Decoding the Unexplored Middle
A study on Digital Financial Services for the Emerging Middle Class in Tier 2, 3 and 4 Centers in India

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Several industry factors indicate that the basic elements of a successful ecosystem for Digital Financial Services (DFS) are rapidly falling in place in India. The country is expected to experience exponential growth in DFS. While this ongoing transformation may well be on the radar of financial services players, the appetite for change and, therefore, preparedness may vary, impacting future success.

In this transformation, the Emerging Middle Class (EMC) in India, which occupies a unique position in the ecosystem, is likely to play the role of a catalyst in mainstreaming DFS.

The study provides data-driven insights and recommendations on the delivery and adoption of DFS. The insights and recommendations are based on quantitative and qualitative data. The data on the EMC population segment was collected from less urbanized areas, within close proximity or the immediate periphery of Tier 1 cities. In India, these areas are categorized as Tier 2, 3 and 4 centers.

Industry and enabler perspectives were captured via interviews with DFS providers, covering banks, Small Finance Banks, Payments Banks including mobile network providers and India Post, Non-Bank Finance Companies (NBFCs), Pre-Paid Instrument (PPI) providers, Payment solution providers, Fintechs and enablers (government officials, regulators and development partners).

A combined assessment of the market and stakeholder insights were distilled while developing recommendations to expand the DFS ecosystem and deepen digital financial inclusion, within the daily ecosystems of this segment of customers and merchants.

The study aspires to broaden industry understanding of the EMC ecosystem, while also suggesting the direction industry should take to achieve potential innovations. In addition, it offers a targeted approach that could drive DFS adoption within this inadequately understood segment.

Commissioned by NetHope, research for this study, both primary and secondary, was conducted by Deloitte Touche Tohmatsu India LLP. The learning and insights from the study are presented in this report. The team would like to thank Visa Financial Inclusion Team for its support for this study through a grant to NetHope.

To further promote and accelerate the reach of DFS into the EMC ecosystem, NetHope with charitable funding from Visa has announced the India “Accelerator for Consumer Capacity in Electronic Payment Transactions” (ACCEPT) program. The program is designed to create, jump start, or accelerate the commercial delivery of DFS offerings to market segments studied in this research.

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**About NetHope**

NetHope empowers organizations to improve the world by applying the promise of technology to the problems of humanity. NetHope, a consortium of 50 leading global nonprofits, partners with more than 100 other committed tech companies and funders to design, apply, adapt and scale technological solutions in development, disaster response and conservation. Together, the NetHope community strives to solve the world’s toughest problems.

More information on NetHope is available at http://nethope.org
Decoding the Unexplored “Middle”

Executive Summary

Introduction

Digital Financial Services (DFS) has the potential to dramatically accelerate the access to and deepen the penetration of financial services in India. This is particularly true for the Emerging Middle Class (EMC) in the country. The change in pace can be catalyzed by or requires the development of newer products, customer segments and improved approaches to the market.

The understanding of DFS is still emerging amongst both financial services providers as well as the market support ecosystem. The current understanding is particularly nebulous for customer segments in Tier 2 to 4 centers.

With the Indian government’s recent demonetization initiative to remove specific currency notes from circulation, there is a heightened sense of urgency around digital acceptance and its impact in the near term on different market stakeholders.

The timing of the government’s announcement occurred while the report was being drafted for this project. Recognizing the potential significance of demonetization for the DFS sector, the project team undertook a rapid, narrowly focused market assessment to capture immediate reactions amongst the EMC customers and merchants. While demonetization has provided the short-term incentive to use DFS, our analysis indicates that the sustainability of this behavior shift will predominantly depend on how providers respond and whether the ecosystems that support digital payments will exhibit attributes similar to those of cash payments— frictionless and perceived as near free. Our inquiries on the impact of demonetization for the EMC customers and merchants further revealed that both segments view the complexity of DFS and the lack of overlap between digital payments and their daily transaction ecosystems as significant deterrents to broader, sustained adoption of these new service alternatives.

This report provides a more holistic perspective on DFS with respect to associated behaviors, attitudes and unmet needs of the EMC customers and merchants in Tier 2 to 4 centers in India. This broader view remains necessary and relevant to help these market segments make a more substantial and sustainable transition away from cash to DFS.

It also encapsulates actionable insights and specific recommendations that financial service providers can deploy to improve the relevance of their DFS offerings. Adoption of these recommendations is expected to increase the robustness of business models, accelerate financial inclusion, and eventually lead to a positive social impact on the financial lives of EMC households in India.

The state of play in the EMC customer’s financial and digital lives

The rapid growth of the Indian economy in the last two decades led to a substantial expansion of the Indian middle class, characterized by rising incomes and changing aspirations.

India’s middle class is an estimated 250-300 million people out of a total population of ~ 1.3* billion. Within this universe, the EMC is a unique sub-segment, defined in this report as households with an annual income between INR 1,50,000 and INR 10,00,000 (approximately USD 2,500 and USD 15,000). While the EMC shares many of the attributes of the broader middle class, its key differentiator is a lower income level compared to the rest of the middle class.

India’s Emerging Middle Class

Household income levels of
INR 1,50,000 to 10,00,000

(*Indian population in 2016 as per United Nations and World Bank estimates)

Broad Methodology

Data Collection: The methodology used for this study was a combination of qualitative and quantitative primary research conducted across multiple locations, supported subsequently by secondary analysis. The pan-India data collection process, spanning 37 centers, included 10 Focus Group Discussions, 100 qualitative interviews, and 500 quantitative surveys of EMC customers (with a mix of 70% males and 30% females). The interviews also covered 100 merchants. Research and data collection was conducted in towns identified as typical of all four regions of the country.

Study Sample: The focus of the study was the EMC residing in Tier 2 to 4 centers, with steady incomes and exposure to technology. The study sample was not random but drawn from customers in three pre-defined categories: (1) Banked-DFS users, (2) Banked-DFS non-users and (3) Unbanked-DFS users. The rationale for choosing these categories was to isolate behavioral and attitudinal differences while identifying commonalities that could drive or dampen active DFS use.

The merchants included in the research are representative of five broad service segments: (1) utility, (2) lifestyle, (3) everyday goods, (4) services, and (5) healthcare. The research was structured to ensure consistency and adequate regional coverage across type and size of merchants’ businesses. The merchants were either: (1) DFS users or (2) DFS non-users and have been categorized as such.
Attractiveness of the EMC segment

Higher income levels, improved exposure to emerging trends and use of digital channels for accessing information and services are reshaping customer attitudes, behaviors and consumption. These shifts make the segment an interesting market for DFS providers to understand.

Another factor that contributes to making the EMC an attractive, addressable market for financial services is the anticipated rapidity with which the Indian middle class will/can adopt digital technologies. The inherent low costs of acquiring customers through DFS, coupled with the lower cost of delivering financial services and servicing customers is likely to propel DFS ahead as the preferred mode for meeting the large unmet needs of this segment.

Key findings on customer behavior suggest that those who receive their income digitally have a greater likelihood of adopting DFS for daily use.

The shift in EMC behavior was evidenced from changing ownership patterns, increased levels of sophistication as well as the higher priority accorded to the product attributes of trust and overall quality, over traditional factors such as price in their purchase decisions.

Along with changes in the propensity to consume and consumption patterns, the EMC now also demonstrates a growing sense of empowerment and financial confidence.

Despite the ability to manage and meet financial obligations remaining a concern, this study indicates that the majority within the EMC believes that meeting their financial goals is within their reach. While greater confidence in their future financial well-being bodes well for DFS, it has its implications for providers and other stakeholders, who must align their business models in line with a shift in the paradigm.

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**Know Your (EMC) Customer***

- **99%** of the EMC customers own a mobile phone, **85%** of who own a smart phone
- **78%** of the EMC customers own a two-wheeler. But ownership of a four-wheeler is aspirational for the segment as reflected by ownership levels of **17%**
- **Nearly 80%** of the EMC customers hold a savings bank account, however, only **73%** actively use them for savings, retail payments and transfers
- **Despite high penetrations of bank accounts, more than 70%** of the EMC receive their income in cash
- **63%** of the EMC customers use the Internet for over 30 minutes every day, of who **85%** use it primarily for entertainment
- **More than 75%** of the EMC customers worry about managing their finances and almost **80%** find it difficult to adhere to their budget
- **51%** of the EMC customers use debit cards as a mode of payment at large retail stores
- Of the EMC customers use debit cards as a mode of payment at large retail stores
- The top three financial goals of the EMC customers are: (i) business growth, (ii) saving for child’s education, and (iii) saving for unforeseen expenses
- Top five household expenses for the EMC customers are: (i) grocery, (ii) garments, (iii) transport, (iv) education, and (v) health
- 32% of merchants operating in the EMC ecosystem believe that given the small size of their transactions, DFS is not relevant to their business
- **53%** of DFS non-user merchants are active debit card users in their personal lives
- The top three parameters for DFS evaluation by merchants operating in Tier 2 to 4 centers are: (i) relevance to business, (ii) customer demand, and (iii) costs
Key Insights from Tier 2 to 4 centers

Repositioning DFS use from predominantly payments to savings, credit and investments can improve volume of business

The EMC customer currently does not view DFS as a tool to meet their life goals but instead associates DFS largely with payments.

Merchants currently find it difficult to harness their banking relationships to obtain credit from financial sources that are based on digital trails.

DFS adoption is likely to be triggered by building use cases, and awareness around use of DFS as a one-stop-solution that meets all the financial needs of users. Once DFS is adopted the EMC customer is likely to demonstrate a greater propensity to allocate funds to financial services including enhanced savings, credit and investments. This growth in volume will make the EMC segment even more attractive.

Evolving financial needs and financial aspirations of the EMC customers will trigger DFS adoption

In the EMC segment, the level of monthly household income is clearly at an inflection point. As income levels rise the aspiration to achieve a better standard of living grows, which in turn fuels their income. As a result, this segment has the potential to double their income over the next three to four years.

India’s demographic dividend, comprising a younger population with a higher proclivity for digital technologies, is also expected to create a large, digitally savvy customer segment, at a rate much faster than the market anticipates.

The EMC customer and merchant behavior is likely to veer towards rapid adoption of digitization with mobile phones being the preferred channel. Customer preference is also graduating from pricing (discounts) to include greater convenience and service as factors. This shift is likely to translate into higher awareness and faster adoption of DFS.

As overall customer awareness of DFS improves, the challenges posed by insufficient understanding and perceived complexities can be overcome through institutional efforts to improve digital and financial literacy

Contrary to our presupposition, the EMC customer in Tier 2 to 4 centers was found to be aware of DFS. However, insufficient depth in this awareness, and therefore, low maturity in understanding, has confined DFS to use cases and products that have existed in the market over a longer period of time.

The EMC’s most immediate association of DFS with cards (debit and credit) makes them the most preferred DFS channel for the customers. Debit cards, apart from being the most widely accepted DFS solution, are also the most frequently used. 34% of card users (debit and credit) makes them the most preferred DFS channel for the customers. Debit cards, apart from being the most widely accepted DFS solution, are also the most frequently used.
credit) conduct card transactions at least once a week.

It was also found that there exists an undeniable gender divide in DFS awareness, with women having lower levels of awareness than men. However, women Banked-DFS users do make a greater contribution to decisions in the household due to digital access.

Therefore, in the overall context, an obvious need exists for providers and enablers to focus on customer education, in addition to leveraging mobile literacy to drive digital, and eventually, financial literacy.

Understanding the user personas and sub-segments within the EMC segment is crucial for responding to and succeeding in this market

The EMC segment in Tier 2 to 4 centers is a heterogeneous group. Within this segment, customer perceptions, motivators and the propensity to adopt DFS vary, depending on factors ranging from life goals, age, life stage, education level, occupation, gender, and income levels.

Six customer personas and six merchant personas were identified during the course of this research. Understanding these variations in user personas will enable DFS providers and enablers to create market relevant and, therefore, effective DFS strategies.

The EMC segment is ready for its journey from Digital Enablement to Digital Empowerment. DFS providers now need to create and drive customer value and earn the trust of users

The EMC customer in Tier 2 to 4 centers is digitally ready. Evidence from the data places the level of trust debit and credit card users currently have in this product higher than that in other DFS products, with 65% of card users likely to recommend card payments.

### Evolving EMC trends across six dimensions*

#### Usage
- Digital transactions for merchants accepting debit and credit card payments is less than 10% of their total revenue
- 53% of DFS non-user merchants use debit cards for personal transactions
- 76% of the EMC customers who receive their income directly in their bank accounts are Banked-DFS users

#### Trust
- The EMC customers across tiers are most likely to recommend debit cards payments over other DFS options

*Stated data has been collected through primary research

Improved adoption and trust of DFS is directly correlated to positive use encountered by the customer during the initial DFS experience. While providers rate DFS as amongst the most market relevant strategies to expand growth, reduce costs, and improve profitability, most have not looked at specific strategies for EMC customers in Tier 2 to 4 centers.

The approach of providers to segmenting EMC customers, based on geography, is stereotypical and is not sensitive to the customer sub-segments. Their approach needs to be both granular and differentiated in order to address the specific needs of the EMC segment.
Decoding the Unexplored “Middle”

Mapping the DFS Journey of EMC customers and merchants

The affinity for DFS among EMC customers was evaluated on the basis of six key dimensions: (1) Awareness, (2) Access, (3) Interest, (4) Evaluation, (5) Usage, and (6) Trust. The dimensions captured attitudes, perceptions and behaviors towards DFS. Based on these dimensions, six customer and six merchant personas were identified.

The personas present distinct challenges and triggers that could impact DFS adoption and usage. The research proposes that, in the short term, DFS providers focus on customers and merchants with a greater likelihood of adopting DFS as their primary mode of transaction.

Customer Personas

Skeptics are relatively older customers who after many years of functioning in a cash ecosystem have grown comfortable with it. Hence, they see no value-add from DFS. Given their life stage, they display low levels of comfort and trust in technology, making them resistant to DFS uptake.

Hurdled customers face either a financial or cognitive challenge. Hence, access is an issue for them even though they are interested in evaluating DFS.

Contemplators are cautious by nature, preferring to remain confined to their comfort zone. Their usage of DFS is restricted to either fixed needs, fixed products/channels or fixed point of usage (for example, they use only debit cards at restaurants, large grocery chains or malls).

Plus Ones are women that are joint decision makers in the family. In many instances even when Plus Ones have an independent source of income, they are relegated to playing a secondary role in financial decision-making. They, however, play a dominant role in decisions related to household spends and optimization of savings.

Striders are a comparatively younger, enthusiastic segment, constantly seeking avenues to rapidly increase their social status. Their use or evaluation of DFS is driven by the belief that it has the potential to yield a direct economic benefit, and help them achieve their aspirations.

Venturers lead the DFS involvement scale with frequent DFS usage. Their positive evaluation and usage of DFS is directly correlated to the convenience it offers them.

Mapping of the six customer personas based on the likelihood of DFS adoption:

Likelihood of DFS adoption

<table>
<thead>
<tr>
<th>Likelihood</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Skeptics: Conservative, satisfied with current cash ecosystem; risk averse, who perceive no value in DFS</td>
</tr>
<tr>
<td></td>
<td>Hurdled: Limited financial and cognitive ability, restricted usage but open to DFS evaluation</td>
</tr>
<tr>
<td></td>
<td>Plus Ones: Financially dependent and digitally savvy; restricted DFS usage directed for specific needs</td>
</tr>
<tr>
<td>High</td>
<td>Striders: Enthusiastic towards DFS, understand associated benefits, but limited access restricts usage</td>
</tr>
<tr>
<td></td>
<td>Venturers: Open to experimentation with new technologies, values convenience in daily life; propagators of DFS</td>
</tr>
</tbody>
</table>
Merchant Personas

Deserters have a negative attitude towards DFS as a result of an unpleasant experience in the past. Although they continue to accept digital payments, they actively dissuade customers from using digital payments at their establishment, given a past experience of fraud or failed transactions.

Old-schoolers are by nature risk-averse and resistant to change. They believe that adoption of modern technologies will not yield any benefit and hence are disinclined to try them. However, in their personal lives they use digital and social media for entertainment and communication.

Toe-Dippers are not easily influenced, preferring to make their own judgements on adopting new technologies and products. Every decision, personal or business, is the outcome of a rigorous evaluation of perceived benefits. Their use of DFS is driven by its estimated direct impact on their bottom line.

Contented Captains maintain a “status quo” towards DFS and its benefits. Higher access to financial services is the key reason inducing them to adopt digital payments. However, they do not actively seek or avoid this form of payment from customers.

Aspirers are digitally savvy and progressive users of social media. Risk takers and interested in “changing with the times”, the major hurdle preventing Aspirers from using DFS is the inability to furnish the necessary documents and/or infrastructure.

Early Adopters expect new technologies to improve their efficiency and simplify their lives. They also want to hold on to their image in society and the self-perception of being ahead of the curve based on their adoption of new products and technologies. They are most likely to recommend new products and services to their peer group. Therefore, they have the potential to influence other merchants.

Mapping of the six merchant personas based on the likelihood of DFS adoption:

<table>
<thead>
<tr>
<th>Likelihood of DFS adoption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deserters: Reverted to cash usage, due to bad experience with DFS</td>
</tr>
<tr>
<td>Old Schoolers: Satisfied with current cash ecosystem, perceives no value in DFS</td>
</tr>
<tr>
<td>Toe-Dippers: Cautious towards DFS, but likely to adopt with a strong use-case</td>
</tr>
<tr>
<td>Aspirers: Enthusiastic towards DFS, understands associated benefits, but limited access restricts usage</td>
</tr>
<tr>
<td>Contented Captains: Accepts established products like debit cards, but no strong preferences or dislike towards DFS</td>
</tr>
<tr>
<td>Early Adopters: Risk takers, open to experimentation with new technologies, potential DFS propagators</td>
</tr>
</tbody>
</table>

Low to High
Opportunities and Recommendations for DFS providers

The customer and merchant data generated six key value propositions for industry stakeholders to consider, either individually or through collaborative efforts, to move this segment from digital enablement to digital empowerment.

The table below provides a snapshot of the points of digital intervention that open potential opportunities for DFS providers to effectively acquire and service the EMC customers and merchants operating in the ecosystem.

Table A: Points of digital intervention listing potential opportunities for DFS providers to acquire and service the EMC customers and merchants

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Points of digital intervention</th>
<th>Potential roles/partnerships for DFS providers</th>
</tr>
</thead>
</table>
| Offer Simple, Easy to Understand and Secure Solutions | • Leverage technology and create simple to use and easy to understand propositions  
• Make micro payments simpler  
• Develop lean solutions requiring limited/no internet connectivity | • DFS providers can leverage mobile devices and technologies like QR code to design innovative, simple and lean solutions  
• Banks and Fintechs can jointly offer solutions facilitating seamless and secure transactions  
• Banks can leverage and expand on EMC’s trust in debit cards to increase DFS use |
| Focus on Efficient Service Delivery | • Adopt a mix of digital and assisted channels to deliver customized products profitably  
• Leverage existing financial and non financial infrastructure as delivery channels  
• Use mobile devices as a primary platform to offer DFS solution | • Banks can partner with Business Correspondents/Agents to deliver products/services to the last mile  
• Telco based Payments Banks can convert their agent network into micro branches and use mobile platform to service customers beyond Tier 1  
• Banks can cross sell digital credit, savings, insurance and POS/wallets  
• DFS providers can leverage digital transactions to create credit history for unbanked and underbanked merchants |
| Build Customized, Need Based Solutions | • Create digital solutions offering savings, credit and investments  
• Use digital transactions to create credit history | • Banks can partner with Fintechs to develop products with assessment of customer’s needs and perceived value  
• DFS Providers can offer products with differential pricing to maximize wallet share of individual customers |
| Move to Value Based Pricing | • Develop pay-as-you-use products  
• Design propositions to look at customer based rather than product based profitability | • Regulators need to continue with policy changes to dis-incentivize cash  
• DFS providers can partner with local merchants to increase DFS acceptance beyond Tier 1 centers |
| Foster Favorable Ecosystem Development | • Continue effort to dis-incentivize cash  
• Educate customers on cost of cash  
• Digitize daily touchpoints for additional DFS acceptance | • DFS providers with limited physical reach can leverage internet penetration for targeted marketing  
• Providers can partner with developmental organizations like trade bodies for effective communication |
| Deliver Simple and Targeted Communication | • Disseminate awareness about DFS and its benefits  
• Deliver simple and targeted customer communication  
• Ensure immediate communication of DFS benefits | |
The above mentioned recommendations need to be evaluated, by providers across categories as well as enablers, to increase the adoption and proliferation of DFS.

**Offer Simple, Easy to Understand and Secure Solutions**

Solutions designed on the basis of a rational assessment of varied customer needs, and their ability to understand and use DFS will make it the preferred channel for transactions. Technologies like QR codes can facilitate easy to use products that do not require PIN codes or complex transactions that may deter use by the EMC.

**Focus on Efficient Service Delivery**

High cost of delivery and customer service of DFS beyond Tier 1 translates into a lower ROI for providers. A channel mix of existing financial, non-financial and digital infrastructure, in addition to innovative technology driven channels are best suited to reach the EMC customers and merchants operating in the ecosystem in a cost effective and prompt manner. Building on trust that emerges from DFS, including the high levels of trust in security and reliability of debit card transactions, could provide a strong path to build additional DFS activity.

**Build Customized Need-Based Solutions**

Designing a complete value proposition that includes savings, credit, investment and payments is likely to be the way forward to tapping the full potential of the EMC customer, presenting an opportunity to profitably increase share of wallet and volumes.

**Move to Value-based pricing**

The EMC segment is a value-seeking cohort, and DFS solutions need to be customized to match their financial ability to pay. A need exists to consider differential pricing based on their frequency, value of usage as well as lifecycle potential. Solutions based on the principle of "pay as you use" will positively impact DFS adoption of customers and merchants.

**Foster Favorable Ecosystem Development**

Creation of a robust digital payment ecosystem is essential if the potential value of DFS is to be captured. Supporting secure and low cost transactions while accommodating product and channel innovation are key elements for creating a DFS ecosystem.

**Deliver Simple and Targeted Communication**

Customers and merchants are not provided adequate handholding across various lifecycle stages resulting in lack of extent of awareness of DFS. Simple, straightforward and targeted communication through channels such as banks, development partners, smartphone etc. stand the best chance of capturing customer’s attention.

**Conclusion**

While the EMC customers and merchants in Tier 2 to 4 centers offer immense opportunity, action is required at multiple fronts to move this segment away from cash towards DFS. This study suggests that creating digital infrastructure and providing access is not sufficient to give DFS providers the ability to capture the EMC market.

The key to success lies in earning the trust of and delighting the customer through simple, clear, easy to understand, real and intuitive products, services or experiences.

The size, income levels and propensity to consume financial services makes the EMC segment in Tier 2 to 4 centers very attractive for DFS providers. The EMC customer in Tier 2 to 4 centers is well positioned in terms of awareness and readiness to embrace the power of digital financial solutions, and the impact it is likely to have on meeting his/her financial goals.

Volumes and adoption are likely to outweigh short-term cost considerations that providers may have, as the EMC customer in Tier 2 to 4 centers will, in the near future, represent a significant and attractive profit pool. To win the trust and wallet share of the EMC customer DFS providers need to create differentiated value propositions.

The success of DFS providers in this segment is likely to depend on how they are able to design and tailor their offerings, to specifically address the requirements of the EMC customer and their aspirations.
Executive Summary

Decoding the Unexplored "Middle"
Defining the topography of the EMC landscape in Tier 2 to 4 centers

The Emerging Middle Class

India’s middle class is estimated at 250-300 million people. Within it is an inadequately understood but sizeable segment – the Emerging Middle Class (EMC). The promise of the EMC segment lies in its aspiration for a better quality of life, backed by the potential to significantly grow its income, expenditure, and savings to meet these aspirations.

EMC customers are defined as individuals with an annual household income ranging between 1,50,000 to INR 10,00,000 (approximately USD 2,500 to USD 15,000). The focus of this report is the EMC segment that resides in Tier 2 to 4 centers.

Attributes of the EMC customer in Tier 2 to 4 centers

Higher levels of income, greater exposure to emerging trends and new channels for accessing products and services are rapidly shaping customer behaviors and consumption patterns, especially that of the EMC customer in Tier 2 to 4 centers in India.

More empowered now, they are enthusiastic about moving up the social ladder by either upscaling their existing consumption patterns (for instance from a two-wheeler to a four-wheeler) or by purchasing goods directly correlated with a financially stable and aspirational individual.

The changing face of the EMC customer can be explored on two major socio-economic counts: ownership and behavior.

Changing ownership patterns (Exhibit 1) confirm the customer’s desire for a tangible reassurance of an improved lifestyle. An increase in income levels allows this segment with a greater propensity to consume superior goods and services to transform the way they view ownership of assets.

Greater levels of sophistication, prioritization of the product attributes of trust and overall quality over price in their purchase decisions characterize the changing behavior of the EMC customer (Exhibit 2), even in the lower income segment and tiers.

With price no longer the only key consideration for purchase decisions, they steadily move beyond necessities to supplementary products, acquiring items that were once on their wish lists. The inclination of the EMC to spend on entertainment (movie theaters), grocery (supermarkets instead of kirana stores), and education (private instead of public schools) illustrates their shifting preferences.

While the EMC segment is dynamic, this research brought to the fore behavioral and ecosystem related characteristics embedded in the manner that this segment currently views, adopts and uses DFS. These trends highlight the underlying behavior and variabilities within the EMC across - among other factors - tiers, gender and access to financial services as well as DFS.

**Exhibit 1: Changing Ownership Patterns of The EMC**

<table>
<thead>
<tr>
<th>Feature Phones, Desktop</th>
<th>Smartphones Phone, Laptops, Tablets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two wheelers (bikes, scooters)</td>
<td>Cars</td>
</tr>
<tr>
<td>Renting a house</td>
<td>Owning a house</td>
</tr>
</tbody>
</table>

**Exhibit 2: Changing Behavioral Patterns of The EMC**

<table>
<thead>
<tr>
<th>Shopping at local apparel stores</th>
<th>Shopping for brands at malls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shopping at Kirana stores</td>
<td>Shopping at supermarkets</td>
</tr>
<tr>
<td>Not eating out</td>
<td>Eating out once a week</td>
</tr>
<tr>
<td>Sending children to public schools</td>
<td>Sending children to private school</td>
</tr>
</tbody>
</table>
This report segments the EMC customers in Tier 2 to 4 centers into three broad categories: (A) Banked-DFS users, (B) Banked-DFS non-users, and (C) Unbanked-DFS users (Exhibit 3).

**Exhibit 3: Broad customer segments of the EMC in Tier 2 to 4 Centers**

### Banked-DFS users
- **Demographic Profile**
  - Age Profile (years)
    - 40+ 21%
    - 30-40 35%
    - 20-30 44%
  - Education*
    - 9% Post Graduate
    - 50% Graduate
    - 28% High School
    - 13% High School
  - Monthly Household Income
    - <25K 60%
    - 25-45K 32%
    - 45K+ 2%
- **Ownership**
  - Bank account (%)
    - 100% have a Savings Account
  - Smartphone (%)
    - 86% own a Smartphone
  - Usage of non-cash channels
    - 83% Card
    - 16% Mobile banking
    - 28% Mobile wallets
- **Top Four Financial Goals**
  - Saving for an emergency
  - Growing business
  - Child’s education
  - Buying a car

### Banked-DFS non-users
- **Demographic Profile**
  - Age Profile (years)
    - 40+ 38%
    - 30-40 33%
    - 20-30 29%
  - Education*
    - 6% Post Graduate
    - 28% Graduate
    - 4% High School
    - 23% < High School
  - Monthly Household Income
    - <25K 64%
    - 25-45K 25%
    - 45K+ 11%
- **Ownership**
  - Bank account (%)
    - 100% have a Savings Account
  - Smartphone (%)
    - 75% own a Smartphone
  - Usage of non-cash channels
    - Not relevant for DFS non-users
- **Top Four Financial Goals**
  - Growing business
  - Child’s education
  - Saving for an emergency
  - Buying a car

### Unbanked-DFS users
- **Demographic Profile**
  - Age Profile (years)
    - 40+ 34%
    - 30-40 33%
    - 20-30 33%
  - Education*
    - 4% Post Graduate
    - 36% Graduate
    - 40% High School
    - 20% < High School
  - Monthly Household Income
    - <25K 60%
    - 25-45K 34%
    - 45K+ 6%
- **Ownership**
  - Bank account (%)
    - 2% have a Savings Account
  - Smartphone (%)
    - 98% own a Smartphone
  - Usage of non-cash channels
    - 42% use Mobile wallets
- **Top Four Financial Goals**
  - Child’s education
  - Growing business
  - Saving for emergency
  - Buying a home
Charting the DFS journey of EMC customers in Tier 2 to 4 centers
The research and analysis conducted, based on data gathered from 500+ customer surveys, led to the identification of key trends and underlying behavior across six key dimensions. The six dimensions are: (1) Awareness, (2) Access, (3) Interest, (4) Evaluation, (5) Usage, and (6) Trust.

To arrive at these six dimensions, similar variables from the customer discussion guides were grouped to map the journey of a customer, pre and post usage of DFS, along with the customer’s behavioral traits and life goals that impact DFS adoption and usage.

These dimensions were designed to be intuitive and mutually exclusive, besides being collectively exhaustive. The data captured across these six dimensions provides clarity on the status of DFS adoption across the three broad categories that are the subject of this report, Banked-DFS users, Banked-DFS non-users, and Unbanked-DFS users.

The DFS Journey of EMC Customers

<table>
<thead>
<tr>
<th>The DFS Journey of EMC Customers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Awareness</strong></td>
</tr>
<tr>
<td>Gauges whether an individual is aware of the availability of DFS, understands how to access DFS, including his/her depth of understanding</td>
</tr>
</tbody>
</table>

Six Dimensions and their key characteristics

- **Awareness**: Gauges whether an individual is aware of the availability of DFS, understands how to access DFS, including his/her depth of understanding
- **Access**: Measures the individual’s access to technology, infrastructure, and financial services with regard to adoption of digital channels, products and services
- **Interest**: Gauges the individual’s desire and inclination to sample DFS, in addition to identifying factors driving the person’s decisions (attitudes, perceptions, aspirations, etc.)
- **Evaluation**: Ascribes the value (financial and non-financial) perceived by the individual for DFS and judges their ability to use it
- **Usage**: Ascertainsthe level of DFS activity, and the compatibility of an individual’s financial habits and lifestyle patterns with new digital products, channels, and services
- **Trust**: Evaluates the level of trust merchants and customers have in DFS, with the likelihood of them recommending it to their peers
**Awareness**

The EMC customer in Tier 2 to 4 centers is aware of DFS, though the depth of awareness is relatively low and inconsistent across the segment.

The data gathered and research negated the presupposition that the EMC customer in Tier 2 to 4 centers has limited awareness of DFS. Instead it showed that this segment possesses significant awareness of DFS (Exhibit 4).

However, the depth of awareness of EMC customers is low. It is largely based on hearsay, the experience of others or as interpreted by peers.

Further, a gender divide exists in DFS awareness, with men having a higher level of DFS awareness than women. This gap is particularly acute for DFS non-user women, only half of who are aware of DFS solutions available, whether it be debit and credit cards, mobile wallets or online payments (Exhibits 5a and 5b).

The access to smartphones and Internet allows the EMC customer to increasingly access information online. This indicates the underlying inclination to research for and learn about the options available to them.

Of all the DFS solutions, debit cards are the most widely acknowledged (Exhibit 6). The money volume of transactions using debit cards is almost twice that of electronic payments, NEFT, RTGS, IMPS and Bank transfers.

The higher level of comfort associated with the use of debit cards, making them a dominant mode of digital payment, is a consequence of their availability over a relatively longer period of time in the ecosystem. A second factor contributing to the preference for cards is that banks focus on issuing debit cards with savings accounts, while also promoting cash withdrawal transactions through debit cards.

Mobile wallets, accessed through smart phones, are also rapidly gaining popularity, despite being a recent entrant.

**Additional Insights**

- A gender divide exists in awareness of DFS in the EMC customers. While, 73% of men agreed to having DFS knowledge, only 60% of women feel the same.
- 75% of Banked-DFS users, 58% of DFS non-users and 73% of Unbanked-DFS users believe that they have substantial knowledge of DFS.
- 85% of women are aware of debit cards as a mode of payment, yet a mere 32% of them actively use debit cards.
- Only 50% of merchants are well aware of the charges involved in installing a POS machine.

---

**Exhibit 4: Awareness/Knowledge about DFS**

<table>
<thead>
<tr>
<th>DFS Products</th>
<th>Banked-DFS users</th>
<th>Banked-DFS non-users</th>
<th>Unbanked-DFS users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>75%</td>
<td>58%</td>
<td>73%</td>
</tr>
<tr>
<td>Disagree</td>
<td>14%</td>
<td>22%</td>
<td>17%</td>
</tr>
<tr>
<td>Neither</td>
<td>11%</td>
<td>9%</td>
<td>9%</td>
</tr>
</tbody>
</table>

**Exhibit 5a: Awareness/ Knowledge of DFS in male respondents**

- 27% Disagree with DFS knowledge
- 73% Agree with DFS knowledge

**Exhibit 5b: Awareness/ Knowledge of DFS in female respondents**

- 40% Disagree with DFS knowledge
- 60% Agree with DFS knowledge

**Exhibit 6: Awareness/ Knowledge of different DFS products**

<table>
<thead>
<tr>
<th>DFS Products</th>
<th>Awareness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic Payments</td>
<td>48%</td>
</tr>
<tr>
<td>Debit Cards</td>
<td>49%</td>
</tr>
<tr>
<td>Mobile Wallets</td>
<td>87%</td>
</tr>
</tbody>
</table>
### Access

Customers feel more empowered with better access to financial services, available as a consequence of the proliferation of banks and non-bank providers.

The research on DFS penetration in this segment also yielded a gender divide, though much less than in the dimension of Awareness. An average of 73% of bank account penetration was found among women and 83% among men.

The higher level of access places DFS solutions such as debit cards, Internet, mobile banking and mobile wallets within reach of the EMC. It lets the customer segment believe they have easy access to financial services (Exhibit 8).

Women reported that digital access gives them the freedom to evaluate financial needs against digital solutions, helping them optimize household spending in areas where they are independent decision makers. Women equated this financial empowerment with their ability to increasingly contribute to decisions in the household.

Even as steady progress is made in the access to financial services in general, and DFS in particular, customers and merchants belonging to this segment still secure credit through informal channels such as family, friends, relatives, employers or money lenders. The predominance of cash-based income acts as an impediment, taking this “digitally enabled” customer a step back in the adoption of DFS (Exhibit 9). The data, however, displayed much higher use of DFS by those who receive their incomes through digital channels.

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### Additional Insights

- **75%** of respondents agree to having easy access to financial services
- Though **98%** of merchants own a savings bank account, as few as **14%** have taken loans from formal financial institutions

---

### Exhibit 7: Access to bank account, smartphone and Internet*

<table>
<thead>
<tr>
<th></th>
<th>Savings Account</th>
<th>Smartphone</th>
<th>Internet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banked-DFS users</td>
<td>100%</td>
<td>95%</td>
<td>88%</td>
</tr>
<tr>
<td>Banked-DFS non-users</td>
<td>100%</td>
<td>86%</td>
<td>67%</td>
</tr>
<tr>
<td>Unbanked-DFS users</td>
<td>100%</td>
<td>75%</td>
<td>67%</td>
</tr>
</tbody>
</table>

*Respondents could choose more than one option

### Exhibit 8: Ease of access to financial services

- **75%** agree with having easy access to financial services
- **14%** neither agree nor disagree with having easy access to financial services
- **11%** disagree with having easy access to financial services

### Exhibit 9: Income in cash versus income in bank account*

<table>
<thead>
<tr>
<th></th>
<th>Banked-DFS users</th>
<th>Banked-DFS non-users</th>
<th>Unbanked-DFS users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Income</td>
<td>65%</td>
<td>36%</td>
<td>12%</td>
</tr>
<tr>
<td>Income in bank account</td>
<td>72%</td>
<td>16%</td>
<td>8%</td>
</tr>
<tr>
<td>Cheques</td>
<td>80%</td>
<td>0%</td>
<td>8%</td>
</tr>
</tbody>
</table>

*There was a 9% overlap between cash income and income in bank account*
Interest
The EMC customers in Tier 2 to 4 centers are increasingly interested in trying new technologies as well as DFS. The underlying belief piquing this interest is the assumption that DFS will fulfill their aspirations to buy a home, invest in their children’s education, and grow their business.

Customers across all three categories showed keenness in the use of technology to access financial services so as to fulfill their aspirations (Exhibit 10). The interest of men is driven by the desire for better time management. The desire to optimize their fixed allowance for household expenses is a key driver for women.

For men, technology has made financial services accessible since it provides on-the-go solutions, eliminating the need to take time off from work to visit a branch. A majority of women, though joint decision makers in the household, are dependent on the male head-of-household for financial services. They prefer not to venture out to access financial services, and hence, view technology as a potential tool to manage their household expenses from within the confines of their home (Exhibit 11).

The immediate association of DFS with cards (debit and credit) makes cards the most preferred DFS channel for the customers. However, due to their ease of access, price point and tiered KYC, mobile wallets are emerging as the next most favored mode of DFS.

Evaluation
The EMC customer in Tier 2 to 4 centers is judicious, using his/her own financial and cognitive ability to evaluate DFS on the basis of its perceived value.

The top financial challenges of more than 66% of the respondents are: (i) meeting their present financial responsibilities, and (ii) saving for the future. Despite their financial challenges the EMC customer is, nevertheless, confident of meeting his/her top financial goals (Exhibit 12). Banked-DFS users are relatively more confident of their financial future than others.

The Banked-DFS non-users are digitally enabled in other areas of daily activity. They have near total access to digital channels. Almost 75% own a smartphone with an active Internet connection and nearly 100% of them have a Savings Account.

This suggests that even though Banked-DFS non-users have access to DFS enabling channels, insufficient cognitive ability and inadequate awareness has restricted their usage of and interest in DFS.

Upon delving into the reasons for the lack of use of DFS, it was found that, first, 44% of the respondents consider

- 25% of Banked-DFS non-users expressed interest in the use of technology for financial transaction
- 31% of DFS non-user merchants believe that DFS is irrelevant to their business ecosystem

**Additional Insights**

**Exhibit 10: Customer interest in using technology to access financial services**

<table>
<thead>
<tr>
<th>DFS Channel</th>
<th>No interest</th>
<th>Not too interested</th>
<th>Somewhat interested</th>
<th>Very interested</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unbanked-DFS users</td>
<td>26%</td>
<td>19%</td>
<td>15%</td>
<td>4%</td>
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<tr>
<td>Banked-DFS non-users</td>
<td>41%</td>
<td>19%</td>
<td>17%</td>
<td>4%</td>
</tr>
<tr>
<td>Banked-DFS users</td>
<td>42%</td>
<td>44%</td>
<td>10%</td>
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**Exhibit 11: View technology as an enabler for increasing access to DFS**

<table>
<thead>
<tr>
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<th>Disagree</th>
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<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unbanked-DFS users</td>
<td>81%</td>
<td>9%</td>
<td>9%</td>
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<tr>
<td>Banked-DFS non-users</td>
<td>67%</td>
<td>13%</td>
<td>7%</td>
</tr>
<tr>
<td>Banked-DFS users</td>
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**Exhibit 12: Confidence in achieving top financial goal**

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<td>88%</td>
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difficulty in DFS use a major reason for their reluctance to adopt DFS. Second, one in two or 50% of DFS non-users are of the view that difficulty in understanding DFS impedes their use and adoption of it.

Although, the EMC customer in Tier 2 to 4 centers enjoy a host of positive factors that favor DFS adoption, the top trigger for DFS usage varies across categories (Exhibit 13). For example, the ability to withdraw money from an ATM without visiting a bank branch is the dominant trigger for Tier 4 debit card users. The perception of safety and that of being a technologically advanced mode of transaction is a major motivator for Tier 2 customers, especially for customers from higher income brackets. The majority of customers surveyed, even when price sensitive, take into cognizance aspects such as value, convenience, and the associated risk prior to adopting DFS.

Usage

Usage of DFS amongst the EMC customers is fueled by their aspirational lifestyle; high use of Internet in Tier 2 to 4 centers indicates their digital readiness.

The aspiration for a better lifestyle in EMC customers attracts them to malls/branded showrooms, restaurants, and frequent travel. These lifestyle aspirations increasingly expose EMC customers to a range of DFS service points. Usage is, needless to say, determined by the availability of DFS acceptance points in their surrounding ecosystem.

Debit cards, apart from being the most widely accepted DFS solution, are also the most frequently used. 34% of debit and credit users conduct card transactions at least once a week (Exhibit 14). The frequency of debit and credit usage is lower amongst women. This gap could be a result of perceived lower relevance in their everyday transactions. A case in point being kirana stores, where women predominantly transact, have limited points of acceptance.

EMC customers in Tier 2 to 4 centers are digitally ready. Over 63% of the customers surveyed estimated that they accessed the Internet for at least 30 minutes a day, via their smartphones (Exhibit 15a). Across the customer categories, all EMC customers evinced interest in the mobile channel, though the preferred point of digital access for DFS differed across customer categories (Exhibit 15b).

Banked-DFS non-users and Unbanked-DFS users exhibit a strong preference for the mobile phone to access financial services over other digital channels. However, Banked-DFS users, prefer an omni-channel approach, i.e. both website and mobile app, to access their bank accounts.
Trust

Positive experiences during initial use of DFS products contribute to users’ trust, continual commitment to, and championing of products among peers.

Trust is directly correlated to the positive experiences encountered by customers during their DFS adoption life cycle. An EMC customer who develops trust in the product, channel or institutional provider exhibits a willingness to continue to use DFS or experiment with new DFS products or channels (Exhibit 16).

In the EMC segment, a peer’s willingness to recommend a product is a reliable indicator of trust. Favorable experiences with DFS, either due to a seamless experience during use or the reference to a strong use-case for convenience is likely to be communicated via word-of-mouth (Exhibit 17). Unpleasant experiences are proactively disseminated among peers, resulting in the customers themselves not only stopping usage of digital payments but also dissuading others from using it.

In case of an unpleasant experience, the EMC customer proactively discusses the unpleasant experience with peers.

Evidence from the data places the level of trust card-users currently have in this product higher than that in other DFS products, with 65% of card-users likely to recommend debit and credit card payments (Exhibit 18). This may be an outcome of the higher frequency of usage and popularity of (debit and credit) cards compared to any other modes of DFS. The EMC customer trusts his/her primary bank partners, and is more likely to experiment with new DFS recommended by them.
Virtualising Customer Personas and Mapping Preferences

Customer Personas

Though the EMC customers in Tier 2 to 4 centers have certain specific contours that define their overall identity as a class, at a granular level they are a heterogeneous group.

Individual customer perceptions, motivators and barriers to adopting DFS vary, as do reactions to DFS experiences. Customers have varying propensities to use DFS, based on factors covering life goals, age, life stage, education level, occupation, gender and income.

Greater understanding of these variations will enable DFS providers and enablers to create effective DFS strategies. The customer survey conducted through 10 Focus Group Discussions, 100 qualitative surveys, and 500 quantitative interviews across 37 cities across four regions (N, S, E, and W) reveals six distinct personas, besides generating key market findings that describe customer behavior as well as their outlook towards DFS in the identified geographies.

1. Skeptics

Largely in the age bracket of 40 to 50 years, most are school graduates with monthly incomes between INR 12,000-45,000. While their occupations span a wide range of different functions, the majority own small businesses or shops.

Skeptics are rooted to a traditional way of life. Besides demonstrating minimal inclination to try new brands, technologies or products, they have no trust in modern technologies. Their major concern is growing their business or saving up for their child’s education, relying predominantly on traditional saving methods to achieve these goals.

Despite their rather rigid mind-sets, Skeptics own and use smartphones, leveraging digital and social media for entertainment and communication.

As the financial ecosystem of Skeptics (both income and expenditure) is highly cash driven, use of the banking channel is limited only to savings. On the one hand, their lack of trust in modern technologies and, on the other, satisfaction with the current ecosystem results in very low interest in DFS.

Story from the field

1. Skeptics

Two employees manage Rupinder’s cloth store in Patiala - a Tier 3 center. This convenience gives Rupinder - a family man - sufficient time to focus on his personal finances. His savings account is in a public sector bank, located ~2 kms away from his shop. For him, and those with the same attitude, a visit to the bank is akin to a social outing because of the deep and long standing relationship the clientele develops with local bank employees, most of who are from within their community. Rupinder too enjoys these visits to catch up on various local and national business issues.

Though he owns a smartphone, its use is limited to features like WhatsApp for chatting with friends and family. DFS makes Rupinder apprehensive because of the lack of physical contact. He feels secure with the physical “feel” of cash. Benefits like ease-of-use and time saved, associated with DFS, have little value for him. In addition to his ecosystem being cash-driven, Rupinder has practically no motivation to test DFS as his visit to the bank is an opportunity to connect with people he is comfortable with.
2. Hurdled

Predominantly individuals in the age bracket of 30-55 years, for various reasons their education remained limited to the primary level. Hence, the monthly income of this segment is lower, typically restricted to INR 12,000 to 25,000. They, however, are skilled workers pursuing trades in great demand such as carpentry, plumbing, etc.

Life decisions of the Hurdled are constrained by the limitations their financial or cognitive ability places on them, making them risk-averse and cautious. Their daily lives revolve around the struggle to make ends meet and they are devoted to meeting the basic necessities of life for their families.

Most Hurdled have dormant bank accounts. Their digital and social media usage or awareness is significantly low, most likely because they find technology challenging. However, they do selectively use social media applications like WhatsApp or Facebook. They rely on their family and friends for their knowledge of digital or financial services.

Due to the low compatibility of DFS with their environment - insufficient acceptance points, low usage by their family and friends, receipt of payments predominantly in cash - their awareness of and access to DFS is low. Though currently non-users of DFS, they are open to evaluating potential benefits of DFS if it saves them money and facilitates a better life.

3. Contemplators

They are relative young, aged between 20-30 years, and are digitally and socially savvy. Most of them are college graduates with a monthly household income from INR 12,000 to 45,000.

Contrarians of some kind, Contemplators are risk averse and, by nature, not inclined to experiment. Their behavior patterns revolve around the goals of making life comfortable for their family, and the need to sustain a good standard of living.

These traits make their digital habits restrictive, with digital technologies used only as a medium to stay connected with people or as a tool to seamlessly complete their daily activities. This limited use of technology is reflected in their elementary awareness of DFS.

While, Contemplators recognize that technology has made financial services more accessible to them, their cautious nature limits their use of DFS to cash withdrawals at ATMs and debit card purchases at trusted stores. They are not inclined to use new technologies to access DFS because they perceive a lack of value from it.

Story from the field

2. Hurdled

Employed as a contractor in Bhiwandi, a Tier 3 center, 45 year-old Hari receives his salary on a weekly basis in cash, as do most like him in the same profession. During the week, Hari uses up this cash to cover his household expenses, most of which are paid for in cash, especially groceries, vegetables, school fees, transport and the like. Therefore he does not feel the need for a bank account, as he knows most of the cash in hand will soon be spent. When he does require credit, he relies on the sales proceeds of his ancestral land, which has served as a nest egg to meet episodic financial requirements.

For Hari DFS products are for affluent people with surplus funds. This perception of DFS being a "metro product" is strengthened because DFS solutions are in English, a language he is not familiar with and hence a barrier to his entry. This is also the reason he has limited awareness of DFS benefits. Yet, he is open to experimenting with those DFS products that are easy to use and in a language he understands. Time is a factor in his trade. Hence given that most of Hari's time is spent coordinating a slew of activities, options like making bill payments through DFS appeal to him because it saves the need for him to physically go and pay utility bills.

Story from the field

3. Contemplators

Shyam, who studied up to high school started a small trading business in Fatehgarh, a Tier 3 center in a North Indian town. Soon thereafter this 27-year-old got married to someone he knew from childhood. Active on social media, his favorite shows are hair styling videos on YouTube. That apart, he enjoys getting forwards on new products from friends and family. Rarely do these have anything to do with his finances.

For Shyam, therefore, technology is as an enabler only if it offers a compelling value proposition. DFS represents debit cards for cash withdrawals at an ATM, paying at a POS if no additional charges are payable and the option of “cash on delivery” for goods purchased online. Essentially a follower, Shyam finds comfort in adopting new products only if they have broad acceptance among his peer group. Beyond debit cards, he does not see any value from other DFS products, regarding them as just “old wine in a new bottle”.

Story from the field
4. Plus Ones

Plus Ones are predominantly women above the age of 28 years, with varying levels of education and household income. While most do not have independent sources of income, they do contribute to decision-making in family matters.

They exercise influence over decisions involving household spends and optimizing savings, and hence, are open to trying new brands, technologies or stepping outside their comfort zone. Their evaluation of DFS products and channels is impacted by the desire to discover optimal solutions for their needs, household expenses and aspirations at the minimal cost.

The majority of Plus Ones are digitally and socially active, however, the depth of awareness and usage of digital and social media is inconsistent across the group. The primary desire driving use of technology is the need to stay connected with their children and family. Despite their access to DFS, limited awareness and financial ability restricts their usage of DFS. Usage of DFS is directed towards meeting everyday, micro-needs such as grocery payments, mobile recharges, local travel and children’s pocket money. Interestingly, this largely unbanked segment, shows trust in mobile technologies and an openness to experimenting with new payment methods, if it fits their requirements.

5. Striders

Striders are young, enthusiastic 22 to 35 year olds with at least a college degree. Their monthly income is low, ranging between INR 12,000 to 25,000 as they have only begun their careers. Ambitious and interested in adopting new trends in the market, they are high on smartphone ownership and digitally savvy. The aspirations of the Striders flow around educating their children, expanding their current business or finding new business ventures to multiply their income quickly.

Their inquisitiveness translates into high interest in and the cognitive ability to tap into new technologies. As a consequence they constantly educate themselves through digital, social or print media, observe their surroundings/peers to glean new technologies and trends in financial services.

While their DFS awareness is high, it does not often translate into adoption due to their financial constraints. “Saving for the future” is the predominant financial challenge of Striders, even as most expenses are funneled into fixed family necessities.

With positive experiences and understanding of the underlying value, Striders are likely to transform into advocates of DFS.
6. Venturers

Individuals, 30 or above in age, who have benefitted from higher education are loosely termed as Venturers. They earn higher levels of income, either as self-employed or salaried individuals. Further, they are professionally and financially stable, with high access to both technology and financial services. Convenience is a critical driver for Venturers, as they aspire for higher standards/quality of living. Also being risk-takers by nature, they are inclined to explore new avenues to increase their income.

Smartphone ownership is high among Venturers, with use of digital and social media occupying a significant position in their daily lives. They believe in staying “ahead of the curve” and hence, self-educate and inform themselves about new technologies and products through multiple channels.

Venturers demand “on-the-go” solutions, and place trust in technology-backed solutions that give them the ability to achieve their life and financial goals. They trust in and, therefore, prefer to transact with formal financial institutions for their financial needs. Besides receiving their incomes digitally, their ecosystem also offers wider access to DFS acceptance points. This translates into the higher value they place on DFS, and therefore, greater usage of it. Given their high DFS awareness and usage, Venturers are most likely to be advocates of DFS.
Relative Assessment

Customer personas vary across the six dimensions and each persona poses a different set of opportunities and challenges intended to help service providers identify how to target these segments effectively.

The table below highlights the distinct dimensions for every persona and how it impacts and determines their attitude towards DFS. This is followed by a comparison of key behavioral indicators with reference to DFS.

Exhibit 19: Relative assessment of six dimensions across customer personas

<table>
<thead>
<tr>
<th>Qualitative indicator</th>
<th>Skeptics</th>
<th>Hurdled</th>
<th>Contemplators</th>
<th>Plus Ones</th>
<th>Striders</th>
<th>Venturers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Averse to using technology while accessing financial services</td>
<td>Restricted by their financial ability, bank or mobile ownership</td>
<td>DFS use is restricted to using debit cards at popular and trusted outlets</td>
<td>Low interest in DFS due to limited acceptance at everyday touchpoints</td>
<td>Evaluation is impacted by inadequate financial ability</td>
<td>High use of DFS due to ecosystem support</td>
<td></td>
</tr>
<tr>
<td>Quantitative indicator</td>
<td>Only 21% exhibit interest in using technology for financial activities</td>
<td>47% own a savings bank account; with only 45% being active users</td>
<td>~ 85% prefer ATMs to a bank branch for cash activities</td>
<td>Low interest in experimenting with varied DFS solutions</td>
<td>50% believe that DFS is easy, convenient and fast</td>
<td>100% debit card users and 60% electronic payment users</td>
</tr>
</tbody>
</table>

Exhibit 20: Key metrics for tracking the behavior of customer personas

<table>
<thead>
<tr>
<th>Personas</th>
<th>Skeptics</th>
<th>Hurdled</th>
<th>Contemplators</th>
<th>Plus Ones</th>
<th>Striders</th>
<th>Venturers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative assessment of key dimensions across personas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Attitude towards DFS</th>
<th>Cynical</th>
<th>Value-driven</th>
<th>Limited use</th>
<th>Functional</th>
<th>Aspirational</th>
<th>Convenience driven</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Segments</td>
<td>Banked-DFS non-users</td>
<td>Banked-DFS non-users</td>
<td>Banked-DFS non-users</td>
<td>Banked-DFS users</td>
<td>Banked-DFS users</td>
<td>Banked-DFS users</td>
</tr>
<tr>
<td></td>
<td>Unbanked-DFS users</td>
<td>Unbanked-DFS users</td>
<td>Unbanked-DFS users</td>
<td>Banked-DFS users</td>
<td>Banked-DFS non-users</td>
<td>Banked-DFS non-users</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Banked-DFS users</td>
<td>Unbanked-DFS users</td>
<td>Banked-DFS users</td>
</tr>
<tr>
<td>Key barrier to DFS use</td>
<td>Trust</td>
<td>Financial ability</td>
<td>Awareness</td>
<td>Acceptance points</td>
<td>Compatibility with ecosystem</td>
<td>Acceptance points</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Financial ability</td>
<td>Awareness</td>
<td>Acceptance points</td>
<td>Compatibility with ecosystem</td>
<td>Acceptance points</td>
</tr>
<tr>
<td>Motivator to DFS use</td>
<td>Government regulations to disincen-tivize cash</td>
<td>Minimal cost and easy to understand products</td>
<td>Handholding at time of adoption</td>
<td>Add on solution at minimum cost</td>
<td>Tailor made solutions</td>
<td>Convenient solutions</td>
</tr>
<tr>
<td>Ease of conversion</td>
<td>Very Low</td>
<td>Low</td>
<td>Medium</td>
<td>Medium</td>
<td>High</td>
<td>Very High</td>
</tr>
</tbody>
</table>
Key Customer Insights

While the study captures user archetypes to assess the distinct needs of different customers through six personas, the data also yields interesting insights that unravel the overall attitudes, personal and life goals, besides providing clarity on perceptions, motivators and barriers towards DFS.

This section details eight insights that decrypt the mindscape of a customer conducting financial transactions digitally. It also provides digital points of intervention for DFS providers.

The EMC customer is graduating from spending merely on necessities to making discretionary expenditures.

This change is predominantly driven by their aspiration for a better standard of living. However, the perceived complexity in usage of DFS and its limited acceptance deters adoption or more frequent usage amongst customers.

These customers associate DFS primarily with payments, abjuring broader financial services like savings, credit and investments. Women - with their strong influence on everyday household spends - and youth - who have the ability to encourage older members - are uniquely positioned to serve as catalysts for DFS uptake.

Limited association of DFS and its benefits

**Optimization of basic needs and aspirational spends impact evaluation of DFS**

While being cautious about how and where they spend, EMC customers are also fundamentally aspirational and work towards building a better lifestyle. Hence, their daily lives are spent juggling between "aspirational spends" and "necessities", which leads them to constantly worry about how to manage finances and stick to a budget (Exhibit 21).

Customers seek immediate benefits like small discounts, therefore preferring to shop at "kirana stores" and with the "local baniya" (small merchants) for their daily needs. These merchants are more open to negotiations, instant discounts and offer periodic credit to regular customers. Simplicity and promptness of these perks are valued much more by customers compared to deals and discounts offered by digital instruments, which they find selective in nature and difficult to understand.

Nevertheless, quality products and trending brands have great appeal for these customers. Therefore, shopping at malls, eating out in restaurants and spending at big retail store chains or coffee shops is viewed as aspirational and convenient. These expenditures by the EMC customers have steadily found a place in their DFS transactions (Exhibit 22).

EMC customers view e-commerce as a channel that gives them easy access to aspirational brands and products at discounted prices. These purchases are conducted online as these brands are relatively difficult to find in Tier 2 to 4 centers. Even more attractive are the incremental discounts offered through digital instruments. These have started to tip the scale in favor of online transactions.

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**Exhibit 21: Attitude towards money**

<table>
<thead>
<tr>
<th>Worry about managing their finances</th>
<th>3/4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Find it difficult to stick to a budget</td>
<td>4/5</td>
</tr>
</tbody>
</table>

**Exhibit 22: Most reported DFS transactions**

<table>
<thead>
<tr>
<th>Transaction</th>
<th>Card Users</th>
<th>Aspirational</th>
<th>Convenience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail Store</td>
<td>51%</td>
<td>41%</td>
<td></td>
</tr>
<tr>
<td>Online Purchases</td>
<td>50%</td>
<td>45%</td>
<td></td>
</tr>
<tr>
<td>Restaurants</td>
<td>41%</td>
<td>21%</td>
<td></td>
</tr>
<tr>
<td>Prepaid recharge</td>
<td>42%</td>
<td>53%</td>
<td></td>
</tr>
<tr>
<td>Utility bills</td>
<td>36%</td>
<td>53%</td>
<td></td>
</tr>
<tr>
<td>Bus/Train tickets</td>
<td>36%</td>
<td>39%</td>
<td></td>
</tr>
<tr>
<td>School Fees</td>
<td>32%</td>
<td>28%</td>
<td></td>
</tr>
</tbody>
</table>
Customers in smaller cities also display a proclivity towards transacting digitally when the perceived value of digital products and channels in terms of convenience, discounts or assured possession outweighs the inertia of transacting in cash. More than 35% of Banked-DFS users (debit and credit card or mobile wallet users) transact digitally on online portals for booking tickets, while the rest of them pay in cash to a travel agent, who books the tickets digitally for them. This substantiates the fact that though customers are price sensitive, they are adept enough to evaluate convenience versus cost.

Clear and instant communication about associated value can help customers adopt DFS as a viable option.

Digitization of customer touchpoints with high frequency, small ticket transactions and incentivizing micro/small payments can be used to draw them in, increasing DFS adoption dramatically. Payment solutions designed on the principle of tiered pricing i.e. where customers pay for only part of the service, can assist in profitably meeting their demands, especially for this “value seeking” customer cohort.

EMC customers with behavior similar to the Hurdled and Striders are most likely to display these attitudes.

**Limited association of DFS with savings, credit and investments confines DFS use to “Payments”**

The association of DFS with P2P and P2M payments in the customer’s mind is the greatest, while it is the least with savings, deposit and credit (Exhibit 23). This trend does not differ drastically amongst Banked-DFS users and Banked-DFS non-users. Customers exhibit a strong association of DFS with micro and small payments. Recharging their mobiles, paying utility bills and booking tickets "On the Go" through DFS is relevant to their everyday life (Exhibit 24).

Only 20% of the respondents associate DFS with savings (Exhibit 25) and less than 33% of customers prefer to repay their loans through digital channels (Exhibit 26).

Traditional instruments, for example post-dated cheques, are still the preferred and trusted mode for repayment of large and periodic sums. Given that their savings are sporadic and limited, saving through informal institutions, for instance, chit funds gives them the flexibility for anytime, anywhere transaction and liquidity. These informal savings and credit transactions are primarily in cash.

The EMC customers do not view DFS as an enabler in achieving their life goals, most of which revolve around fulfilling their family needs, being prepared for emergencies and attaining a better lifestyle (Exhibit 27). These customers predominantly display an inclination to save through traditional banking instruments (term deposits, savings account). They also believe that banks provide credit at reasonable rates.

Research indicates that current investment patterns of the customers are highly skewed towards non-financial investments such as gold and real estate. However, customers admit that these investments require much larger capital outlays, and that they would prefer investing in products allowing them to put aside small amounts of money every month, growing to become a large corpus.

The absence of any digital or formal transaction data trail for the customers makes it difficult for traditional players to gauge their exact requirements. This hinders their assessment as potential customers.

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**Exhibit 23: Most associated transactions with DFS**

<table>
<thead>
<tr>
<th>Transaction Type</th>
<th>DFS Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Send money</td>
<td>43%</td>
</tr>
<tr>
<td>Receive money</td>
<td>40%</td>
</tr>
<tr>
<td>Merchant payments</td>
<td>36%</td>
</tr>
</tbody>
</table>

**Exhibit 24: Top 4 most DFS associated small and micro payments**

<table>
<thead>
<tr>
<th>Transaction Type</th>
<th>DFS Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tickets bus/train</td>
<td>46%</td>
</tr>
<tr>
<td>Utility payments</td>
<td>44%</td>
</tr>
<tr>
<td>Mobile recharge</td>
<td>43%</td>
</tr>
<tr>
<td>Local transport</td>
<td>32%</td>
</tr>
</tbody>
</table>

**Exhibit 25: DFS perception beyond payments**

1/5 Associate savings or safe storage with DFS

**Exhibit 26: Preferred mode for EMI payments**

2/3 Prefer payment of EMI and loan repayment through non-digital modes

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Decoding the Unexplored “Middle”

Designing a comprehensive proposition that includes savings, credit, investment and payments is a way to expand use, so that providers can tap the complete potential of these customers, and the opportunity to scale financial services to them.

EMC customers with behavior similar to the Hurdled, Contemplators, Plus Ones and Skeptics are most likely to display these attitudes.

**Value seeking women in the EMC cohort view DFS positively but find low relevance in everyday spends**

50% of the women among the EMC are joint decision makers in the family. Though they do not make independent financial decisions, they influence financial decisions for the family. Qualitative analysis reveals that families with digitally enabled women display a higher probability of transacting digitally.

For daily household expenses these women have a direct impact on the choice of where and how to transact. Given the limited finances of their families, these women are generally “value seekers” and their major trigger for DFS usage is its value - convenience, cash discounts, etc (Exhibit 28).

Digital value propositions that they can secure through cash back, discounts, and deals possess enormous appeal to women, much more than men. This behavioral aspect makes them early adopters, who can potentially become the digital touchpoints for their families. Further, solutions that enable women to manage their daily expenses from the comfort of their home and provide a compact way to carry money, without the fear of loss of cash, can hasten adoption and frequent usage.

Tiered KYC products that can be accessed “on the go” and do not require a physical touchpoints for activation can help address their needs effectively. Further, linking value added services, rewards, cash backs and most importantly discounts, to ensure customer loyalty among women can convert this segment to potential DFS advocates easily.

EMC customers with behavior similar to Plus Ones are most likely to display these attitudes.

**While the younger generation is “mobile ready and digitally savvy”, association with DFS is limited**

Mobile is the fastest and most widely adopted technology amongst younger customers, between the ages of 18-30 years. 61% of the youth surveyed across the EMC in Tier 2 to 4 centers spend between 30 minutes to an hour a day accessing the Internet on their mobile phones (Exhibit 30).

More than 85% of respondents use their mobile phones to search for information on products and services across e-commerce websites. One in three young respondents have used their mobile phones to purchase products or services online indicating that those in the younger generation are graduating towards online

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**Exhibit 27: Top 3 life goals for customers**

- Business growth: 43%
- Child’s education: 42%
- Saving for future: 38%

* A respondent could select more than one option

**Exhibit 28: Women’s view on DFS**

- Women find DFS convenient: 50%
- Women find DFS safe: 44%
- Women find DFS easy to use: 34%

Women associate DFS with payments at retail stores

2/5

* A respondent could select more than one option

**Exhibit 29: Women’s degree of influence on household expenses**

- Grocery: High: Seek instant discount, variety and convenience
- Garments: High: Seek aspirational brands at optimal price
- Education: Medium: Joint decision, influenced by male members
- Transport: Low: Is dependent on male members of the family
- Utility: Medium: Seek convenience and takes joint decision

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Exhibit 30: Time spent on mobile phones by youth

- >30 minutes a day: 36%
- <31-45> minutes a day: 22%
- <46-60> minutes a day: 25%
- <01-02> hours a day: 15%
- <02 hours a day: 2%

Exhibit 31: Perceived complexity by Banked-DFS non-users

- Banked-DFS non-users admit that they “do not know how to use” existing DFS products and services.

Exhibit 32: Top reasons for not using DFS (as a % of respondents)*

- I find it difficult to use: 44%
- I don’t know how to get one: 43%
- I never thought about using it: 42%
- Cash payments are easier: 41%
- Places I shop do not accept digital: 31%

* A respondent could select more than one option

Exhibit 33: Interest in technology to access financial services

- Banked-DFS non-users show interest in using technology to complete financial activities.

Perception determines DFS adoption and use

Despite adequate access to DFS, the customer’s perception that DFS is complex to understand and use limits its adoption.

One of two Banked-DFS non-users state that difficulty in understanding DFS is a major barrier to its use (Exhibit 31). They cited the need to memorise login credentials, PINs, One Time Passwords and frequent technical errors as impediments that make it even more inconvenient and complex to use DFS. Cash, therefore, was cited as the easiest to understand to use (Exhibit 32).

The Banked-DFS non-users among the EMC customers have high access to digital channels. Almost 75% of the Banked-DFS non-user segment owns a smartphone that has an active Internet connection, while nearly 100% have a savings account. Despite these levels of digitization, they have not considered opting for digital as a channel for financial services. The reluctance stems from a perceived lack of cognitive ability and their extent of awareness.

Additionally, 33% of Banked-DFS users said debit cards, mobile wallets or bank transfer have functions they did not understand.

Easy to understand solutions and seamless transaction features such as QR code scanner, biometric, voice authenticated payments, which do not require customers to input complex passwords or credentials, will go a long way in bridging the gap between awareness and adoption.

EMC customers with behavior similar to Skeptics and Hurdled customers are most likely to display these attitudes.
Banked-DFS users and Banked-DFS non-users show positive correlation between perception of safety and DFS use

Safety, convenience and ease-of-use have been pointed out by Banked-DFS users as triggers for DFS usage (Exhibit 34). On the one hand, it results in Banked-DFS users being discerning and on the other hand, it raises a number of “what if” questions, deterring usage. The perception of safety shifts across the DFS life cycle, i.e. pre-usage, usage and post-usage.

Pre-usage: Concerns of DFS non-users revolve around the fear of the lack of visibility of the entire transaction flow, which stems from the following unanswered questions: (i) How is the money sent? (ii) Will it be received? (iii) What if the money gets locked? (iv) What if I forget the PIN?

Usage: Banked-DFS users have apprehensions concerning transaction failures, constant network issues and delayed confirmation messages, leaving them unsure of the success of the transaction.

Post-usage: Issues related to post-usage are associated with the uncertainty around the authority or personnel responsible for redressing grievances if and when there is an unsuccessful transaction. These perceptions weaken the value offering of DFS for both Banked-DFS users and Banked-DFS non-users.

Tie-ups with development partners who can drive literacy, along with additional security measures imposed by regulators to manage fraud, can potentially instill confidence in customers.

The existing sense of comfort and the relationship that established financial service players have with their clientele can go a long way in reducing the fear of the unknown. Awareness and literacy in pre-usage, supported by availability of safe products, handholding during usage and customer facing complaint redressal mechanisms, with post-usage assistance, can all be integrated into provider offerings.
Behavioral aspects of the customers, revolving around freedom to bargain, earn quick discounts, discomfort in standing in long queues and dislike of traveling long distances, impact their evaluation of the digital mode of transaction. To achieve a behavioral change that makes customers migrate from cash to digital, and make DFS a habit, requires a major push towards digitizing high frequency everyday spends and increasing acceptability of DFS instruments in the customer’s current ecosystem.

Increased awareness, wider access, increased opportunity and the incentive to use it frequently will create comfort levels and reduce their fear of DFS. The development of payment solutions that are as agile, easy to understand and universally acceptable as cash will be paramount for DFS providers, in driving universal acceptability of digital payment solutions.

EMC customers with behavior similar to Plus Ones, Contemplators and Skeptics are most likely to display these attitudes.

**The customers who receive their income in cash show limited propensity towards DFS**

Though less than 25% of the survey respondents receive their income digitally, 76% of them are regular users of DFS. By contrast, only 29% of respondents who received their income in cash are active Banked-DFS users (Exhibit 38). This validates the hypothesis that digital income triggers the adoption of DFS amongst customers.

While the Banked-DFS user customers show a positive predisposition towards using well established products associated with bank accounts, especially debit cards and electronic transfers, for financial transactions, Unbanked-DFS users show a higher propensity to use mobile wallets over debit and credit cards. This preference for the mobile might translate into leapfrogging of traditional digital products and rapid adoption of mobile based DFS products.

EMC customers who receive digital incomes are also more likely to save and transact digitally. Also, a majority of the EMC customers who were issued a debit card connected to their bank accounts, transacted more frequently with their debit cards (Exhibit 39). These customers were more inclined and comfortable transacting digitally for small and micro payments (utility bills and phone recharge) after their first positive DFS experience.

The bigger challenge facing DFS providers is digitizing the customer’s income in a cost effective manner. Partnering with “customer aggregating points” and large establishments for customer acquisition and servicing points is a promising way to digitize incomes and incubate a strong digital financial payments ecosystem.

EMC customers with behavior similar to Striders, Venturers and to some extent Contemplators are most likely to display these attitudes.
Navigating the unchartered Merchant Contours

Merchant Personas

Along with insights on customers, the merchants operating in the EMC customer ecosystem in Tier 2 to 4 centers were assessed owing to their role of key enablers, bridging the gap between customers and DFS providers. As of now their role is restricted to serving as the point of digital transactions. However, they have the potential to transform into customer education, acquisition and servicing points. In the effort to create a favourable DFS ecosystem it is important that DFS providers do not view merchants solely as transaction points, but as possessing the potential to catalyze and accelerate adoption of DFS.

1. Deserters

Deserters are merchants who have operated for over eight years in organized or semi-organized markets. They are risk-averse and have low levels of aspiration for growing their business. Beyond business they use social media in moderation, being digitally enabled through smartphones.

Their decisions in life are driven by the needs of their family. However, their business decisions are very objective. As a consequence, acceptance of new solutions is a function of its compatibility with their business ecosystem.

Any bad experience or fraud radically alters their perception, resulting in a huge negative impact on their usage of DFS.

While at some point of time Deserters did accept (debit and credit) cards as a mode of payment, however, instances of fraud or an unpleasant experience makes them actively dissuade customers from making payments through (debit and credit) cards at their shops. Their evaluation of modern technologies, mostly DFS, is negative. They are loyal to traditional modes of payments. They express a strong dislike towards DFS and openly recount their negative experience.

Story from the field

1. Deserters

A resident of Bhiwandi, a Tier 3 center 80 kms from the commercial capital of India, Mumbai, Arun takes care of his family of four using only cash both in his business and personal transactions.

Even though this 35-year-old maintains a business account with a government bank only 2 kms from his store and has the necessary documents to access financial services, he has an extremely negative view on DFS. Five years ago, at an ATM INR 10,000 was deducted from his account but he did not get the cash. This one unpleasant experience has closed his mind to adopting any digital mode of transaction, viewing them with extreme distrust.

His dislike for DFS has been strengthened by similar experiences faced by his peers, friends or relatives, even though these failed transactions were not directly experienced by him but were based on perceptions that digital modes of transaction are prone to failures.

However, they have the potential to transform into customer education, acquisition and servicing points. In the effort to create a favourable DFS ecosystem it is important that DFS providers do not view merchants solely as transaction points, but as possessing the potential to catalyze and accelerate adoption of DFS.
Decoding the Unexplored “Middle”

2. Old Schoolers

Merchants categorized as Old Schoolers essentially operate in the unorganized local market. They have been in business for >15 years, are risk averse by nature and highly resistant to changing their known way of life.

In their personal spheres, they use digital and social media only for the purpose of entertainment and communication.

Old Schoolers believe that adoption of modern technologies will not benefit them and hence are not open to giving them a try. Their business operations are well established and function smoothly, an equilibrium they are unwilling to disrupt.

Although they have access to formal financial services and hold a business account, they prefer using banks only to store surplus cash. They have low credit needs since they believe in self-funding business expansions. All payments to suppliers, employees and small business expenses are made in cash. Old Schoolers are not open to adopting DFS, even at the cost of losing customers.

3. Toe Dippers

Toe Dippers are established merchants with a track record of over five years in business. They predominantly operate in unorganized markets, are street smart and not easily influenced. They believe in their own judgement when it comes to adopting new technologies and products.

As individuals, they are restrained users of digital and social media with every decision, personal or business, taken after rigorous evaluation of perceived benefits.

Not keen to take risks, Toe Dippers are, however, open to evaluating solutions that are likely to translate into quantifiable benefits. Their aspirations in life are moderate and their financial goals are linked to the needs of their families.

Toe dippers are financially enabled, trusting of public sector banks and prefer low risk instruments for financial transactions. Their ecosystem is cash driven with only a niche customer segment demanding card payments. Their DFS usage is driven by the direct impact on their bottom line. Even if they see value in DFS, advocacy among their peers is minimal.

Story from the field

2. Old Schoolers

The archetype of his community, Balwant Ghosh is a 40-year-old vegetable vendor from Howrah, just across the banks from the teeming metropolis of Kolkata. He began his business buying and selling vegetables on a daily basis. His business has grown tremendously though he runs his shop from the very same place in an unorganized street market where he began 25 years ago.

Early morning is his busiest time with customers thronging to his shop. Purchases though vary from small portions for the daily meal to large requirements of food establishments. Having seen his business grown steadily over the years, and his entire ecosystem runs seamlessly on cash, he is not inclined to use technology in business related activities. Even for communication, he uses his smartphone sparingly. Balwant’s business account is, in his view, safe with a PSU bank. He is extremely risk-averse and finds DFS unsafe and irrelevant to the nature of his business, where buying and selling within the day is a prerequisite.

Story from the field

3. Toe Dippers

Sahil is the second-generation owner of a mini mart in Fatehgarh, a Tier 3 center in Punjab. His store, which was once a small mom and pop store, has been scaled into a mini mart that offers a similar range of brands as available in organized multinational retail stores. Sahil enjoys spending his day interacting with his customers, many of whom are migrants to Canada and visit Fatehgarh to meet relatives. This gives him a world-view he would otherwise not have.

His is therefore not the only retail store that offers a variety of products but also one with a POS machine for cards. Sahil has earned the loyalty of this segment, which transacts high amounts due to the high conversion rate from dollar to rupees. However, POS payment is applicable only for amounts higher than INR 200 to recover the transaction charges on a low margin business. For amounts lower than this threshold, he requests buyers to withdraw cash from an ATM next door. Sahil understands the convenience and benefits, both to customers and himself, of moving away from cash.
4. Contented Captains

Contented Captains are typically merchants who have run established businesses for over 10 years either in the organized or unorganized market. They are risk neutral and make decisions based on trusted sources of information.

In their personal lives, they are moderate users of digital and social media and have reasonable awareness of DFS. They prefer to maintain a "status quo" when questioned about DFS and its benefits.

These merchants with experience, content to run their business of many years, believe that adoption of modern technologies will lead to business continuity and reasonable profits, albeit to a limited extent. They seek a strong relationship with their bankers, who usually initiate them to any new financial offerings, including DFS.

Contented Captains usually hold a business account, personal account as well as avail other services, predominantly overdraft facilities, from their trusted banks. Higher access to financial services is the key reason for adoption of digital payments. Although they accept digital payments, Contented Captains do not actively seek or avoid this form of payment from customers. They neither leverage the benefits of digital payments completely nor do they communicate the same to fellow merchants due to the lack of a strong value proposition.

5. Aspirers

Aspirers are younger merchants who own small businesses. Inquisitive by nature, they are risk takers and intent on "changing with the times". Aware of the new offerings and product innovations in the market, in their personal lives too, they are digitally savvy and progressive users of social media.

Business decisions of Aspirers are mainly influenced by customer satisfaction and enhanced profit margins. They believe that modern technologies are representative of a progressive merchant, and can help improve business and overall profits. Aspirers, therefore, often seek special offers, lower technology and operating costs, which serve as drivers for the adoption of anything new.

Although Aspirers expect new technologies to rapidly scale up the customer base, given their business size they have concerns regarding data security and transaction failures. The major barrier, perhaps the greatest impediment, for not using DFS is the lack of necessary documentation and infrastructure required to own a business account, limiting their access to DFS.

Story from the field

4. Contented Captains

Kishwer Singh and his brother are partners in a garments shop in Patiala that they have run for the past 20 years. Though both are married they continue to live in a joint family and, take most of their business and personal decisions together as a team. Their family is the epitome of an Indian joint family, a comparison the brothers are proud of. A commerce graduate, Kishwer handles the day-to-day operations of the shop.

His personal transactions are largely in cash, though he is not averse to using a card when required. Around five years ago, the brothers installed a POS machine based on the recommendation of the PSU bank where they have a current account.

Their contract with the bank does not require them to pay a rental instead they are charged a transaction fee.

Much like other small family run businesses in India, Kishwer and his brother hope to see their business grow and be able to bequeath it to the next generation. Both value the support they receive from their bank and trust the services/recommendations provided to them.

Story from the field

5. Aspirers

Irfan’s scented flower oils business is based in Kochi, a beautiful coastal town in Kerala, a family business that the 26-year-old was given the reins of. This young, upward mobile, single lifestyle merchant lives with his family of six.

Irfan is digitally enabled, with progressive social media habits. He is inquisitive and believes in educating and updating himself through the digital media. Since his bank branch is at a distance of over five kms from his home and shop, distance restricts his usage of financial services. Irfan aspires to secure an export license and expand his business online to cater to international markets. Despite using his dexterity with technology to scout for options and business opportunities available overseas, Irfan is prevented from putting his business on a faster trajectory. He is unable to present the relevant documents to open a business account. Therefore Irfan is constantly looking for a solution to accept digital payments without a business account.
6. Early Adopters

Early Adopters are merchants who run large establishments, have been in business for over 15 years, and are predominantly present in organised markets. At the forefront of experimenting with advanced products and technologies, these risk takers are also usually less price-sensitive. Early Adopters seek the opportunity to leverage both technology and financial innovations before others and have the financial ability to acquire and use them.

These tech-savvy individuals also use digital and social media extensively in their personal lives.

Business decisions of Early Adopters are mainly influenced by their curiosity and ‘what if’ scenarios. They possess the drive to acquire information and actively seek new experiences that help them progress both in their personal and professional spheres.

Although Early Adopters expect new technologies to improve efficiency and simplify transactions over the traditional methods, they also view it as a means to maintaining their image in society.

Most financial transactions of the Early Adopters are digital. They usually accept more than one mode of digital payment from their customers, and are most likely to recommend new DFS products and services to peer groups, commanding influence over other merchants as well.

Vaishnavi, a fashion designer and a seamstress, has run her own boutique in Mysore, a micro enterprise for the last 10 years. Her shop is popular in this suburban town as is evident from the fact that 80% of her revenue comes from repeat customers. Many of her clients are young professionals comfortable with DFS just like her.

Vaishnavi installed a POS machine two months after she launched her store. While the majority of her customers prefer card payments, she convinced a few young customers to pay through a mobile wallet. The high value she places on digital payments is a derivative of the working time it saves her. For her purchases as well, as much as possible, Vaishnavi prefers to pay by debit cards. “Most of my utility payments are done through mobile banking apps. Whenever I go shopping, be it for clothes or for household needs, I swipe my credit card,” she says.
Relative Assessment

Merchant personas vary across the six dimensions. The table below highlights the distinct dimensions for every persona, with how it impacts and defines their attitude towards DFS. This is followed by a comparison of key behavioral indicators with reference to DFS.

### Exhibit 40: Relative assessment of key dimensions across merchant personas

<table>
<thead>
<tr>
<th>Qualitative indicator</th>
<th>Low interest arising from an unpleasant experience</th>
<th>Lacks interest in adopting DFS and new technologies</th>
<th>Value delivered by DFS and cognitive ability impacts evaluation</th>
<th>Unable to evaluate benefits of DFS; maintains &quot;status quo&quot;</th>
<th>Usage is driven by interest in technology to expand their business</th>
<th>Easy access and high use of DFS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantitative indicator</td>
<td>More than 90% expressed disinterest in adopting DFS</td>
<td>70% are not interested in adopting a digital payment option</td>
<td>85% find DFS costlier than cash</td>
<td>65% see low correlation between DFS adoption and their business growth</td>
<td>~ 90% are willing to try POS for payments, in case of customer demand</td>
<td>~ 90% are likely to propagate DFS, in case of a good experience</td>
</tr>
</tbody>
</table>

### Exhibit 41: Key metrics for tracking the behavior of different merchant personas

<table>
<thead>
<tr>
<th>Personas</th>
<th>Deserts</th>
<th>Old Schoolers</th>
<th>Toe Dippers</th>
<th>Contented Captains</th>
<th>Aspirers</th>
<th>Early Adopters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative assessment of key dimensions across personas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qualitative indicator</td>
<td>Averse</td>
<td>Resistant</td>
<td>Evaluator</td>
<td>Objective</td>
<td>Ambitious</td>
<td>Experimentative</td>
</tr>
<tr>
<td>DFS involvement</td>
<td>Low</td>
<td>Low</td>
<td>Medium</td>
<td>Medium</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Key barrier to DFS use</td>
<td>Experienced fraud</td>
<td>Negative perception of technology</td>
<td>Cost of DFS</td>
<td>Lack of quantifiable benefits with high usage of DFS</td>
<td>Reduced margins due to DFS</td>
<td>Lack of customer awareness</td>
</tr>
<tr>
<td>Motivator to DFS use</td>
<td>Secure transactions</td>
<td>Dis-incentivization of cash by government</td>
<td>Financial &amp; non-financial incentives to self and customer</td>
<td>Easy and fast credit through DFS involvement</td>
<td>Financial history for credit worthiness</td>
<td>Avenues for customer satisfaction</td>
</tr>
<tr>
<td>Ease of conversion</td>
<td>Very Low</td>
<td>Low</td>
<td>Medium</td>
<td>Medium</td>
<td>High</td>
<td>Very High</td>
</tr>
</tbody>
</table>
Decoding the Unexplored "Middle"

Key Merchant Insights

Even though merchants are rapidly gaining DFS related awareness, their comfort with the current cash ecosystem impedes its adoption amongst those who do not accept DFS solutions. Low compatibility with their ecosystem and lack of customer demand, in addition to the drag of extensive prerequisites for onboarding and dearth of customized solutions that serve unique business needs of merchants, has resulted in a less mature DFS ecosystem in the identified centers.

DFS does not meet the needs of merchants

Limited customization of DFS solutions for small and micro merchants limits mass adoption

DFS providers need to resolve the dilemma of offering simple yet customized solutions for the masses. Merchants are a heterogeneous group with diverse needs. The "one size fits all" approach does not resonate with them. Qualitative analysis uncovered the perception of the majority of merchants (DFS user merchants and DFS non-user merchants) in smaller markets that providers are force fitting standard solutions without looking at their unique business and market needs.

Onboarding and servicing merchants in these geographies is challenging because of high gestation periods, lower ROI due to low volumes, and inability to identify merchant behavior due to the lack of a digital data trail. Simple, secure, and easy to understand solutions designed with a fair assessment of diverse merchant needs, compatible with their cognitive and financial ability, is the way ahead.

Though POS is the most adopted channel for DFS for retail, solutions like wallets, QR code based payment methods could be explored.

Further, the analysis reveals that small and micro merchants face significant problems due to the lack of reliable network connectivity and power supply, the dual wave on which digital innovations ride.

Marketplaces in these areas are mainly unorganized, with a significantly higher proportion of merchants having limited access to electricity and sporadic network coverage. Easy to operate solutions capable of functioning with limited network and power connectivity, namely offline POS machines and payment solutions using basic features of phone technology, can prove very effective for smaller markets.

This situation is most relevant for Aspirers and Toe Dippers.

Further, merchants are unable to harness their banking relationships to gain credit from formal financial sources, a conundrum for them, which erodes the very potential of establishing better digital transaction trails.

The insights gained from merchants offer a clear understanding of the ground realities faced by this inadequately understood group of end users, even as they remain the most critical route to digitizing customers, as a result of their frequent interaction with the latter.

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Exhibit 42: Top five parameters for DFS evaluation

- Relevance to business
- Customer Demand
- Cost (upfront and recurring)
- Ease of use
- Transaction security

Exhibit 43: Barriers for adoption of DFS

1 of 3

DFS non-user merchants believe that DFS is irrelevant to their business ecosystem

Exhibit 44: Merchant digitization in personal life

Only 1 of 2

DFS non-user merchant is personally digitally enabled
Complexity in acquiring and maintaining DFS acceptance technology dampens merchant interest

Merchants who wish to acquire DFS acceptance devices are required to submit a multitude of documents (Exhibit 45). Often merchants in this segment do not possess them due to size, nature and duration for which their businesses have existed.

The problem is particularly acute for micro and small merchants who do not possess income tax statements and sales tax registration, a prerequisite for being registered as an authorized merchant by DFS providers.

The interest of DFS non-user merchants often wanes at the very initial stage due to the opacity of cost structures, which they find difficult to understand. Merchant perceptions on the quantum of the upfront costs, loaded with variable fees and charges of digital channels, compared to the ease of low or no cost of cash is a deterrent for adoption.

Further, inadequate handholding at the time of adoption and installation of digital channels mutes confidence and erodes trust (Exhibit 46). Only 50% of the merchants interviewed were fully aware of the fee structure for a POS installation. The acuteness of this problem is evident from the statements of merchants (both DFS user merchants and DFS non-user merchants). Their first concern is the difficulty in understanding DFS, while the second concern is the added hurdle of lack of training. Both factors act as a barrier to the increased adoption of digital channels.

Providers often face the dilemma of whether or not to ease merchant documentation processes. Universally issued and accepted account opening documents can be used as surrogates to tide over the documentation needs prior to installing a digital channel. Measures such as biometric authentication/ online account opening can be deployed to achieve quick turnarounds while opening business accounts for merchants. Providers can look at alternate sources of verification to minimize operational risks associated with business accounts. Tiered KYC products coupled with simple and quick processes for DFS installation and activation can accelerate mass DFS adoption, especially in smaller businesses.

Further, a solution embedded in an existing platform, for instance a mobile device, can empower merchants to expand their payment acceptance capabilities besides proving beneficial in light of the familiarity of merchant with this channel. 88% of merchants already own a smartphone for their business and can be considered "mobile ready". A replicable model is the use of mPOS devices across the globe to penetrate unorganized merchant segments by leveraging its low hardware costs, less complex documentation processes and the existing comfort merchants have with smartphones.

This situation is most relevant for merchants whose personas match Aspirers.

Exhibit 45: Documents required for POS registration
- Shop & establishment certificate
- Telephone/ electricity bill
- Sales tax registration
- Rent lease agreement
- Voters identity
- PAN
- Latest Income Tax

Exhibit 46: Training provided for POS usage
Only 1 of 3 DFS user merchants are provided training at the time of adoption of POS

Key Merchant Insights
DFS is not well understood

Limited understanding of DFS amongst merchants, deters adoption and constrains usage

Merchants (DFS users and DFS non-users) cited “difficult to understand” as one of the top three challenges preventing adoption and usage. Nearly 37% of total merchants (DFS users and DFS non-users) view DFS as a complex way to transact. DFS non-users express concerns over committing mistakes and losing their money during digital transactions. This fear dramatically reduces once the merchant begins to use DFS solutions (Exhibit 47).

The presumption of DFS users that inadequate training and handholding at the time of POS installation has a negative impact on their DFS understanding and usage was also encountered during the research.

Aside from questioning their own ability to understand it, 50% of DFS user merchants also face a fairly onerous challenge due to the lack of understanding of DFS among their customers and employees (Exhibit 48).

Further, they have an overwhelmingly high dependence on DFS providers to resolve even minor transaction related issues. 42% express happiness with access to call centers, with the “anywhere, anytime, access” of the call center pushing it in the number one spot as the biggest value offering.

Though DFS knowledge remains limited across locations, merchants in regions with a high tourist inflow stood out with relatively better understanding of DFS products.

Merchants picked multiple products, complex process and varied experiences across channels as possible causes for their confusion about DFS and a reason for deterring usage.

Hence one stop solutions that could accelerate DFS adoption and use are: (i) ensuring access to last mile “easy access points” for handholding across the merchant lifecycle, (ii) easing access to customer grievance redressal mechanism, (iii) creating targeted merchant communication and (iv) training programs.

These suggestions are most relevant for Old Schoolers and Toe Dippers.

Merchants do not associate fulfillment of credit needs with DFS

Almost two of three card accepting DFS users merchants have adopted their POS from the provider they bank with, indicating that merchants have a positive predisposition towards their current providers.

However, as shown in Exhibit 50, despite having established banking relationships, merchants do not select formal institutions as the top choice to obtain a quick loan to meet business needs.
Additionally, while many merchants have sought loans for personal reasons, seeking credit for business-related activities from formal institutions is not common.

Historically, the process of obtaining credit, from formal financial institutions, was tedious and required extensive documentation. Even today, credit assessment by providers (especially Public Sector Banks) continues to rely on a limited set of documents, income tax returns, bank statements, pay-slips and mortgaged property.

This method of assessment is not a good fit for merchants, a majority of who earn and hold their income in cash. Almost 70% of the merchants, therefore, go to their friends, family, otherwise mortgage land or gold with moneylenders for business quick loans. In the event of an immediate requirement, these merchants are not averse to paying a higher rate of interest for quick disbursal from such informal sources of credit.

Merchants also often need short-term credit to manage their working capital requirements. This is typically managed through supplier provided credit, of a period of two to three weeks, with an average limit of INR 30,000 in Tier 2 to 4 centers.

While the need to evaluate the creditworthiness of these merchants by leveraging their digital income/expense trail along with alternative credit assessment methods is evident, continuous evaluation and upgradation of their credit limits could be a value enhancer.

This situation is most relevant for Aspirers and Toe Dippers.

**Merchants appreciate benefits associated with DFS better post-adoption**

DFS user merchants both understand that digital solutions are safe and advanced, as well as believe that it helps increase customer footfall and drives sales.

These have grown to be convictions as DFS user merchants believe cost is a minor disadvantage for gaining access to DFS products. More than 70% of those surveyed pay monthly rental fees for POS machines. Merchants, who are DFS users, are most likely to be quicker in adopting new DFS offerings than DFS non-users because they are satisfied with their past experience.

One of three DFS users merchants are also likely to recommend DFS to their friends / families and colleagues.

There also exists a need to educate merchants on the benefits of adopting non-cash modes for business transactions, especially since about 90% of them use a gamut of the DFS products - debit cards, wallets and online banking - in their personal lives.

Low merchant adoption and active use of new digital products and services remains a major concern for DFS providers. The challenge is two-fold. First, for the large mass of population from Tier 2 to 4 centers.

**Exhibit 50: Providers are unable to leverage existing banking relationships with merchants**

| 2/3 | Merchants approach informal sources for a quick loan despite of these merchants owning a business account |
| 5/6 | Merchants (DFS users & DFS non-users) have received a loan for business-related needs from formal institutions |

| Only 1 | Of 7 |

**Exhibit 51: Top 3 reasons and benefits for DFS* adoption**

| Customer demand | 57% indicated customer demand as a primary factor for adoption |
| Safe to use | 62% indicated that card payments are very safe and advanced |
| Saves time | 26% indicated that card payments reduced the cost of managing cash |

*DFS adoption predominantly refers to acceptance of card payments by merchants.
Decoding the Unexplored “Middle”

that maintains a preference for cash payments, the complexity of digital modes of transactions can appear intimidating. Second, DFS providers have not been able to successfully identify, tap and motivate “Propagator Merchants/Champions” to influence other DFS non-users.

More than 45% of merchants learn about new digital payments modes from their peers and other merchants. This validates the suggestion that DFS providers can leverage select DFS user merchants as “champions” to educate or drive adoption amongst their customers and peer merchants.

This situation is most relevant for Early Adopters.

Convenience of cash overshadows benefits of DFS

Low relevance in surrounding ecosystem inhibits adoption and usage of DFS by merchants

The payments ecosystem of merchants includes their suppliers, customers, employees and other vendors. All these payees prefer to transact in cash, listing various reasons for doing so, convenience, easy avoidance of taxes and perceived complexity of DFS.

Few merchants are offered electronic payments as a mode of payment by their suppliers. Merchants who prefer electronic payments to suppliers are those that deal in big-ticket items, for example electronics.

There is a high correlation between the type of merchant (DFS users and DFS non-users) with the DFS-readiness of their suppliers as seen in Exhibit 52. Only 3% of DFS non-user merchants have the option of paying their suppliers electronically compared to 38% DFS user merchants. Most DFS user merchants, however, still view cash as the preferred mode of payment.

Low customer demand for digital payments also deters use of DFS (Exhibit 53). Moreover, research indicates that merchants do not feel the need for digitization of transactions as the customers rarely demand invoices (Exhibit 54).

Most merchants pay their employees in cash; often based on the preferences of the employees themselves. Employees often need advance payment of salary in cash to meet big ticket expenditures/emergencies. Additionally, other avenues of day-to-day expenses such as utility payments are also made in cash as it is convenient to pay when required using the shop cash-box or withdrawing money from the merchant’s personal account.

Government initiatives to discourage use of cash and solutions to on-board multiple stakeholders across the merchant value chain can translate into rapid adoption.

This situation is most relevant for Old Schooler, Contented Captain and Toe Dipper merchants.
Merchant preferences are influenced by convenience associated with cash over cost of cash, preventing uptake of digital payments

Nearly 49% of total merchants provide customers the option of paying by either cash or digital channels. In a competitive sales environment, merchants feel compelled to meet customer demand for multiple payment options. When asked which payment method is most preferred, 73% of respondents said cash. In comparison, 13% favored debit and credit card, and only 2% favored mobile payment options. Analysis revealed that, merchant preferences for digital payments are influenced by their perceptions of the cost and transaction time involved.

Merchants perceive cash as the most preferred mode due to two key factors. **First**, merchants tend to underestimate the full cost of cash, as they tend to neglect costs that are not apparent, such as loss due to theft or counterfeit notes, time to prepare cash registers, reconciliation of cash payments, and travel to deposit cash. Nearly 13% of merchants reported travel of one to two hours to make cash deposits at their banks and 23% (Exhibit 56) of merchant interviewed visit their financial institution everyday. **Second**, the cost of using digital payment methods is stated upfront by the provider making the cost more evident and real for the merchant. 48% of DFS merchants are aware of at least two of the five charges applicable to them for using DFS. Merchants usually take a short term view and are unable to acknowledge the long term benefits of accepting digital payments over cash.

While disincentivizing cash and making digital transactions simpler can prove effective in accelerating DFS usage, it requires intervention from multiple stakeholders.

Regulatory intervention, without doubt can drive DFS adoption; initiatives such as subsidies for POS terminals, tax relaxations for using digital payments, stringent KYC for high ticket cash transactions and limits on cash withdrawals can prove effective. DFS providers need to identify the optimal product, pricing and channel mix for a compelling value proposition.

This situation is most relevant for Old Schoolers, Contented Captains and Toe Dippers.

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**Exhibit 55: Top 3 cited reasons for cash preference over other digital payment modes**

- Customers rarely ask for it (non cash payment mode)
- Cash payments are better as we receive the money immediately
- Difficult to solve queries when customers have issues with the non cash payment option

**Exhibit 56: Frequency of cash deposit trips to the Bank**

- 1 - 3 times a month 5%
- 2 - 3 times a week 28%
- Daily 23%
- Weekly 44%
In the previous sections, several potential DFS provider intervention points are enumerated. In this section, the six key value propositions for industry stakeholders to consider either individually or in collaboration to deliver DFS to EMC customers and merchants in Tier 2 to 4 centers are identified.

1. Offer Simple, Easy to Understand and Secure Solutions

Simple, secure and easy to understand solutions designed with: (i) a fair assessment of the diverse needs of the EMC customers in Tier 2 to 4 centers and (ii) their ability to understand and use DFS, will go a long way in making it a widely accepted channel for transacting.

Technology to make transactions simple and secure

The use of technology to develop easy to understand solutions and seamless transaction features - contactless payments, biometric/iris, voice authenticated payments, QR code based solutions being obvious examples - can prove to be a big step in making DFS simple and easy to understand for the EMC customers. These do not require customers to input complex passwords or credentials yet ensure transaction security.

Contactless payment solutions, an example being Near Field Communication (NFC), which has potential to provide convenient solutions, by reducing transaction time, are currently not yet well entrenched in Tier 2 to 4 centers, principally due to of the higher cost of embedding this technology in smartphones. Other forms of contactless payment solutions – for instance, QR code – with their ease of understanding and cost effectiveness, are steadily making progress as a more rational choice in these geographies.

Technologies using Application Program Interfaces (API) that integrate bank websites to merchant websites and assure a seamless payment experience for customers, could be a solution worth considering.

While in the current context, POS is evidently the most adopted channel for DFS at retail, payment solutions rooted in the existing infrastructure, such as smartphones can evolve to be more effective for merchants operating in this ecosystem. Fintech companies, with their high ability to innovate, could in partnership with trusted providers like banks, effectively deliver these solutions.

Simplifying small and micropayments

Products like wallets have helped overcome the challenge of meeting the KYC requirement or multi-layered authentication, besides, of course, facilitating one touch payments for smaller transactions. Banks could explore this opportunity further, using tiered KYC for wallets, QR code based solutions and prepaid cards to facilitate small ticket digital transactions through bank accounts for this segment.

Going beyond the boundaries of the Internet

Lean smartphone applications and payment solutions requiring minimal interface with the Internet (for example open loop USSD solutions, SMS, IVR and missed call) can add immense value by reducing transaction failure rates and driving digital adoption.

Providers can effectively ride upon an open loop USSD channel to deliver financial services to the lower end EMC customers, especially in Tier 3 and 4 centers.

2. Focus on Efficient Service Delivery

A combination of existing and innovative technology driven channels are best suited to target and service customers and merchants in Tier 2 to 4 centers.

Expanding DFS exposure through the existing financial infrastructure

The sphere of trust of urban customers is now growing to include Fintechs and NBFCs. The EMC customer, however, in Tier 2 to 4 centers continues to repose maximum confidence in banks.

These customers and merchants, who are averse to taking risks and have been dependant over extended periods of time on banks for their financial needs, can be effectively targeted through digital channels connected to banks. Fintech, Payments Banks and other new entrants with their partnership with banks can leverage this existing infrastructure for customer acquisition and onboarding. They will benefit from their association with a trusted brand and its reach to gain a financially literate customer at minimal cost.

Mobile - “the channel of the future”

The existing familiarity of customers with mobile phones spells an immense opportunity for DFS providers. The smartphone can be used as a channel to effectively onboard, service and cross sell to the customers. Open loop USSD solutions can leverage feature phones to onboard non smartphone users.

Telco backed and technology driven Payments Banks are best suited to leverage their position. The traditional players or banks can partner with these nimble players to deliver traditional banking products through this channel.
Assisted mode

Business Correspondents (BC) enabled with technologies such as micro ATMs, handheld devices and tablets have the potential, in the near term, to effectively deliver financial services in Tier 2 to 4 centers. Traditionalists and SFBs have placed faith on this “technology enabled channel with a human interface” to ensure mobility and last mile connectivity. DFS providers are experimenting with multiple BC models (onsite, offset, in-house and outsourced) to find an equilibrium between service quality, operating cost and reach.

More than channels (B2B2C)

DFS providers are viewing large establishments such as schools, hospitals, petrol pumps, retail chains, co-operatives, utility bill counters and highway tolls collectors as platforms for quick customer acquisition. Once digitized, these establishments will spawn new DFS ecosystems where customers can transact frequently, leading to a network effect.

Non-financial infrastructure

Non-financial touchpoints (health centers, social set-ups and gathering) with a high footfall can be effectively leveraged to limit the cost of customer acquisition and deliver targeted communication to customers.

Information and data captured at these touchpoints can also serve as easy KYC for DFS providers. Traditional players like banks and nimble players like NBFCs /MFIs /SFBs can effectively convert these non-financial nodes into financial interaction hubs. Telco based Payments Banks can consider transforming their agent network into micro bank branches for their potential banking customers.

3. Build Customized, Need Based Solutions

Designing comprehensive DFS product suites that include payments, savings, credit and investment is the optimal approach to tapping the underlying potential arising from the financial needs of customers and merchants.

Digitized daily transaction points

Small and micro merchants in Tier 2 to 4 centers consider digital payments to be more expensive than cash. Often they do not have the financial ability to invest in a POS installation. Hence, smartphone based payment acceptance solutions, including a QR code based solution, mPOS, wallets, UPI and open loop USSD solutions, that are embedded on an existing device and are affordable would fit well and accelerate their digitization journey.

Demographics based offerings

A large part of the EMC population is financially dependent, especially women and teenage children. They have limited access to financial infrastructure, as borne out by their limited data plans, low-end smart phones, limited documentation KYC, etc. Their interest in DFS is driven by their inclination to unearth value for money.

Tiered KYC products, that can be accessed “on the go” and do not require a physical touchpoint for activation, can effectively help address the needs of customers. Further, DFS providers could consider linking value added services, rewards, cash-backs, and most importantly discounts with DFS offerings to enhance overall value delivered and ensure customer loyalty.

Digital savings, credit and investment

DFS solutions that enable the customers to save from the comfort of their home, through simple to understand products, competitive interest rates and no minimum balances, are best suited to address the small ticket size and high frequency of saving needs.

Mobile wallet providers can offer convenient options for digital storage of small amounts of money. Traditional players like banks, with wallet propositions linked to their savings account, can fulfill the dual purpose of providing a transaction account, while continuing to pay interest on the value stored digitally by the customer.

Once informal savings and credit groups, chit funds are linked to formal financial services through digital channels, security, financial inclusion and mobilization of savings can be effectively enhanced.

Credit is needed by the customers primarily to finance medium ticket size items, fulfill their aspirational needs and spend on smaller ticket size items for their everyday household needs. While traditional players cater sporadically to the demand for medium sized loans, digital channels can decrease loan processing, disbursal and collection costs, besides making available adequate, timely and smaller size loans to these customers and merchants.

Overdraft products with dynamic credit limits linked to transaction history, anticipated income or sale history, delivered through suitable digital instruments like cards, can help them manage their cash flow requirements.

Scaled down investment products and credit insurance bundled through digital channels are examples of offerings that can help DFS providers improve the unit economics for the EMC customer in Tier 2 to 4 centers.

Traditional players like banks, who partner with incumbent players with widespread reach (BCs) or nimble players like Fintechs, can position themselves to service these customers well. Mobile phone users leave a daily digital trail, thereby, providing ample opportunity for Payment Banks of mobile network operators to leverage an individual customer’s mobile money or mobile bill history to strengthen credit assessments and deliver instant credit.
Leverage alternate data sources for creation of credit history

Analysis of the financial transaction data of customers by using digital/non digital information from their frequent transaction points, local Kirana stores, baniyas, petrol pumps and hospitals etc., can assist in the creation of a visible transaction history.

Likewise, sales data for a merchant can establish a merchant’s creditworthiness. Therefore, there is a critical need for a centralized organization/ body with strong alliances among industry players to create a database for the customers and merchants with limited credit trails.

4. Move to Value Based Pricing

DFS providers can consider a differentiated strategy, with DFS offerings customized to the financial needs of the customers, a possible option being differential pricing based on the frequency and value of usage.

Pay as you use

Investment and credit products with differential and easy to understand pricing that mirror the financial needs of customers can help DFS providers profitably tap customers.

Customer profitability instead of product level profitability

The business case for DFS providers to serve the EMC customers and merchants in Tier 2 to 4 centers is best understood through the creation of bundled solutions that cater to all their financial needs, rather than evaluating these customers on the basis of individual transactions only.

An integrated approach can help build and sustain a profitable relationship with these customers and merchants. At an individual product level, the limited financial ability and smaller ticket size transactions of this segment make it appear unprofitable. However, providers envisioning a holistic relationship leading to a profitable increase in the share of wallet could emerge as winners.

5. Foster Favorable Ecosystem Development

Nurturing a robust digital payment ecosystem is essential for capturing the true potential of DFS.

This ecosystem should support secure and low cost transactions while accommodating product and channel innovations.

DFS infrastructure

Infrastructure needed to accept and deliver digital finance can, depending on geographies and customer maturity, either piggyback on existing infrastructure or innovative low cost solutions, The DFS ecosystem in Tier 2 to 4 centers needs to be a supported by a wide network of heterogeneous merchants who accept DFS as well as ubiquitous cash-in, cash-out points, in the form of digital/physical/agent touchpoints to provide “15-minute access” to the Banked-DFS users.

Enabler and regulator push for creation of digital economy

Related initiatives by the Government, the recent being the proposal to ban large ticket cash transactions, denominations of currency, demonetize large currency denominations in order to dis-incentivize cash, will hugely support the DFS ecosystem.

Digital initiatives of the magnitude of Smart Cities and Digital India are expected to boost the adoption of digital payments. However, the need to incorporate more aggressive policies around disincentivizing cash for the customers and merchants in these geographies is critical. High inclination towards maximizing benefits from financial transactions makes these policies especially compelling.

6. Deliver Simple and Targeted Communication

Customer attention on the viability of DFS can best be captured through simple, straightforward and targeted communication through trusted channels, especially government and development partners.

Mobile literacy to financial literacy

DFS providers can leverage mobile literacy among both customers and merchants to reiterate the DFS story.

Customized communication content delivered through
SMS, social and digital media, capable of being viewed on the phone is the optimal choice for reaching customers at a minimal cost. Players with a limited physical presence are best positioned to leverage mobile, Internet and telecom penetration to target this group.

**Champions to drive DFS awareness**

Rapid innovations have made technology accessible at reasonable costs. EMC customers in Tier 2 to 4 centers have expanded to add new sources of awareness and influence. In the past decade, the customers have traversed from seeking and sharing information from peers and traditional media to gathering information from social and digital media.

However, the network effect created through word-of-mouth remains highly prominent in this group of customers and merchants. Development of customers and merchants, who have enjoyed positive experiences with DFS, as advocates can prove effective.

**Development partners as catalysts for targeted communication**

Handholding and financial literacy can be entrusted to development organizations - NGOs, trade bodies and independent consultants - who can raise the extent of awareness and deliver targeted communication. Loyalty and frequent usage can be sustained only if the customer is supported at every intervention point. Partnerships between providers and developmental organizations like trade bodies (CAIT), to communicate upfront to merchants the immediate benefits of DFS, can yield considerable benefits.
The EMC customer and merchant in Tier 2 to 4 centers is well positioned to realize the power of digital financial solutions and the impact that it is likely to have on meeting his/her financial goals. Most DFS providers recognize that the EMC in Tier 2 to 4 centers is an attractive segment, primed for DFS delivery and likely to constitute a significant profit pool in the near future.

However, many DFS providers are not yet geared to understand nor can they address the specific needs of this customer segment. The task at hand is to identify differentiated value propositions that these providers and enablers can etch to imprint a unique story to win in this market.

Future volumes and adoption of DFS is likely to, no doubt, outweigh short term cost considerations that providers may have. Although, DFS providers have tested the waters and created excitement in the space, they have not spurred the activity to the level that the customers and merchants in these tiers would like, one that would address their real challenges.

Understandably, offerings that cater to the underlying needs are inadequate or yet to be developed. In the short term, the focus should be on developing DFS solutions that are appropriately designed and tailored to address the EMC customer’s requirements and aspirations.

The Government and regulators will be expected to drive adoption through policy changes aimed at promoting a less-cash economy and making end customers realize the cost of cash. Development partners and industry bodies have the potential to become advocates that drive the involvement scale upwards by educating and handholding customers through this DFS journey.

Looking ahead, it will not be sufficient to develop DFS solutions to address today’s problems. Given that this segment is at the cusp of a behavioral change that is truly qualified by ambitions, DFS providers will need to respond to tomorrow’s challenges and anticipate solutions for the future DFS economy.

We believe that the EMC customer and merchant in Tier 2 to 4 centers is unquestionably ready to take on the disruption that DFS is likely to make in their lives, the question for DFS providers and enablers is: Are you ready?
Decoding the Unexplored “Middle”

Appendix 1: Rethinking the Industry Landscape

To understand the current outlook of providers towards DFS in the identified geographies and their strategies to drive its adoption in-depth interviews were conducted with the senior management of 40 DFS providers and enablers. The distinct takeaway is that while DFS providers have digital financial solutions at the core of their strategies, they have not looked at the specific strategies for EMC customers in Tier 2 to 4 centers. The approach of providers to segment customers is stereotypical, being “geography” centric, and does not differentiate between customer sub segments within cohorts.

Supply Side: Recognizing Real “Peers”

The conventional method of categorising financial services players has either been by ownership (e.g.: public, private, foreign), by legacy (e.g.: old and new private banks), as well as by their service offerings (universal banks, small finance banks, Payment Bank, postal bank) and physical reach (national, regional player).

There is a need to redefine DFS providers by their chosen digital business model rather than by the conventional categories. Each of these business models have inherent advantages and disadvantages that distinguish them from each other and accord them a unique market positioning. Providers have adopted varying business models from: (1) an asset-light one to a (2) branch-heavy one, a technology-led one to a partnership-led one to target the specified geographies.

Three key elements define and distinguish their underlying business models.

- **Reach**: The physical presence of providers in terms of branches/ATMs/outlets and existing partnerships to serve in these geographies
- **Digital value proposition**: Product/channel/ customer experience innovations that will determine if there is a unique value proposition for the customers in these geographies
- **Breadth of Financial Services**: An existing suite of financial products and services for the customers that helps establish trust and recall in the minds of the customers.

Based on their DFS model, the providers can be broadly classified into five categories

1. **Traditionalists**

Traditionalists have a sizeable physical infrastructure (branches) and additional human touchpoints (BCs) providing them with an advantage of “reach” due to legacy operations. Owing to their strong core financial services association they enjoy the trust of customers across the tiers. Traditionalists intend to leverage digital channels primarily to deliver routine financial services to their existing customer base. They rely on expanding their reach through building proprietary BC networks. These providers are slowly and steadily building digital capabilities to serve their customers.

2. **Urban Centric**

These providers are predominantly focused on metros and select Tier 1 centers as their target geographies. They take a linear approach to the market, leveraging technology to address and service the financial needs of a more mature and digitally enabled customer base.

The Urban Centric providers believe “digital” is tier-agnostic and hence these capabilities are transferable to Tier 2 to 4 centers in the near future. Select PPI providers and banks (mainly foreign) are focusing all their energies in providing a seamless digital experience to their Tier 1 customers. Although, they have identified the opportunity in Tier 2 and below, expanding to these geographies is not yet on their radar.

3. **Nimble**

These providers have deployed or intend to use several asset light models to serve the Tier 2 to 4 centers. Their business model entails minimal physical touchpoints, supported strongly by digital product offerings and channels (including mobile BCs) in terms of customer acquisition, onboarding and servicing. New age Fintechs rely on leveraging the “digital readiness” of their target customers as well as borrowed infrastructure, to support their own limited infrastructure. They often have limited product offerings and rely heavily on digital delivery.

4. **Contenders**

Contenders are potential frontrunners capable of extending DFS very competitively to Tier 2, 3 and 4 centers. They aim to achieve this through optimum utilization of their existing reach (albeit limited), focused DFS offerings and negotiated partnerships.

While some are yet to build a strong association with financial services in the customers’ minds, others are focusing on staying ahead of the curve in terms of innovation. These providers, with some additional seasoning, possess the ingredients required to drive DFS adoption. Few providers (across types) are executing ambitious and aggressive strategies to leverage digital offerings supported by strong partnerships to drive DFS adoption.

5. **Invaders**

Invaders are traditionally large non-financial services players who have now ventured into financial services. They have an inherent advantage of a vast physical infrastructure (branches/service points) as well as technological capabilities to scale up. However, their ability to offer focused DFS offerings in Tier 2 to 4 centers will depend on their speed to innovate. The advantage of cost arbitrage in serving below Tier 1 customers is what distinguishes them from traditionalists.

Telcos sponsored Payments Banks and the postal Payments Banks have an enviable physical reach. Their speed to innovation, customer servicing capabilities and breadth of financial services offerings will determine success.

As seen in Exhibit 57, the identified provider cohorts have been mapped based on their relative reach and depth of financial services in context of their current business model for Tier 2, 3 and 4 markets. The Physical Digital Continuum represents the various choices that the providers may choose to approach DFS. In each cohort, different providers have varying value propositions based on digital offerings. The size of the bubble is an indication of their existing customer base. While each of them will continue to leverage their existing strengths, their strategies to increase their physical reach, ability to optimize digital innovations and establish a financial services offering will determine their unique positioning on the curve.
Staying Ahead of the Curve

It is clear that the various categories of players have relative inherent advantages and challenges to leverage DFS to serve Tier 2, 3 and 4 locations. However, with a cash-rich ecosystem dominating Tier 2 and below geographies and a dynamic market, understanding customer needs and the unique requirements of merchants in these geographies is the only way to create a sustainable DFS business case.

Exhibit 57: DFS Provider Landscape in below Tier 1 Centers
The methodology used for the study is a combination of qualitative and quantitative primary research conducted across multiple locations. The study is designed to identify opportunities for uptake of DFS among the EMC customers and merchants operating in Tier 2 to 4 centers based on analysis of data derived from primary research.

**Definition of Emerging Middle Class**

For the purpose of the study, Emerging Middle Class (EMC) has been defined as the customer segment with a monthly household income in the range of INR 12,500-85,000 (annual income in the range of INR 150,000 to INR 1,000,000). They have been further classified into broadly three major categories:
1. Banked-DFS users
2. Banked-DFS non-users
3. Unbanked-DFS users.

**Customer Interviews**

The study covers a sample of 650 customers across 37 cities across four regions (N, S, E and W). This sample size was designed to ensure appropriate representation across parameters like education, age and social backgrounds. Customers interviewed belonged to the three segments – Banked-DFS users, Banked-DFS non-users and Unbanked-DFS users. Consistency and adequate regional coverage across customer categories was ensured. The survey included 10 Focus Group Discussions, 100+ qualitative and 500+ quantitative interviews. The quantitative sample distribution across three segments was as follows – Banked-DFS users (223 customers), Banked-DFS non users (166) and Unbanked-DFS users (127).

**Merchant Interviews**

For merchants, similar geographies were identified as for the customer survey to ensure that the study taps into merchants who cater to the EMC customer in Tier 2 to 4 centers. The study covers a sample of 250 merchants. The merchants were either, DFS users or DFS non-users and categorized as such. Those interviewed belong to five broad categories i.e.: utility, lifestyle, everyday goods, services and healthcare. Again, consistency and adequate regional coverage was ensured across type and size of merchant businesses.

**Methodology**

The three key elements of the methodology included creating personas, drawing insights and finally identifying implications for the key industry stakeholders. The personas have emerged as a result of a robust data analysis exercise. Similar variables from the merchant and customer discussion guides were grouped to arrive at six summary variables i.e. dimensions that trace every stage of the journey for the EMC customer and merchant in Tier 2 to 4 centers from pre to post adoption of DFS.

Based on the similarity of responses across these dimensions, distinct personas were identified for customers and merchants. Post persona creation, insights were drawn through data analysis. These insights were analysed and supported with the quantitative data collected from the study. The report concludes by offering value propositions for DFS providers and enablers interested in furthering DFS in the EMC customer and increasing merchant acceptance points in the identified markets.
Demonetization devalued nearly 86% of the currency in circulation, which initiated knee jerk reactions in the market. To capture its impact on the EMC customers and merchants, a quick narrowly focused market assessment was undertaken.

The study conducted in the month of December across 8 cities involved brief quantitative interviews focusing on demonetization with a set of around 250 merchants. This merchant set was independent of the sample size in the original study.

The analysis of data indicates that while demonetization has provided short-term incentive to use DFS, the sustainability of this behavioral shift will predominantly depend on multiple factors such as ecosystem support for digital payments, and frictionless and affordable payments.

The findings of the main report provide a holistic perspective on DFS with respect to associated behaviors, attitudes and unmet needs of the EMC customers and merchants in Tier 2 to 4 centers. In the section below, we have mapped the dominant short-term shifts across the 6 key dimensions in the EMC ecosystem triggered by demonetization and shortage of cash supply. While the data was collected immediately after demonetization, the analysis below takes into consideration the continuing behavioral trends instead of merely stating immediate short-term reactions.

### 1) Awareness:
DFS awareness has increased amongst EMC customers and merchants post demonetization. Our analysis indicates that awareness of mobile wallets as a mode of payment has seen a higher surge compared to other modes of DFS (Exhibit 1), which is attributed to minimal infrastructure requirements for wallets, mobile readiness of customers and the aggressive marketing campaigns led by mobile payment providers.

### 2) Access:
While, payment providers and banks are witnessing an increase in the demand for POS and other digital products, providers are not fully prepared to fulfill this demand. A number of merchants are facing difficulties and delays in getting access to POS. Hence, most merchants and customers are adopting mobile wallets as an easy fix to their cash liquidity concerns. Nevertheless, this shift is limited to retail payments. As shown in Exhibit 2 and 3, cash still remains the most preferred mode of payment, to suppliers and employees.

### 3) Interest:
Demonetization has augmented the interest of merchants in acquiring digital modes of payments. Exhibit 4 indicates, while 57% of DFS non-user merchants expressed interest in offering card payment solutions to their customers, 55% of them asserted their interest in offering mobile wallet as a mode of accepting payments. On the other hand, customer preference for payment products differed with 72% of merchants stating that their customers still prefer paying in cash. Informal short-term credit from suppliers to merchants and from merchants to their customers is on a rise, and this arrangement is being widely adopted to deal with aftereffects of demonetization.

### 4) Evaluation:
Demonetization has positively impacted evaluation of DFS payments by the merchants and customers operating in the EMC ecosystem. Post demonetization, 55% of DFS user merchants feel that their revenue has increased due to the digital payment mode they provide to their customers. However, as stated in the report, complexity and safety remain the major barriers to DFS evaluation and adoption. Customers and merchants alike are viewing demonetization as a temporary phase and believe that once cash is pumped back into circulation, they will revert to the cash ecosystem.

### Usage:
Although 79% of merchant respondents have experienced a dip in their revenues post demonetization due to constrained consumption by customers, DFS user merchants saw a marginal increase in the contribution of digital payments to their overall revenue (Exhibit 5). Merchants and customers both share concerns about transaction security and transaction failures, but, they are willing to take a risk in cases where the transaction value is small.
5) **Trust:** Demonetization has built a strong case for propagating DFS. While, Early Adopters and Venturers will continue propagating DFS, government’s efforts towards making digital more economical may provide an impetus for Aspirers and Striders to overcome their existing hurdles and actively use and propagate DFS.

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**Exhibit 4: DFS non-user merchants showing interest in offering DFS as mode of payment**

<table>
<thead>
<tr>
<th></th>
<th>Pre-demonetization</th>
<th>Post-demonetization</th>
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<tbody>
<tr>
<td>Debit and credit cards</td>
<td>57%</td>
<td>55%</td>
</tr>
<tr>
<td>Mobile wallets</td>
<td></td>
<td></td>
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</tbody>
</table>

*The respondents were allowed to choose more than one option

**Exhibit 5: Sales revenue through POS**

<table>
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<th>Pre-demonetization</th>
<th>Post-demonetization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debit and credit cards</td>
<td>13%</td>
<td>15%</td>
</tr>
<tr>
<td>Mobile wallets</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*The respondents were allowed to choose more than one option*
Aadhaar: It is a 12-digit unique number, which the Unique Identification Authority of India (UIDAI) issues for all residents in India. This number is linked to a central database that captures complete KYC information (photo, proof of address, proof of identity and biometrics) of an individual.

API: Application Program Interface (API) is a set of routines, protocols, and tools for building software applications. It specifies how software components should interact (i.e. between banks or between a bank and another third party such as a Telco).

Automated Teller Machine (ATM): An automated teller machine (ATM) is an electronic banking outlet, which allows customers to complete basic transactions using a credit card or debit card without any human assistance.

Banking Agent/ Business Correspondent: Any third party acting on behalf of a bank or other financial services provider (including an e-money issuer or distributor) to deal directly with customers. Depending upon their agreement with the provider, agents may provide a variety of services on the provider’s behalf, ranging from cash deposit, cash withdrawal and sale of third party products like insurance.

Biometric Authentication: A system that facilitates the identification of a person through biometric verification or by evaluating one or more distinguishing biological traits, such as fingerprints, hands, earlobe geometry, retina, iris patterns and voice waves.

Chit Funds: Is an informal financial instrument for storing money and getting access to credit. It accepts savings at an interest and lends money.

Co-operative society: A cooperative (also known as co-operative, co-op or coop) is an autonomous association of people united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled business.

Digital Financial Services (DFS): Financial services and products delivered through digital channels or transactions where at least one leg of the transaction is digital.

Digital Financial Inclusion: The use and promotion of DFS to advance financial inclusion. The essential components of digital financial inclusion are a digital transactional platform, a device used by the customer to electronically connect to this platform and perform financial transactions, the use of retail agents for the customer to transact from and the provision of a wide range of financial products and services.

Digital payment: A payment made via the electronic exchange of information and without any exchange of physical documentation such as cash or a personal check. This includes payments made with payment cards (e.g., credit, debit, prepaid) and electronic bank transfers.

Direct Benefit Transfer: Transfer or electronic transfer of government subsidies, scholarships and other benefits directly into beneficiaries’ bank account. A government or a government nominated body initiates this transfer.

Electronic Fund Transfer (EFT): Any transfer of funds initiated through an electronic terminal, telephone, mobile phone, tablet, phablet, computer system or magnetic tape for the purpose of ordering, instructing or authorizing a payment services provider to debit or credit a customer’s bank or e-Money account.

Electronic Payments (e-Payments): Payments made via electronic channels, including mobile and Internet channels, through infrastructure such as mobile phones, computers, electronic cards, and POS devices.

Feature phones: Low-end mobile phones that typically provide voice calling and text messaging functionality.

Financial inclusion: Access and effective use of appropriate financial services that are provided responsibly and sustainably in a well regulated environment.

Fintech: The term is a contraction of “financial technology”. It refers mainly to technological innovations in the financial sector, including innovations in financial literacy, banking, investment and even crypto-currencies. It also refers to the use of technology and innovative business models in the provision of financial services.

IMPS: Refers to Immediate Payment Services, wherein money can be transferred electronically on a real time basis between two individuals holding a bank account.

Kirana store: Local shopkeeper selling groceries and general household items.

Know Your Customer (KYC) requirements: The process, generally required by regulation, used by a bank, Telco or other authorized service provider to verify the identity of its clients or customers.

Merchant: An entity that accepts payment for the sale of goods or services. A merchant may be a single merchant outlet or represent multiple merchant outlets. Also known as a retailer.

Micro and Small Merchants (MSMs): Retail or service sector businesses with fewer than 10 employees at any single location.

Mobile money: A financial account that can be accessed and used for making and receiving transactions from a mobile phone.

Mobile point-of-sale (mPOS) terminal: A payment acceptance application that uses a portable electronic device such as a smartphone, tablet, or dedicated wireless device. The portable electronic device typically is not solely dedicated to point-of-sale functions and has the ability to wirelessly communicate across open networks.

Mobile payments (m-payments): The facilitation of domestic and/or cross-border payments via a mobile phone. M-payments are a subset of MFS. As noted above, m-payments sometimes are defined broadly to include Internet-enabled devices and POS terminals.

Mobile wallet (m wallet): Mobile technology that is similar to a real wallet. It stores money in the form of digital value and provides a convenient solution for any business looking to allow customers to purchase their products online with greater ease, therefore driving sales.

Non-bank financial company (NBFC): A financial institution that does not have a full banking license or is not supervised by a national or international banking regulatory agency.

Near Field Communication (NFC): Communication protocols that enable two electronic devices, one of which is usually a portable device such as a smartphone, to establish communication by bringing them within four cm (two inches) of each other.
One Time Password (OTP): A unique alphanumeric/numeric password that is generated at the time of any digital transaction for authentication. OTP is generally sent to the payee’s mobile.

Payments Bank: Refers to a differentiated bank that will be allowed to conduct restricted banking activities like acceptance of deposits, payments and remittance services, internet banking and function as business correspondent of other banks.

Payment Solution Provider: An entity that provides solutions enabling funds to be deposited and withdrawn from an account; payment transactions involving transfers of funds; the issuance and/or acquisition of payment instruments such as cheque, e-Money, debit cards and credit cards; and remittances and other services central to the transfer of funds.

Person-to-Government (P2G): Payments or financial transfers from individual citizens to governments (e.g. taxes).

Person-to-merchant (P2M): Payments or financial transfers from individual citizens to merchants in exchange of goods or services (online and offline).

Person-to-Person (P2P): Payments or financial transfers between two individuals (e.g. remittances).

PIN: Refers to the unique personal identification number which is issued in conjunction with a debit or credit card. This number is used to authenticate transactions conducted through these cards.

Point of sale (POS) terminal: An electronic device that reads a payee’s payment information (e.g., debit card) and transmits the transaction and payment information to a payments provider over a network.

Prepaid card: A payment card with a monetary value stored on the card itself, not in an external account maintained by a financial institution.

Prepaid Payment Instrument (PPI): Refers to methods that facilitate purchase of goods and services against the value stored on such instruments (card/ mobile wallet/ voucher) etc. The value stored on such instruments represents the value paid for by the holder, by cash, by debit to a bank account, or by credit card.

Small Finance Bank (SFB): Refers to differentiated banks aimed at providing financial services to unbanked and underbanked segment of society, such as small business units, small and marginal farmers, micro and small industries and unorganized sector entities.

Smart cities: Refers to urban development vision to integrate multiple information and communication technology (ICT) and Internet of Things (IoT) solutions in a secure fashion to manage a city’s assets.

Telecom operator (Telco): A telecommunications organisation that provides wireless voice and data communication to mobile phone users.

Third Party Provider: Agents and others, acting on behalf of a DFS provider, whether pursuant to a services agreement, joint venture agreement or other contractual arrangement.

User Interface (UI): The elements of a system with which a user has direct contact, and with which they interact to conduct activities.

Unified Payment Interface (UPI): Refers to a single window mobile payment interface riding on IMPS technology for instant transfer of money between bank accounts.

White Label ATM: An ATM that does not belong to one particular bank and is generally operated by a non-bank entity.
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