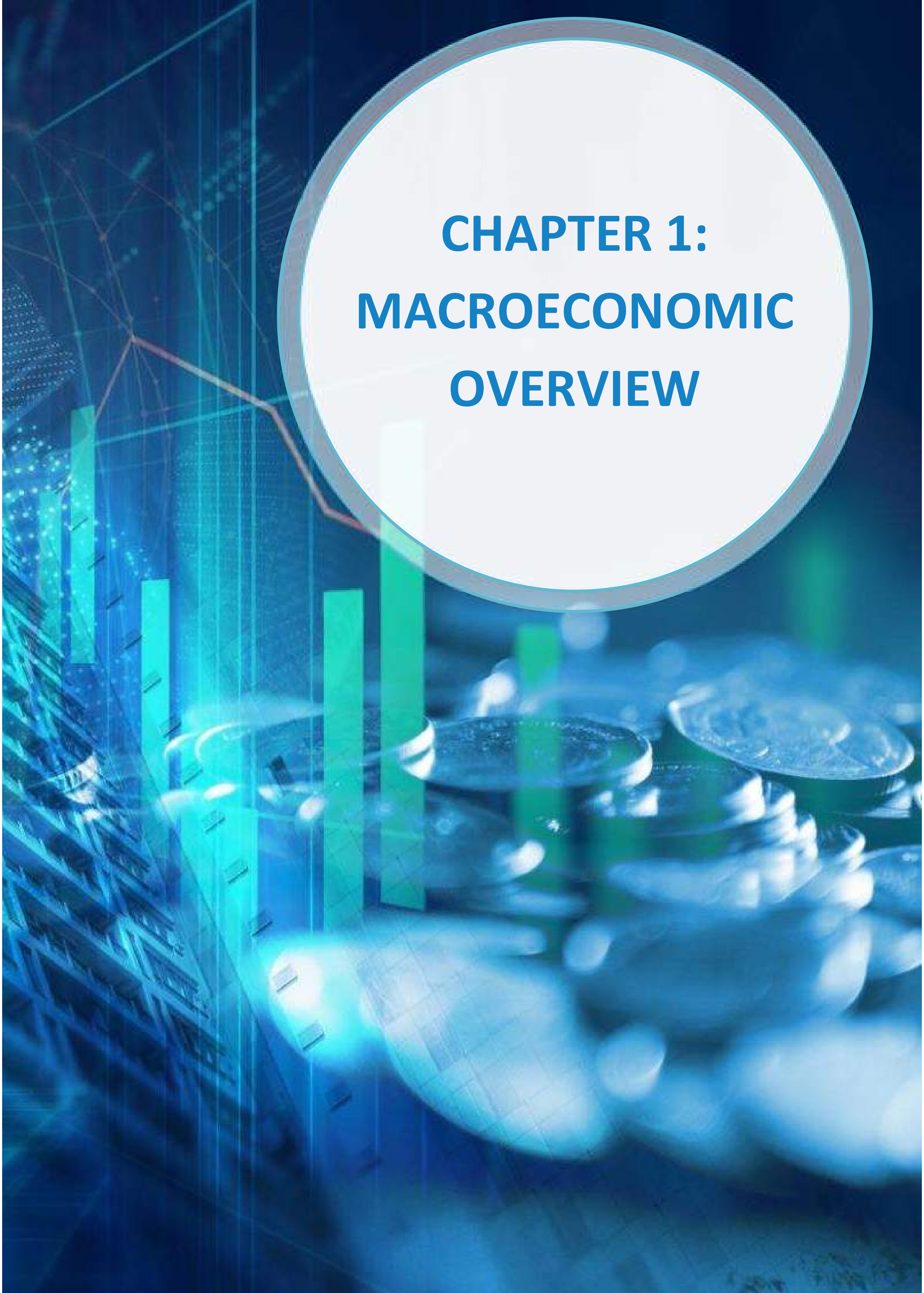
Industry Report on SaaS Based Fintech Market in India

Submitted to

Zaggle Prepaid Ocean Services Ltd

23 Aug 2023

CHAPTER 1: MACROECONOMIC OVERVIEW



CHAPTER 1: MACROECONOMIC OVERVIEW

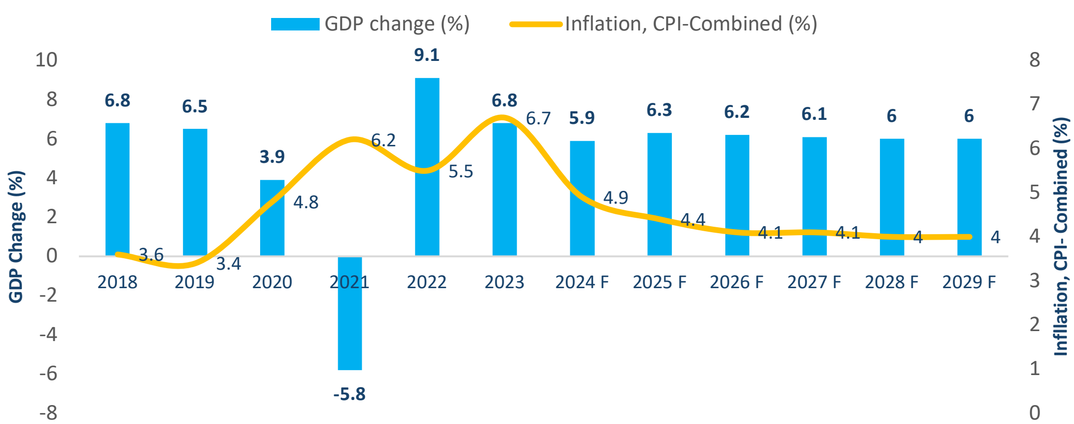
A. Macro indicators

Macro indicators: Strong recovery from the COVID-19 pandemic aided by government plans for financial inclusion and supportive demographics provide immense potential for Fintech companies in India.

B. GDP Growth and inflation estimates

- India's economy has sharply recovered after a GDP contraction of c. 5.8% in FY2020-21 due to the COVID-19 pandemic. According to the International Monetary Fund (IMF), India's GDP grew at c. 9.1% in FY2022 and c. 6.8% in FY2023. Further, IMF has forecasted India's GDP growth at c. 5.9% in FY2024 and c. 6.3% in FY2025. The average GDP growth is expected to be c. 6% from FY2025 to FY2029.

Exhibit 1.1: - India's GDP Growth FY2018-29F (%)



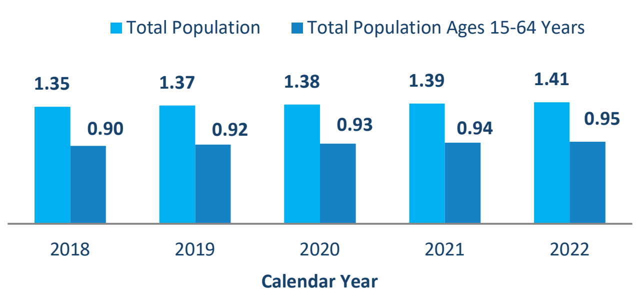
Note: FY (Fiscal Year) is from April to March; F-Forecasted; This definition will remain the same throughout the document.

Source: IMF; and Staff Reports

RBI has marginally lowered the forecast for FY2024 from 5.1% to 4.9%. IMF projects Global CPI inflation to fall from c. 6.7% in FY2023 to c. 4.9% in FY2024.

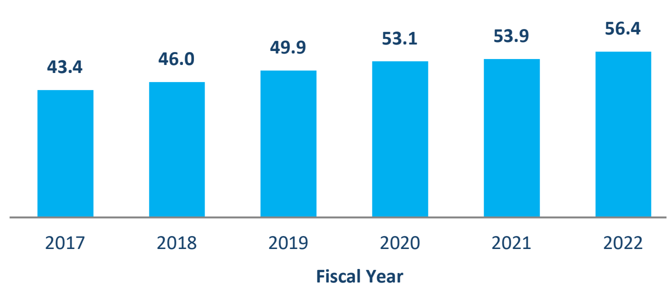
1. Population and Financial Inclusion

Exhibit 1.2: - Population Overview & Estimates CY2018-22 (Bn)



Source: World Bank, IMF, Frost & Sullivan Analysis

Exhibit 1.3: - India's Financial Inclusion Index, FY2017-22 (Bn)

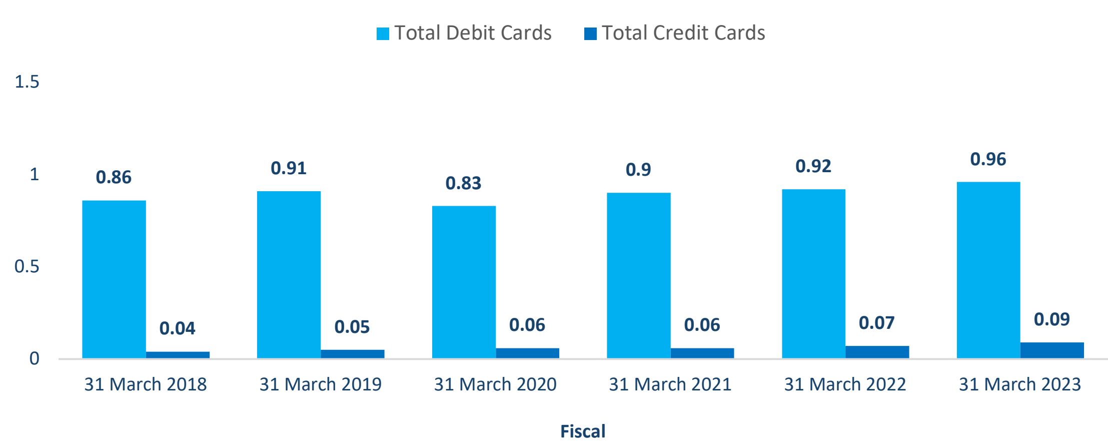


Source: RBI

- India's population had crossed the 1.40 Bn mark in FY2022. A c. 80% of the population aged 15–64 years (about 0.75–0.76 Bn) is considered banked or has a bank account. However, the World Bank estimates that nearly 50% of these accounts are inactive or dormant and are not being used to deposit savings or make transactions regularly. The inactive accounts combined with the unbanked population (c. 20%) provide substantial opportunities for banks, financial institutions, and Fintech companies to capture the under-banked and need of banked population and businesses. Even the banked population is underserved as many services are not easily available to them such as credit etc. forcing them to either avail these services from informal sector or the need goes unserved.
- Majority of the banked population in India does not have access to the banking credit facilities, leaving them to be exploited through informal sector where high interest rates are not only breaking their will to access credit, but are also contributing towards black economy, reducing opportunities for SME sector in rural areas indirectly.
- While India's Financial Inclusion Index ("FI-Index") has shown improvement in the last 5 years, there is a considerable gap to be bridged to bring the unbanked population into the formal financial net. The FI-Index score indicates three critical variables of financial inclusion: penetration of financial services (number of adults having bank accounts); availability of banking services (number of bank branches per population of 1,000); and usage of financial services (measured as outstanding credit and deposit).
- In addition, robust and active usage of digital financial services remains a challenge as high inactivity and limited engagement persists. The vast number of inactive accounts underline the importance of creating products and engagement strategies that are better designed to meet the needs of people and serve as the primary objective of financial inclusion.

2. Credit card / Debit Card / Prepaid Card Penetration: India a debit card market with increasing scope for both prepaid and credit cards

Exhibit 1.4: - Number of Debit Cards and Credit Card Issued, India, FY2018-23 (Bn)



Source: The Reserve bank of India (RBI)

The penetration and growth of debit and credit cards, also known as plastic money, is growing rapidly in India. Card-based payments registered a CAGR of c. 10% in terms of volume and c. 18% in terms of value between the years FY2018 to FY2023. Moreover, the total number of credit card subscribers grew from c. 63 Mn in FY2021 to c. 85 Mn in

FY2023 owing to an increase in demand for cashless and convenient transactions, majorly by millennial customers. A dip in FY2020 numbers can be attributed to the RBI's directive to replace old magstripe debit and credit cards with more secure, chip based EMV cards, the global standard for credit and debit card payments.

Exhibit 1.5: -Card- Transactions Volume by Card Type, FY2018-23 (Bn)

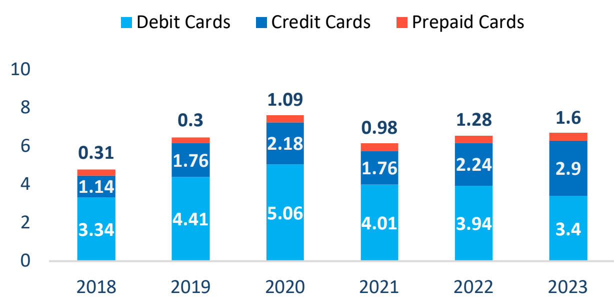
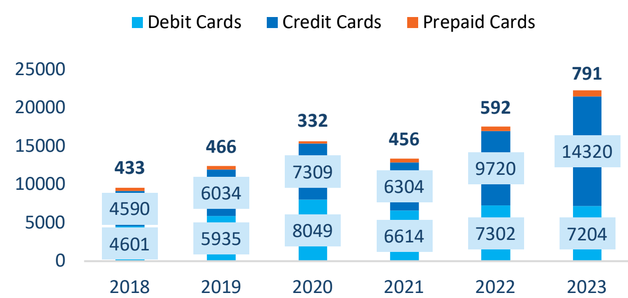


Exhibit 1.6: Transactions Value by Card type, FY2018-23 (INR Bn)



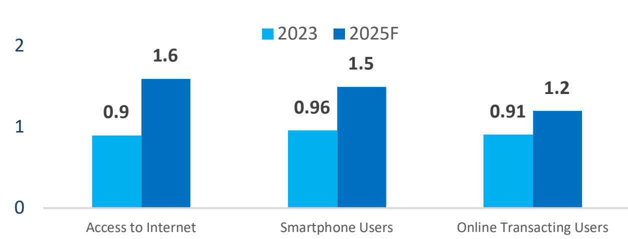
Source: RBI, Frost & Sullivan Analysis

The demand for prepaid cards is primarily driven by corporates for gifting, reimbursements, and forex requirements for corporate travelers. Payroll cards, being a safer alternative to cash payments, are increasingly being adopted, as cards can be blocked and reissued if lost. Further, SMS (and e-mail, if subscribed) alerts for every transaction done on the card offer a safe & secure environment. As of March 2023, India had c. 0.28 Bn prepaid cards of c. 1.62 Bn prepaid payment instruments (smart cards, magnetic stripe cards, internet accounts, internet wallets, mobile accounts, mobile wallets, and paper vouchers). The volume of prepaid card transactions accounted to c. INR7.4 Bn in FY 2023 from c. INR6.57 Bn in FY2022. However, India's prepaid card market transaction value is expected to reach INR3000 Bn by FY2027 at a CAGR of c. 35.8% from 2022, mainly attributed to increased application in online payments for eCommerce and bills, with demonetization and the pandemic as factors.

3. Internet, mobile, and smartphone usage penetration –High internet penetration increases the target market for Fintech companies

Internet and mobile penetration are like China, making India the next big market for the Fintech industry. Low-cost data availability coupled with increased affordability as income growth has enabled high internet penetration in India, narrowing the gap between telephone subscribers and internet users exponentially. In the past 4 years the internet user base has expanded from 0.85 Bn to about 0.9 Bn. The number of active internet users is expected to reach between c. 1-1.6 Bn by FY2025.

Exhibit 1.7: Internet, Smartphone, and Online Transaction Users, India, FY2023E-25F (Bn)

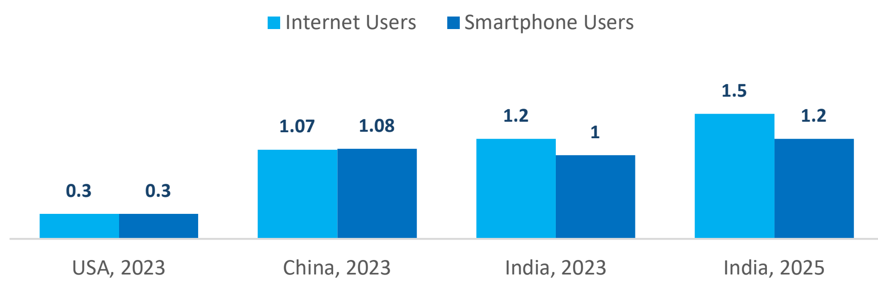


Source: Frost & Sullivan Analysis

Exhibit 1.8: Internet, Smartphone, Online Penetration, India, FY2023-25F (%)

Particulars	FY2023	FY2025
Internet Penetration	64.0%	70.0%
Smartphone Penetration	71.0%	78.0%
Online Transacting Users	45.0%	54.0%

Exhibit 1.9: - Internet & Smartphone Users, India Vs Other Countries (Bn)

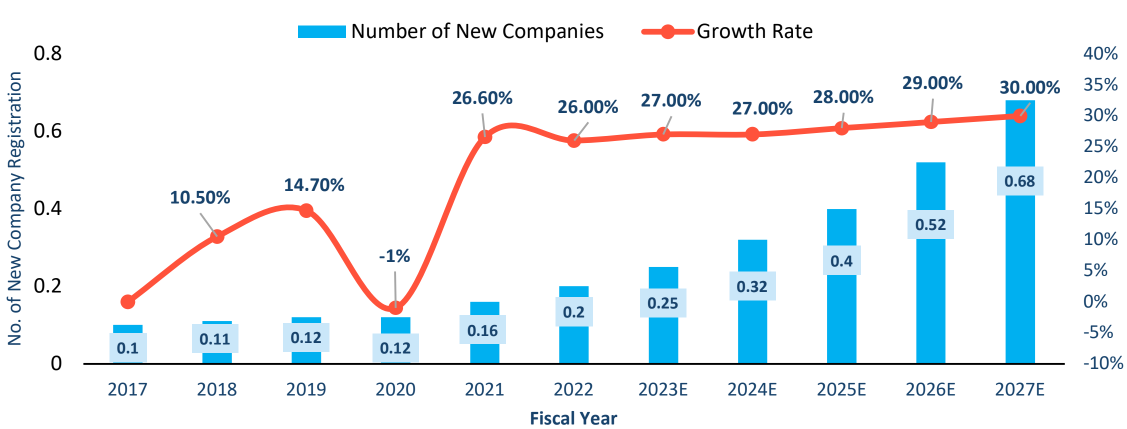


Source: Frost & Sullivan analysis

C. Number of Companies in India: Growing new company registrations, increasing startups & MSMEs, increasing utilization of financial services

In India, a total of 13.1 Mn companies were registered as of December 2022. In India, there are c. 96.4% micro companies leaving only c. 3.6% of small, medium, and large enterprises. The annual growth in registration of new companies is rising at a rapid pace, primarily due to the shifting focus of economic activity from a limited number of firms to new entrants.

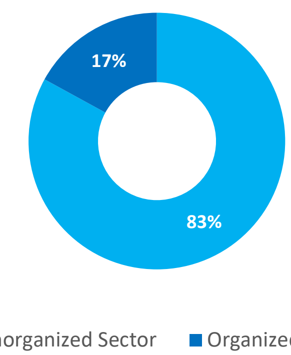
Exhibit 1.10: - Number of New Company Registrations in India, FY2017-27 (Mn)



Source: Corporate Affairs Ministry, India, News Articles

The growth is majorly driven by the flourishing services sector in the country and growing progress in the manufacturing industry. The registration of new companies in the manufacturing sector accounted to c. 28% and Services Sectors accounted to c. 72% as of 31st December 2022. As per the MCA definition, in India companies get registered as small companies/MSMEs (<250 employees) and other companies/Large companies (>250 employees). The companies with less than 250 employees contribute c. 40-45% of the overall employment while the companies with more than 250 employees contribute c. 60% share of the total workforce.

Exhibit 1.11: - Split Between Organized & Unorganized Sector of India, FY2023 (%)



Source: Ministry of Labour & Employment, India, QES

Exhibit 1.12: - Distribution of Enterprises by Size and Region, Investments and Turnover, FY2023 (Mn, INR Mn)

Sector	Micro	Small	Medium	Total	Share (%)
Rural	32.4	0.08	0.001	32.5	51%
Urban	30.6	0.25	0.004	30.9	49%
Total	**63.1**	**0.33**	**0.005**	**63.4**	

Investments	Up to INR2.5 Mn	INR2.5 Mn - INR5.0 Mn	More Than INR5.0 Mn
Nos. of Micro	2148330	294989	151161
Nos. of Small	552317	106551	9256568
Nos. of Medium	24822	8516	9909

Turnover range	Up to INR2.5 Mn	INR2.5 Mn – INR5.0 Mn	More Than INR5.0 Mn
Nos. of Micro	18197057	1374013	2310644
Nos. of Small	59475	6642	141275
Nos. of Medium	6104	172	1578

Source: Ministry of MSME

Exhibit 1.13: - Distribution of Employment by Type of Enterprises & Region, FY2023 (Mn)

Sector	Micro	Small	Medium	Total	Share (%)
Rural	48.9	0.8	0.06	49.76	45%
Urban	58.7	2.4	0.12	61.22	55%
Total	**107.6**	**3.2**	**0.18**	**110.98**	**100%**

Source: Ministry of MSME

D. The workforce in India: Increasing employment to aid banked population in the country

The unorganized sector accounted for the largest share of the workforce in India at c. 93%. The sector is defined under the Unorganized Workers' Social Security Act, 2008, and includes household manufacturing activity and small-scale industry. In contrast to the organized sector, jobs are low-paying and often not regular; no specific rules and regulations are set for employees; and, most importantly, employment is not secure.

The Government of India is trying to encourage the unorganized sector by launching various schemes and policies for the workers' benefit. Major policies include eShram, Pradhan Mantri Shram, Pradhan Mantri Shram, Yogi Maan-Dhan (PM-SYM), and Aam Admi Beema Yojana.

India's working population is estimated to be at c. 528Mn in FY2023E, wherein c. 17% has access to the credit card market. India's employment rate stands at c. 43%, while the global average at c.55%. India needs to employ an additional 180-190 Mn people to ensure that it reaches the global average. It needs to more than double its workforce to match the likes of China, with a working population of over 900 Mn. By FY2030, the country may focus on core sectors such as manufacturing, which has the potential to create 11 Mn new jobs, and the construction sector, which could produce 24 Mn new opportunities. Labour- and knowledge-intensive service sectors can produce more than 22 Mn and 30 Mn new jobs respectively, which would help the country boost the employment rate.

As per the current trends, India's Fintech is focusing on the employee-oriented services market as this segment of customers is easy to acquire and retain at lower costs. Further, this segment is expected to offer significant opportunities during the next five years. The number of new company registration in India is expected to grow at a CAGR of c. 28% from FY2022 to FY2027.

Also, corporate customers (businesses) are actively seeking better employee expense management solutions. In the last two years, most of these solutions were subscribed using prepaid payment cards and digital wallets. Owing to this the prepaid cards transaction value is estimated to grow at a CAGR of c. 40% from FY2022 to FY2023. This transaction value is expected to grow from c. INR791 Bn in FY2023 to c. INR3000 Bn in FY2027 at a CAGR of c. 35.8%.

1. Overview of Income, Tax Slabs, and PF in India:

Nearly 13.5% of the workforce, i.e., c. 74 Mn people, filed returns during FY2022–23 under various income slabs. According to the World Inequality FY2022 Report, the top 10% of the population earns more than c. 57% of the country's national income, the middle 40% earns c. 29.7%, and the bottom 50% earns only 13%. This discrepancy is also seen in the distribution of wealth wherein the top 10% of the population controls c. 65% of the household wealth while the bottom 50% controls only c. 6%.

Exhibit 1.14: - Split of Tax Filing on Income-Slab FY2021-22 (%)

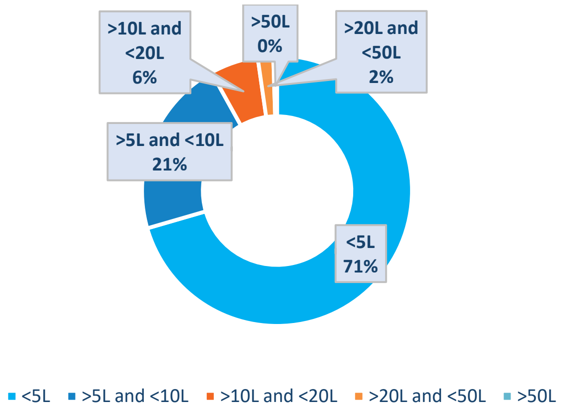
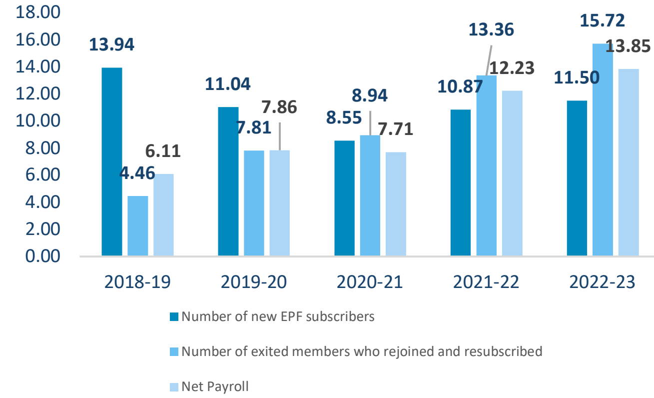


Exhibit 1.15: - Annual EPF Memberships FY2019-2023 (Mn)



Source: EPFO, IT Return Statistics India

The Employee Provident Fund (EPF) is another significant component of an individual's income. From FY2018 to FY2023 more than c. 55.90 Mn new subscribers joined the EPF scheme, with c. 0.89 Mn net subscribers added to the EPF Organization in Nov 2022, compared with 1.39 Mn in Nov 2021. In India, the average salary of most of the population (c. 65%) is less than INR5 Lakhs per annum, which contributes to the largest share of total EPFO members. The second largest segment accounts for c. 26%, income between INR0.5 Mn per annum to INR1.0 Mn per annum.

CHAPTER 2: OVERVIEW OF THE FINTECH MARKET IN INDIA

CHAPTER 2: OVERVIEW OF THE FINTECH MARKET IN INDIA

A. OVERVIEW OF THE FINTECH MARKET:

India's Fintech ecosystem has c. 2100 start-ups spread across a wide range of segments such as payments, lending, wealthtech, insurtech, and neo banking. This industry has already raised more than c. 25% of all start-up funding in India and is anticipated to receive even higher interest from investors. India's Fintech market revenue is estimated to reach c. INR8341 Bn in FY2027 from c. INR3123 Bn in FY2022 due to supportive government policies, rising investments, and the highest Fintech adoption rate of c. 87% compared to other countries.

2. Drivers, Restraints, Challenges/Current Trends

i. Drivers

- **Governmental Initiatives:**

The Indian Government and RBI have supported India's Fintech market through various initiatives and schemes to boost industry growth.

Exhibit 2.1: - Major Initiatives from Government and Central Bank of India that Favored Fintech Growth

Initiative/Scheme	Launch Date	Description
Credit Card Linkage to UPI	January 2023	Previously only Savings or Current account could be linked to UPI, however linkage of credit cards with UPI is now possible from Jan 2023.
E-Rupee	December 2022	It is a tokenized digital version of the Indian Rupee, issued by the Reserve Bank of India (RBI) as a central bank digital currency (CBDC). It follows the blockchain distributed ledger technology.
e-RUPI	August 2021	A digital solution launched by GoI where users can pay for COVID-19 vaccination through UPI e-Prepaid vouchers at the merchants.
FAS Tag	February 2021	National Highway Authority of India (NHAI) made FAS Tag mandatory for all vehicles.
The Regulatory Sandbox (RS)	December 2020	The RBI and Insurance Regulatory and Development Authority (IRDAI) launched RS to aid live testing of new products and services under a controlled regulatory environment. This service is expected to encourage innovations in the financial sector, promote efficiency, and benefit customers.
National Common Mobility Card (NCMC)	March 2019	Inter-operable transport card that helps users pay travel, toll duties (toll tax), retail shopping, and withdraw money
Unified Payments Interface (UPI)	December 2016	Launched by the National Payment Corporation of India (NPCI), UPI is a mobile application that empowers users to use multiple bank accounts in a single mobile application for fund routing and merchant payments.
Peer-to-peer lending (P2P) to be treated as NBFC	April 2016	RBI announced a plan to include P2P lending under NBFCs to bring more credibility and trust to these businesses.

License to Payments Banks	August 2015	RBI granted "in-principle" licenses, under which entities must fulfill required banking conditions within 18 months to receive full licenses under section 22 of the Banking Regulation Act, 1949 for the payment banks.
Startup India	August 2015	The GoI launched a Startup India campaign to encourage new start-ups in India by focusing on three major areas: Simplification and handholding, funding support and incentives, industry-academia partnership, and incubation. This initiative helped Fintech start-ups to grow. To date, India has more than 2000 start-ups, of which 17 have already gained unicorn status (valuation of at least USD1 Bn).
Digital India	July 2015	GoI launched this campaign to make the country digitally empowered. Various awareness campaigns such as the Annual Digital India Summit & Awards are part of this campaign.
Pradhan Mantri Jan Dhan Yojana (PMJDY)	August 2014	To provide affordable financial services such as bank accounts, credit, remittances, insurance, and pensions to all citizens of the country, thereby reducing the country's unbanked population.

Source: Government Websites, RBI, Frost & Sullivan Analysis

India has launched its digital currency, the digital rupee in FY2023 to have efficient and cheaper currency management. Additional initiatives such as India Stack that supports NPCI for authenticating Aadhaar identity for digital payments, transfers, opening new accounts, and enabling mobile connectivity are also expected to drive India's Fintech market.

ii. Digital Infrastructure

India’s Fintech ecosystem has grown rapidly because of financial institutions, start-ups, the government, venture investors, and regulators fostering collaborations and consolidations. On the supply side, digital infrastructure exists in the form of the India Stack, the Central KYC Record Registry, Information Utilities, and others, allowing finance to be modularized and providers to innovate. Further, regulators are assisting Fintech by fostering a cashless society, creating regulatory sandboxes, and establishing companies that facilitate data flow inside the financial industry.

Further, with the introduction of account aggregators, API readiness of banks and NBFCs, the launch of many neo banks, and aggressive fund-raising, India has emerged as a model for open banking deployments across the globe. Indians are already utilizing the power of open banking (UPI/AePS) regularly, and they are likely to adapt to future technologies with no difficulty.

In addition, with the launch of 5G supportive technologies such as artificial intelligence (AI), the Internet of Things (IoT), cloud computing, quantum computing, and block chain are expected to change the nature of financial services and the ways they are offered. It is expected to enable high-end trading and quicker distribution of Fintech services.

iii. Restraint

- **Security Concerns:**

The Indian consumer base rapidly adopts Fintech services, but concerns remain about data breaches, malware injection, hacking of accounts, data loss, and abuse of cloud services.

iv. Trends

- **Cashless Economy:**

India's economy is moving toward a cashless economy as digital payments reach c. 78% in FY2023 which can be attributed to the high adoption of UPI, digital wallets, debit cards, credit cards, online, and other modes of bank transfers.

Exhibit 2.2: - UPI Transaction Value, FY2018-23 (INR Bn)

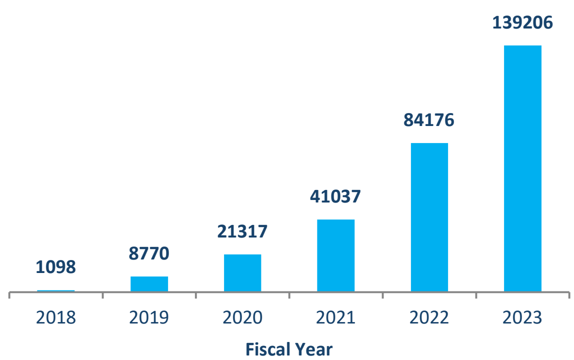
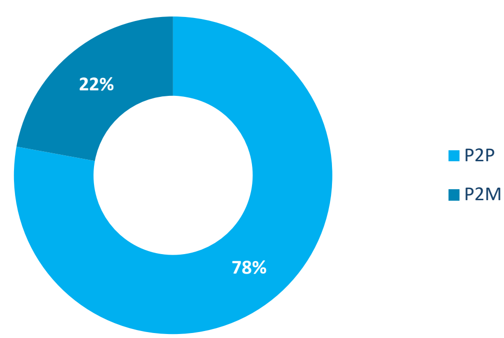


Exhibit 2.3: - UPI Payment Value Split By Type, FY2023 (%)



Source: NPCI, Frost & Sullivan Analysis

For instance, the UPI payment mode has shown significant growth since 2018. According to CLSA, UPI transactions grew from INR1098 Bn in FY2018 to INR139.2 Tn in FY2023 at a CAGR of c. 163%.

The P2P (peer-to-peer) transactions held the highest share of c. 78% of the total UPI transaction values in FY2023, as it became a common fund transfer method between individuals.

- **Spend Management**

Spend management allows real-time tracking, assessment, and control over expenses by organizations to/through various stakeholders including employees, payroll, vendors, and channel partners. The Indian domestic market has witnessed increasing IT penetration in the last decade enabling awareness and growth in the MSMEs. However, the awareness is still at nascent stages and most of the MSMEs have partial awareness about spend management solutions resulting in c. 61% of the companies using fragmented products for various functions. The high initial costs incurred towards spend management solution setup is also one of the major hinderance towards market growth, giving opportunities for SaaS offerings. India's outsourced spend management software and services market is estimated to grow from INR35 Bn in FY2022 to INR72 Bn by FY2027 on the back of greater awareness and higher acceptance within MSMEs coupled with expansion of industrial economy and increased availability of customized spend management solutions.

- **Neo Banking**

Despite exponential growth since FY2019, Indian neo banks have yet to receive specific licenses or regulatory approvals, limiting the existence of digital banks or challenger banks in the country. Currently, Fintech forms the core of neo banks by partnering with RBI licensed banks, NBFCs, and other financial institutions to provide financial services through digital platforms.

India has 18 neo banks offering distinct products and services to their target customer segments, thus ensuring significant growth potential in the future. There is an active focus from neo banks on providing services to underserved segments such as teenagers, blue-collar workers, gig economy workers, and SMEs. For instance, FampPay, a Bengaluru-based startup, provides teenager-focused services, and hylobiz launched a digitally enabled platform for SMEs.

The neo banking market in India is picking up quickly, and in Q2 FY2021, the neo banking sector raised c. USD88 Mn, which was c. 4.9% of the total funding of the Fintech sector during the same period. These companies again raised in FY2022 via multiple funding rounds, such as Niyo (USD100 Mn in Feb 2022 and USD30 Mn in Jul 2022), and FamPay (USD38 Mn in Jun 2022), among others. These developments indicate that India will produce more unicorns from this industry soon.

- **Insurtech**

Insurtech is rapidly developing in India, with investors supporting innovations and offerings for value-added services. The companies operating in this segment addresses niche demands and current needs from the market through data-driven innovations across the value chain.

The Funding for Insurtech accounted to USD512 Mn in 34 rounds in FY2021 compared to USD291 Mn across 380 rounds in FY2022. India has the second largest Insurtech market in APAC accounting for c. 35 % of the USD3.66 Bn of Venture Capital investments in this region, and it housed c. 66 Insurtech companies.

- **WealthTech Platforms**

The delivery of legacy wealth management services is increasingly moving toward wealthtech platforms. The availability of high-end technologies such as AI, machine learning (ML), big data, and advanced analytics helped them provide efficient and effective solutions for investments to consumers and wealth managers. India has at least 440 wealthtech start-ups offering robo-advisors, digital brokerage, portfolio management tools, and B2B solutions providers.

3. Porter's 5 forces

i. Bargaining Power of Supplier: High

Two types of suppliers are involved in the Indian Fintech verse. The first provides funds (investors) and the second offers technologies (companies). In the wake of COVID-19, some early-stage Fintech players struggled to raise investments as investors focused more on stable business models, a trend that is likely to continue until the complete recovery of the Indian economy and the Fintech market. Thus, investors' bargaining power is expected to be high for the next few years. On the other hand, technology suppliers are plentiful, meaning that they have less bargaining power (suppliers of niche or modern technologies such as AI and ML are exceptions). Technology is developed in-house and should not be considered as an input. One of the major inputs is the underlying banking product (which is built through partnerships like a co-branded prepaid/credit card instrument). The supplier (banks) has significant bargaining power.

ii. Bargaining Power of Buyer: Medium

Despite an immense potential customer base, the Fintech industry remains largely price sensitive. In addition, major companies provide discounts to encourage and retain customers until they reach a sizeable customer base. Switching costs are low in most segments, so customers' bargaining power remains high. Parallelly, for Fintech companies serving businesses, the switching cost is higher due to tighter integrations and dependencies with respect to certain functions. Due to this aspect the bargaining power of the buyer would be medium. The switching cost in a B2B business is high as APIs are tightly integrated and corporates do not wish to switch unless there are glaring issues with the current provider. Also, enterprise customers are driven by the quality and robustness of a tech solution and not driven only by cost.

iii. The threat of New Entrants: Moderate

The threat of new entrants varies by segment. Digital payments, mobile wallets, and prepaid payment interfaces saw a sizable number of new entrants in recent years, but neo banking, blockchain, wealthtech, and insurtech saw fewer entrants due to strict regulatory barriers. Thus, the threat of new entrants remains moderate.

iv. The threat of New Substitute: Low

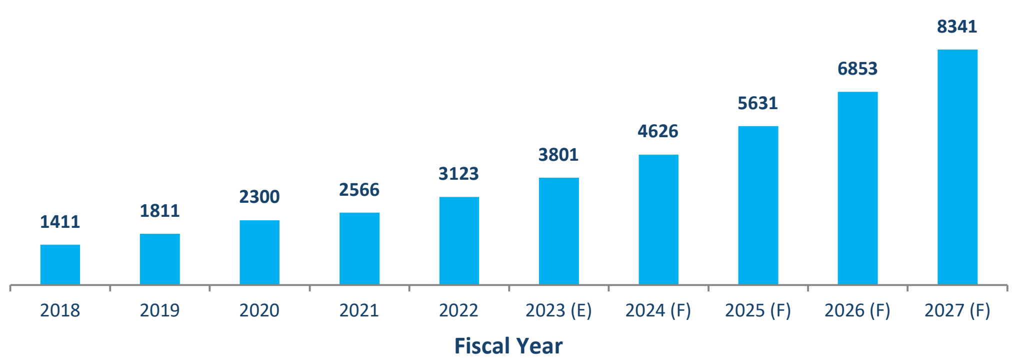
Fintech has the lowest threat of substitutes in India. Fintech itself is an evolutionary substitute for traditional financial services. Thus, it is challenging to identify the substitute technologies for core Fintech services such as digital payments, digital lending, insurtech, wealthtech, and neo banking.

v. Competitive Rivalry: High

Competitive rivalry in the Indian Fintech space remains high with increase in the number of Fintech start-ups. India has also produced c. 17 Fintech unicorns through May 2022, that can deliver highly competitive financial services. Because of limited financial services in the Indian market, every Fintech remains under pressure to offer innovative and differentiated products and services to their customer segments.

4. Overall Estimated Fintech Market (5-year historical and 5-year forecasts) – Revenue and Volume

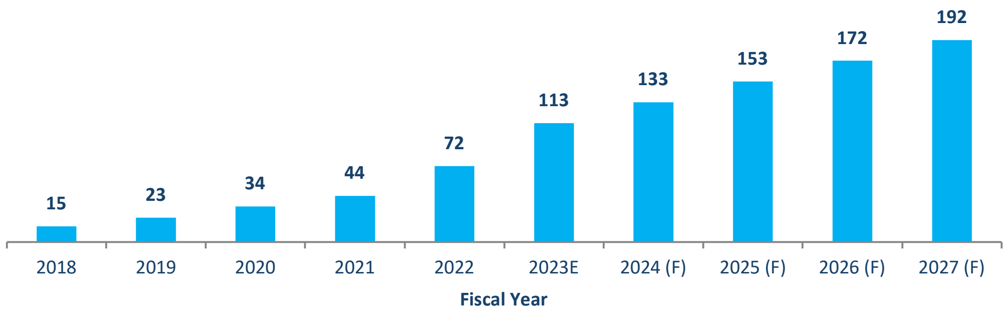
Exhibit 2.4- India's Fintech Market Revenues, FY2018-27 (INR Bn)



E-Estimated, F-Forecast

Source: RBI, News Release, Frost & Sullivan Analysis

Exhibit 2.5- India's Fintech Transaction Volumes, FY2018-27 (Bn)



Note: The total volume includes transaction volume of digital payments, digital lending, and InsurTech volume, which contributes nearly c. 70% of total Fintech volume. The rest of the calculation is made on best efforts basis. *E-Estimated, F-Forecast*

Source: RBI, IRDAI, Frost & Sullivan Analysis

5. Impact of Covid-19 on the overall Fintech industry

The Fintech industry came under stress during the first and second waves of COVID-19 as access to funds became difficult, especially for a few early-stage ventures. On the other hand, companies established with innovative business models saw a better reception from Fintech investors. Interest cuts and the country's economic slowdown drastically changed many industry assumptions. The Indian Fintech funding in FY2020 was USD2.2 Bn which increased 3x to USD7.9 Bn in FY2021, and the funding in H1 2022 was c. USD3.5 Bn.

i. A decline in Investments:

- Fintech startups witnessed a c. 53% decline in investments in H1 2020 as total funds raised were c. USD1.7 Bn through 70 deals compared to USD3.6 Bn through 102 deals in H1 FY2019.

ii. Challenge for Credit and Lending Fintech:

- Extended moratorium along with a waiver of accrued interest by RBI significantly affected lending Fintech's' incomes during 1st lockdown.
- Further, during the lockdown, the borrowing also reduced significantly. For instance, in H2 2020, loan disbursal volumes reduced to c. 80%, from the previous decline of c. 50% in H2 2019.

iii. Low Liquidity

- Investors' low interest in investing in Fintech since the depression in the market resulted in a lower survival rate amongst Fintech players.

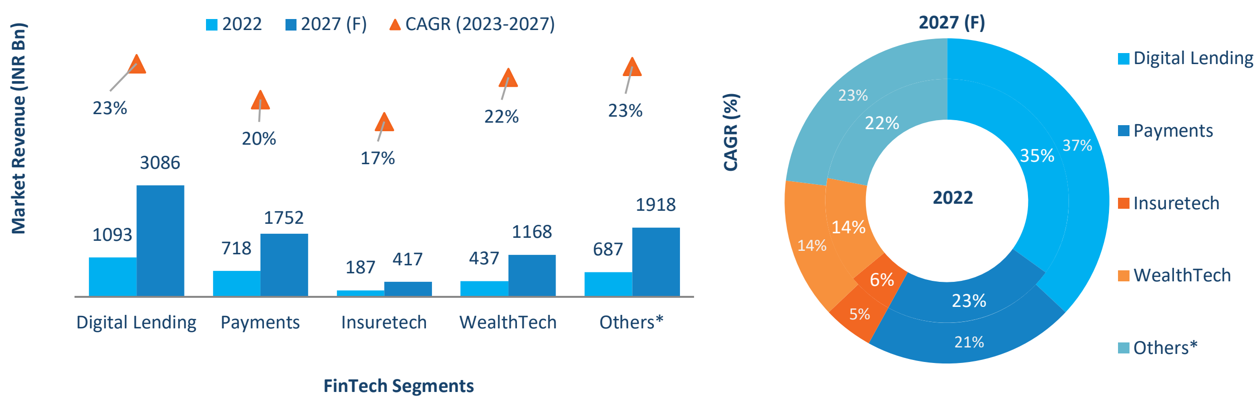
iv. On the contrary, COVID-19 also created new opportunities for the Fintech industry such as:

- High growth in the use of digital financial services and eCommerce.
- Increased awareness around the need for a financial reserve leading to increased customer onboarding for Fintech focused on low-risk savings management (a few experienced c. 30% surge in customers during the pandemic).
- Based on such trends, investors changed their industry assumptions and modified their strategies. For e.g.:
  - Expanding customer reach with lower prices as many customer segments have adopted digital platforms.

- Widened their offerings with compatible services such as bookkeeping, with lending on their platforms.
- Increased digital interactions with customers through multiple touchpoints.
- Eliminating operational redundancies, including reducing staff, process automations, cross-skilling teams, and re-strategizing the business.

B. Segmentation

Exhibit 2.6: - India Fintech Market Revenue & Market Share, by Segments, FY2022 & FY2027 (INR Bn)



Note: The Base year is 2022, CAGR is calculated from FY2023 to FY2027; Segment Definition: Digital lending revenue earned from interest on B2B, B2C, and P2P loans service charges; Payments segment includes total revenue earned from service fees and charges applied on transaction value generated from all digital payment modes such as online banking, UPI, etc.; InsureTech includes revenue generated from the number of insurancessold online; WealthTech includes revenue generated from fees and commissions through online investment made by customers/users; Other segments majorly consist of Forex & Remittance, and Blockchain.*

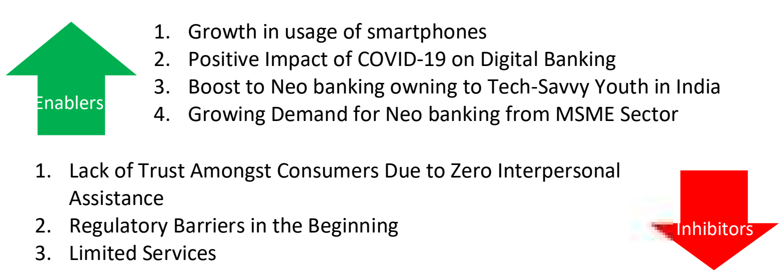
Source: RBI, Invest India, New Articles, Frost & Sullivan Analysis

C. Overview of Neobanking in India

1. Definition and Segmentation

The increasing use of innovative, tech-enabled solutions in the banking sector has given rise to neo banking business models in the country. These banks offer superior technology to financial services and enhanced customer experience while leveraging existing banks' regulatory infrastructure and core systems. Major neo banking service segments include payments and transfers, lending and financing, retail banking, financial management, insurtech, markets & exchange/trading, and Fintech platform of which, payments & transfers, and lending & financing, are the major revenue contributing segments.

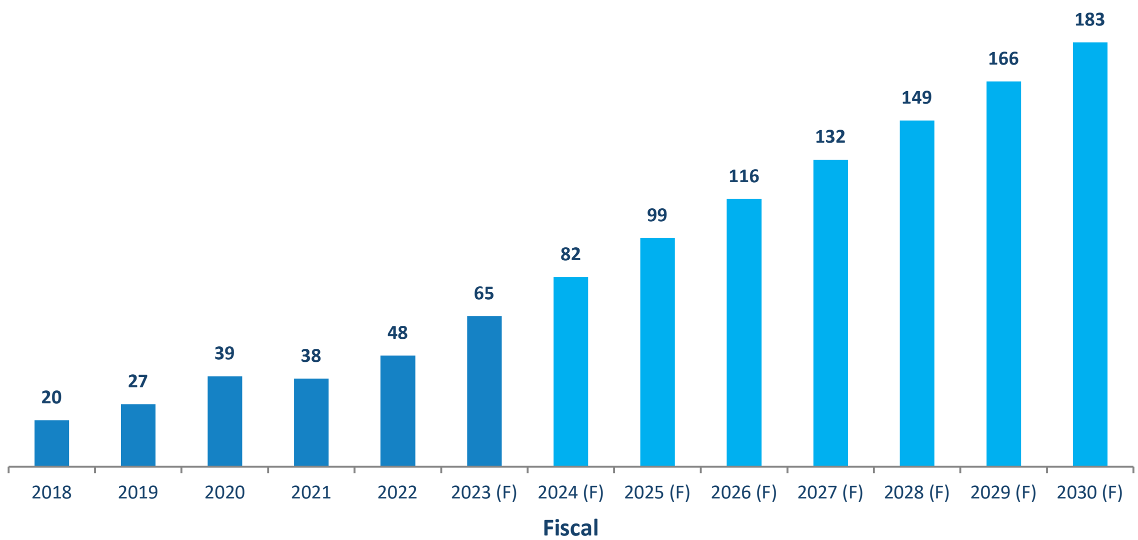
Exhibit 2.9: - Neo Banking Market Dynamics



Source: Frost & Sullivan Analysis

2. Overall Neo Banking Estimated Market Revenue (5-year historical and 8-year forecasts)

Exhibit 2.10- India's Neo Banking Estimated Market Revenue, FY2018-30F (USD Bn)



Source: Company reports, Company websites, Frost & Sullivan Analysis

3. Neo banking Key players

The key players in the neo banking market include Paytm Payments Bank (FY2023 revenue of c. INR79.9 Bn), Fino Payments Bank (FY2022 revenue of c. INR10.1 Bn), Airtel Payments Bank (FY2023 revenue of INR13.0 Bn), RazorpayX (FY2022 revenue of c. INR900.4 Mn), InstantPay India Limited (FY2022 revenue of c. INR1.0 Bn), India Post Payments Bank (FY2022 revenue of c. INR4.6 Bn), Niyo Solutions Inc. (Finnew Solutions Pvt Ltd with FY2021 revenue of c. INR240 Mn), Jio Payments Bank (FY2021 revenue of c. INR130 Mn), Open Financial Technologies Pvt. Limited (FY2022 revenue of c. INR563 Mn), and NSDL Payments Bank (FY2021 revenue of c. INR623 Mn).

CHAPTER 3: OVERVIEW OF THE DIGITAL PAYMENTS MARKET IN INDIA

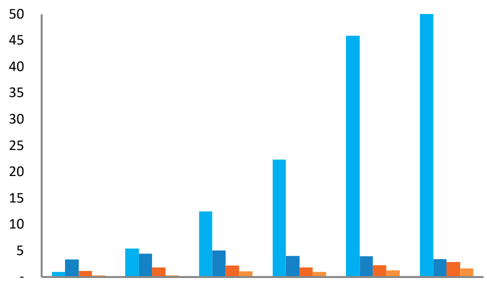
CHAPTER 3: OVERVIEW OF THE DIGITAL PAYMENTS MARKET IN INDIA

A. Overview of Digital Payments Landscape (UPI, Cards, Wallets, etc)

India boasts the fastest-growing digital payments industry, with a 5x increase in contactless payments from FY2016 to FY2023. To meet expanding customer demand, the number of businesses accepting contactless payments increased 6x in the 3 years from FY2018 to FY2021. The sectors driving the growth are Quick Service Restaurants, Pharmacies, Food and Grocery. The RBI-DPI Index continues to show a considerable increase in digital payment usage and penetration across the country.

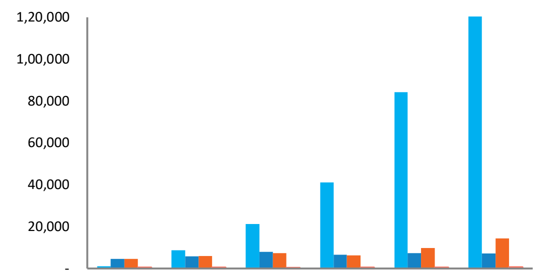
In FY2022, UPI accounted for c. 86% of all consumer payments, with mobile wallets accounting for only c. 2.4%. With the significant increase in UPI traffic, CLSA (formerly known as Credit Lyonnais Securities Asia) forecasted that digital payments (debit cards + credit cards + UPI) from consumers to merchants climbed c. 114% in FY2019 to more than 420% in FY2021 and is on track to reach 1575% growth in FY2022 from FY2018.

Exhibit 3.1: -Transaction Volume by Payment, FY2018-23 (Bn)



	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23
UPI	0.92	5.39	12.52	22.33	45.97	84.16
Debit card	3.34	4.41	5.06	4.01	3.94	3.4
Credit Card	1.14	1.76	2.18	1.76	2.24	2.9
Prepaid Payment Instrument	0.31	0.3	1.09	0.98	1.28	1.6

Exhibit 3.2: -Transaction Value by Payment, FY2018-23 (INR Bn)



	2018	2019	2020	2021	2022	2023
UPI	1,098	8,770	21,317	41,037	84,176	1,39,150
Debit card	4,601	5,935	8,049	6,614	7,302	7,204
Credit Card	4,590	6,034	7,309	6,304	9,720	14,320
Prepaid Payment Instrument	433	466	332	456	592	791

Source: RBI

UPI is responsible for the largest transaction volumes among all payment methods, but UPI payments are not profitable because they are free of processing charges, whereas debit/credit card merchants and POS/gateway companies charge fees for the service. Because of this, UPI-based issuers and super apps are now diversifying into full financial service platforms that include lending, distribution, and non-financial services to capitalize on the large customer/merchant base they have built. Examples include Paytm, PhonePe, MobiKwik, Google Pay, BharatPe, Pine Labs, RazorPay, and CRED.

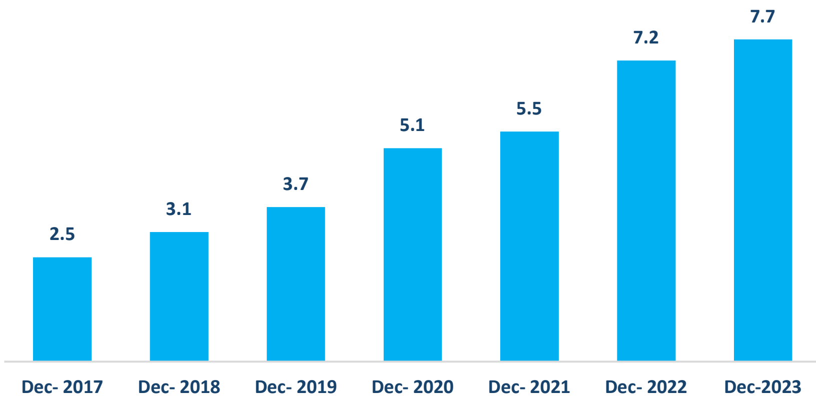
1. Drivers

Tech-savvy users, who have access to various platforms, are increasingly choosing digital means to explore and finish their purchasing trips. While internet retailers were among the first to accept digital payments, older payment systems swiftly followed.

i. Increased Deployment of Points of Sale (PoS) infrastructure (Physical and Digital modes)

The debit and credit card industry are one of the most important pillars of the digital payment environment, with the potential for issuing banks, acquiring banks, merchants, payment service providers, card networks, and PoS terminal vendors. Customers currently make digital payments at in-store merchant locations mostly using PoS terminals or by scanning a QR code. In tier 1 and 2 cities, PoS terminals are becoming increasingly popular in merchant sectors like restaurants, grocery shops, retail stores, jewelry stores, and gas stations. However, their adoption was slower in other cities. As a result, the RBI established the Payments Infrastructure Development Fund (PIDF), which was funded by the central bank, card-issuing banks, and payment networks.

Exhibit 3.3: Number of PoS Terminals FY2017-23E (Mn)



Source: RBI, Frost & Sullivan Analysis

ii. Higher Adoption by Gen Z

Gen Z consumers prefer digital payments over older payment methods because the former enables more efficient, frictionless, and robust transactions. The use of mobile payment applications for in-person payments is anticipated to climb from c. 5% today to c. 19% in the future. On the contrary, Gen Zers expect to reduce their use of debit cards (from c. 35% currently to c. 26%) and credit cards (from c. 16% now to c. 14%) over the next 5 years.

The Fintech industry will continue to innovate and provide dynamic and secure transaction facilities to develop and promote the country's digital payment landscape, even though India is already advancing in terms of blockchain technology, cloud-based payments, cryptocurrencies, and other payment facilities powered by AI, ML, and the IoT.

iii. Rapidly Developing Blockchain Technology

Blockchain technology is already the next big thing since FY2022. It is possible to demonstrate a considerable decrease in asset transfer costs and timelines using any of the blockchain APIs. It is also believed that blockchain would significantly increase transparency among market participants, therefore leveling the playing field. With so many advantages, it will undoubtedly be a trendsetter in the digital payment field in the next 12-18 months.

2. Restraints

i. Digital Payments Fraud

Data breaches, malware injection, account hacking, data loss, and cloud service misuse are just a few of the significant security threats. Indian consumers need to be educated to utilize digital payments securely.

ii. **The Backlash from the Zero MDR Policy.**

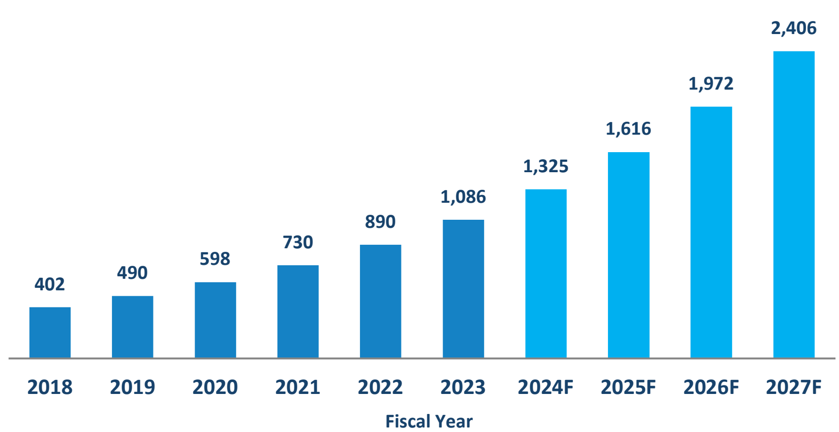
In January 2020, the Zero MDR policy entered into force. According to this policy, businesses having an annual turnover of more than INR0.5 Bn must provide consumers with low-cost digital means of payment such as BHIM, UPI, QR code, and Aadhaar Pay, as well as certain debit cards (RuPay Cards), NEFT, or RTGS transactions, where customers or the merchants would not be charged any hefty processing fees or MDR.

However, the government's aim to increase financial inclusion has been counterproductive, with debit card payments falling from 0.25 Bn transactions in January 2023 to 0.22 Bn in April 2023 and further down to 0.21 Bn in June 2023. Although the growth is expected to return to transactions volume in the next few months, the overall impact remains. Furthermore, non-bank payment service providers are fighting to keep their operations afloat, while the requirement to absorb MDR expenses impacts profitability.

As a result, payment companies are expressing dissatisfaction and are urging the government to allow a less regulated interchange instead of zero MDR on QR code, UPI, and RuPay debit card transactions, as well as tax breaks for merchants who accept electronic payments and incentive schemes to increase the popularity of QR code-based transactions. On the other hand, the MDR for credit cards, prepaid cards, and debit cards from other issuers was almost non-impacted, enabling profitability for these players. Only Rupay debit card MDR has been absorbed by the govt, on Visa and Mastercard the MDR is capped at 75 basis points.

3. Overall Estimated Market size (5-year historical and 5-year forecasts)

Exhibit 3.5: India's Digital Payments Market Revenue, FY2018-27 (INR Bn)



Source: News Release, Frost & Sullivan Analysis

The digital payment market is expected to grow at a CAGR of c. 22.0% from FY2023 to FY2027, boosted by digital currency and supporting technologies such as AI and ML for convenience.

4. Impact of Covid-19

The COVID-19 pandemic has undoubtedly dealt a blow to the card transactions on PoS machines. PoS transactions were down several times in the short run due to an overall slowing in consumer spending. However, it is expected to gradually go up when consumer spending improves in the long term.

UPI, IMPS, and AePS (fund transfer) payment methods, on the other hand, increased significantly throughout the pandemic, helping India surpass China and the United States with the most considerable number of real-time internet transactions in FY2020. According to a recent Capgemini Research Institute survey, c.75% of Indian customers have boosted their use of digital payments since the pandemic began, and this shift in payment pattern will continue with digital payments expanding at the same rate in FY2022-23 as they did in FY2020 and FY2021.

India is on the verge of seeing huge growth in digital payments acceptance, and COVID-19 has simply supplied the much-needed fuel to quicken the pace of this adoption. With a diverse population not just in terms of demographics but also in the channels, modes, frequency, and providers of digital payment transactions, India will undoubtedly be a complicated mainland center of digital payments, with an ever-evolving adoption narrative.

B. Retail Digital Spend on Merchants (online and offline)

Digital transactions increased to c. 99% of non-cash retail purchases during the pandemic in the FY2023 period, with credit transfers being the most popular method, from c. 97% in FY2020 (based on RBI data).

1. Number of transactions

Retail merchants in India have worked hard to adapt to ever-changing consumer expectations such as finance, home delivery, and the shift to omnichannel store models. Furthermore, the country's strong regulatory structure, as well as its powerful immense value and retail payment systems, are contributing to the rapid increase in the value of retail digital payment transactions.

Exhibit 3.6: -Retail Digital Transaction Volume, FY2018-23 (Bn)

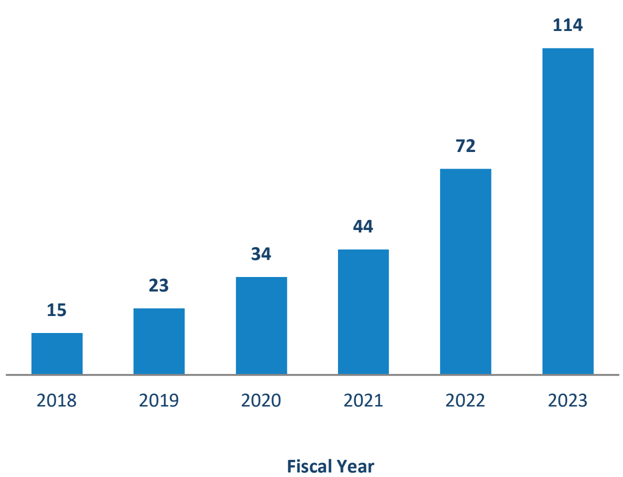
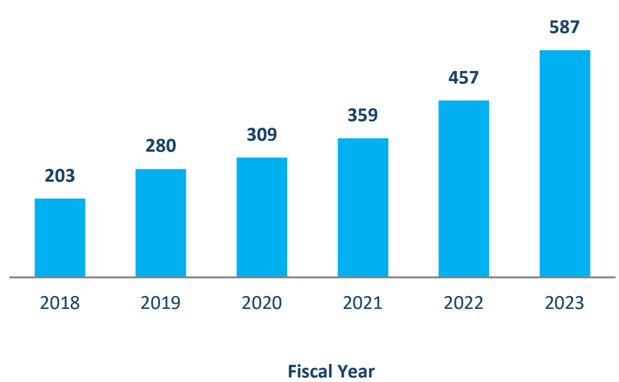


Exhibit 3.7: - Retail Digital Transaction Value, FY2018-23 (INR Bn)



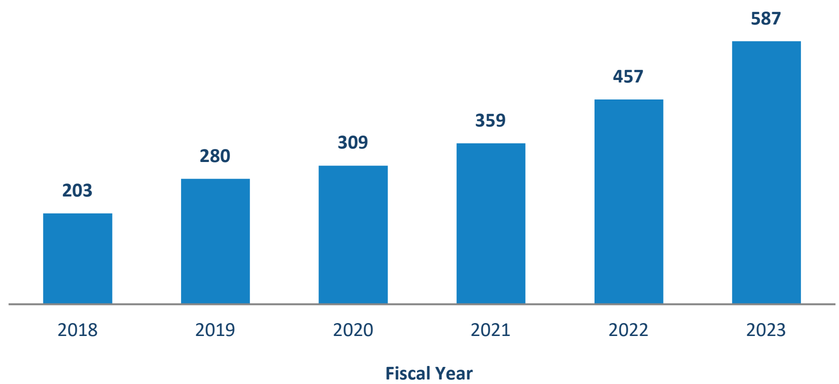
Source: RBI, Frost & Sullivan Analysis

2. Value of transactions

The RBI's pilot study in FY2018-19 explored retail payment patterns of individuals in six cities (Delhi, Kolkata, Bengaluru, Mumbai, Chennai, and Guwahati) and discovered that convenience was the biggest influence in the use of digital payments. Indeed, the ability to pay from anywhere and at any time, without having to line up outside an ATM, has been a driving force behind the growth of retail digital transaction value.

3. Average Size per transaction

Exhibit 3.8: Average Retail Digital Transaction Value, FY2018-23 (INR)



Source: RBI, Frost & Sullivan Analysis

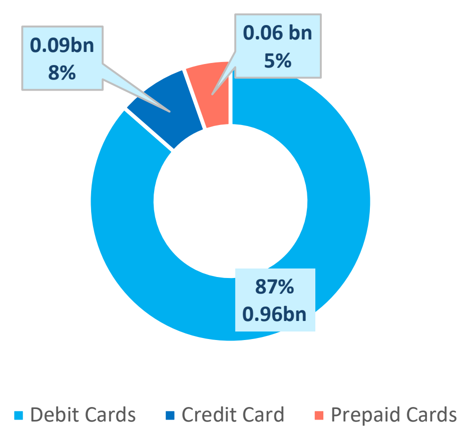
In FY2023, the average per-transaction surpassed INR 587 which was an increase of c. 28% over FY2022.

C. Overview of Card Market in India

The usage of credit and debit cards for payment is gaining popularity. With the rise in the contactless transaction limit and credit cards providing quick and safe access to credit, customers have additional opportunities to utilize their cards for everyday payments. This is projected to accelerate in places other than metros because of legislative measures such as PIDF and offline payments aim to increase the usage of digital payments in locations with poor internet access.

1. Number of Cards and Split by Types

Exhibit 3.9: Total Cards Volume (Bn), and Share by Type (%), India, March 2023



Source: RBI Bulletin, Frost & Sullivan Analysis

Payment card issuances are expected to reach a 16-month high as the economy recovers. Furthermore, banking activity has increased, and banks are increasingly aggressive in contacting their target clientele. Furthermore, with increasing mobility came a rise in access card issuances, which climbed significantly in FY2023.

2. Value of Transactions (Debit Cards + Credit Cards + Prepaid Cards)

In FY 2023, the total card-based transactions surpassed INR22 Bn, this is a c. 13.3% growth compared to FY2022.

Exhibit 3.10: Cards Based Transaction Value, FY2021-23 (INR Bn)

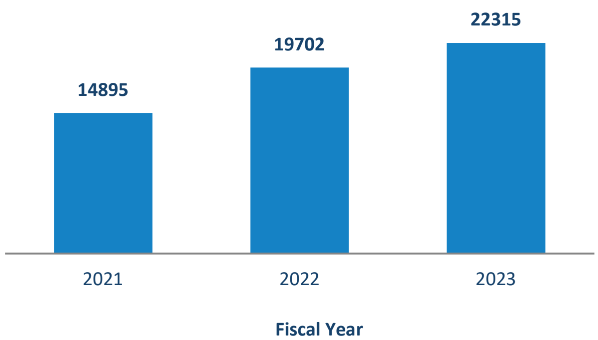
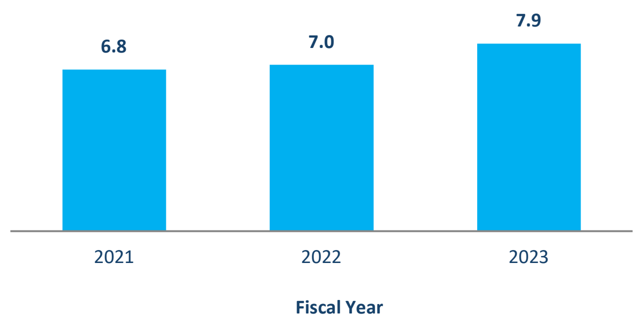


Exhibit 3.11: Total Cards (Debit + Credit + Prepaid Cards) Based on Retail Transaction Volume, FY2021-23 (Bn)



Source: RBI Bulletin, Frost & Sullivan Analysis

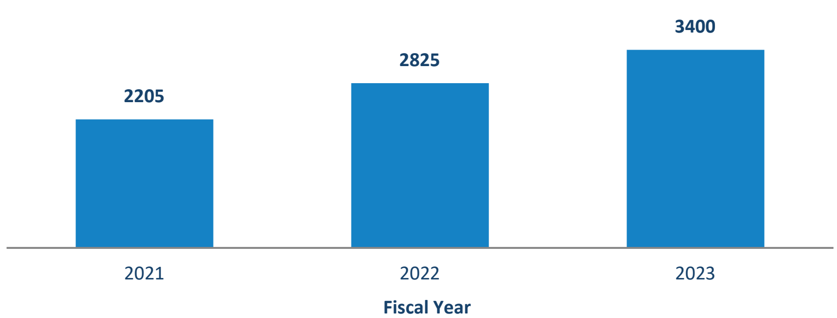
Note: Prepaid card is an instrument of payment which facilitates buying of goods and services, against the value stored in the instrument. Buyer of prepaid card can be an employer, employee/individual consumer. Gift cards are part of prepaid cards and can be exchanged for specified cash value of goods/services and can be given as gifts. Some other types of prepaid cards include prepaid meal cards, pay day cards, travel cards and the like.

3. Number of Transactions

Card-based retail transaction volume is expected to remain lower than other payment type transactions as consumers shifted to UPI payment modes. However, volume is expected to increase as more prepaid cards are used.

4. Avg Size Per Transaction

Exhibit 3.12: Average Card-Based Transaction Size Per FY2021-23 (INR)



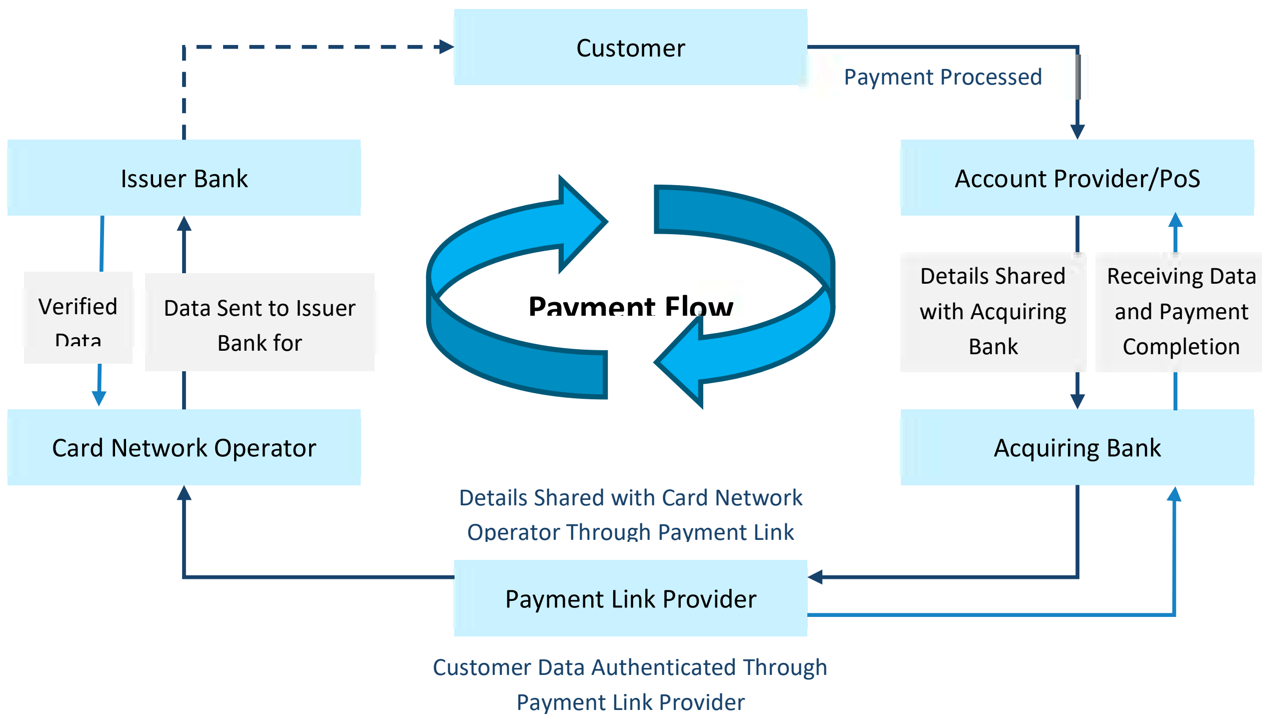
Source: RBI Bulletin, Frost & Sullivan Analysis

In FY2022-23, the average card-based transaction size is expected to be higher than FY2021-22, due to an increase in the card transaction value.

5. Interchange Rate

From April 2023, Interchange at the rate of 1.1% of the transaction value / amount shall apply to payments made to all online merchants, large merchants and small offline merchants having transaction value / amount greater than INR2000. NPCI issued a circular in March 2023 on PPI charges for Merchant Transactions in UPI and there have been a few changes with regards existing rates for other transactions also.

Exhibit 3.13: Flow of Money



Source: Frost & Sullivan Analysis

Note: The transaction costs are taken up by various players in the value chain depending on the market conditions.

Exhibit 3.14: Factors Influencing Discount & Interchange Rates

DISCOUNT RATES	INTERCHANGE RATES
Credit rating of the registered business owner	Type of the Card (Premium, High Spend, Corporate or Infinite)
Credit rating of the registered merchant	Processing method of the card (key entered, swiped, phone order or online)
Type of the business registered by the business owner.	Type of the industry registered for the transaction (SMEs, MSMEs, Oil and Gas, Grocery etc.)
Total turnover of the company	
Monthly sales of the company	

Retailers pay the discount fees, while the interchange fees are independent of the discount charge. As a result, every transaction is charged, and the business performing the transaction is not required to pay an amount equal to or less than the interchange rate. The charge is determined by the terms of the payment processing agreement. In general, the percentage charge for MDR is between 1% and 3%.

In the case of debit cards, small company owners will pay a maximum MDR of 0.4% of the bill value. Owners of medium and large businesses will be charged 0.9% of the bill's total value. In addition, the RBI has established an MDR limit for small company owners of INR200 per bill and INR1000 for everyone else. This is applicable only for debit cards.

Quick Response or QR-based payments are subject to a separate set of restrictions. The MDR for small firms will be 0.3% of the transaction value or INR200, whichever is lower. The MDR for medium and large firms will be 0.8% of the transaction value or INR1000, whichever is lower.

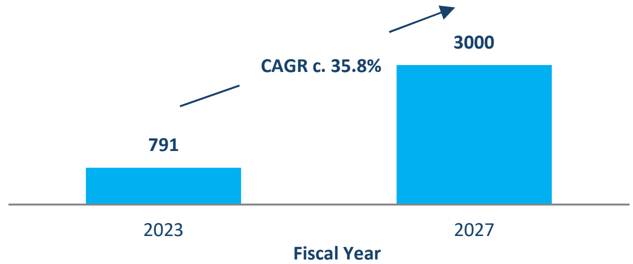
On December 28, 2019, the then Finance Minister declared that the MDR would no longer be applied for digital transactions processed using RuPay debit cards, or the UPI. The policy went into effect on January 1, 2020. The government will cover MDR costs on transactions up to INR2000 conducted using debit cards, BHIM UPI, or Aadhaar-enabled payment systems.

D. Overview of Corporate Credit Card / Prepaid Card market

1. Prepaid Card Number and Size

The Indian prepaid card market for transaction value has recently boomed and is predicted to grow at a CAGR of c. 35.8% from FY2022 to FY2027 as the commercial sector rapidly adapts to the usage of prepaid cards. Corporate prepaid cards offered improved cash flow management, quicker employee reimbursement, more security checks, and cash. They are commonly used as gift cards, meal cards, travel cards, and payday cards.

Exhibit 3.15: Prepaid Card Transaction Value, FY2023-27 (INR Bn)



Source: RBI, Frost & Sullivan Analysis

In the prepaid card industry, gift cards remain the most extensively circulating card, whether used for online purchases or in a retail store. E-gift transactions have tripled in the last 3 years. Prepaid meal cards have witnessed significant growth, and some businesses have begun to provide them to employees, to purchase snacks, meals, and groceries.

Prepaid travel cards are also becoming popular in the business world because they allow firms to load a single currency for personnel traveling to a specific location. Payday cards are designed exclusively for freelance and blue-collar

CHAPTER 4:

OVERVIEW OF SPEND AND HUMAN CAPITAL MANAGEMENT SOFTWARE AND SERVICES MARKET IN INDIA

CHAPTER 4: OVERVIEW OF OUTSOURCED SPEND AND HUMAN CAPITAL MANAGEMENT SOFTWARE AND SERVICES MARKET IN INDIA

A. Introduction

Spend management tools strategize purchases, procurements, employee travel, and expense-related activities across multiple business functions with the primary objective of saving money. An effective spend management system allows for real-time visibility of company spending across departments, aids in risk management, establishes and implements internal controls, and develops clear companywide expense-related policies.

Companies could use either a unified spend management system or fragmented programs for distinct functions such as employee expense management, vendor management, payroll management, tax management, procurement and purchasing, and channel partner incentivization.

As per current policies prevalent in the industry, in absence of employee reimbursement tools, the employees must submit their reimbursement bills 5-7 days prior to their payday extending the cycle time from 5 days to 35 days. The Fintech players target to reduce this cycle period and increased transparency and adherence, while enabling easier liquidity management for employees.

Companies offer corporate prepaid cards, gift card loyalty programs, RnR schemes, employee tax benefits programs, and multi-wallet reloadable prepaid cards to boost employee morale and maintain better control of employee spending.

Exhibit 4.1: Key Players in Oursourced Spend Management Software Marketby Service Category, India

Travel & Expense Management Software	Vendor Management Software	Employee Rewards and Recognitions
Coupa	Coupa	Coupa
Edenred	Ariba	Edenred
Expensify	Zoho	Expensify
Wex	Zaggle	Wex
Zaggle	Brex	Zaggle
	Pleo	
	Ramp	
	Spenmo	

Source: Company, Website, New Release, Frost & Sullivan Analysis

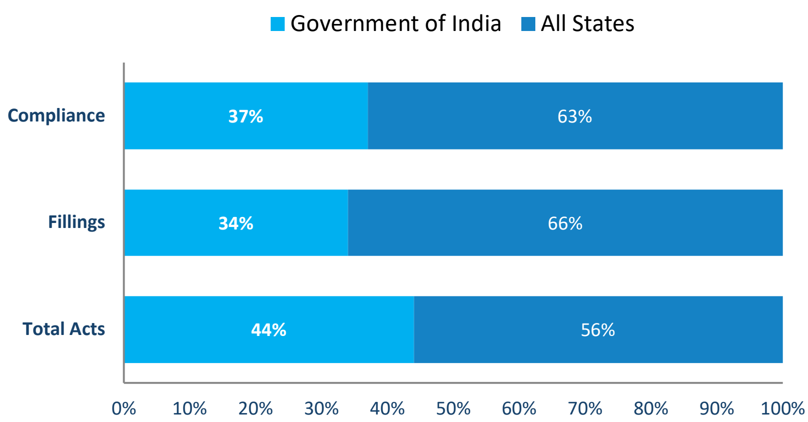
As indicated above, Coupa, Expensify, Edenred, Wex, and Zaggle are a few of the market players which offer diversified end-to-end SaaS offerings to customer organizations.

1. Drivers

i. Regulatory landscape

It is challenging for an organization to independently navigate India's highly competitive business world and complex regulatory landscape of more than 1500 acts, 69000 compliances, and 6000 regulatory filings across central and state governments.

Exhibit 4.2: - India's Compliance Statistical Overview (since FY2020)



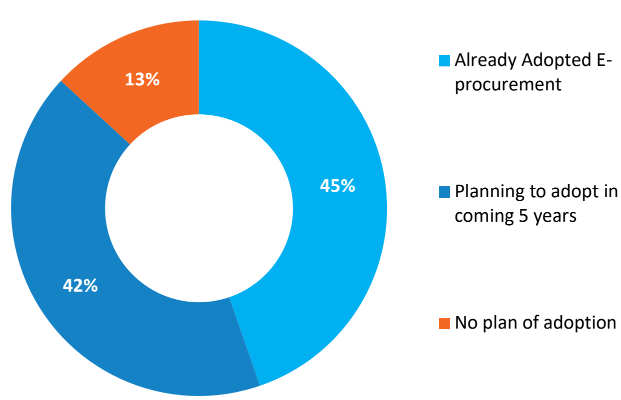
Source: Press releases, Frost & Sullivan Analysis

Organizations demand systems and platforms that can comprehend complicated and constantly changing state and federal compliance regulations and requirements, help them communicate and enforce company and legislative policies to their employees, and automate classified document management operations and reporting. Automated spending and human capital management systems exercise better control over many internal transactions and ensure compliance.

ii. Significant awareness of spend management technology

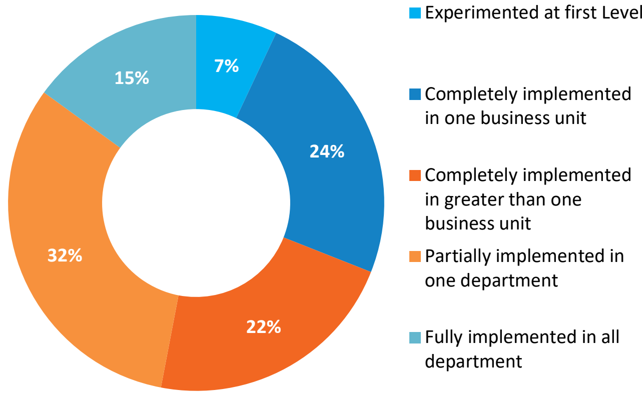
Many Indian companies have either already implemented or plan to adopt e-procurement technologies. According to a survey, firms understand the benefits of new procurement technologies such as improved sourcing of suppliers, reduction in procurement lead times, and employee strengths.

Exhibit 4.3: India E-Procurement Level of Adoption, FY2020 (%)



Source: Symbiosis International, Frost & Sullivan Analysis

Exhibit 4.4: Implementation level of E-procurement in already adopted E-procurement Software, FY2020 (%)



Source: Symbiosis International, Frost & Sullivan Analysis

The survey found that only c. 37% of Indian enterprises have implemented eProcurement software in one or more business units, indicating a significant opportunity in the space.

iii. Rising remote working practices

The pandemic accelerated the trend of working from home, and this model has continued to reshape even after the pandemic ended. For instance, in the IT sector, many large organizations announced that a significant percentage of their workforce will continue working from remote locations. This has created huge demand for services providers even at SME levels wherein the usage of technology was limited earlier. Therefore, the key market players are investing in R&D activities to integrate the latest technologies, including Artificial intelligence (AI), machine learning, and other emerging technologies to offer automated solutions. These highly customizable solutions are efficient and easy to deploy and can fulfill the needs of remote working.

iv. Increasing Digitization at Organizations and Building Automated workflows for efficiency

The increased digitalization trends in organization and automated workflow are expected to be key drivers in this market's growth. Workflow automation in India has witnessed significant growth and adoption in various industries. Businesses are leveraging innovative technologies like artificial intelligence, machine learning, and robotic process automation to streamline and optimize their processes. Automation enables companies to reduce manual tasks, improve efficiency, minimize errors, and enhance overall productivity. From Finance and Healthcare to manufacturing and customer service, Indian enterprises are automating to stay competitive in the global market. Additionally, the government's initiatives to promote digitalization and the rise of start-ups focusing on automation solutions have further accelerated this trend. As technology continues to evolve and become more accessible, workflow automation is expected to play a pivotal role in transforming India's business landscape, driving innovation, and fostering economic growth.

Restraints

i. Low affordability and lack of knowledge among potential users

According to a survey conducted in FY2020, only c. 13.1% of organizations showed no intent to adopt spend management software such as e-procurement as they had lower employee strength and could not afford the excessive cost of implementation. In addition, a lack of understanding and knowledge about digital tools for communication resulted in only c. 34% of India's MSMEs adopting digital means to interact with employees, customers, and suppliers in FY2019. In terms of full adoption of such software-as-a-service solutions, the figure dropped to only 7% (*Source: according to 129,537 MSME respondents in a survey conducted by the India SME Forum).* About c. 70% of MSMEs cited among the restraints a lack of knowledge and guidance in using such tools, the cost of investing in these technologies, and lack of skilled talent to manage them. These factors will keep legacy systems alive and hinder the market's growth.

2. Trends

Exhibit 4.5: India Outsourced Spend Management and HCM Market Key Trends

Trend	Description
Employee Experience	The pandemic caused a significant uptick in demand for personalized yet cost-effective employee experience solutions. A recent development in HR IT is employee wellness and mental health tools for emotional wellbeing, physical fitness, dietary planning, and other assistance. On the other hand, companies focus on providing a swift response to their employees' monetary affairs through various spending management applications such as travel and expense management software.
People Analytics	People analytics is a data-driven and goal-oriented way of evaluating all people processes, functions, issues, and possibilities at work to elevate these systems and achieve long-term company success. People analytics is sometimes known as talent analytics or HR analytics. It majorly helps in the transformation of HR responsibilities, HR business interactions, HR-employee relationships, and improvises quality of HR insights.
AI	Companies in India have begun to explore affordable spend management systems because they improve forecasting accuracy, which consequently improves expenditure analysis. This issue can be resolved by bringing Artificial Intelligence technologies into spending management that can provide better and more efficient results. AI merges automation and data to produce enhanced expenditure analysis to simplify jobs or alter algorithms depending on predetermined corporate regulations. This gives a more balanced approach to budgeting.
Cloud and Mobile Deployment	Cloud adoption has registered a significant pace in recent years, especially during the COVID-19 pandemic, due to its fast and cost-effective flawless collaboration and better security along with reduced risks of errors. For instance, in 2021, c. 22% of enterprises in India used a multi-cloud environment, and it is expected to rise to 50% in the next two years *(Source: Rackspace Technologies).* According to the National Association of Software and Service Companies (NASSCOM), domestic demand for cloud computing is growing as businesses of all kinds digitalize, and prospects for small and medium-sized businesses expand. Owing to this, many companies have started offering mobile-based employee portals along with cloud-based application deployments.

Source: News Release, Frost & Sullivan Analysis

3. Need for automation of spend management

- Many businesses continue to use manual procedures or outdated software solutions to record, manage, and predict expenditures. A c. 61% of companies continue to use fragmented programs to manage various sorts of spending.

- Despite being the second most significant controllable expenditure for enterprises, c. 86% of India's firms lack adequate travel and expense management solutions.
- In the pursuit of greater agility, organizations are investing in automation and optimization strategies to accelerate go-to-market and improve user experience. A c. 90% of executives feel their organizations might improve their expenditure control.
- In addition, c. 87% of respondents were interested in a unified spend management platform to enable audits across all forms of spending and enforce compliance with corporate spending regulations.

4. Porter's 5 forces

i. Bargaining Power of Supplier (Low):

- The bargaining power of technology suppliers is low because of the presence of global majors and hundreds of local technology suppliers in the country.
- The bargaining power of suppliers of niche or recent technologies such as AI and ML is, however, high. Supply is of human capital – technology is developed by Zaggle.

ii. Bargaining Power of Buyer (Moderate):

- Buyers can easily discover alternative suppliers of a certain product, which increases their bargaining power.
- Buyer's bargaining power declines when considering the high vendor and service switching costs associated with data and technology migration.

iii. The threat of New Entrants (Moderate):

- Not so easily available investments in India, which can help Indian companies bring scalability and offer SaaS at competitive prices.
- The high number of tech start-ups present in the country increases the threat of new entrants.

iv. The threat of New Substitute (Moderate):

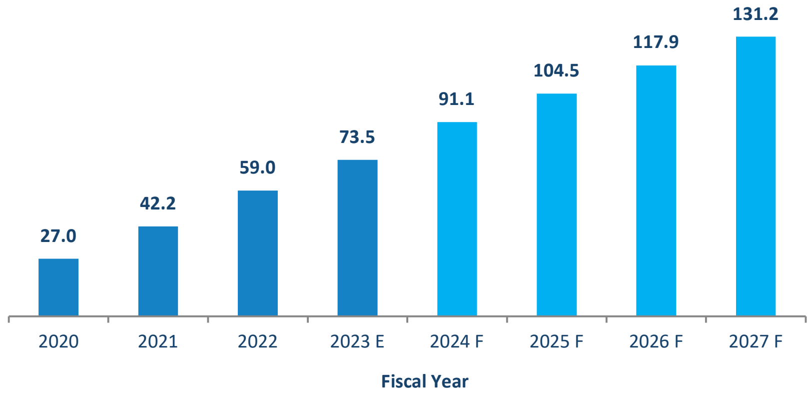
- Recent technology stimulated the development of user-friendly products such as mobile applications and handheld devices that posed a high threat to substitutes.
- The few accessible replacements are of high quality but much more costly. As a result, the danger of alternate products is low inside the sector.

v. Competitive Rivalry (High):

- Competitive rivalry in India's spend management market remains high with the rise in the number of tech startups.
- Vendors always remain under pressure to offer innovative and differentiated products and services as the customer always has a vast number of established vendors options.

5. Overall Estimated Market size

Exhibit 4.6: India Outsourced Spend Management Software and Services Market Revenue, FY2018-27 (INR Bn)

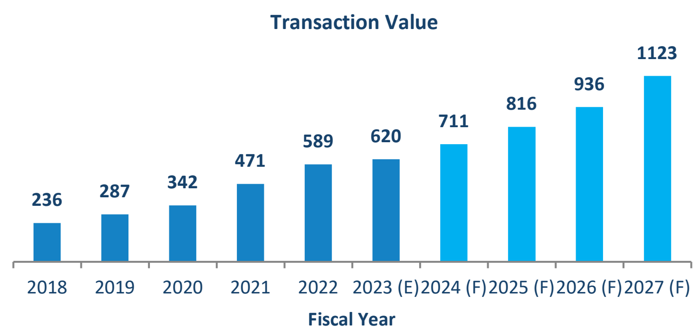


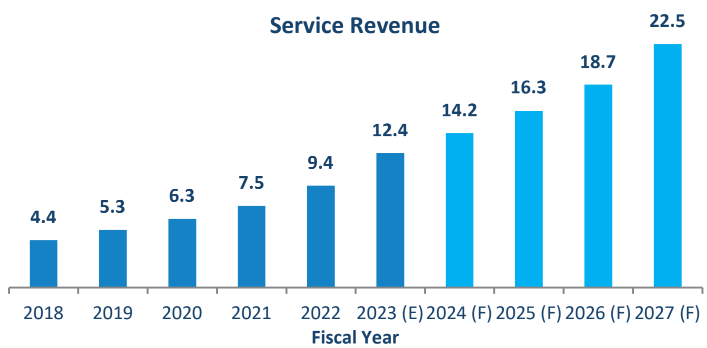
E-Estimated Revenue, F-Forecasted Revenue *Source: Annual Report, Company Websites, Frost & Sullivan Analysis*

The total spend management software and services market size is inclusive of revenue from procurement management, expense management, and payroll market.

India's spend management software and services market is expected to reach c. INR131 Bn by FY2027 from an estimated c. INR73 Bn in FY2023, growing at a CAGR of c. 25.3%. The overall market for spend management (in-house & outsourced including procurement management, expense management, and payroll management) was estimated to be INR82 Bn in FY2022, which is estimated to surpass INR200 Bn by FY2027 with share of outsourcing estimated at around 60% in FY2022.

Exhibit 4.7: India's Gift and Loyalty Program Card Transaction Value & Service Revenue, FY2018-27 (INR Bn)



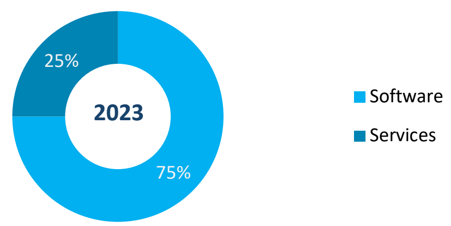


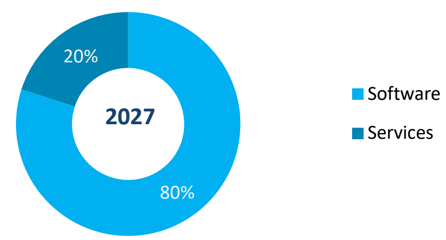
E-Estimated Value, F-Forecasted Value

Source: Annual Report, Company Websites, Frost & Sullivan Analysis

vi. Split of Software and Services

Exhibit 4.8: - India Outsourced Spend Management Software and Services Market Revenue Share, FY2023 vs FY2027 (%)



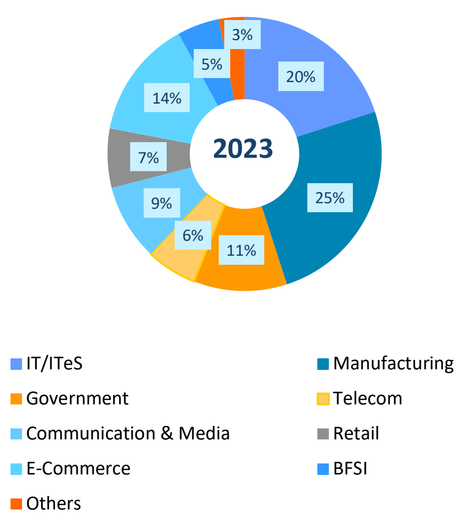


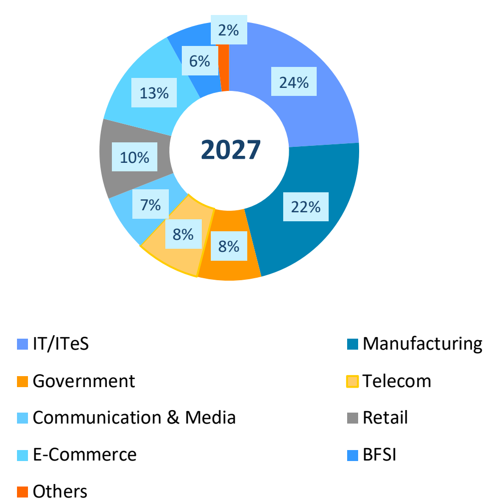
Source: Frost & Sullivan Analysis

India's spend management software and services market is dominated by the software segment, with a share of c. 75% as of FY2023. The dominant position of this segment is attributed to the growing adoption of the software to manage the workforce, vendor and procurement management, and easy sourcing increasing. Further, this segment is expected to grow faster than the services market during the forecast period of FY2023-27 due to the increasing demand for technologies for process automation such as artificial intelligence and machine learning.

vii. Market split by industry verticals

Exhibit 4.9: - India Outsourced Spend Management Software and ServicesMarket Revenue Share, FY2023 vs FY2027 (%)





Source: Frost & Sullivan Analysis

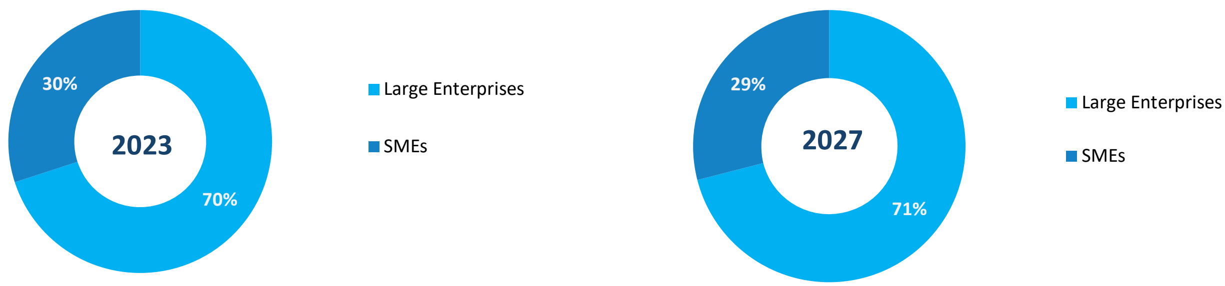
Manufacturing and e-Commerce industries are expected to witness a higher adoption rate of spend management software and services during the forecast period of FY2023-27. This can be attributed to the increasing need for automation in vendor and procurement management, along with evolving retention policies such as loyalty programs.

6. Split by organization type: SMEs and Large Enterprises

viii. Organization Type

However, due to the COVID-19 pandemic, SMEs are expected to limit their investment in the HCM software and solutions to some extent.

Exhibit 4.10: - India Outsourced Spend Management Software and Services Market Revenue, FY2023 vs FY2027 (%)



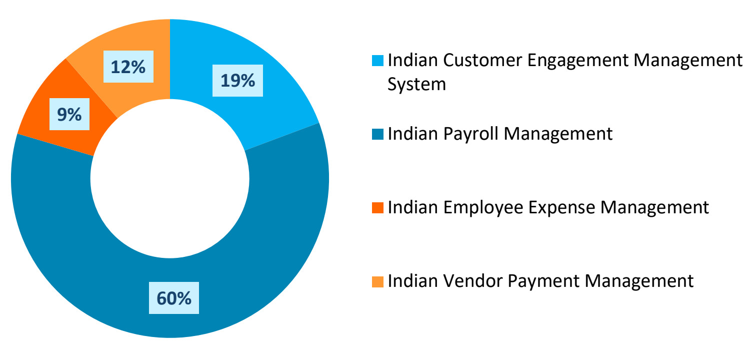
Source: Frost & Sullivan Analysis

Large enterprises accounted for a larger share of c. 70% of India's spend management software and services market. This market is expected to grow at a CAGR of c. 10% during the forecast period of FY2023-27. Large workforces and the need to manage and increase employee productivity; availability of ICT infrastructure; increasing investment in the technologies; continued shift towards globalization; and compliance with regulations are some of the major factors behind the larger share of the large enterprises.

7. Categories of Services

8.

Exhibit 4.11: - Outsourced Spend Management Revenue Share by Category, FY2022 (%)



Source: Frost & Sullivan Analysis

In the above chart, can we change GCLP (Gift Cards and Loyalty Programs) to CEMS (Customer Engagement Management System). The combined market for all services depicted was calculated to be INR70 Bn in FY2022 and is estimated to reach INR115 Bn by FY2027 at a CAGR of c. 10%.

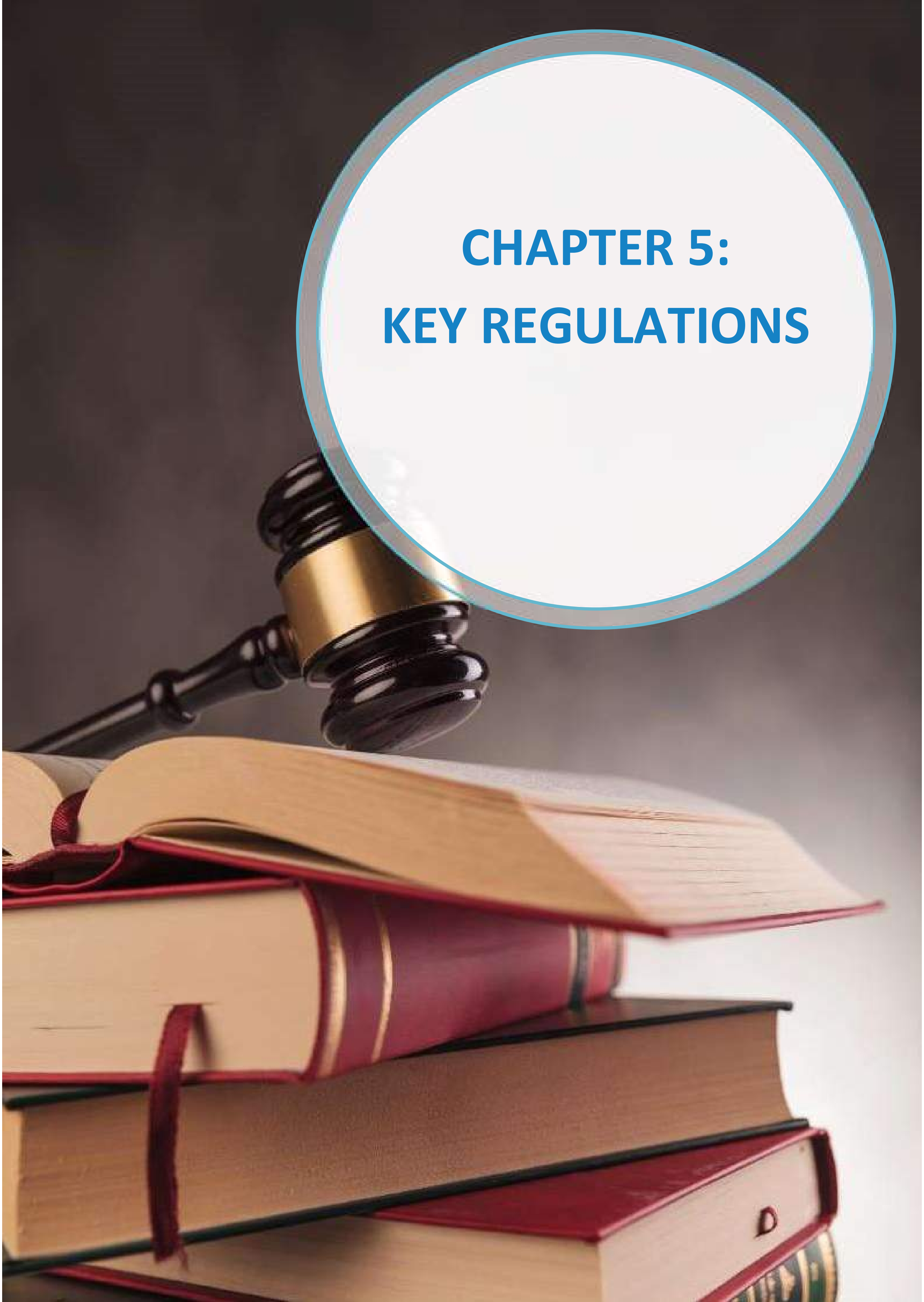
Exhibit 4.16: Indian Outcourced Spend Management and Service Categories

Category	Definition	Key Trends
Employee Expense Management	Employee expenses are categorized into reimbursable expenditure, non-reimbursable expenditure, and reward payments. Reimbursable expenditures usually include travel expenses (local conveyance, flight and hotel bookings, among others), meal expenses, medical expenses, telecom expenses, and fuel expenses.	• 82% of companies are either partially or entirely lacking in making the whole travel and expense process automated despite being the second-largest operational expense after payroll. • 48% of companies do not have a system to detect fraud as expenses are mapped manually.
Employee Rewards & Recognitions	Employee recognition and reward system refer to a program set up by the company to reward performance and motivate employees.	• The war for talent will increase the emphasis on diversity, equity, and inclusion, as well as the rising expenses of employee benefits, putting pressure on Indian companies to revise their employee experience plans. • Most Indian organizations include employees of all ages, and this is one of the employee engagement trends that will continue to expand in the future.
Vendor payment management	A system that oversees the payment of a business's external suppliers for goods, services, or both.	• Modern, astute firms have already begun to consider automating their vendor management procedures, including vendor onboarding, to reduce compliance risks • Firms are automating vendor interactions, payments, and increasing overall compliance in the tax environment
Negotiation as a service (NaaS)	A platform that allows businesses to automate tailored commercial negotiations at a scale, to secure the best deal for their consumers. It compares and evaluates proposed terms and conditions and compares them to others in the market to reach an agreement that is suitable for both sides.	• Typical Fortune 500 companies spend more than a third of their sales on categories that may be purchased through negotiated contracts • NaaS has always meant hiring an outsourcing center. However, this process is increasingly developing via the use of innovative technology.
Payroll Management	The payroll management within the expense management covers employee salaries & incentives payment management in accordance with policies & regulations. It may also	• Bonus payments, benefit deductions, vacation leaves, salary increases, employee recruitment and firing, checklist-driven payroll processing in under a minute, accurate reconciliation tools, generating and distributing pay slips with a single click, and

Category	Definition	Key Trends
	keep a financial record of employees' gross earnings, payroll deductions, net pay, and the employer's payroll tax due.	a highly configurable claims module with expenses and reimbursement workflow are all possible with a payroll system • Requirement for managing the expanded workforce, as well as the rising need for replacing older systems with advanced payroll solutions to minimize the time spent on the administration; increasing adoption of a work-from-home policy, and maintaining payroll tax records and avoiding penalties are some of the major factors increasing adoption of the payroll management
Channel partner incentivization	A behavior modification tool designed to reward partners for achieving specific goals, excluding direct cash incentives.	• After the Covid-19 outbreak reduced customer demand, Indian companies are increasing dealer and distributor incentives to push sales • Recent incentives have focused on increasing liquidity in the system, rewarding stronger sales performance, and covering dealer overhead expenses such as purchasing sanitizers and safety equipment
Gift Card Loyalty Program (GCLP)	A benefits program that helps employees saves money through financial wellness packages with outstanding rewards and corporate discounts.	• Several companies are offering incentives, while others are providing sustainable and fitness-related presents • IGP, a multicategory gifting company, has seen a 30 percent year-on-year increase in corporate gifting over the festival season over the last two years

Source: News Release, Frost & Sullivan Analysis

CHAPTER 5:
KEY REGULATIONS



CHAPTER 5: KEY REGULATIONS

Sr. No	Category	Regulation	Description	Source
1	Income Tax Regulations	Sections: 80C, 80CCC, 80CCD, 80D, 80DDB	Under these regulations, employees can select from various investment options to save upon a certain amount of tax. It includes investments in PPF, mutual funds, medical insurance and reimbursements, house loan, among others.	Incometaxindia.gov
2	GDPR Equivalent Regulations	Data Protection Policies	India is working to implement a data protection framework that incorporates many of the GDPR's provisions such as user consent policy, data breach policy, data fiduciary, and among others. The new law, the Personal Data Protection Bill (PDP), 2019, is now before parliament and was suggested to revamp India's current data protection policy, controlled by the Information Technology Act of 2000.	PCI Security Standard council
3	Personal Data Protection for Fintech		The law has the potential to pave the way for consent-based data exchange in the financial services industry. Financial firms frequently fail to appropriately price risk owing to a lack of data on everyone. If the bill is properly implemented, users may feel more comfortable disclosing personal information, and with more data at their disposal, Fintech businesses will be able to adapt their products and services better.	
4	Payment Card Industry Data Security Standards (PCI DSS)	PCI Data Security	The PCI DSS is a set of security standards formed in 2004 by Visa, MasterCard, Discover Financial Services, JCB International, and American Express. Governed by the PCI Security Standards Council, the compliance scheme aims to secure credit and debit card transactions against data theft and fraud.	
5	KYC Regulations	KYC Regulations	RBI Advises the financial institutions to ensure KYC regulation adherence.	
6	**Digital Banking/Lending**			
	Digital Payments	PSS Act, 2007, UPI Payments, Payment Aggregators/Ga	The given regulation provides information about the payment acts set by the government of India. The Payment and Settlement System Act of 2007 ('PSS') regulated electronic payments, with the	

		teways, PPI, Card Tokenization, E-mandate on cards	goal of ensuring a secure and efficient payment and settlement system. it also includes payments made through UPI, Payment Gateways, PPI, and other digital payment modes.	
	Digital Lending	Banking Regulation (BR) Act, 1949, RBI Act 1934, Companies Act, State wise Lenders Act, Chit Funds Act, 1982, P2P Lending	In India, lending activity, whether online or offline, is governed by RBI, and all banks (private/public), NBFCs, must register with RBI under this act for undertaking digital lending. In addition, Companies that do not meet principal business criteria for registration as an NBFC with the RBI can also undertake lending activities subject to applicable provisions of the Companies Act, 2013 such as Section 186, which prescribes certain restrictions on the loan amount and minimum interest rate for such loans. Likewise, RBI has a set of guidelines for state wise lenders act, chit funds act P2P lending and among others.	https://www.rbi.org.in/Scripts/PublicationReportDetails.aspx?UrlPage=&ID=1189#S3
7	Neo Banks	Licensing from SEBI and IRDAI w.r.t. financial investment products& Insurance,	Neo banks offer products via the RBI, SEBI, and IRDAI. RBI has set various guidelines for outsourcing activities of neo banks, engaging Business Correspondents (BCs) under Master Circular on Branch Authorization, risk management, digital payment security controls, among others.	RBI
8	Product Specific Regulations	RBI, SEBI, and IRDAI Directives & issuances on specific category of investment products	The Fintech and Neo-banking players must follow various product specific guidelines issued by RBI (related to Credit/Loans etc.), SEBI (related to investment products), and IRDAI (related to insurance issuance & aggregation etc.).	
9	Key Operational Processes	RBI and SEBI specified processes	The market players must adhere to the process level guidelines including, customer onboarding process guidelines, grievance redressal mechanism and fair practice code, and MDR regulations among others.	
10	Cloud Ecosystem	DSCI Guidelines, Ministry of Home Affairs	The service provider with cloud ecosystem must follow different IT guidelines to be governed	

		categorization, MFA Access Controls, MeITY Data Localization Rules	under various regulations issued by the regulators.
11	Other Fintech Guidelines	NBFC Guidelines; P2P Lending Platform Directives, 2017;	The organizations operating without the banking license are treated as NBFCs and have been further divided into categories with specific guidelines and adherence level requirements for each category. Similarly, Master Directions – NBFC – P2P Lending Platform Directions 2017, governs the digital lending activities.

CHAPTER6: COMPETITIVE LANDSCAPE ANALYSIS

CHAPTER 6: COMPETITIVE LANDSCAPE ANALYSIS

A. Comparison of Key Players

Some of the leading players listed in this section that are active in the spend management industry include Divvy, Brex, Pleo, Ramp, Coupa, Expensify, Fleetcor, Edenred, Wex, and Happay.

The benchmarking has been done based on their product offerings and key features offered by various companies.

1. Loyalty Cards

Exhibit 6.1: - Loyalty Cards: Competitor'sFeature Comparison

Features / Company	Zaggle	Divvy	Brex	Pleo	Ramp	Coupa	Expensify	Fleetcor	Edenred	Wex	Happay
Headquarter	**India**	**US**	**US**	**Denmark**	**US**	**US**	**US**	**US**	**France**	**US**	**India**
Rewards, Cash backs Discounts & Offers	✔	✔	✔		✔	✔	✔	✔	✔	✔	✔
Automated Reports	✔	✔	✔					✔		✔	
Real-Time Spend Tracking	✔	✔	✔	✔			✔			✔	✔
Money Withdrawal	✔										
High Security	✔	✔		✔			✔	✔	✔	✔	
The extensive network of discounted services for cardholders (AWS, Trinet, etc.)			✔		✔		✔				✔
Compatibility with various payment gateways (Apple Pay, Gpay)				✔		✔					
Spend Limit Management (Bank/Balance)	✔	✔	✔		✔		✔			✔	✔
Integration with Other Accounts (Travel, ERP, accounting, and finance software)	✔						✔				
Flexibility to Use In-Store and Online	✔			✔	✔	✔	✔	✔	✔	✔	
International Payments								✔			

Source: Company Website, Frost & Sullivan Analysis

The above table indicates the analysis of key features found across all players. Apart from the above, market participants offer additional features like fleet and fuel management, e-Receipt, and transaction fees management.

2. Spend Management

Exhibit 6.2: - Spend Management: Competitors' Features Comparision

Features/Company	Zaggle	Divvy	Brex	Pleo	Ramp	Coupa	Expensify	Edenred	Wex	Happay
Expense Tracking	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Expense Reporting	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Automatic Mileage Tracking with GPS	✔					✔			✔	✔
Smart Scanning-OCR	✔									✔
Online Reimbursement	✔	✔		✔	✔	✔	✔	✔		✔
Auto Approval Workflows and Hierarchy	✔						✔			✔
Global compatibility (Currency/Language)						✔				✔
Travel Request Form Reporting	✔					✔	✔	✔	✔	✔
Track expenses with a Prepaid expense card	✔	✔	✔		✔		✔	✔		✔
Real-time transfer of funds to cards	✔	✔	✔				✔		✔	✔
Card Management	✔	✔	✔		✔		✔	✔		✔
Client Customization	✔					✔				✔
Multiple Funding Accounts	✔			✔	✔				✔	✔
Automatic Report & Receipt Generation	✔	✔	✔		✔		✔	✔	✔	
Integration with Other Payment Gateways (Apple Pay, Gpay, AWS)		✔	✔		✔				✔	

Source: Company Website, Frost & Sullivan Analysis

3. Fintech Solutions

Under Fintech solutions, companies majorly offer lending-related services, especially to small businesses. These include small business loans, personal loans with low interest, short-term loans, and accounts payable, among others.

Exhibit 6.3: - Fintech Solutions: Competitors' Features Comparision

Features/Company	Zaggle	Divvy	Brex	Pleo	Coupa	Edenred	Wex
Instant Loan	✔	✔	✔			✔	✔
Low-Interest Rate	✔	✔	✔			✔	✔
No Prepayment Charges	✔						
Real-time Overview				✔	✔		
Short Term Loan	✔	✔	✔				
Cash & Liquidity Management					✔		

Debt Investment Management					✔		
Multiple Account Integration				✔	✔		

Source: Company Website, Annual Report, Sec Fillings, Investor Presentation, News Articles, Frost & Sullivan Analysis

4. Key Players and brief profiles (Digital Payments & Cards)

i. INTRODUCTION OF SPEND MANAGEMENT KEY PLAYERS

Exhibit 6.4:- Expense and Procurement Management Product & Service Benchmarking

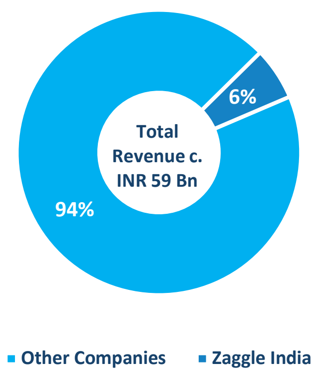
Product	SAP Ariba	SAP Concur	Expensify	Zoho Expense	Coupa	Happay	Fyle	Zaggle
Travel		✓	✓	✓	✓	✓	✓	✓
Invoice		✓	✓	✓				✓
Payments		✓	✓	✓	✓			✓
Analytics	✓	✓		✓		✓	✓	✓
Procurement	✓			✓	✓			✓
Petty Cash						✓		✓
Reimbursement			✓	✓			✓	✓
Employee Tax Benefits			✓			✓		✓
Card Management			✓			✓	✓	✓
Supplier Management	✓							✓
Sourcing Solution	✓							
Direct Spend Solutions	✓							
Financial Supply Chain	✓							
Intelligent Spend Management	✓							

Source: Company websites, Frost & Sullivan Analysis

As indicated from the tables above, Zaggle is among the few uniquely positioned players offering diversified services within Fintech products and services and has advantages of having largest number of prepaid cards issued and high profitability along diversified portfolio of SaaS services (including tax & payroll) and a wide touchpoint reach. Zaggle is a leading player in spend management with a differentiated value proposition and diversified user base with more than 50 Mn prepaid cards issued in partnership with banking partners and more than 2.27 Mn users served, as of Mar 2023. With one of the largest numbers of issued prepaid cards in India in partnership with certain of Zaggle's banking partners with c. 16% of country's total prepaid transaction volume (Exhibit 6.6) and c. 12.7% of the country's total prepaid transaction value share as of Mar 2023 (Exhibit 6.7).

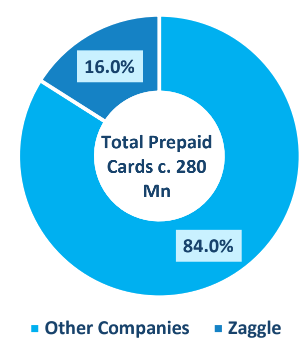
Incorporated in 2011, Zaggle operates in a segment where it interacts and interfaces with its customers (i.e., businesses) and end users (i.e., employees). The company demonstrated a growth at a CAGR of c. 51.9% during the three-year period between FY2021 and FY2023, which was, in part, a result of increased usage of digital modes of payment during this period in India.

Exhibit 6.5: - Revenue (Expense + Procurement + Payroll Management) Share, By Company, India, FY2022 (%)



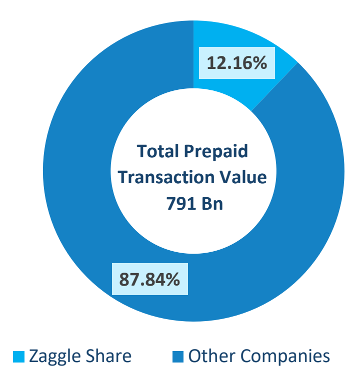
Source: Annual Report, Investor Presentation, Frost & Sullivan Analysis

Exhibit 6.6: - Number of Prepaid Card Share by Volume, India, as of March FY2023 (%)



Source: Annual Report, Investor Presentation, Frost & Sullivan Analysis

Exhibit 6.7: - Prepaid Card Transaction Value Share by Company, India, as of March FY2023 (%)



Source: Annual Report, Investor Presentation, Frost & Sullivan Analysis

Companies such as Zaggle, have created a market niche in India by offering the combined solution for spend management (through payment instruments) and employee management (through SaaS). This diversification acts as barrier to new entrants as the combined exposure adds complexity not only in terms of processes and offerings, but also in terms of guidelines adherence and internal operations. Zaggle's presence in the employee expense management prepaid card segment makes it one of the important Fintech competitors in the Fintech and Neo banking markets. Further, the company also has a prominent presence in the rapidly growing gift card and incentive markets. Some of its key products include Propel (Channel and Employee Rewards / Incentives Management), Save (Expense Management and Employee Tax Benefits), and Gift Card Closed Loop Programs.