Payment trends driven by non-banking players

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Foreword

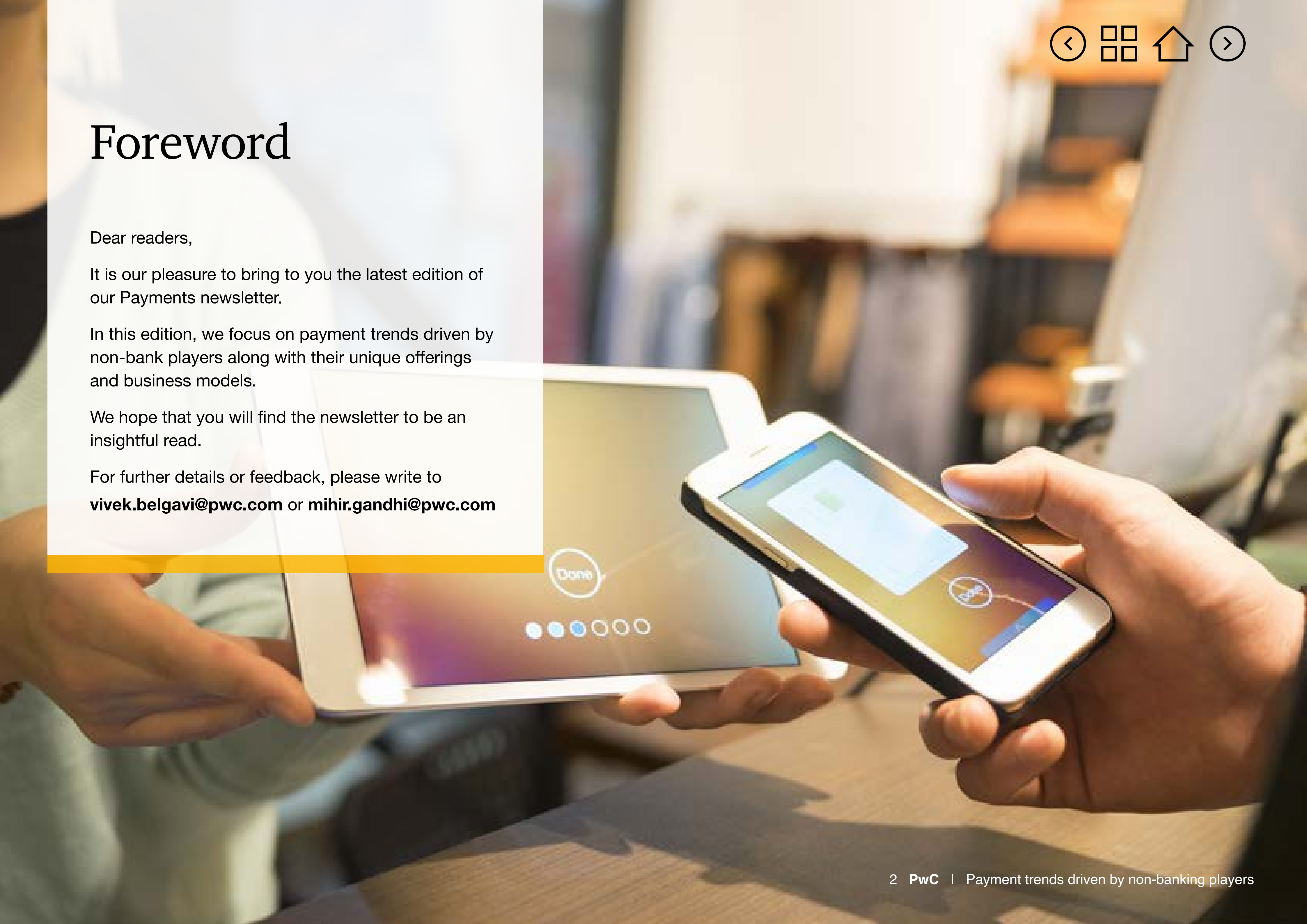
Dear readers,

It is our pleasure to bring to you the latest edition of our Payments newsletter.

In this edition, we focus on payment trends driven by non-bank players along with their unique offerings and business models.

We hope that you will find the newsletter to be an insightful read.

For further details or feedback, please write to **vivek.belgavi@pwc.com** or **mihir.gandhi@pwc.com**



In this issue

01 Introduction

The digital payment industry in India has evolved and transformed drastically over the last decade. Total digital payments have increased by 216% and 10% in terms of volume and value, respectively, for the month of March 2022 when compared to March 2019.[1] Consumer payment habits have also seen a significant transition, with demonetisation and the COVID-19 pandemic playing a key role in the increase in digital payments.

Overall, the payment market has grown owing to the following factors:

- **The Government and the Reserve Bank of India's (RBI) initiatives:** Various initiatives have been taken by the Government and the RBI, including the RBI's Payment Vision 2025.
- **High proliferation of smartphones:** India had 750 million smartphone users in 2022, with the market and the number of smartphone users is expected to reach one billion by 2026.[2]
- **Increase in internet penetration in rural areas:** Internet penetration in rural India has grown at the rate of 37% when compared to 2020, clocking 351 million active users in 2021.[3]
- **Increase in e-commerce sales:** India's e-commerce industry's gross merchandise value (GMV) is set to grow to USD 188 billion by 2030 from USD 55 billion in 2021.[4] The growth in e-commerce is expected to increase digital payment transactions.
- **Wider availability of acceptance infrastructure:** Technology-driven infrastructure such point of sales (PoS) machines and QR codes are being installed at stores for smoother payments experience for the customers.
- **Introduction of innovative payment solutions:** Non-bank players such as FinTech entities and non-banking financial institutions (NBFCs) are adopting new, innovative payment solutions for enhancing customer experience.

1 https://m.rbi.org.in/scripts/PublicationVisionDocuments.aspx?Id=1202

2 https://www.ibef.org/industry/ecommerce

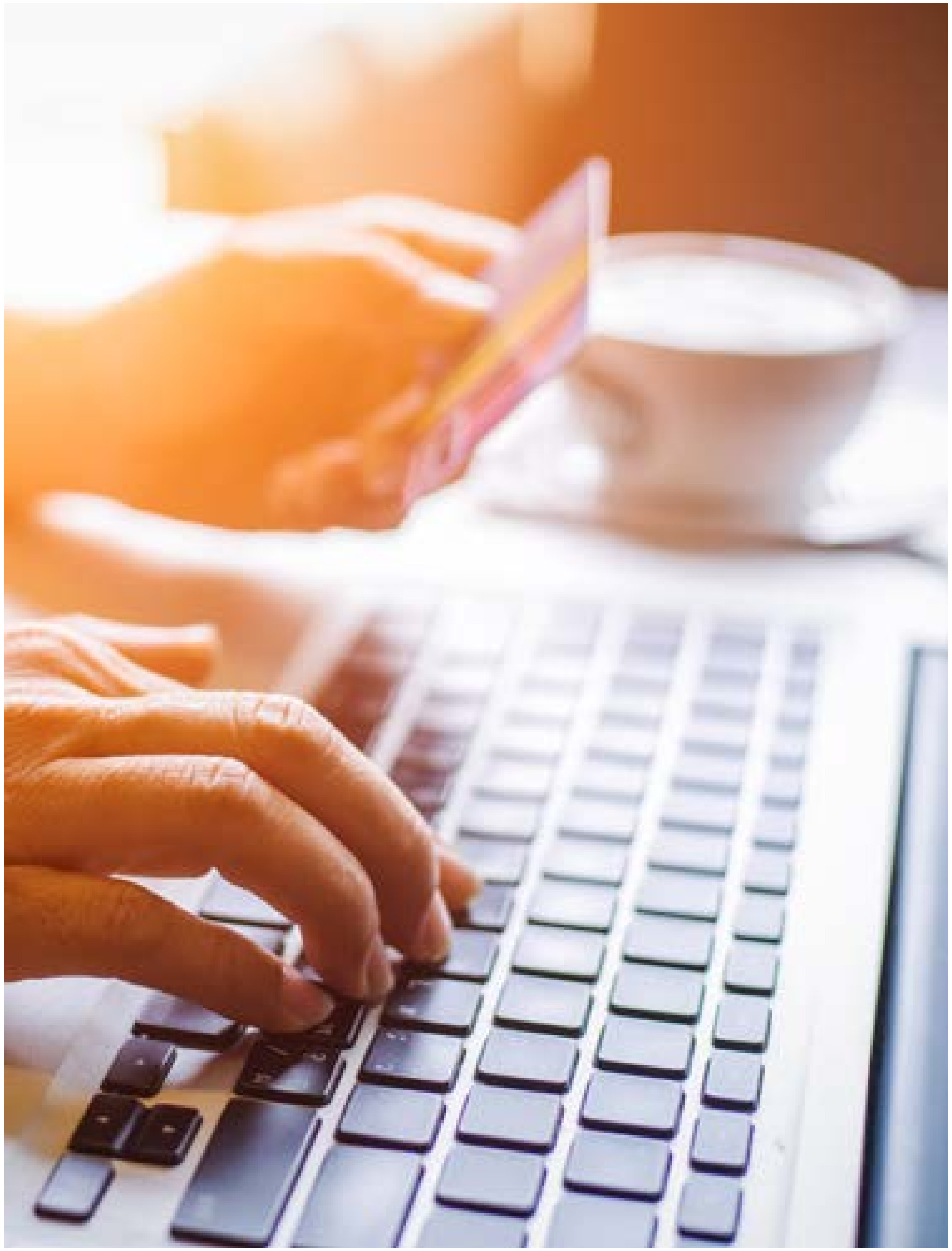
3 https://www.iamai.in/press-release/rural-india-takes-driving-seat-indias-internet-usage-growth

4 https://www.investindia.gov.in/sector/retail-e-commerce/e-commerce

In this newsletter, our focus is on the innovations and solutions driven by non banking players in the payment ecosystem.

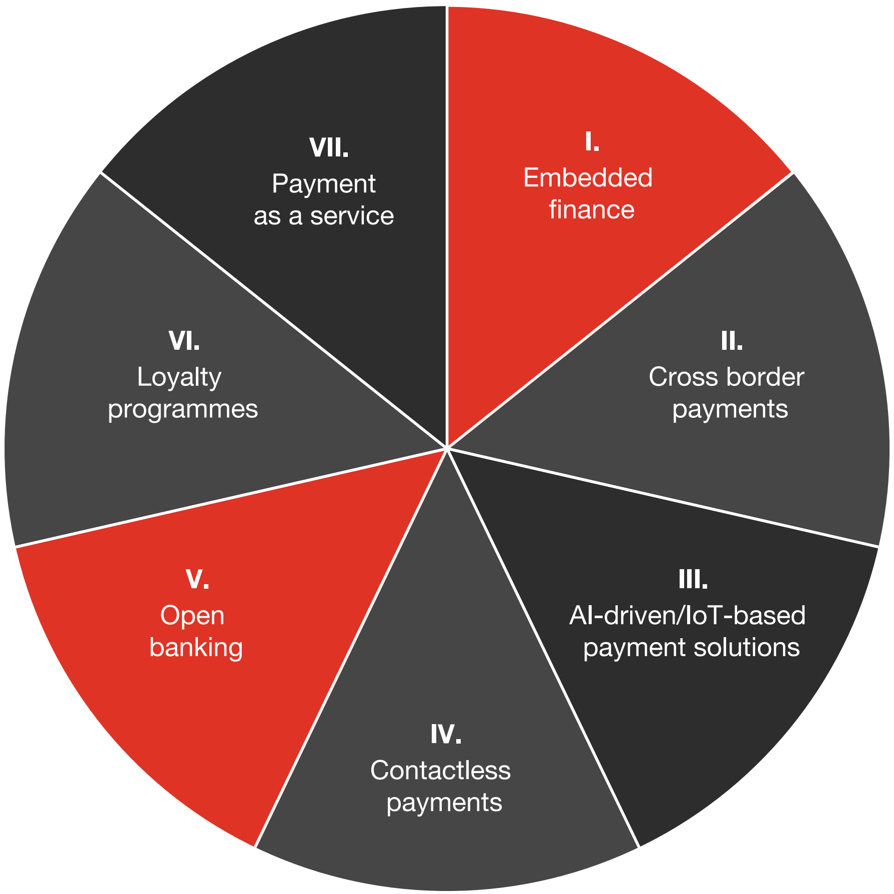
Non banking players have played a significant role in advancing the adoption of digital payments. With the introduction of Unified Payments Interface (UPI) and Bharat Bill Payment System (BBPS), and with the prevalence of open-source technology, Non banking playes have been able to carve out a niche for themselves. Some of the key services provided by the non-bank players include technology infrastructure, platforms for quick onboarding and driving customer engagement through solutions for banking, lending, insurance, personal financing, wealth management, and payment, among others.

By using continuously evolving technology and focusing on solving specific gaps, non-bank players provide better customer service, micropayment options and relevant services to enhance the user experience without incurring a high upfront investment. Overall, the payment ecosystem, which was once dominated by banks, has evolved. There has been an increase in the number of non-bank players due to their innovative, customer-centric product and service offerings which leverage technology.



02 Payment trends driven by non-banking players

This section focuses on the innovative offerings of non-banking institutions along with the business models which can generate new revenue streams for the institutions.



I. Embedded finance

Introduction

With the adoption of digital payment, customers are now expecting fast and convenient ways to access all financial services at one place. This has led to a rising trend of embedding financial offerings into the existing products or services by non-financial companies such as technology companies, retailers, mobility players and telecom providers. In the last few years, non-bank companies have been integrating various financial solutions such as e-wallets, accounts, payments, investments, insurance and lending products into their offerings. The goal of these companies is to make financial services more accessible and seamless for the end customer while enabling expansion of their business offerings and generating new revenue streams.

Some of the key offerings by non-banks in embedded finance include:

1. **Providing technological infrastructure:** Various FinTechs today offer the technology required for integrating embedded finance services and processing transactions, managing fraud, complying with regulations, APIs, data analytics, etc.
2. **Merchant financing:** Non-bank players across telecom, e-commerce, payment service providers, etc., generate and use alternative score modelling to assess the credit risk of merchants. This enables financial institutions (FIs) to offer merchants a customised credit product or service, such as a working capital loan or a personal loan with a specific interest rate based on their credit score.

Example: A leading payment service provider offering PoS and QR-based payment solutions has partnered with RBI-approved non-bank financial institutions (NBFCs) to offer merchant loans. The loans are designed to help small and medium-sized businesses meet their working capital requirements and other funding needs. The company offers instant loan approval to eligible merchants based on their transaction history and other factors. It deducts invoice-based daily instalments from the merchants before making a settlement in their bank account. This solution helps reduce the loan repayment burden on the merchants.

3. **Lending/Buy now pay later (BNPL):** Various NBFCs have been offering small ticket lending options in the form of BNPL, allowing businesses to offer instant checkout loans to their customers.

   Example: A leading payment acceptance and customer engagement solutions provider in India offers BNPL solutions to its merchant partners, thereby allowing customers to make the payment in instalments. This helps the customer to avail quick credit facility with zero down payment and no additional paperwork.

Business model

Non-bank players need to partner with banks, financial institutions and merchants/customers to provide financial services to their customers. Some of the revenue streams which can be generated for the non-bank players by these financial services are:

- transaction fees
- subscription fees
- fees for processing loans
- interest or charges on loans provided by NBFCs
- referral fees for providing leads
- transactional customer data utilised for cross-selling and up-selling providing an additional revenue stream.

II. Cross-border payments

Introduction

As the world's economies become more interconnected with the increase in global e-commerce, there is a greater need for a cross-border payment system which is quick, secure and efficient. Many non-banking entities are venturing into the cross-border payment space by providing alternative mechanisms, thereby challenging the traditional mode of money movement across borders.

The key offerings by non-banks in cross-border space are:

1. **Blockchain-based cross-border payment solution:** FinTechs and technology service providers offer solutions around blockchain technology using open-source protocols to move money instantly while offering transparency in fees and real-time payment status.

   Example: One of the leading banks in India has tied up with a leading cross-border transaction enabling technology company to enable seamless sending or receiving of funds globally. Some of these non-bank players also reward their repeat customers with loyalty benefits.

2. **Cross-border UPI payments:** Several non-banks are providing technology infrastructure to enable cross-border payments using UPI.

   Example: A FinTech player has introduced a new feature through which users can make international payments through UPI, making it the first FinTech company in India to have such a facility. This entity has tied up with the National Payments Corporation of India International Payments Limited (NIPL) to enable international payments using the agile infrastructure provided by non-bank institutions and the use of the UPI network. FinTech users can make payments at international merchant outlets which have a local QR code in the UAE, Singapore, Mauritius, Nepal and Bhutan.

3. **Digital wallets for cross-border payments:** Payment aggregators and other licensed payment service providers are facilitating international money transfers by allowing individuals and businesses to send and receive money across borders through various channels, including wallets, thereby offering the flexibility of using a single payment application for making cross-border payments.

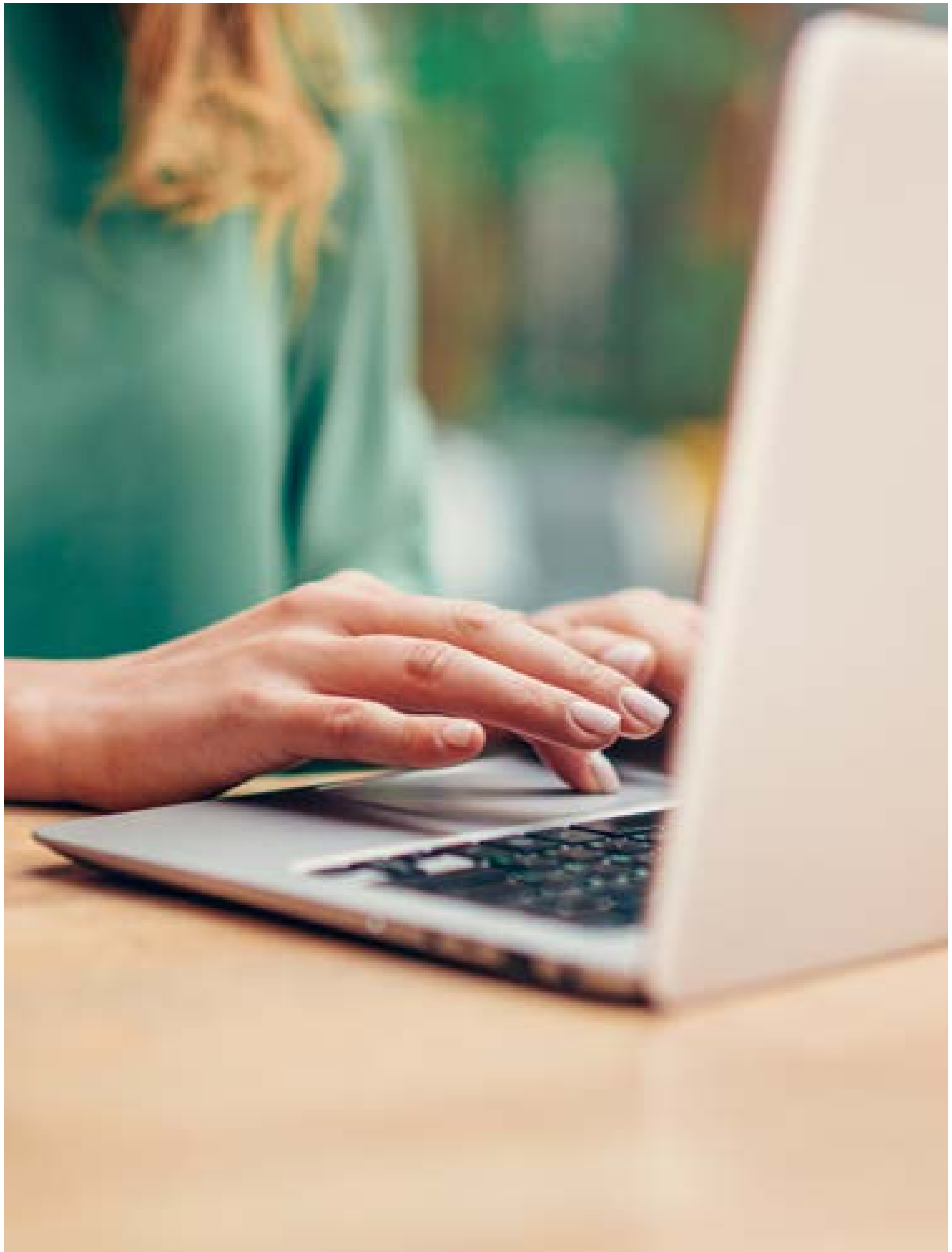
4. **E-commerce payment solutions:** Various payment service providers are offering payment solutions like payment aggregation, payment gateway, shopping cart integrations, etc. which enables businesses/ merchants to accept payments from customers in other countries.

   Example: A FinTech company enables merchants to accept payments from their customers using international credit and debit cards. It also allows merchants to accept payments in foreign currencies over and above international cards and lets the customers pay in foreign currencies using real-time currency conversion. Foreign currency equivalent to the order amount is displayed to the customer on the payment interface before the payment process is completed.

Business model

Some of the key revenue streams in cross-border payments for non-banks include:

- transaction fees and forex conversion fees (varying on the transaction amount, payment method, transfer destination, and exchange rates)
- infrastructure/technology development fee collected from FIs.



III. Artificial intelligence (AI)-driven and Internet of things (IoT)-based payment solutions

Introduction

Non-banking players have been using AI in several payment processes such as transaction monitoring, automating workflows, and KYC processes for risk profiling. They are also expanding their offerings to provide payment options through IOT-enabled devices.

As AI and IoT technology continues to evolve, non-bank players are expected to offer innovative digital payment solutions that leverage connectivity to streamline payments and enhance the customer experience.

Some of the key AI-driven offerings provided by non-banking players include:

1. **Personalised payment solutions:** AI-driven payment processing solutions provided by non-bank players involves the use of AI-based algorithms to analyse user data, learn user behaviour, make predictions, and provide recommendations for making personalised and efficient payments.

2. **Fraud management solutions:** AI-driven fraud detection tools offered by non-bank players can analyse customer behaviour, track their locations and determine their purchasing habits to identify potential cases of fraud.

   Example: A large non-banking player in India is providing fraud and risk management solutions designed to stop fraudulent transactions. The platform uses an advanced real-time rule engine and cognitive intelligence to simulate human intelligence for monitoring, investigation, case management and escalation. It comes with the necessary reporting service that covers fraud activity reporting, compliance reporting and trend reporting, among others.

3. **Automated KYC solutions:** Non-bank players are providing automated KYC solutions using AI for anti-money laundering and KYC compliance activities.

   Example: A leading non-bank player offers an AI-powered digital onboarding solution. It enables banks and FIs to verify customer identities by capturing and verifying officially valid documents in real-time and complying with KYC and anti-money laundering (AML) regulations more efficiently.

   The solution uses algorithms to extract information from customer documents and verify the authenticity of the information provided, all in 30 seconds. The system can also detect forged or doctored documents and flag them for further review by human experts. AI KYC helps businesses scale faster reduce cost and cut turnaround time, to offer a seamless onboarding experience to customers.

4. **AI-based dynamic routing:** AI-based transaction routing – a technology used to optimise the routing of financial transactions through the most efficient and cost-effective payment channels – is offered by a few non-bank players in the market. The system utilises AI and machine learning (ML) techniques to analyse real-time data and make intelligent decisions about how to route transactions.

   Example: A technology company operating in the payment ecosystem offers AI-based dynamic routing, primarily focused on driving cost efficiency for the merchants or partners obtaining the service. The other routing logic could be better customer experience or better payment success rates. The dynamic routing feature works by analysing a range of factors, such as transaction volume, transaction history and payment method to determine the best possible route for each transaction. Most merchants processing high transaction volumes prefer to integrate with multiple payment processors to minimise transaction failures.

This solution of AI-based dynamic routing helps to increase the uptime and success rate and minimises the dependence on a single payment processor for each transaction.

5. **Soundbox-based payment:** Soundbox for digital payment is an innovative solution that enables users to make digital payments through voice commands. It is an IoT-driven device which combines hardware and software to provide a seamless and convenient payment experience.

   Example: A large FinTech company provides soundbox, an innovative IoT-driven payment solution. Soundbox offers plug-and-play with the technology service provider and the acquirer platform to enable merchants to accept multiple payment methods using a single QR. This solution can also be used for marketing purposes by playing ads in between transactions. Merchants and product companies can leverage this solution to make instant announcements of ongoing offers, newly launched products, etc. The device is powered by an AI voice assistant which provides instant audio confirmation of the paid amount.

6. **Wearable payment solutions:** Non-bank players offer technological solutions which enable IoT devices to trigger payment transactions by linking wearable devices such as smartwatches and fitness devices to payment applications.

   Example: A consumer wearable device company has partnered with a large public sector bank and an international wearable technology provider to launch a range of payment-enabled smartwatches. A secure, certified near-field communication (NFC) chip is embedded in the watch strap to enable contactless digital payments. Users need to register their watch on the bank's mobile application using Unique Reference Number (URN), which leads to the creation of a debit card number for the watch. Using this debit card number users can make payments at stores, restaurants, gas stations and other locations by bringing their watch closer to the point of sale (POS) terminals.

Business model

Implementation of AI/IoT-based payment is a large change program, and non-bank players need to enter partnerships for the various processes involved, including processing of payments, user onboarding, device management, tokenisation and designing the digital architecture to enable payments.

Revenue streams which can be generated for non-bank players are:

- setup fee for providing hardware and software infrastructure
- platform licensing fee
- subscription fees obtained from banks
- transaction level fees
- revenue from selling devices to customers
- revenue through cross-selling of products and services.

IV. Contactless payments

Introduction

Non-bank players are increasingly offering contactless payment solutions to businesses, enabling them to accept payments from customers using a range of payment methods.

Some of the key offerings of non-bank players in the contactless payments space are:

1. **Acceptance infrastructure:** Non-bank players offer acceptance infrastructure such as PoS devices that enable businesses to accept payments from customers using contactless payment methods.

   Example: The first-ever pocket, android-based PoS machine in India was launched by a leading FinTech player in 2020. Since then, various non-banking players have entered this space, enabling customers to make contactless payments.

2. **Technological solutions integrated with wearables and smart devices:** Various players provide technological solutions that can integrate contactless payment technology with wearables or smart devices such as smartwatches, fridges, cars or fitness trackers, enabling customers to make payments using these devices.

3. **Voice-based payments:** A few technology service providers are offering voice-based payments solutions that uses natural language processing (NLP) algorithms to enable users to make payments using voice commands.

   Example: A global technology company launched its speech-based payment option in India, which enables customers to make purchases using voice commands through a virtual personal assistant. This technology facilitates quick and convenient payments, without the need of a physical payment device.

Business model

Non-bank players have various partners such as banks, card scheme operators, etc., to provide their offerings. They can generate revenue through:

- one-time implementation fee
- subscription fees
- licensing fee for offering the platform and tech infrastructure
- revenue through cross-selling of products and services.

V. Open banking

Introduction

Banks are leveraging FinTech companies, commonly known as neobanks, by offering them open APIs for various customer engagements. Neobanks are FinTechs that operate entirely online and offer a range of financial services such as savings accounts, loans, and investment products. They do not have any physical branches and rely on digital channels for customer acquisition and service delivery. Neobanks leverage the data obtained by using open banking to provide customers with various service offerings. This data can also be leveraged, after obtaining the customer's consent, by various financial institutions to access the financial information needed to meet the rising customer expectations in banking, lending, payments, accounting and money management.

The key offerings by non-bank players in the open banking space involve:

1. **Integrated, interactive platform:** Technology service providers offer interactive platforms with multiple payment offerings by banks, NBFCs, etc. These services are integrated together on a single platform to offer multiple banking services such as vendor payments and accounting services. These platforms are innovative and ensure continuous customer engagement.

Example: A large FinTech player offers a banking platform that provides open banking features such as bank account management, vendor payments and automated accounting. The platform allows businesses to integrate all its bank accounts into a single platform, enabling it to oversee all its financial operations in one location while also delivering real-time transaction data and analytics.

2. **Account aggregation:** Non-bank players provide account aggregation services that can pull customer data from various sources. This data is also analysed by non-bank players to derive insights and offer personalised solutions.

   Example: An Indian start-up has enabled third-party providers to access customer data from multiple bank accounts in a unified manner with the user's consent. The company provides businesses with an API to integrate their services with multiple banks.

3. **Personal financial management:** Non-bank players are using mobile apps to provide financial management features such as budgeting, cost monitoring and financial planning.

   Example: FinTech in India provides a range of personal finance management services to its users which includes expense tracking, budgeting, personal loan, mutual fund investment, and credit score monitoring, among others. It retrieves and analyses financial data from various banks and financial organisations by using open banking APIs.

Business model

Non-bank players looking to offer solutions using open banking need to collaborate with other businesses or FIs to provide a complete suite of products. They would also need to partner with technology suppliers, such as API developers, security and encryption providers, and data storage and management providers.

Some of the revenue streams which can be generated through open banking solutions are:

- implementation and API licensing fee
- subscription fee for access to their platform and services
- commission fee for the referral to financial products and services
- revenue through data monetisation
- interchange fee for transactions initiated on a non-bank player's platform

VI. Loyalty programmes

Loyalty programmes provide customers with additional rewards for selecting a company for product and service purchases and require them to repeat transactions with the brand in order to ensure customer stickiness. Various non-bank players have been offering loyalty programmes as a marketing tool for their clients to enable new customer acquisition and to keep existing customers engaged. Loyalty programs are typically based on a points system, where customers earn points for making purchases or completing other designated actions, such as referring friends or leaving product reviews. These points can then be redeemed for rewards, such as discounts, free products or exclusive experiences.

Some of the key loyalty programme offerings of non-bank players are:

1. **Coalition loyalty programmes:** Non-bank players offering coalition loyalty programmes which allows customers to earn and redeem points across multiple partners. It helps businesses reach a wider audience and increases customer engagement and loyalty. It also provides access to customer data to provide better offerings.

   Example: A leading loyalty programme provider offers interoperable B2B and B2C loyalty solutions. The company is engaged in integrating loyalty benefits from varied partners on a single unified platform. Members can use a single loyalty number or mobile number to earn rewards by shopping at a variety of stores and brands, both offline and online. The company enable users to redeem those points through direct partnerships with different product and service providers.

2. **Loyalty as a platform:** A few technology service providers have built a customised platform for businesses to offer a range of benefits and rewards to their customers, employees or partners. These companies enable businesses to offer a diverse range of benefits, such as discounts, on products and services, access to exclusive events, and rewards for loyalty and engagement to their customers.

   Example: A technology-driven consumer benefits marketplace engages with financial institutions and other companies to design a customised loyalty programme to drive customer acquisition, retention and engagement. By analysing various customer data points like ethnicity, demographics, spend capability, budget, etc., the company develops unique reward and benefit programs to offer innovative loyalty solutions.

3. **Healthcare-based rewards:** A healthcare-focused reward programme company incentivises healthy purchasing behaviours, while providing customers with tangible rewards and benefits to stay engaged and motivated in their efforts. The goal of these programs is to encourage customers to take a proactive approach for their health and well-being.

   Example: A loyalty program offered by a financial service company is designed to reward customers for making healthier lifestyle choices, while engaging with various partners and service providers. Members earn points by participating in a range of activities such as going for health check-ups, purchasing a gym membership or buying healthy food items. These points can be then redeemed by members for a variety of rewards options such as discounts on shopping, flight and travel packages, and gym membership.

Business model

Non-bank players who are looking to offer loyalty solutions need to partner with various entities on both the merchant side and bank side. Partnerships are an important aspect of loyalty programs as they help businesses offer a wider range of rewards and benefits, reach new audiences and create a more valuable program for their customers.

Loyalty programmes can generate the following avenues of revenue for non-banks:

- implementation, consulting and set-up fee
- monthly or annual subscription fee for access to loyalty program platform
- transaction fees such as a percentage of the points or cashback earned by the customer
- charge businesses a fee when customers redeem their rewards, based on the value of the reward or a flat rate
- advertising or sponsorships
- data-driven revenue by collecting and selling customer data to third-party advertisers and marketers.

VII. Payments as a service (PaaS)

Several non-banks provide PaaS to various financial institutions. The offerings by the non-bank players under PaaS along with the benefits and fees associated have been covered in PwC’s October 2021 payments newsletter titled ’Payments as a service (PaaS) – an approach to outsourcing the payments technology and support functions’.[5]

5 https://www.pwc.in/industries/financial-services/fintech/dp/payments-as-a-service-paas-an-approach-to-outsourcing-the-payments-technology-and-support-functions.html

03 The way forward

The future of services that can be offered by non-bank institutions looks promising. Non-bank players have played a significant role in shaping the payments landscape in India by introducing a range of products and service in the payments ecosystem. The use of innovative technologies have made digital payments more convenient, secure and accessible than ever before. It has also helped non-bank players in providing personalised offerings to customers.

As technology continues to advance, companies are looking to provide more innovative payment solutions to bridge the gap between traditional payments and new customer requirements. Furthermore, partnerships and collaborations between financial institutions, banks and non-bank players can help improve the payments ecosystem by offering comprehensive payment solutions to customers.

The trend which started with digital wallets is expected to continue with more innovative digital solutions in future. The future of service offerings by non-banks in the payments space is dynamic, exciting and full of opportunities for continued innovation and growth in the payment ecosystem.

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