

How digital payments drive financial inclusion in India

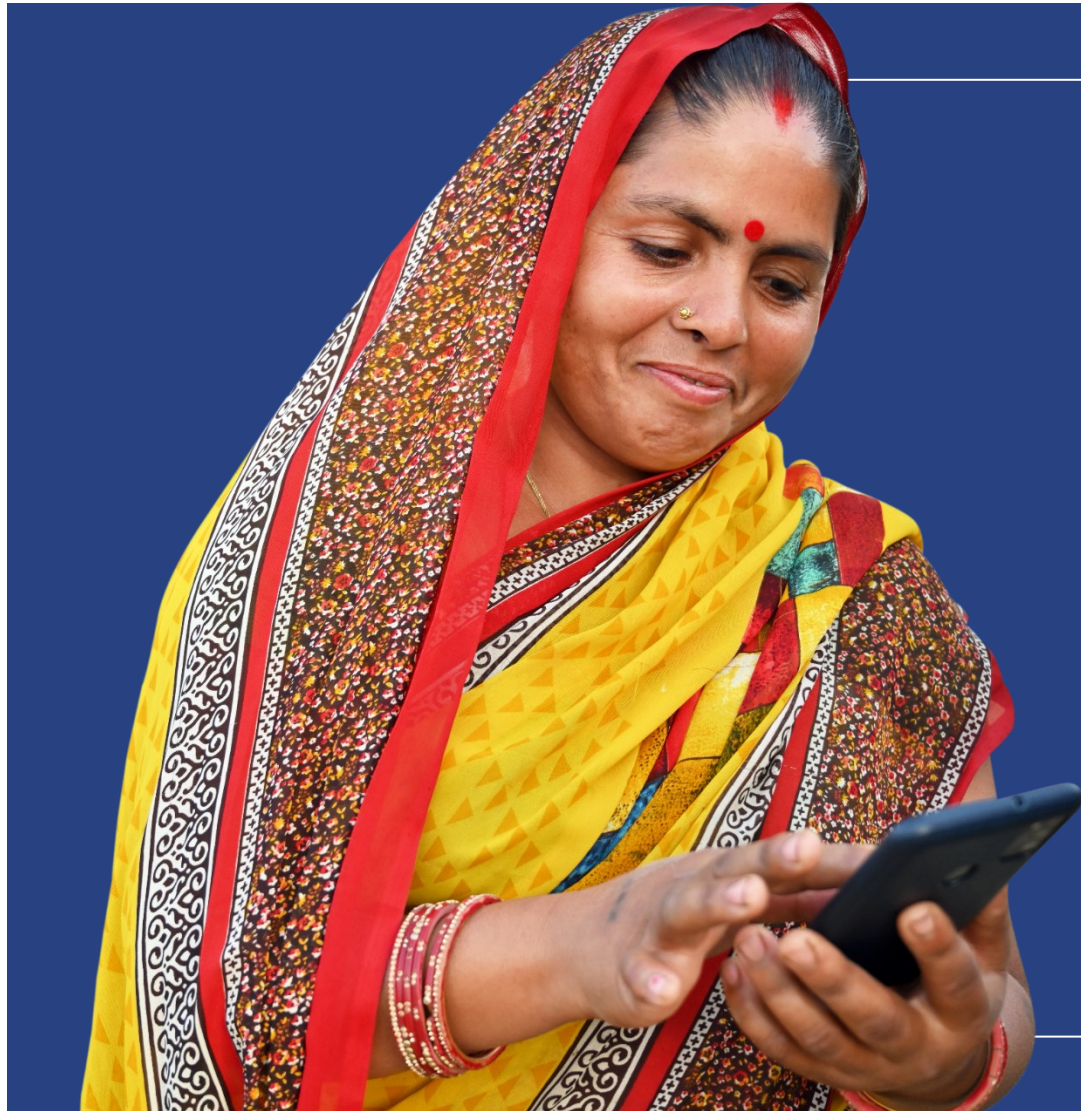
An abridged version of the
whitepaper



NPCI
भारतीय राष्ट्रीय भुगतान निगम
NATIONAL PAYMENTS CORPORATION OF INDIA

MSC
MicroSave Consulting

Foreward to the report



Acknowledgments

- We extend our appreciation to NPCI for its guidance and support in providing information to develop the whitepaper and this abridged report.
- We also thank the RBI and DFS for maintaining a public data repository that provided insights to develop the whitepaper, in collaboration with NPCI.

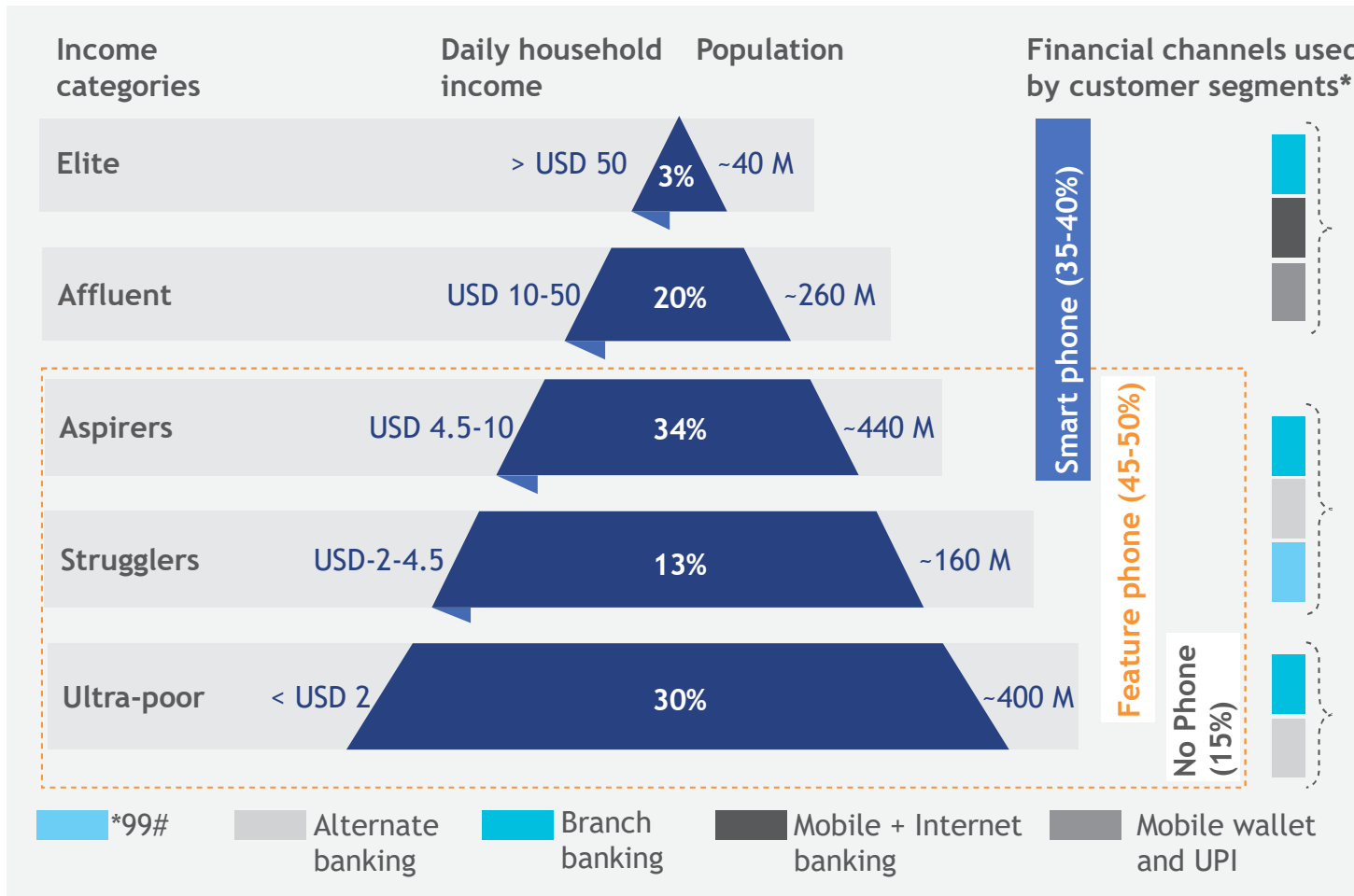


About this report

- This report is an abridged version of the whitepaper on “How digital payments drive financial inclusion in India.”
- To read the full-length version of the report, please visit << link >>.

Most customer segments in India have varied financial needs and preferences, depending on their lifecycle stage

A 2018 MSC study divided India's population into five major segments based on their daily household income; each segment has distinct digital and financial behavior based on their varied financial needs and their degree of access to financial resources



Almost all **Elites** and **Affluents** own smartphones and use sophisticated digital channels, such as UPI, branch banking, and alternate banking for their financial needs. They are the most comfortable using DFS and are well-served by both incumbents and FinTechs.

Aspirers and **Strugglers** predominantly display limited experience and usage of digital payments. Yet they readily agree to transact digitally if they find relevant use-cases. Aspirers mostly own smartphones, whereas a large proportion of Strugglers use feature phones. Strugglers have a high prevalence of USSD platform usage.

The **Ultra-poor** have low awareness of digital payments and do not trust it. They lack relevant use-cases to transact on a digital platform. They depend extensively on government-backed social security programs, and live in areas with limited or no connectivity.

Source: MSC analysis

The LMI segment faces several barriers to adopt digital payments and need a collaborative approach from players in the ecosystem to mitigate the barriers

Key products to implement the above mentioned recommendations

Customer-level barriers



- Cash is still the king
- Limited awareness and digital literacy hamper the uptake

Service-provider-level barriers



- Limited segment-level customization on digital payment products
- Lack of responsive GRM

Ecosystem-level barriers



- Lack of robust solutions to overcome the excessive reliance on internet connectivity
- Trailing acceptance ecosystem for digital payments
- Inadequate CICO network

Recommendations to resolve these barriers

- ✓ **R1*** Create awareness and develop the right value proposition for using digital payments
- ✓ **R2** Create a positive experience for users
- ✓ **R3** Create capability and trust in digital payments
- ✓ **R4** Improve the acceptance infrastructure for digital payments
- ✓ **R5** Build collaboration with players in the ecosystem to drive innovation

Key products to implement the above mentioned recommendations



Aadhaar-based payment products:

- Aadhaar enabled Payment System (AePS)
- BHIM Aadhaar Pay (BAP)



Contactless payment products

- Unified Payments Interface (UPI)
- Bharat Bill Payment System (BBPS)



Card-based payment products

- RuPay

Source: MSC analysis

*R1 to R5 indicates priority based on efforts and cost involved in interventions

See [Annex 1](#) to understand the barriers to adopt digital payments in detail

India's digital payments ecosystem requires a few improvements to promote sustainable usage among customers

RBI's 2025 vision

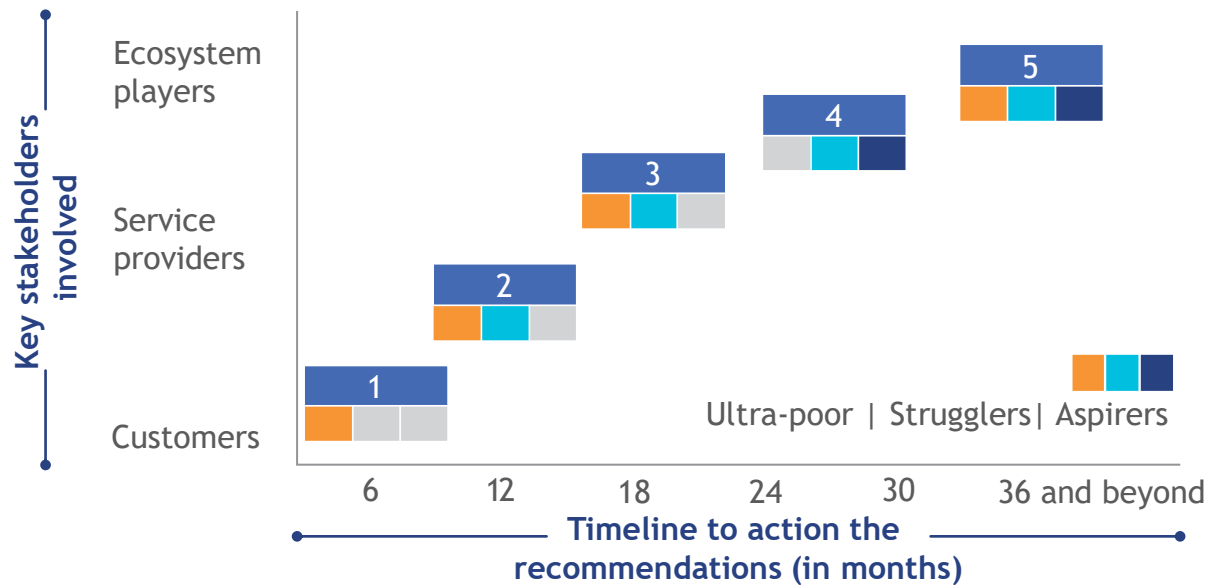


The RBI's payments vision documents have helped develop and modernize India's payment systems through four strategic pillars—**responsive regulation, robust infrastructure, effective supervision, and customer-centricity.**

The Payment Systems Vision 2025 intends to provide **fast, secure, convenient, accessible and affordable digital payment solutions through the 4Es.*** This vision builds upon the RBI Payments vision 2019-21, which intended to **enhance customer experience, empower payment system operators and service providers, and implement a forward-looking regulation supported by risk-focused supervision.**

Players in the ecosystem need to undertake several steps to fulfill this vision and increase the adoption of digital payments

Recommendations to improve the adoption of digital payments in India






- R1** Create awareness and develop the right value proposition for the use of digital payments
- R2** Create a positive experience for users
- R3** Create capability and trust in digital payments
- R4** Improve the acceptance infrastructure for digital payments
- R5** Enhance collaboration with ecosystem players to drive innovation

Source: MSC analysis





*E-Payments for Everyone, Everywhere, Every time (4Es)

Service providers need to focus on building the right value proposition and creating a positive experience for LMI customers

Segments impacted	
 <p data-bbox="239 376 417 415">Ultra-poor</p>	<p data-bbox="575 248 1462 322">R1 Create awareness and develop the right value proposition for using digital payments</p> <p data-bbox="555 362 1854 396">1.1 Develop anchor use-cases for various customer segments to ensure sustained usage</p> <ul data-bbox="555 419 2359 686" style="list-style-type: none">▶ Create dedicated and need-based anchor use-cases to enable the adoption of digital payments by various sub-segments of the population, such as women, farmers, merchants, and urban poor segments.▶ Targeted use-cases may include:<ul style="list-style-type: none">• Using UPI for salary payouts (B2P channel) and agri input payments in the rural areas;• Using <i>Aadhaar</i>-based payments to pay workers' salaries or contract payments in factories, commission payouts to insurance agents, and MFI loan repayments, among others.
 <p data-bbox="239 901 417 939">Ultra-poor</p>  <p data-bbox="239 1005 417 1043">Strugglers</p>	<p data-bbox="575 782 1365 829">R2 Create a positive experience for users</p> <p data-bbox="555 891 1679 925">2.1 Conduct UI/UX testing of the product to ensure intuitive product design</p> <ul data-bbox="555 948 2033 1033" style="list-style-type: none">▶ Understand the customer's adoption journey and their financial needs before they design a product▶ Test the product's UI with their target segments and design a seamless and intuitive interface <p data-bbox="555 1056 1518 1090">2.2 Develop a seamless, transparent, and efficient GRM for users</p> <ul data-bbox="555 1113 2377 1233" style="list-style-type: none">▶ Resolve transaction failures on time to improve customer adoption manifold and enhance trust in the products and services▶ A centralized GRM platform with a standardized TAT and quick dispute resolution mechanism would help resolve grievances with the increase in the volumes of digital payments

Source: MSC analysis




Service providers need to build the right value proposition and create a positive experience for LMI customers

Segments impacted	R3 Create capability and trust in digital payments
 <p>Ultra-poor</p>  <p>Strugglers</p>	<p>3.1 Offer assisted transaction support to build trust in digital payments</p> <ul style="list-style-type: none">Adopt a phygital* model to help ensure last-mile connectivity, using BC agents or feet-on-street (FoS) to employ banking at customers' doorstep. Last-mile agents can help create awareness, train, onboard customers and merchants, and assist in the adoption of digital payment products, such as BAP and BBPS. <p>3.2 Build a community of facilitators and end-users to drive the uptake of digital platforms</p> <ul style="list-style-type: none">Create a vibrant digital community of end-users and facilitators, such as local influencers, to improve universal access to services, drive end-user engagement, and create an environment of trust for the adoption of digital platforms. <p>3.3 Ensure open communication through multiple channels</p> <ul style="list-style-type: none">Digital platforms, such as WhatsApp, can be used to create awareness and provide information on financial products and services, and prevent fraud while conducting digital transactions.
 <p>Strugglers</p>  <p>Aspirers</p>	<p>R4 Improve the acceptance infrastructure of digital payments</p> <p>4.1 Improve internet connectivity in remote areas and develop offline solutions to allow customers to transact in regions with low connectivity</p> <ul style="list-style-type: none">Develop offline payment solutions to aid processing of transactions without a data connection or when data connection becomes available or through slower networks. The launch of UPI123 Pay in 2022 seeks to improve access for more than <u>400 million feature phones users</u> previously excluded from the digital payment landscape.Create awareness of offline payment solutions and design regional language support for customers

Source: MSC analysis

*phygital: combination of physical and digital for enhanced experiences

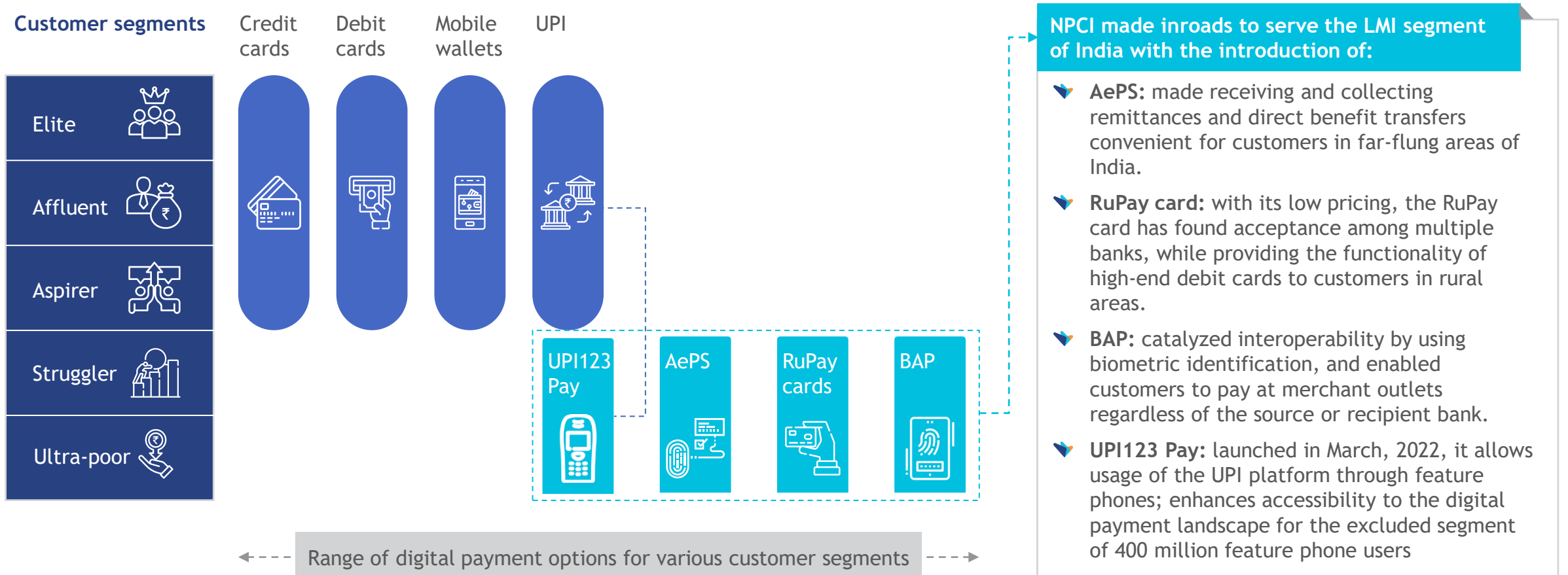
Regulatory bodies also need to ensure greater collaboration among several stakeholders to promote innovation in digital payments

Segments impacted	R4 Improve the acceptance infrastructure of digital payments
	<p>4.2 Onboard merchants digitally in rural areas and deploy more devices or modes for them to accept digital payments from customers</p> <ul style="list-style-type: none"> Providers should deploy more PoS devices at subsidized rates and partner with phygital firms to expand the outreach of billers in rural areas and create an integrated bill payment system through BBPS. <p>4.3 Strengthen the CICO network to provide access to financial services for the LMI segments</p> <ul style="list-style-type: none"> Segment the agents into service agents and sales agents to optimize the spread of agents as per-population coverage; geotag agent locations to allow customers to identify agent outlets easily; India has 3.26 million BC agents as on December, 2021*; improve the density of BCs from the current growth rate of BC agents at 57.5% CAGR to resolve last-mile issues for the customer Incentivize agents to undertake cashless transactions to reduce the prevalence of physical cash; Conduct a costing study to identify the financial viability of agents and redesign compensation structures accordingly; Create a dashboard that shows data on the performance of BCs, their status—whether active or dormant, and offer a centralized support mechanism to address grievances.
<ul style="list-style-type: none">  Ultra-poor  Strugglers  Aspirers 	<p>R5 Enhance collaboration with ecosystem players to drive innovation</p> <p>5.1 Collaborate and create “super apps” to offer higher ease and utility for customers</p> <ul style="list-style-type: none"> Super apps allow providers to gather behavioral insights on customers’ online preferences and thus provide the opportunity to offer need-based and customized financial products and services.

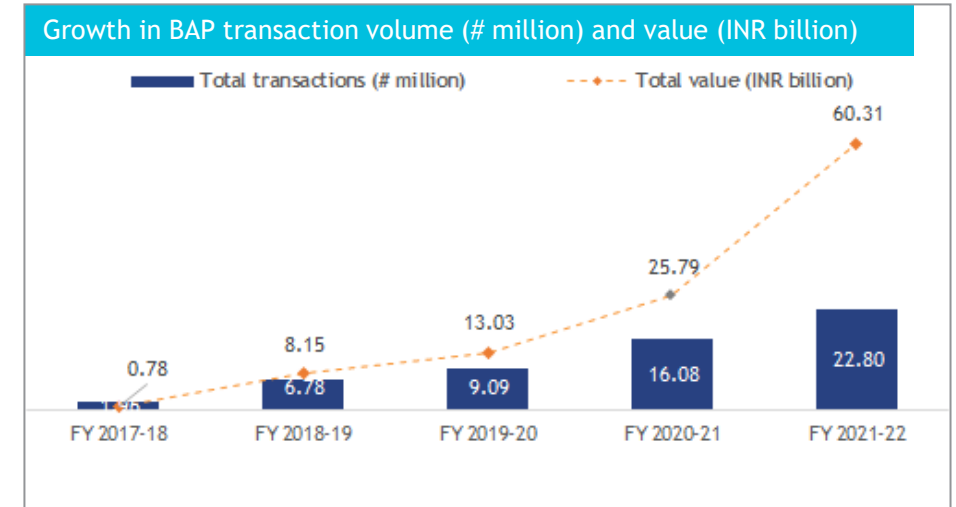
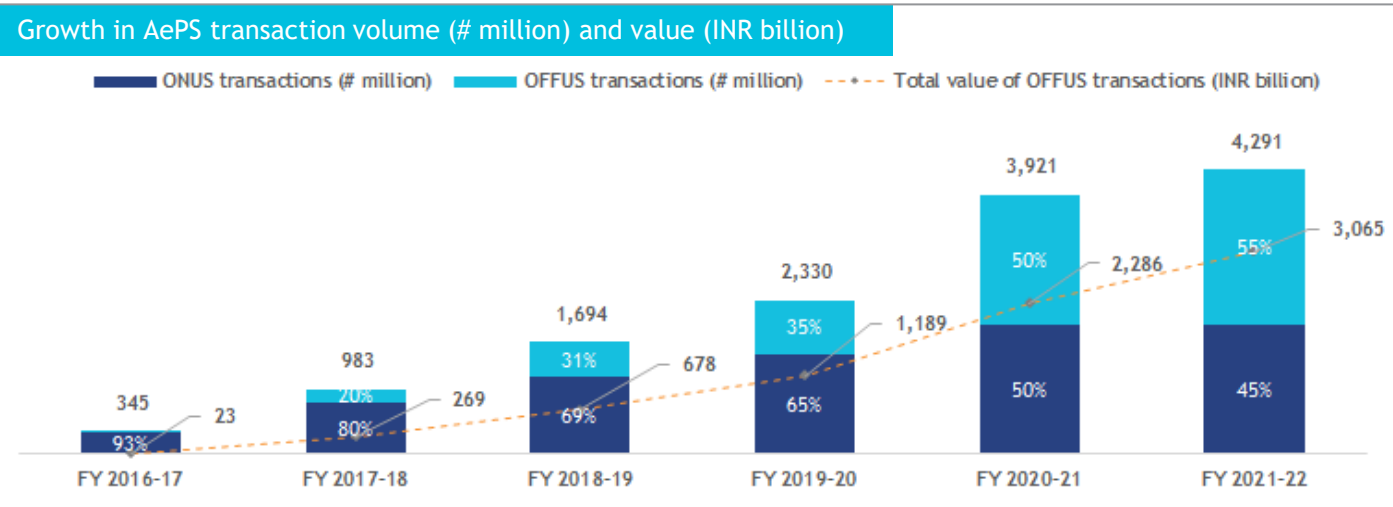
Source: MSC analysis
*RBI Annual Report 2021-22

While most providers focus on the needs of the affluent, NPCI focuses on simple and affordable digital payment solutions for the masses

Digital payment products, such as credit cards, debit cards, wallets, and UPI are primarily skewed to serve the population that owns smartphones. Even though these instruments played a key role in strengthening the digital ecosystem in India, it did not necessarily bridge the digital divide in the payments space.



Aadhaar-based payments serve as a lifeline for all government disbursements, and for customer segments that do not own or use smartphones



AePS milestones

- ▶ **FY2021-22** witnessed **~357 million** transactions each month on AePS. During the pandemic, AePS emerged as a critical cash-out medium for workers in the informal sector. The platform has also boosted in-cash DBT through agent networks across rural India.
- ▶ Recurring transaction failures (especially OFFUS), issues in reconciling failed transactions, and inconsistent customer experience at BC agent outlets restrict the uptake among people from the bottom of the pyramid.

BAP milestones

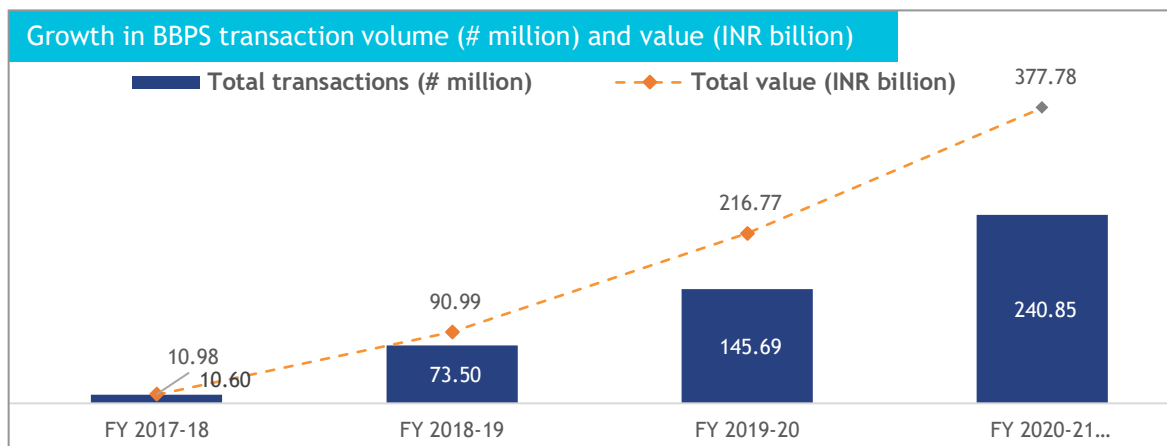
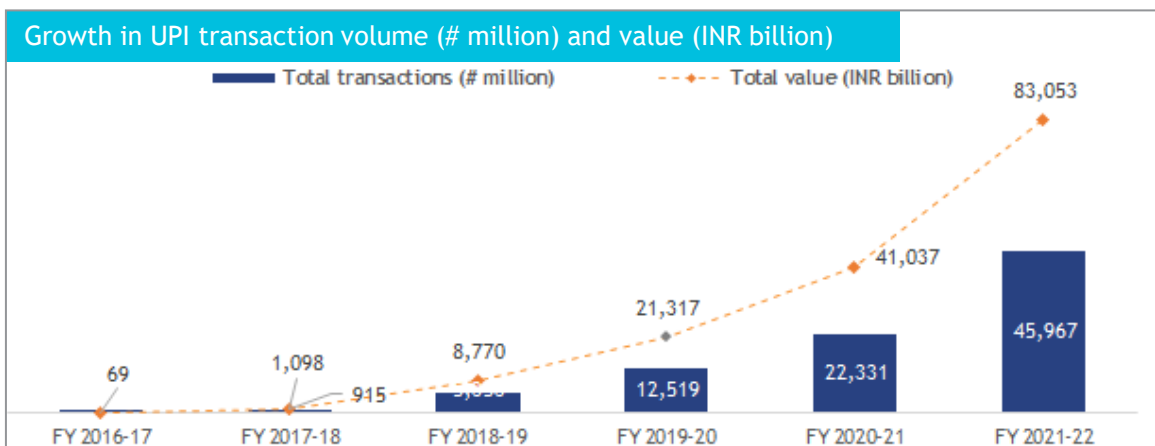
- ▶ BAP transactions witnessed **CAGR of 70% by volume over five years** with merchant payments, strengthening the overall digital ecosystem in India. BAP lacks takers in urban geographies while there is higher adoption in rural and semi-urban regions.
- ▶ A lack of evident demand from customers, lengthy transaction process, and the initial CAPEX for biometric devices continues to slow BAP's progress.

Future plans for Aadhaar-based products

- ▶ NPCI is working on **alternative modes of authentication** to avoid biometric mismatch while authenticating AePS transactions. These modes include **iris and face recognition**, with a test rollout being conducted with four leading banks.
- ▶ NPCI intends to **reduce the TAT for BAP transactions**, and **introduce new use-cases** to increase its uptake.

Source: NPCI website, DigiDhan dashboard, MSC analysis

Contactless payments provide safe, secure, and convenient payment options that have triggered high digital payment adoption across the country



UPI milestones

- UPI achieved a **CAGR of ~119% by volume**, and **300 million users** since 2016. UPI transactions stood at a monthly average of **3.83 billion** as on June 2022.
- The launch of AutoPay and UPI IPO among others has led to UPI's exponential growth.
- UPI123 Pay** will further the reach of UPI to 400 million+ feature phone users and take digital payments to the next half billion.
- The UPI model's unique features made it appealing to other nations, with Singapore, UAE, Nepal, Bhutan, and now France accepting payments using UPI.

BBPS milestones

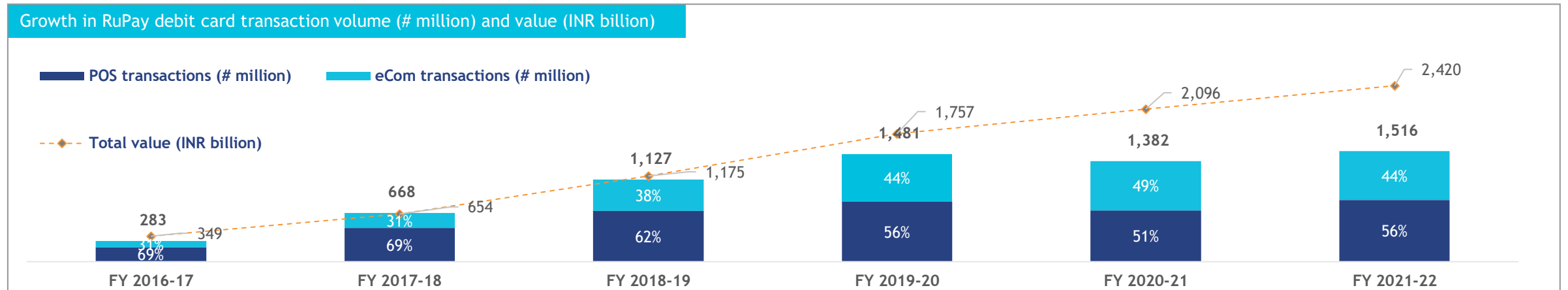
- BBPS achieved a **CAGR of 73% by volume** since 2016. It has added ~20,454 unique billers across 19 additional categories, such as loan repayments, insurance, school fee, and booking fees for cooking gas, among others
- The rural and urban LMI customer base finds BBPS safe, thus moving away from cash at physical outlets.
- BBPS has also launched the Unified Presentment Management System (UPMS) which facilitates auto-debit across channels and modes of digital payments.

Future plans for contactless payments

- NPCI is working on guidelines to **link credit cards to UPI**, **increase** avenues of payment through UPI, and drive credit penetration into digital payments.
- The initial stage would link **RuPay credit cards** to the UPI system, followed by market expansion. This will expand the usage of credit card for making payments but feasibility of zero MDR remains questionable.**
- NPCI plans to **expand the reach of BBPS** by adding more use-cases and categories to the product.

**Source: NPCI website, MSC analysis, [Business Standard](#), [The Economic Times](#)

Card-based payments through the domestic RuPay card network offer low processing fee and wide acceptance at ATMs, PoS devices, and e-commerce sites



RuPay milestones

- Close to **1,100 banks in India** issued **~600 million RuPay debit cards**. Around **315 million PMJDY beneficiaries** transact using a RuPay card. RuPay increased its market share from **15% in 2017 to 60% in 2020** in terms of total debit cards in the market.
- RuPay card has also increased its geographic outreach to **195 countries** by partnering with various international card networks.
- The uptake has also increased due to the issuance of RuPay cards for several government initiatives, such as KCC and Mudra Yojana.
- Tokenization for in-app merchants and quick checkout without an Additional Factor of Authentication (AFA) have also enhanced the transaction experience for RuPay users.
- RuPay has introduced on-the-go contactless wearables for enhanced convenience for customers. These wearables include watches and keychains, using which customers can make a payment without carrying a physical card.

Future plans Rupay debit cards

- Low active usage, limited use-cases and lack of acceptance infrastructure in rural areas have lowered the domestic growth of RuPay.
- NPCI plans to **overcome this acceptance barrier** of RuPay cards by introducing **SoftPos**, where a merchant's mobile device can operate as a PoS.
- NPCI also intends to provide **contactless payment options in the transit systems** to acquire more customers and increase usage.

Source: NPCI website, MSC analysis

The vast spread of the LMI segment offers an interesting business case for providers to design “need-based” and robust digital payment solutions (1/2)

	P	B	G
P	1	2	
B			
B			

- The growing demand for digital payments and the evolving lifestyle of customers has bolstered the need to design specific use-cases* that will drive the adoption of digital payments further in the future.
- We focus on four channels (**P2P, P2B, B2P, and P2G**) since most of the payments between businesses and governments are large in value and are already digitized. Here we will look at a few use-cases under the P2P and B2P channels:

1. Use-cases through the P2P channel



Domestic remittances

Market potential of **INR 700 million (USD 9.45 billion)**

% of digitization in P2P: <10%

- Nearly **120 million migrant workers** from remote and rural areas account for 80% of the country’s domestic remittances
- Presently, ~60% of the overall domestic remittance transactions happen through informal modes; this offers FSPs an opportunity to digitize remittance transactions worth more than **INR 400 billion (~USD 5.4 billion)**



House rental payments

Market potential of **21.72 million households**

% of digitization in P2P: <10%

- Most millennials, who form a significant proportion of households, prefer to rent houses over owning them since the prohibitive costs of real estate add a significant EMI burden on the monthly paycheck. Moreover, most rental payments happen in cash in tier-II and below cities.
- This creates a sizeable opportunity for FSPs to digitize monthly cash-based transactions

2. Use-cases through the B2P channel



Agri payments (FPOs/co-ops)

Market potential of **21.72 million households**

% of digitization in B2P: 20-25%

- More than **70% of rural** households depend on agriculture and allied sectors for their livelihood. Agriculture contributes to about 18% of India’s GDP, with a gross value of **INR 23 trillion** (~USD 310 billion).
- The farm-to-fork value chain involves multiple intermediaries; most transactions between the intermediaries happen in cash.
- Some potential use-cases that can be digitized include agri-input purchases, transport payments, warehousing transactions, and the sale of produce, among others.
- Digitization of these payments can act as a strong hook for the LMI segment to adopt digital payments gradually, as most people from to LMI segment are engaged in the agriculture and allied sector.

Source: MSC analysis

*G2P, G2B, G2G, B2B, B2G use-cases are large-value transaction and are already digitized and well-served by financial players. Hence, we have omitted them from the analysis.

The vast spread of the LMI segment offers an interesting business case for providers to design “need-based” and robust digital payment solutions (2/2)

	P	B	G
P			
B	3	4	
B			

- Most merchant payments in the country that flow through the **P2B channel** are conducted via cash payments, which present an opportunity for providers to digitize the cash-based transactions
- The **P2G channel** comprises payments for government services, donations, bills, and taxes. More than 80% of transactions occur in cash, which offers potential use-cases for providers to tap into

3. Use-cases through the P2B channel



Merchant payments

Market potential of **INR 4.65 trillion (USD 62 billion)**

% of digitization in P2B: 15-20%

- Around **57 million** micro-merchants in India currently transact in cash. Moreover, more than **37%** of the total e-commerce transactions are done through cash-on-delivery.
- This creates a massive opportunity to digitize cash-based merchant payments worth INR 4.65 trillion through online and offline micro-merchants in the country.



MFI loan repayments

Market potential of **5.8 billion repayment transactions**

% of digitization in P2B: 15-20%

- About **202** microfinance institutions across India cater to more than **58 million** clients with an outstanding loan portfolio of INR 231.7 billion (~USD 3.15 billion).
- More than 95% of the MFI loan repayments are conducted in cash through MFI field agents. This offers the potential to digitize **5.8 billion** transactions annually.

4. Use-cases through the P2G channel



Utility bill payments

Market potential of **680 billion bills annually**

% of digitization in P2G: 10-12%

- Around **163 million** people in India pay utility bills, which leads to **7.55 trillion** utility bills annually, of which **70%** are paid in cash.
- Assuming even a modest incremental conversion from cash to digital presents a massive opportunity to digitize approximately **680 billion bills** across the country.



Public transit system payments

Market potential of **32 billion trips across all modes**






% of digitization in P2G: 10-12%

- People make approximately **88 million trips** on public transport each day in India—comprising **70 million** trips by buses, approximately **18 million** by railways, and **0.23 million** by air.
- A growing influx of people in cities will lead to a larger volume of ticketing transactions and an opportunity to convert physical transactions to digital ones.

Source: MSC analysis

*G2P, G2B, G2G, B2B, B2G use-cases are large-value transaction and are already digitized and well-served by financial players. Hence, we have omitted them from the analysis.

By 2025, we envision a host of innovative digital payment solutions will help address the varied needs of the LMI segment

01 Frictionless payments 	02 Contactless payments 	03 Voice-based payments 	04 Offline payments 	05 Analytics-based solutions 
<ul style="list-style-type: none"> ➤ All UPI-enabled apps in India support Bharat QR and UPI QR to facilitate payments for smartphone-savvy LMI customers. ➤ Acquiring banks have deployed ~4.83 million Bharat QR codes, which process ~250 million transactions every month, with the potential to increase further. Frictionless payments are expected to reach INR 5.6 trillion (~USD 75 billion) in annual transactions by 2022. 	<ul style="list-style-type: none"> ➤ They constitute 15% of digital payment transactions through solutions, such as NCMC and OEM mobile apps or wallets. ➤ 20% of PoS terminals in the country are NFC-enabled, which extends the reach of UPI for offline merchants through PoS devices. ➤ NPCI can now compete with global card networks like Visa and MasterCard, which have strong associations with banks for their “tap-and-go” cards. 	<ul style="list-style-type: none"> ➤ Aimed at 200+ million Indians who can only access voice technology; it would also support the ~1 billion LMI population, many of whom are either illiterate or neo-literate. Proximity sound-based payments at merchant outlets through UPI123 Pay would help the oral segment conduct transactions in their preferred language. ➤ Several FinTechs and FSPs in India now use voice recognition technology to offer access to financial products and services. 	<ul style="list-style-type: none"> ➤ Digital transactions beyond urban areas mostly occur through PoS devices and QR codes; poor connectivity creates challenges for transactions in rural areas. Offline payment solutions like RuPay Contactless or *99# have emerged, but their adoption is limited. ➤ The launch of UPI123 Pay provides the opportunity to increase uptake among the LMI segment through four key solutions, including payment through IVR number, missed call, sound-based technology, and payment implemented through OEMs.* 	<ul style="list-style-type: none"> ➤ Blockchain and AI/ML can improve payments through fast processing and greater transparency. Through consent-based data sharing, the Account Aggregator framework would enhance access to financial services as a fourth layer of the India Stack. ➤ CRM, capital management, access to digital credit, and business intelligence insights on sales are some offerings to merchants; providers offer similar services to customers, such as individual cash management and analytics based on spending.

Source: MSC analysis
*Original Equipment Manufacturers

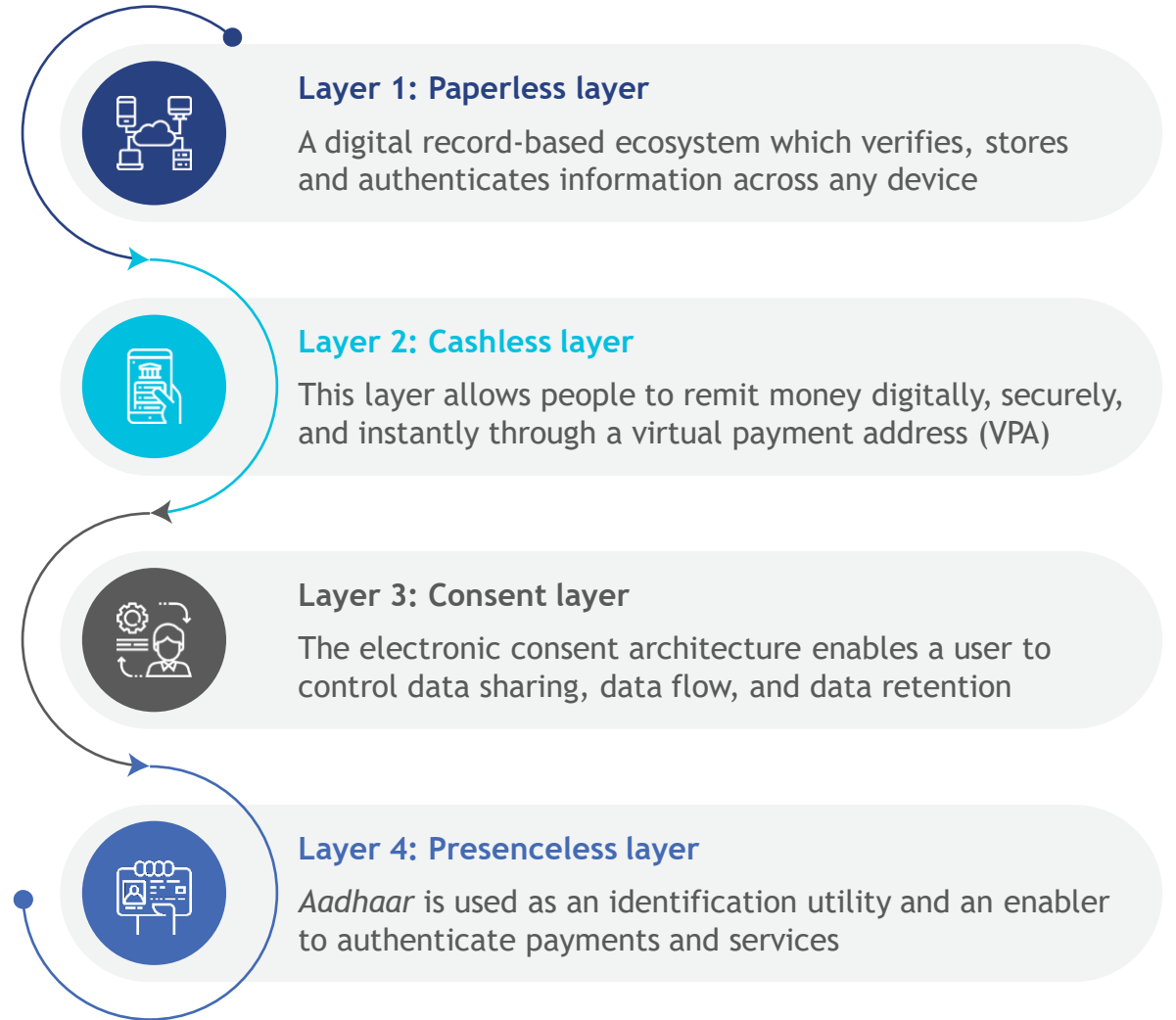
Many payment solutions from India can offer lessons for the world and be replicated in international markets (1/2)

1

India Stack



- India Stack is a secure, robust, and reliable platform enabled the Indian government and regulators. It combines the concept of a common national identity with a standard national API through a digital system.
- IndiaStack worked toward a **presence-less, paperless, and cashless service delivery** and hosted ambitious solutions for digital payments, featuring the world's largest biometric database and an **API-based digital infrastructure** to remit money between any bank, smartphone app, or prepaid instrument. FinTechs have also used the IndiaStack platform to **develop customer-centric products** for Indian customers.
- India Stack's implementation had a significant impact on the Indian population. As per UIDAI and India Stack, around **1.33 billion Aadhaar*** numbers were issued till June, 2022, with more than **772 million Aadhaar** numbers linked to bank accounts as on April, 2022.
- It significantly reduced the costs to deliver financial products and onboard customers, while enabling access for new customers.
- Seeking to build a similar platform, many countries have approached Indian payment experts associated with designing India Stack for guidance. Future disruptions will test its limits and possibilities.



Source: MSC analysis, [UIDAI](#)

*Aadhaar is a 12 digit individual ID which serves as a proof of identity and address in India

Many payment solutions from India can offer lessons for the world and be replicated in international markets (2/2)

2

Expansion of RuPay cards and UPI



- Several countries in Asia, Africa, and the Middle East sought NPCI's knowledge and experience to establish a **real-time payment system** or domestic card program in their market to meet the rapidly evolving need for fast-growing global businesses.
- Following this, NPCI established partnerships with Discover Financial Services (DFS) USA, Network for Electronic Transfers (NETS) Singapore, Lyra Network in France, Gateway Payments Service in Nepal, Royal Monetary Authority (RMA) in Bhutan, and Bangladesh Bank (with support from the Bangladesh Election Commission) in Bangladesh, among others. Products like UPI and RuPay proved cost-effective, secure, convenient, and instantaneous as modes of payment.
- UPI has unique features like **an open platform**, two-factor authentication, a facility for service providers to build upon existing infrastructure, **access to multiple bank accounts** in one application, and interoperability with bank accounts and PPIs, among others.
- Compared to products like Alipay and WeChat, **UPI is simpler to use** and facilitates direct bank transactions only through the beneficiary's mobile number or VPA.

3

Biometric payments - iris and face recognition



- Biometric authentication allows users to **pay merchants and transfer money** through payment products like **AePS** and **BHIM Aadhaar Pay**. According to research, transaction failure occurs in **34.03% of AePS transactions** (especially in OFFUS transactions) primarily due to biometric mismatch. Banks have initiated pilots for authentication through **iris and face recognition** to mitigate this issue.
- The most extensive implementation of the *Aadhaar* database has been for **disbursements and withdrawal of government subsidies**. It has been extensively used in various national and state schemes, such as **Ujjwala, PAHAL, and MGNREGS**, where the amount is sent directly to *Aadhaar*-linked bank accounts of beneficiaries via APBS. It has also helped the Indian government reduce leakages in the system and save more than **INR 75 billion (USD 1.01 billion)**.
- Several **Indian providers continue to guide and support** Indonesia, Zambia, Bangladesh, Morocco and Philippines among other countries, to create biometric technologies for digital payments and other applications.

Annex 1: Several barriers hinder the adoption of digital payments

1.



- Most financial transactions in India occur in cash. Customers exhibit a strong status quo bias for using cash and lack trust in digital payments, which amplifies this bias further. Low digital and financial literacy limit scaling of digital payments, among other contributing factors.
- Cash transactions entail charges—both for deposit and withdrawal at bank branches or ATMs. Consumers spend considerable time, effort, and money in transit to get cash and make cash payments.
- Around 90% of India's population is digitally illiterate, while only 27% is financially literate. This is especially true for vulnerable segments like women, 60% of whom may not have used the internet anytime in their life.

2.



- Digital payment products are designed with similar interfaces and process flows, without differentiation for the needs and preferences of varied customer segments. They fail to realize diverse cognitive abilities and needs of multiple segments.
- Most apps lack multi-language functionality and tend to focus on use-cases relevant to the urban and more educated class of consumers. These include P2P transfers, e-commerce, food delivery, insurance, and mutual funds SIPs.
- This results in a non-standard and ineffective GRM across service providers, which severely degrades the customer experience of digital payments, further exposing less-literate and vulnerable sections of the population, such as women.

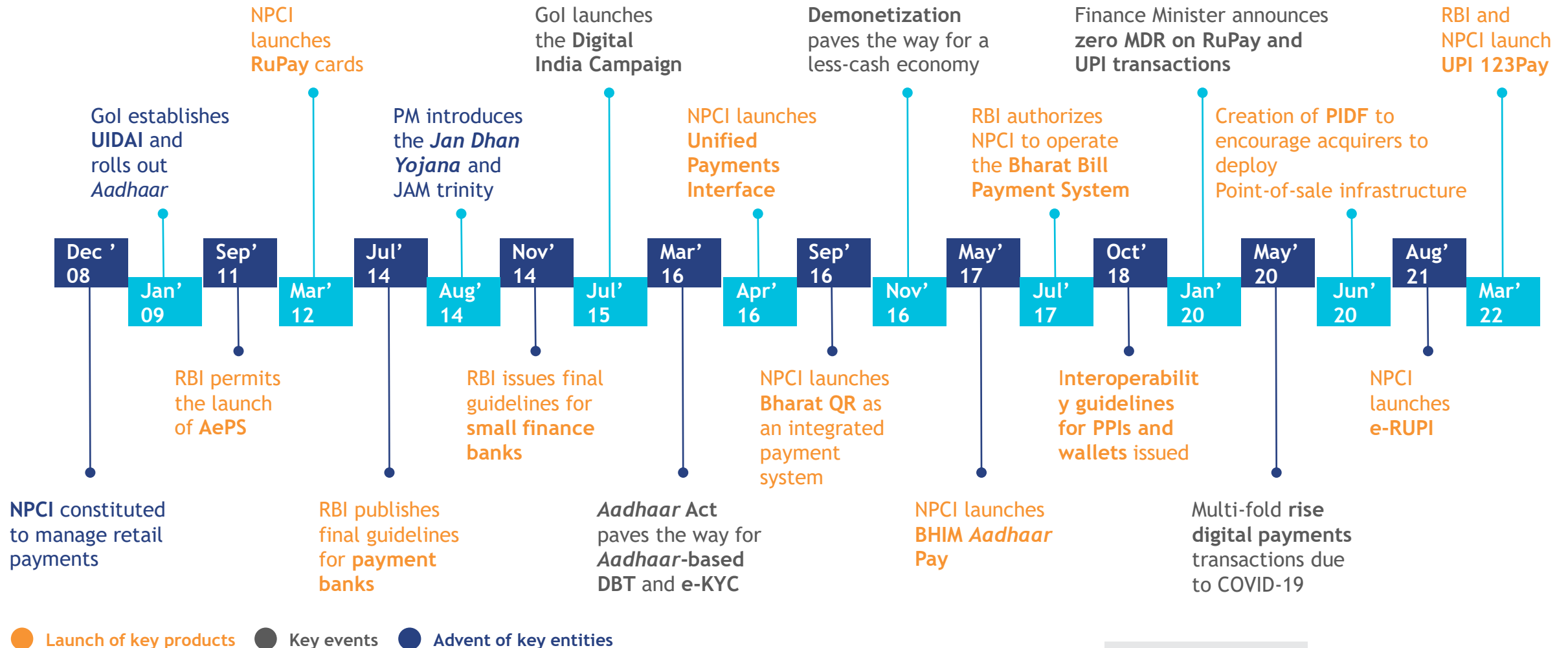
3.



- India's BC network has operational and financial sustainability challenges, including issues with liquidity management, high cost of setting up, poor internet connectivity, limited capacity of potential agents, and low spread of product offerings.
- India's teledensity in rural areas is at a dismal 58%. This is corroborated by the fact that a mere 20% of rural users access the internet for digital transactions as compared to nearly 65% of urban users.
- Financial touchpoints are skewed toward urban regions. Of India's 63+ million micro-merchants, 96% are underserved by financial institutions. As per PoS deployment statistics, ~80% of merchants are out of the reach of digital payments.

Annex 2: Many milestones have accelerated India's digital payment journey

The figure below highlights a series of concerted efforts from various stakeholders, especially the NPCI, to drive innovation, improve the delivery of services, and bring a user centric experience for a range of digital payments services



Source: NPCI website, MSC analysis

[Back to the main slide](#)

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clients

>1,000
publications

Assisted development of digital G2P services used by **>875 million** people

Implemented **>875 DFS** projects

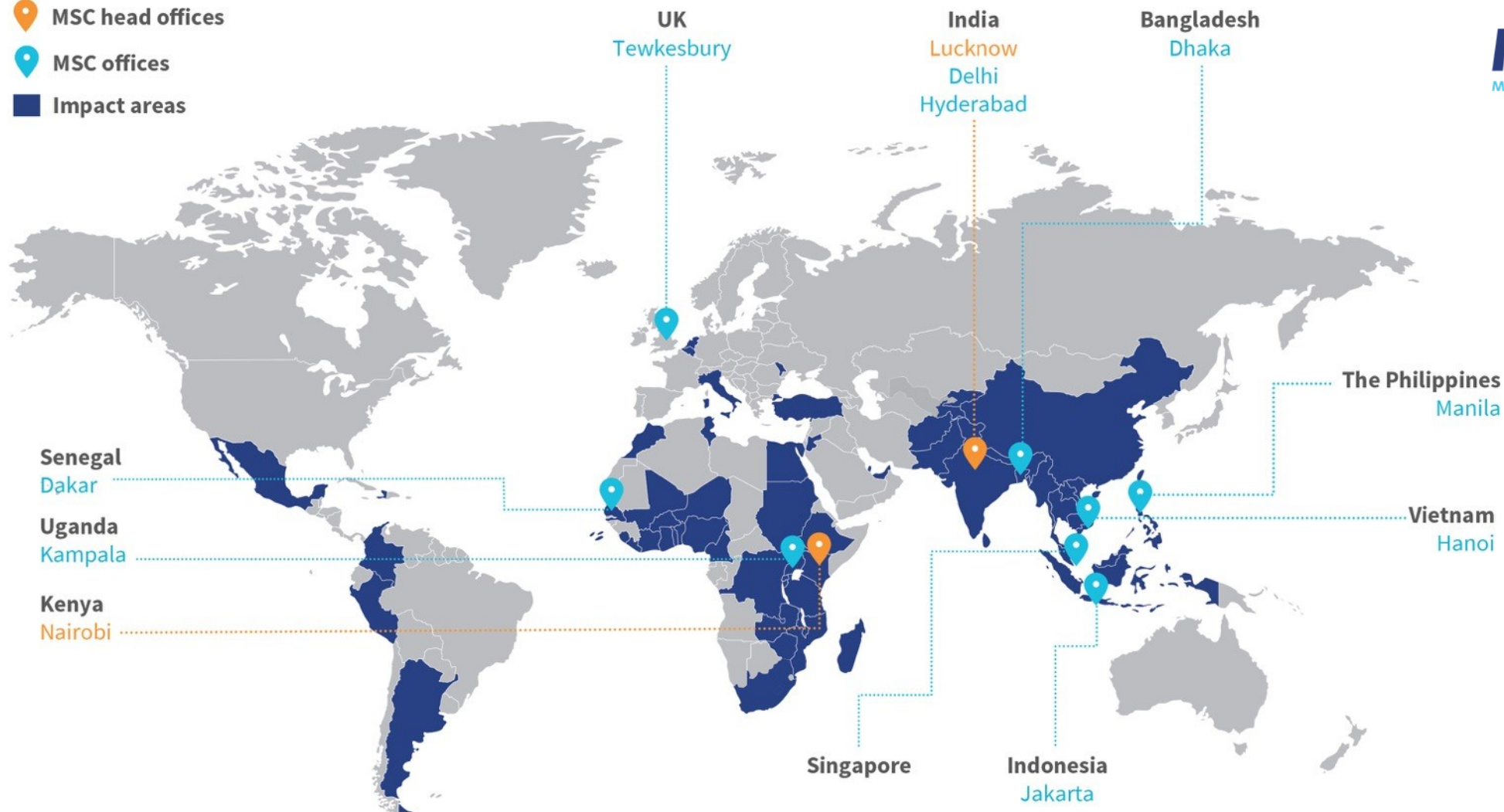
Developed **>275 FI products** and channels now used by **>55 million** people

Trained **>10,500** leading FI specialists globally

Some of our partners and clients



-  MSC head offices
-  MSC offices
-  Impact areas



[MSC corporate brochure](#)

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