



The Evolving Financial Ecosystem for Micro-Merchants in India

REPORT
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Mastercard Center for Inclusive Growth commissioned this study. IFMR LEAD conducted this study including all relevant fieldwork and data analysis.

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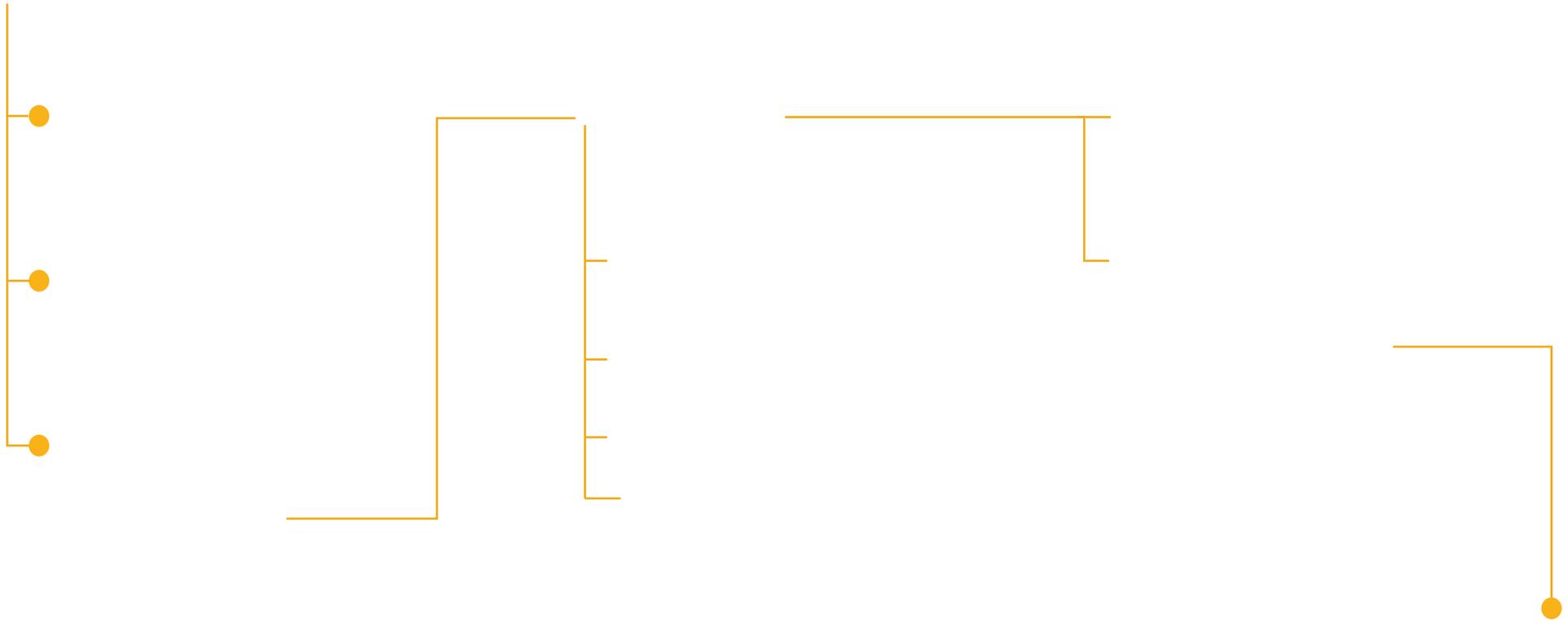
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The digital revolution in India is well underway and there is a need to understand the on-the-ground adoption and usage of digital platforms. This study surveyed 547 merchants across the five cities of Jaipur, Kanpur, Indore, Nagpur and Surat and across twelve different business categories. The survey sought to understand the business profiles of merchants in terms of their cash flows and asset ownership; their credit profiles in terms of previous and current borrowings, and their adoption and usage of digital financial services (DFS). The following key themes emerged based on insights from the surveys:

- **Seasonality and Reinvestment:** Firstly, merchants predominantly conduct daily investment activities through reinvestment of daily savings and income; very few merchants have an outstanding working capital loan. Merchants in these areas also experience high seasonal variation in cash flows determined by fluctuations in demand due to weather and festivals. Thus, the scope for growth of enterprises is low.
- **Reliance on informal lending:** Secondly, few merchants rely on formal lenders to access credit, and two out of three merchants are not satisfied with their current formal lenders mainly due to the indirect costs of making multiple visits to a branch that is not located within walking distance, and the lengthy disbursement processes associated with loan applications. This has implications for financial inclusion programmes that focus on promoting access to finance but pay inadequate attention to design and delivery.

- **Lack of adoption of Digital Financial Services:** Third, although awareness of traditional digital platforms such as savings accounts is high, only one in two merchants are aware of mobile and Internet banking, while an even smaller proportion use any of these platforms. One in four merchants use digital platforms for financial transactions and most rely on cash to transact with customers and suppliers. Due to the formal nature of agreements between merchants and their suppliers, in terms of supplier choice, stock required and frequency, merchants indicate a preference to digitally transact with their suppliers to save operational costs.

The above insights suggest that there is significant potential to explore innovations in product design, and adoption drives that can influence the usage of digital platforms by micro-merchants.

The digital revolution in India is well underway. Aided by pro-active regulation and the large number of fin-techs and start-ups, the transition to a society that is truly cashless has begun in full earnest over the last few years. Needless to say, a seamless transition to a truly cash-less society requires all stakeholders to adopt and accept digital financial systems; for a cashless economy to operate efficiently, its value proposition must appeal to consumers and merchants alike. While progress to this end has been made, a completely digital environment remains a distant dream (USAID, 2015). As the government moves its social security and other G2P payments/ tax related functioning to digital platforms, it creates a solid foundation upon which person-to-person payments, such as international and domestic remittances, can be built. (BTCA, BMGF, World Bank, 2014). Digital platforms allow for providing large-scale access to financial services by utilizing mobile phones, retail point of sales, and other easily available access points. There is also a line of thought suggesting that digital payments provide the confidentiality and convenience women require in financial services, thus serving as an enabler for women's empowerment in the long run. (G20, 2010) An often forgotten set of stakeholders in this regard is the "micro-merchants" in India, who account for an overwhelming proportion of all sales. Millions of customers in India, transact with these micro-merchants on a daily basis, in order to purchase various consumer goods - including food & beverages, pharmaceuticals, garments and automobile/ motorcycle accessories among many others. Broadly, micro-merchants have very small margins, serve low-income customers, rely on small-size transactions, and operate in primarily cash-based ecosystems (Dalberg, 2016). A recent

study estimates that around 59 million micro-merchants operate in India, with a potential market size of around INR 23,000 Crore (Mastercard, 2016). Globally, micro-merchants transact over USD 6.5 trillion dollars annually, and serve over 4.5 billion customers on a daily basis (Dalberg, 2016). These merchants are critical stakeholders in India's leap towards a less-cash society, as they account for 92% of the retail market (IBEF, 2016). Digitizing payments has the potential to reduce transaction costs, while increase efficiency and transparency, thus surmounting many of the traditional barriers (physical, cost etc.) that have hindered financial inclusion efforts in India. Transitioning these merchants to digital payments provides an opportunity to significantly further India's financial inclusion agenda. Various organizations focused on advancing financial inclusion believe that digital payments are essential for the widespread availability and usage of financial services. A growing body of evidence shows that financial inclusion helps small or marginal businesses expand, by providing credit that enables business owners to increase their inventory, invest in new tools or hire additional workers¹. The sustained acceleration of digital payments at the level of micro-merchants is thus critical to achieve the vision of a less-cash society (Deloitte, 2017). The acceptance of digital payments can significantly improve operational efficiency and increase security for micro-merchants. Furthermore, the digital trail also creates a credit history that may be used to secure financing that was hitherto unavailable. However, given their thin margins, and the initially high transaction costs associated with digital payments (as perceived), fewer than 6% of the micro-merchants in India accept digital payments (Dalberg, 2016).

¹ World Bank Financial Inclusion Database.

These issues notwithstanding, micro-merchants also operate in an ecosystem where cash is the primary mode of transaction – for even payments to suppliers, and more importantly, the preferred mode for a majority of the clientele.

The Government of India's move to delegalize INR 1000 and 500 rupee notes in November 2016 provided a huge stimulus to digital transactions. In the face of shortage of cash and stringent limits on bank withdrawals, there was a rapid growth in the adoption of digital payment systems in the period immediately following the policy move. However, data from the Reserve Bank of India

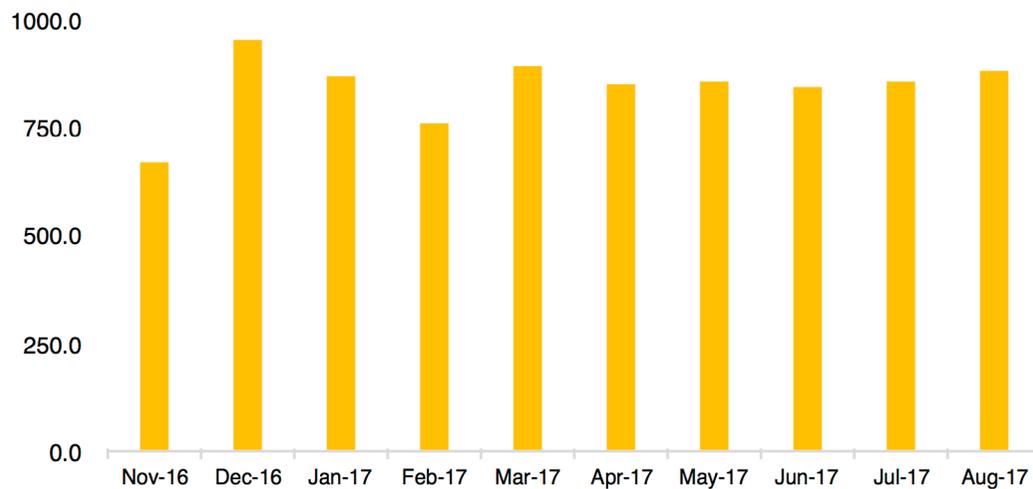


Figure a. Volume of Digital Payments in India (in millions)

(as of 30th August 2017) suggests that the volume of digital transactions declined sharply at the beginning of 2017, and has since increased – but is yet to return to the levels seen in December 2016. This reinforces the fact that digital payments are indeed here to stay, while raising questions about the pace of adoption, and how to improve uptake in smaller cities and towns, and rural areas. Improving merchant adoption in particular is crucial to driving the transition to a less-cash economy, given the key position they occupy in the ecosystem. Enhancing the understanding of micro-merchants' financial needs and requirements, and identifying key barriers for policymakers and practitioners to focus their efforts are vital in this regard.

At the same time, assessing merchant awareness regarding digital products provides insights that can help improve current outreach and information dissemination strategies.

Micro-merchants need access to capital to grow their businesses. Working capital is often required to keep their stock rooms filled, to purchase input material, and to weather delays between product delivery and receipt of payment. Banks frequently have little appetite in moving down market to lend to small businesses. The transaction costs and perceived risks of small merchants are too high a hurdle for many banks. The business model of and loan terms offered by microfinance institutions (MFI) are onerous for small businesses that seek larger amounts of capital. This results in a gap in financing for what has been coined as the ‘missing middle.’

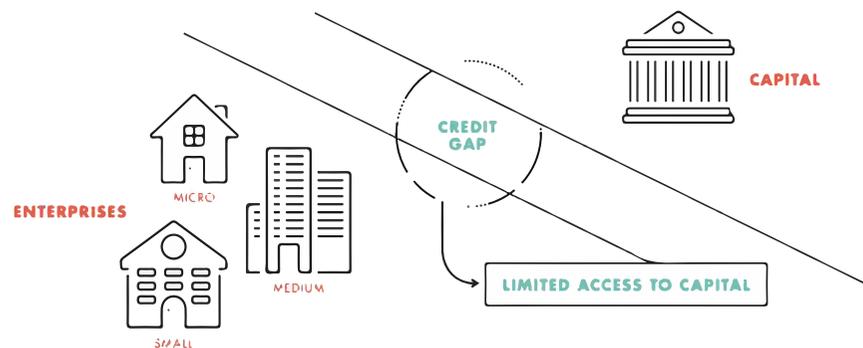


Figure b: Bridging the Small Business Credit Gap (Accion, 2016).

Given the recent push for digital financial services by the Government of India, it is imperative to take stock of the potential of digital services to address this credit gap as well as the current level of adoption of DFS and barriers in transitioning to a less-cash society.

To this end, the main objectives of this study are to:

1. Identify financial needs (including credit gaps and requirements) of micro-merchants.
2. Identify training/ skill gaps of the micro-merchants that need to be addressed in order to ease the transition to digital payments.

In each of the selected 5 cities, micro-merchants under the following verticals – F&B outlets, kirana stores, medical Stores, automobile accessories and spare parts, garments, building and fittings, mobile phone and accessories, watches and accessories, consumer electronics, private cabs, and beauty parlors, and men’s salons/barbers were identified, in selected markets². Approximately 100 randomly selected micro-merchants were surveyed in total, across the different categories and across different markets in each city.

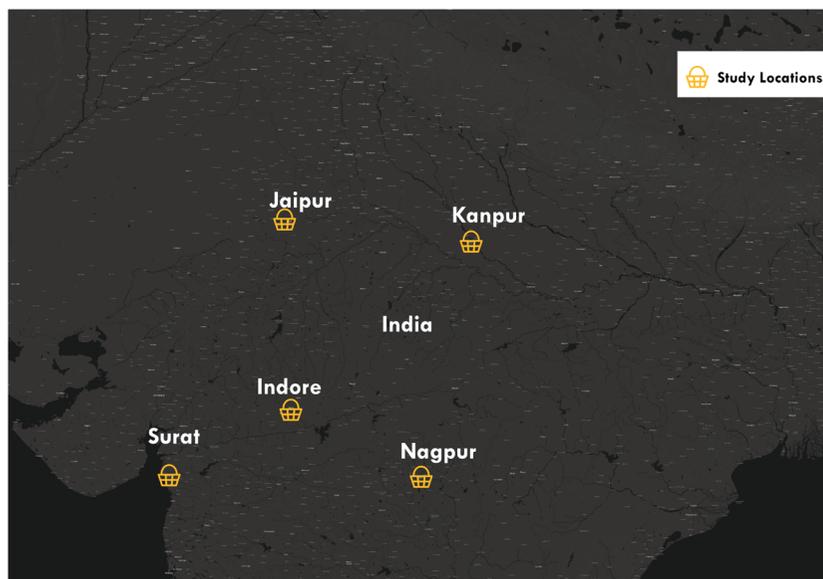


Figure c: Study Locations

A detailed survey instrument was used to capture all required data in order to achieve study objectives.

To this end, the survey instrument captures the following information:

Outcome	Indicator
Micro-merchant profile	<ul style="list-style-type: none"> • Firm Size • Revenue • Expenditures • Infrastructure/ Technology usage
Financial needs and training/ Skill requirements	<ul style="list-style-type: none"> • Borrowing behaviour • Insurance uptake • Financial literacy & product Awareness • Familiarity with usage, and perceptions of digital financial systems
Ease of doing business	<ul style="list-style-type: none"> • Obstacles/ barriers to growth

² Refer to appendix for market list and other details.

The analysis of survey data in section 3.1 begins with an overview of the sample composition across the different business categories in different cities and goes on to describe business characteristics of merchants, followed by cash flows and seasonality of cash flows.

Section, 3.2, highlights trends in borrowings across enterprises in the sample with a focus on loan use and satisfaction.

Section 3.3 provides an overview of the respondents' asset profile including fixed and financial assets.

Section 3.4 discusses the access and adoption of various digital financial services across cities and business categories.



The 547 enterprises sampled in the primary survey were micro-merchants (abbreviated to MM in the report) from Kanpur, Jaipur, Indore, Nagpur and Surat. A majority of enterprises across these cities were garment shops (18.10%), medical stores (16.64%) and kirana stores (12.25%). The business composition in the primary data collection as represented in Table 1 is representative of the markets visited in these cities.

A small sub-set of enterprise owners (5.85%) also has a secondary business that is located at a separate premise than their primary business. The most common secondary businesses that micro-merchants in this sample report are small kirana shop or provision of top-up/mobile recharge facility. The survey also collected data on nature of business ownership; sole proprietorship refers to an individually run business where the profits are accrued to a sole owner, household ownership refers to members of the household running a business together but with no fixed split of profits and investments in capital, and a partnership refers to multiple owners taking a fixed share of profits and contributing a proportion to the investments in capital and assets. Across all five cities, most enterprises are run as sole proprietorships with household ownership being common in Kanpur (32.58%) and Indore (25.86%).

Merchants sampled in Surat, mainly garment shops (29.51%), medical stores (13.93%) and building and fitting stores (12.30%) tend to have a higher number of employees (3.42 on average) than enterprises in other cities. 96.10% of the micro-merchants surveyed rely primarily on their business savings for running

Table 1: Sample composition for survey of micro-merchants

	All	Kanpur	Jaipur	Indore	Nagpur	Surat
Number of surveyed enterprises	547	100	100	120	105	122
Primary Business (%)						
Garments	18%	14%	20%	19%	6%	30%
Medical Stores	17%	24%	21%	16%	10%	14%
Kirana Stores	12%	14%	15%	21%	9%	3%
Food and Beverage Outlets	12%	9%	18%	16%	8%	10%
Consumer electronics	9%	12%	10%	9%	7%	9%
Mobile phone and accessories	6%	5%	4%	3%	10%	10%
Automobile accessories and spare parts	6%	8%	0%	8%	8%	6%
Building and fittings	5%	0%	1%	3%	10%	12%
Mens salons/barbers	5%	4%	7%	3%	10%	2%
Beauty parlours	3%	6%	0%	2%	10%	0%
Watches and accessories	3%	4%	4%	0%	8%	1%
Private cabs	2%	0%	0%	1%	7%	4%
Secondary Business (%)	6%	1%	2%	21%	2%	2%

their day-to-day business activities; only 4% rely on borrowings from formal and informal institutions for this. This reinvestment of income in business is a major factor in long-run sustainability and profitability of business activities.

Along with city-level variation in number of employees, business size (as measured by employee count) also differs across business categories. In terms of business categories, food and beverage outlets, building and fittings stores, consumer electronic stores and garment shops tend to have a higher than average number of employees in this sample.

Reinvestment of business savings and income is uniformly high across all cities and business types (Table 2). However, there are some interesting results (Figure 1) in reliance on borrowing for food and beverage outlets (3.03%) and automobile shops (3.13%) that indicate reliance on informal credit; such as credit from money-lenders, other shop-keepers, friends and relatives; for running daily business activities. Medical shops (4.40%), automobile shops (9.38%) and beauty parlours (5.88%) report reliance on formal credit; such as credit from nationalized, private or cooperative banks or non-banking financial institutions and microfinance institutions for funding their daily business activities.

Enterprises in this sample report average monthly sales of Rs. 91,200 (for the time period May-June 2017) and average costs of Rs. 48,982. Consistent with the larger business size indicated through number of employees, enterprises

in Surat also report significantly higher sales and costs across this time period. Enterprises in Kanpur, mainly medical shops (24% of sample), garment shops (14%) and kirana stores (14%) report the lowest sales and costs in the survey time period. However, it is interesting to note, enterprises in Kanpur are the most likely to report expansion in business size over the past one-year, closely followed by enterprises in Surat (Table 3).

Table 2: Characteristics of Businesses

	All	Kanpur	Jaipur	Indore	Nagpur	Surat
Nature of business ownership (% MMs)						
Sole proprietorship	83%	65%	99%	64%	94%	90%
Owned by household	13%	33%	1%	26%	6%	4%
Partnership	4%	2%	0%	10%	0%	6%
Number of employees (mean)						
	2.83	2.55	2.89	2.73	2.5	3.42
Funding for day-to-day activities						
Business income and savings	96%	100%	100%	91%	90%	99%
Formal borrowings	3%	0%	0%	6%	8%	0%
Informal borrowings	1%	0%	0%	3%	2%	1%

There is also significant variation in monthly business sales and costs across business categories in the sample. Mobile phone shops along with building and fitting shops report the highest monthly sales, followed by private taxi companies and garment shops. The trends are similar for the monthly costs; mobile phone shops and private cabs report highest monthly costs followed by building and fitting shops. The drivers for sales differ across cities and business types, whereas, the drivers of costs are largely homogenous.

Besides sale of goods, the main drivers of sales income over the previous month are receipts from mobile top ups, photocopy, courier and STD facilities, followed by sale of prepared food and drinks for employees and provision of agent services such as customer service points, banking correspondent, and brokerage. Secondary income from receipts of mobile top ups, photocopy, courier services is predominantly in Indore and Surat for consumer electronics shops. Similarly, receipts from sale of prepared foods are more prevalent in Indore and Surat for building and fittings shops as well as consumer electronic stores. Receipts from provision of agent services are predominantly in micro-merchants in Nagpur across all business categories.

The main drivers of costs for businesses in the sample are water, electricity, wages and fuel. Secondary drivers of costs are cleaning and premise maintenance, packaging and stationary, and business communication expenses. These are uniformly applicable across cities and business types.

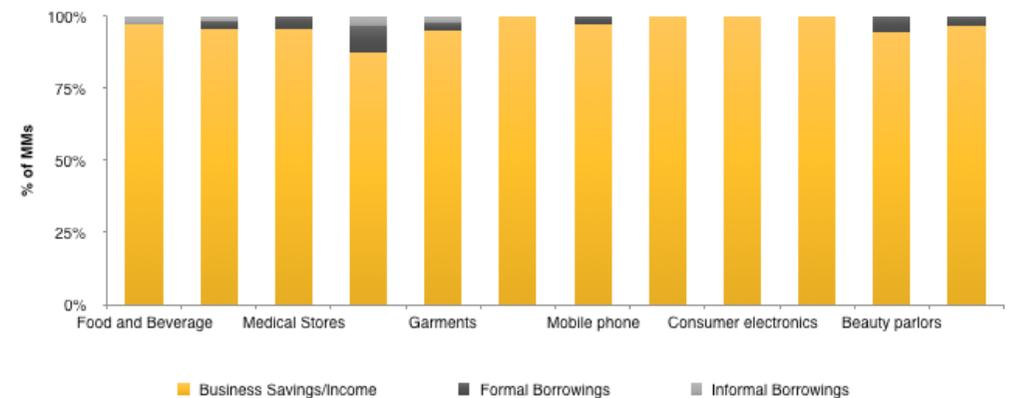


Figure 1. Source of Funding for Daily Business Activities

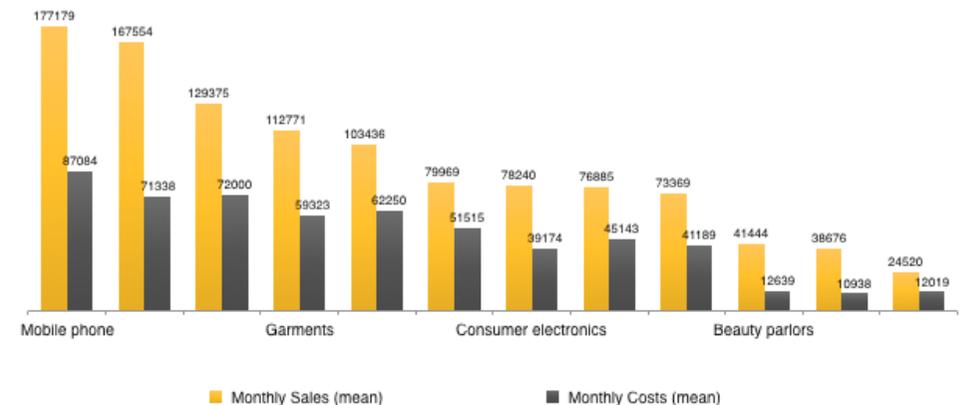


Figure 2. Monthly Sales and Costs by Business Type

Based on the above reported estimates, enterprises were further asked to provide subjective perceptions of business growth over the past one-year with respect to level of sales, profitability as well as employee size, investment in capital and purchase of assets. Whilst Table 3 highlights city-wise business growth, Figure 3 highlights the business growth experienced by different business categories. In line with the recent growth of private cab services such as Uber, Ola and Meru, highest proportion of private taxi providers in the sample reported expansion in the previous one-year. Shops selling watches reported highest levels of contraction in business size; these are mainly present in Nagpur, followed by few in Kanpur and Jaipur (Table 1).

Enterprises in this sample also reported a high level of seasonality in revenues and costs; high revenue and high costs were reported in months of festivals and marriages, and lowest revenue and costs reported in months of monsoon and winter. As businesses largely depend on their own business savings and income streams for financing the business, low business growth can be expected in low revenue and low cost months.

This highlights scope for provisions of flexible credit contracts that account for this seasonality in cash flows. Additionally, 23.92% of the sample report being unfamiliar with making a budget; this suggests there is a need for training on resource allocation across business activities keeping in mind the associated risks and volatility of cash flows.

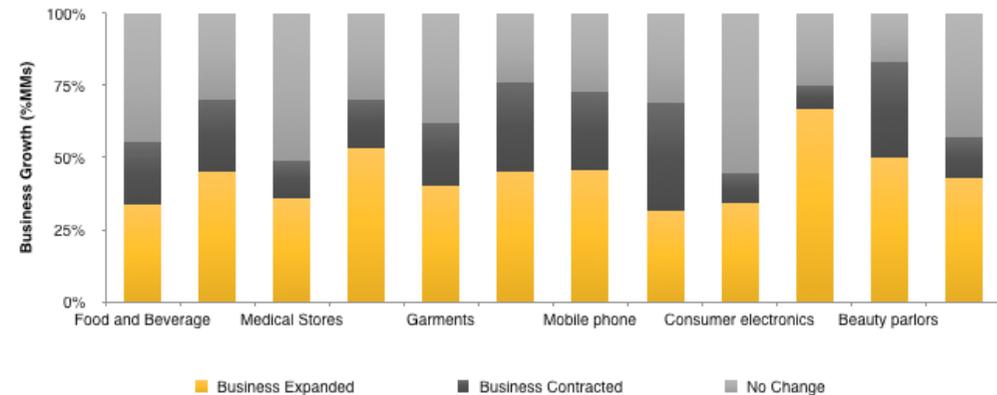


Figure 3. Business Growth

Table 3: Cash Flows and Profitability

	All	Kanpur	Jaipur	Indore	Nagpur	Surat
Business Cash Flows (Mean INR (USD¹))						
Sales in last 30 days	91,200 (1420)	14,494 (226)	37,117 (578)	42,588 (663)	106,941 (1666)	228,939 (3566)
Costs in last 30 days	48,982 (763)	5,628 (88)	23,275 (363)	55,202 (860)	15,096 (235)	132,904 (2071)
Profitable (%MMs)	82%	100%	100%	98%	100%	13%
Business Expanded in past year (%MMs)	39%	74%	7%	38%	23%	51%

Key Takeaways

- ▶ Most businesses report being profitable: costs are driven by water, electricity, wages and fuel, and revenue is driven by goods sold as well as additional on-site features such as mobile top-ups, photocopy, and sale of prepared food.
- ▶ Reinvestment is the key tool for ensuring long-run sustainability; nearly all merchants rely on daily income and daily savings to fund their business activities. However, they also experience high volatility of cash inflows and subjective estimates of year on year expansion are low.
- ▶ One in four merchants don't make a regular budget; there is scope for training to deal with volatile cash flows and putting contingency measures in place.

3.2.1 Previous Borrowings

Of the enterprise owners who reported having borrowed for the enterprise at least once since establishment, there is a significant reliance on both formal and informal lending sources. 33.92% of borrowers who reported borrowing at least once in the past, borrowed from formal lending institutions, whereas, 22.81% borrowed from informal lending institutions. 18.71% borrowed from private banks with a relatively lower percentage from cooperative banks (7.02%), nationalized banks (4.02%), and non-banking financial institutions (NBFCs) and microfinance institutions (4.02%). Borrowers reported visiting the lender an average of six times in the case of formal lenders and an average of two times in the case of informal lenders. Additionally, 53.45% borrowers found the loan application and disbursement procedures at formal institutions easy to manage, whereas, 71.05% found the informal procedures easy. This difference in ease of disbursement reflects one of the main barriers for micro-merchants in accessing credit from the formal financial sector.

At least one previous borrowing was reported across all business categories in the sample. Interestingly, food and beverage outlets, consumer electronics and automobile shops reported equal or higher borrowing from informal credit sources. Informal lending is characterised by high rates of interest that can adversely affect business performance in the long run. Figure 6 (in 3.2.2) reports a slight shift in borrowings from informal to formal borrowing channels in terms of current borrowings. However, as the push for financial

Table 4: Previous Borrowing History

	All	Kanpur	Jaipur	Indore	Nagpur	Surat
Previous Borrowings (%MMs)	38%*	-	-	56%	19%	25%
Formal credit	58%	-	-	45%	65%	83%
Informal credit	36%	-	-	47%	35%	13%
Both formal and informal	5%	-	-	8%	0%	4%

* Though 172 businesses reported having taken a loan in the past, 81 of these preferred not to share details on type of lending institution and have therefore been left out of the analysis in Table 4.

inclusion continues and access to banking increases, it is imperative to design measures of awareness and training as well as targeted credit products that could better suit the needs of such enterprises and help them access formal lending channels.

The survey also inquired on the end use of loan funds. Encouragingly, a large majority of borrowers reported direct use of funds for both capital and working capital needs attached to their business – in fact, over 90% of enterprises reported at least one business-related use. Figure 5 reports the percentage of enterprises that reported using loan funds primarily for that purpose; 49.41% of enterprises reported using loan funds primarily to start a new business, followed by 29.17% that reported using loan funds primarily for acquiring business assets. However, there is some diversion of loan funds toward non-business

uses, most commonly, other primary uses reported are to finance purchase of household assets (4.17% of enterprises) and consumption smoothing (another 4.17%).

Out of the 172 enterprises that reported having borrowed at least once, 8.14% reported missing an installment or making a repayment late. This was usually met with a public announcement of the delay from the lender as well as repossession of collateral and imposition of penalties. In cases of borrowing from MFIs, the group paid on behalf of the defaulter. The most commonly cited reason for late payment is lack of cash in-flow at the beginning of the month due to low sales in the previous month. This highlights the need for greater flexibility in the credit options available to micro merchants.

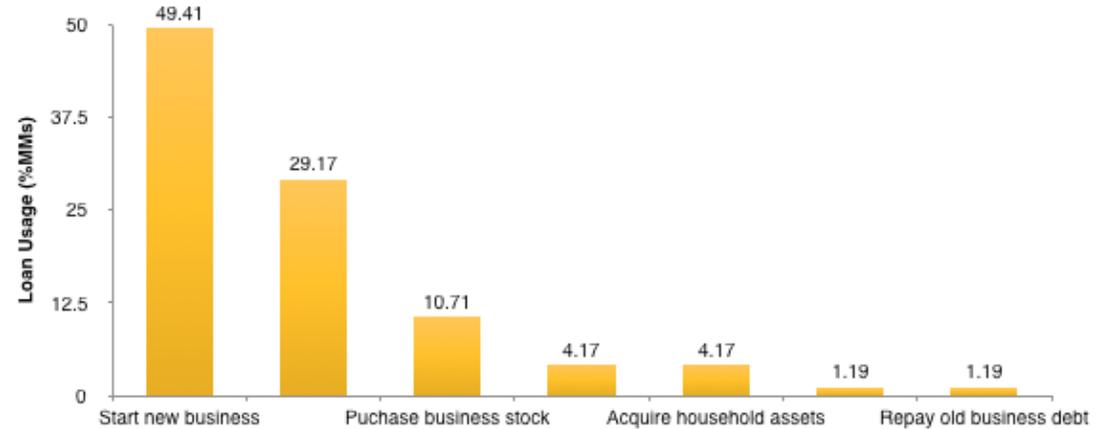


Figure 5. End Use of Loan Funds

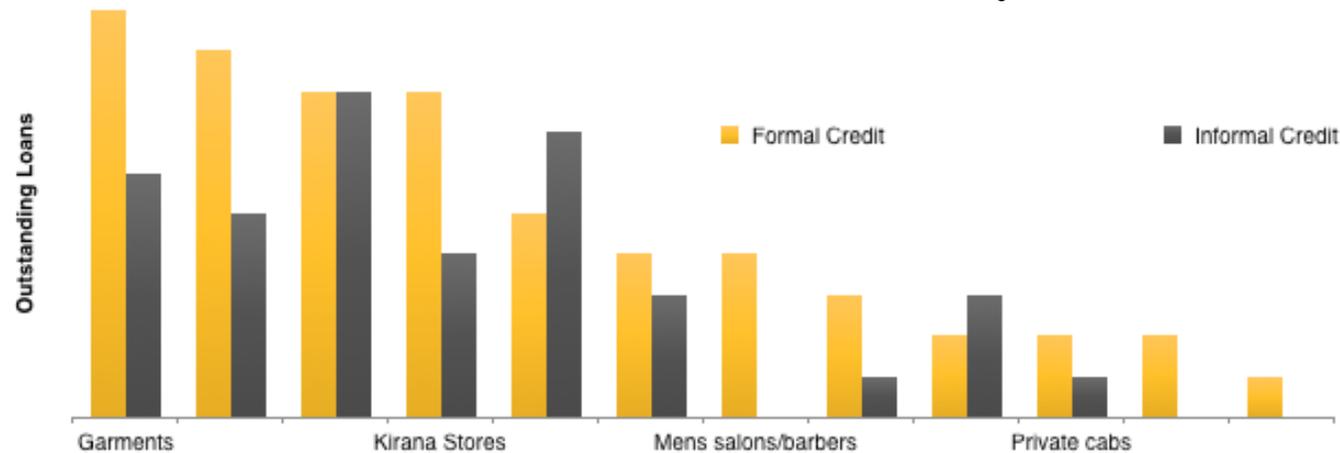


Figure 4. Type of Borrowing Institution

3.2.2 Current Borrowings

Across the five cities, 10.79% of the merchants surveyed have an outstanding loan, and less than 1% have more than one outstanding loan. In line with the findings highlighted above, a surprising percentage of merchants rely on informal borrowing (30.5%), mainly concentrated in Indore and Nagpur. Out of the formal lending channels, a large proportion of the sample banks with private banks (47.46%), and this is consistently high across the three cities of Indore, Nagpur and Surat. Penetration of nationalized banks in this segment seems relatively low. With the Government push for financial inclusion and access to banking through nationalized banks, this low level of dependence on nationalized banks needs to be studied further.

Although a comparison of Figure 4 and Figure 6 suggests a slight shift from informal to formal lending channels for businesses that were previously dominantly borrowing from informal channels such as food and beverage outlets, consumer electronics and automobile shops, the reliance on informal lending channels is still relatively high. 23.82% of the merchants surveyed report that they are unable to expand their businesses as they lack access to credit. This further substantiates the need for increasing awareness regarding formal banking channels. Challenges such as long disbursal times, lengthy documentation procedures and multiple visits to the branch need to be addressed in a timely manner to enable a swifter transition to formal banking. Additionally, recent partnerships between technology service providers and last

Table 5: Current Borrowing Profile

	All	Kanpur	Jaipur	Indore	Nagpur	Surat
Current Borrowings (%MMs)	11%	-	-	46%	29%	25%
Private bank	47%	-	-	41%	35%	73%
Nationalized bank	8%	-	-	4%	6%	20%
Cooperative bank	10%	-	-	11%	18%	0%
NBFC-MFI	2%	-	-	0%	6%	0%
SHG	2%	-	-	0%	6%	0%
Friends or family	12%	-	-	4%	29%	7%
Other shopkeeper	19%	-	-	41%	0%	0%

mile financial institutions such as Microfinance institutions and Non-Banking Financial institutions should be capitalized upon to offer targeted credit for micro-merchants as well as facilitate the on-boarding of merchants onto digital platforms.

Similar to the findings in 3.2.1, 93.21% of merchants used their current outstanding loan for productive purposes. Enterprises were again asked to report their primary use of loan funds for the outstanding borrowing. As highlighted in Figure 7, there is low level of allocation of funds primarily into household purposes such as consumption smoothing and acquiring household assets. 38.98% of enterprises reported using loan funds primarily for starting

a new business, followed by 32.20% to acquire business assets. However, 3.40% reported using the loan funds primarily for consumption smoothing and a further 3.40% primarily for purchasing of household assets. Whilst it is not possible for lenders to exercise control over the end use of loan funds, these estimates are helpful to understand the extent to which funds disbursed are deployed in productive enterprise activity and the likely scale of economic benefits that might ensue.

Whilst a high number of micro merchants, 37.21%, were asked on the value of their assets during the loan assessment procedures, a further 50.85% were asked to produce some form of collateral verification (not necessarily pledged as collateral). It is unclear whether verification includes business and personal assets, however, higher proportion of customers of formal lenders report interest in collateral than those borrowing from informal lenders. Overall, 53% of borrowers were dissatisfied with their lending institution (whether formal or informal); one in every two borrowers reported that they were unlikely to borrow again from their current lender. Whilst more formal borrowers are not fully satisfied with their current lender as compared to borrowers of informal sources, a higher number of micro merchants who borrowed from informal sources indicate they would not borrow from their current lender again. Formal borrowers were mainly dissatisfied with the multiple visits they need to bank to a bank branch as well as the lengthy time period between application and disbursement. Furthermore, merchants reportedly spent 30 minutes on average per journey to the nearest branch of the lending institution.

Table 6: Lending Process and Customer Satisfaction

	All	Formal lender	Informal lender
Collateral verification requested (%)	51%	54%	44%
Guarantor (%)	61%	73%	33%
Not fully satisfied with lender	53%	63%	28%
Unlikely to borrow again from current lender	54%	46%	67%

As financial inclusion assumes that once borrowers are formally banked, they will remain so and the benefits of being formally banked would accrue over time, this finding is quite positive. However, if due to low customer satisfaction borrowers do not remain formally banked, the long-term benefits of financial inclusion might not be fully realized.

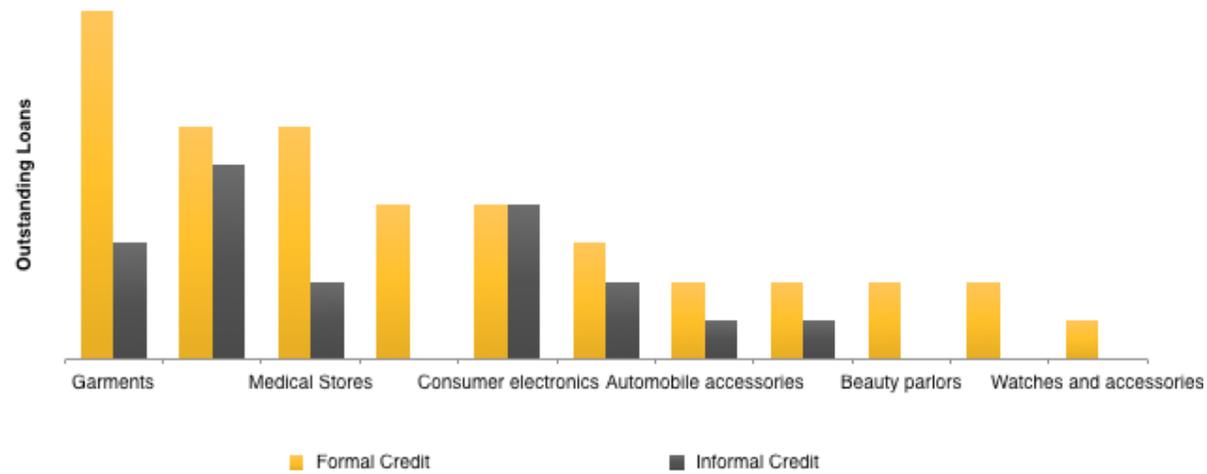


Figure 6. Type of Borrowing Institution

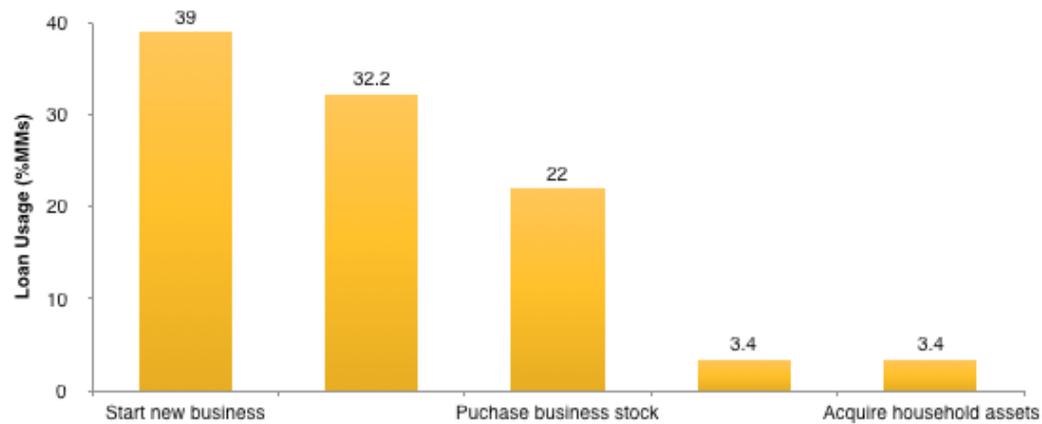


Figure 7. End Use of Loan Funds

Key Takeaways

- ▶ One in four merchants report low expansion due to lack of targeted credit that meets their requirements.
- ▶ Two in three merchants are not happy with their formal lending institution; this has implications for the assumptions of financial inclusion that once formally banked, individuals remain formally banked.
- ▶ Few business categories such as food and beverage, and consumer electronics still rely heavily on informal sources for credit; other merchants such as automobile shops have moved away from informal to formal sources.
- ▶ Around 10% have outstanding loans currently, and about 7% of merchants report using these loans for household purposes.

To further understand the profile of micro merchants across these five cities, the survey administered also collected information on the ownership of various physical and financial assets that merchants use for their businesses. In terms of ownership of physical assets, there is considerable variation across the five surveyed cities. Over 90% of businesses reported ownership of a motorcycle/scooter for business use and few businesses across the sample rely on bicycles. The penetration of four wheelers is still quite low among businesses in Jaipur, Nagpur and Indore, whilst Surat (63%) reported a significantly higher ownership of cars/trucks/bus for business purposes. The spread of businesses in Surat is largely similar to those in other cities (Table 1), however, there are a higher number of building and fittings (12.30%) businesses in Surat as compared to other cities. This potentially ties in with the use of four wheelers for transportation, as building and fittings materials are larger and more cumbersome to transport.

Ownership of fixed assets such as furniture and machinery is similar across cities; however, there is variation across the business categories owing to the nature of their services. Businesses that require more intensive use of fixed assets such as beauty parlours, watches, mobile phone and automobile accessories shops, report higher ownership of these assets. In terms of the nature of ownership of these assets, 93.24% of assets are purchased whilst the remaining assets are inherited or purchased on rent. Ownership of land for business use varies across the five cities with Nagpur (56%) and Surat (40%) having a distinctly higher proportion of merchants owning land. This

Table 7: Physical Asset Ownership (% of MMs)

	Kanpur	Jaipur	Indore	Nagpur	Surat
Motorcycle/ Scooter	93%	97%	60%	89%	97%
Bicycle	16%	13%	18%	6%	10%
Car/ Truck/ Bus	38%	6%	12%	20%	63%
Furniture	93%	77%	53%	85%	49%
Machinery/ Equipment	46%	1%	48%	46%	19%
Smaller Tools	18%	0%	18%	7%	20%
Land for Business	9%	28%	22%	56%	40%

is interesting as though the nature of markets surveyed across the cities is similar, there seems to be a trend toward more permanent holdings in Nagpur and Surat, whereas, a higher reliance on rented land in Kanpur, Jaipur and Indore.

As previously mentioned in Section 3.2, a majority of micro merchants were asked to produce some form of collateral verification, however, the assets were not necessarily pledged as collateral. In this section, we collected data on whether any of the physical assets were pledged as collateral for a borrowing. Across the five cities, 11.52% of businesses have pledged at least one or more assets as collateral against an outstanding borrowing.

The landscape of financial asset ownership for business use within this micro merchant sample highlights low diversification across asset type. Most

businesses have taken up traditional banking products such as current account, savings accounts and deposits (fixed deposits, recurring deposits and term deposits) through which they conduct their business transactions. Take up of insurance significantly differs across cities, with enterprises in Kanpur (58%) and Surat (44%) reporting above sample average take-up of life or health insurance. Asset insurance remains low across the five cities; however, Surat (37%) again seems to be a more developed market for financial products. Variation of financial asset ownership across business type is relatively uniform is presented in Figure 9.

With the exception of Surat (87%), credit card ownership for business purposes is extremely low reflecting a huge potential for expansion of this product among micro merchants. In terms of the types of business, buildings and fittings, mobile phone accessories, private cabs and garments have a higher ownership of credit cards while men's salons and beauty parlours do not make use of this product across cities (Figure 9). Mutual funds, pensions and other market based financial product have very low penetration across the cities and business types in this sample. Overall, enterprises reported fairly low access to financial products indicating a wide product gap even among active clients of formal financial institutions.

This also ties in with the insights in Section 3.2 on borrowings, which highlight heavy reliance on informal lending channels; the reliance on informal lending channels is not for lack of access to formal banking as indicated by the number

Table 8: Financial Assets Ownership (% of MMs)

	Kanpur	Jaipur	Indore	Nagpur	Surat
Current Account	90%	60%	52%	35%	85%
Savings Account	30%	71%	44%	79%	75%
Deposits	48%	8%	20%	0%	27%
Insurance (Life + Health)	58%	0%	12%	4%	44%
Asset Insurance	0%	0%	10%	4%	37%
Credit Card	0%	8%	15%	3%	87%
Pension	0%	0%	8%	0%	2%
Mutual Funds	0%	0%	5%	0%	10%

of savings account and current account customers, but more due to lack of awareness, targeted credit products, and challenges faced in transacting with formal institutions. Customer awareness and product targeting have scope for increasing access in these locations.

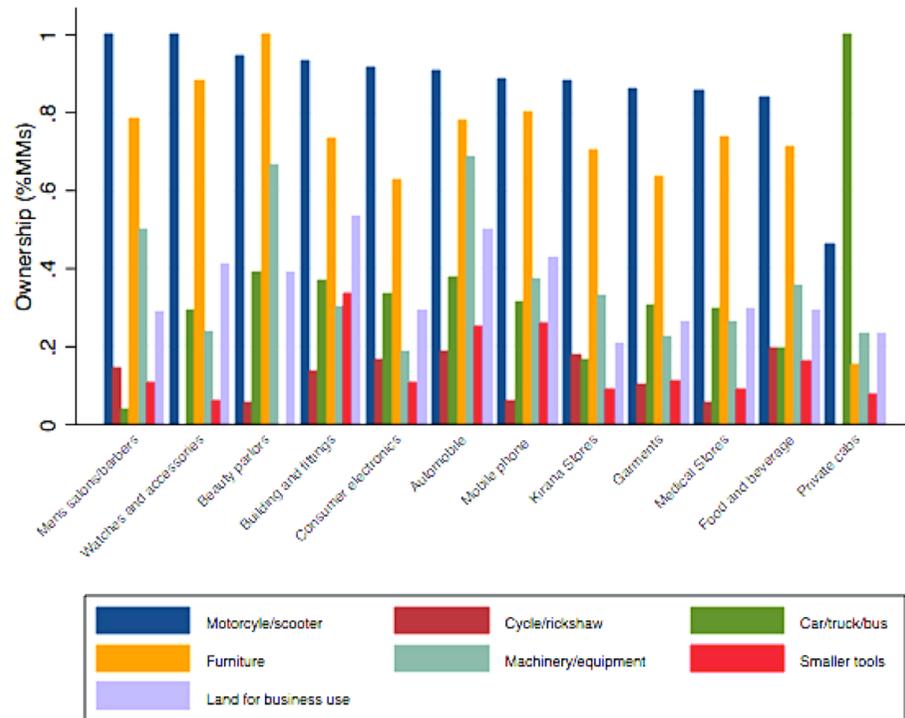


Figure 8: Ownership of Physical Assets

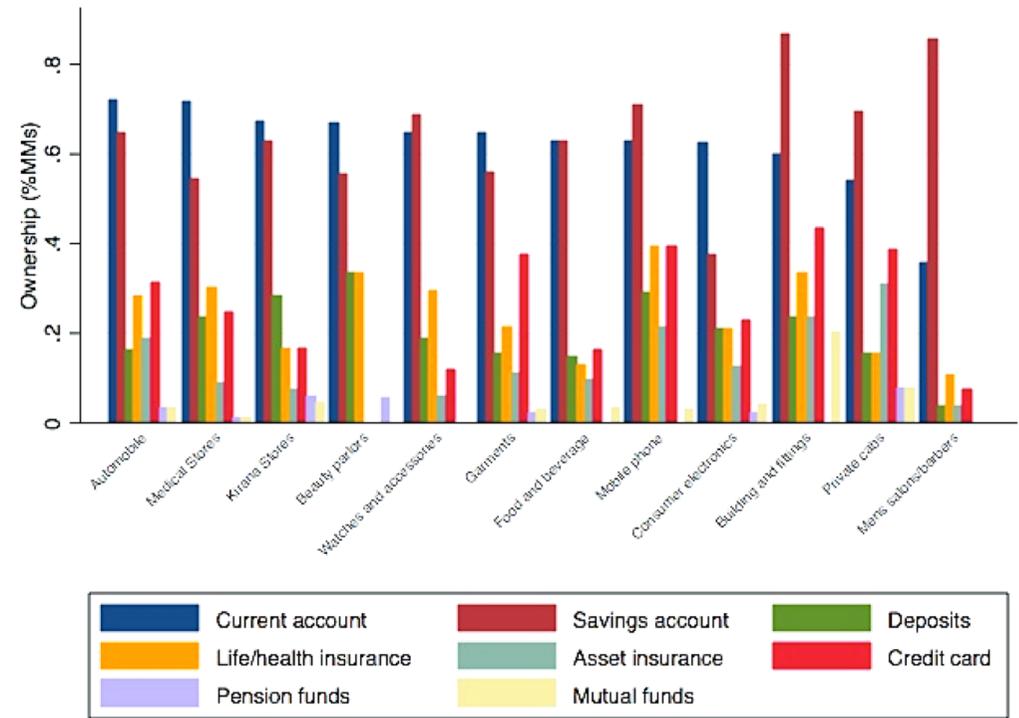


Figure 9: Ownership of Financial Assets

Key Takeaways

- ▶ Kanpur and Surat have a much higher penetration of current accounts, whereas, merchants in Jaipur and Nagpur mostly have savings accounts.
- ▶ Deposits and insurance peak in Kanpur and Surat, but other cities have low up-take of these financial products. Credit card usage is exceptionally high in Surat.
- ▶ Access to traditional financial products is high and the question remains whether access to financial assets translates to their regular use.

Given the recent push toward adoption of digital financial products by the Government and service providers, a section of the survey focused on understanding the access, awareness and usage of different types of digital products among the sample.

3.4.1 Digital Infrastructure

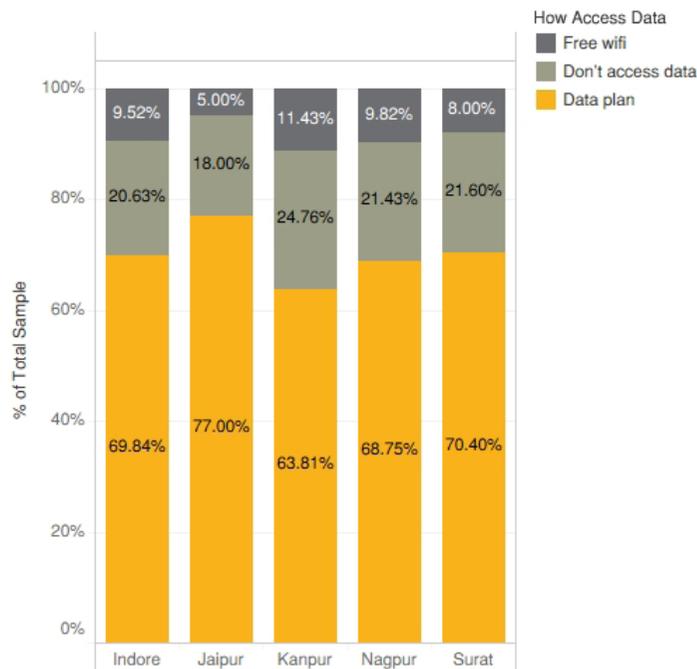


Figure 10: Usage of Data

Table 9: Access to Digital Infrastructure (% of MMs)

	Kanpur	Jaipur	Indore	Nagpur	Surat
Active Mobile Connection	96%	92%	97%	98%	94%
Smart-phone Users	76%	84%	82%	80%	83%
Access Mobile Data	64%	77%	70%	69%	70%
Use for Financial Transactions	19%	28%	18%	21%	27%

Access to data networks is a crucial link to enable digital transactions. Increased network connectivity and competitive data tariff rates have significantly increased the affordability of data plans.

In terms of micro merchant profile in this sample, 95.43% reported an active mobile connection; this was consistent across cities. 81.04% merchants reported using a smart-phone, and the rest use a basic feature-phone. Kanpur reported a slightly lower proportion of smart-phone users at 75.51%. Overall, 21.30% of the sample does not access Internet data services on their phone; 69.89% access data through mobile data and 8.80% rely on free WiFi services. The city-wise variation in usage of data is highlighted in Figure 10.

Merchants tend to use their phones largely for phone calls (95.09%) and low share of 22.49% regularly use their mobile phones for financial transactions of any sort. This represents a large market gap in adoption of digital financial services (Figure 11). There is also a large variation in the types of business

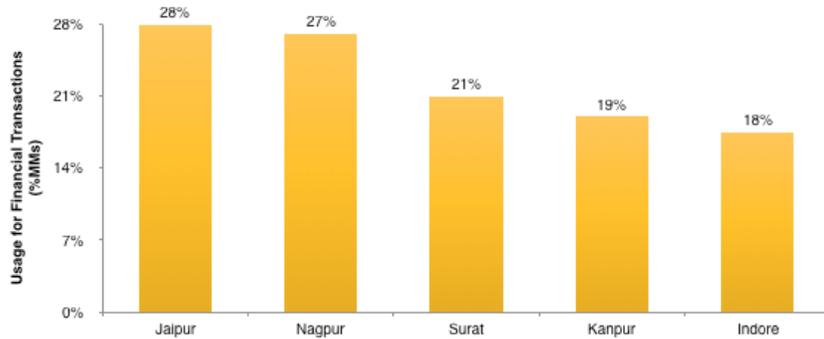


Figure 11: Mobile Phone Usage for Financial Transactions

that use their mobile phones for financial transactions; building and fittings and private cabs tend to use this the most and medical stores, consumer electronic stores, beauty parlours and salons the least. Although this pattern is understandable, it emphasizes the need to further understand the requirements of different business segments with respect to encourage usage.

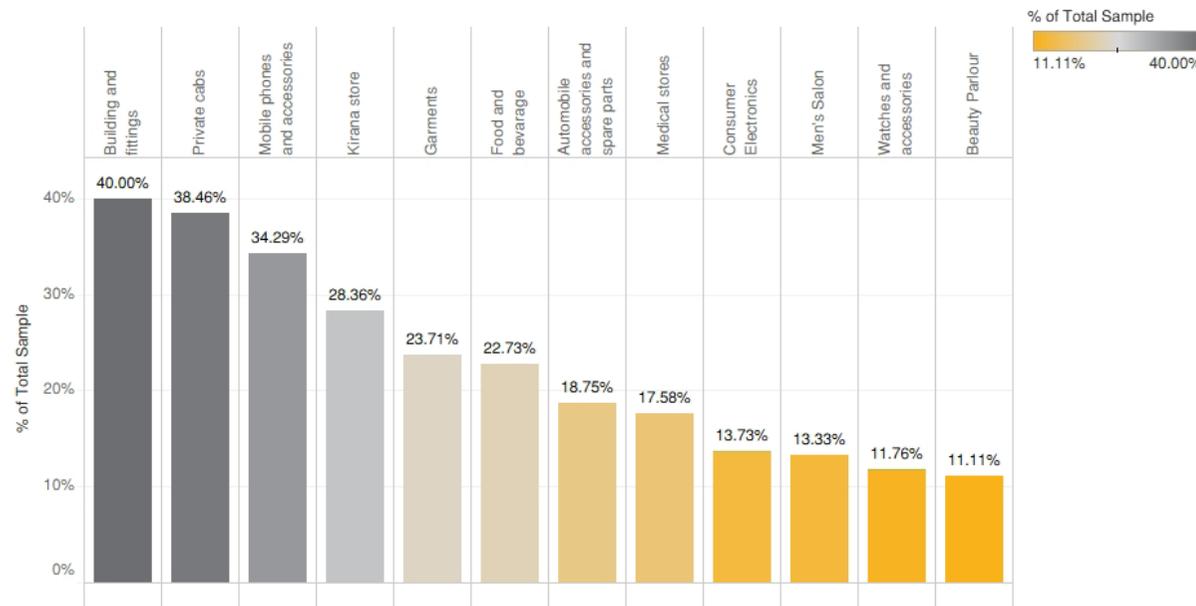


Figure 12: Mobile Phone Usage for Financial Transactions

3.4.2 Awareness

In line with Table 8, across the five cities, awareness was highest for conventional banking products that are considered highly liquid and alternatives to cash such as saving accounts (70.57%), current account (64.53%) and ATM/Debit card (72.58%). One in two micro merchants are not aware of mobile banking and net banking facilities that could potentially lead to efficiency and productivity gains. A detailed city wise breakdown on awareness of different products can be found in Appendix A.

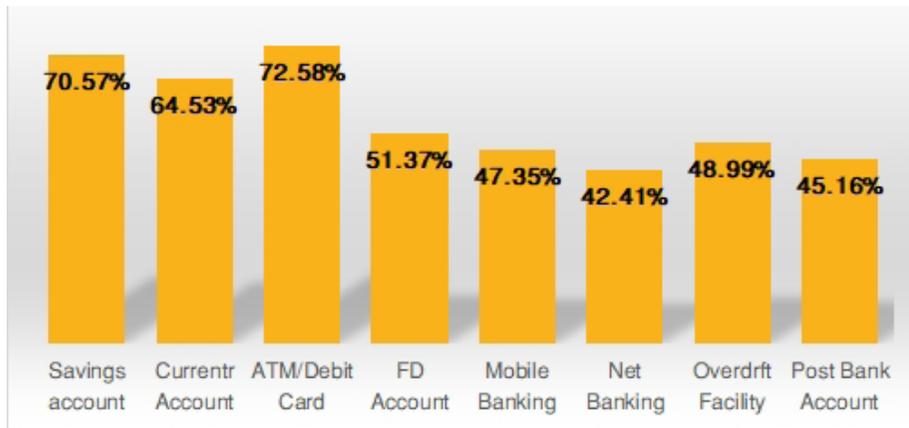


Figure 13: Awareness of Products

Table 10: Awareness of Digital Platforms (% of MMs)

	All	Kanpur	Jaipur	Indore	Nagpur	Surat
Savings Account	71%	65%	74%	78%	67%	69%
Current Account	65%	60%	69%	68%	66%	61%
ATM/Debit Card	73%	69%	77%	77%	68%	74%
Fixed Deposit	51%	44%	55%	53%	49%	55%
Mobile Banking	47%	41%	44%	52%	45%	53%
Net Banking	42%	33%	44%	48%	39%	47%
Overdraft	49%	39%	49%	54%	49%	52%
Post Bank Account	45%	34%	50%	46%	44%	51%

3.4.3 Usage

Additionally, awareness to financial products does not directly translate into active usage of these products by businesses (ref Table 8). ATM/debit card (39.12%), current account (38.03%) and savings account (31.99%) are the most commonly used products across the cities but this is much lower than the number of micro merchants with savings accounts and current accounts (Figure 14). It is interesting to note that there are no categories of products that indicate a higher percentage of 'used' as compared to 'using' or 'never used'. This clearly supports the hypothesis that the issues in take up lie in lack of technical know-how of how to use and not previous bad experiences with various products.

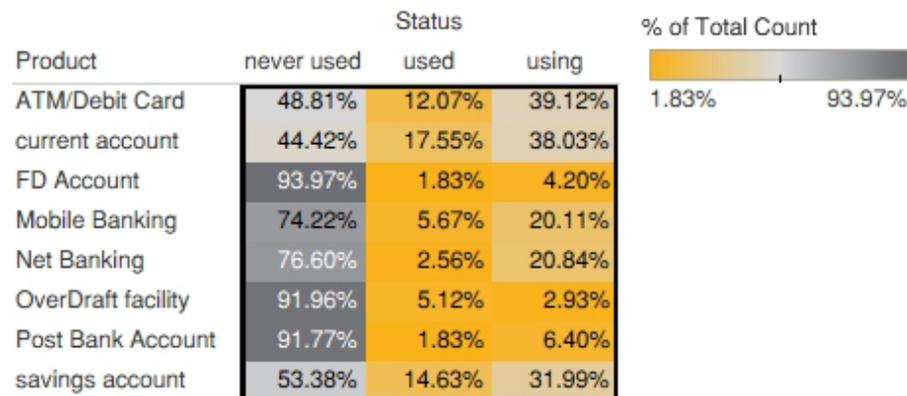


Figure 14: Usage of Products

Table 11: Usage of Digital Platforms (% of MMs)

	Kanpur	Jaipur	Indore	Nagpur	Surat
Savings Account	22%	35%	35%	32%	34%
Current Account	41%	35%	43%	35%	35%
ATM/Debit Card	36%	42%	36%	37%	44%
Fixed Deposit	3%	4%	2%	5%	7%
Mobile Banking	19%	22%	15%	19%	25%
Net Banking	19%	24%	19%	17%	25%
Overdraft	2%	1%	5%	5%	2%
Post Bank Account	6%	9%	4%	8%	6%

The low awareness of mobile banking and net banking is compounded by low usage amongst those aware as well. Of the merchants aware of these services, only 20.11% use mobile banking and 20.84% use Internet banking. There is quite a bit of variation in the business types that adopt mobile banking and Internet banking; a majority of the 20% or so is concentrated around garments, medical stores, food and beverage and kirana shops. A more detailed city wise overview of Figure 14 can be found in the Appendix A.

Whilst promoting a less-cash ecosystem for micro merchants, it is also equally important to concentrate on consumers and suppliers accepting digital payments and interacting with the merchants in a digital ecosystem. In terms of the modes of payment with customers, cash continues to be the preferred mode of transaction for 54.99% of businesses across the cities followed by

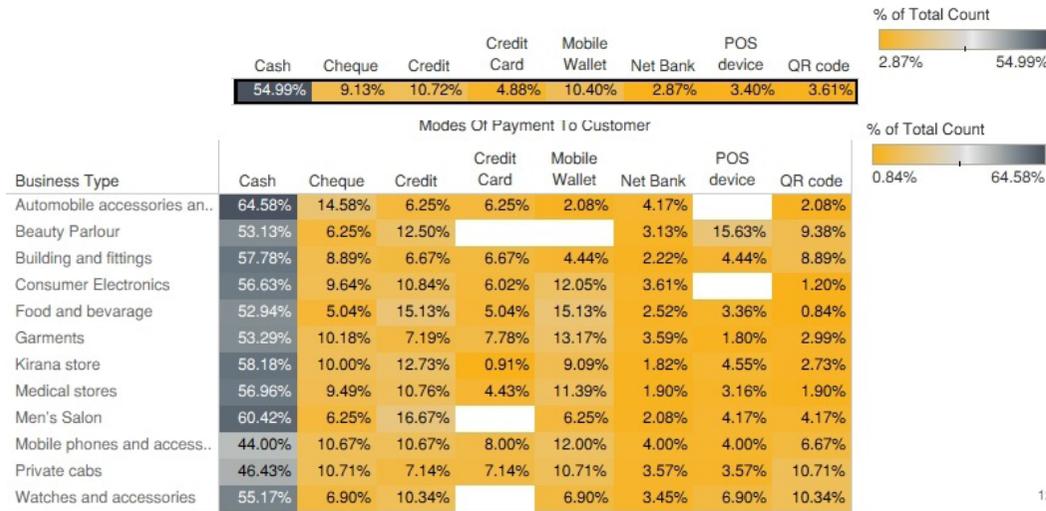


Figure 15: Interaction with Customers (Business Type)

credit (10.72%). Interestingly, mobile wallets have started to gain traction amongst micro merchants with 10.40% of enterprises using this mode of payment to transact with their customers.

With respect to suppliers, cash (43.66%) is still the most preferred mode of transaction across all business types. However, alternative modes of payment are also prevalent across cities with cheque (15.76%) and credit (16.96%) facilities being used in place of cash transactions. Net banking and POS devices are among the least used modes of payment with suppliers while POS devices are used more in transaction with customers.

With the increasing popularity of e-wallets as modes of transaction among micro merchants, the survey revealed that amongst the merchants that use e-wallets, the most common transactions were receiving payments (38.57%), making payments (34.19%) and payment of bills and utilities (11.33%) while only 4.75% of e-wallet users made loan repayments through these products. The emergence of Fintechs, along with recent tie-ups between mobile money platforms and non-banking financial institutions provide an ideal setting to explore how e-wallets can be leveraged to improve access to credit for micro merchants.

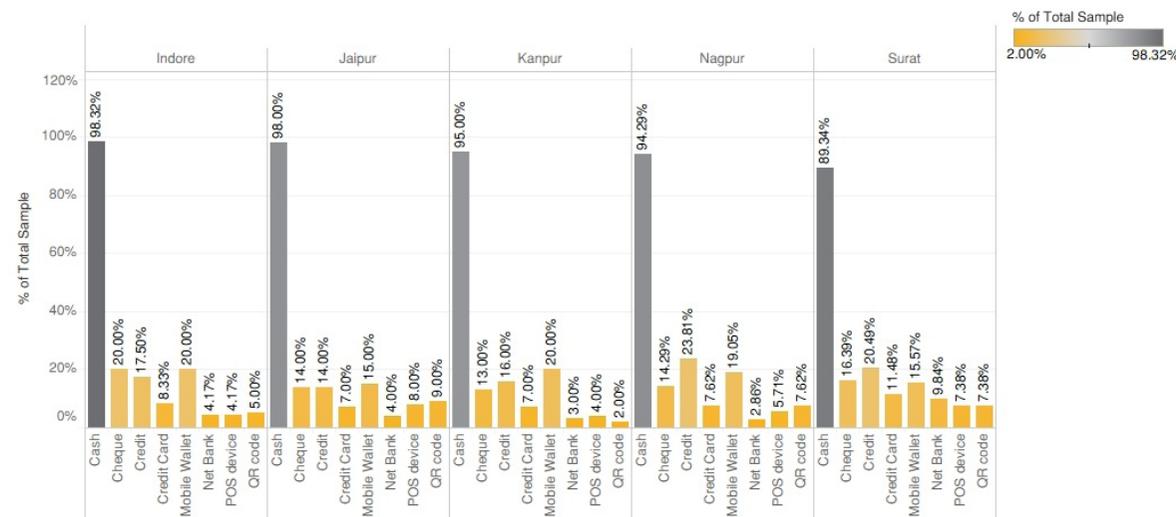


Figure 16: Interaction with Customers (City)

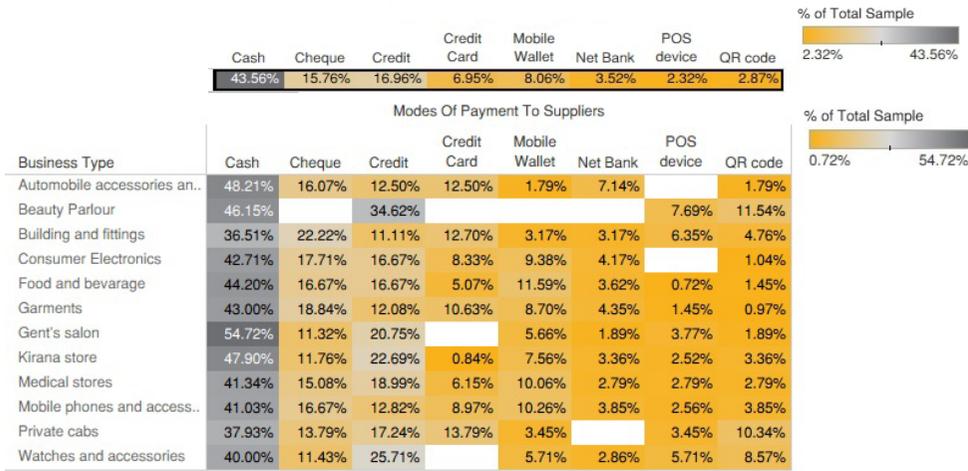


Figure 17: Interaction with Suppliers (Business Type)

Despite the high penetration of smartphones, access to data and awareness of certain products, adoption of digital financial products, specifically mobile banking, e-payments and digital financial transactions continues to be low. Amongst reasons for not using digital platforms, 32.88% of the merchants cited that they did not trust digital transactions, 22.52% believed that they would have to pay extra taxes by using these modes of payments, 22.07% did not know how to use any digital financial products and 20.72% feel there is a security threat to conduct financial transactions digitally. Overall, though micro merchants do fully participate in the formal banking system, cash is still used as the predominant mode of transaction across business types and geographies due to a lack of awareness of alternative financial products on offer.

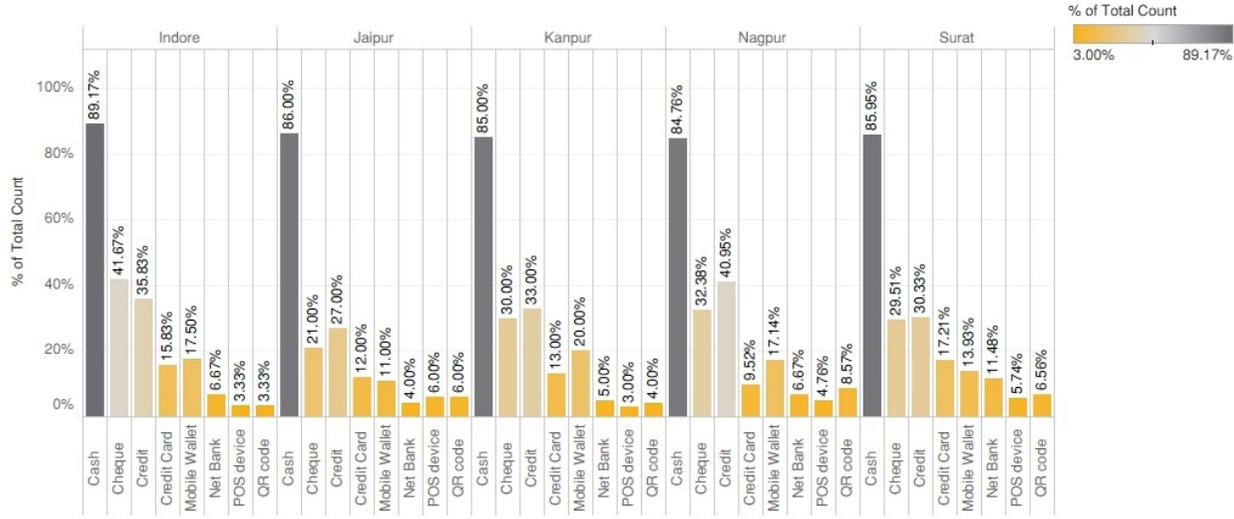


Figure 18: Interaction with Suppliers (City)

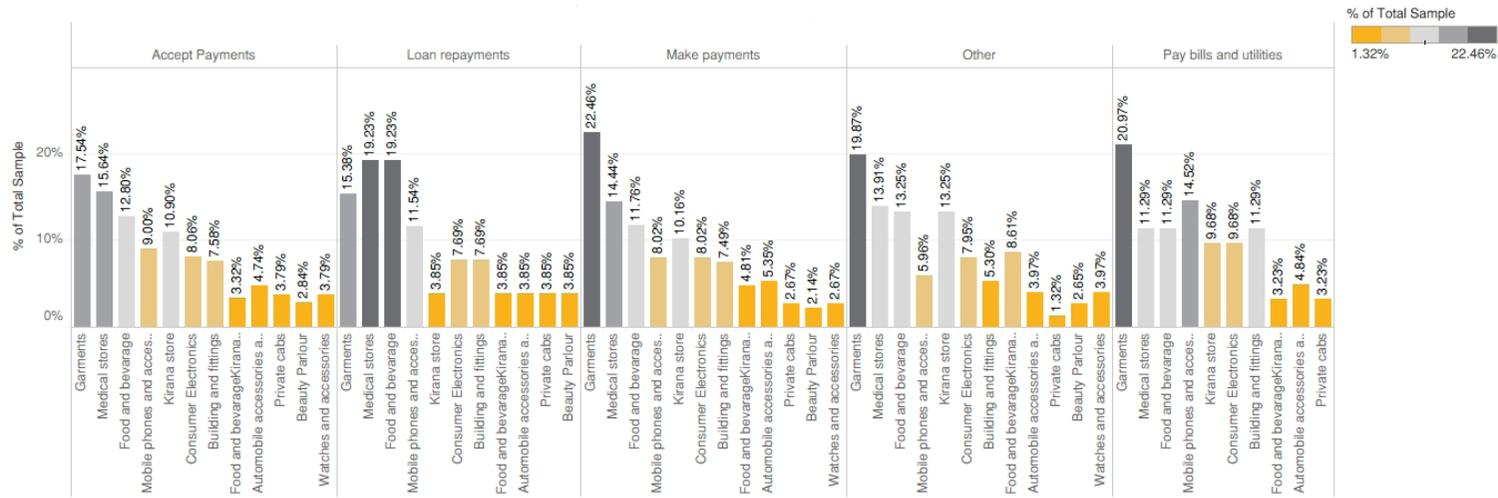


Figure 19: Usage of Digital Financial Products

Key Takeaways

- ▶ Awareness of traditional methods such as debit card and cheque is high, however, one in two merchants are not aware of Internet banking and mobile banking facilities.
- ▶ Awareness is further compounded with low usage of digital platforms across the five cities and twelve business categories.
- ▶ Around 22% of merchants use their mobile phones for financial transactions.
- ▶ Nearly half the merchants report using cash for interactions with suppliers and customers; there is a need to digitalize the entire merchant ecosystem.

The findings of this study reflect three broad themes; seasonality of cash flows and reinvestment of business income, low reliance on formal banking and low usage of digital financial services. Along these lines future research could explore the following questions:

- i) What is the scope for innovations in product design to address seasonality of cash flows?
- ii) How can partnerships in the digital ecosystem be capitalized on to meet the merchant requirements for credit?
- iii) Once large-scale awareness has been generated, how can it be harnessed to encourage regular usage of digital financial platforms be ensured?
- iv) What are the next steps needed to facilitate stickiness of digital platforms?
- v) How does the current policy framework aid the transition to digital platforms and what are the policy gaps that still need to be addressed?

Seasonality of cash flows: Micro-merchants face irregular cash flows that are dependent on seasonal fluctuations in demand and influenced by externalities such as weather and festivals. As most merchants rely on their daily earnings and savings to run business activities, the scope to manage and expand businesses is determined by the regularity of cash flows.

1. Product Design – Flexible credit: Given this, a flexible credit schedule might be a viable option to ease the burden on merchants.

In terms of product design, IFMR-LEAD has tested out some flexible repayment products that coincide with the seasonality of cash flows and productivity³. To this end, one on-going study offered individual loan customers a flexible repayment structure wherein repayment was relaxed during the peak season of business activities. Businesses were allowed to take two “holiday periods”; 3 consecutive months during the 24 month repayment period during which amount repaid is less than the regular instalment amounts. This novelty in design allows for seasonality of business activities and boosts the business growth and thereby capacity to repay.

2. Product Design – Non-traditional models: There have been a number of innovative non-traditional lending models that have come about in recent times (highlighted in Table 12) that aim to serve entrepreneurs better than the traditional models of credit.

³ <http://ifmrlead.org/a-study-on-repayment-flexibility-contract-choice-and-investment-decisions-among-indian-microfinance-borrowers/>

For the sample in this study, asset based lending and cash flow based lending could be viable options. IFMR-LEAD's research in this area has tested out designs intermediated lending for the individual loan product offered by microfinance institutions. In one study, researchers used behavioural economics insights to design a product that relies on a structured finance approach that used crop predictability as collateral, had a simplified payment collection structure and varying credit limits. The product was tested on sugar cane farmers; to meet consumption needs before harvest, farmers rely on informal loans from moneylenders and then spend most of their income from harvest on repaying the moneylender. With this product, farmers could borrow money through the mill at which they process their cane at harvest time. This intermediary approach ensures cheaper and ensured regular payment collection.

3. Training: 23.92% of the study sample report being unfamiliar with making a budget; this lends scope for training on allocation of funds and resources across budget activities. Training could additionally include rule of thumb information on planning for volatilities and contingency measures to deal with irregular cash flows.

Low reliance on formal banking: A large proportion of the merchants surveyed still rely on informal lending. This predominantly occurs due to lack of access to formal banking or lack of knowledge on how to operate bank accounts and

Table 12: Alternate models of financing

Low Risk/ Return	Low Risk/ Return	Medium Risk/ Return	High Risk/ Return
Asset-Based Finance	Alternative Debt	“Hybrid” Instruments	Equity Instruments
<ul style="list-style-type: none"> • Asset-based lending • Factoring • Purchase Order Finance • Warehouse Receipts • Leasing 	<ul style="list-style-type: none"> • Corporate Bonds • Securitised Debt • Covered Bonds • Private Placements • Crowdfunding (debt) 	<ul style="list-style-type: none"> • Subordinated Loans/ Bonds • Silent Participations • Participating Loans • Profit Participation Rights • Convertible Bonds • Bonds with Warrants • Mezzanine Finance 	<ul style="list-style-type: none"> • Private Equity • Venture Capital • Business Angels • Specialised Platforms for Public Listing of SMEs • Crowdfuning (equity)

Source: OECD (2013b)

other lending activities; Table 8 highlights high access to savings and current accounts and substantiates the second line of reasoning.

1. Literacy drives/training: Merchants reported being unhappy with the detailed and lengthy timeline for approval and disbursement of loans from formal lending institutions. The first step of provision of services has been met, and recent innovations in digital financial services such as linkages with Aadhaar could reduce waiting time. Such issues need to be duly addressed for customers need to be retained. However, the take-up in terms of usage of accounts is still low. Thus, there is a need to increase consumer knowledge of products available and relative pricing of various products by different institutions. This calls for a platform that can connect consumers to various lenders.

2. **Product design:** The findings also demonstrate a need for products that can adequately meet merchants' working capital requirements. Recent financial innovations such as those by Aye Finance offer cluster specific products; targeted products for manufacturing industries, service industries and trading industries. Additionally, merchant needs can be met through partnerships between financial and technological service providers to provide quick and short-term loans.

Low usage of digital financial services: Recent pushes on the supply side have ensured awareness of the digital platforms available. However, there is a large gap between awareness and usage that needs to be tackled as a next step. For micro-merchants, various levers need to be exercised to increase technical knowledge and adoption.

1. **Skilling:** Although awareness is high, user knowledge of various digital platforms remains low. As merchants are more adept with financial transactions and the involved processes, low-assistance on boarding is needed to familiarize them with digital platforms and show them the value in using these. These on boarding opportunities could take the form of audio and visual training, detailed FAQ's and tutorial sections on applications, and on boarding of the entire merchant ecosystem from suppliers to customers. Once on-boarded onto digital platforms, merchants can also act as a common services centre (CSC) to help build digital skills for customers as well.

2. **Product design – Partnerships:** Partnering of mobile money wallets and payment banks with NBFCs such as the partnership between Sonata and Oxigen wallets could lead to financial innovations that target the segment specific needs of such merchants.
3. **Product design – Policy implications:** As per the latest application of GST in India, the Government is also considering offering a 2% discount on GST paid on transactions less than INR 2000 (approx. USD 30), if the payment is made through a cashless method. Data suggests that a majority of the transactions for micro-merchants are less than INR 2000 and thus this rebate could potentially encourage creating a habit of cashless transactions within the ecosystem.

A NITI Aayog Interim report⁴ recommends the Government to consider an income tax rebate on incremental earning and sales tax rebate on incremental sales on transactions accepted through digital platforms. Additionally, to increase convenience for merchants, the report proposes integration of billing and tax filling in the common UPI and Aadhaar Pay application and a subsidy of 50% for biometric sensors to onboard merchants on to Aadhaar Pay.

Additionally, TRAI recommends encourage data usage in rural areas through the provision of free data of 100MB per month or to make digital transactions data packets free of cost.

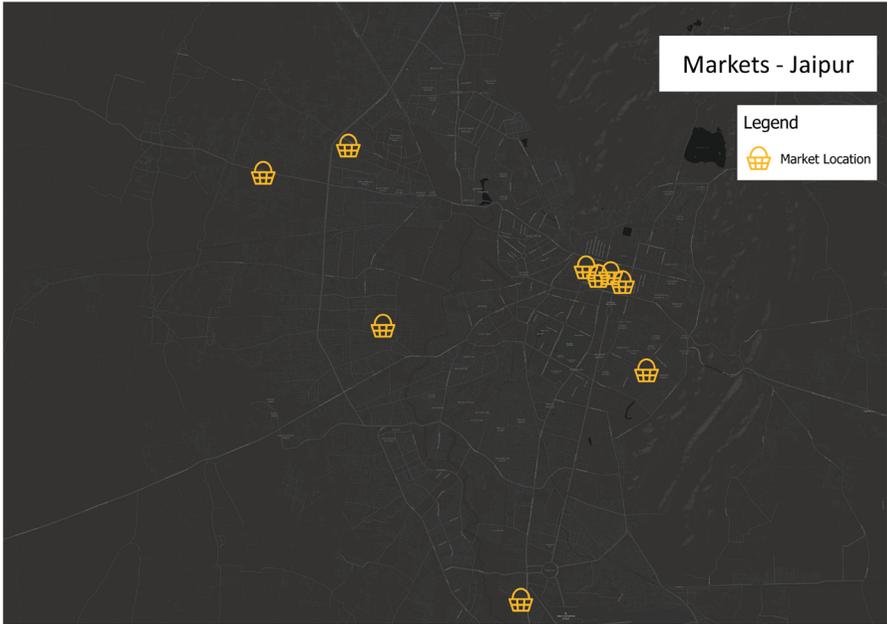
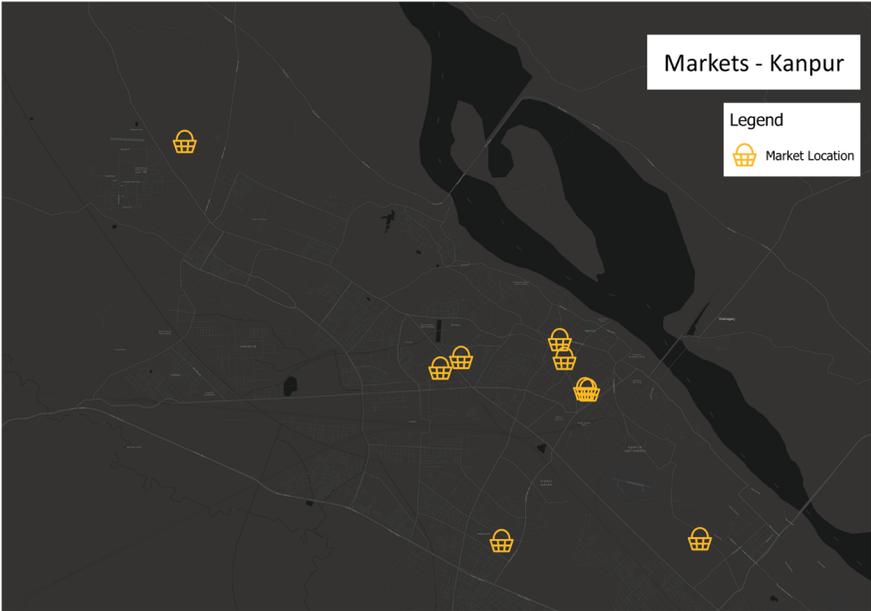
⁴ http://niti.gov.in/writereaddata/files/new_initiatives/Dig%20Report%20-%20Final.pdf

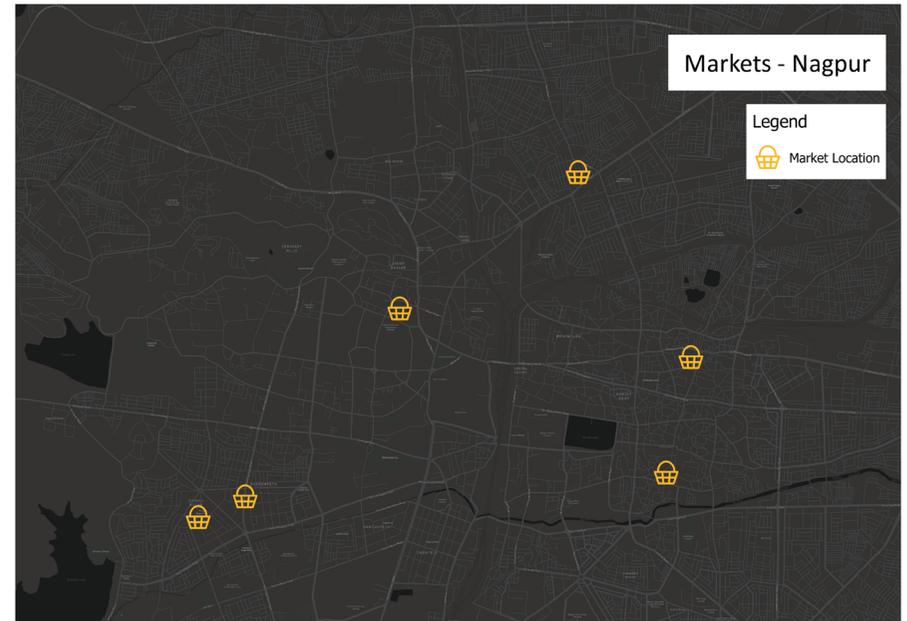
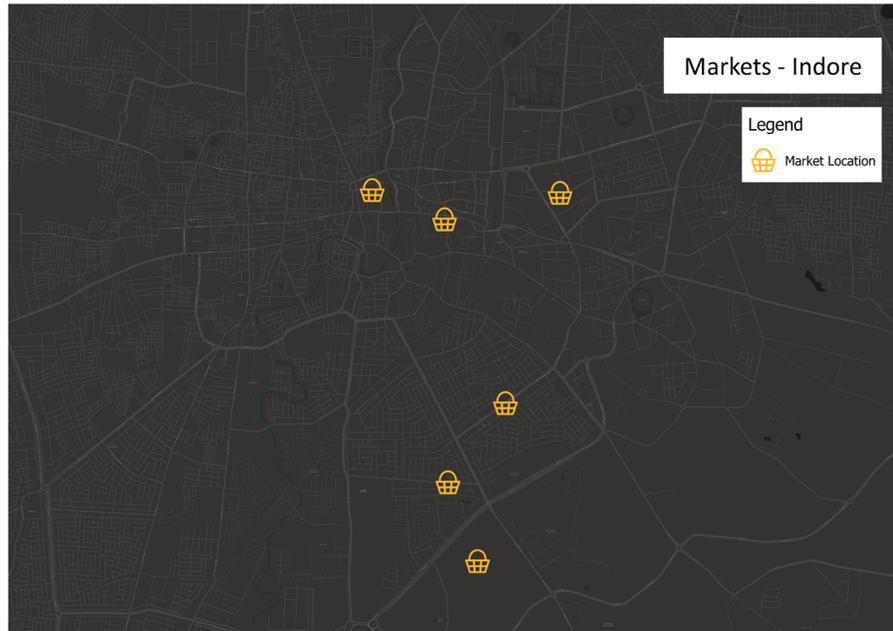
Lastly, merchants currently pay a merchant discount rate (MDR) charge to banks to avail card transaction services. Currently, banks are allowed to charge an MDR no higher than 0.25% on transactions up to INR 1000 (approx. USD 15), 0.5% on transactions between INR 1000 and INR 2000, 1% on transactions larger than INR 2000. Recently, in a move to encourage digital transactions, the Government has proposed that the Reserve Bank of India (RBI) cap the merchant discount rate (MDR) on debit card transactions at INR 200 (approx. USD 3). The central bank is yet to release final guidelines on this⁵.

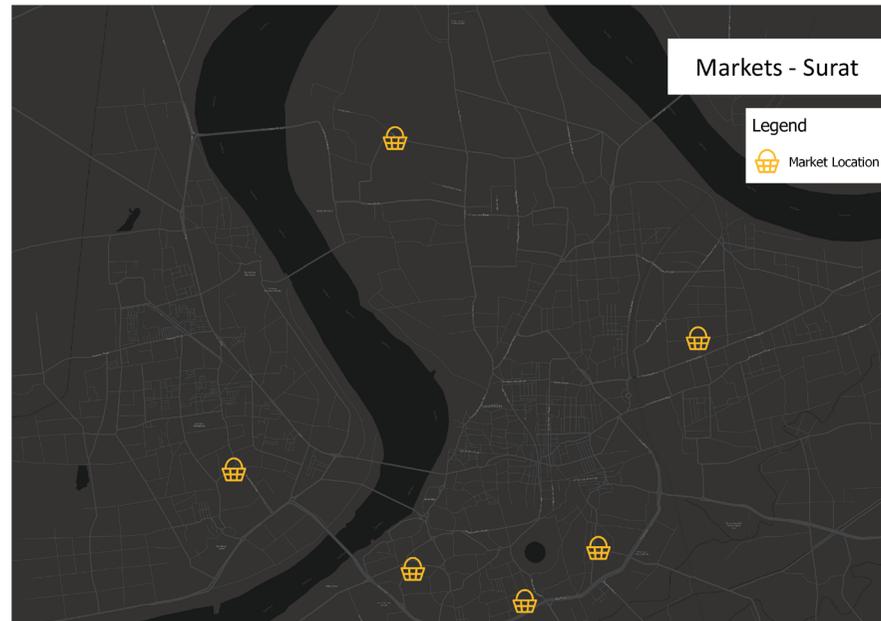
⁵ <http://www.financialexpress.com/economy/centre-boosts-digital-payments-wants-rbi-to-hike-mdr-on-debit-card-transactions-to-rs-200/861119/>

APPENDIX A - Usage of Digital Platforms by City











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