The State of Digital Payments in India

A Survey of Consumers and Merchants in Select Tier 3 to Tier 6 Locations

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CHASE
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Contents

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Words alone cannot convey our sincere gratitude to every individual who has contributed in every small way towards bringing out this report. We express our sincere gratitude to all such individuals, without whom the publication of this report would not have been possible.

Foreword

The RBI Payments Vision 2025 envisions empowering users with payment systems that are affordable, convenient, and accessible for all, anywhere and at any time. This also aligns with the Government's vision of transforming India from a cash-based to a digital economy and promoting financial inclusion across the country. There is a significant and continuous surge in the usage of digital payment services like the Unified Payment Interface (UPI), Over the years, UPI has emerged as the preferred payment mode for millions, moving from just being an urban phenomenon. However, challenges remain in UPI's adoption in rural India.

BharatPe is committed to aligning its work with the Government's vision which is reflected through its various partnerships with different arms of the Government such as the Ministry of Housing & Urban Affairs on the PM SVANidhi Scheme, Ministry of MSME on the PM Vishwakarma Scheme, Invest India for their ODOP (One District One Product) initiative, etc. BharatPe is determined to augment efforts to drive digital financial inclusion at the grassroots level.

Continuing the thrust on such initiatives, I am pleased to introduce Chase India's report '*The State of Digital Payments in India – A Survey of Consumers and Merchants in Select Tier 3 to Tier 6 Locations*', commissioned by BharatPe. The report is based on the findings of an in-person survey of over 2,000 consumers and merchants, conducted in select tier 3 to tier 6 locations spread across eight states of the country. The report identifies key aspects of digital payment services that need to be improved or addressed and also provides valuable recommendations for the same.

The report also delves into the challenges faced by last-mile users in availing digital payment services. Key points highlighted in this regard include inadequate infrastructure like lack of or poor internet connectivity; capacity constraints like lack of knowledge on how to use digital payments and lack of trust/ risks of using digital payments like online financial frauds. It further reveals that merchants claimed to have faced difficulties in the Know Your Customer (KYC) process wherein lack of requisite documents for KYC, and complex as well as time-consuming process were the most common difficulties identified by merchants.

Given these findings, the report provides corresponding recommendations to overcome such issues, suggesting action points for different stakeholders like the Government, the Reserve Bank of India (RBI), digital payment service providers, as well as civil society organizations. It will serve as a valuable resource for such stakeholders who are working towards creating a more efficient, secure, and inclusive digital payment ecosystem.

I hope that Chase India showcases this report to different stakeholders for sensitising them on the challenges faced by users of digital payments, as well as their expectations with regard to improvement in digital payment services. I congratulate Chase India for coming out with this timely and important study on this crucial sector and hope that the report can constructively contribute to ongoing conversations on the subject. I wish them all the very best in this endeavour.

Rajnish Kumar
Chairman, BharatPe

Executive Summary

The RBI Payments Vision 2025 envisions empowering users with payment systems that are affordable, convenient, and accessible anytime and anywhere. As per the regulator's latest annual report, the goal is to achieve 100% coverage in providing every eligible individual with at least one digital payment mode in 50% of districts of the country by March 2025. This aligns with the Government's priorities of transforming India into a truly cashless economy. While COVID-19 led to the doubling of the RBI's Digital Payment Index to 418.77 in September 2023 from 207.84 in March 2020, much remains to be done. Studies show that usage and adoption of digital payments are concentrated in regions that enjoy high development. Challenges such as lack of awareness, know-how, and inadequate infrastructure have limited the uptake of digital payments in rural India.

Considering the above, an on-ground survey of adopters and non-adopters (both merchants and consumers) of digital payments was conducted, to identify the underlying factors contributing to the limited uptake of digital payments in select tier 3 to tier 6 locations of India. A total of 2,240 respondents were surveyed, which included 1,184 consumers and 1,056 merchants, spread across eight states in different geographic zones of the country. Key findings of the survey, as captured in the report have been given in the figure below.

Low level of awareness towards digital payments amongst merchants	Consumers and merchants using digital payments, prefer digital payments over cash	Four key challenges faced by consumers and merchants in using digital payments
• ~94% of consumers who had never used digital payments claimed to be aware of such services. On the other hand, only ~54% of merchants who had never used digital payments claimed to be aware of such services. • ~55% merchants also claimed to be unaware about all the charges (fixed and transaction-based) incurred for availing digital payments.	• The key benefit/ reason of using digital payments claimed by consumers (~88%) and merchants (~43%) alike, is that it is more convenient than using cash. • Other perceived benefits include wide acceptability of digital payments by peers, and financial incentives for using digital payments in terms of offers and discounts for consumers, and perceived increase in sales for merchants. • ~97% consumers using digital payments and ~98% merchants using digital payments claimed to be willing to continue using digital payments in the future as well.	• Inadequate infrastructure (lack of or poor internet connectivity, or not having a mobile phone) • Service-related issues (poor app interface, high/ hidden charges and technical glitches) • Capacity constraints (lack of knowledge on how to use digital payments) • Lack of trust/ risks of using digital payments (transaction security, and online financial frauds)

Merchants face difficulties in the KYC process	Online financial fraud	Key expectations of consumers and merchants
· ~29% merchants faced difficulties in the Know Your Customer (KYC) process. · Lack of requisite documents (~44%) and complex/ time consuming process were the most common difficulties identified by merchants in this regard.	· Most users (consumers and merchants) have not been exposed to online financial frauds. Vishing and Phishing are the most common types of online financial frauds faced by users. · However, ~18% merchants, and ~13% consumers have suffered a financial loss due to online financial frauds. · More percentage of merchants than consumers, who faced a digital financial fraud, claimed to report it. Aggrieved users reporting digital financial fraud, claim to do so to their respective digital payments service provider or bank. · ~76% and ~79% consumers and merchants claimed that their complaint for online financial fraud was resolved.	· Improvements in infrastructure (access to relibale internet). · Better quality of service from service providers (better app interface,low and transparent charges, and no technical glitches). · Capacity building initiatives on how to use digital payments safely.

Given such findings, the report provides corresponding recommendations to overcome such issues. These have been given below.

- Ensure a timely constitution and finalisation of the Payment Advisory Council to stay updated on the latest industry practices, emerging innovations, and the desired regulatory norms.

- Enable data/ intelligence sharing for cyber fraud prevention by taking actionable steps towards the creation of the Digital Payments Intelligence Platform.

- Build a repository of blocked merchants, coupled with Law Enforcement Agencies (LEA) training sessions would also be useful.

- Generate awareness amongst last mile and vulnerable users through initiatives promoting digital financial literacy and inclusivity. Promote tools such as AePS, UPI Lite, UPI 123PAY, Hello! UPI, which do not require a smartphone or internet connectivity.

- Conduct stakeholder consultations for drafting universal KYC norms which may use alternative innovative methods such as linkage with Jan Dhan accounts, using the central KYC registry, leveraging digital technology like geo-tagging and biometric identification, etc.

- Unlock the potential of private sector contribution in enabling digital financial inclusion by including it in the Corporate Social Responsibility schedule under the Companies Act.

- Take actionable steps towards the implementation of the proposed Digital Payment Protection Fund to improve the recovery rate of defrauded amounts.

- Incentivise digital payment service providers under the DigiDhan mission for increasing payment infrastructure deployment.

It is evident that multi-stakeholder efforts shall be required to follow through on these recommendations. Also, a cohesive and network approach by the Government would need to be adopted for the same, i.e., different arms of the government would need to work with synergy, and not in silos, to achieve the desired objective of enhancing and deepening digital payments in India.

Introduction

1. Introduction

1.1. Digital Payments Landscape in India

Digital financial inclusion has been a key policy goal of the Government of India (GoI) and is a cornerstone of the Government's vision of *Viksit Bharat*, transforming India into a developed nation by 2047. Concerted initiatives have been undertaken by various ministries, the Reserve Bank of India (RBI), National Payments Corporation of India (NPCI), and the industry to generate awareness, improve accessibility, and thereby, increase the usage of digital payments. This has resulted in retail digital payments recording a whopping 90-fold increase in the last 12 years. India now accounts for nearly 46% of the world's digital transactions. Unsurprisingly, Unified Payments Interface (UPI) is the major driving force behind this unprecedented growth. The ease and convenience offered by UPI have led its share in digital payments to be around 80% in 2023.[1]

To enhance inclusivity, the NPCI introduced innovative features in UPI to allow people to transact digitally offline (UPI Lite X) and through conversations in Hindi and English (Hello! UPI). Besides UPI, users also have the option of availing other online payment avenues such as debit and credit cards, Immediate Payment Service (IMPS), National Electronic Funds Transfer (NEFT), Real-Time Gross Settlement (RTGS), Aadhaar enabled Payment System (AePS), among others. All this combined has significantly transformed the way people transact in both Person-to-Person (P2P) and Person-to-Merchant (P2M) categories across small and high-value transaction levels.

However, while digital payments are popularly considered to have become a ubiquitous method of transacting in India, a closer look at the data from the World Bank reveals that about 70% of account holders did not make a single digital payment, as of 2021. India's large population, coupled with the statistic that 78% of adults possess an account, means that roughly 540 million of the world's 1 billion adults with an account but without any digital payment activity reside in India. COVID-19 led to digital payments getting a major thrust due to the need for contactless payments. Despite that, only about 12% of adults, i.e., fewer than 20% of account holders, paid a merchant digitally in 2021.[2]

This shows that there is still a long road ahead for India to truly become a cashless economy. It is important to stress that these numbers are being relied upon due to the paucity of authoritative data on digital payment usage in the recent past and that they would have some changes in the last 3 years. Nevertheless, the data provides a broader trend about the adoption of digital payments in India. Literature suggests inadequate digital infrastructure, lack of knowledge, trust, and safety issues, as major reasons behind the non-adoption of digital payments. The survey attempts to study these challenges and provide recommendations to this effect.

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1 Address by Governor, Reserve Bank of India at the Digital Payments Awareness Week celebrations, available at:
  https://rb.gy/ajm4cj

2 The Global Findex Database 2021, available at: https://www.worldbank.org/en/publication/globalfindex/Report
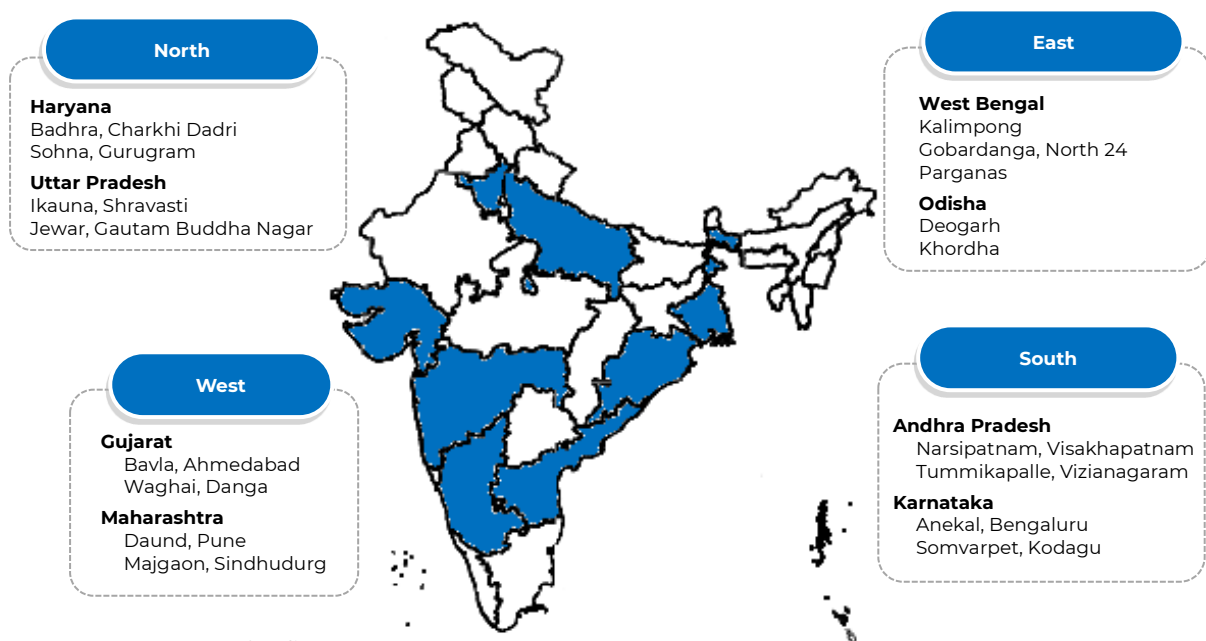
1.2. About the Survey

Considering the above, an on-ground survey of adopters and non-adopters (both merchants and consumers) of digital payments,[3] was conducted, to identify the underlying factors contributing to the limited uptake of digital payments in select tier 3 to tier 6 locations of India. These locations have been specifically selected since the RBI's Payments Infrastructure Development Fund (PIDF) scheme targets increasing digital payment adoption in these areas, suggesting poor uptake.[4] Hence, the objectives of the survey include:

- Gauge the target audience's level of awareness and usage of digital payment services and the reasons thereof.
- Assess the challenges faced by non-adopters of digital payment services and the factors that will prompt their transition to digital payment methods.
- Understand the Knowledge Attitude and Practices (KAP) of users (consumers and merchants) towards digital payment services.

As the GoI intends to make India a cashless economy which is possible by increased digital payments penetration, the findings of the survey given in this report will help in providing insights into the challenges faced by users in adopting online payment methods.

The survey was undertaken in the locations given in the map below (). A minimum of 60 consumers and 60 merchants were surveyed in each of the 16 cities/ towns selected for the survey. A total of 2,240 respondents were surveyed, which included 1,184 consumers and 1,056 merchants. Further details about the survey design/ sample selection, as well as the respondent profiles, among other details, have been given in the Annexure.

Figure 1: Survey Locations

North

Haryana
Badhra, Charkhi Dadri
Sohna, Gurugram

Uttar Pradesh
Ikauna, Shravasti
Jewar, Gautam Buddha Nagar

West

Gujarat
Bavla, Ahmedabad
Waghai, Danga

Maharashtra
Daund, Pune
Majgaon, Sindhudurg

East

West Bengal
Kalimpong
Gobardanga, North 24
Parganas

Odisha
Deogarh
Khordha

South

Andhra Pradesh
Narsipatnam, Visakhapatnam
Tummikapalle, Vizianagaram

Karnataka
Anekal, Bengaluru
Somvarpet, Kodagu

Map source: Survey of India

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3 Digital payments here include the entire gamut of online payment methods, including Unified Payments Interface, debit/ credit cards, internet banking, Aadhaar-enabled Payment System, mobile wallets etc.

4 RBI's Payments Infrastructure Development Fund – Extension of Scheme and Enhancements, available at: https://rb.gy/d6jtxw

1.3. About the Report

The survey covered various aspects of digital financial services at the grassroots level as explained above and consequently the report captures the findings of the survey in detail.

Chapter 2 delves into the awareness, adoption, and usage of digital payments by consumers and merchants. Parameters for gauging these include the frequency of usage of digital payments, avenues/ stakeholders for whom digital payments are used, weekly volume of digital transactions, comfort levels of value of digital payment transactions through different modes, popular service providers of digital payments, and factors considered while choosing a service provider. The chapter also provides insights into the perceived benefits of digital payments for consumers and merchants.

The challenges faced by different respondents (consumers and merchants, as well as adopters and non-adopters of digital payments) have been covered in Chapter 3. Various aspects have been covered in it, such as perceptions towards infrastructure availability/ adequacy, perceived risks involved in using digital payments, any prevalent capacity constraints in using digital payments, among others.

A deep dive into merchant perspectives has been done in Chapter 4. It covers pertinent issues, potentially being pain points for merchants in using digital payments. These include challenges in the KYC process, and charges associated with digital payments. The chapter also sheds light on merchants' perspective on VAS availed by merchants, from digital payment service providers.

Online financial frauds have become a grim reality with the advent of technology in financial services and have the potential to dent user confidence on digital payments. Chapter 5 highlights the exposure of consumers and merchants to different types of online financial fraud. It also covers the reporting behaviour of consumers and merchants towards online financial frauds, coupled with their perspectives on the successful resolution of such complaints.

Chapter 6 provides deeper understanding into the KAP of different profiles of consumers and merchants, based on gender, age, level of education, number of years since using digital payments, type of business, etc.

The final Chapter captures the expectations of consumers and merchants. Different perspectives of non-adopters, erstwhile users, and current users of digital payments have been presented. Also, actionable recommendations that align with the RBI's vision of providing every user with Safe, Secure, Fast, Convenient, Accessible, and Affordable e-payment options have been given in it.[5]

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5 RBI's Payments Vision 2025, available at: https://rb.gy/f7rz8u

Awareness, Adoption and Benefits of Digital Payments

2. Awareness, Adoption and Benefits of Digital Payments

Demonetisation in 2016, followed by the COVID-19 pandemic in 2020, brought an attitudinal shift towards the acceptance of digital payments. These coupled with proactive policy initiatives by the Government, and rapid technological advancements have resulted in a marked shift toward digital payments, by addressing consumer and merchant needs across varied sectors. Notable examples include:

- Launch of the 'Zero-MDR' initiative, which eliminated transaction charges for RuPay and UPI, significantly increased Point of Sale (PoS) terminal deployments.
- The BHIM Incentive program for banks was launched with a financial outlay of Indian Rupee (INR) 26 billion in 2023, has promoted low-value digital transactions in the country.
- Launch of a dedicated mission to promote digital transactions under the Ministry of Electronics and Information Technology (MeitY), called the DigiDhan Mission in 2017. This has now been transferred to the Department of Financial Services (DFS).[6]

2.1. Adoption and Usage of Digital Payments

In sync with publicly available data of the RBI,[7] UPI emerged as the clear leader/ most popular mode of digital payment amongst the respondent base.[8] Debit cards found the second spot, followed by credit cards and other digital payment options.

Table 1: Popular modes of digital payments

Rank	Mode of Payment	Consumers	Merchants
1	UPI	99.1%	100.0%
2	Debit and credit cards	33.2%	7.7%
3	Others: mobile/ prepaid wallet, Buy Now Pay Later (BNPL) services, internet banking, and AePS	26.1%	5.2%

With respect to usage of these modes of digital payments:

- More consumers claim to be comfortable in making digital payments of over INR 5,000 via UPI and debit cards, as opposed to other modes of digital payment. Similarly, more merchants claim to be comfortable in receiving digital payments of over INR 5,000 via UPI, as opposed to other modes of digital payments.

- Most consumers are comfortable in making digital payments up to INR 2,000. Only 1 out of 5 consumers are comfortable making a digital payment of over INR 5,000.

- Most merchants are comfortable accepting digital payments between INR 2,000 to INR 5,000.

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6 Cabinet Secretariat Notification S.O. 3223€, available at: https://egazette.gov.in/WriteReadData/2023/247418.pdf

7 RBI's data on Payment System Indicators - March 2024, available at: https://www.rbi.org.in/Scripts/PSIUserView.aspx?Id=34

8 Based on the respondents not selecting the option of 'do not use', to the question: What is the maximum payment value you have made or are comfortable making/ you have received using the following digital payment? (n=536 consumers and 482 merchants)

Details have been given below.[9]

Table 2: Comfort thresholds of using digital payments

Payment Mode	INR 1 to INR 500	INR 501 to INR 2,000	INR 2,001 to INR 5,000	INR 5,001 and above
Consumers				
UPI	15.6%	35.8%	20.0%	28.6%
Debit Card	15.7%	31.4%	27.3%	25.6%
Credit Card	14.3%	44.6%	25.0%	16.1%
Others	21.3%	35.4%	33.4%	9.9%
Merchants				
UPI	16.0%	18.7%	17.5%	35.5%
Debit Card	0.0%	17.0%	38.3%	23.4%
Credit Card	2.3%	11.4%	43.2%	20.5%
Others	8.3%	25.0%	61.1%	5.6%

2.2. Consumers Usage of Digital Payments

The survey reveals that ~40% of consumers claim to be using digital payment services on a daily basis. Also, ~45% of consumers claimed to be using digital payment services once every alternate day. This reflects the frequent usage of digital payments by consumers, even in Tier 3 to 6 locations of the country. Depicted in the graph below is consumers' weekly frequency of using digital payments.[10] It is also to be noted that consumers are using digital payments for making payments to varied stakeholders, as has been given below.[11]

Graph 1: Consumers weekly frequency of and usage of digital payments
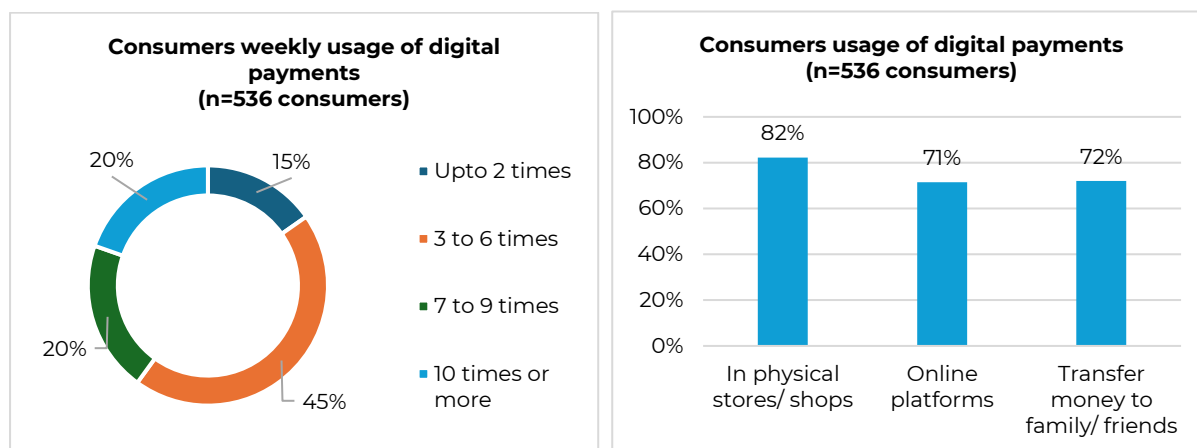
It is pertinent to mention that ~74% of consumers claimed to be using digital payment services on behalf of their family as well.[12]

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9 Question: What is the maximum payment value you have made or are comfortable making/ you have received using the following digital payment? (n=536 consumers and 482 merchants)

10 Question: In the past one week, how many times did you use digital payments? Single Choice Question)

11 Question: Where do you use digital payments? Multiple Choice Question (MCQ). Note: online platforms include e-commerce websites, online ticket booking, bill payments etc. Note: Percentages have been rounded-off.

12 Question: Do you use digital payments for your transactions or your parents/ other members of the family? Single Choice Question. (n=536 consumers)

## 2.3. Merchants Usage of Digital Payments Services

The survey reveals that on average, around 36% of merchants claimed to be processing over 50 digital payment transactions every month. Also, around 23% of merchants claimed to be processing not more than 1 digital payment transaction every alternate day.[13] Furthermore, most merchants process digital payment transactions of less than INR 15,000 every month. Only a handful of merchants claimed to process digital payments of over INR 1 lakh.[14] These have been depicted in the graph below.

Graph 2: Volume and value of digital payments processed by merchants
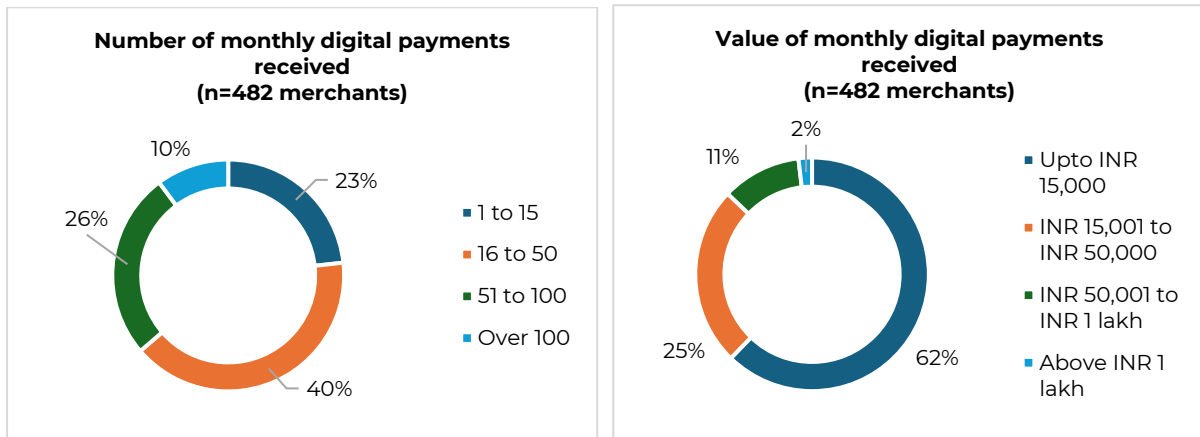
While around 41% of merchants claimed to receive less than 25% of their sales through digital payments, around 15% of merchants claimed to receive over 50% of their sales through digital payments.[15] This shows the potential left to be tapped with respect to increasing the usage of digital payments at the grassroots level. Notably, PhonePe, Google Pay, Paytm, and BharatPe were found to be most popular service providers for digital payments amongst merchants,[16] as has been given in the graph below.

Graph 3: Monthly sales through digital payments and popular providers of digital payments

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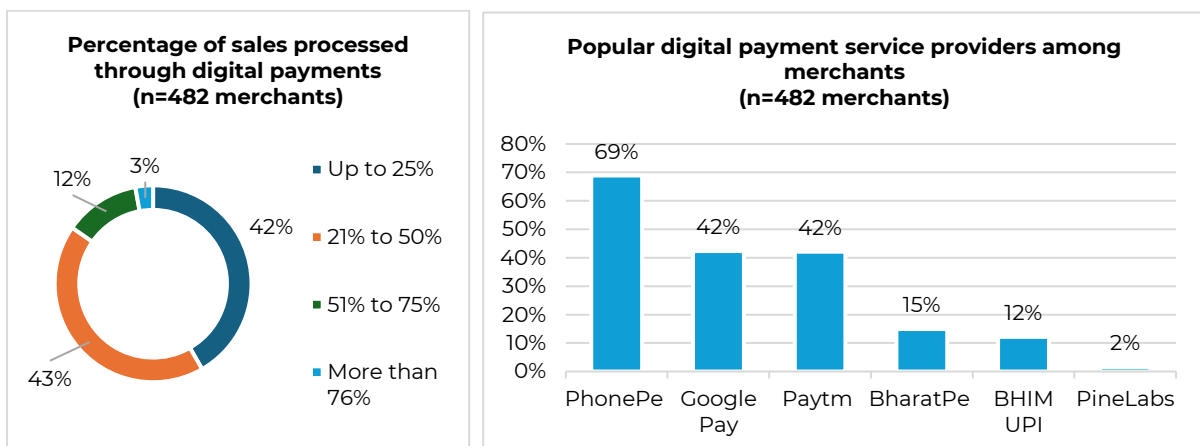
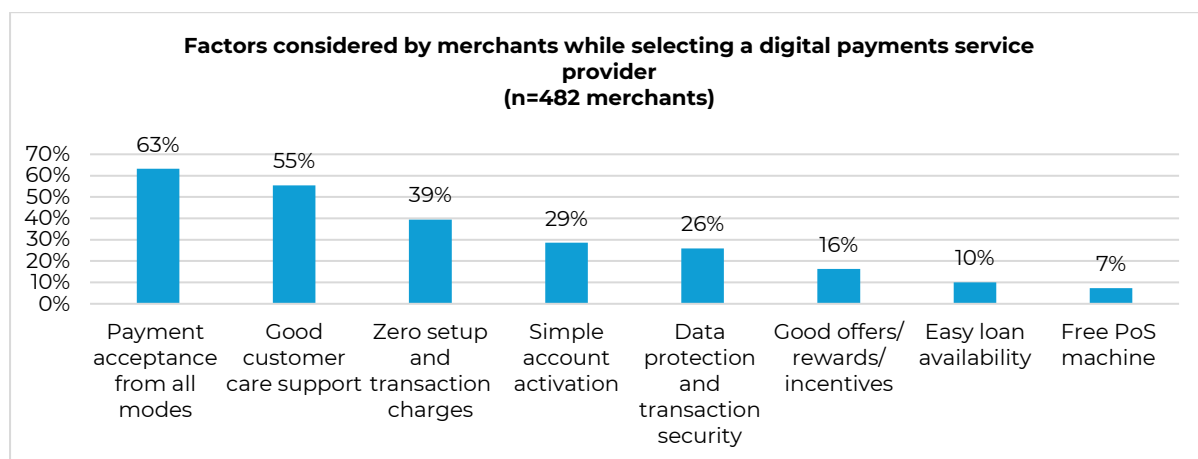13 Question: What is the total volume of digital transactions processed per month? Single Choice Question
14 Question: What is the total value of digital transactions processed per month? Single Choice Question
15 Question: On average, what percentage of your monthly revenue comes from digital payments? Single Choice Question
16 Question: Which digital payment service provider do you use? (MCQ)

Merchants consider various factors while choosing their preferred digital payments service providers.[17] As is visible in the subsequent graph, multi-mode payment acceptance, good customer support and charges associated with digital payments, are the key considerations for merchants while choosing a particular service provider. Notably, good offers/ rewards/ incentives do not make it to the top five factors. This reveals merchant expectations from service providers as well.

Graph 4: Factors considered while choosing a digital payments service provider

Factors considered by merchants while selecting a digital payments service provider
(n=482 merchants)

- Payment acceptance from all modes: 63%
- Good customer care support: 55%
- Zero setup and transaction charges: 39%
- Simple account activation: 29%
- Data protection and transaction security: 26%
- Good offers/ rewards/ incentives: 16%
- Easy loan availability: 10%
- Free PoS machine: 7%

2.4. Awareness towards Digital Payment Services

Level of awareness

Many awareness generation initiatives have been undertaken by different arms of the GoI, such as:

- <u>MeitY</u>: It launched a TV channel 'DigiShala' in 2016, to educate rural and economically disadvantaged segments on digital payments, which has reached 20 million families with multilingual content.[18] The ministry also introduced the PMGDisha program in the same year, under which over 63 million individuals were trained on digital payments. Furthermore, short-duration campaigns such as 'Digital Payments Utsav', and 'Digital Payment Sandesh Yatra' have also played a role in spreading awareness about digital payments.

- <u>RBI</u>: Initiatives like electronic Banking Awareness and Training (e-BAAT), and multi-channel and multi-lingual public awareness campaigns such as 'RBI *Kehta Hai*', on themes like convenience of digital banking, safety of digital banking etc., have helped in raising awareness amongst masses on digital payments. The RBI has also advised all SLBCs/ UTLBCs to identify districts in their respective states to make them 100% digitally enabled.[19] As of 31st March 2023, 182 districts have been identified with 87 being 100% digitally enable

- <u>DFS</u>: The DigiDhan Mission, Pradhan Mantri Jan Dhan Yojana (PMJDY), among other initiatives have helped bolster digital payment transactions.

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17 Question: What factors do you consider while selecting a digital payment service provider? (MCQ)
18 Impact of DigiDhan Mission on India's Digital Payments Ecosystem, available at: https://rb.gy/fq1648
19 RBI Annual Report, 2023, available at: https://rbi.org.in/scripts/AnnualReportPublications.aspx?Id=1375

Such efforts are also being complemented by banks, through organizing financial literacy camps and the banking correspondent initiative. These are often targeted toward key rural stakeholders like Self-Help Groups (SHGs), school children, micro entrepreneurs, senior citizens, among others.[20]
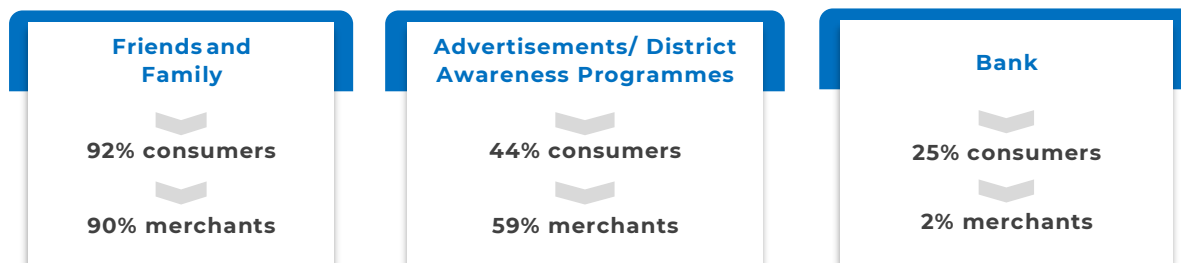
Notably, even the private sector has played its part in the endeavour of raising awareness and adoption of digital payments. HDFC Bank's Offline Pay helped facilitate network-independent transactions,[21] while BharatPe's collaboration with the Ministry of MSMEs to drive the PM Vishwakarma scheme helped digitally enable small artisans across the country.[22]

While such efforts have helped raise awareness amongst consumers of digital payments, merchants apparently remain left out of such awareness-generation campaigns. The survey reveals that as opposed to consumers; many merchants claim to be unaware of digital payments.[23] 94% of consumers who had never used digital payments claimed to be aware of such services. On the other hand, only 54% of merchants who had never used digital payments claimed to be aware of such services.

Sources of awareness

The survey finds that awareness towards digital payments mostly spreads through friends and family.[24] Given below are the avenues from where consumers and merchants got to know about digital payments.

Figure 2: Drivers of awareness towards digital payments

Friends and Family	Advertisements/ District Awareness Programmes	Bank
92% consumers	44% consumers	25% consumers
90% merchants	59% merchants	2% merchants

This questions the efficacy and on-ground impact of bank led initiatives on awareness towards digital payments.

2.5. Benefits of Using Digital Payment Services

The key benefit/ reason of using digital payments claimed by consumers and merchants alike is it is more convenient than using cash. Also, many users and merchants perceive digital payments to be widely accepted by their peers, which signifies the prevalence of network effects in the adoption of digital payments. There also exist financial incentives for using digital payments in terms of offers and

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20 Lok Sabha question on awareness on safe digital banking, available at: https://shorturl.at/bnW2s
21 HDFC Bank Offline Pay, available at: https://www.hdfcbank.com/personal/useful-links/offline-pay
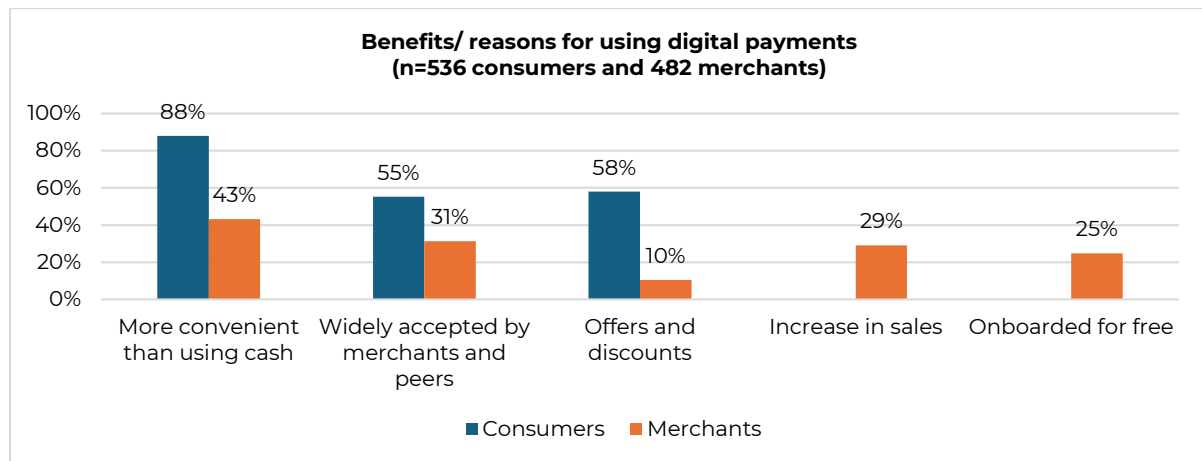22 BharatPe's collaboration with Ministry of MSME, available at: https://rb.gy/45exny
23 Based on the response of 'not aware of digital payments services' received from non-adopters of digital payments to the question: Why have you never used digital payment services? Single Choice Question. (n=529 consumers and 436 merchants)
24 Question: How did you come to know about digital payments? (n=536 consumers and 482 merchants)

discounts for consumers, and perceived increase in sales for merchants. The benefits of using digital payments have been given below.[25] Notably, many of such benefits have also been corroborated by other studies such as 'Impact of DigiDhan Mission on India's digital payments ecosystem'.

Graph 5: Perceived benefits/ reasons of using digital payments

Benefits/ reasons for using digital payments
(n=536 consumers and 482 merchants)

Category	Consumers	Merchants
More convenient than using cash	88%	43%
Widely accepted by merchants and peers	55%	31%
Offers and discounts	58%	10%
Increase in sales		29%
Onboarded for free		25%

Given such benefits of using digital payments, ~97% consumers and ~98% merchants claimed to be willing to continue using digital payments in the future as well.[26]

25 What are the benefits you derive from using digital payment/ Why do you accept digital payments? MCQ. Note: consumers were not given the options of 'increase in sales' and 'onboarded for free'.
26 Question: Will you continue using/ accepting digital payments services? Single Choice Question. (n=536 consumers and 482 merchants)

Challenges Faced in Using Digital Payments

3. Challenges Faced In Using Digital Payments

While digital payments come with the benefits discussed in the previous chapter, they also face challenges in uptake, and pose risks while using them.

Literature suggests that common challenges in enhancing the uptake of digital payments include limited digital and financial literacy in last-mile areas, resistance to change with respect to payment modes, limited access to reliable networks and smartphones, etc. Notably, India lags on such parameters. For instance, while almost every household in India now has a smartphone, not every member will have one, making usage for payments difficult. As per ASER 2023 report, about 90% of surveyed households had a smartphone.[27] But of the males and females who knew how to operate one, only 43.7% and 19.8%, respectively, owned a smartphone. This lack of agency to own a smartphone consequently affects digital literacy skills as well. An NSSO survey recently showed that only about 27.5% of India's population between the age group of 15-29 were digitally skilled.[28]
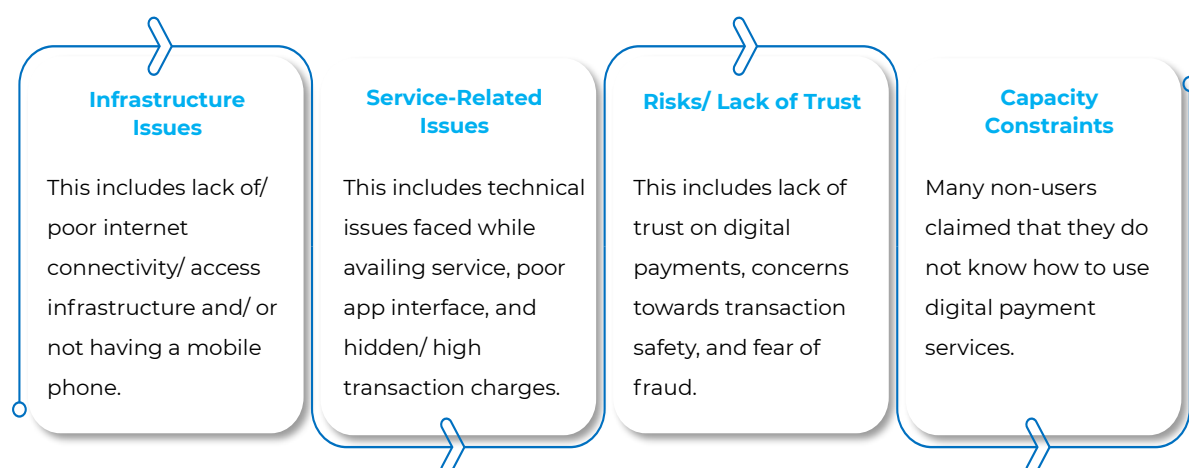
On the other hand, usage of digital payments poses risks/ threats with respect to online financial frauds, data privacy concerns, transaction security, among others. These have the potential to dent the confidence of users or potential users, in adopting digital payments.

The survey gauged respondent's perceptions on such issues, and relevant findings have been discussed in subsequent sections.

3.1. Key Challenges Faced by Consumers and Merchants

There survey reveals four major challenges impeding the adoption of digital payments. These have been given in the subsequent figure.

Figure 3: Key challenges impeding the adoption of digital payments

Infrastructure Issues	Service-Related Issues	Risks/ Lack of Trust	Capacity Constraints
This includes lack of/ poor internet connectivity/ access infrastructure and/ or not having a mobile phone.	This includes technical issues faced while availing service, poor app interface, and hidden/ high transaction charges.	This includes lack of trust on digital payments, concerns towards transaction safety, and fear of fraud.	Many non-users claimed that they do not know how to use digital payment services.

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27 Annual Status of Education Report (Rural) 2023, available at: https://asercentre.org/wp-content/uploads/2022/12/ASER-2023-Report-1.pdf

28 The Print- India has $1 trillion digital dream, but 73% youth lack basic email skills, shows NSSO survey, available at: https://theprint.in/india/india-has-1-trillion-digital-dream-but-73-youth-lack-basic-email-skills-shows-nsso-survey/1467605/
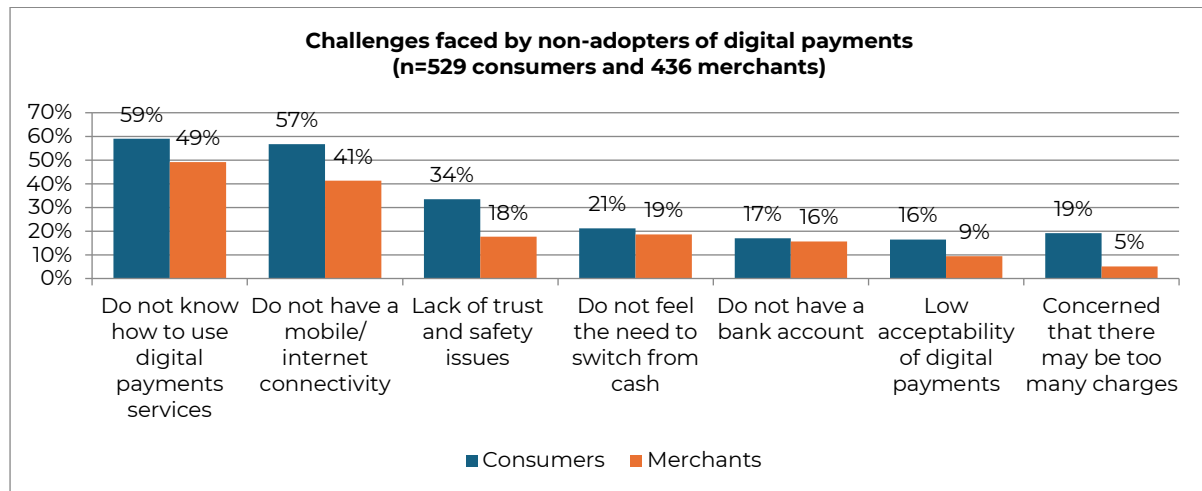
However, different respondents faced different challenges, based on their adoption status of digital payments. These have been discussed in subsequent sections.

3.2. Challenges Faced by Non-Adopters of Digital Payments

As is visible in the graph below, capacity constraints, not having a mobile, and lack of access to internet, are the major reasons for consumers and merchants not adopting digital payments.[29]
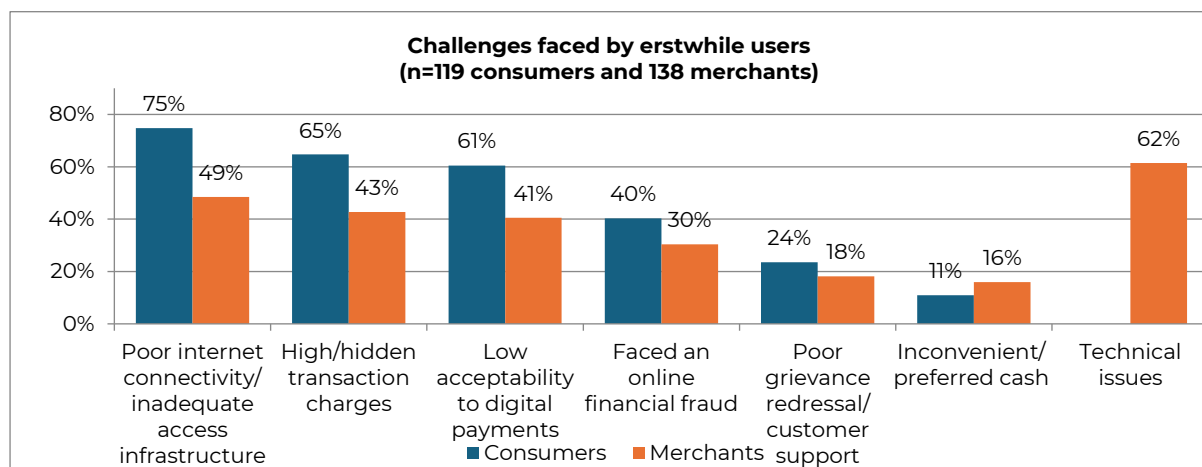
Graph 6: Challenges faced by non-adopters of digital payments

**Challenges faced by non-adopters of digital payments
(n=529 consumers and 436 merchants)**

Challenge	Consumers	Merchants
Do not know how to use digital payments services	59%	49%
Do not have a mobile/ internet connectivity	57%	41%
Lack of trust and safety issues	34%	18%
Do not feel the need to switch from cash	21%	19%
Do not have a bank account	17%	16%
Low acceptability of digital payments	16%	9%
Concerned that there may be too many charges	19%	5%

3.3. Challenges Faced by Erstwhile Users of Digital Payments

High/ hidden charges and poor internet connectivity/ access infrastructure,[30] were found to be the common challenges faced by consumers and merchants, leading them to stop using digital payments.[31]

Graph 7: Challenges faced by erstwhile users of digital payments

**Challenges faced by erstwhile users
(n=119 consumers and 138 merchants)**

Challenge	Consumers	Merchants
Poor internet connectivity/ inadequate access infrastructure	75%	49%
High/hidden transaction charges	65%	43%
Low acceptability to digital payments	61%	41%
Faced an online financial fraud	40%	30%
Poor grievance redressal/ customer support	24%	18%
Inconvenient/ preferred cash	11%	16%
Technical issues		62%

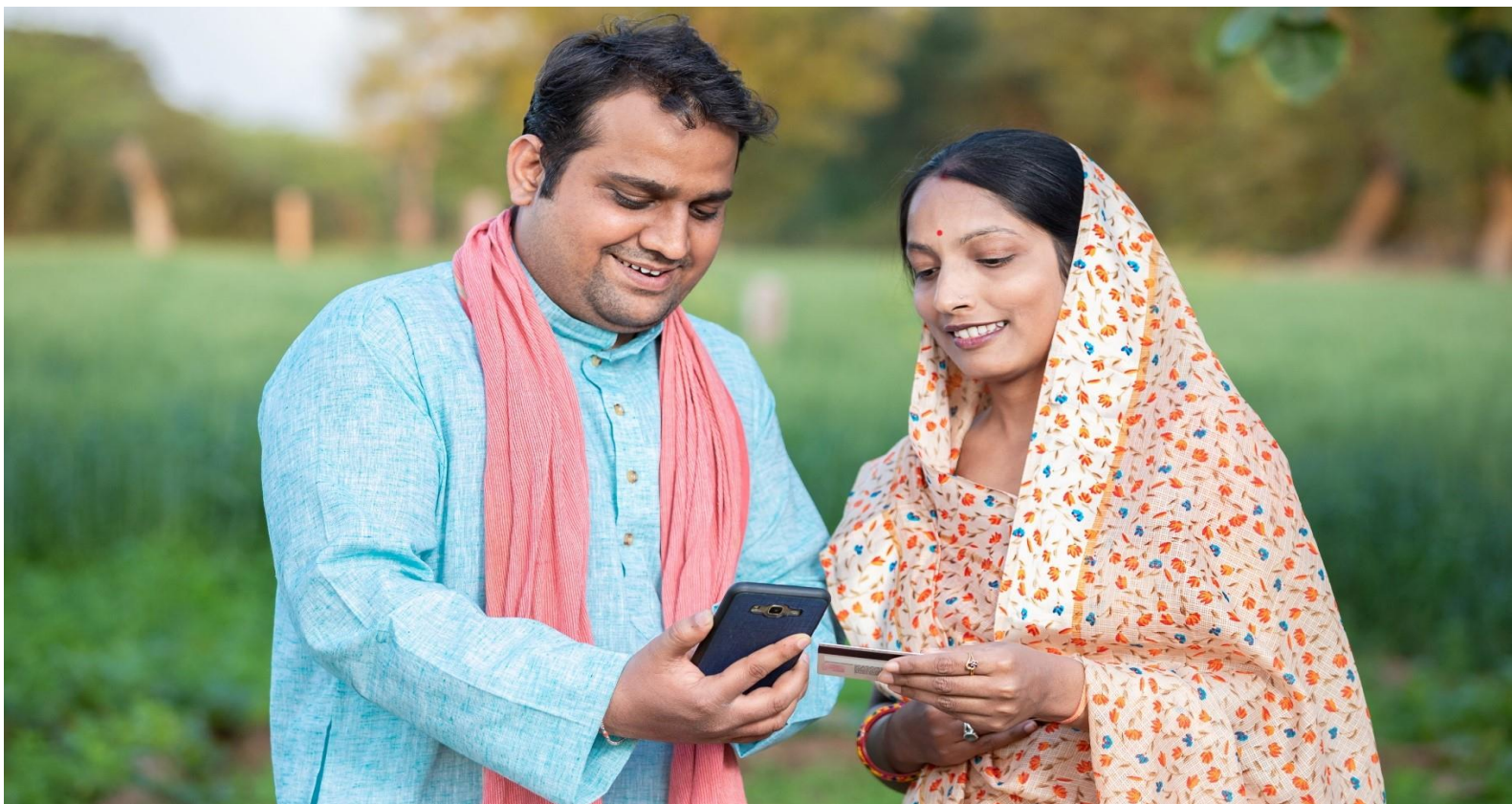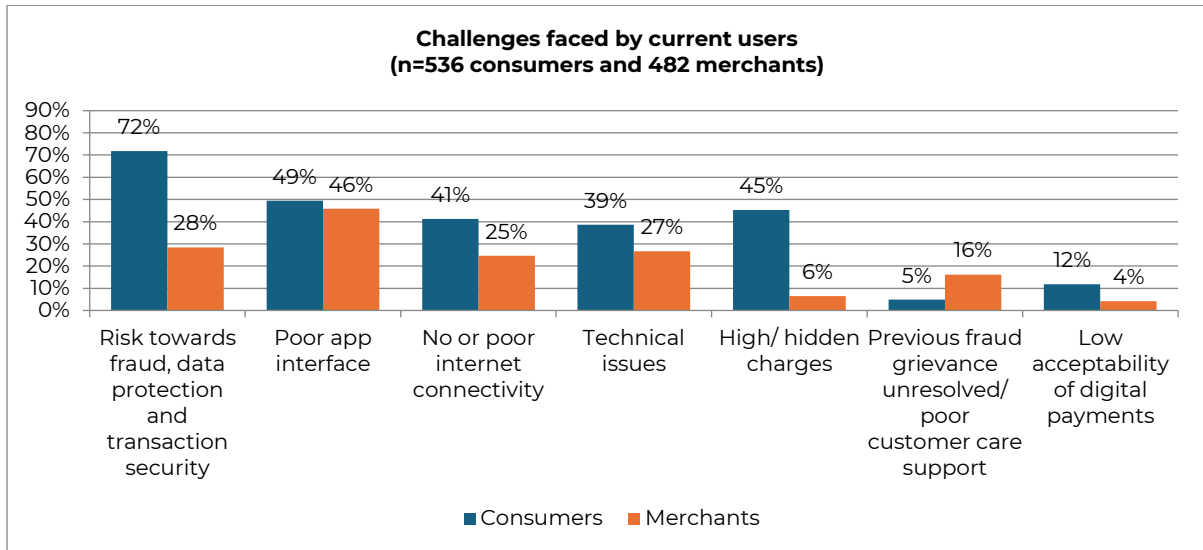29 Question: Why have you never used/ accepted digital payments? MCQ
30 For the purpose of the survey, access infrastructure is deemed to include mobile phone/ Point of Sale machine/ QR Code etc.
31 Question: Why did you stop using/ accepting digital payments? MCQ. Note: consumers were not given the option of 'technical issues

3.4. Challenges Faced by Current Users of Digital Payments

Risks towards digital financial frauds, technical issues,[32] and poor app interface are the key challenges faced by users of digital payments (consumers and merchants), as is visible in the subsequent graph.[33]

Graph 8: Challenges faced by current users of digital payments

Challenges faced by current users
(n=536 consumers and 482 merchants)

Challenge	Consumers	Merchants
Risk towards fraud, data protection and transaction security	72%	28%
Poor app interface	49%	46%
No or poor internet connectivity	41%	25%
Technical issues	39%	27%
High/ hidden charges	45%	6%
Previous fraud grievance unresolved/ poor customer care support	5%	16%
Low acceptability of digital payments	12%	4%

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32 For the purpose of the survey, technical issues deemed to mean bank account being blocked, mobile phone issues like insufficient storage, unable to access the app due to login issues, QR code/ PoS machine not working etc.

33 Question: Are you facing any of the below challenges while using/ accepting digital payments? MCQ

Merchant Perspective on Pertinent Issues

4. Merchant Perspective on Pertinent Issues

Approximately 82% merchants find digital payment services easy to use.[34] Also, approximately 72% merchants perceive the customer care support of digital payment services to be good.[35]

4.1. Know Your Customer Process

Approximately 97% Merchants claimed to have approached the digital payments service provider for onboarding. Few merchants were approached by service providers in this regard.[36] Separately, 29% merchants faced difficulties in the KYC process.[37] Lack of requisite documents and complex/ time-consuming process were the most common difficulties identified by merchants.[38]

Graph 9: Difficulties faced in the KYC process

Difficulties faced in the KYC process (n=482 merchants)
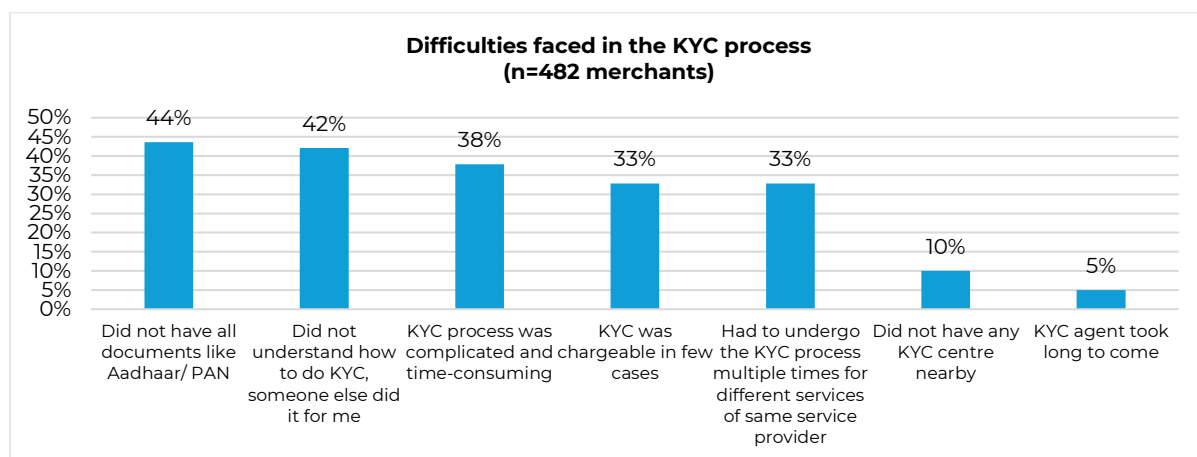
4.2. Value Added Services

Availing a soundbox/ speaker is a popular Value-Added Service (VAS) availed by merchants. Other VAS such as availing digital loans, or advertising services found limited uptake among the respondent base, as can be seen in the figure below.[39]

Figure 4: Uptake of VAS by merchants

| 56.2% | 13.1% | 7.1% |
| Soundbox / speaker | Advertising on service provider's app | Availing digital loans |

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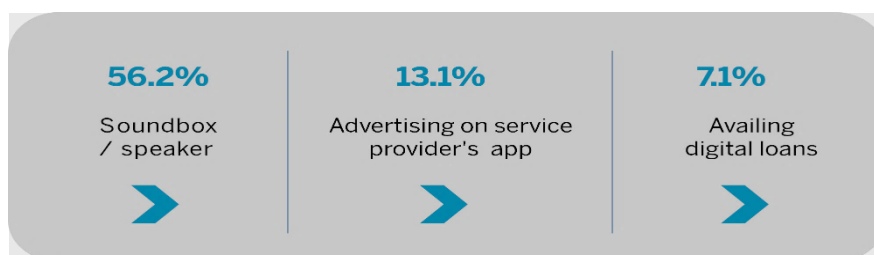
34 Based on the respondents selecting the option of 'easy to use', to the question: Why do you accept digital payments? MCQ. (n=482 merchants)

35 Based on the respondents selecting the option of 'good customer support', to the question: Why do you accept digital payments? MCQ. (n=482 merchants)

36 Based on the respondents selecting the option of 'I approached/ checked online the digital payment service provider', to the question: How were you onboarded by your digital payment service provider? (n=482 merchants)

37 Based on the respondents selecting the option of 'Did not face any issues', to the question: What kind of difficulty did you face regarding the KYC procedure to onboard yourself on the digital payment service provider's platform? (n=482 merchants)

38 Question: What kind of difficulty did you face regarding the KYC procedure to onboard yourself on the digital payment service provider's platform? MCQ
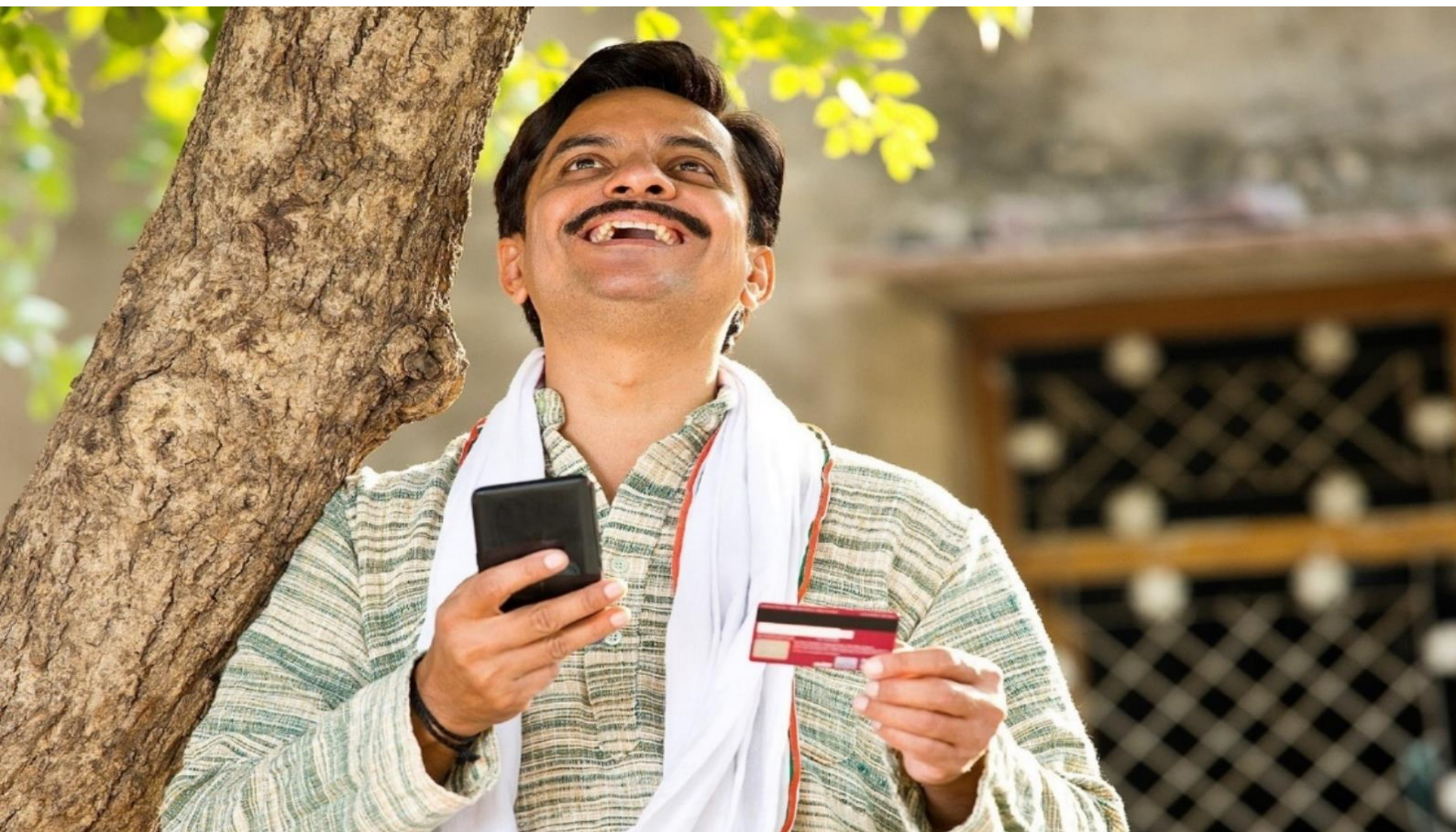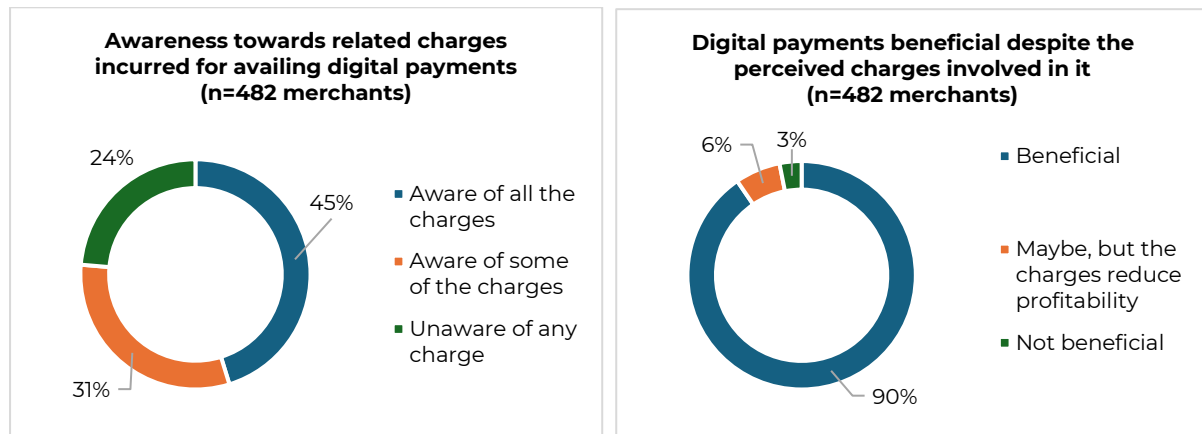
39 Question: Which other value-added services provided by the digital payment service provider do you use? MCQ. (n=482 merchants)

4.3. Charges towards Digital Payment Services

There appears to be a lack of awareness towards related charges (fixed and transaction-based) incurred for availing digital payment services.[40] The majority of the merchants currently using digital payments, find it beneficial irrespective of the perceived charges involved in it.[41]

Graph 10: Perception towards charges of accepting digital payments

Awareness towards related charges incurred for availing digital payments (n=482 merchants)

- 45% Aware of all the charges
- 31% Aware of some of the charges
- 24% Unaware of any charge

Digital payments beneficial despite the perceived charges involved in it (n=482 merchants)

- 90% Beneficial
- 6% Maybe, but the charges reduce profitability
- 3% Not beneficial

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40 Question: Are you aware of the related charges (fixed and transaction-based) incurred for availing of digital payment services? Single Choice Question

41 Given the related charges (fixed and transaction-based) involved in using a digital payment service, is it still worth using digital payments for your business?

Online
Financial Frauds

5. Online Financial Fraud

The GoI and the RBI have taken many measures to raise awareness amongst the masses on the safe use of digital payments. One of the ways through which the government raises awareness about cybercrimes is by organising Cyber Safety and Security Awareness weeks in association with state governments and union territories. The RBI also regularly conducts Electronic Banking Awareness and Training (e-BAAT) programmes through its regional offices targeted toward bank staff, customers, students, SHGs, farmers, shopkeepers, and the common man. The 'RBI *Kehta Hai*' campaign is another multi-channel public awareness drive to sensitise people about safe online practices through advertisements on television, radio, social media, etc.

Despite such initiatives, the RBI's data on Payment System Indicators for March 2024 shows that 2.57 lakh fraudulent transactions took place in the month, which were collectively valued at INR 471 crores. Essentially, it amounts to '1 in every ~67,394 payment transaction being fraudulent.[42] Accordingly, it becomes important to gauge the KAP of consumers and merchants on the issue.

5.1. Exposure to Online Financial Fraud

Most consumers and merchants have not been exposed to online financial fraud. However, ~18% merchants, and ~13% consumers have suffered a financial loss due to online financial fraud.[43] Vishing,[44] and Phishing,[45] are the most common types of online financial fraud faced by users, i.e., consumers and merchants alike.[46]

Graph 11: Consumers and merchants' exposure to different online financial fraud

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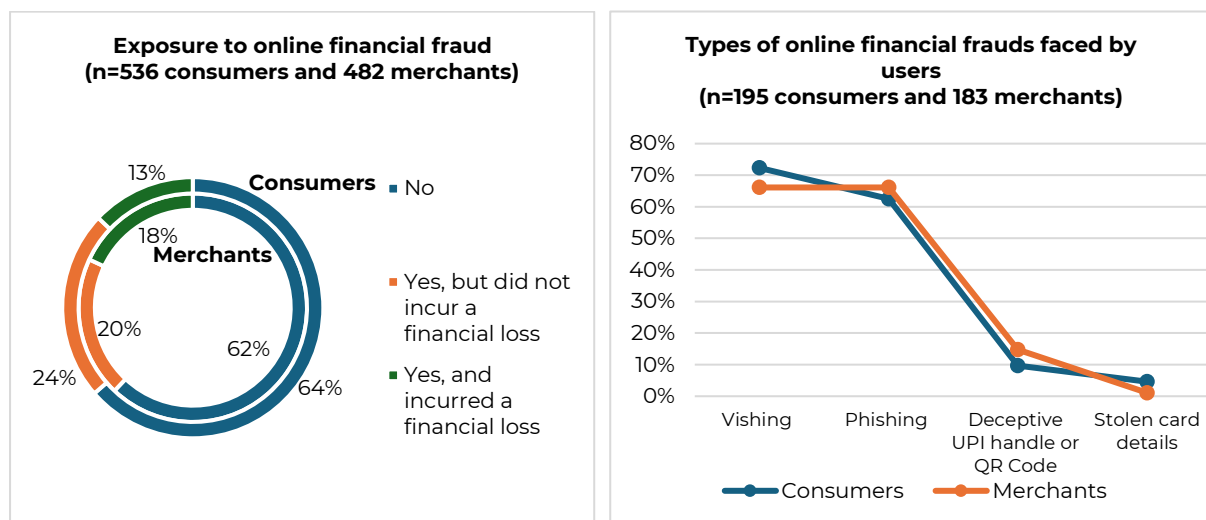
42 RBI's data on Payment System Indicators - March 2024, available at: https://www.rbi.org.in/Scripts/PSIUserView.aspx?Id=34
43 Question: Have you been exposed to digital financial frauds? Single Choice Question
44 Vishing means when fraudsters contact individuals claiming to be bank employees or others, asking for a UPI pin/ OTP, or requesting to download a third-party app for verification purposes.
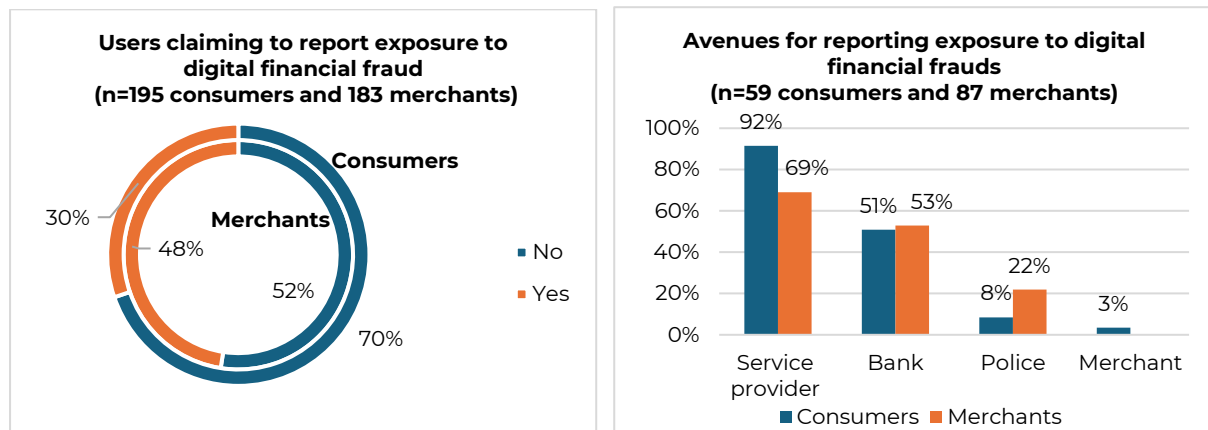45 Phishing means when fraudsters send bogus emails, or messages to access sensitive information such as password, OTP, or PIN of the potential victim.
46 Question: What kind of digital financial fraud were you exposed to? MCQ

5.2. Reporting and Grievance Redress in Case of Online Financial Fraud

More percentage of merchants than consumers, who faced a digital financial fraud, claimed to report it.[47] Aggrieved users reporting digital financial fraud, claim to do so to their respective digital payments service provider or bank.[48] Notably, ~76% and ~79% consumers and merchants claimed that their complaint for online financial fraud were resolved.[49]

Graph: 12: Reporting exposure to digital financial fraud

Users claiming to report exposure to digital financial fraud (n=195 consumers and 183 merchants)

Avenues for reporting exposure to digital financial frauds (n=59 consumers and 87 merchants)

Data from the Citizen Financial Cyber Frauds Reporting and Management System (CFCFRMS) platform (part of the National Cybercrime Reporting Portal), shows that amounts lost by citizens on account of online frauds have been going up Year on Year (YoY). Recovery rate of the defrauded amount remains low.[50]

The most common reason for users to not report a digital financial fraud is the fraud amount being too small, or no financial loss incurred.[51]

Graph 13: Reasons for not reporting a digital financial fraud

Reasons for users to not report a digital financial fraud (n=136 consumers and 96 merchants)

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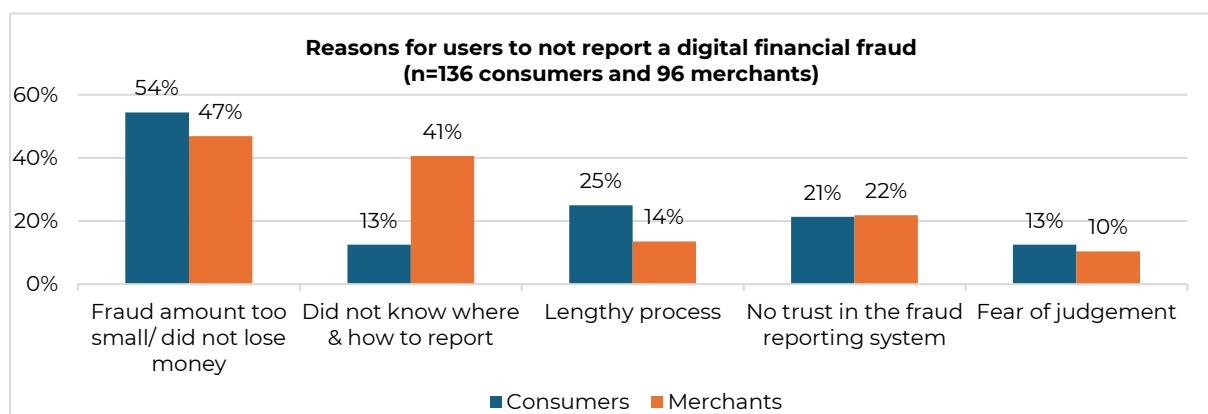
47 Question: Did you report the digital financial fraud? Single Choice Question
48 Question: To whom did you report the digital financial fraud? Note: merchants were not provided the option of 'merchant'. MCQ
49 Question: Was your complaint on the digital financial fraud resolved? Single Choice Question. (n=59 consumers and 87 merchants)
50 Standing Committee on Communications and Information Technology's report on Digital Payment and Online Security Measures for Data Protection, available at: https://shorturl.at/vDDDc
51 Question: Why did you not report the digital financial fraud? MCQ

Significant Findings from Different Respondent Profiles

6. Significant Findings from Different Respondent Profiles

6.1. Findings from Different Consumer Profiles

Consumer finding based on gender and geography

A deep dive into different consumer perspectives based on gender and geography is revealed below.

Figure 5: Findings from different consumer profiles based on gender and geography

| Gender-based findings	Geography based findings
• **Men started using digital payments before women:** ~37% men claimed to be using digital payments since before COVID-19, whereas only ~27% women claimed to use digital payments before COVID-19, i.e., 2020.	• **Lack of internet connectivity is more prevalent in Tier 5 and 6 locations than Tier 3 and 4 locations:** ~38% consumers in Tier 5 and 6 locations claimed lack of internet connectivity as a reason for not using digital payment services, whereas only ~28% gave such a reason in Tier 3 and 4 locations.
• **Men use digital payments more frequently than women:** On an average, ~43% men claimed to use digital payments at least once a day, whereas only ~35% women claimed the same.	• **Consumers in Tier 5 and 6 locations have lower trust in digital payments versus those in Tier 3 and 4 locations:** ~44% consumers in Tier 5 and 6 locations cited lack of trust and safety issues as a reason for not using digital payment services, whereas only ~30% gave such a reason in Tier 3 and 4 locations.
• **Men are comfortable making higher value UPI payments than women:** ~32% men claim to be comfortable in making payments of over INR 5,000 via UPI, whereas only ~25% women claimed the same.	• **Consumers in Tier 3 and 4 locations are comfortable making higher value UPI payments than those in Tier 5 and 6 locations:** ~32% consumers in Tier 3 and 4 locations claim to be comfortable in making payments of over INR 5,000 via UPI, whereas only ~19% consumers in Tier 5 and 6 locations claimed the same.

Consumer findings based on age and education

Respondents were bifurcated based on age and education. Four categories were created with respect to age: Gen Z (up to 27 years), Millennials (between 28 to 43 years), Gen X (between 44 to 59 years), and Baby Boomers (60 years and above). Similarly, with respect to education, categorization done included: uneducated, up to primary education, up to secondary education, and graduates and above. Key findings have been listed below and depicted in the following graph.

- The trend shows that the higher the age, the higher the capacity constraints in using digital payment services.

- The trend shows that the higher the age, the lower the trust deficit in using digital payments and lower resistance to change from using cash.

- The trend shows that the lower the education level, the higher the capacity constraints in using digital payment services.

- The trend shows that the lower the education level, the lower the trust deficit in using digital payments and lower resistance to change from using cash.
- The trend shows that the higher the education level, the higher the comfort in making payment of over INR 5,000 through UPI.

Graph 14: Findings from different consumer profiles based on age and education
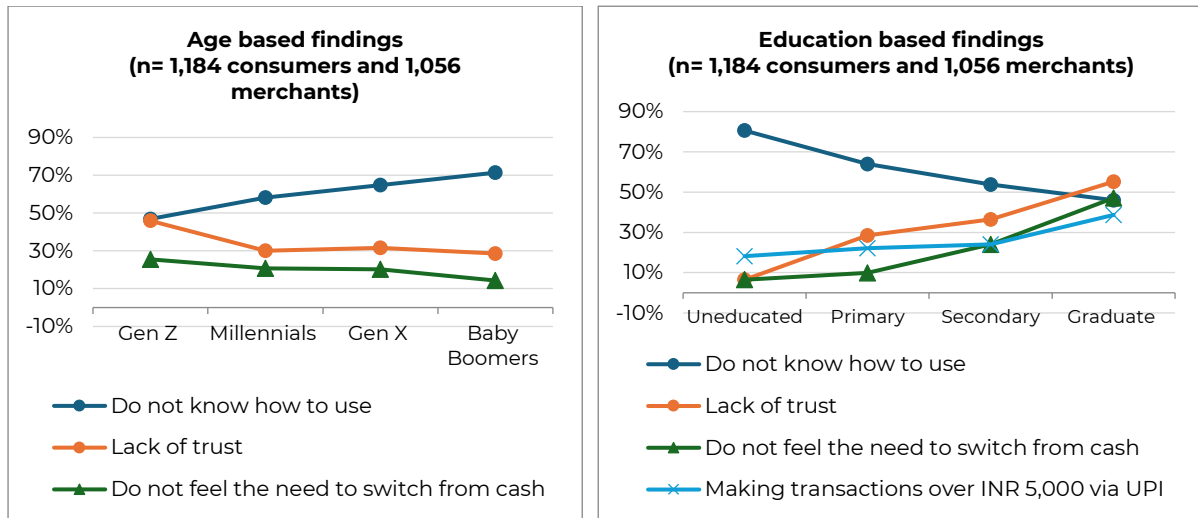
6.2. Findings from Different Merchant Profiles

To derive deeper findings from the merchant respondent data, merchants were sliced based on gender and type of establishment (temporary shop[52] and permanent shop[53]). Given in the figure below are the insights gathered from such slicing.

Figure 6: Findings from different merchant profiles based on gender and type of establishment

Gender based findings	Type of establishment-based findings
• **Male merchants started using digital payments before female merchants:** ~34% male merchants claimed to be using digital payments since before COVID-19, whereas only ~18% female merchants claimed to use digital payments before COVID-19, i.e., 2020. • **Female merchants are less likely to know how to use digital payments than male merchants:** ~60% female merchants cited capacity constraints as a reason for not using digital payments, as opposed to only ~47% male merchants.	• **Merchants with a permanent shop started using digital payments before those with a temporary shop:** ~39% merchants running a permanent small/ large shop claimed to be using digital payments before COVID-19, whereas only ~20% merchants running a temporary tent shop/ handcart claimed to be using the services before COVID-19, i.e. 2020. • **Merchants with temporary shops claim more capacity constraints than those with permanent shops:** ~58% merchants running a handcart/ temporary shop cited capacity constraints as a reason for not using digital payments, as opposed to only ~43%merchants with a permanent small/ large shop.

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52 For the purpose of the survey, these have been classified as those which open suddenly, and have no fixed place/ location of operation. Examples include a handcart, or a tent/ footpath shop.
53 For the purpose These have a fixed structure and place/ location of operation.
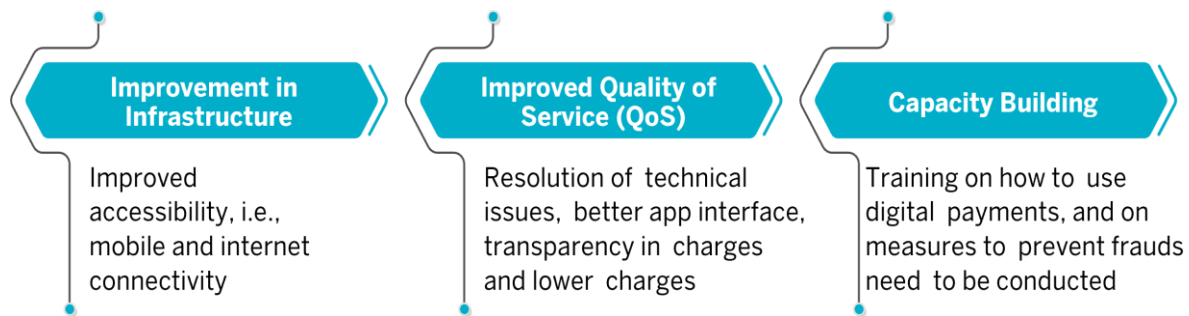
Conclusion

7. Conclusion

7.1. Key Expectations of Consumers and Merchants

Based on the data received, there are three key expectations of consumers and merchants from digital payments. These have been given in the figure below and are in sync with the challenges highlighted previously.

Figure 7: Key expectations of consumers and merchants from the way forward
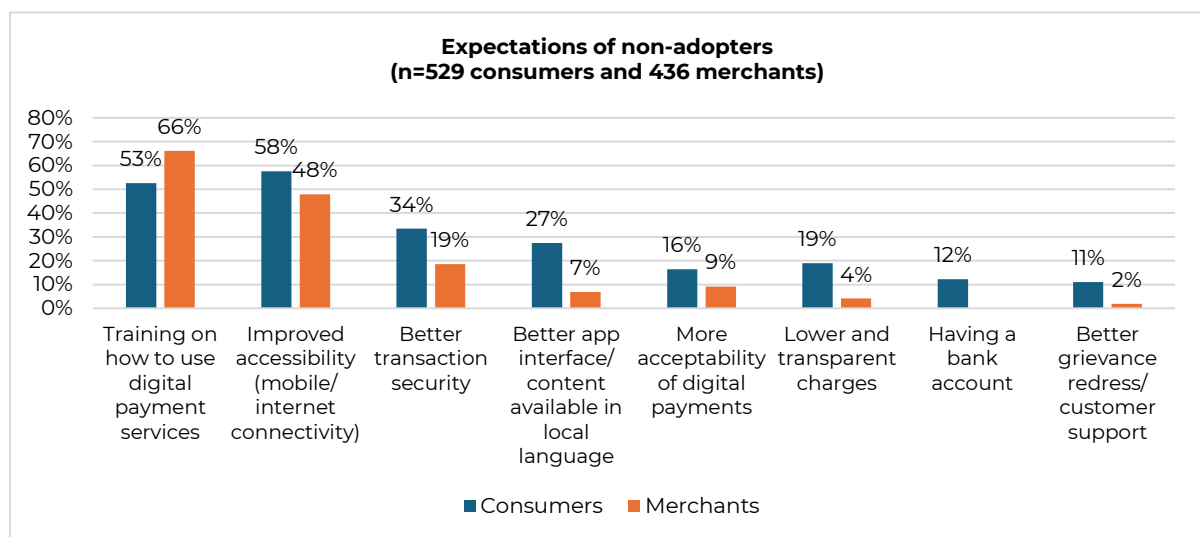
Improvement in Infrastructure	Improved Quality of Service (QoS)	Capacity Building
Improved accessibility, i.e., mobile and internet connectivity	Resolution of technical issues, better app interface, transparency in charges and lower charges	Training on how to use digital payments, and on measures to prevent frauds need to be conducted

However, different respondents have different expectations, based on their adoption status of digital payments. These have been discussed in subsequent sections.

7.2. Expectations of Non-Adopters of Digital Payments

As is visible in the subsequent graph, non-adopters of digital payments (consumers and merchants) want better infrastructure, capacity building initiatives and better transaction security, for adopting digital payments.[54]

Graph 15: Expectations of non-adopters of digital payments

Expectations of non-adopters
(n=529 consumers and 436 merchants)

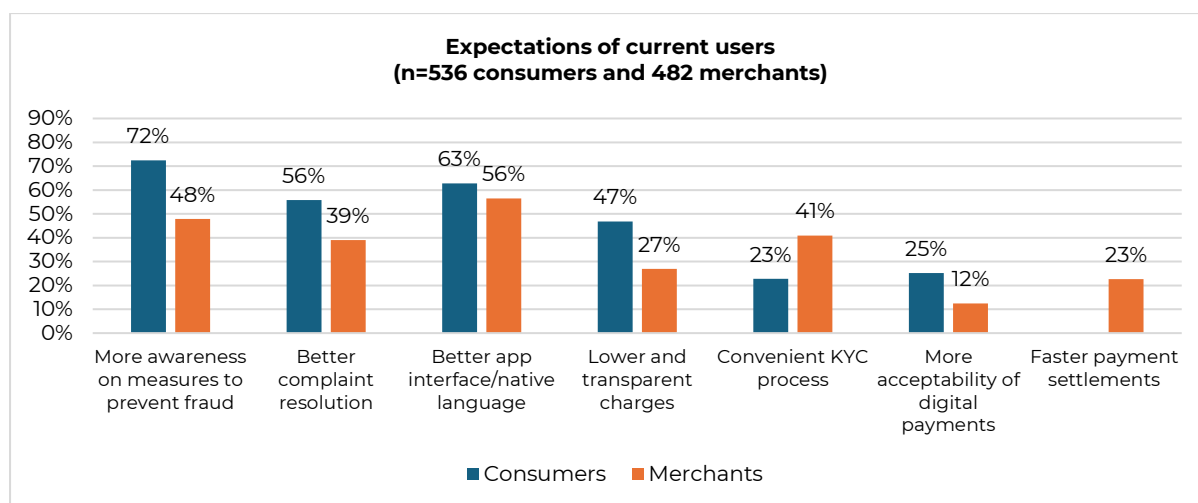|	Consumers	Merchants
Training on how to use digital payment services	53%	66%
Improved accessibility (mobile/internet connectivity)	58%	48%
Better transaction security	34%	19%
Better app interface/ content available in local language	27%	7%
More acceptability of digital payments	16%	9%
Lower and transparent charges	19%	4%
Having a bank account	12%	
Better grievance redress/ customer support	11%	2%

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54 Question: What would encourage you to start using/ accepting digital payment services? (MCQ). Note: merchants were not given the option of 'having a bank account'.

7.3. Expectations of Erstwhile Users of Digital Payments

Lower charges and transparency in charges, resolution of technical issues, and improved accessibility are the key improvements expected by consumers and merchants who have stopped using digital payments, which would encourage them to restart using the same.[55]

Graph 16: Expectations of erstwhile users of digital payments

**Expectations of erstwhile users
(n= 119 consumers and 138 merchants)**

■ Consumers ■ Merchants
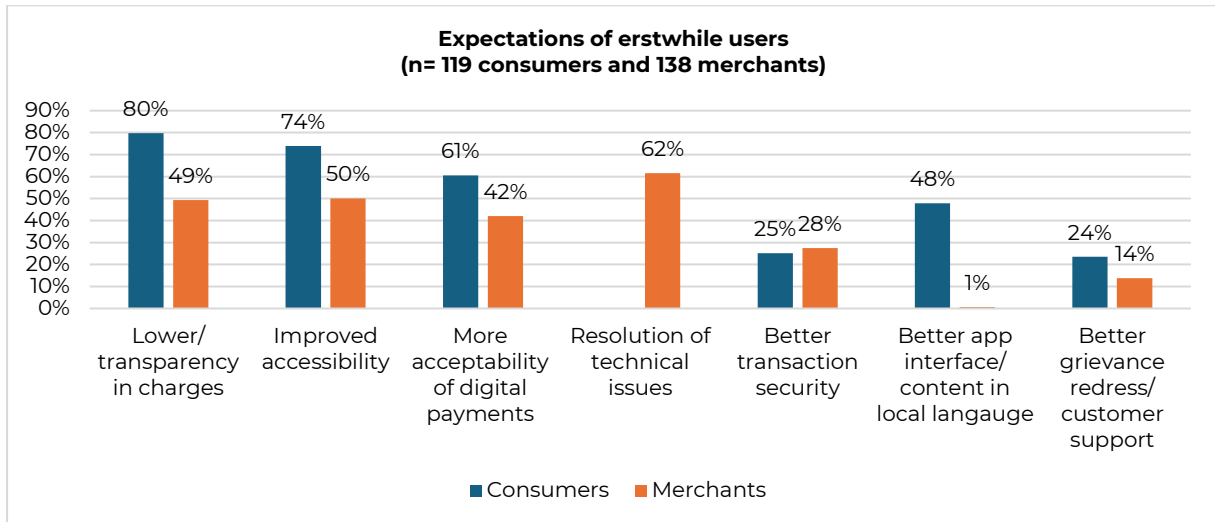
7.4. Expectations of Current Users of Digital Payments

Awareness initiatives on measures to prevent digital financial frauds, better grievance redress, better app interface, and simpler Know Your Customer (KYC) process are the key improvements wanted by current users of digital payments (consumers and merchants), as is visible in the graph below.[56] Notably, merchants have also cited faster payment settlements as a key expectation from digital payments. The RBI's draft amendments to payment aggregator regulation may then need reconsideration as the provision on limiting escrow accounts to just two banks may become untenable during system outages leading to delayed settlements.[57] This will severely impede the uptake of digital payments among small merchants who are dependent on daily settlements to maintain their cash flow.

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55 Question: What would encourage you to restart using/ accepting digital payment services? MCQ. Note: consumers were not given the option of 'resolution of technical issues'.

56 Question: What would you like to improve about digital payment services? MCQ. Note: consumers were not given the option of 'awareness on VAS'.

57 RBI Draft Regulation of Payment Aggregators (PAs), available at: https://www.rbi.org.in/Scripts/bs_viewcontent.aspx?Id=4419

Graph 17: Expectations of current users of digital payments

**Expectations of current users
(n=536 consumers and 482 merchants)**

Category	Consumers	Merchants
More awareness on measures to prevent fraud	72%	48%
Better complaint resolution	56%	39%
Better app interface/native language	63%	56%
Lower and transparent charges	47%	27%
Convenient KYC process	23%	41%
More acceptability of digital payments	25%	12%
Faster payment settlements		23%

■ Consumers　■ Merchants

7.5. Recommendations

The RBI's Annual Report 2023-24 envisions achieving 100% coverage in 50% districts across the country by March 2025.[58] The goal is to empower every eligible individual in the identified district with at least one digital payment mode. However, findings from the survey demonstrate that infrastructure, QoS, capacity building, lack of trust, and safety concerns are the core roadblocks in enhancing the uptake of digital payments. Furthermore, a cumbersome KYC process is also a pain point for merchants.

Corresponding recommendations have been given below to address these roadblocks basis a priority order. Notably, multi-stakeholder efforts would be required to implement these recommendations. Adopting a 'whole-of-government approach'[59], and 'whole of systems approach'[60], would be useful in this regard. These recommendations are aligned with the RBI principle of 'Through the Cycle' Risk Assessment Framework with continuous Horizon Scanning and a Holistic Risk Assessment.

- **Inclusive Stakeholder Engagement for Simplification of the Know Your Customer (KYC) process**: 29% of the merchants who use digital payments admitted to facing difficulties in completing the KYC process. The top three issues faced were a lack of requisite documents, a lack of knowledge to complete the process, and the KYC process being too complicated and time-consuming. Also, 41% of merchants using digital payments called for a more convenient KYC process. Considering the Financial Stability and Development Council (FSDC) is working on prescribing uniform KYC norms, the Government and the RBI may initiate and complete inclusive stakeholder consultations with the participation of industry, associations, think tanks, academia, and consumer groups.[61] These consultations will focus on universal KYC norms to achieve interoperability of KYC records, thereby simplifying the entire procedure.

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[58] RBI's Annual Report 2023-2024, available at: https://shorturl.at/Xs1Ou

[59] Whole-of-government approach refers to joint activities performed by diverse ministries, public administrations and public agencies in order to provide a common solution to particular problems or issues.

[60] A whole of system approach involves applying thinking, methods and practice to identify collective actions, required to overcome a particular challenge.

[61] Union Finance Minister chairs 28th meeting of Financial Stability and Development Council (FSDC) in New Delhi, available at: https://dea.gov.in/sites/default/files/Press%20Release%20on%2028th%20Meeting%20of%20FSDC%20in%20New%20Delhi_3.pdf

Innovative and customised means for conducting KYC of different user bases can be considered, as suggested in Figure 8.

Figure 8: Alternate KYC Methods

Interoperability and digitization of KYC records is the need of the hour to achieve digital financial inclusion goals. Alternate innovative methods of KYC completion should be adopted to address challenges related to lack of documents and inadequate infrastructure at the ground level. Some of the ways that can be considered are as follows:

- Over 50 crore Indians have Jan Dhan Accounts.[1] Herein, the KYC procedures for Zero Balance account holders can be adapted for merchants to use digital payment services. Similar arrangements can be made for Small Account holders who don't have the required documents to open a Zero Balance account. As Small Accounts expire in 12 months, using merchant services can help account holders transition to Zero Balance accounts, reducing the risk of Small Accounts being misused for money laundering. The ongoing linkage of PAN Cards with Aadhaar will also further enhance regulatory scrutiny of Jan Dhan accounts.

- Usage of the Central KYC Registry may be mandated to reduce KYC delays and duplication of efforts.

- Digital technology solutions may be used to enhance the KYC process by incorporating geographic and biometric data for identity verification. Additional methods such as capturing geocoordinates to pinpoint the merchant's location and utilizing image recording to confirm physical presence can also be adopted.

- **Amendment to the Schedule of Corporate Social Responsibility (CSR) Activities under the Companies Act, 2013**: To address infrastructure and capacity building-related issues, it is suggested that the Government amends *Schedule 7 of Section 135 of the Companies Act, 2013* to include 'promotion of financial inclusion' as an activity under CSR.[62] This will incentivize private companies to undertake projects targeted towards enhancing financial inclusion in tier 3 to 6 locations of India that are otherwise left out from the purview of mainstream projects due to hefty logistical and technical costs. This includes financial outlay toward on-ground sales staff, training costs, payment acceptance infrastructure deployment, etc. Receiving tax benefits for undertaking such activities will motivate private companies to invest in the digital enablement of rural areas.

- **Incentives Offered under DigiDhan Mission**: To include the underserved at the grassroots level of the digital payments pyramid, fintech players would need to make significant investments. This calls for an enhancement of incentives offered under the DigiDhan mission, making participation in the initiative a commercially viable project for fintech companies.[63] As they front the tedious consumer and merchant onboarding process, incentives will help increase investments in the deployment of requisite enabling infrastructure such as QR Code and Point of Sale (PoS) machine etc.

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[62] Schedule VII, Section 135 of Companies Act, 2013, available at: https://t.ly/skFeK
[63] Notification of DigiDhan Mission, available at: https://www.meity.gov.in/writereaddata/files/digidhan-mission.pdf

While it is recognized that the Government offers incentives to promote UPI-based digital payments, there are concerns that these funds primarily benefit banks, leaving digital payment service providers (payment aggregators) with limited support. There have also been suggestions to increase the amount of these incentives.[64]

- **Data Sharing for Cyber-fraud Prevention**: The RBI should take actionable steps towards setting up a Digital Public Infrastructure (DPI) for the proposed Digital Payments Intelligence Platform (DPIP) for which a committee has been formed under the chairmanship of Shri AP Hota, former MD & CEO, NPCI.[65] Such DPI would enable network-level intelligence and real-time data sharing across payment systems for fraud mitigation. The DPI should be based on the principles laid under the Playbook 'The DPI Approach', which was released during India's G20 presidency last year by the Digital Economy Working Group (DEWG), on aspects of technology (interoperability, flexibility, security), governance (data protection and cyber security regulation, grievance redress, ethical use of technology, standards and protocols), and ecosystem (collaboration, sustainability, feedback loops, periodic meetings). Also, a multi-stakeholder (LEAs, RBI, government, industry, civil society) approach would need to be adopted for identifying, preventing, and mitigating payment fraud risks. Notable in this regard is the Ministry of Home Affairs (MHA) proposal to create a new wing called Cyber Fraud Mitigation Centre under the I4C, to deal with cyber financial fraud in real-time by involving different stakeholders, including telecom service providers, social media and other IT intermediaries etc., who have been working in silos thus far.

- **Timely Constitution and Finalization of Payments Advisory Council (PAC):** The RBI's 2025 Vision document proposed the creation of a PAC to assist the Board for Regulation and Supervision of Payment and Settlement Systems (BPSS) with insights into the latest industry practices, emerging innovations, and the desired regulatory norms. The BPSS is empowered for authorising, prescribing policies and setting standards for regulating and supervising all the payment and settlement systems in the country. The following points should be considered in the constitution and operationalization of the PAC.

    o <u>Composition</u>: The council should comprise of members from consumer groups, fintech, legal experts, bankers, investor community etc., to ensure inclusive representation from different stakeholder groups.

    o <u>Inclusiveness</u>: Inclusive Industry consultation should be conducted at the earliest to decide the responsibilities of the council, its objectives, code of conduct etc.

    o <u>Process</u>: The PAC should conduct periodic internal meetings as well as meetings with the BPSS (suggested, on a quarterly basis) for continuous evaluation of the regulatory landscape, along with monitoring of the progress of the PAC's action agenda. This will help bridge the gap between policy and implementation, especially in areas such as KYC, fraud reporting, cybersecurity etc.

Notably, similar multi-stakeholder PACs have also been setup in other countries. The United States of America's (US) Federal Reserve Payments Improvement Community advises on issues related to payment systems, such as security, efficiency, and innovation. Similarly, Payments Canada's Stakeholder Advisory Council provides advice and perspectives on

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[64] Banks Took Away Govt Subsidies, Didn't Pass It To Payment Aggregators: PCI Chairman On UPI Charges, available at: https://t.ly/ZWU_e

[65] RBI's Statement on Developmental and Regulatory Policies, available at: https://t.ly/o45n7

payment systems. Relevant good practices from these jurisdictions should be tailored and implemented in India as well.

- **Collaborative methodology for better coordination among stakeholders**
    - o <u>Repository of Blocked Merchants</u>: Flowing from the Finance Minister's 2023-24 Budget announcement on facilitating public consultation for financial sector reforms, the RBIH's decision to organise exclusive monthly discussions with fintech is a welcome move.[66],[67] Similar path-breaking initiatives must be undertaken, such as real-time repositories of blocked merchants to curb online fraud. The repository can be shared with the I4C to prevent other companies from onboarding them. It may contain merchant details such as name, business type, PAN card, and other identification documents to ensure a fraudulent seller cannot shift trade to other payment companies and banks after being blocked by one company. This will also help define the role and responsibilities of all ecosystem players, especially LEAs, ensuring a more collaborative and efficient approach to identifying fraudulent activities. By clearly delineating these responsibilities, we can foster stronger partnerships and optimize the efforts of each entity involved.

    - o <u>LEA Training</u>: As online financial crimes are constantly evolving, industry players, in collaboration with I4C, can hold regular training sessions with LEAs to keep them abreast of the latest fraud techniques. This may be integrated with DFS's Annual Capacity Building Plan (ACBP) wherein joint cybersecurity drills can be held with the LEAs sharing the real-life cases they are getting and fintechs sharing their expertise.[68] A cycle risk assessment framework will ensure continuous horizon scanning to proactively identify and mitigate potential risks, ensuring the resilience of the digital payment ecosystem.

- **Digital Financial Literacy & Inclusivity**: To address awareness and knowledge gaps related to availing digital payment services, especially in a safe manner, service providers, with support from Central and State Governments and civil society, should revise nationwide customer awareness and sensitization programmes. This may include the following initiatives:
    - o Customised sessions based on age, language, and education, directed to users, including, school children, women's self-help groups, farmer-producer organisations, beneficiaries of direct-benefit transfer schemes, etc.
    - o A mix of online and offline methods for awareness-building, including through social media.
    - o Digital payment providers may sync their platforms with RBIH and DIBD's solution toward linguistic inclusivity to extend the reach of digital financial services to users in their native tongues. This will help improve the QoS and accessibility of online payment avenues for non-English speaking users.[69]

- **Promote Rural Area-Specific Digital Payments:** The survey highlighted that one of the key reasons for not using digital payment services was the lack of internet connectivity and

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[66] Budget Speech 2023-2024, available at: https://www.indiabudget.gov.in/doc/bspeech/bs2023_24.pdf
[67] RBIH Finquiry announcement, available at: https://t.ly/RzOvS
[68] DFS Annual Capacity Building Plan (ACBP), available at: https://cbc.gov.in/sites/default/files/DFS.pdf
[69] Setting the Tone for Linguistic Financial Empowerment, Bhashini (DIBD) and RBIH Collaborate for an Inclusive Vision, available at: https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1964079

mobile ownership. This can be mitigated by promoting digital payments such as AePS that don't require a smartphone. 'UPI Lite', 'UPI 123PAY', and 'Hello! UPI' are a few other ways of accessing the UPI network without needing a smartphone or internet connectivity. Targeted promotion of these services by banks, Government, RBI, and civil society in areas lacking adequate infrastructure will ensure the unbanked and underserved people are seamlessly brought into the digital fold.

- **Actionable Steps towards the Implementation of the Digital Payment Protection Fund (DPPF)**: To further increase user confidence in digital payments, actionable steps on the creation of a DPPF should be taken. The Fund, as envisaged in the RBI's Payment Vision 2025, was to be created to improve the recovery rate of defrauded amounts through online financial frauds.[70] The following steps should be prioritized in this regard.

  Constitute an inclusive committee consisting of different stakeholders like government, LEAs, industry and civil society, for framing the wherewithal of the fund with respect to its objectives, funding inflow, flow and disbursement of funds, guardrails against misuse, grievance verification etc. A white paper on the above aspects should be released in the public domain, inviting stakeholder input. Inclusive stakeholder consultations in physical and online modes should be conducted on the same.

Summing up, it is envisaged that the findings and recommendations discussed in this report shall prove to be valuable for different stakeholders and help them devise targeted interventions in sync with their endeavour of creating a more efficient, secure, and inclusive digital payment ecosystem in India.

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[70] RBI Payments Vision 2025, available at: https://t.ly/QVL3t

Annexure: Details of the Survey

Annexure: Details of the Survey

A.1.1. Overview

The survey intended to assess the reasons behind the poor adoption of digital payment services in Tier 3 to 6 locations of India, for both, consumers, and merchants. A minimum of 1920 respondents were envisaged to be surveyed as per the details tabulated below. The final number of respondents surveyed were 2,240, i.e., 1,184 consumers and 1,056 merchants.

Table 3: Sampling methodology

Number of Zones		4 (North, South, East and West)
Stage 1	States per zone	2
	Total States	**8**
Stage 2	Districts Per State	2
	Total Districts	**16**
Stage 3	Sample per district	Minimum 120 (60 Consumers + 60 Merchants)
	Total Sample	**Minimum 1920 (960 Consumers + 960 Merchants)**

The sampling plan is divided into 3 stages i.e., (i) selection of states, (ii) selection of districts, and (iii) selection of locations.

A.1.2. Selection of States

To ensure a pan-India representation for the study, all Indian states and Union Territories (UTs) were divided into 4 zones viz-a-viz. North, South, East and West. The States and UTs in these regions are categorised as follows:

- Two states from each zone with highest number of digital transactions (per capita basis)[71] were selected for the study.
- UTs were purposively excluded from the selection, given that they represent a limited geographical area and population compared to the states.

Accordingly, eight states were selected, namely – *Haryana, Uttar Pradesh, West Bengal, Odisha, Karnataka, Andhra Pradesh, Gujarat, and Maharashtra.*

A.1.3. Selection of Districts

Reliable, uniform, and updated public data on uptake or usage of digital payments at district level is not available with institutions like the RBI, the National Payments Corporation of India (NPCI), data.gov.in, Indiastat etc. Thus, for choosing the sample districts within the selected states, data related to the number and volume of digital transactions made available by PhonePe for public use
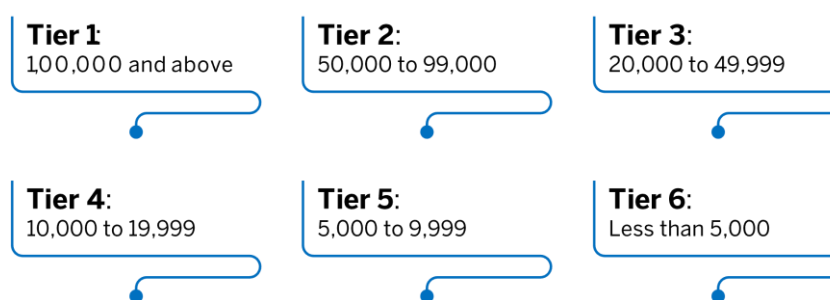
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71 DigiPay Dashboard, available at: https://digipay.gov.in/dashboard/#

was utilized. As per statistics published by NPCI,[72] PhonePe is the market leader in terms of volume and value of customer-initiated transactions, making it a reliable proxy for sourcing data for sampling purposes.

The study intended to assess the reasons behind poor adoption of digital payment services in tier 3-6 locations of India, both adopters and non-adopters of digital payment services were surveyed. Accordingly, the survey was conducted in two districts from each state – one district with highest and one district with lowest number of digital transactions (in Q3 of 2023)[73].

A.1.4. Selection of Town/ City

To select the tier 3 to 6 cities/ towns (as outlined by RBI's criteria)[74] for the study, highest and lowest population (as per census 2011) were relied upon as parameters.

Figure 9: RBI criteria for classifying tiers based on population

Tier 1:
1,00,000 and above

Tier 2:
50,000 to 99,000

Tier 3:
20,000 to 49,999

Tier 4:
10,000 to 19,999

Tier 5:
5,000 to 9,999

Tier 6:
Less than 5,000

Thus, from each selected district with highest number of digital transactions, a tier 3 to 6 city/ town with the highest population was selected. Similarly, from each selected district with lowest number of digital transactions, a tier 3 to 6 city/ town with the lowest population was selected. Notably, the main city/ district headquarters could not be selected, since they were falling under the category of tier 1 or 2 locations, which did not meet the study's criteria.

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72 NPCI UPI Ecosystem Statistics, available at: https://www.npci.org.in/what-we-do/upi/upi-ecosystem-statistics
73 PhonePe Pulse, available at: https://github.com/PhonePe/pulse
74 The RBI's tier-wise classification of centres based on population, available at:
   https://rbidocs.rbi.org.in/rdocs/content/pdfs/100MCA0711_5.pdf
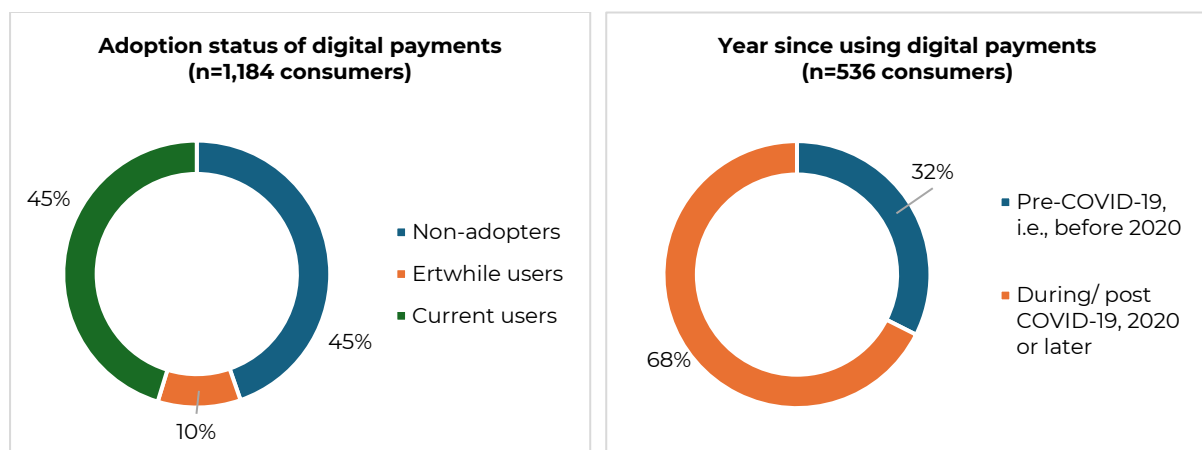
A.1.5. Respondent Profile

Consumers

Diversity was ensured with respect to age, education, gender, as well as working status of respondents. The profile of consumers surveyed has been given in the figure below.

Figure 10: Consumers respondent profile

Age	• Gen Z (Upto 27 years): 23% • Millennials (28 to 43 years): 46% • Gen X (44 to 59 years): 29% • Baby Boomers (60 years & Above): 2%
Education	• Uneducated: 6% • Primary: 23% • Secondary: 48% • Graduate & Above: 23%
Gender	• Male: 51% • Female: 49%
Occupation	• Working: 67% • Non-working: 33%
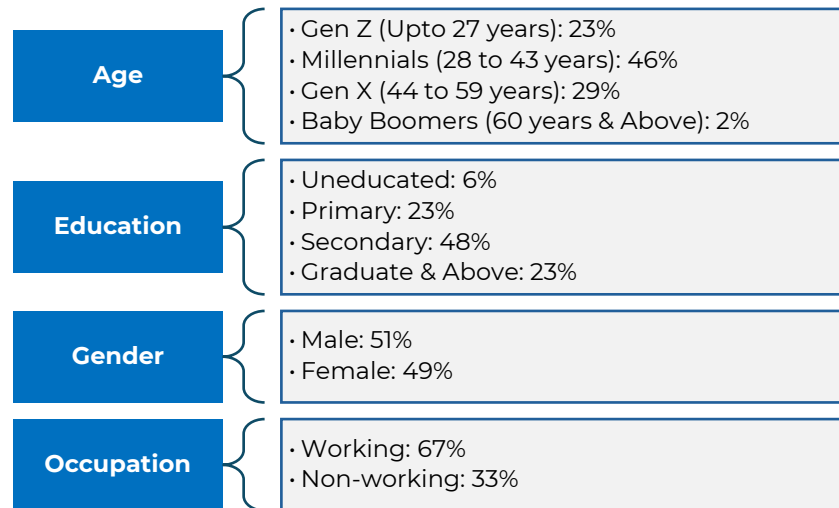
In line with the objective of the survey, the sample spread was designed to survey three categories of consumers: non-adopters, erstwhile users, and current users of digital payments.[75] Also, diversity among consumers was maintained with respect to the number of years of using digital payments.[76] The bifurcations in this regard have been given in the graph below.

Graph 18: Consumer profile

Adoption status of digital payments (n=1,184 consumers): Non-adopters 45%, Erstwhile users 10%, Current users 45%

Year since using digital payments (n=536 consumers): Pre-COVID-19, i.e., before 2020 — 32%; During/post COVID-19, 2020 or later — 68%

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75 Question: Are you using digital payments currently? Single Choice Question
76 Question: When did you start using digital payments? Single Choice Question

Merchants

Diversity in merchant respondents was ensured with respect to age and education. Despite efforts, fewer female merchants could be surveyed. The profile of merchants surveyed has been given in the figure below.

Figure 11: Merchant respondent profile

Age	Gender	Education
• Gen Z (Upto 27 years): 23% • Millennials (28 to 43 years): 51% • Gen X (44 to 59 years): 21% • Baby Boomers (60 years & Above): 5%	• Male: 86% • Female: 14%	• Uneducated: 8% • Primary: 29% • Secondary: 50% • Graduate & Above: 13%
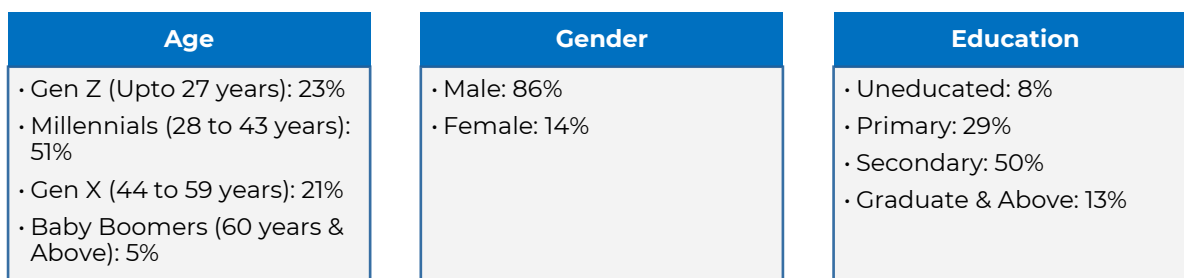
Like consumers, the merchant sample spread was designed to survey three categories of merchants: non-adopters, erstwhile users, and current users of digital payments. Also, diversity among merchants was ensured with respect to the number of years of using digital payments. The bifurcations in this regard have been given in the graph below.

Graph 19: Merchant profile

Adoption status of digital payments (n=1,056 merchants): Non-adopters 41%, Erstwhile users 13%, Current users 46%

Year since using digital payments (n=482 merchants): Pre-COVID-19, i.e., before 2020 33%, During/ post COVID-19, 2020 or later 67%
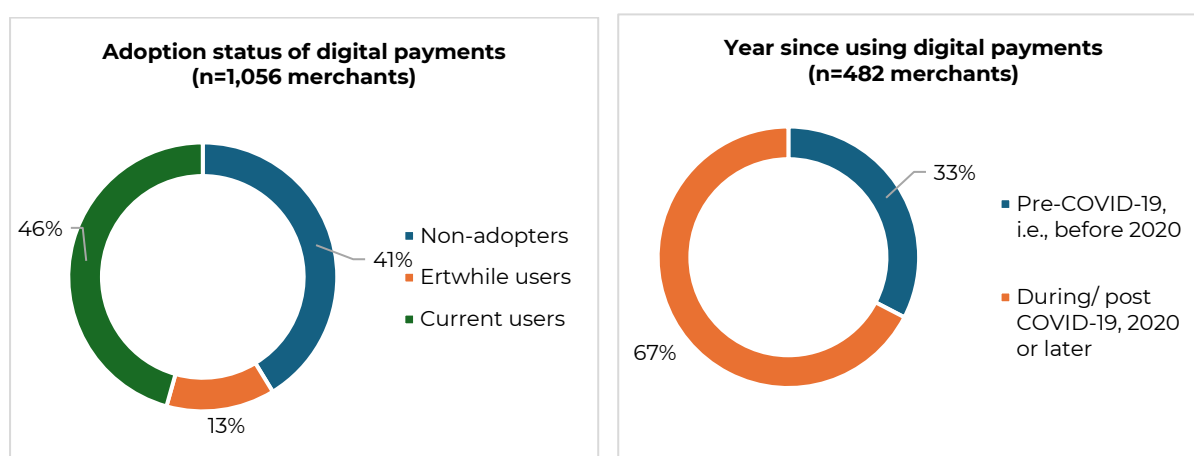
Diversity was also ensured amongst the merchant sample spread with respect to the size and scale of their business, as has been given in the graph below.

Graph 20: Revenue and scale of business

Average Monthly Revenue
(n=1,056 merchants)

- Upto INR 15,000
- INR 15,001 to INR 50,000
- INR 50,001 to INR 1 lakh
- Above INR 1 lakh

14% · 4% · 39% · 43%

Scale of business
(n=1,056 merchants)

- Temporary handcart/ tent shop
- Small local shop
- Large shop

3% · 35% · 62%
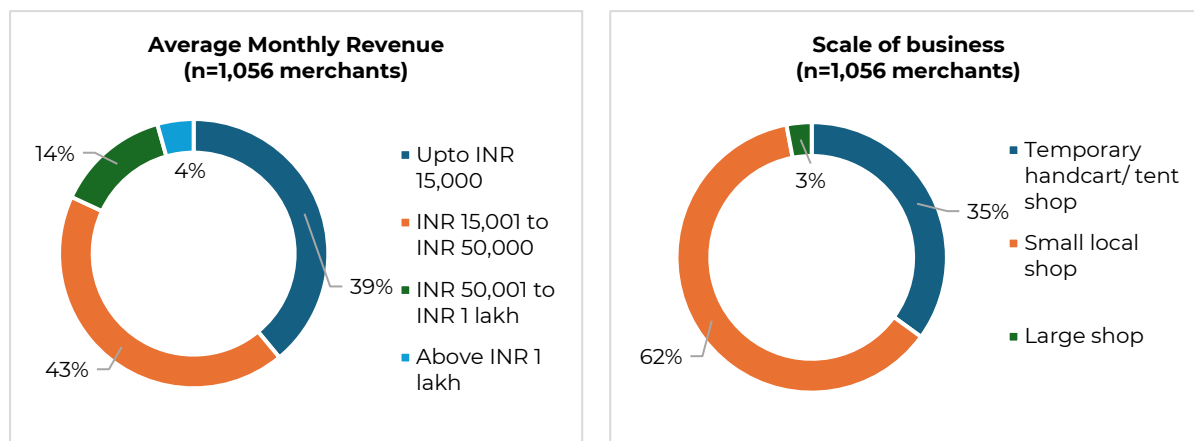
A.1.6. Limitations of the Survey

The survey exercise and the findings emerging from it have some inherent limitations. These are listed below.

- **Limited scope and depth**: The limited scope and depth of certain questions made it difficult to capture nuances of user responses, with respect to reasons behind the responses.

- **Validity of responses**: The validity of the responses cannot be confirmed, since they are influenced by respondent biases and driven by perceptions towards the subject, i.e., the survey relied upon stated preferences and perceptions of respondents.

- **Data accuracy**: While efforts were made to maintain data accuracy, any errors that may have occurred in data analysis remain solely ours.

- **Interpretations**: Despite testing and piloting the questionnaire, as well as surveyor trainings, it is possible that certain questions may have been interpreted differently by different enumerators/ respondents.

Appendix

Appendix

List of Graphs, Tables, and Figures

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List of Abbreviations

Abbreviation	Full Form
GoI	Government of India
DPI	Digital Public Infrastructure
PMJDY	Pradhan Mantri Jan Dhan Yojana
RBI	Reserve Bank of India
UT	Union Territory
MeitY	Ministry of Electronics and Information Technology
MHA	Ministry of Home Affairs
DFS	Department of Financial Services
UPI	Unified Payment Interface
AePS	Aadhaar-enabled Payment System
KAP	Knowledge Attitude and Practices
BNPL	Buy Now Pay Later
VAS	Value Added Service
KYC	Know Your Customer
PIDF	Payments Infrastructure Development Fund
LEA	Law Enforcement Agency
SHG	Self-Help Group
PoS	Point of Sale
SLBC	State Level Bankers' Committee
UTLBC	Union Territory Level Bankers' Committee
MCQ	Multiple Choice Question
P2P	Person-to-Person
P2M	Person-to-Merchant
IMPS	Immediate Payment Service
NEFT	National Electronic Funds Transfer
RTGS	Real-Time Gross Settlement
INR	Indian Rupee
RBIH	Reserve Bank Innovation Hub
DIBD	Digital India Bhashini Division
US	United States of America
DPIP	Digital Payments Intelligence Platform
I4C	Indian Cybercrime Coordination Centre

The State of Digital Payments in India
A Survey of Consumers and Merchants in Select Tier 3 to Tier 6 Locations

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Chase India is a leading public policy research and advisory firm with growing practices in Technology & Fintech, Transport & Infrastructure, Life Sciences, Development and Sustainability. Chase India provides consultancy services to organizations for mitigating business risks through evidence-based policy strategy. Chase India has pan India presence with offices in New Delhi, Mumbai, Pune, Hyderabad, Chennai and Bengaluru and is a part of the WE Communications Group worldwide. For more information, please visit www.chase-india.com

About BharatPe

BharatPe was started in 2018 with the mission to build a holistic FinTech platform for offline merchants and small businesses. Today, BharatPe offers a suite of simple, easy-to-use and secure fintech products including payments and business loans to its merchant partners. The company has an extensive network of over 13 million merchants across more than 450 cities in the country. For more information, please visit the website of BharatPe at www.bharatpe.com