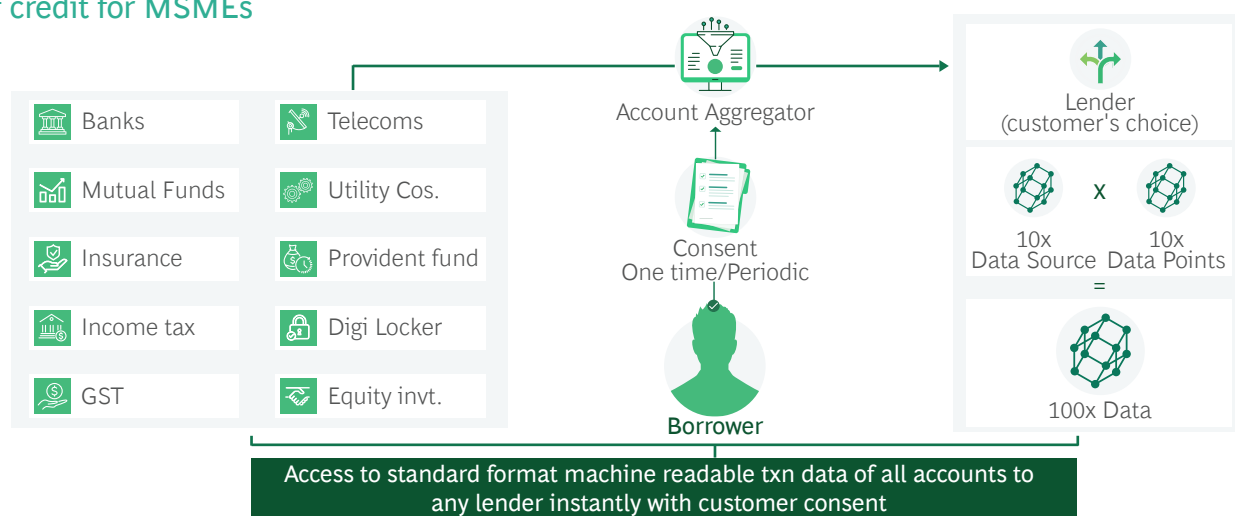
data pertaining to MSMEs as seen in Exhibit 6. Atop this rich data layer, OCEN seeks to create an open standard. Lending Service Providers (LSPs) will act as direct selling agents as well as data providers for regulated lenders (Banks / NBFCs) and plug into the AA framework. Lenders can then integrate with these LSPs via APIs to acquire, underwrite and service these MSME loans digitally.

This has three implications:

- 1 Firstly, analytics capability (for customer acquisition, pricing, and partnerships) becomes an important point of differentiation for Fintechs
- 2 Secondly, it brings banks, NBFCs and Fintechs closer, as collaborators and not as competitors
- 3 Thirdly, ownership of the customer (MSME) for future monetization (for e.g., trade financing, forex) will need to be resolved between the LSPs and Banks / NBFCs, given an LSP can partner with multiple Banks / NBFCs

◎ Credit quality continues to be a key priority for Fintechs, given high credit costs in small-ticket disbursements, primarily sourced by digital Fintechs / NBFCs. GNPA's for all loans sourced by Fintech¹⁸ lenders in small-ticket (less than INR 25,000) loans grew by ~7x21 between March 2020 and March 2021. Through 2021, portfolios sourced by Fintechs continued to demonstrate GNPA's of ~20%¹⁹ of disbursements as illustrated in Exhibit 7. Such high credit costs add pressure on unit economics, which pushes up yields and portfolio risk in tandem. Additionally, they could also invite increased regulatory scrutiny on Fintechs' sourcing model, loan pricing and credit policies (for e.g, FLDG). To control credit costs while managing operating expenses,

Exhibit 6 – Availability of machine readable data to increase for lenders, leading to democratization of credit for MSMEs



Source: BCG analysis

16. Source: CCI ecommerce model, BCG CCI Digital Influence Study 2013-17, 2021 surveys (N=10000 to 20,000 each year, urban and rural coverage)

17. Sezzle alone lost as much as 90% of its market cap with share price dropping from \$5.73 to \$3.02, while Afterpay lost ~40% and affirm lost 18%

18. Fintech & NBFCs taken together to avoid any skew owing to FLDG arrangements by Fintechs

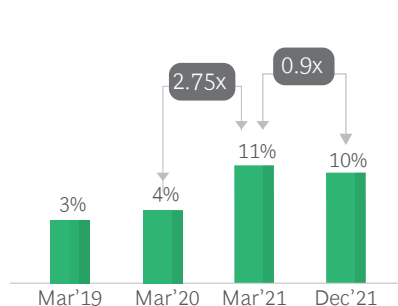
19. Source: CIBIL Data

20. Source: CRISIL – Yearbook on the Indian debt market 2021

Exhibit 7 – Fintechs continue to see high GNPA's triggered with the onset of covid

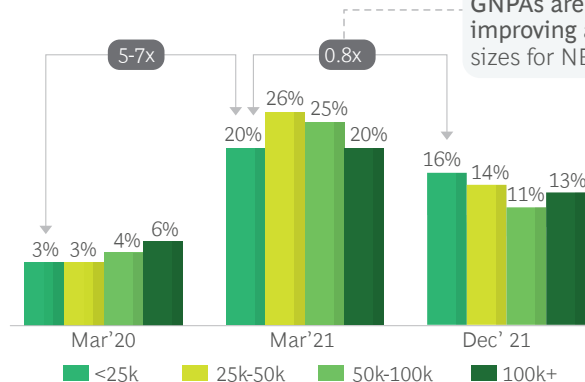
GNPAs for all loans have increased by ~3x from Mar'20 to Mar'21 for NBFC & Fintech lenders

GNPA as a % of AUM
All personal loan combined



GNPAs for small ticket loans have increased by 5-7x from Mar'20 to Mar'21 for NBFC & Fintech lenders

GNPA as a % of Disbursements



Source: TransUnion CIBIL, BCG analysis

Note: Fintech & NBFCs taken together to avoid any skew owing to FLDG arrangements by Fintechs; CIBIL data for individual fintech players in anonymized format is not available

- Fintechs need to be able to secure more consent-based data at scale** (via OCEN) to substitute surrogate data with actual data on customer cohorts
 - Build robust risk models that can withstand multiple credit cycles.** While the ML-led Fintech models can learn faster than bank/NBFC models, the loan repayment data still flows in broadly in the same cadence across Fintechs (for e.g., monthly). Therefore, achieving model improvement is a metronomic process, iterated over time.
 - Hyper-personalize product policy and collections model for customers via advanced analytics** (for e.g., selective product access, lower limits for low-credit score customers, higher contactability thresholds for riskier customers)
- ⊙ **Lowering cost of funds by improving the depth of India's debt and securitization market could dramatically improve Fintech unit economics and portfolio credit quality.** Currently, even in peak liquidity cycles, 70-80%²⁰ of debt (by value) flows to AAA-rated NBFCs and above whereas in low liquidity cycles, debt concentration is even higher (~90%). The higher cost of funds for below AAA-rated NBFCs adds pressure on Fintech partners to source higher yield, riskier loans, increasing systemic credit risk. Thus, there is a clear benefit to establishing a vibrant debt market in India. However, this requires Fintechs to be able to
- Demonstrate clear value to a debt investor, whose goals are different** (e.g., loss minimization via better credit quality) from an equity investor (e.g., upside maximization via valuation gain)
 - Price risk capital effectively**, both on the liability and the asset side of the balance sheet, by leveraging data, analytics and ML
 - Achieve a high velocity/throughput of debt funding by building a market for securitization**
 - ⊙ Particularly, securitization is a key unlock for lowering cost of funds. Given 84%²¹ of India's household wealth is locked in physical assets, securitizing them could dramatically expand availability of lending capital for Fintechs. Replacing unsecured lines with secured funding would lower funding IRR, thereby enhancing viability of Fintech business models in the long run. Building scale in securitization needs concerted policy impetus across sectors and states. A key example is Maharashtra digitizing agricultural land records via '7/12', thereby opening up such asset categories for disruption.
 - ⊙ **RBI's focus on upholding regulatory, tech, consumer protection standards could subject Fintechs to a standard protocol of operating model with implications on growth, viability.** The working group in Nov 2021²², through its working paper has noted that FLDG arrangements involve non-regulated LSPs bearing credit risk without maintaining any regulatory capital, and that there is a potential for build-up of credit and counterparty risk for regulated entities. This could limit / disallow the growth of FLDG based lending models deployed by Fintechs. A potential recommendation on introducing a legislation for 'Banning of Unregulated Lending Act' could potentially cap interest rates, especially to the riskier / NTC segments. Another recommendation urges regulated entities to maintain auditable documents of algorithms used for underwriting and obtain explicit customer consent for usage of any underwriting data. This could impact the access to data and efficacy of underwriting by Fintechs, subsequently impacting credit costs.

21. Source: RBI's household wealth report 2017

22. Paper being the 'Report of the Working Group on Digital Lending including through Online Platforms and Mobile Apps'

3. WEALTH Fintechs are vying to educate and unlock mass investors at scale with discount-led business models

India's wealth will continue to be increasingly financialized and drive penetration of equity investing (especially in the mass / affluent segment).

Between FY14 to FY19, India's annual gross household wealth grew by 14% (versus 6% for physical wealth). While FDs continue to hold the largest share (18%) of India's financial wealth, the CAGR of equity MFs (39%) and alternatives (44%) has outpaced that of FDs and bonds (9%) in the same period. This is reflective of India's MF under-penetration (12% vs. 63%²³ globally), underlying returns of asset classes, changing customer attitude and behavior towards investing in equity. Between FY20 to FY25, the number of individuals entering the 'affluent'²⁴ band will double from ~0.5M to ~1M²⁵. For Fintechs, a growing pyramid and addressable demand at the base poses the need for digitally educating, activating, and servicing this base at scale. Not surprisingly, this has led to proliferation of wealth techs seeking to serve the mass segment with innovative themes.

Wealthtechs are activating mass investors through thematic innovation in products. However, the path to long-term viability will need a shift from discount-led to monetization-led plays and better education and engagement of existing customers.

Key thematic examples include micro-investment (Spenny), auto-investments (Jar), robo-advisory (Stack), ecosystem integrations (Multipl), gamification (Jar), financial literacy (Finpeg) and vernacular support (Fello). Jar enables auto-investment of spare change from purchases, into MFs, SIPs, digital gold. Spenny enables micro-investments (as low as INR 10). Stack analyses customers' risk profile basis a questionnaire and algorithmically recommends a suitable portfolio. Multipl integrates with merchants (e.g., travel aggregators) to fulfil customers' spending goals while helping them ringfence their savings for this purpose

Ultimately, three factors will decide viability of these Wealthtech models:

- 1 Firstly, the ability to dramatically simplify investing for 'Bharat' through a solid content platform with vernacular support
- 2 Secondly, the ability to rapidly scale AUM and drive annuity by keeping customers engaged, given the small-ticket sizes in this play
- 3 Thirdly, the propensity to transition from 'discount' to monetizable products like regular MF (vs. direct MF)

Technological solutioning to improve mass-investor literacy could emerge as an important growth driver versus core financial engineering of products. Incumbents are trying to get 'customers to do better with their money' by embedding nudges in order flows to guard against common pitfalls (for e.g, Zerodha introduced embedded nudges on penny stock risks, which saw a marked reduction in penny stock volumes). Product offerings in equity and fixed income continue to remain standard. The key to capture this segment is to understand their needs rather than serving complicated financially engineered products they do not feel a need for.

The investment thesis on Wealthtechs is indexed towards user acquisition and engagement, given the underpenetration of India's wealth landscape, thereby increasing monetization runway for these firms. However, to monetize wealth offering, wealth techs need to begin monetizing advisory and delivery trades. Since Zerodha's disruption of broking for retail investors in 2015, monetizing delivery trades has been a challenge since transaction fee is a key revenue driver. "At some stage, we need to start charging for broking transactions for delivery trades also—Nitin Kamath, Zerodha". Further, to remain cost effective in a competitive space, fintechs are aiming to keep cost of customer acquisition low for e.g, Zerodha's customer acquisition cost is "very little to none" versus an industry average of INR 3000–5000 per customer. This has been one of the key drivers of Zerodha's profitability in the last few years.

23. Source: Paytm DRHP, Press Search, BCG Global Wealth Report 2021 - BCG Global Wealth Market Sizing, BCG analysis

24. Affluent band is defined as Individuals with investible wealth between INR 1 to 5 Cr

25. Source: CCI City Income Projections

4. Innovation **INSURANCE** will be shaped by a new regulatory regime and infrastructural enablers like NHS, AA and India Stack

- IRDAI seeks to usher in a new regime of insurance regulations, which could unlock newer operating models, partnerships between Insurtechs and incumbents.

Key implications include:



White-labeling: Today, InsurTechs cannot white-label products that can be underwritten by a traditional insurer. A change in regulation could result in a one-to-many Insurer-Insurtech partnerships, likely making this a 'winner-takes-all' market for Insurtechs



Digital distribution: Today, legacy insurers cannot set up a subsidiary digital attacker—in case of a revision, these insurers can now reinvent to cover new-age customers themselves, thereby reducing reliance on new-age Insurtechs for distribution

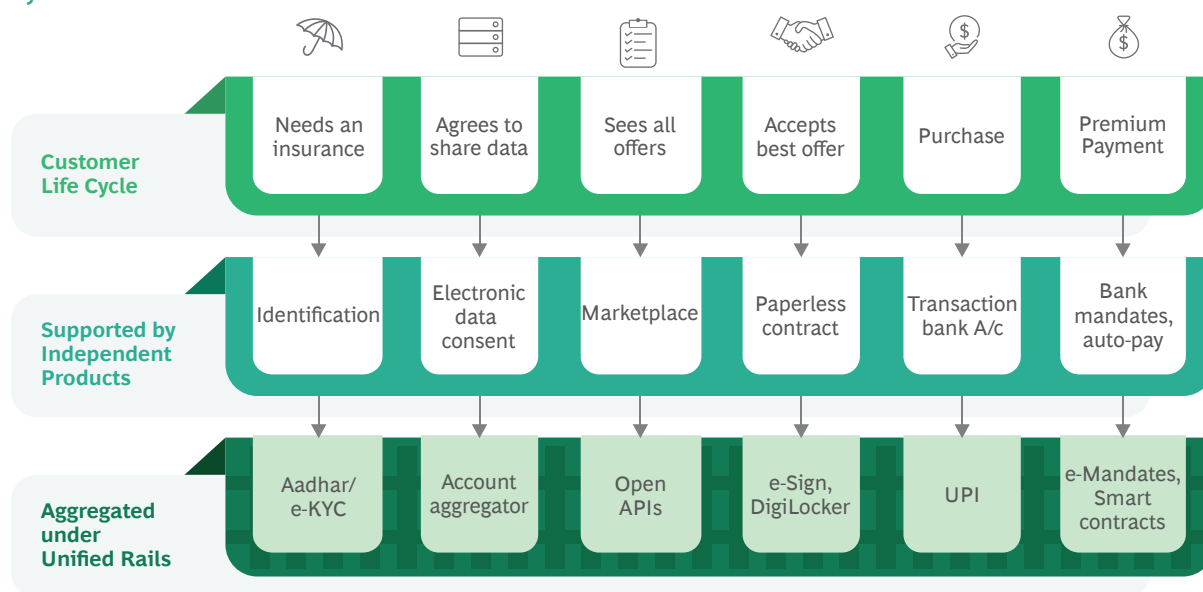


Consolidation: Today, an insurance companies cannot merge with a digital attacker to strengthen its digital presence²⁶. Any change(s) to this guideline could potentially influence the corporate structures of key players in this space with legacy firms eyeing synergetic partnerships or M&A

- The AA framework and India Stack will enable end-to-end journey digitization of insurance. This will improve efficiency and customer experience for legacy insurers, unlock greater capture for regulated Insurtechs, create downstream niches for other Insurtechs. Exhibit 8 illustrates how insurers could leverage the stack at each stage. This will have three implications for insurers and Insurtechs: Firstly, Insurers will now be able to onboard their customers faster, assess needs better (vs. being product pushers), underwrite and price risk more granularly, and simplify purchase and repayments. Secondly, regulated digital attackers (for e.g. Acko) can reduce / remove reliance from other partners and can now directly reach, understand, service customers, thereby maximizing value capture. Thirdly, other modular Insurtechs will seek to deepen their niche in specific supporting / downstream processes like video assessment, roadside assistance, in partnership with legacy insurers.

- The National Health Stack will significantly unlock value in Retail Health Insurance, with more Insurtechs plugging into this ecosystem. Health insurance will expand to include OPD (Outpatient Department), customized underwriting models will become feasible based on health data / records. It opens up a possibility for insurers to create E2E health and wellness ecosystems, embedding value added services like health advisory, monitoring etc. along with health insurance. Insurtechs can partner with insurers to offer innovative product constructs and lend digital distribution capabilities. Insurtechs can also help drive down costs, streamline claims settlements, lower frauds and cost of operations for health insurance by virtue of their tech capabilities.

Exhibit 8 - Insurance data aggregation architecture can enable digitalization of end-to-end customer life cycle



Source: BCG analysis

26. Today, the Insurance Act doesn't permit an insurance company to acquire more than 10% equity stake in any company

5. CRYPTO, DeFi (Decentralized Finance) no longer the wild west; increasing regulator recognition and scrutiny a double-edged sword

• The recent crypto market erosion has tempered stakeholder expectations; capital will continue to be constrained whereas talent pool remains resilient.

Since scaling meteoric highs in market cap in early 2021, cryptocurrencies have been weathering a period of price volatility since November 2021. In the 8 months since, the price of Bitcoin has fallen by ~70%²⁷, and Ethereum by ~75%²³. The collective erosion of market capitalization amounts to over \$1 Trillion. Response to this erosion has varied across stakeholders. Retail investor confidence on cryptocurrencies and decentralized projects has taken a hit, as evidenced by the plunge in Decentralized Exchange volumes (48% down since Nov'21²⁸) and the Total Value Locked (TVL) in DeFi protocols (66% down from \$257 Billion since Nov'21). Crypto-native firms (including Coinbase, Gemini) have affected layoffs and hiring freezes, while other Fintechs like BitMEX and Robinhood have tempered their crypto aspirations. However, despite the crash and the funding outlook, developer activity has continued to hold strong, indicating a resilient talent pool.

Therefore the capital-constrained environment would act as a forcing function to eventually channel capital and talent pool to viable blockchain applications and DeFi projects. These projects should be able to demonstrate inherent value, built atop a robust, scalable infrastructure, and designed to enhance the traditional ecosystem versus try to replace it. A good example is on-chain asset tokenization.

• On-chain asset tokenization is expected to gain prominence across key markets.

In addition to traditional asset fractionalization, on-chain asset tokenization is focused more on illiquid assets (e.g., agri land) and private markets (e.g., pre-IPO stocks) to improve liquidity, accessibility, transparency and efficiency of such

asset classes. The total size of illiquid assets globally which can be tokenized would be \$16 trillion²⁹ by 2030. Exhibit 9 illustrates the tokenization landscape. The on-chain asset tokenization market globally surpassed \$2.3 billion in 2021 and is expected to grow at a 5-year CAGR of 19% to reach \$5.6 billion by 2026. As per experts, the potential of on-chain asset tokenization in Asia alone is to the tune of \$3 trillion (i.e., total market cap of private unlisted assets), indicating a huge addressable market.

The global uptake of on-chain tokenization is underpinned by three success factors

- 1 Clearer regulatory framework across nations
- 2 Concerted push to demonstrate proof of concept and improve retail investor awareness
- 3 Standard tech protocols across tech stack to accelerate go-to-market

• Large crypto Fintechs continue to operate with caution in an evolving regulatory landscape.

In the union budget the government imposed a TDS of 1% on transactions from July 1 and 30% tax on capital gains giving it some legitimacy but the talks of banning crypto in India has led some of the big names to change their domicile to Dubai/Singapore. Regulator too continues to be mindful on investor education, acquisition, KYC, dollarization of capital. After a free run for a year, the ASCI cracked down in Feb 22. It mandated that crypto ads follow a set of 12 guidelines and show a “highly risky” disclaimer. This has also led to a slowdown in funding received by Indian startups operating in the space.

Exhibit 9 - Distinct differences exist today between the landscapes of traditional fractionalization and on-chain tokenization

	? What is tokenized?	Who tokenizes it?	How is it tokenized?
Traditional asset fractionalization	Public markets <ul style="list-style-type: none"> Real estate Public equity Private equity Fixed income Commodities 	<ul style="list-style-type: none"> PE firms Investment Banks AMCs Hedge funds 	Key steps/stages involved <ol style="list-style-type: none"> 1. Underlying asset is fractionalized 2. Each segment listed on an exchange 3. Multiple parties' own small fractions 4. Process supervised by centralized agency (REIT, ETF, MF)
On-chain asset tokenization	Private markets <ul style="list-style-type: none"> Pre-IPO stock SME revenues Public infra Private debt Wholesale bonds Digital assets Physical art Exotic beverages 	<ul style="list-style-type: none"> Asset originator Tech companies Protocol developers 	Key steps/stages involved <ol style="list-style-type: none"> 1. Assemble the ecosystem 2. Configure a token 3. Set compliance rules 4. Distribute the tokens 5. Execute corporate actions

Source: BCG analysis

27. Source: Press Search: The NewYork Times

28. Source: Press Search: The Defiant

29. Source: World Economic Forum – 2015, BCG Analysis

Key Takeaways



Payments

1. Credit Card on UPI rails will further turbocharge digital payments penetration
2. While overall credit card penetration will increase, the role of non-banks is unclear; to be shaped by regulation
3. Increase in merchant base will drive P2M payments and expand credit access and sharper credit decisioning
4. RBI's Payments Vision 2025 to drive innovation and growth, although with expanded regulatory responsibilities for Fintechs

Wealth

1. India's wealth will continue to be financialized; underpenetrated equity and MF market will present an opportunity for Wealthtechs
2. Wealthtechs are activating the mass/affluents through thematic innovation. However, the path to long-term viability will require Fintechs to charge customers for services
3. Technological solutioning and investor education will be more important growth drivers for mass segments versus pure product engineering
4. The Wealthtech investment thesis will be indexed towards user acquisition vs. monetization/profitability, given the underpenetration of Indian market; however, CAC has started becoming a key differentiator to improve unit economics

Crypto, DeFi

1. The recent crypto market erosion has tempered stakeholder expectations; capital will continue to be constrained whereas talent pool remains resilient
2. On-chain asset tokenization is expected to gain prominence across key markets. Its evolution will be shaped by regulations, standard tech protocols and the adoption by TradFis
3. Large crypto Fintechs will continue to operate with caution in an evolving regulatory landscape

Lending

1. While embedded finance / BNPL will further drive digital payments and credit penetration, achieving profitability at scale remains elusive
2. Fintechs continue to strive to improve credit quality; consent-based data, robust risk models, and bespoke credit policies could be important unlocks
3. Securitization and tapping into the debt market could help alleviate pressure on Fintechs' cost-of-funds and therefore yields
4. RBI's focus on upholding regulatory standards and consumer protection could invite greater scrutiny on Fintechs' lending models (e.g., FLDG) and ultra-high yields

Insurance

1. IRDAI seeks to usher in a new regime of insurance regulations, which could unlock newer operating models, partnerships between InsurTechs and incumbents
2. The AA framework and India Stack will enable end-to-end journey digitization of insurance, leading to greater operating efficiency, sharper pricing newer partnership models between insurers and InsurTechs
3. The National Health Stack will significantly unlock value in Retail Health Insurance, with more InsurTechs plugging into this ecosystem

Conclusion

Indian Fintechs have been the posterchild of India's digital growth story, with their growth propelled by a surplus of capital, maturing infrastructure and favorable underlying customer demographics. The good news for Fintechs is that India's digital infrastructure is only expected to further mature and the underlying demand growth is expected to stay strong. However the Fintechs will also have to operate in an environment with regulator(s) that are increasingly nationalistic, pro-consumer, and vigilant; licensed incumbents who are strengthening their digital capabilities; increasingly affluent and digitally-savvy customers who are hungry for their financial needs to be met digitally; and most importantly, a large base of mass customers waiting to be digitally educated and serviced. Achieving sustainable and profitable growth in this environment will be test of which Fintechs can grapple and balance these multiple stakeholders and place their customer at the centre of it all. Ultimately, customer is king.

Glossary

AI	Artificial Intelligence	KYC	Know Your Customer
AMC	Asset Management Company	LSPs	Lending Service Providers
AMFI	Association of Mutual Funds in India	MDR	Merchant Discount Rate
API	Application Programming Interface	MF	Mutual Fund
ASCI	Advertisement Standards Council of India	ML	Machine Learning
AUM	Asset Under Management	MSME	Micro, Small and Medium Enterprise
BNPL	Buy-Now Pay-Later	NBFC	Non-Banking Financial Company
CASA	Current And Saving Account	NFC	Near Field Communication
CBDC	Central Bank Digital Currency	NHS	National Health Stack
CC	Credit Card	NTC	New-To-Credit
DLT	Distributed Ledger Technology	OCEN	Open Credit Enablement Network
DSA	Direct Selling Agent	ONDC	Open Network for Digital Commerce
FI	Financial Institution	P2M	Person-to-Merchant
FLDG	First Loan Default Guarantee	PPI	Prepaid Instrument
GNPA	Gross Non-Performing Assets	QR Code	Quick Response Code
GSTN	Goods and Services Tax Network	SBM	State Bank of Mauritius
HH	Households	TReDS	Trade Receivables Electronic Discounting System
IVR	Interactive Voice Response	UPI	Unified Payment Interface
JAM	Jan Dhan, Aadhar, Mobile		

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