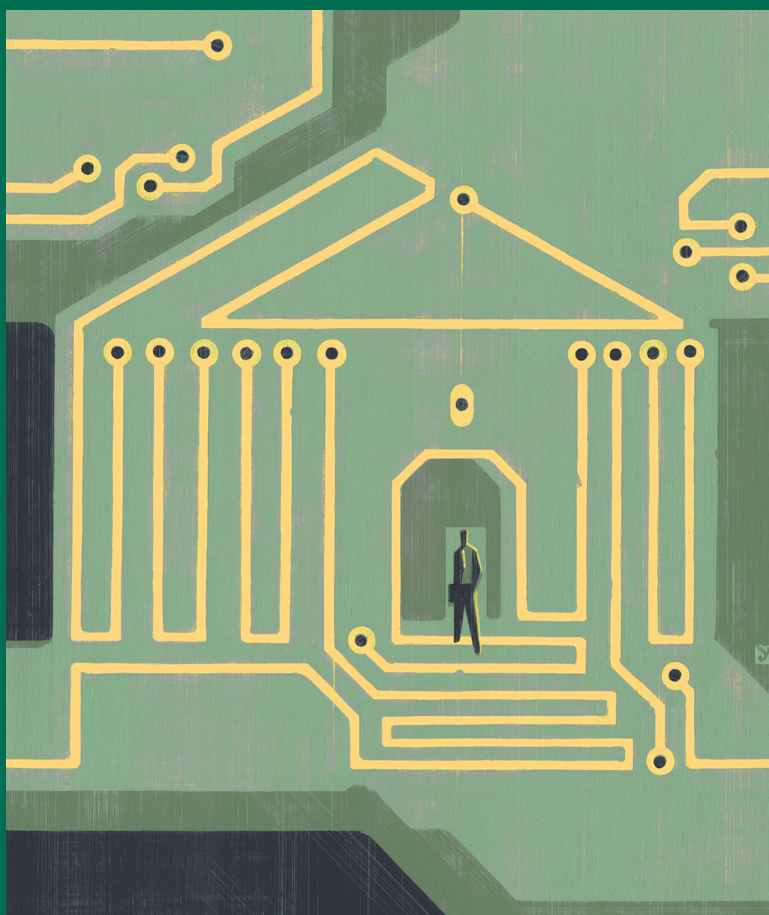


BCG

THE BOSTON CONSULTING GROUP



Indian Banks' Association



**PRODUCTIVITY IN INDIAN BANKING: 2014**

# Digital Banking

Opportunity for Extraordinary Gains in Reach,  
Service, and Productivity in the Next 5 Years

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PRODUCTIVITY IN INDIAN BANKING: 2014

# Digital Banking

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Service, and Productivity in the Next 5 Years

Saurabh Tripathi

Bharat Poddar

Yashraj Erande

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September 2014

*“At first people refuse to believe that a strange new thing can be done,  
and then they hope it can be done, then they see it can be done,  
then it is done and all the world wonders why it wasn’t done before”*

— F. H. Burnett

# CONTENTS

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4  | <b>PREFACE</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 5  | <b>EXECUTIVE SUMMARY</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 7  | <b>DISRUPTIVE POTENTIAL OF DIGITAL BANKING</b><br>Unprecedented Advancement in Reach<br>Dramatic Improvement in Customer Experience<br>Extraordinary Gains in Productivity of Banks<br>Fundamental Shift in Nature and Intensity of Competition: War for Transactions<br>Massive Economic and Societal Benefits with Eradication of Paper<br>Call for Collective Action: Attacking POS Cash and Digital Jan Dhan<br>Call for Action from Banks<br>Interventions Needed From RBI and Government |
| 16 | <b>CUSTOMER ENGAGEMENT ON DIGITAL</b><br>Retail: The Activation Challenge<br>Small Business Transactions: Giving Cinderella Her Due<br>Financial Inclusion: What Digital can do to the Jan Dhan Yojana                                                                                                                                                                                                                                                                                         |
| 27 | <b>DIGITAL-ENABLED CUSTOMER ACQUISITION</b><br>Digital Devices-Led Sales Force Productivity Enhancement<br>Big Data-Led Cross-Sell, Retention and New Acquisitions<br>Direct Digital Sales                                                                                                                                                                                                                                                                                                     |
| 35 | <b>DIGITIZING THE BANK</b><br>Digitized Back-offices: 2x Customer Satisfaction; 20 Percent Higher Efficiency; and Half the Operating Risk<br>Call Centers in India—Not Fully Harnessed<br>Lean Organization@digital: Aim for 20 Percent Leaner Overheads<br>Risk Management: Building on the Lessons of Retail Lending in India                                                                                                                                                                |
| 43 | <b>MAKING IT HAPPEN—WHAT WILL IT TAKE?</b><br>Is the Technology Agile? Is the Channel Design Human Centred?<br>Change Management Challenge: Seven Hurdles Thrown by Legacy Systems and Mindset<br>Bank-in-a-Bank Model: An Approach to Accelerate Change                                                                                                                                                                                                                                       |
| 49 | <b>APPENDIX</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 52 | <b>GLOSSARY</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 54 | <b>FOR FURTHER READING</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 55 | <b>NOTE TO THE READER</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

# PREFACE

**T**HIS REPORT IS THE fourth in the “Productivity Excellence” series of BCG reports which are published and released on the occasion of the annual FICCI-IBA Banking Conference (FIBAC). In 2011, a report titled “Being Five Star in Productivity”, in 2012, a report titled “From Five Star to Seven Star in Productivity”, and in 2013, a report titled “Consistency, Quality and Resilience: The Next Frontier for Productivity Excellence” was published by BCG. These reports are based on extensive primary research and analysis of data collected from almost all the major scheduled commercial banks in India (36 banks in 2014), complemented with primary surveys on customers (1,000 small businesses surveyed in 2014). The primary goal of the research is to identify and elucidate practices, ideas and approaches that banks in India can adopt to sustain their financial strength while pursuing the objective of financial inclusion, which requires extraordinary cost efficiency, productivity and innovation. This series defines productivity in a broad sense covering diverse areas like branches, back-offices, digital channels, administrative offices and bad debt management.

This report “Digital Banking: Promise of disruptive gains in reach, service and productivity in next five years” is being published amidst widespread optimism in the Indian economy even as some concerns regarding the health of Indian banks linger. It also happens to be the time when digital technology and its potential to transform banking is capturing the imagination of banking leaders across the world. The enormity of the potential in digital is fortuitously accentuated in India with the new government of India articulating a bold vision for a digital India. Progressive regulatory moves have ideally positioned Indian banking for digital transformation. With rapid growth in penetration of smart phones and high speed internet, it is a matter of a few years before every possible customer will be reachable on the internet. This report highlights the enormous possibilities to reduce costs, improve customer service and reduce risks. It also identifies a few more initiatives that the Government of India and the Reserve Bank of India have to undertake to accelerate this transformation.

# EXECUTIVE SUMMARY

*“The digital revolution is far more significant than the invention of writing or even of printing.”*

— Douglas Engelbart

## Why Digital?

Digital mega trend is profoundly impacting all businesses globally. Ubiquitous and high speed connectivity, savage computing power in smart phones, instant information and cheap unlimited storage are upsetting market positions and creating disruptive new ways of serving customers. Fortunately for Indian banks, this mega trend is maturing in the context of proactive regulatory reforms, a rapidly expanding unique identity project, and an overarching ambitious government vision for digital India. For the Indian banking industry in general and proactive banks in particular, digitization promises to deliver extra ordinary gains in productivity, service quality and reach.

## A Discontinuity—with Disruptive Potential

By 2019, we expect an increase in the return on assets of the best players by over 0.5-0.6 percent. And for the industry as a whole, potentially an increase of 0.3-0.4 percent, tantamount to 1.0-1.5 percent reduction in interest rate for borrowers. The gaps between the good and the not-so-good banks will widen sharply. Paper money, that has dominated transactions for centuries, could be on its way out. We see the warning to cash. There is a clear possibility of 30-40 percent substitution of cash in circulation in India with digital.

Payment banks in India will hasten a trend that is now capturing the imagination of banking strategists the world over. Float in CASA and priceless data regarding customer buying behaviour patterns will stay with the banks (or non banks) that facilitate customer transactions. The corner stone of successful digital banks will be excellence in payments. Most of the payments growth will be on digital channels like internet, mobile, POS debit, and ECS. In effect, these channels are the core of banking and branches will serve specialized purposes. This is a tectonic paradigm shift.

## Opportunity for Banks

By digitizing processes end to end, engaging customers on digital channels for transactions and sales, and collectively working towards eradicating cash, banks can achieve up to 30 percent jump in sales productivity, reduce administrative staff by about 10-15 percent and improve back office staff productivity by 20 percent. Digital transactions lead to higher CASA balances in accounts by as much as 20 percent, and use of information bureau and analytics based early warning systems can reduce the charge of bad debt substantially as shown by the continuously reducing NPA in retail. Use of digital technology can help in manpower planning, placement of the right person at the right place, and in dramatically enhancing transparency in performance management. All this can be done while fundamentally improving customer service in terms of phenomenally reduced turnaround times and higher customer responsiveness.

## Challenges

Challenges will come from the old and the new. It is very difficult even for the smartest of the banks to change their legacy systems, processes and most importantly staff mindsets. It requires unwavering commitment from

the top. New attacker entrants can create the offering from scratch. Some banks will try to ring fence a team to create a new bank within a bank to fight the old mindset.

Digital Banking requires smarter investment in technology architecture and intuitive design of channel interfaces. Banks can hardly rely on IT vendors. They need to have some basic capabilities like agile development and rapid prototyping in-house. IT spend of Indian banks is rising steadily and has now reached 4 percent of revenue. Public sector banks are driving this growth with almost 100 percent growth in IT investment per annum in self service machines. This is, however, hardly enough for public sector banks to sustain their position.

## Our Sobering Starting Point

In the back drop of the phenomenal potential at hand, facts on the ground are sobering. Only 50 percent of debit cards issued are used at ATMs and 14 percent used at POS. 80 percent of cash withdrawals in branches are less than Rs. 25,000 in value. 1 percent of active SB customers in public sector banks and 10 percent in private sector banks use mobile banking. Only 4 percent of cash deposit, which is 60 percent of the branch cash transactions, is being done through Cash Deposit Machines. 46 percent of business transactions are through cheques, which really have no excuse to exist. A survey of 1,000 small businesses highlights that they are willing to move to digital but have not been educated enough by banks.

Competitiveness of PSU Banks will further reduce unless the government takes urgent measures to reform their talent constraints and unshackle their decision making from the overhang of vigilance. Unlike the last decade, where decline in market share of PSU banks was rather slow, in the coming decade it will be precipitous. In a Digital environment, market share shifts will be rapid as customers will find it much easier to switch. The smaller public sector banks are at particular risk of rapid decline given their poor investment in transformation. They lag significantly on virtually every dimension of digital preparedness. In our view, this should be a primary consideration in the blue print for consolidation of public sector banks in India.

## Call for Further Action from RBI and Government

RBI's vision, evident in continuous reform measures over the last year, has already made the Indian banking sector one of the most conducive for digital banking among comparable emerging Asian market economies. Energy behind the Prime Minister's Jan Dhan Yojana (PMJDY) is awe inspiring. However, some more steps need to be taken.

Cash needs to be eliminated. We have the requisite technology. More importantly, we have the need. Benefits of digital transactions go beyond cost reduction to tax efficiency and even eradicating corruption. We need to attack cash transactions at POS, even at the smallest of merchants. We have not yet managed to harness the mobile phone fully. Innovative endeavours in other countries have demonstrated that highly convenient mobile to mobile funds transfer requiring only mobile number is possible. PayM scheme in UK is an inspiring example. IMPS scheme needs to be upgraded on priority. Mobile banking and Giro vision of the Reserve Bank of India needs to take this into account.

PMJDY has shifted away from push to pull based model for inclusion. However, its design needs to acknowledge learning of the last five years. Banking industry has so far opened 16 crore no frills accounts. Only a quarter of them had even a single transaction last year. And only a quarter have any balance. In effect five years of effort has led to about 20 percent addition to active SB accounts in the nation. This is because the accounts opened for inclusion are designed as a conduit of cash disbursement, not for facilitating payments by the account holders. If the mobile to mobile POS funds transfer were to be made feasible, we could get even the smallest account holder in remotest area to buy from their local merchant through their mobile phone. Transactions lead to balances and balances lead to economic viability. That is the key to inclusion in deposits. We need to augment PMJDY in credit through a subsidized entry of excluded small ticket borrowers into information bureaus where their credit history can get recorded.



# DISRUPTIVE POTENTIAL OF DIGITAL BANKING

*“People always overestimate what will happen in next 2 years and underestimate what will happen in next 10 years”*

— Bill Gates

**T**HE DIGITAL REVOLUTION PROMISES extraordinary gains in the productivity of the banking industry; dramatic improvements in the quality of customer experience; and a fundamental shift in the nature and intensity of competition. Supported by pro-development regulations and government action, it also promises a rapid and unprecedented advancement in the reach of banking.

## Unprecedented Advancement in Reach

The digital revolution is upon us in its full glory. Technology is advancing by the day. Affordable smart phones and high bandwidth access will reach an unprecedented number of Indian consumers in the coming years. The Indian Government's ambitious vision for a digital India emboldens us to predict that within the next five years we will see a new, digitally savvy Indian consumer emerging across urban as well as rural markets. As depicted in Exhibit 2.1, by 2020 we expect the number of smart phone users to equal the number of active bank accounts in the country, and cover 70-80 percent of the eligible population. It is possible to envisage that almost all eligible customers will be onboarded onto the mobile phone-based digital payment and savings platform in next five years. A similar revolution is conceivable on the lending side. The phenomenal impact of the information bureau on the retail lending business in India is evident in the continuously declining NPA ratio of retail lending for banks. Extension of the information bureau to cover a larger population will lead to a majority of Indian people who are self employed, or employed in the unorganized sector, to have credit history and eligibility for credit from the

banking sector. Incorporation of telecom and electricity bill payment records into the credit information bureau can unleash this enormous potential to extend the penetration of banking in India.

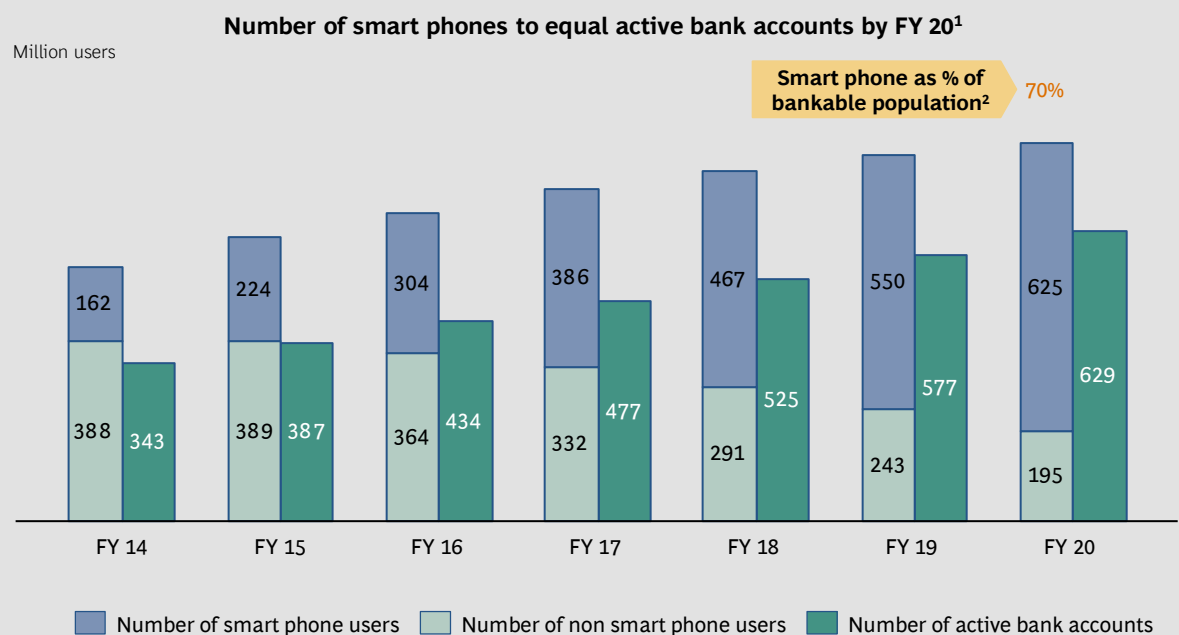
## Dramatic Improvement in Customer Experience

Digital banking customers have been immersed into the digital experience by iconic technology companies like Google, Apple, and Amazon. These customers also have very advanced expectations from banks. Exhibit 2.2 highlights some select expectations. They put heavy demands on operational excellence and technological prowess to provide dynamic customization and integrated interactive multichannel access. This requires significant technology and operations transformation in the banks. We see a possibility of dramatic change in the level of customer service offered to banking customers in a more digitally enabled banking context.

## Extraordinary Gains in Productivity of Banks

The good news is that this investment in technology can lead to a much more profitable business model. Exhibit 2.3 depicts the synthesis of BCG's experience in the creation of digital banking business models set up from scratch without legacy challenges. Digital banks have a cost-to-income ratio advantage of 10-15 percent over conventional models. This is driven by the rate of customer acquisition that is more than twice as productive as conventional models, a 50-70 percent higher level of primary banking relationships (where the custom-

Exhibit 2.1 | In 5 Years, We Could See a Very Different Digital India — Smart Phones to Become Primary Banking Channel in 5 years



Source: BCG analysis.  
<sup>1</sup>Smart phone users: emarketerINC; Number of bank account holders: RBI Basic Statistical Returns.  
<sup>2</sup>Bankable population is population with Age >18 years.

Exhibit 2.2 | Customer Expectations Being Driven Very High by their Experience with Non-Bank Digital Companies

Customer requests are simple, but require seamless integration across digital channels

| To what extent do you agree with the following statements about your bank?     | % agree | Best in class |
|--------------------------------------------------------------------------------|---------|---------------|
| Never ask me to fill the same form twice for info they already have            | 89%     | UBER          |
| Notify me anytime there is a transaction, payment or account change            | 86%     |               |
| Able to contact my bank for 24 X 7 support                                     | 86%     | Apple         |
| Have a single online login                                                     | 83%     |               |
| Provide me with real-time information on status of requests, applications etc. | 84%     | Google        |
| Make it easy to speak to an expert on any banking product                      | 84%     |               |
| Lower my fees if I am willing to do a lot of things on my own                  | 80%     | ebay          |
| Have easy on demand access to customer service                                 | 79%     |               |
| Offer seamless data transfer between online, phone and branch                  | 76%     | amazon        |
| Provide me personalized offers in real-time, that are right for my needs       | 76%     |               |
| Able to obtain new products in 2-3 clicks                                      | 78%     |               |
| Website user interface customized based on my accounts and preferences         | 76%     |               |

Legend: Integrated access (Yellow), Dynamic customization (Grey), Data driven tailored advise (Red), Excellence in delivery (Blue), Interactive access (Light Blue)

Source: BCG consumer study (April 2014) for digitally influenced customers.

Exhibit 2.3 | Successful Digital Models are Substantially More Productive than Conventional Models

BCG experience

| Dimension                                                    | Conventional model | Digital model |
|--------------------------------------------------------------|--------------------|---------------|
| 1 Increase in customer acquisition within the target segment | X                  | >2X           |
| 2 Increase in percentage of "primary" bank relationships     | X                  | 1.5–2X        |
| 3 Increase in product holding                                | X                  | 1.3–1.5X      |
| 4 Lower branch capex                                         | X                  | 0.65–0.75X    |
| 5 Lower branch opex                                          | X                  | ~0.70–80X     |

Source: BCG analysis.

er uses the bank as her primary mode of payments), and a 30-50 percent higher level of cross-holding of products (i.e. higher cross-sell). These productivity gains come through reduction of wasteful costs in conventional operating models.

Fundamental Shift in Nature and Intensity of Competition: War for Transactions

Digital technology is leading to a proliferation of channels and massive increase in the number of transactions made by customers. Exhibit 2.4 shows the growth rate in transactions between FY 2013 and FY 2014. Whereas traditional transactions show 3 percent growth, those supported by technology (ATMs / CDMs) show 30 percent growth per annum; purely digital transactions post over 60 percent growth. We expect transactions to be the primary battleground for market share between banks; the number of transactions facilitated by a bank will determine its market share in deposits. This is already evident in the Indian market. Exhibit 2.5 demonstrates that there is a very clear correlation between the average savings balance per account in a bank and the average number of non branch transactions per savings account in that bank. It is also evident in Exhibit 2.5 that banks that improve their share in transactions gain in their share of deposits. We expect this trend to intensify over the next five years. The introduction of payment banks will render this space highly competitive; we expect significant investment from the banking industry to make the payment process more convenient for the customers. Ex-

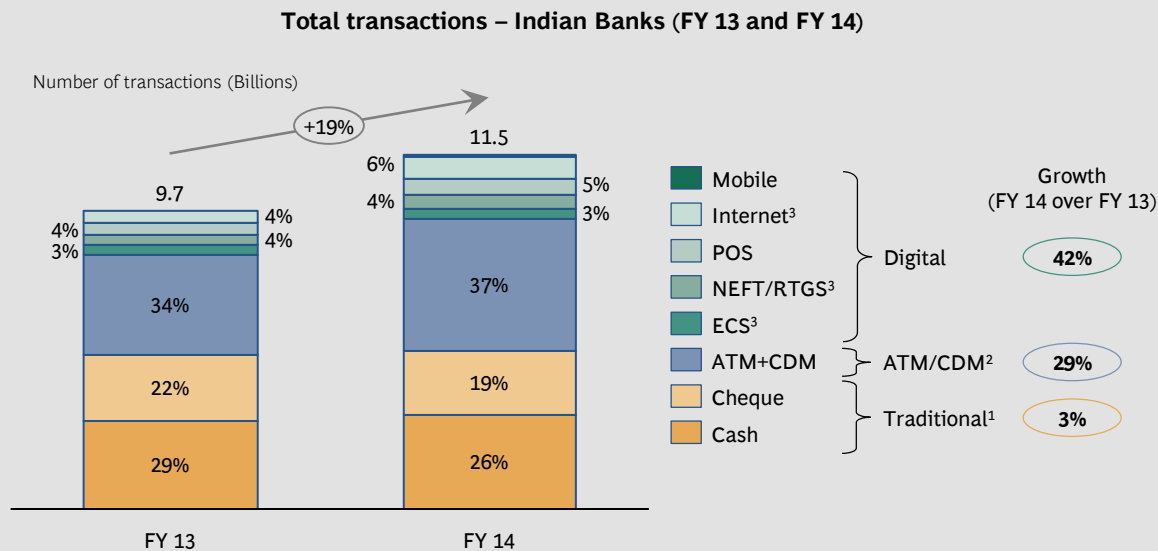
hibit 2.6 depicts the four categories of potential payment banks that will contest for consumer transactions: telecom operators, retailers, stand-alone Pre Paid Instruments (PPI) players and traditional banks. We expect the new competition from non bank participants to dent low cost deposit franchises of traditional banks by stealing away transactions with better customer propositions.

More fundamentally, we expect that the process of switching accounts between banks will become far easier with digital technology. Starting a new banking relationship will be fast and convenient. This implies that banking relationships that were considered ‘sticky’ will be under threat and inefficient banks will see rapid loss of market share.

Massive Economic and Societal Benefits with Eradication of Paper

One of the most profound implications of digital banking is the possibility of eradicating paper in the banking system. This paper exists in the form of cash in circulation, cheques issued to make payments, and massive use in application forms, statements, credit memoranda etc. The benefits are obvious. Paper based processes are slow as physical movement takes time. Digital processes eliminate such inefficiencies. The environmental benefit of eradicating paper cannot be overemphasised. Exhibit 2.7 depicts the levels of cash and cheque used by savings and current account customers. The level of cash is substantial at around 26 percent of the transactions. Over 45 percent of current

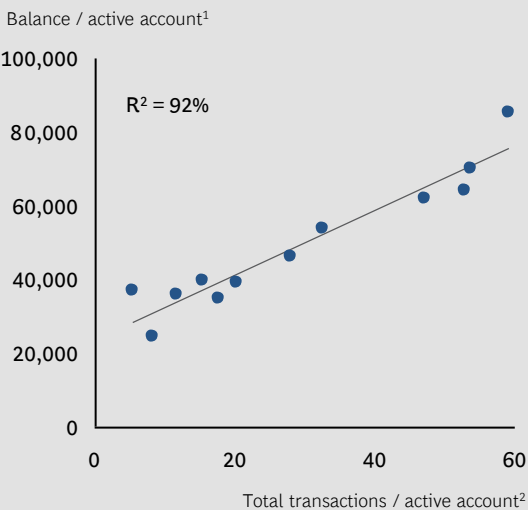
Exhibit 2.4 | Massive Growth in Digital Transactions Followed by ATM / CDM — Tomorrow's Winners in Deposits will Need to Master Digital Transactions



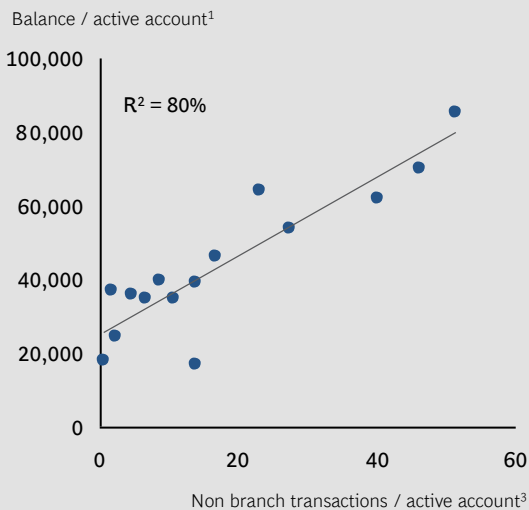
**Sources:** FIBAC Productivity Survey 2014; RBI; IBA; BCG analysis.  
<sup>1</sup>Traditional channels include Cash and Cheque. Cash transactions refer to counter cash transactions within branch.  
<sup>2</sup>ATM/CDM includes withdrawals transactions at ATM and deposit transactions at CDMs. ATM and Mobile transactions included are financial transactions only.  
<sup>3</sup>NEFT/RTGS/ECS include transactions which have been initiated offline. NEFT and RTGS transactions done over internet included as part of internet transactions.

Exhibit 2.5 | Transactions are Driving Balances and Consequently Market Shares — Trend to Further Consolidate Over Next 5 Years

**Savings account balance vs. transactions per account across banks (FY 14)**

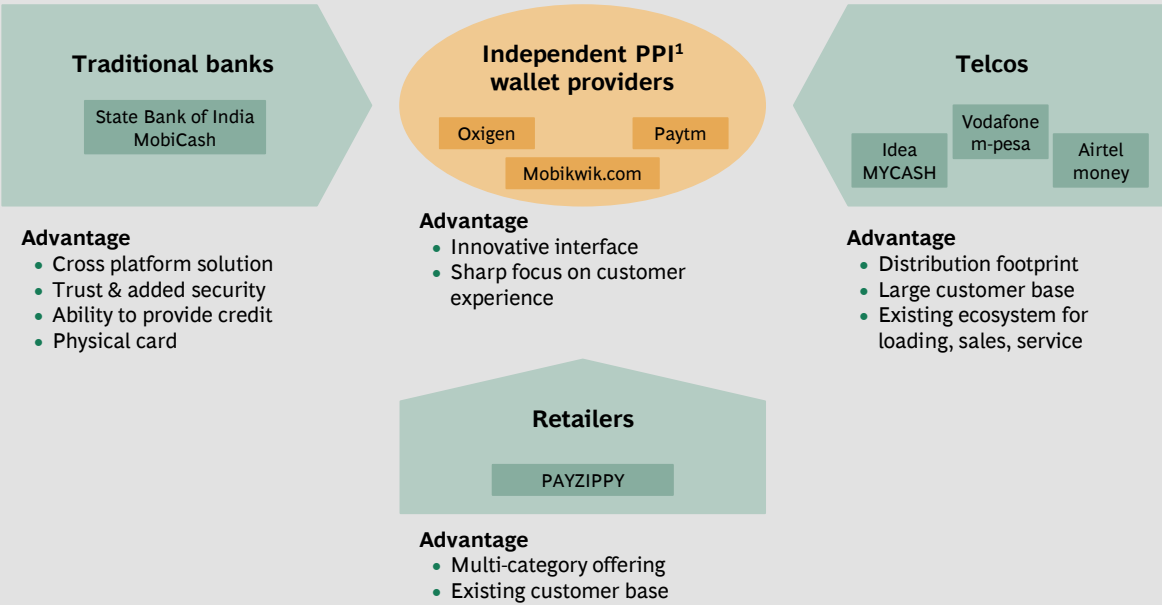


**Savings account balance vs. non branch transactions per account across banks (FY 14)**



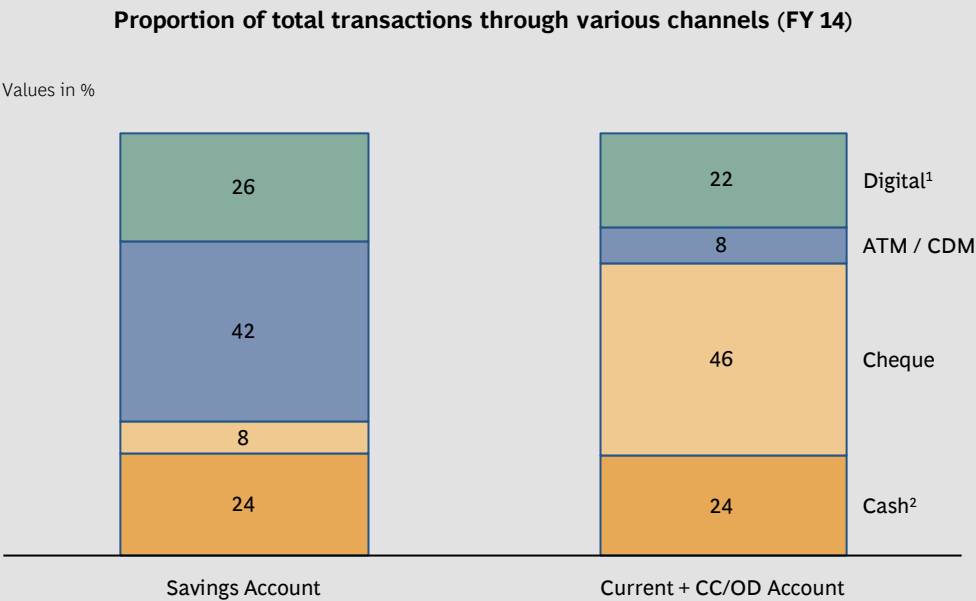
**Sources:** FIBAC Productivity Survey 2014; BCG analysis.  
**Note:** Data included is for 3 PSU (Large), 1 PSU (Medium), 3 Private (Old) and 4 Private (New) banks for Total transactions and for 4 PSU (Large), 3 PSU (Medium), 4 Private (Old) and 4 Private (New) Banks for non branch transactions.  
<sup>1</sup>Active account defined as accounts which have had a user initiated transaction in last 6 months (as of 31 Mar 2014).  
<sup>2</sup>Total Transactions include: cash withdrawal & deposits at branch, cheque (inward + outward), and financial transactions over internet banking, mobile banking, POS machines, and ATMs / CDMs.  
<sup>3</sup>Non branch transactions include: financial transactions over ATM / CDM, internet banking, mobile banking and POS machines.

**Exhibit 2.6 | Competition in Transactions is Expected to Dramatically Rise, Regulatory Changes will Unleash New Non-Bank Competitors into the Space for Transactions**



Source: BCG analysis.  
¹PPI: Pre Paid Instruments.

**Exhibit 2.7 | Cash Related and Cheque Transactions Dominate CASA — Rapid Phasing Out Cash Related and Cheque Transactions will Hasten Digital Revolution**



Sources: FIBAC Productivity Survey 2014; RBI; IBA; BCG analysis.  
¹Digital includes: transactions over POS, Mobile, ECS, NEFT and RTGS channels. ATM / CDM and Mobile transactions included are financial transactions only.  
²Cash transactions refer to counter cash transactions within branch.

account transactions are still cheque based. Over 40 percent of savings account transactions are through ATM cash withdrawal. There clearly is a massive opportunity for the Indian banking system to harness digital technology.

Eradication of cash has advantages that go beyond the obvious cost benefits. In case of benefit transfers, electronic transactions can be tracked to ensure right recipient and also right end use. Tax compliance will get a significant boost with movement of cash to electronic transactions.

This, however, requires collective action from the banks, and support from regulators and the government.

### Call for Collective Action: Attacking POS Cash and Digital Jan Dhan

Cash transacted at the Point of Sale (POS) is the biggest source of cash circulating in the banking system. If cash has to be eradicated, POS cash has to be tackled. Roll out of card-based POS devices is an obvious option but it is unlikely to make economic sense, given the costs involved. Smaller merchants are loath to have a POS device installed due to cost consider-

ations. Mobile transactions offer a much lower cost and ready-to-go option. Mobile-to-mobile transfers at POS's have massive potential that is hitherto almost entirely untapped. This requires collective action from the banking system.

As depicted in Exhibit 2.8, the PayM service launched in UK in April this year is a highly relevant case study. The PayM service, launched by the Payments Council in UK (equivalent of the NPCI in India), allows for instantaneous transfer of funds from one bank account to another purely on the basis of the mobile number. The sender needs only to know the mobile number of the recipient. This is facilitated by a central registry where mobile numbers are linked to specific bank accounts. Customers can register their mobile numbers against their bank accounts in the registry. The PayM service can be used in stand-alone mode, or can work in the background of the customer's mobile banking apps. It is proposed that all banks in UK will participate in the system. Every banked customer can send money to any other banked customer purely with knowledge of latter's mobile number. The response to PayM has been extraordinary, with over one million customers signing up within three months of its launch.

### Exhibit 2.8 | PayM in UK is Banking Industry's Strategic Response to Consolidate in Payments Space

#### What is PayM ?

```
graph TD; SB((Sender's Bank)) --- RB((Receiver's Bank)); SB --- P[PayM]; RB --- P; S((Sender)) --> SB; R((Receiver)) --> RB;
```

#### How it is better than alternatives

**Instant and secure mode of payment**

**Highly convenient – Need only smart phone and beneficiary mobile number**

**Integrated with most mobile banking apps**

**Low cost compared to alternatives – such as POS**

- Only such free service in the world

**P2P but also P2M (for small businesses, retailers)**

**Only sender needs smart-phone; receiver does not**

**Massive initial success for PayM in first 100 days**

- 1 million registered customers
- Transactions worth ~ £6.5 million executed

**PayM is an application based service which works with existing mobile banking or payments application**

**Sources:** The Telegraph; UK Press Association; UK Payments Council; PayM Website.  
**Note:** P2P: Person to Person; P2M: Person to Merchant; POS: Point of Sale.

12 | DIGITAL BANKING

While there are mobile-to-mobile payment mechanisms across the world, PayM stands out for its simplicity and convenience. Adoption speaks for itself. While the UK market may have other payment alternatives, this system can be dramatically more valuable in the Indian context where POS and card penetration is still a long way from becoming universal.

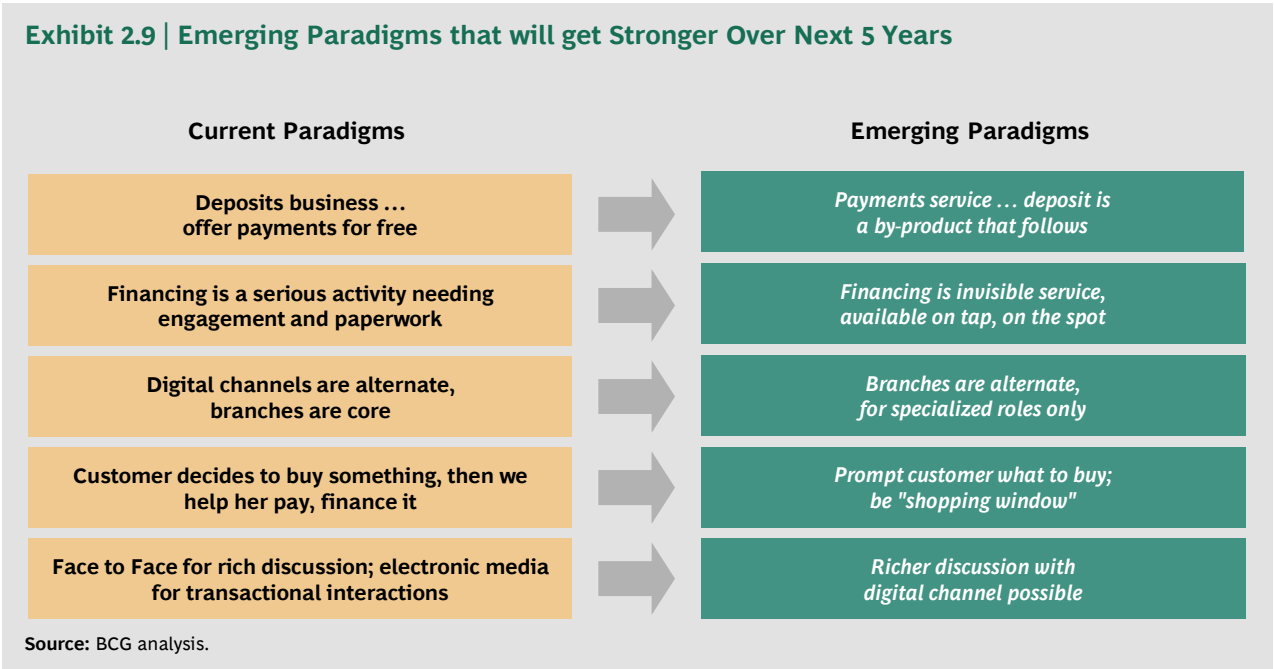
Such a system in India can improve the efficacy of the Jan Dhan scheme manifold. In the current design, the beneficiaries of direct benefit transfer are likely to use their RuPay cards to withdraw funds from their accounts and spend it in cash. The funds are unlikely to stay in the account. Now in the medium term, the likelihood of having a POS terminal in a local provision shop is negligible. Hence the RuPay card will be used only as an ATM card. Imagine a scenario where a very easy mobile-to-mobile payment scheme is operational. The beneficiaries can buy goods and services by transferring money to the shopkeeper's account. The shopkeeper only has to have a mobile number that is linked to a bank account, and that mobile number needs to be known. The possibilities are immense. In this case, the account is used as a transaction account to make payments, and not merely as a conduit to get cash. Our research has shown that in such a case the account will have higher balances and thus higher economic viability.

### Call for Action from Banks

Incumbent banks will need to undergo a complex transformation process to harness digital technology fully. The first step is a change in the paradigms adopt-

ed by the top management. These are depicted in Exhibit 2.9. Some of the long standing paradigms are to be replaced over time by emerging paradigms that will dictate the business model design. First is the idea that payment is a core product that is critical for deposits. Banks need to compete specifically to get the payments business of clients to defend their low cost deposits. Digital channels are often called 'alternate channels' while the branch is referred to as the 'core channel'. Digitally advanced banks will have digital channels as their core and the branch as an alternate specialized channel. This is based on the recognition that advancements in digital technology permit much richer interactions on digital channels as compared to the face-to-face interactions that are highly valued in the branches. In the digital paradigm, the banks do not merely facilitate a payment passively when the customer has decided what to buy; rather, they use analytics on customer data to ascertain what is best for the customer and try to facilitate customer choice. Digital banks influence the customer decision process and hence capture all the payments made. And finally, the loans process is not just about the customer application process followed by credit analysis; it involves proactive credit preapprovals with no paperwork, fast decisions and immediate online disbursals. The biggest challenge for incumbent banks is to be able to change the framework of thinking in the top management.

Exhibit 2.10 depicts the set of initiatives that incumbent banks need to undertake to harness digital technology fully. Digitization is relevant across all aspects of the organization. Digitization of the sales process



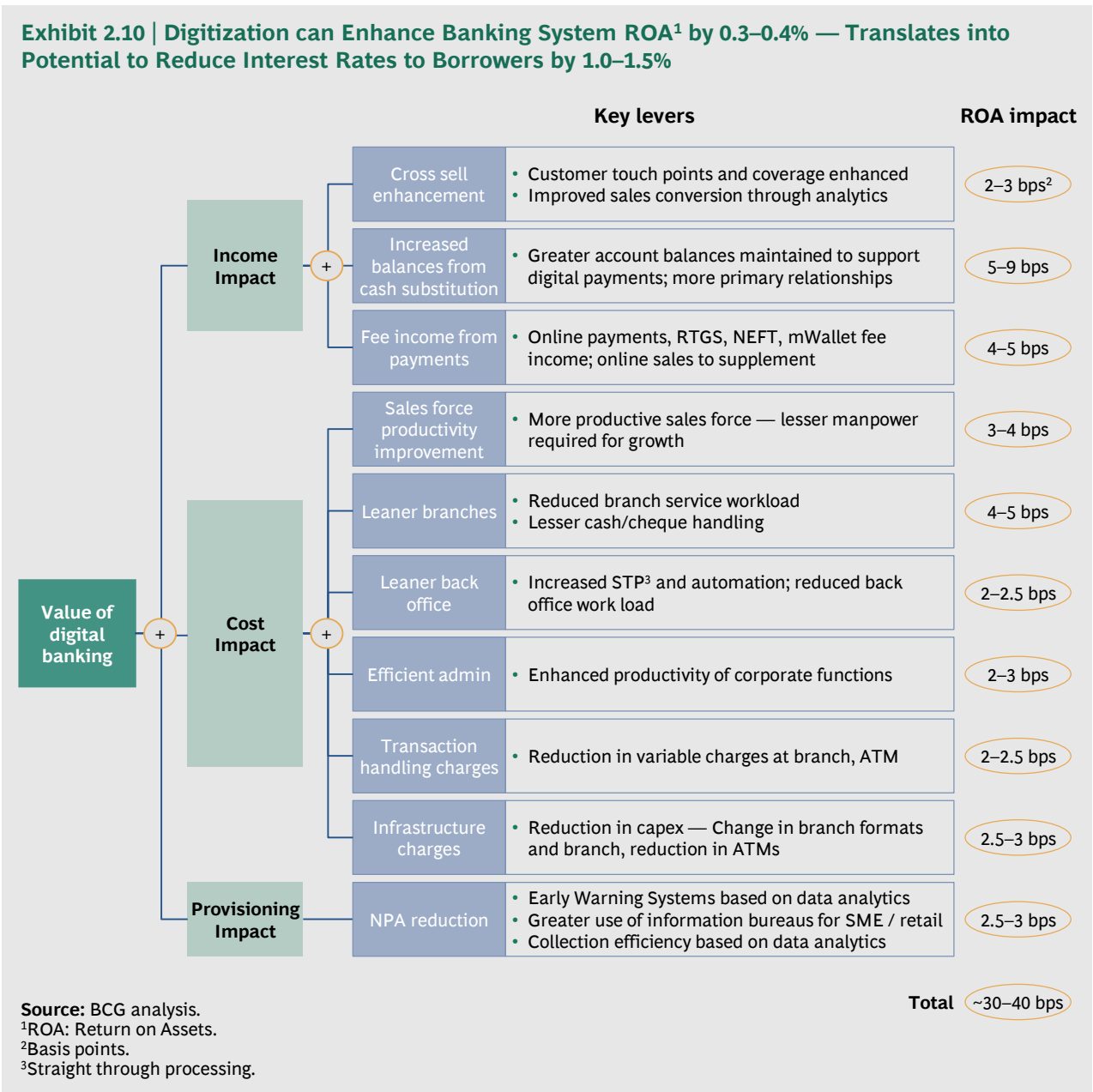


can increase the sales productivity of the front staff by as much as 25 percent. Online channels can contribute to the tune of 20 percent of total new customer acquisitions. In some advanced digital banks, this could be as high as 80 percent. If the customers are properly engaged with intuitive and useful digital payment interfaces, chances are that they will keep up to 20 percent higher balances. On the cost side, there is a possibility of 5-10 percent cost reduction in the back office with process digitization. Internal processes of the bank like the performance management system can be digitized to improve data transparency regarding performance and manpower resource allocation, thereby increasing productivity of resources within the organization. With analytics, it is possible to envisage early warning sys-

tems that could help reduce bad debt costs for the bank by improving collection efficiency.

### Interventions Needed From RBI and Government

Among comparable emerging economies in Asia, a foreign entrant finds India to be the most conducive environment for digital banking. RBI has successively fine tuned the KYC process, business correspondent regulations, pre-paid instruments framework, mobile banking guidelines, and so on. It is a great starting point. A few more specific regulatory interventions will hasten the digital transformation of the sector and the consequent benefits to banks and consumers.





1. *Eradicating cash: Moving Point of Sale (POS) cash to Mobile-to-Mobile transfer (M2M).*
  - Set up a mobile registry shared by all banks along the lines of the PayM system of the UK, which links mobile phone numbers with bank account numbers across the nation. This system can be used to facilitate highly convenient mobile P2P or P2M transfers with only knowledge of the mobile phone number of the payee or merchant.
  - Broaden the vision of the Giro Scheme to envision a one-time bill from any merchant to be raised to any customer on the latter's mobile number, which can be accepted and paid online through the mobile phone. Effectively, a bill raised on the POS can be accepted on the mobile and paid through mobile transfer based on the scheme mentioned in the previous point.
2. *Digital customer experience:* It is conceivable to offer an entirely digital consumer banking experience in India. At least a section of the customers should be able to open their accounts purely online by authenticating themselves biometrically or with OTP without the need for wet signatures on paper or human interaction. Few interventions in this context would be:
  - Expedite uniform KYC norms and inter-usable KYC records across the financial sector.
  - Clarify the legal necessity of wet signatures in case the customer is authenticated with OTP or biometrics.
  - Obviate the need for physical verification by a bank official for opening an account in case the customer is authenticated biometrically through Aadhar.
3. *Disincentivize physical modes of payments:* Ironically, the pricing of payment instruments is often such that it promotes usage of physical instruments. For example, cheques are free whereas customer pays for RTGS or NEFT transactions.
  - Consider pricing cheque payments vis-à-vis electronic payments that achieve the same purpose.
4. *Product development:* Certain products in digital form are not mature enough to fully capture the benefits of their physical counterparts. Two instances are evident—bank guarantees and cheques.
  - Expedite electronic bank guarantees.
  - Introduce an electronic payment product that replaces cheques. It should have an option to be post-dated, and intimation of issuance of the instrument should reach the payee instantly. The payee should have the same legal protection as with a paper cheque under the Negotiable Instruments Act.
5. *Expand coverage of the information bureau:* Information bureau can be the most potent driver of inclusion on the credit side. Expansion of credit bureau should get top priority from the government and the RBI.
  - Expedite introduction of periodic utility bill payments (electricity, telecom) and periodic insurance premium payments information into information bureau records. This would increase the bureau coverage from current 20 percent to almost 70 percent and would be a major boost to credit eligibility of low ticket borrowers who are largely self employed or in the unorganized sector.
  - Government should consider subsidizing entry of records of low ticket borrowers into the information bureaus. Often low ticket lending margins are not able to profitably support the fee of information bureau.
6. *Urgent transformation measures in public sector—especially the smaller banks.* It is evident in this report that the set of smaller public sector banks (PSU-M) is trailing the larger banks (PSU-L) on almost all dimensions. The gap will widen rapidly as digital environment reduces the stickiness of customers. Government must accelerate definition and implementation of the proposed “autonomy with accountability” package with particular consideration for the set of smaller public sector banks.
  - In the immediate term, facilitate higher management bandwidth to transform smaller size PSU banks.
  - Consolidation to create five-six large PSU banks with sufficient scale in technology, management bandwidth and the talent pipeline.

# CUSTOMER ENGAGEMENT ON DIGITAL

*“Design is not just what it looks like and  
feels like. Design is how it works”*

— Steve Jobs

**A**S SEEN EARLIER IN the report, banking customer expectations are rapidly rising given their experience with non-bank digital companies. If done well, engaging customers on digital could deliver 11-17 bps improvement in banking system ROA—combined impact of cross-sell enhancements, increased balances from cash substitution and fee income from payments. In this chapter we dig deeper into the retail and small business customer’s digital engagement, and lay out the specific recommendations for the banks to pursue.

## Retail: The Activation Challenge

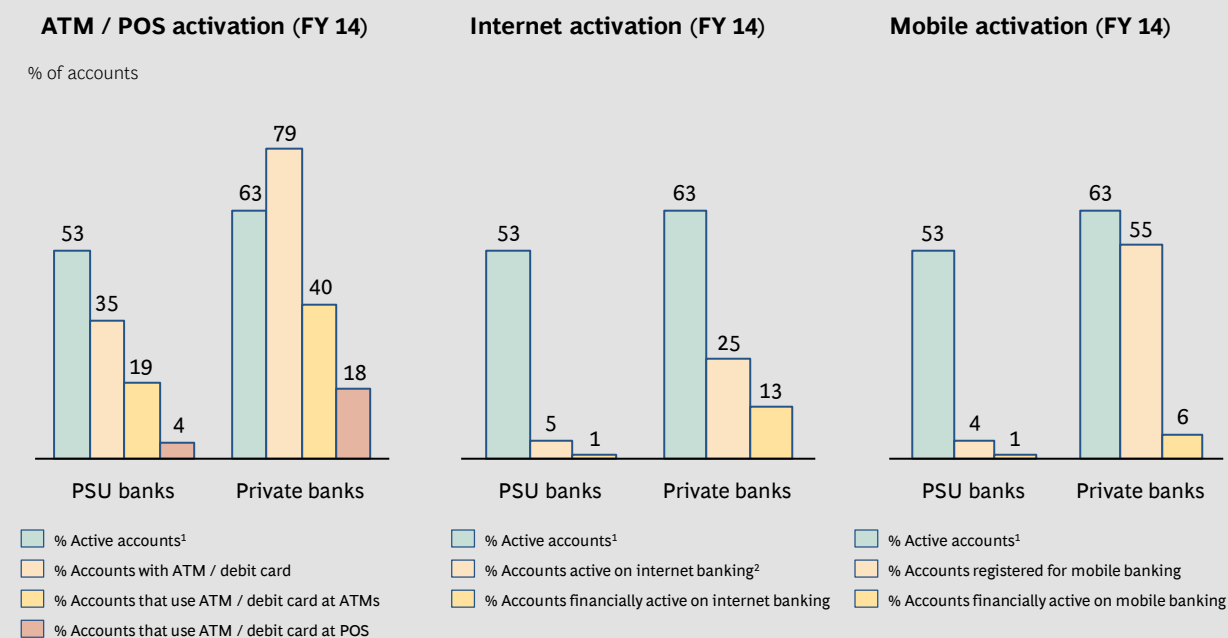
It would not be unreasonable to assume that close to 100 percent of retail banking customers would own a mobile phone. BCG’s recent digital influence study, conducted by BCG’s Centre for Consumer Insight, suggests that more than 30 percent of savings account customers have access to the internet; this number is rapidly growing. The disproportionate growth of digital transaction channels over traditional channels, as discussed earlier in this report, clearly establishes the fact that remote digital banking is more convenient for customers than physical branch banking. Banks are well aware of this and have ramped up investment in mobile, internet and other self-service channels, which we will discuss later in this report. Yet, the key question remains: is digital banking growing as fast as it could? Has digital banking reached maturity among the customer base or do banks have more to do? We argue in this chapter that banks have so far addressed only the tip of the iceberg, and that a lot more needs to be done.

Data from the FIBAC survey of banks, as shown in Exhibit 3.1, suggests that very few savings account customers

are actually engaged on digital channels. Only 53 percent of public sector banks and 63 percent of private bank savings accounts are ‘active’. We have established in the 2012 and 2013 FIBAC reports that higher adoption of digital channels and higher share of transactions leads to higher activation and balances in savings accounts.

The first step in digital activation is to ‘on-board’ a customer on a digital channel. In case of ATMs / POS’s, this can be done by providing the customer with an ATM / debit card with a valid PIN; in case of internet and mobile banking, by ensuring that the customer has a valid username and password. We start to see significant fall rates in this first step itself. Only 35 percent of public sector bank accounts have an ATM / debit card. Of course, this number increases to 70 percent of the ‘active’ public sector bank accounts, but is still a significant drop given the ubiquity of ATMs. By contrast, private banks have carded 79 percent of their accounts, i.e. more than 100 percent of their active account base. A large number of public sector bank customers have no option but to go to the branch to withdraw cash, public sector banks need to card their account base quickly and this should be relatively easy to do. As we move from ATM to mobile and the internet, we see even higher drop rates in this on-boarding step. Only 5 percent of public sector bank accounts are on-boarded onto internet banking and 4 percent onto mobile banking. By contrast, these numbers are 25 percent and 55 percent respectively for private banks. An alarming drop rate, given that 30 percent of savings account customers have access to the internet and almost 100 percent have access to mobile phones. Some banks are only just starting to install mobile and internet platforms. Where the platforms are available,

### Exhibit 3.1 | Low Engagement and Activation of Retail Customers on Digital Channels



**Sources:** FIBAC productivity survey 2014; BCG analysis.

<sup>1</sup>Active account defined as an account with at least 1 user initiated transaction in the last 6 months, financially active on a channel defined as at least 1 user initiated transaction in last 6 months.

<sup>2</sup>Accounts active on internet banking defined as accounts with atleast 1 login to internet banking in the last six months.

many customers are still not aware of these platforms. Even if they are aware, many customers find it difficult to register on and / or access the platform; many others have concerns about the security and usability of these platforms. Getting customers on-boarded on ATMs for cash hasn't been easy and the journey is not even complete. In relative terms, on-boarding for usage on POS's, mobile and the internet is more difficult. Banks have a tough task cut out for them.

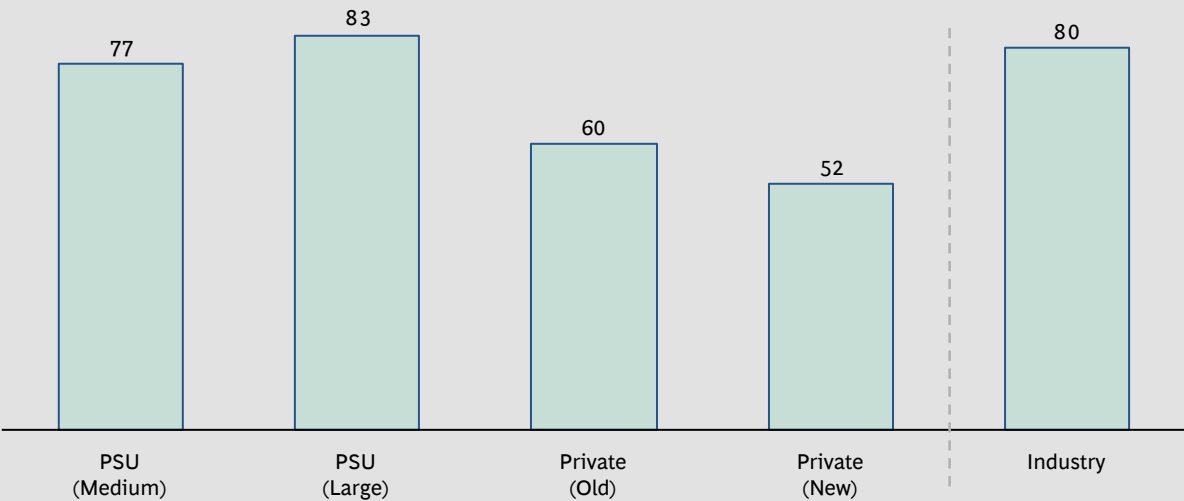
The second step is to activate 'spends' or financial transactions on a digital channel. Of the ATM / debit carded-base, only 55-60 percent of active accounts show usage of the card at ATMs for cash—a 40-45 percent drop rate from the carded-base. Only 10 percent of the public sector banks' carded-base and 25 percent of private banks' carded-base uses debit cards at POS terminals for spends. Drop rates for the internet and mobile are also alarming. Only 20-25 percent of public sector bank internet and mobile banking active accounts are using these channels for financial transactions—in other words only 1 percent of total public sector bank savings accounts are seeing financial transactions through internet and mobile channels. By contrast, 13 percent and 6 percent of private banks' savings accounts see financial transactions through these channels respectively. Some proportion of

drop rates between the on-boarding and spending steps could be attributed to customers having multiple accounts across banks and choosing to use their primary bank predominantly for transactions. We have seen this behaviour in the 2012 FIBAC report, based on a survey of over 14,000 savings account customers; on an average, customers make 67 percent of their transactions in their primary bank. However, drop rates are much higher than what could be explained by customers having multiple accounts. Banks across the spectrum need to do much more to induce spends in digital channels—on-boarding is only the first step.

We described ATM adoption for cash transactions as 'relatively easy' compared to adoption and activation of mobile, internet and POS channels. Few will argue about this; the higher activation of ATM channels over the others proves the point. But, banks still have a long way to go even in this relatively easier challenge. Exhibit 3.2 has a telling story. 80 percent of all cash withdrawals at tellers by savings account customers are less than Rs. 25,000. This is as high as 83 percent for large public sector banks, and 52 percent for private banks. Productivity benefits from moving these low value transactions from tellers to ATMs are well established—it costs anywhere from Rs. 50-100 to fulfil a cash transaction in

Exhibit 3.2 | Significant Low Value Cash Withdrawals in Branches by Savings Account Holders

Proportion of cash withdrawals < Rs. 25,000 for savings accounts at branch (by volume) (FY 14)



There is a large opportunity in moving low value cash withdrawals to ATMs

Sources: FIBAC productivity survey 2014; BCG analysis.

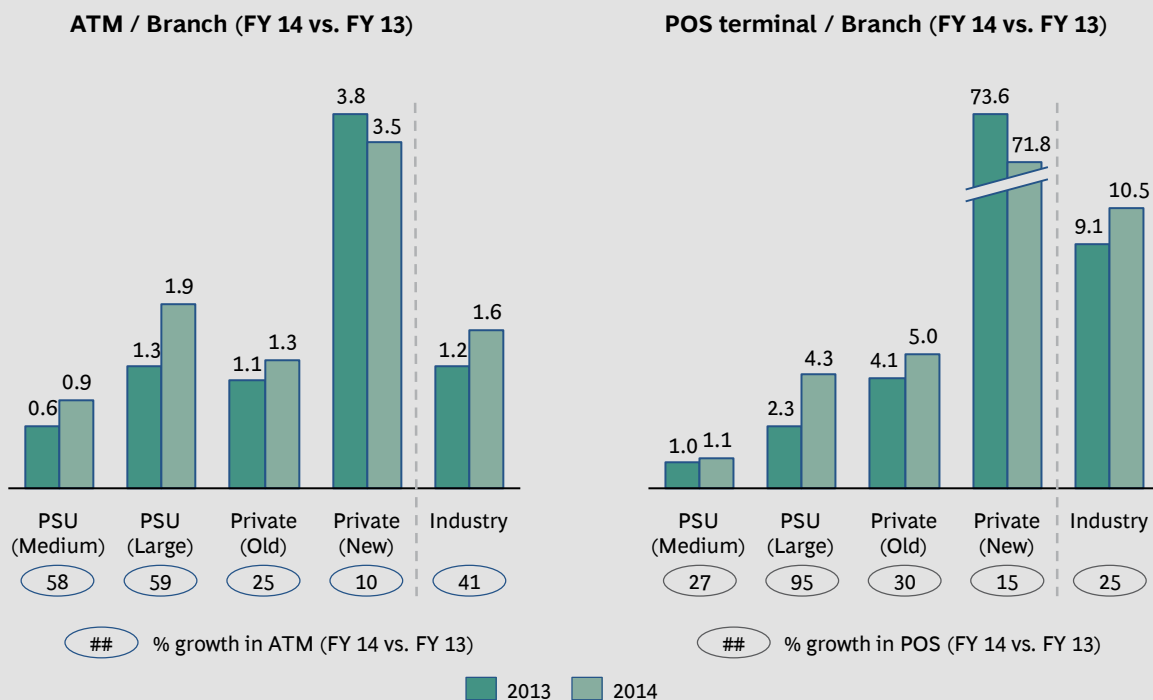
the branch, and at the most Rs. 15-20 on ATMs. Additionally, the time freed up in the branch could be used for more value added activities like sales. The issues that need to be tackled to increase ATM adoption are well known: install more ATMs, card more customers, provide them with a PIN number, make them aware of ATM functionality and then induce them to spend. We do see an increase in ATM deployment by 40 percent year-on-year, as seen in Exhibit 3.3. ATMs per branch have increased from 1.2 to 1.6. Large and medium public sector banks have grown their base by almost 60 percent and are now at 1.9 and 0.9 ATMs / branch respectively. Private banks have set a high bar at 3.5-3.8 ATMs / branch. A similar trend is witnessed in POS deployment. POS terminals per branch have increased from 9.1 to 10.5, posting a 25 percent jump in absolute terms. Large public sector banks have the highest increase in their installed base of POS terminals, at 90 percent year-on-year.

However, as we said earlier, increase in ATM / POS deployment will only solve part of the problem. Banks will have to overcome the internal 'one-time cost' and 'contact-ability' hurdles to provide cards to more accounts. Of course, there is an incremental one-time cost to card a new account, but many banks recover it through an

initial or annual fee. Moreover, increase in the balances and usability of these carded accounts will more than offset their costs. Contact-ability is also a real issue. Addresses and phone numbers of many old accounts might not be up-to-date, causing significant operational challenges for the banks to card such accounts. But there is no reason to not card new accounts. Banks should set internal targets to card 100 percent of their savings accounts in a time-bound manner. Additionally, they will have to run targeted campaigns and involve their branch staff to increase customer awareness and induce spends.

Change in a digital world is extremely rapid. While the banks have not even fully activated their ATM, POS, mobile and internet channels, we are already seeing an influx of many new digital self-service channels that will dramatically change the face of Indian banking in the years to come. Exhibit 3.4 shows penetration of some relatively newer self-service devices like cash deposit machines, cheque deposit machines, passbook printers and self-service kiosks. The deployment of these devices has just started, with penetration ranging from 0.02-0.03 per branch for cheque deposit machines and self-service kiosks to 0.06-0.07 per branch for cash and cheque deposit machines. The productivity benefit from increased penetration and adoption of these devices will be simi-

### Exhibit 3.3 | Rapid Growth in New ATM and POS Terminal Deployment



Sources: RBI; IBA; BCG analysis.

### Exhibit 3.4 | Self Service Penetration in New Technologies Yet to Pick Up

Self service machines per branch by bank type (FY 14)

| Bank type     | ATM  | POS   | Cash deposit machines | Cheque deposit machines | Passbook printers | Self service kiosks |
|---------------|------|-------|-----------------------|-------------------------|-------------------|---------------------|
| PSU (Medium)  | 0.89 | 0.85  | 0.01                  | 0.00                    | 0.01              | 0.02                |
| PSU (Large)   | 1.85 | 4.38  | 0.09                  | 0.03                    | 0.13              | 0.01                |
| Private (Old) | 1.31 | 4.94  | 0.12                  | 0.00                    | 0.00              | 0.00                |
| Private (New) | 3.58 | 72.88 | 0.09                  | 0.01                    | 0.00              | 0.14                |
| Industry      | 1.64 | 10.93 | 0.06                  | 0.02                    | 0.07              | 0.03                |

High penetration in recognized and proven platforms

Need to encourage penetration of new generation platforms

Sources: FIBAC productivity survey 2014; BCG analysis.

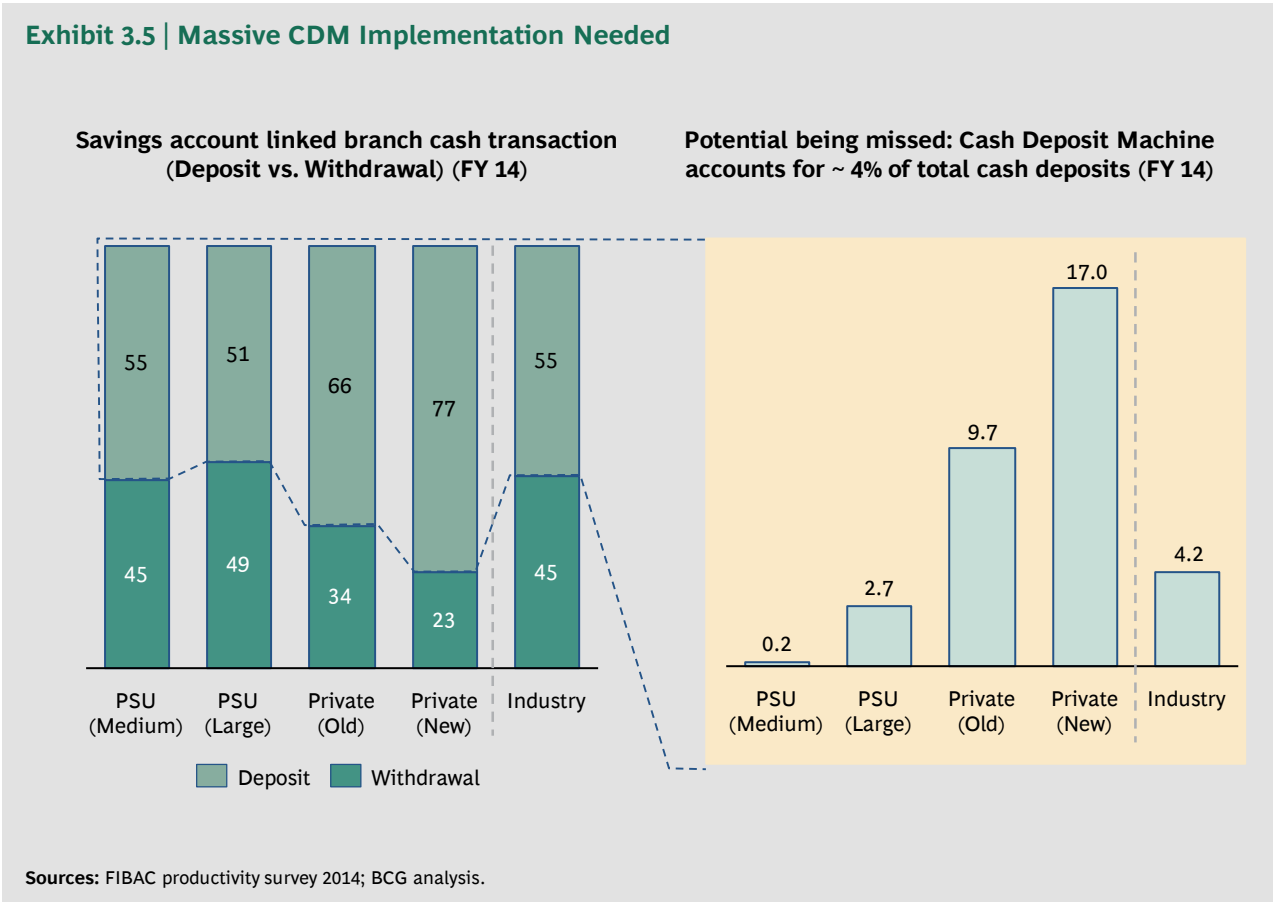
lar or, in many cases, more than those from ATM deployment. Cash and cheque deposit machines have the same potential to free up branch resources as the ATMs. In our project experience, we have seen successful cash deposit machine deployment freeing up 1-1.5 equivalent teller time. Similarly, many counter transactions could easily be made available on self-service kiosks. We have seen the potential to migrate over 20-30 counter transactions to self-service kiosks. This will free up branch capacity to engage customers on more value added activities like problem solving, advising and cross-selling.

Let us do a deeper dive on Cash Deposit Machines (CDMs) to illustrate our point. Let's start from the demand or need assessment for cash deposit machines. Exhibit 3.5 shows that 55 percent of the cash transactions in branches in savings accounts are deposit transactions. For withdrawal transactions as discussed earlier, a large number of these transactions are low value. Most of these transactions have the potential to move to cash deposit machines. This will free up branch resources, making it more convenient for customers—they won't necessarily have to do these transactions during banking hours. The transactions will spread over a longer period of the day, reducing queues and improving the customer experience. Despite all these

benefits, only 4 percent of cash deposit transactions in savings accounts go through CDMs. Based on our experience, adoption of this channel is rapid if done well. This requires choosing the right machine, ensuring proper IT integration with the core systems, making the interface user friendly, deploying roving branch employees for a few weeks to train customers, and ensuring high uptime of the machine.

### Small Business Transactions: Giving Cinderella Her Due

No banking strategy discussion is complete without discussing the importance of small businesses to the profitability of the banks. High yielding small ticket loans, lucrative current account balances, opportunities for various fee incomes and potential for cross-sell of personal products makes this segment very attractive for the banks. However, the treatment meted out to this segment is generally step-motherly—either retail products are embellished with some bells and whistles or corporate products are diluted and served to the segment. Given the continued pricing, growth and NPA challenges in corporate banking and diminishing margins and rising costs in retail banks, more and more banks are now sharpening their focus on the small business segment.



The first step to build and develop the relationship with this segment is to get the dominant share of their transactions. We surveyed 1,000 MSMEs and shopkeepers across the country to understand their transaction behaviour. Exhibit 3.6 shows that shopkeepers use cash for almost two thirds of their payment and collection transactions, followed by cheques for 18-27 percent of their transactions. A very small proportion of shopkeeper transactions happen through RTGS / NEFT and POS. MSMEs use cheques for the bulk of their transactions at 54-55 percent, followed by RTGS / NEFT for one third of their transactions. MSME cash transactions comprise only 15 percent of their total transactions—this is better than shopkeepers, but arguably still very high.

Clearly, small businesses are predominantly transacting in cash and cheque. No wonder, this segment is the most prolific user of branch channels. As seen in Exhibit 3.7, 47 percent MSMEs and 64 percent shopkeepers visit the branch at least once a week. 80-90 percent of their cash deposits in branches are less than Rs. 50,000. The cashier and branch manager are the primary point of contact for small businesses in 50-80 percent of cases. Therefore, as is clear in Exhibit 3.8, proximity to the branch is still the key reason for selecting their primary bank for this segment. Many would argue that this is unacceptable in a digital world.

Further, the second most important reason for selecting a primary bank is ‘better product / service offering’. Better products and services mean faster turnaround time; shorter queues at the bank branch; cash and cheque pick-up facility; flexible timings; user friendly online portal / services; higher cash credit / overdraft limits; less paperwork and documentation; speedy resolution of grievances; co-operative branch staff; a single RM appointed for all requirements; and frequent RM visits to understand needs. Most requirements can be addressed through a better digital offering. Faster turnaround times can be achieved through automated, straight-through, paperless processes. Queues can be shortened by deploying self-service machines and activating online channels. Flexibility in branch timings can be provided with the help of e-branches. Paperwork and documentation can be reduced through digital technologies like tablets for servicing and sales. Branch staff can be freed from day-to-day branch transactions to take on more value added roles like RM and customer visits.

Activation of digital channels in this segment can be very rewarding. In Exhibit 3.9, we notice a disproportionate increase in cross-sell of products and Current Account (CA) balances in the primary bank, as the number of channels used increases. We tracked the usage of nine digital channels—online banking, ATMs, cheque deposit

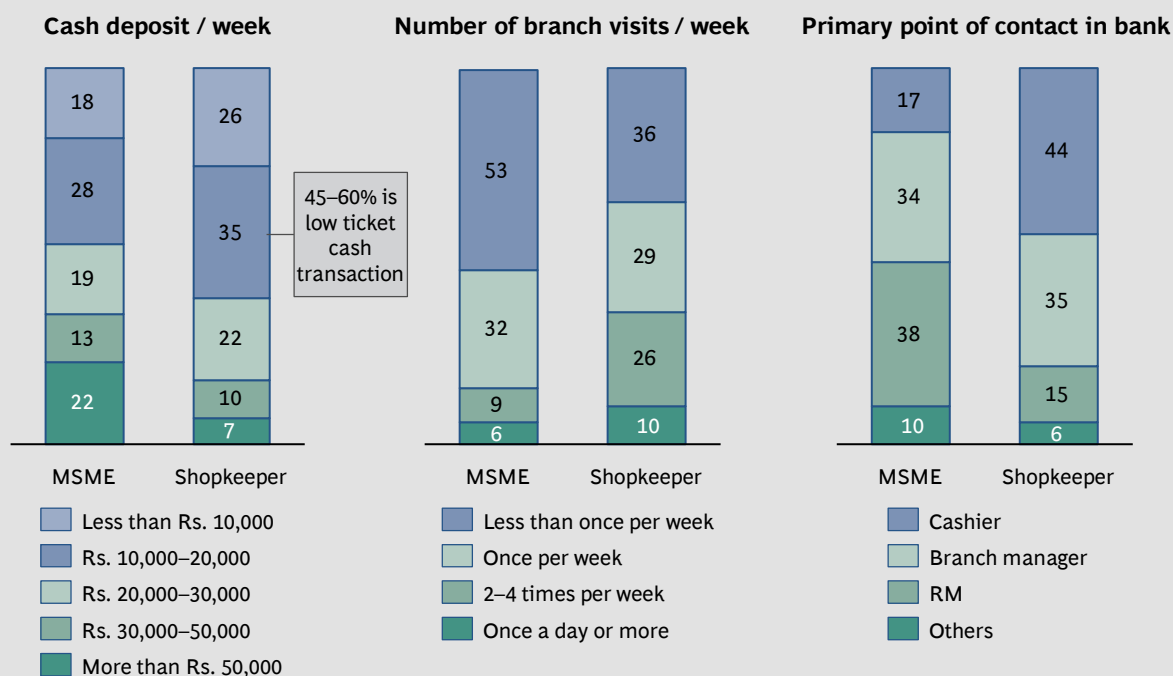
Exhibit 3.6 | Small Businesses Primarily Transacting Through Cheque and Cash

| Segment     | Flow       | Cash | Cheque | RTGS / NEFT | POS |
|-------------|------------|------|--------|-------------|-----|
| MSME        | Payment    | 15%  | 56%    | 29%         | 0%  |
|             | Collection | 15%  | 54%    | 29%         | 2%  |
| Shopkeepers | Payment    | 66%  | 27%    | 7%          | 0%  |
|             | Collection | 73%  | 18%    | 7%          | 2%  |

Sources: FICCI BCG survey; BCG analysis.  
Note: N = 500 for shopkeepers and 500 for MSMEs; Shopkeepers are defined as sole proprietors / partnership firms (retailers / traders / professionals) and MSMEs are defined as entities with revenue upto Rs. 50 crore; Locations covered are Delhi, Mumbai, Chennai, Kolkata, Ahmedabad, Amritsar, Coimbatore, Indore, Nashik, Ranchi, Hyderabad and Bangalore.



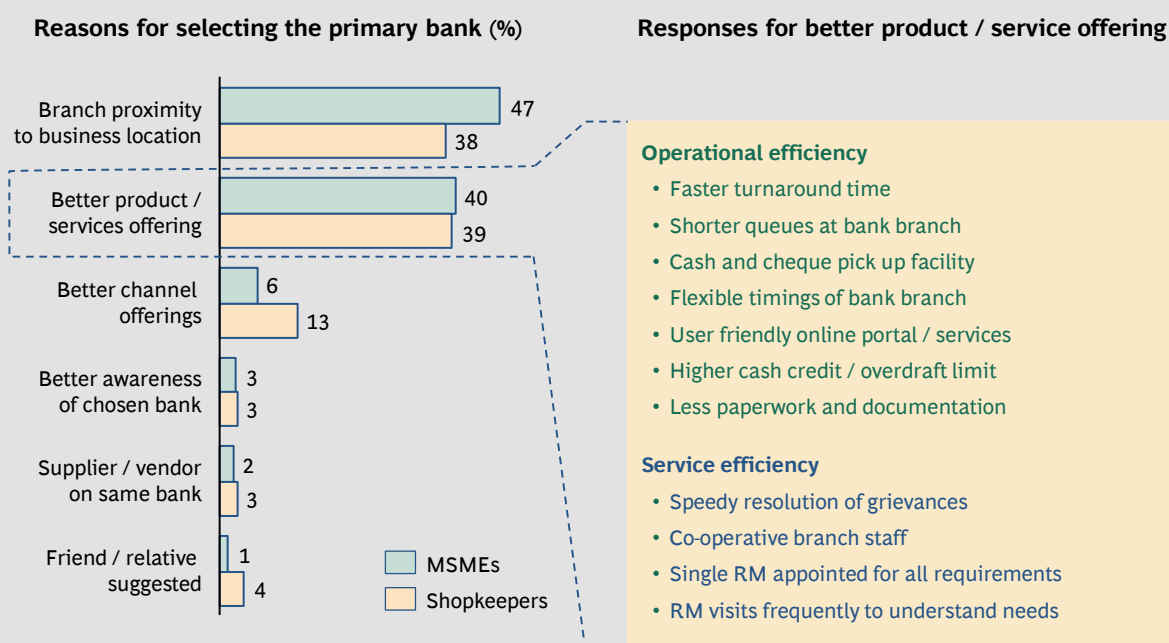
### Exhibit 3.7 | Small Businesses are Prolific Users of Branch Channel



Sources: FICCI BCG survey; BCG analysis.

Note: N = 500 for shopkeepers and 500 for MSMEs; Shopkeepers are defined as sole proprietors / partnership firms (retailers / traders / professionals) and MSMEs are defined as entities with revenue upto Rs 50 crore; Locations covered are Delhi, Mumbai, Chennai, Kolkata, Ahmedabad, Amritsar, Coimbatore, Indore, Nashik, Ranchi, Hyderabad and Bangalore.

### Exhibit 3.8 | Branch Proximity Cited by Small Businesses as Key to Bank Choice

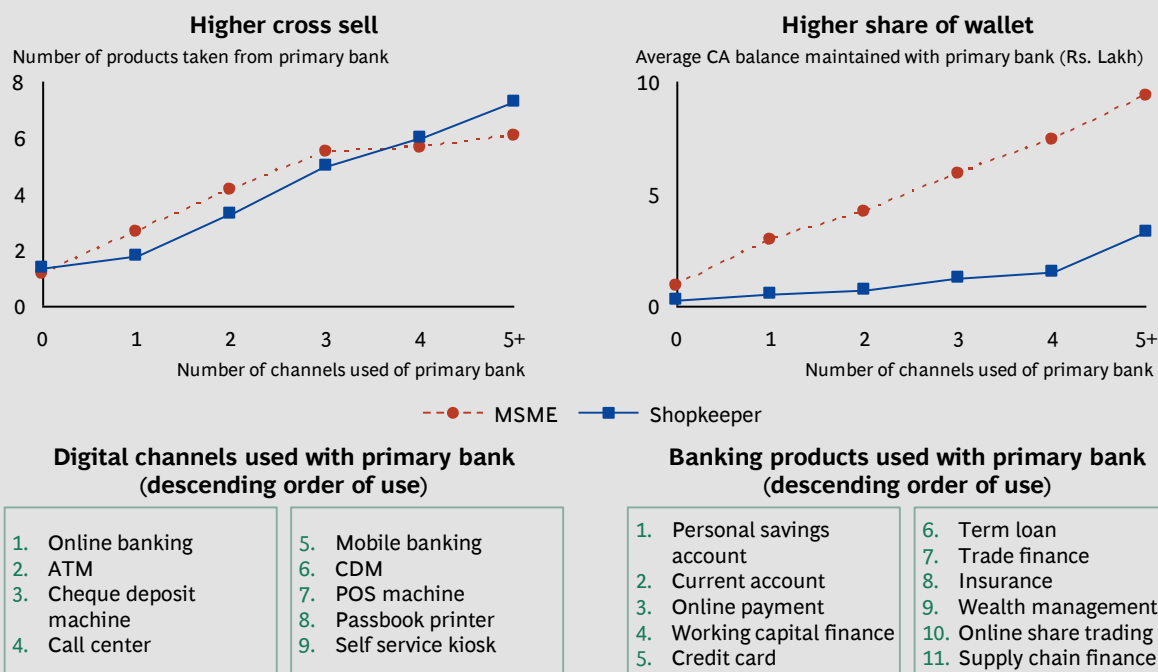


Sources: FICCI BCG survey; BCG analysis.

Note: N = 500 for shopkeepers and 500 for MSMEs; Shopkeepers are defined as sole proprietors / partnership firms (retailers / traders / professionals) and MSMEs are defined as entities with revenue upto Rs. 50 crore; Locations covered are Delhi, Mumbai, Chennai, Kolkata, Ahmedabad, Amritsar, Coimbatore, Indore, Nashik, Ranchi, Hyderabad and Bangalore.



## Exhibit 3.9 | Digital Activation in Small Business Segment Very Rewarding



Sources: FICCI BCG survey; BCG analysis.

Note: N = 500 for shopkeepers and 500 for MSMEs; Shopkeepers are defined as sole proprietors / partnership firms (retailers / traders / professionals) and MSMEs are defined as entities with revenue upto Rs. 50 crore; Locations covered are Delhi, Mumbai, Chennai, Kolkata, Ahmedabad, Amritsar, Coimbatore, Indore, Nashik, Ranchi, Hyderabad and Bangalore.

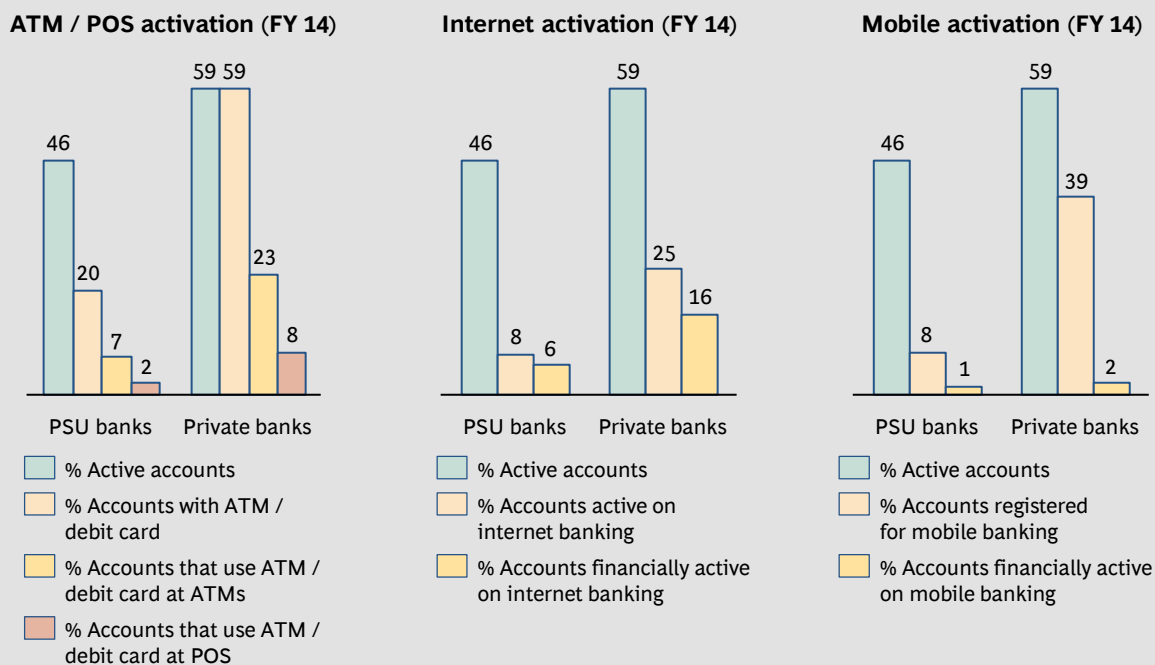
machines, call centres, mobiles, cash deposit machines, POS's, passbook printers and self-service kiosks. Customers using none of these channels had, on an average, one product with the bank. However, as the number of these channels went up to five or more, we saw this segment using up to eight products from the bank. These products were a mix of many personal products like savings accounts, credit cards, wealth management, share trading and business products like current accounts, working capital finance, term loans, etc. Current account balances of MSMEs increased from about one lakh when no digital channels were activated to about ten lakh when five or more digital channels were activated.

Digital channel activation remains anaemic despite all its advantages. Let us first look at the activation numbers in Exhibit 3.10. This chart depicts the activation of digital channels in all current accounts. The majority of current accounts in a typical bank are of MSMEs and shopkeepers, and hence quite representative of the penetration of digital channels in this segment. Similar to savings accounts, we see the first drop happening between active accounts and 'on-boarded' accounts. For ATMs / POS's, private banks have carded almost 100 percent of their active current accounts, but public sector banks have carded only about 40 percent of their active current accounts or only 20 percent of their total current accounts. Fur-

thermore, only 7 percent of public sector bank and 23 percent of private bank current account holders use ATMs for cash. Only one third of carded current account holders use ATMs for cash withdrawals. This is surprising, nay, alarming; and is a huge drain on branch productivity, given how prolific a user of cash this segment is, as seen earlier. public sector banks need to card their active current account base. Private banks and public sector banks both need to drive up the activation of ATM cards quickly for withdrawals in the carded base.

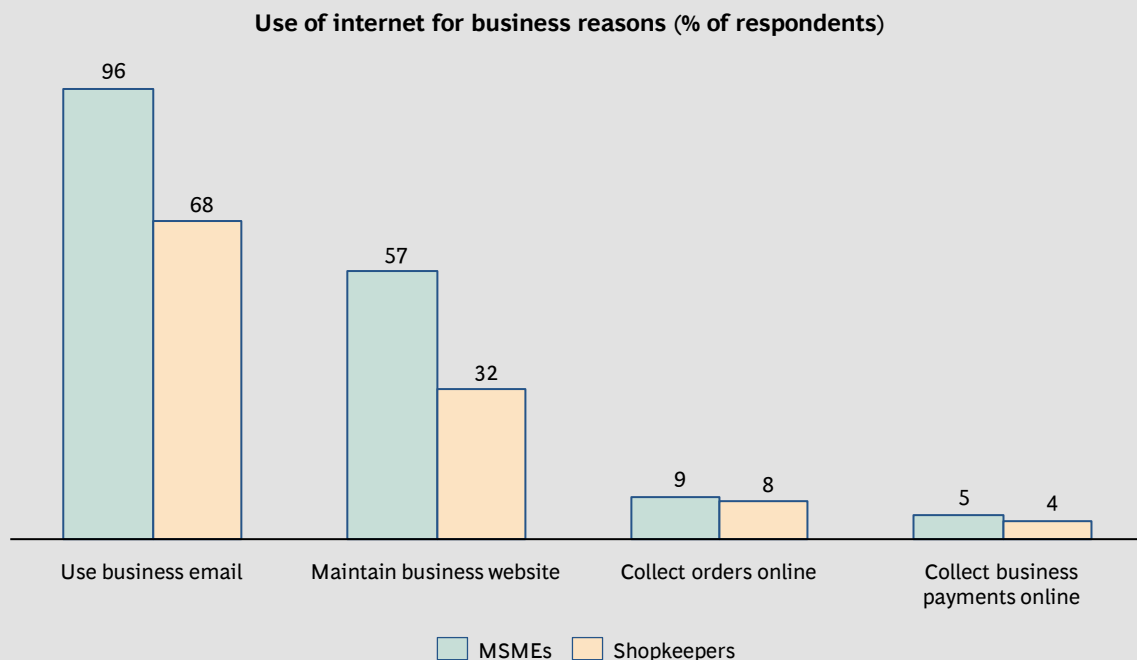
With regard to the internet, public sector banks have on-boarded only 8 percent of their current account customers and private banks about 25 percent. This is alarming, because the customers in this segment are significantly more internet savvy than a typical savings account customer. Exhibit 3.11 shows that 96 percent of MSMEs use business mail and 57 percent of them have a business website; 68 percent of shopkeepers use business mail and 32 percent maintain a business website. Relative to this, the internet and mobile banking penetration for current accounts, as seen in Exhibit 3.10, are miniscule. Once these customers get on-boarded onto internet banking, the pick-up rate to actual transactions is very high: 80 percent for public sector banks and 67 percent for private banks—much higher than retail. Banks rapidly need to on-board this segment to internet banking portals.

**Exhibit 3.10 | Low Digital Activation in Small Businesses (Current Accounts)**



Sources: FIBAC productivity survey 2014; BCG analysis.

**Exhibit 3.11 | High Access to the Internet in Small Business Segment**



Sources: FICCI BCG survey; BCG analysis.

**Note:** N = 500 for shopkeepers and 500 for MSMEs; Shopkeepers are defined as sole proprietors / partnership firms (retailers / traders / professionals) and MSMEs are defined as entities with revenue upto Rs. 50 crore; Locations covered are Delhi, Mumbai, Chennai, Kolkata, Ahmedabad, Amritsar, Coimbatore, Indore, Nashik, Ranchi, Hyderabad and Bangalore.

Banks will need to be persistent in driving adoption in this segment. We see that as the frequency of Point Of Contact (POC) explanation of digital channels to the MSME / shopkeeper goes up, the adoption of digital channels also goes up, as seen in Exhibit 3.12. In about 60 percent of the cases, the bank's POC with the MSME / shopkeeper made no effort in explaining the digital channels to the customer. These customers ended up using about two digital channels on an average. In about 15 percent of the cases, the POC explained the digital channels once. These customers ended up using three digital channels on an average. In 25 percent of the cases, the POC explained and urged the customer many times. In this case, customers started using up to four channels on an average. As we have shown earlier, greater the number of digital channels used, higher are the balances. This is a win-win scenario for the bank and the customer.

### Financial Inclusion: What Digital can do to the Jan Dhan Yojana

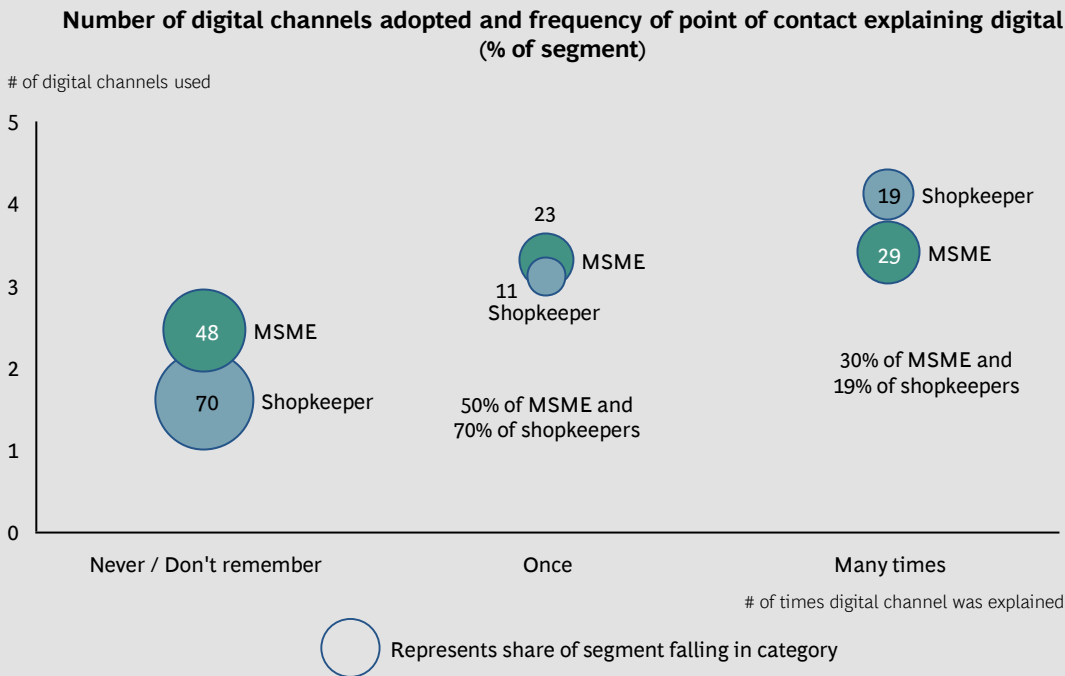
For many years, the banking industry in India, driven by RBI and government mandates has been making efforts and experimenting with new models to increase financial inclusion. The latest government mandate has come in the form of the Prime Minister Jan Dhan

Yojana (PMJDY), requiring banks to open 75 million financial inclusion accounts in 5-6 months. Already on day one, the banks opened 15 million accounts! These accounts have been embellished with RuPay debit cards and accident and life cover. This is a step forward, as some old financial inclusion accounts typically did not have even a debit / ATM card.

Banks have been opening accounts for excluded customers for over five years under financial inclusion schemes. There are learning points that can be adopted into the PMJDY to make it more sustainable and viable. Let us look at the experience of Basic Savings Bank Deposit (BSBD) accounts from this year's FIBAC survey. As per Exhibit 3.13, Indian banks have delivered 40 percent year-on-year growth in BSBD accounts. Most of the growth comes from rural and semi-urban markets. However, only 27 percent of these accounts are 'active' (with at least one transaction in the last one year), as compared to 50-60 percent of normal savings accounts being 'active' (with at least one transaction in the last six months).

Moreover, as shown in Exhibit 3.13, despite five years of intensive efforts, the total active BSBD accounts are only about 20 percent of the total number of active sav-

**Exhibit 3.12 | Banks Need to do More in Spreading Adoption; Low Awareness Behind Lack of Adoption in Small Businesses**

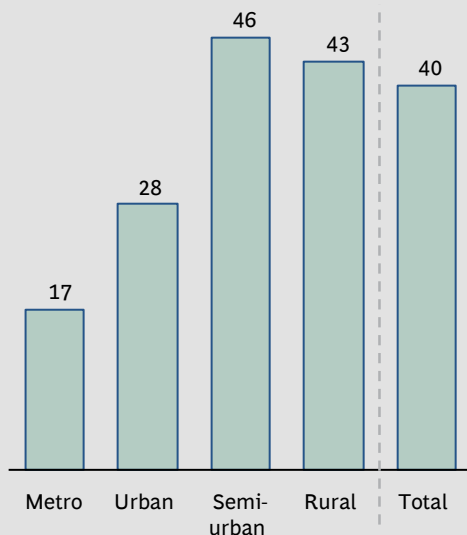


Sources: FICCI BCG survey; BCG analysis.

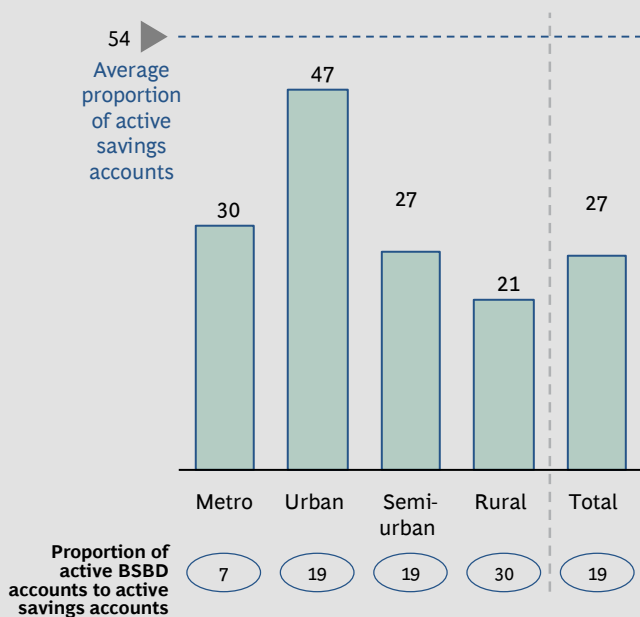
Note: N = 500 for shopkeepers and 500 for MSMEs; Shopkeepers are defined as sole proprietors / partnership firms (retailers / traders / professionals) and MSMEs are defined as entities with revenue upto Rs. 50 crore; Locations covered are Delhi, Mumbai, Chennai, Kolkata, Ahmedabad, Amritsar, Coimbatore, Indore, Nashik, Ranchi, Hyderabad and Bangalore.

Exhibit 3.13 | Rapid Growth in BSBD<sup>1</sup> Account Addition, But Activity Low

% growth in BSBD<sup>1</sup> accounts (FY 14 over FY 13)



Proportion of accounts that are active<sup>2</sup> (FY 14)



Sources: FIBAC productivity survey 2014; BCG analysis.

<sup>1</sup>BSBD: Basic Savings Bank Deposit.

<sup>2</sup>Active accounts for BSBD defined as accounts with at least 1 financial transaction in FY 14.

ings accounts. A typical BSBD account has a fraction of the average balance of a normal savings bank account. This makes the economics of a BSBD account untenable for the banks. The accounts are more difficult to procure—banks have to deploy partnerships, as the branch’s reach is limited and expensive. Even when the accounts were procured, very few transactions happened as the product was not designed for ease of transaction. With almost no transactions, the accounts became dormant or had very low balances.

The PMJDY needs to learn from these experiences and build upon them. To enable transactions, the account has to be funded; and then there should be an easy way to spend from that account. Funding could come from Direct Benefits Transfers (DBTs). But if this doesn’t happen soon, the crores of new BSBD accounts could very soon get dormant and a lot of good effort will come to naught. Let’s assume that the funding happens. How would spends happen? A debit card is better than no card in the hands of a financially excluded customer. But, where would this customer use the debit card? Small shopkeepers and rural areas have minimal POS penetration. Another option is to use it at an ATM—that is better than usage at a Business Correspondent, but will there be enough ATMs? Would the

banks be operationally able to deliver the ATM cards and then the PINs to use those cards?

Enabling digital transactions on mobile may be a way forward to induce spends in these accounts. Banks will need to create and provide tailored, simple mobile banking solutions for BSBD customers. Once BSBD customers are on-boarded onto the mobile platform of the bank, they should also be able to transact easily. As discussed earlier in this report, an example of an easy solution is in the UK, where bank customers can transfer money just by knowing the mobile number of the recipient. Such and more innovative solutions will have to be explored to get BSBD customers to transact through digital channels. Once the transactions start, balances will automatically rise. Operating these accounts with mobile technology will reduce the cost. Higher balances will improve profitability. There will be competition, not obligation, between banks to open these accounts. The financially excluded will finally become financially included.

# DIGITAL-ENABLED CUSTOMER ACQUISITION

*“People don’t know what they want until  
you show it to them”*

— Steve Jobs

**T**YPICALLY, THE INITIAL FOCUS of digital activation is to migrate transactions from branches, ensure customer retention through more transactions in digital channels, and make the bank a ‘primary bank’ for these customers. This is only the first step in the digital journey of a bank. As customers migrate from branches to digital channels, banks will need to learn to sell on these channels. We discuss the burning issue of leveraging digital for sales and then three ways of how digital can be leveraged to enhance customer acquisition.

- Use digital devices (tablets, video chats, mobiles) to enhance the productivity of feet-on-street / branch sales forces.
- Leverage Big Data analytics to pump leads to the sales force / branch for them to make more targeted sales efforts for cross-sell, retention or new acquisitions.
- Directly acquire customers on digital channels (with or without complementary support like video chats, call centres, last mile feet-on-street fulfilment). In a best-in-class global example, more than 80 percent sales of the bank in question happen through digital channels without any branch / physical intervention.

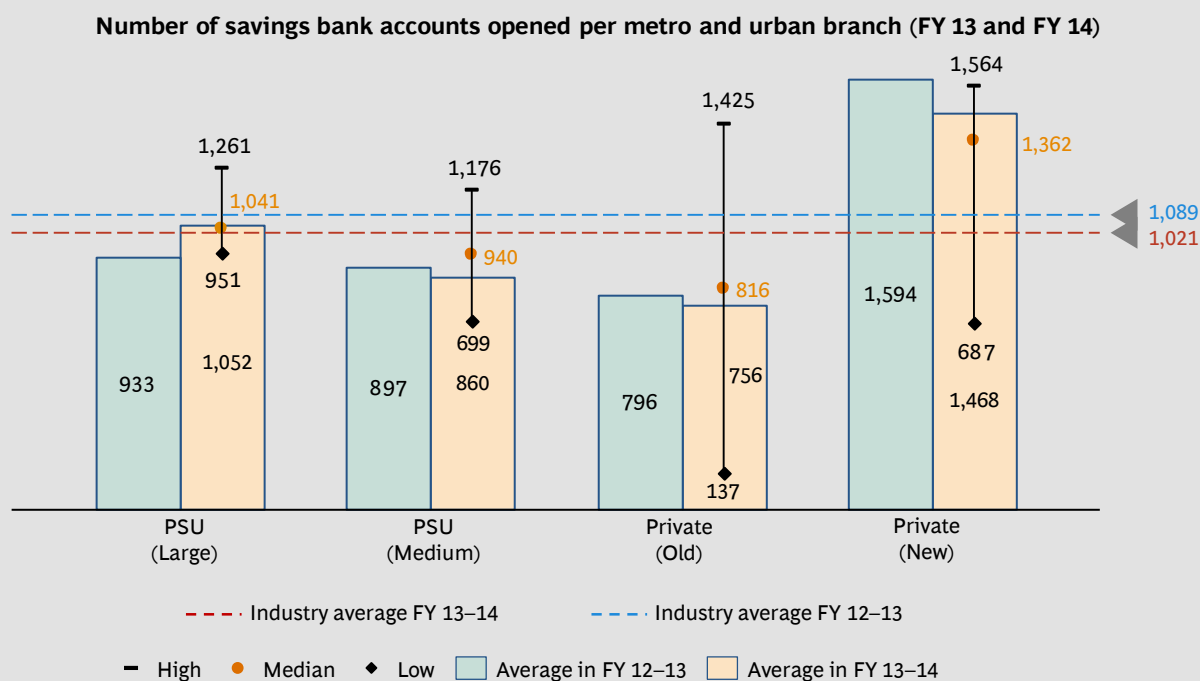
The need to use digital to enhance sales productivity is greater than before because the sales productivity in Indian banks has stagnated. We have seen no improvement in branch sales productivity of savings accounts in Indian banks for the last four years as per the FIBAC survey. The most recent survey result, shown in Exhibit 4.1, suggests that the sales productivity of branches in metros and urban areas has actually reduced by 7 percent from 1,089 to

1,021 new savings bank accounts per branch per year. While large public sector banks have pushed up their sales productivity by 13 percent, all the other bank segments have seen a decline in branch productivity. New private banks continue to have the highest productivity with about 1,500 new accounts per branch per year; but the decline is also the highest in this segment. We see a proliferation of digital tools launched by new private banks to boost sales productivity, like tablet banking services and video chats.

The number of frontline staff in branches has remained virtually the same at about 9.8 people per branch in the metros and urban areas, as seen in Exhibit 4.2, suggesting that the per branch employee sales productivity has also declined for the industry. This further strengthens the case for leveraging digital technology to improve employee productivity. Significant change in branch staffing is seen only in new private banks. Core branch staff strength is down from 10.6 to 9.9 per branch and outbound branch staff strength from 3.6 to 3.2 per branch. As seen in the previous chapter, penetration of digital channels is higher in new private banks; this is helping them take on new branch expansion with fewer employee additions for branch servicing.

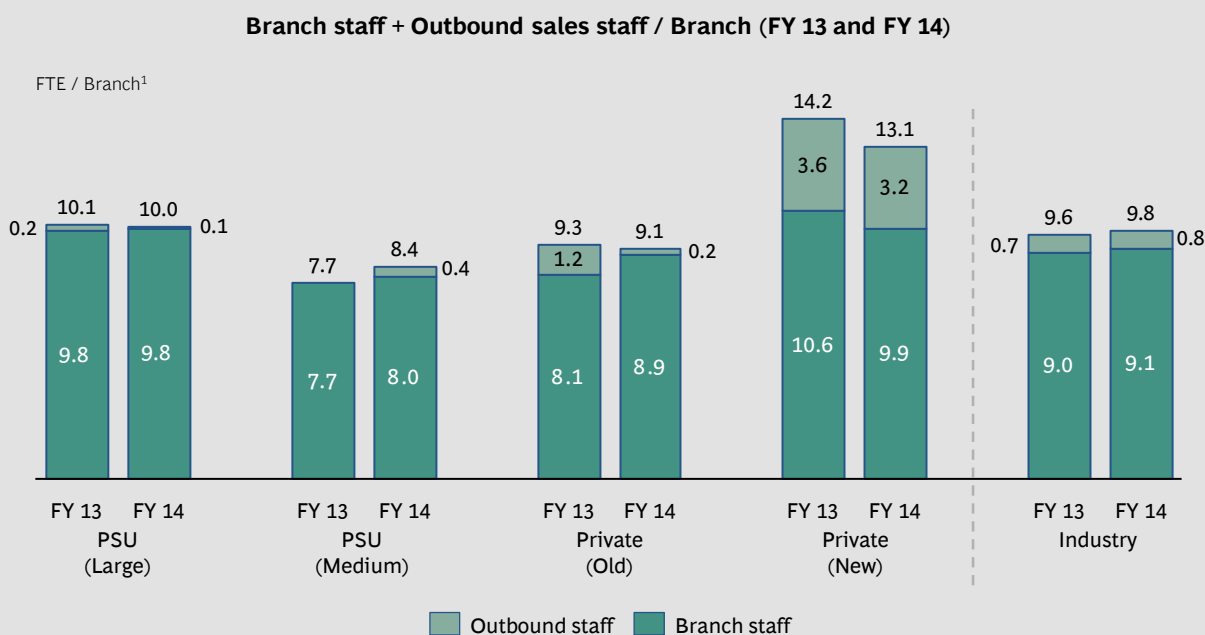
Digital-led acquisition and servicing will become all the more important as banks penetrate deeper into semi-urban and rural areas. Owing to the lower population density, sales productivity will be challenged and the cost to serve will be high. Digital can address both these challenges. As seen in Exhibit 4.3, a disproportionate number of branches are coming up in rural and semi-urban areas. Growth in the metros and urban branches is the lowest in the last six

## Exhibit 4.1 | Branch Customer Acquisition Productivity is Stagnant



Sources: FIBAC Productivity Survey 2014; FIBAC Productivity Survey 2013; BCG analysis.

## Exhibit 4.2 | Branch Staff Stable Year-on-Year — Branch Employee Sales Productivity also Stagnant

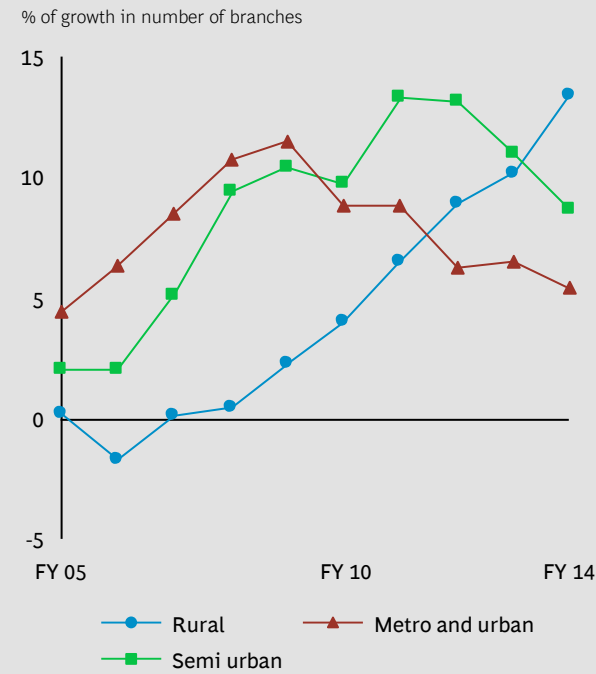


Sources: FIBAC 2014 productivity survey, FIBAC 2013 productivity survey; BCG analysis.

<sup>1</sup>Includes branch staff and specialized salesforces.

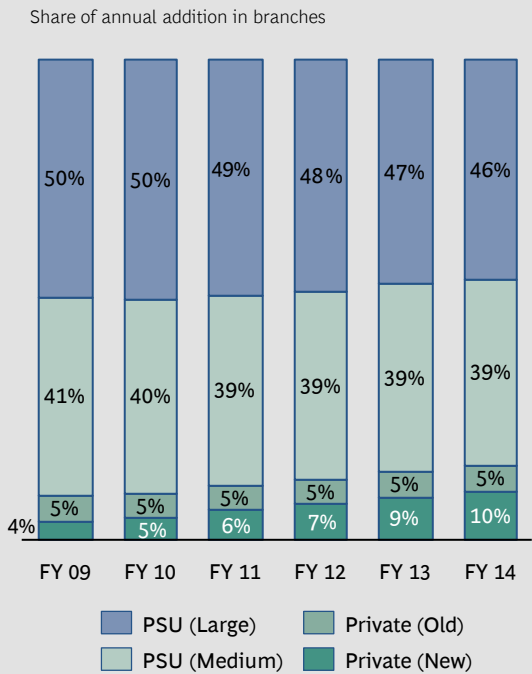
**Exhibit 4.3 | Higher Branch Growth in Semi-Urban / Rural — More Pressure on Productivity and Costs**

**Growth in number of branches across different areas over past 10 years**



Sources: FIBAC Productivity Survey 2014; IBA; BCG analysis.

**Share of different bank types in growth of branches in SU and R**



years, with only 5 percent growth year-on-year. By contrast, semi-urban branches have grown by 9 percent and rural branches by 15 percent. Moreover, year-on-year growth across most retail and commercial banking products is highest in semi-urban and rural areas, as seen in Exhibit 4.4. Savings account balances have grown by 18 percent in semi-urban and rural branches, but only 14-15 percent in metro and urban branches. Current account balances grew by 11 percent in semi-urban and rural branches, but only by 7-8 percent in metro and urban branches. Vehicle and MSME loan balances grew by 25-27 percent in semi-urban and rural branches, but only by 18-22 percent in metro and urban branches. In absolute terms, 36 percent of total savings account balance growth, and about 20 percent of total current account, MSME loans and vehicle loans in the banking sector came from semi-urban and rural areas. Banks cannot ignore the importance of these markets any more; they need to tap digital to economically acquire and serve customers in these markets.

**Digital Devices-Led Sales Force Productivity Enhancement**

When it comes to productivity of the sales force, banks are caught between a rock and a hard place. On the one hand, sales productivity is stagnating or even declining. On the

other hand, branch and sales managers complain about understaffed resources and overworked sales teams. Use of digital devices in the sales process can help break this deadlock. In a BCG global survey of the top 20 financial institutions across retail banks, wealth management providers and insurance companies, we found that 80 percent of the institutions are in various stages of pilot or roll-out of tablet based sales solutions.

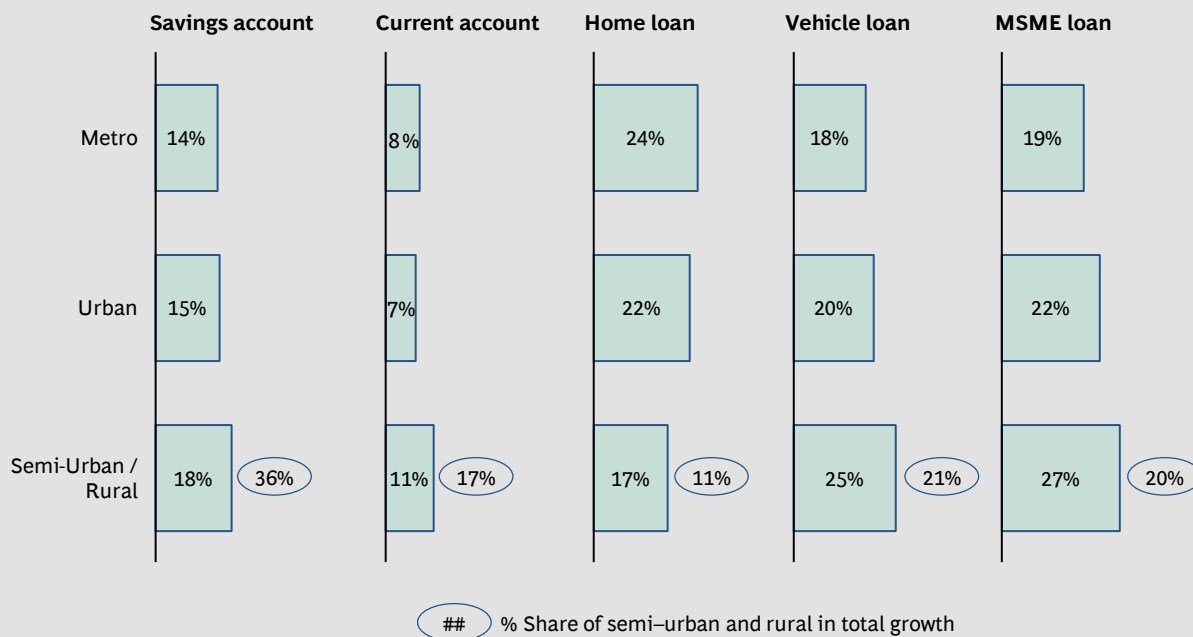
In a particular BCG project experience, a closer look at the sales team revealed that they were spending as high as 50 percent of their time in non-value added work. The sales teams should focus on lead generation and sales conversion; instead, they lose a large chunk of their productive time in correcting errors in applications and documentation, data entry and travel.

In our experience, paper based application and document processing involves several errors such as missing information and supporting documents, and poor handwriting. Correction of such errors could require up to 15-20 percent of sales team time and therefore it is important to get the application 'First Time Right' (FTR). Sales teams often need to travel to the office to complete the paperwork and submit applications for further processing. In our experience, some sales teams travel more than



## Exhibit 4.4 | Bharat vs. India — Semi-Urban / Rural % Growth Faster in Retail / Agri / MSME

Percentage growth in balances (FY 14 over FY 13)



Sources: FIBAC productivity survey 2014, FIBAC productivity survey 2013; BCG analysis.

once a day to discuss cases with superiors or to push ‘urgent’ cases, while others don’t travel to branches every day. This leads either to loss of productive sales time or high Turn-Around-Time (TAT) and poor customer service. Digitization holds the key to solving these problems, increasing the time available to the sales team and increasing their productivity. As shown in Exhibit 4.5, a tablet-enabled sales process increased FTR by 33 percent, decreased travel time by 55 percent and reduced TAT by 50 percent. The overall impact on sales force productivity was 35 percent higher sales!

The digital application in the tablet includes data validation rules which can prompt the sales team for documentation and application errors. This significantly improves FTR. Also digital applications decrease bunching of files at the back end and processing can start as soon as the application is uploaded, which together significantly improves TAT.

Additionally, a well designed digital solution can be used for many other objectives including dynamic lead allocation to the sales team; mail and calendar management; management of to-dos; inclusion of product details; providing MIS reports; and providing visibility of in-process applications to the sales team. For non-retail customers,

the digital tool can also be used to provide visibility on the utilization of existing limits.

While a host of features can be made available in the digital solution for the sales team, ensuring the utilization of digital tools remains a challenge and requires due consideration. Banks and financial institutions should consider the following while digitizing the sales process.

1. Make the processes digital ready.
  - Paper based processes have many inherent compromises and cannot be deployed ‘as is’ in the digital world. Workflow for digital processes—including interaction with other processes—has to be thought through from scratch. Some signatures might not be needed; documents might only need to be photographed and not collected, etc.
2. Get the right software solution.
  - There are many applications, solutions and providers available in the market or they could be developed in-house. Careful attention needs to be paid to select the right software solution in the context of the bank. Then customize the solution specific

## Exhibit 4.5 | Digitization of Sales Team has Huge Productivity Benefits

BCG Experience

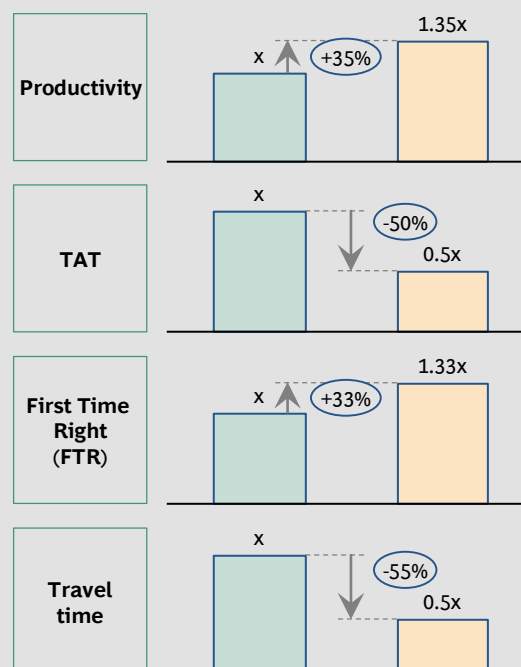
### Context

- Low sales productivity
- Managers complained of overworked sales team
- Customers complained of high turn around time
- Paper based processing
- Errors in sales processes leading to loss of upto 20% sales time
- Sales teams spent ~30% of time in travel

### Digitization of sales

- Sales team armed with tablets designed for sales
- Application, on-boarding processes redesigned
- Software and hardware solution put in place
- Tablet User Interface (UI) made friendly & intuitive
- Sales team trained on new process; new operating rhythm established

### Impact



Source: BCG analysis.

to the workflow and processes of the bank and integrate the digital solution with other systems and processes.

cesses to unlock full value. Normally, rollout initiatives ensure self adoption of digital solutions unlike dictat based adoption.

### 3. Get the hardware plan right.

- Determine the right tablet and mobile devices based on the total cost of ownership, service availability and availability of devices. Design fall-back processes and servicing options in case of field break downs. Think through the connectivity challenges and potential solutions.

### 4. Develop a friendly, intuitive and uncomplicated User Interface (UI).

- Based on your processes and emphasis on digitization, design the right UI for the sales teams. Agility and openness to changing and iterating the process and UI based on field feedbacks is extremely important to get this right.

### 5. Implement sales process changes.

- Plan the (re)training of the sales teams. Design and implement the commercialization of digital pro-

## Big Data-Led Cross-Sell, Retention and New Acquisitions

Banks have reams of data about their customers in their core banking and payment systems. In fact, for a customer's primary banking relationship, the bank knows a lot more about the customer than does any other business. E-commerce sites, mobile telecom players, and retailers with loyalty cards have only a fraction of the customer's data. If this data is leveraged appropriately, banks can create much stronger and better value propositions for their customers than these other players. Many banks globally have started on this journey. Some banks have 'shopping portals' within the logged in portion of their websites, where customized offers are given to customers based on their past spends and shopping habits.

Banks can also use big data techniques to identify hot leads for new products, and identify opportunities to retain and grow balances of existing customers, etc. For example, banks can identify all the customers with term deposits who do not have a savings bank account. These

customers could then be approached for SB accounts through digital channels or the outbound sales force to open an SB account. Such leads would have a much higher conversion rate than those sourced through cold calling or other sources of lead generation.

Banks should urgently invest in Big Data tools and techniques. This will require setting up some additional IT capabilities and investing in sharp analytical human resources. Once that is done, the bank can identify specific-use cases and start leveraging that data to create tailor-made offers for the customers, and identify hot leads for the sales channels.

In a particular BCG project, as shown in Exhibit 4.6, we were able to leverage big data techniques to grow the incremental CASA balances at a bank by almost three times vis-à-vis the baseline in a very short time. A three step process was followed as shown below:

1. Identification of hot leads.

- A large number of ‘use cases’ or themes were identified, for example, current and savings account customers whose balances had declined in the last six months; customers who had a current account or term deposit, but no savings account; customers who had left the bank in the last few months; and new customers who could be approached formed the basis of rich information in payment systems.

2. Pumping of leads and customized sales pitches to the branches and sales teams.

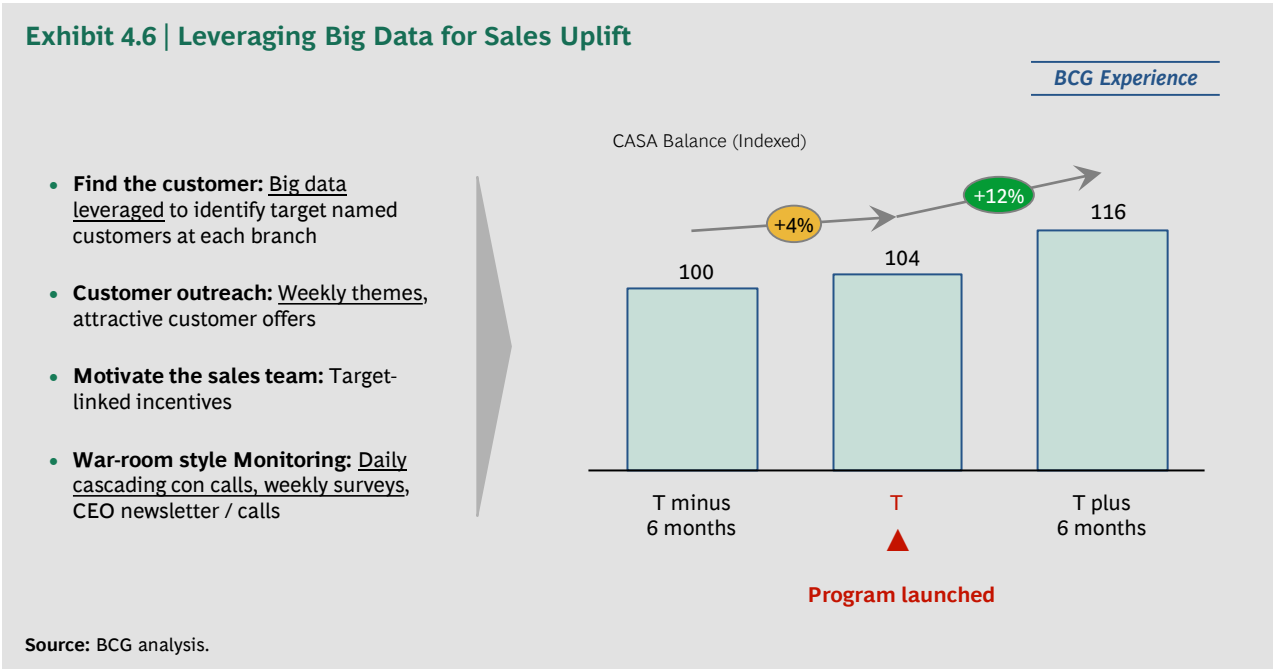
- The identified leads were made available to the branches and sales teams. They were pumped through lead management systems where available, but also through MS Excel sheets and the intranet of the bank where sophisticated lead management systems were not available. A customized pitch followed the lead, depending on the type of lead. For example, the pitch related to cross-sell of CASA to term deposit customers was different from that for a lead where the customer had a declining balance.

3. Tracking, monitoring and refinement.

- A robust tracking, monitoring and governance mechanism was put in place to measure the outcomes and activities on the ground. For example, the sales teams provided daily feedback on a web survey / mobile apps / SMS / lead management system on the activity they had done on the ground. The outcomes were tracked directly in the processing and core banking systems. The themes that did not work were refined quickly or dropped and those that worked well were extended.

Direct Digital Sales

Any direct sales through digital channels will further improve the overall sales productivity of the banks. Channel conflicts will have to be appropriately managed. But, once past the channel conflicts, the benefit to the bank’s top and bottom line will be significant. Digital platforms are often not designed to sell—they start out as channels for



information dissemination and are built over time to ‘accommodate’ sales. This is the equivalent of hiring a team to man the information desk and gradually training them to sell. The best-in-class digital platforms that focus on driving sales need to keep this central to the design. These include desktop and mobile websites, mobile phone apps, call centres and other electronic media to interact and transact with the bank.

Based on global BCG experience, we propose a five pronged approach to enhance direct digital sales, as illustrated in Exhibit 4.7.

**EMBED ‘SALES INTELLIGENCE’ INTO DIGITAL PLATFORMS**

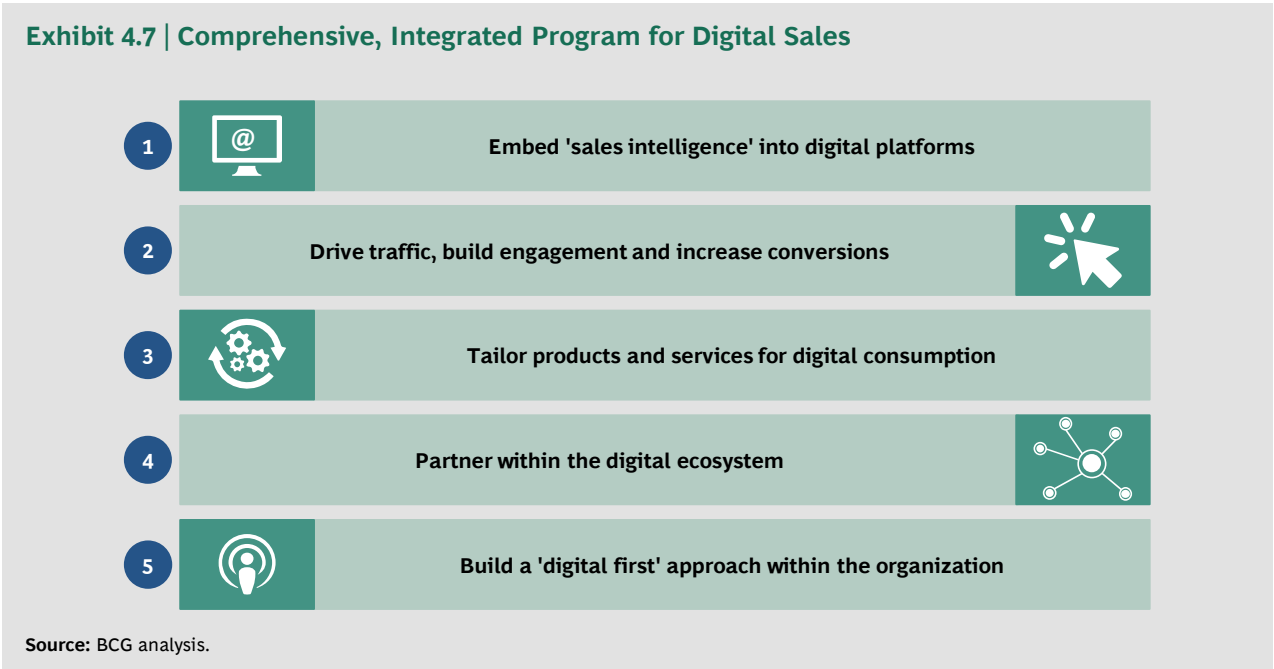
Merely uploading existing application forms is unlikely to work. In the offline world, the RM / sales representative eliminates complexity by hand-holding the customer. On digital platforms, customers are keen on ‘self service’. The form needs to be designed to facilitate quick and convenient applications. For example, for existing customers, as much data as possible needs to be pre-populated to enable them to provide minimal additional information and apply for a product within a few minutes. As per our recent research, one of the largest sources of dissatisfaction among customers is when they are asked to resubmit information that already exists with the bank. Digital technology helps banks overcome this with ease, enhancing customer experience and facilitating sales. Customers also need to be provided with live assistance during the online application process to simulate the real world and address any queries. This includes functionalities like web chat and click to call.

Design also needs to account for the specific ‘form factor’. For example, expecting customers to apply for a banking product through their mobile versus a desktop or laptop requires aligning the design with each of these different form factors. The mobile permits on-the-go application, but banks need to design the application process differently: targeted offer (rather than choices) to avoid complexity, seek minimal information, ensure that the short application form is designed for a clear view on the mobile. Ideally, sales via the mobile need to be designed for one-touch only, where customers can react to a targeted offer with one-click and authentication.

Besides redesign of digital platforms on a stand-alone basis, integration across platforms (web, mobiles, call-centres and even field teams) needs to be seamless to minimise drop-offs in the sales process. A large proportion of customers applying online are unlikely to complete the entire web application; they might just provide certain minimum information to initiate the application process or even drop-off in the middle of the application. The call centre needs to be integrated with the online sales process to call the customer within a matter of minutes to guide her through the application.

**DRIVE TRAFFIC, BUILD ENGAGEMENT AND INCREASE CONVERSIONS**

Banks need to run targeted programs and campaigns to drive relevant traffic to these platforms, as well as increase engagement and sales conversion. These include digital and offline campaigns.



Traffic needs to be driven in a structured manner through a range of sources—organic search typically drives more engaged interactions, leading to higher conversions; paid ads need to be more targeted at the relevant customer segment and factor in understanding of online customer behaviour (for example, digital ads promoting investment products see significantly better results depending on whether they are offered at a finance portal instead of a sports site even if targeted at the same audience); partnerships with media affiliates need to be more tightly measured on various metrics (especially conversions) to get better ROI on digital spends. Web-analytics needs to be a more integral part of online marketing, with banks analyzing navigation through the site (segmented by customer profiles, traffic sources) and facilitating better targeting.

Banks need to create simple and easy-to-process online content complemented with “tools” (for example, simple product comparisons and recommendations, financial planning tools with recommendations and direct links to online application) to increase engagement among relevant customers and direct them towards online purchases. Online applications for financial products still see low conversions at or post the application stage; too many data fields on the online application, lack of live assistance for customers, failure to integrate across channels and field teams to drive fulfilment, rejection of applications not meeting the internal approval criteria are among the key reasons.

To drive online sales, banks need to design and execute an end-to-end programme with the objective to attract relevant traffic, build engagement and increase conversions (either completely online or assisted through other channels). Measurement systems also need to factor in end-to-end metrics to accurately measure the overall cost of acquisition including the cost of generating online leads and the cost of fulfilment (be it the cost of the call centre or the field team required for closure).

Currently measurements and plans at banks still don't build an end-to-end view required to drive higher sales at optimal cost of acquisition.

### **TAILOR PRODUCTS AND SERVICES FOR DIGITAL CONSUMPTION**

Prioritize the portfolio for digital sales; keep the design simple, provide an efficient application and fulfilment process—these are the key mantras. Simple products with ease of sign-up can be winners, for example, personal loans, especially to existing customers and ‘one-touch’ insurance. Relatively ‘more complex’ products like home loans which still require offline assistance and processing

to complete the sales need an effective digital lead capture mechanism complemented with efficient lead transfer and fulfilment.

Digital also offers the flexibility to innovate, for example, bundling in account management solutions (expense trackers, goal based savings etc.) with accounts is a successful trend adopted by digital-focused banks globally.

### **PARTNER WITHIN THE DIGITAL ECOSYSTEM**

Digital is a game changer and banks cannot do it alone. They will need, among others, partnerships with designers, technology firms, digital media agencies, social media platforms, financial websites, specialized firms (for example, web-analytics), e-commerce platforms and online merchants.

This requires a considered and more overarching assessment of their digital strategy—the role that various partners can play, what is core to their success, what needs to be kept within the bank or with the partners, and terms of engagement to maximize value.

Globally, certain banks are increasingly scanning the start-up ecosystem for the latest innovation in financial technology (for example, payments) and are even taking financial risks to build the right partnerships or even acquire key digital assets.

### **BUILD A ‘DIGITAL FIRST’ APPROACH WITHIN THE ORGANIZATION**

Successfully driving digital sales requires banks to get their house in order. This includes a dedicated team within the organization responsible for digital sales with clear metrics to track performance. Analytics needs to be a critical input for digital sales—banks need to leverage the vast volume of data to make their campaigns sharper and offers targeted and personalized. Finally, process excellence is core to driving success; processes need to be designed with a ‘digital first’ mind-set: end-to-end with no need for human interaction unless mandatory; least number of steps for application; and ‘instant’ decision and fulfilment. This will require a fundamental shift in mindset among operations, risk, compliance and even business teams.

At a more fundamental level, banks need to understand that customer expectations for online purchases are being defined not by other banks but by the best non-bank digital players: targeted offers, just two-three clicks, process completed in a few minutes, and instant fulfilment. Banks need to think like online retailers and learn from the best to design their optimal digital sales processes. Think of it as ‘banking commerce’!

# DIGITIZING THE BANK

*“The days of the digital watch are numbered”*

— Tom Stoppard

**C**ENTRALIZATION OF BRANCH ACTIVITIES has led to creation of back-offices at local, regional and national levels. Back offices typically comprise:

1. Processing centers where on boarding, fulfillment, collateral management, logistics and servicing activities are carried out.
2. Call centers where customer queries and complaints are handled.
3. Credit centers where credit applications are processed and risk management activities are undertaken.

BCG experience across processing, call and credit centres shows that the Indian banking sector is at the cusp of the next wave of operational transformation driven by digitization.

## Digitized Back-offices: 2x Customer Satisfaction; 20 Percent Higher Efficiency; and Half the Operating Risk

The back office journey has reached a certain maturity level over the years—particularly for the new private banks that are achieving a relatively higher degree of centralization. As shown in Exhibit 5.1, it is instructive to note that the back office FTE percentage for new private banks is almost four times that of large PSU banks, indicating that the latter still conduct a significant amount of their operational activities in branches (as seen in the chapter on Digitally-Enabled Customer Acquisition).

Globally, the bench-mark for efficient utilization of manpower is to have the percentage of FTEs in back offices close to the 10 percent level. So, the new private banks seem to be moving towards higher efficiency with business process re-engineering and digitization. They can still do more to get the same work done by 25 percent less people in back-offices.

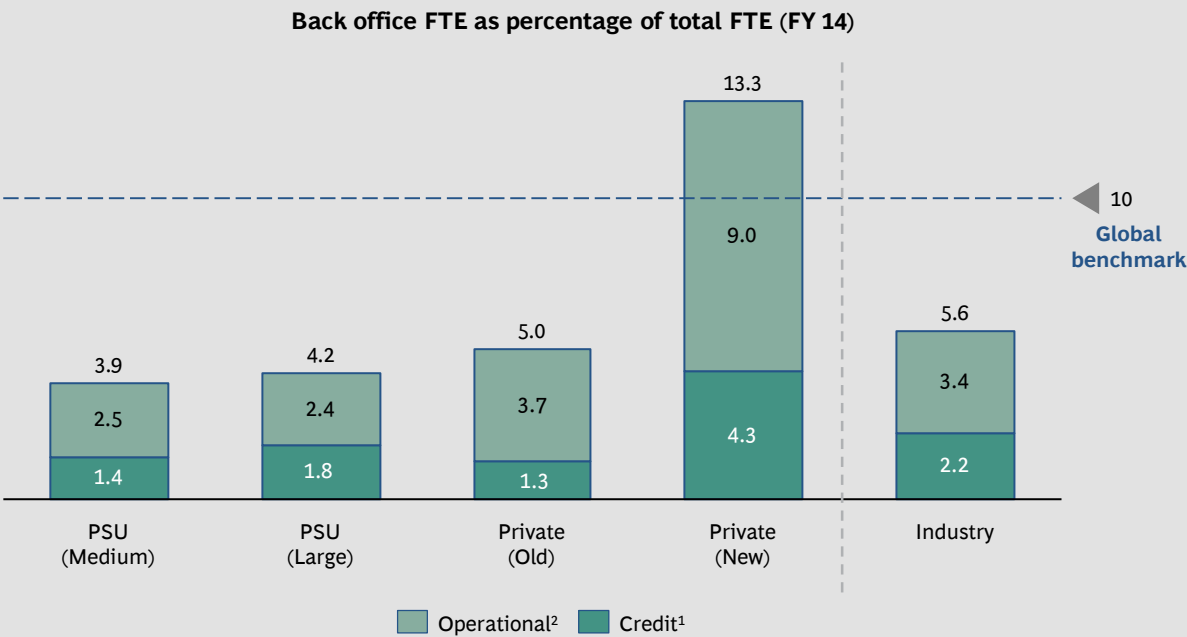
On the other hand, the need for the public sector banks is to move further on centralization. But, they have an advantage as they can go with fully digital models and hence, they can directly move to a lean set-up.

As the degree of digitization in the processes increases, the need for local and regional back offices reduces. For example, regional scanning hubs for account opening get eliminated if KYC and account opening forms are fully digitized. Eventually as the entire process becomes end-to-end digitized, the national processing centre contracts in size.

BCG experience shows that application of digital technology levers can transform the very fabric of processing and operations. This will create the next wave of operational transformation for Indian banks. Exhibit 5.2 summarises the key cornerstones of a digital operation model.

This is instructive for both private and public sector banks. For private sector banks, this presents an opportunity to create the next generation operating model. For public sector banks, this is the time to leapfrog branch centralization challenges and usher in a new era of ultra lean operations. Fundamentally, a fully digitized process eliminates the need for local scanning

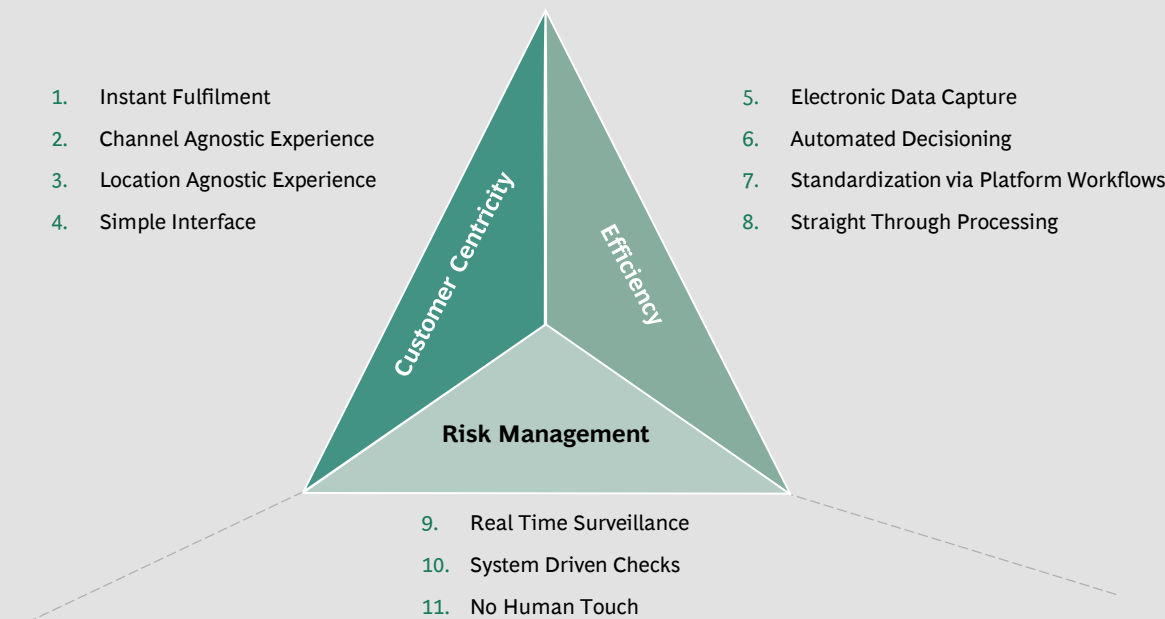
Exhibit 5.1 | Different Stages of Centralization in India — Public Sector Needs to Embrace Digital for Remaining Half of Journey



Source: FIBAC Productivity Survey 2014; BCG analysis.  
<sup>1</sup>Credit back office includes: retail, SME and corporate credit back offices.  
<sup>2</sup>Operational centre's include: retail liabilities, cheque clearing centre's and transaction hubs.

Exhibit 5.2 | Achieving Customer Delight, Lower Risk and Lower Cost Together — 11 Measurable Process Digitization Parameters From BCG Experience in India

Design principles of a fully digital operating model — the holy-grail of operations



Source: BCG analysis.



hubs or processing centres, reduces manual intervention significantly and improves productivity.

In the BCG experience globally, banks have been able to reduce their cost-to-income ratio by over 10-15 percent points by aggressive digitization of their operating model.

Today in India, creating a significantly digitized end-to-end process is indeed possible. Some leading banks are also making moves towards digitising their processes by leveraging tablets and kiosks. The keys to success are the quality of the digital process design and the extent of business volume that flows through it. Achieving success in these two dimensions is easier said than done. Banks that adopt a structured approach to digitally re-imagine their processes through a customer lens and then drive the channels to ensure adoption will emerge as ultimate winners. Exhibit 5.3 summarises BCG’s experience in systematically applying digital levers to conventional operating models.

Call Centers in India—Not Fully Harnessed

BCG experience in mapping customer pathways through a process reveals multiple moments of truth

where a customer will need handholding or human assistance. For example, when a customer has a query while creating a standing instruction on her account or while adding a nominee or while upgrading her credit card, she will need to speak with a bank official for advice. This is where call centres become crucial as they provide a channel for customers to get in touch with a bank official instantly. FIBAC 2014 shows significant room for improvement in the overall call centre capabilities of the Indian banking sector, as shown in Exhibit 5.4.

There is significant room for improvement on the call centre activation; the FIBAC survey shows that very few banks are truly able to leverage their call centres to handle customer needs, as shown in Exhibit 5.5.

Lean Organization@digital: Aim for 20 Percent Leaner Overheads

While digital gets most talked about in the context of new-gen consumer offerings or process digitization, BCG experience has shown that application of digital capabilities to the administrative functions (for example, HR) leads to significant streamlining of their operating model and unlocks value.

Exhibit 5.3 | Digitization Leads to Extraordinary Gains in Customer Experience — For example, Turn Around Time (TAT) Reduction in Retail and Corporate Bank

BCG experience

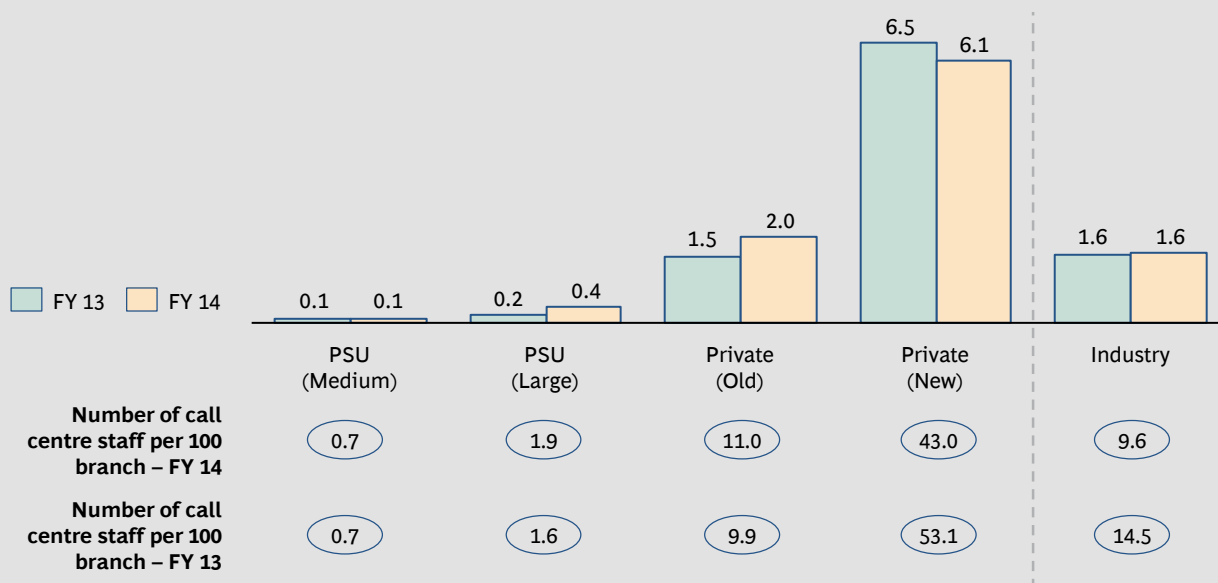
Select impact of digitization on key banking processes

|                                   | Process type                   | TAT Prior to Digitization | Reduction in TAT Post Digitization |
|-----------------------------------|--------------------------------|---------------------------|------------------------------------|
| Retail Banking<br>(TAT Impact)    | CASA account opening           | X                         | 80–90%                             |
|                                   | Retail lending                 | X                         | 65–75%                             |
| Corporate Banking<br>(TAT Impact) | Trade finance product issuance | X                         | 80–90%                             |
|                                   | MSME lending                   | X                         | 60–70%                             |

Source: BCG analysis.

## Exhibit 5.4 | Call Centre is a Massively Underutilized Channel — Public Sector Needs Fresh Thinking on this Crucial Channel

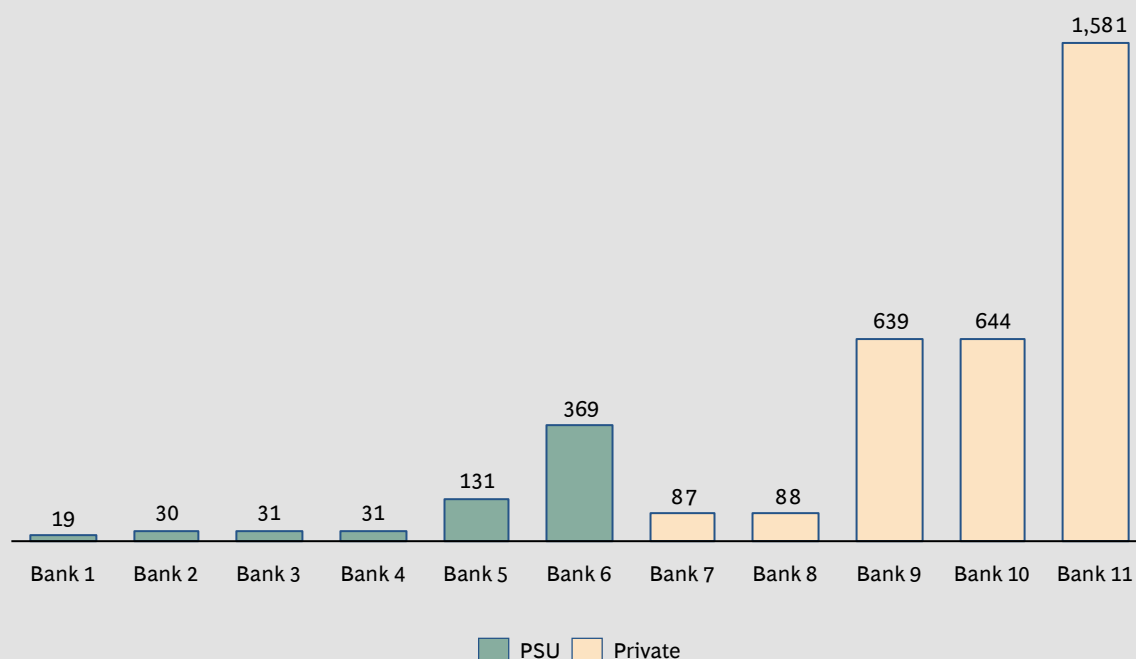
Private banks leading the way in call centre deployment  
Number of call centre staff per 100,000 CASA and retail loan accounts (FY 13 and FY 14)



Sources: FIBAC Productivity Survey 2014; FIBAC Productivity Survey 2013; BCG analysis.

## Exhibit 5.5 | Massive Variation Within Banks in India on Customer Activation for Call Centre

Number of inbound calls per year per 1,000 CASA and retail loan accounts for different banks (FY 14)



Sources: FIBAC Productivity Survey 2014; BCG analysis.

Exhibit 5.6 shows that the proportion of staff at administrative offices like head office, regional office and zonal office level continues to remain high across banking segments.

There is significant potential for reducing the strength of the administrative offices through digital. Specifically, digital offers never-seen-before capabilities to:

- 1. Democratize productivity and performance by making the metrics available to the right people at the right time so that people have absolute transparency on their and their team’s performance.
- 2. Use rule engines to optimize resource allocation dynamically.
- 3. Re-engineer administrative processes by applying digital principles shown in Exhibit 5.2.

Exhibit 5.7 illustrates the BCG experience in the context of the HR function as an example. It shows how digital technology can dramatically improve the talent management and resource allocation system in the Indian context.

### Risk Management: Building on the Lessons of Retail Lending in India

Once an asset turns NPA, it is no more a risk—it is a reality. Typically a significant amount of effort is invested by banks after an asset starts accumulating arrears or officially turns NPA. This approach is not adequate and certainly leaves significant room for value on the table in a digital world.

FIBAC 2014 has found that overall gross NPAs continue to rise—up from 2.5 percent in 2011 to 3.3 percent in 2013 and 4.5 percent in 2014. Corporate, MSME and Agriculture GNPA’s continue to rise from their corresponding levels in 2011 and 2013. Retail remains one segment where year-on-year improvement has been witnessed in GNPA’s. Refer to Exhibit 5.8.

Exhibit 5.9 shows that in light of the current context, banks have taken steps towards bolstering their monitoring and collections staff. New private banks have drastically increased their credit monitoring and collections FTEs to counter the upward trend in GNPA’s. Other bank categories have either increased this number slowly or have decreased it marginally. Banks need to build a cadre of staff who are experts at NPA management. In addition to the increase in

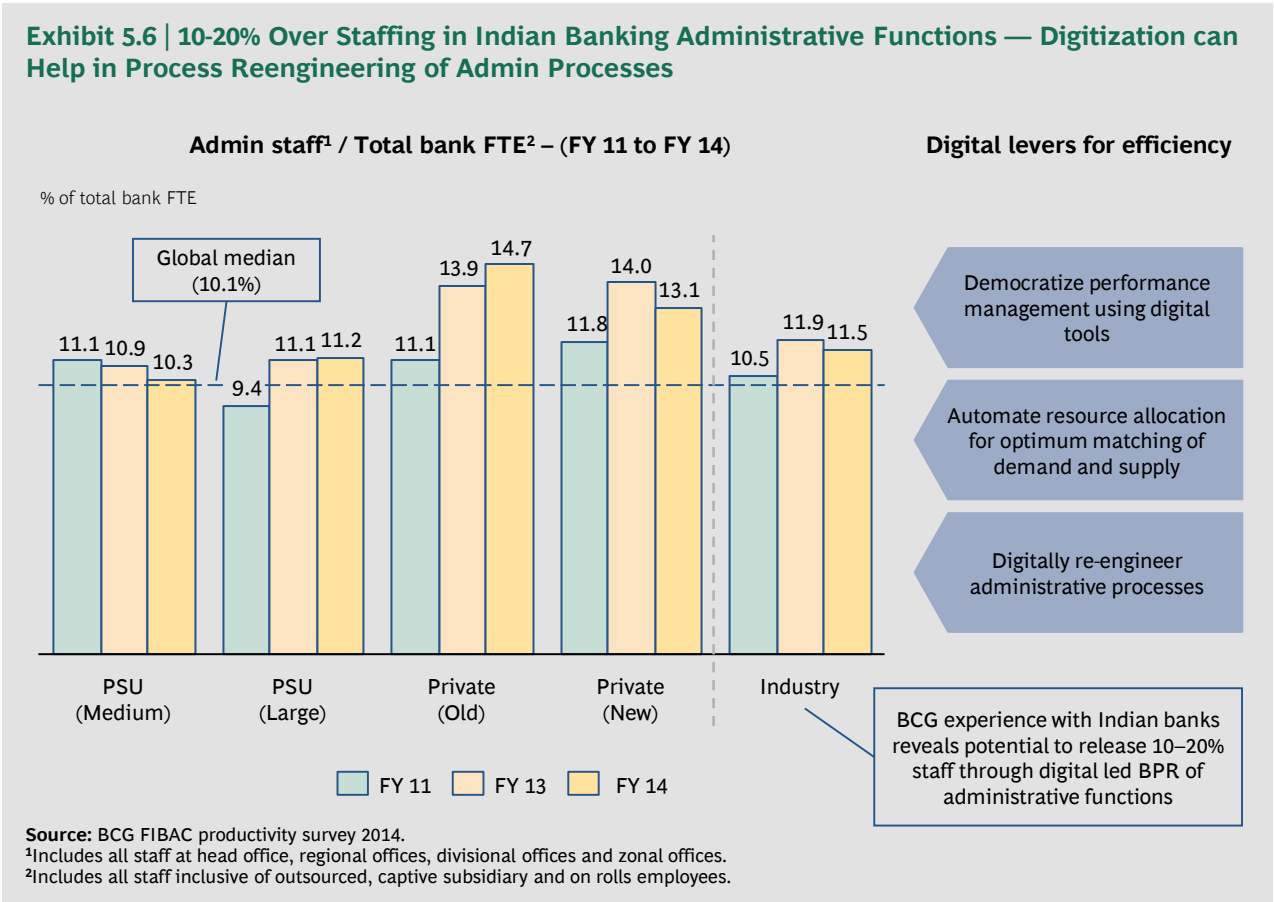
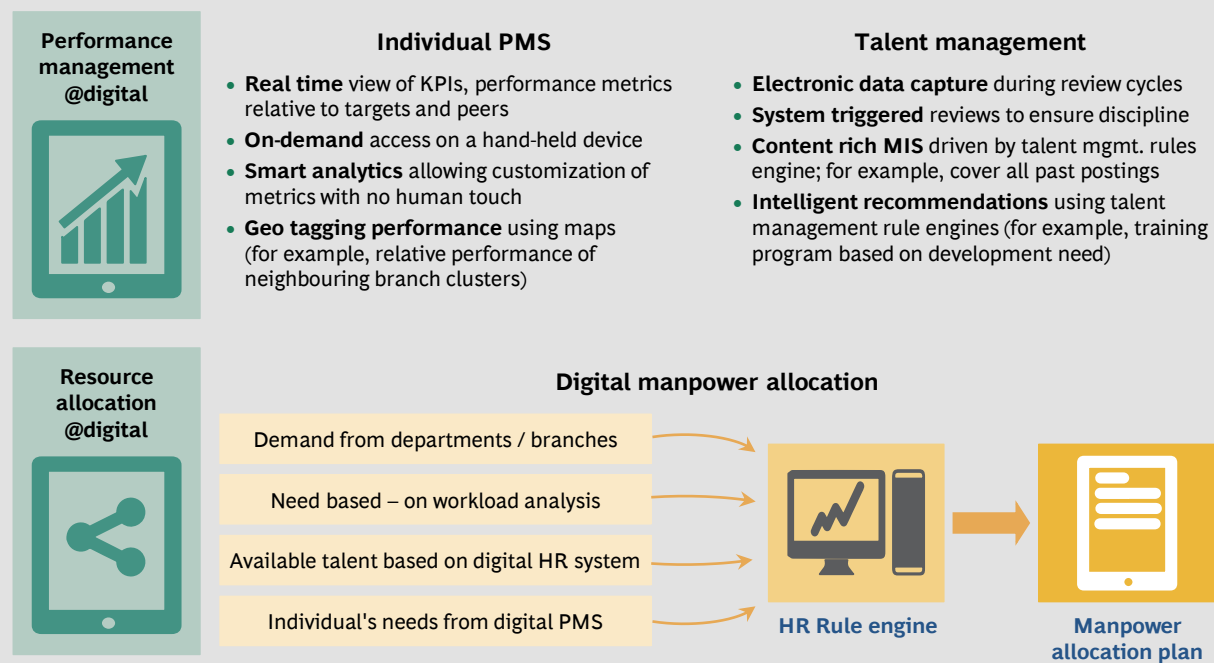


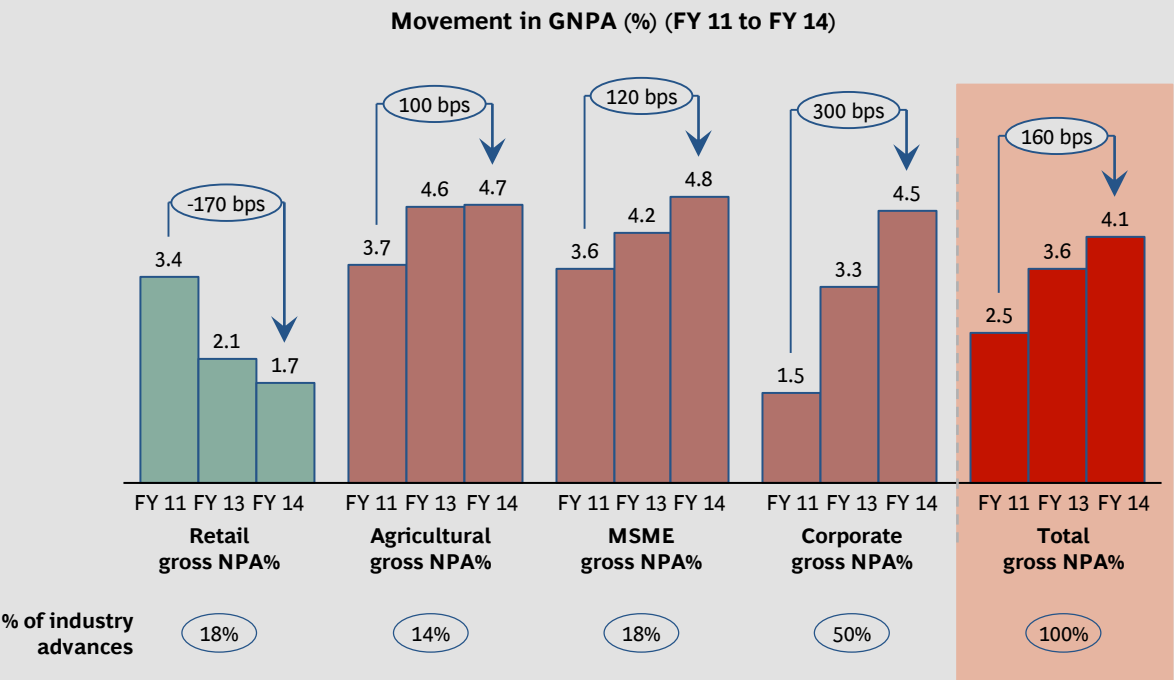
Exhibit 5.7 | Digital Enables Unprecedented Transparency in HR Systems — Performance Measurement, Manpower Allocation – with Direct Bearing on Productivity

BCG experience



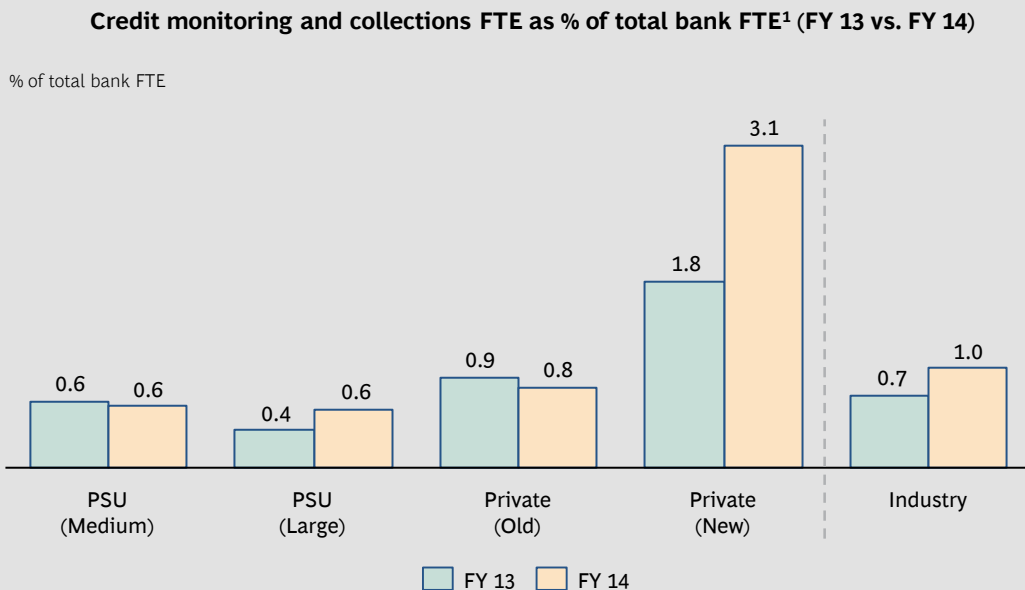
Source: BCG analysis.

Exhibit 5.8 | Use of Information Bureau is a Key Driver of Retail NPA Defying Overall Trend Over Years



Sources: FIBAC Productivity Survey 2011; FIBAC Productivity Survey 2013; FIBAC Productivity Survey 2014; BCG analysis.  
bps: Basis Points; NPA: Non-Performing Asset; MSME: Micro, Small and Medium Enterprise.

## Exhibit 5.9 | Credit Monitoring and Collections Staff has Almost Doubled in Private Sector in One Year; Needs Significant Rethink in Public Sector



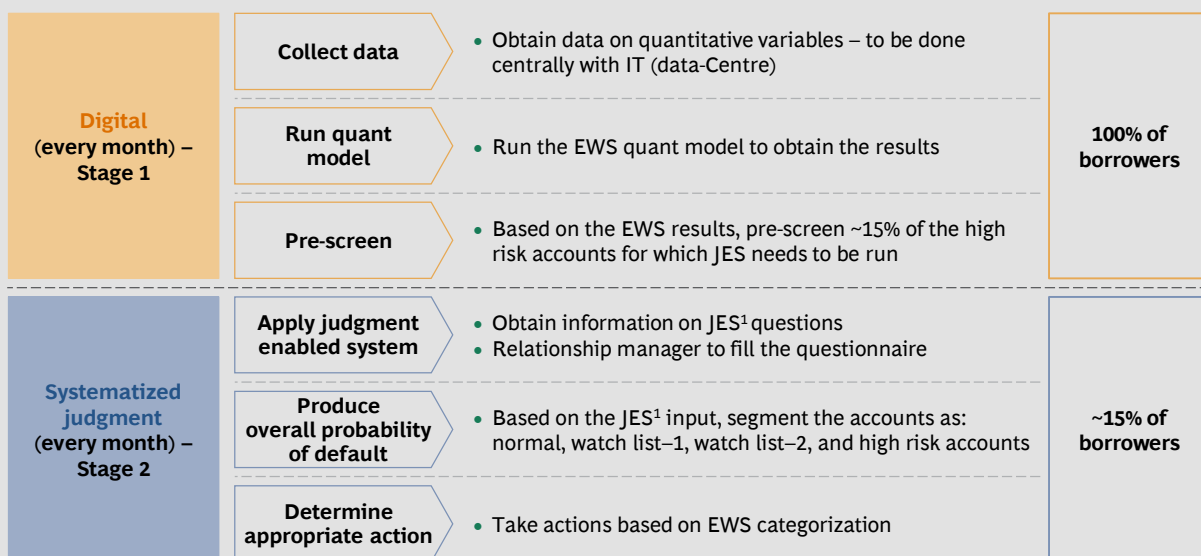
**Digital technology allows a much more sophisticated and proactive approach towards managing balance sheet stress**

Source: BCG FIBAC productivity survey 2013, BCG FIBAC productivity survey 2014; BCG analysis.

<sup>1</sup>Includes all staff inclusive of outsourced, captive subsidiary and on rolls employees.

## Exhibit 5.10 | Prevent Risk Before it Materialises — Early Warning System (EWS)

**EWS operates as a 2 stage process**



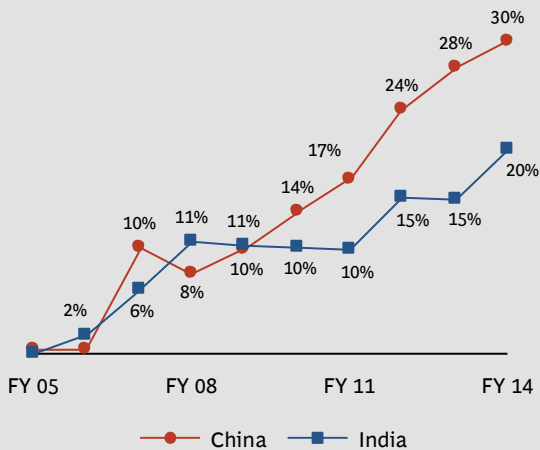
**EWS allows sharp and early identification of risks**

<sup>1</sup>JES: Judgment Enabled System. A scientifically developed questionnaire with well designed questions. Used for eliminating subjectivity in qualitative data collection.

**Exhibit 5.11 | India Needs to Accelerate Coverage of Information Bureau to Achieve Goals of Financial Inclusion**

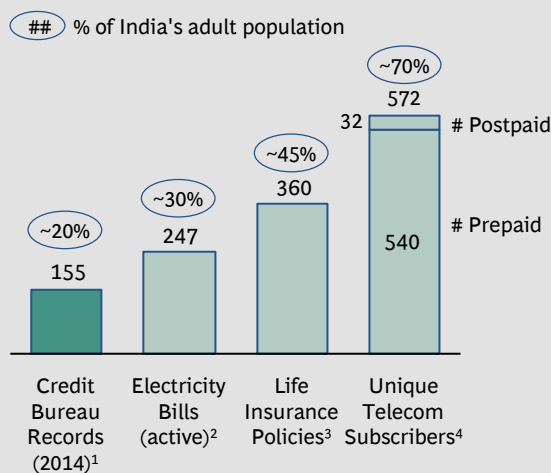
**Coverage of adult individuals by private or public credit bureaus<sup>1</sup>**

% of adults covered by public or private credit bureaus



**Credit bureau coverage compared to other available payment records (FY 14)**

Unique individual records (Millions)



**Introduction of utility bill payment records in information bureaus can create step jump in credit history & reach of credit in India**

<sup>1</sup>Source: World Bank Doing Business Report, Total adults covered by credit bureau.  
<sup>2</sup>Source: Ministry of Power, number of active bills generated.  
<sup>3</sup>Source: iBEF Insurance report, unique life insurance policies.  
<sup>4</sup>Source: TRAI March 2014 report, active unique telecom subscribers.

skilled staff, digital enablement is essential to curb the rising NPAs.

Banks and regulators can do a lot by leveraging digital technologies for NPA management. Firstly, digital technology allows complex analytics to create Early Warning Systems (EWS) which combine the analytics driven quantitative models with experiential learnings of credit experts. Exhibit 5.10 shows a comprehensive EWS with digitization coupled with experience based judgment system.

Secondly, a strong information bureau has played a significant role in reducing credit risk in the retail segment. Currently, organized credit information bureaus cover about 20 percent of the adult individuals in India as shown in Exhibit 5.11. In China, Credit Reference Centre of People's Bank of China covers around 30 percent of the adult individuals and this coverage is growing much faster than that of India.

Introduction of utility bill payment records can create a step jump in credit history and reach of credit. Coverage of organized credit information bureaus can be enhanced manifolds by adding additional data sources like telecom bills, electricity bills and insurance to increase the coverage from the current 20 percent to almost 70 percent as shown in Exhibit 5.11. Regulatory and legal changes are required to allow for additional data sources such as telecom subscribers to be included.

# MAKING IT HAPPEN— WHAT WILL IT TAKE?

*“Any sufficiently advanced technology is  
indistinguishable from magic”*

— Arthur C Clarke

**R**EALISING THE POTENTIAL OF digital is easier said than done—especially with legacy challenges. Firstly, incumbency and conventional mental models make it very difficult to re-imagine banking completely afresh with a digital lens. Secondly, it is complex to digitise existing technology and operating platforms. Last but not the least, it is exceptionally difficult for banks to undertake a digitization journey which fundamentally challenges all their existing models—this requires the ability for creative (self) destruction which is rare. Still, digitization is imperative and can be successfully done. Banks around the globe have employed a strategic and disciplined approach to execute such a system and have reaped rewards as well.

## Is the Technology Agile? Is the Channel Design Human Centred?

Indian banks continue to actively invest in building IT capabilities as shown in Exhibit 6.1. Large PSU banks have increased their technology spend as a proportion of revenues by over 30 percent. The new private banks continue to be the highest spenders as a proportion of their revenues on IT—albeit some consolidation is seen in their technology spend.

Specifically there is a significant push towards self-service enablement as shown in Exhibit 6.2. The large PSU banks have not only increased their technology spend over the last year at the fastest rate—almost 50 percent year-on-year, but also allocated a large proportion (45 percent) of their technology spend on self service. While the new private banks have consolidat-

ed their absolute IT spend, self-service accounted for over more than the fair share (54 percent) of this spend.

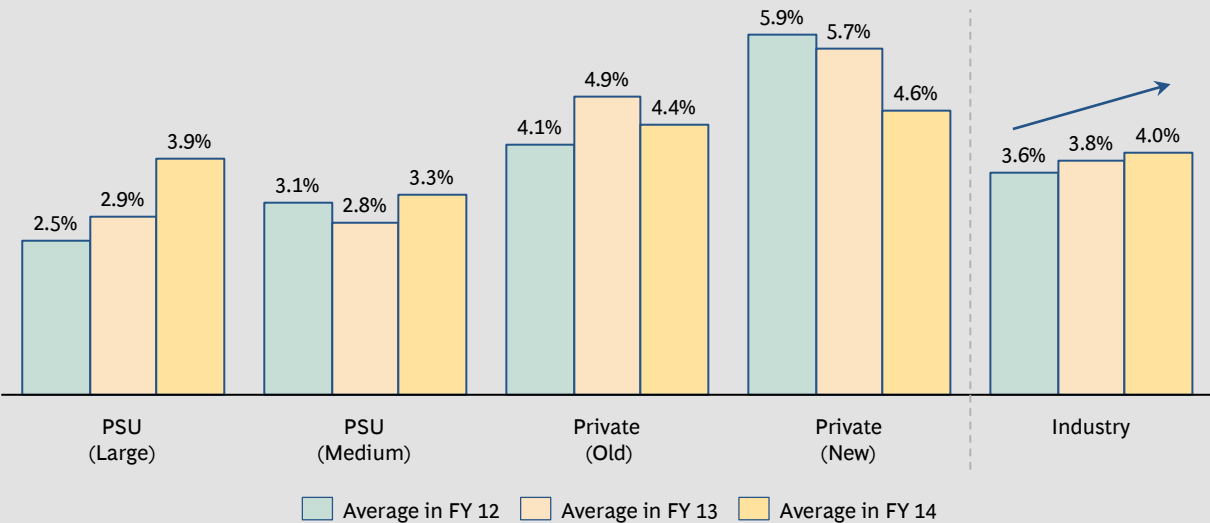
In order to capture the digital future, it is critical for the IT architecture to be agile. Technology agility involves eleven characteristics across customer experience, operations, sales and organization as depicted in Exhibit 6.3. Banks can assess themselves against this eleven point checklist to ascertain how agile their IT architecture really is.

Several Indian banks are burdened with a complex “hair-ball” IT architecture which has evolved in an unstructured manner over the years and is not digital ready. There are three key reasons for this. Firstly, existing systems evolve over a period of time through the ‘need-based’ development of features and functionalities. This creates a complex mesh of linkages between core banking applications and front end channels. Secondly, changing a legacy system is often so complex that IT teams find it simpler and cheaper to create duplicate functionalities or data bases from scratch. As a result the IT architecture ends up becoming more complex with the same data residing in different places with almost no systematic way to reconcile. Furthermore, and perhaps most importantly, the interaction model between businesses and IT departments in most banks is not set-up to be collaborative and structured in terms of managing complex change. As a result, business cases are poorly articulated, there is limited focus on smart prioritization, which ultimately results in a confused and compromised IT architecture.



Exhibit 6.1 | Large Public Sector Banks Investing Aggressively in Technology; Private Sector is Consolidating

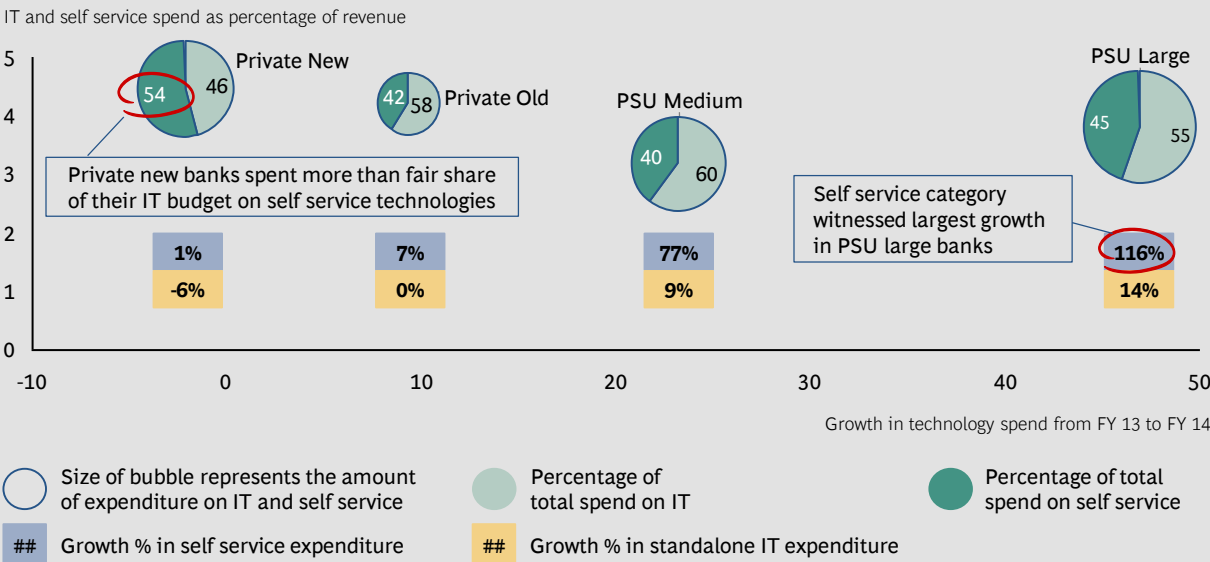
Spend on technology<sup>1</sup> as % total revenue (FY 11 to FY 14)



Sources: FIBAC Productivity Survey 2014, FIBAC Productivity Survey 2013, FIBAC Productivity Survey 2011; BCG analysis.  
<sup>1</sup>Expense on technology includes investment in hardware and software related to IT / technology, ATMs, operating expense but excludes depreciation.

Exhibit 6.2 | Massive Push by Public Sector Towards Self Service Machine

IT and self service / revenue to growth in expenditure on IT and self service



Sources: FIBAC Productivity Survey 2014, FIBAC Productivity Survey 2013; BCG analysis.  
Note: Total amount of expenditure extrapolated on the basis of ratio of IT and SS capex and opex expenditure to revenue (Calculated for banks whose data was available).

## Exhibit 6.3 | Does Your IT Architecture Pass Muster for a Digital Future? — 11 Point Checklist for Indian Banks

BCG experience

| Categories          | What a digital IT architecture should be able to provide?                                |                                     |
|---------------------|------------------------------------------------------------------------------------------|-------------------------------------|
| Customer experience | 1. Do your customers get seamless multi channel experience?                              | <input checked="" type="checkbox"/> |
|                     | 2. Do you have a real-time 360° view of each customer's relationship with the bank?      | <input checked="" type="checkbox"/> |
| Operations          | 3. Can you open your customers' accounts instantly?                                      | <input checked="" type="checkbox"/> |
|                     | 4. Can you process transactions and service requests in real-time?                       | <input checked="" type="checkbox"/> |
|                     | 5. Are your processes end-to-end paperless?                                              | <input checked="" type="checkbox"/> |
| Sales               | 6. Is leads generation and management automated?                                         | <input checked="" type="checkbox"/> |
|                     | 7. Can new products be developed rapidly through "tick-and-flick" based product engines? | <input checked="" type="checkbox"/> |
|                     | 8. Can credit decisions be taken real-time?                                              | <input checked="" type="checkbox"/> |
| Organization        | 9. Do your employees have single interface across front, middle and central offices?     | <input checked="" type="checkbox"/> |
|                     | 10. Can employees see their and their team's performance KPIs in real-time?              | <input checked="" type="checkbox"/> |
|                     | 11. Is the work-flow and task allocation automated?                                      | <input checked="" type="checkbox"/> |

Source: BCG analysis.

As shown in Exhibit 6.4 transforming such hairball architecture into an agile architecture requires banks to undertake a rigorous journey which ultimately results in creation of a services layer that sits between core banking applications and front end consumers of the services. A key step is to institute a robust change management governance model that ensures a collaborative approach between business and IT to prioritise the right changes and implement them in an agile manner. BCG experience has shown significant benefits of creating an agile IT architecture with almost an 80 percent reduction in IT development times and significant simplification of the architecture itself.

When implemented well, self-service features create immense value for the bank as well as the customer. For the customer, they make 'everyday banking' easy. For example, self-service enables anytime opening of Fixed Deposit (FD), online updating of personal information etc. For the bank, self-service enablement unlocks precious manpower from rudimentary activities that can be deployed towards more value added uses.

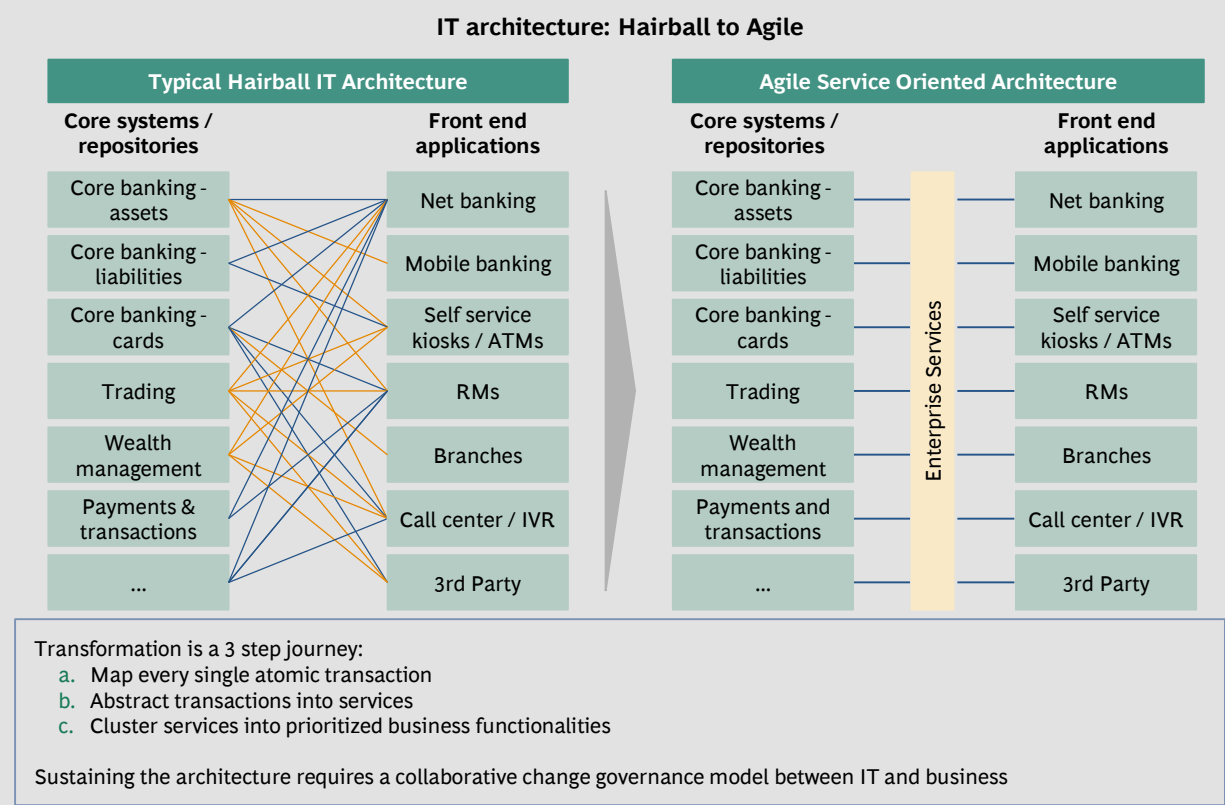
In BCG experience, simply deploying more machines and online features is insufficient to truly enable self-service. Adoption of self-service requires banks to follow a Human Centered Design approach with agile

sprints for developing necessary features. As shown in Exhibit 6.5, human centered design requires answering three questions pertaining to the real consumer need, technological feasibility and economic viability of the solution. These solutions should be implemented in 'agile sprint' formats which is an iterative approach towards developing the end solution. In the agile sprint approach, a minimum commercially viable product with key functionalities is designed, developed and piloted in a series of two to three quick cycles which are executed over weeks instead of months. As a result, there is live feedback from the end-users which gets incorporated quickly into the product, thus creating genuine human centred solutions.

### Change Management Challenge: Seven Hurdles Thrown by Legacy Systems and Mindset

Exhibit 6.6 shows the seven critical hurdles that banks need to overcome to change their legacy systems towards the new digital future. First, the solution needs to be designed in a way that makes its adoption easy—almost natural. This requires ensuring that the solution is simple to adopt for the customers as well as the employees. Second, it is crucial to break the legacy mindset. Any radically re-imagined solution flies in the

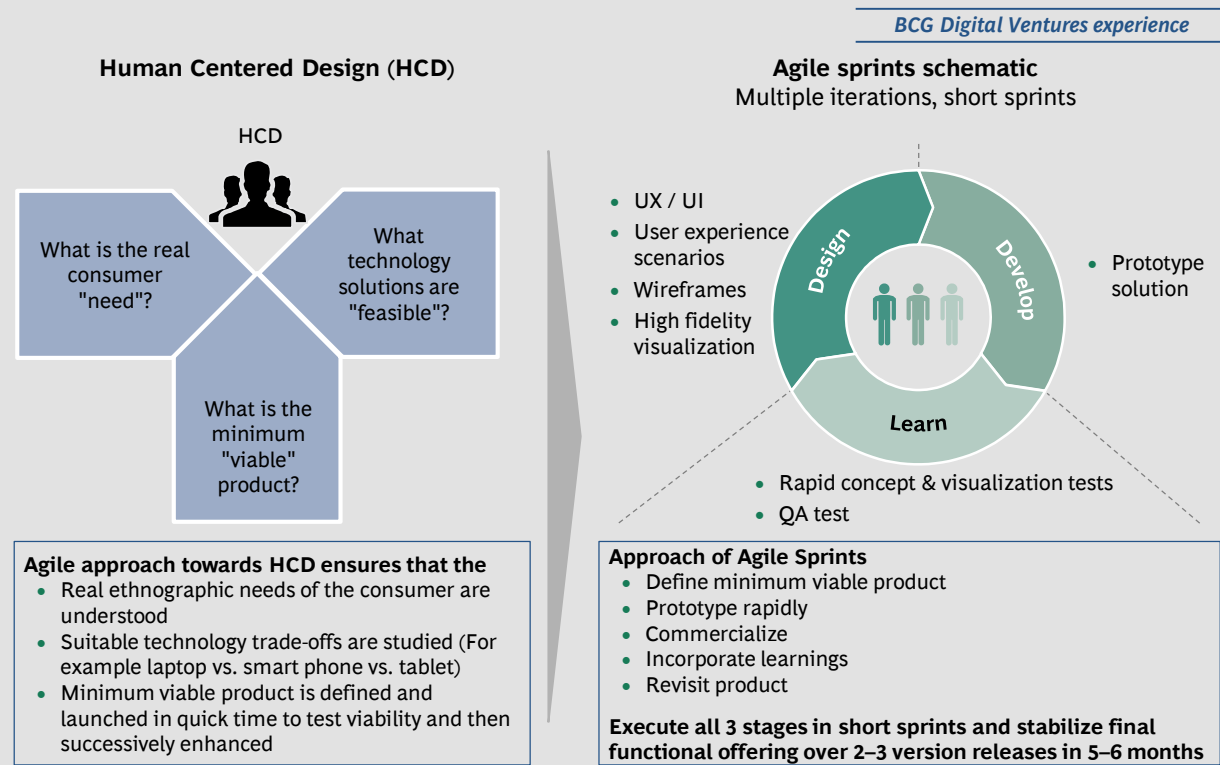
Exhibit 6.4 | Making Legacy IT Architecture Agile is Highly Complex but the Benefits are Worth the Pain



| Dramatic benefits of agile IT                |                                                                                                                       |                     |                                                                                       |                                   |
|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|---------------------|---------------------------------------------------------------------------------------|-----------------------------------|
| Key impact of Lean and Agile IT Architecture |                                                                                                                       |                     |                                                                                       |                                   |
| Impact                                       |                                                                                                                       | From                |                                                                                       | To                                |
| 1                                            |  Number of interfaces              | $M \times N$<br>$X$ |  | $M + N$<br>$X / 8$                |
| 2                                            |  Number of duplicate systems       | Multiple systems    |  | None                              |
| 3                                            |  New development effort            | $X$ project teams   |  | $X / 3$<br>lean integration teams |
| 4                                            |  Time for development              | $X$ months          |  | $X / 4$ months                    |
| 5                                            |  Data, document management systems | $X$ systems         |  | $X / 5$ systems                   |

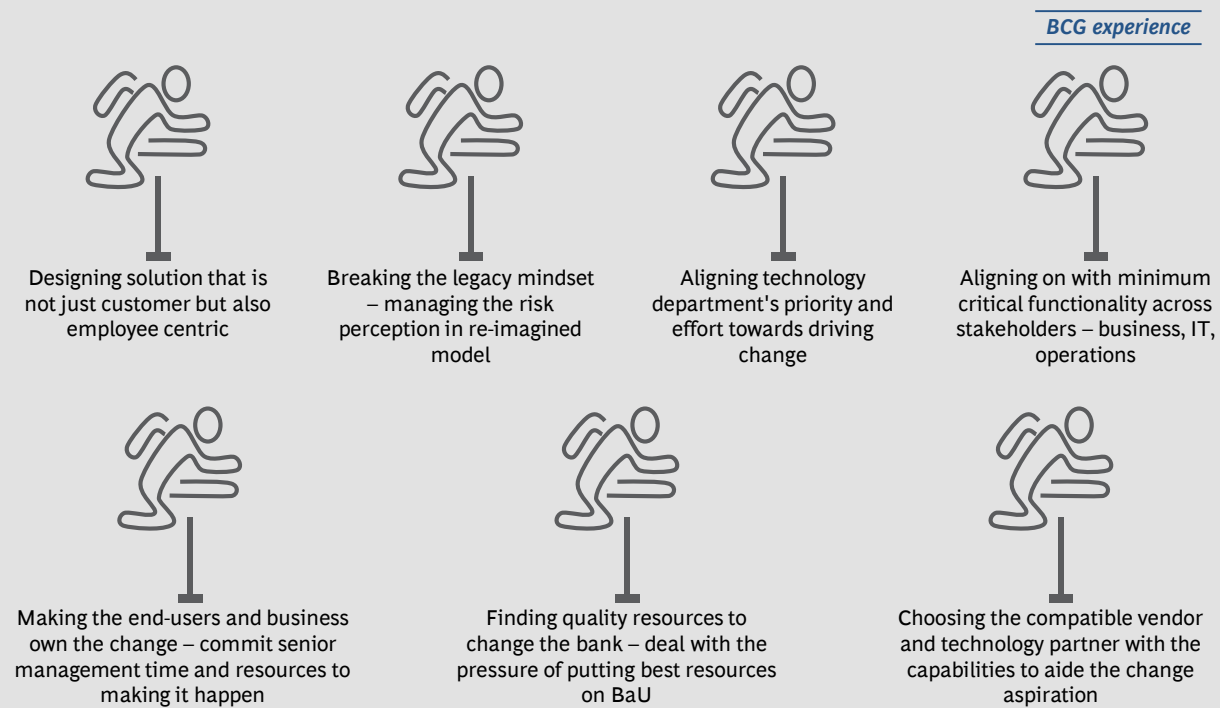
Source: Sanitised BCG experience.

Exhibit 6.5 | Banks Need to Adopt Human Centered Design Enabled by Agile Execution Methodology — Learnings from BCG Experience



Sources: IDEO; Press search; BCG digital ventures; BCG analysis.

Exhibit 6.6 | Seven Hurdles to Overcome for Changing the Legacy Systems and Mindset



Source: BCG analysis.

face of tradition. Conventional risk perception and management models need to be altered for innovation to flourish. Third, for digital changes to be realized the IT department needs to adopt and support the transformation wholeheartedly. This means, the technology department’s priorities and resources need to be aligned with the transformation vision. Four, often business users seek the final “gold plated” outcome before committing to adopting the changed model. It is important that there is buy-in from the business users towards the minimum functionality that is critical for generating the highest impact. This ensures implementation is rapid and the benefits of the transformation become visible earlier. Also, this is the best way to incorporate learnings from customer feedback in subsequent roll-outs. Five, it is important for the senior business leaders to commit themselves to the change cause wholeheartedly and visibly with their resources and time. Six, striking the right balance in terms of deploying the best organizational resources towards Business-as-Usual (BaU) activities versus change initiative. Seven, getting the vendors and technology partners is crucial to successfully implementing the change. Their ability to change along with the banks’ aspiration and in fact augment the skills by bringing new capabilities to bear is vital. All too often, a vision is not fully realized because the vendor or technology partner is unable to support the transformation and it is too costly to in-source.

## Bank-in-a-Bank Model: An Approach to Accelerate Change

As explained earlier, re-imagining and implementing a digitally advanced model requires a completely different approach as shown in Exhibit 6.7. Implementing such a radically re-imagined bank within the parent bank is tantamount to a tug-of-war: between strengthening existing assets like traditional branch sales channels, existing net banking solution etc. versus building a completely digitally re-imagined business model. BCG experience suggests that structural and mindset legacy challenges are all too often very difficult to overcome. Banks need to undergo a creative destruction process where they create an in-house attacker model that is allowed to cannibalize existing business as long as the net value created is higher than the value cannibalized.

Banks that have traversed the digital re-imagination journey in the most rapid and successful manner have often resorted to creating a bank-in-a-bank which ring fences the model and allows it to bloom. Given the complexity of the creative destruction process, such an initiative must have the sponsorship of the highest levels in the bank to succeed. In BCG experience, the rewards are enormous—double the relative market share of the target segment, half the operating cost (driven by heavy technology enablement) and almost twice the sales productivity—and significant gain in shareholder value.

| Exhibit 6.7   Creative Destruction Difficult to Carry Out in Business as Usual — Some Banks Use the ‘Bank-in-a-Bank’ Route |                                  |                                                                             | BCG experience                                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------|----------------------------------|-----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                            | Traditional bank mindset         | Attacker digital bank mindset                                               |                                                                                                                        |
| 1                                                                                                                          | Segments & value proposition     | Universal banking, targeting all segments                                   | Target specific segments (For example, digital savvy, young professionals, etc.)                                       |
| 2                                                                                                                          | Front office                     | Multichannel mix between branch and non-branch                              | Either digital only or digital at the core (with re-imagined physical presence)                                        |
| 3                                                                                                                          | Intelligent middle office        | Mix of CRM and traditional salesforce management                            | Algorithmic leads generation, virtual assistance, and centrally programmed activity management for human interventions |
| 4                                                                                                                          | Configurable product factory     | From traditional financial services manufacturers (For example, funds, Ins) | Vertical integration with players across an ecosystem of products, services, and HW                                    |
| 5                                                                                                                          | Excellent support functions      | Procedure and process based risk / compliance                               | Technology-enabled risk / compliance<br>Unique employer brand (For example, Google)                                    |
| 6                                                                                                                          | IT and Ops                       | Enabling front office and optimized for cost efficiency                     | Strong focus on FO / MO technologies<br>No back-office                                                                 |
| 7                                                                                                                          | People, organization and culture | Traditional, conservative, linear, silos                                    | Young, entrepreneurial, flat, agile, multi-disciplinary                                                                |
| Creating an internal attacker ‘bank-in-bank’ can help turbo charge the process of creating digital capabilities            |                                  |                                                                             |                                                                                                                        |
| Source: BCG analysis.                                                                                                      |                                  |                                                                             |                                                                                                                        |

# APPENDIX

## Introduction to Banking Research

Research was conducted across five key areas of productivity—NPA management, Front-office model, Adoption of new channels, Organization design and Back-office model. Information was captured through eleven forms, which were filled up by each of the participating banks:

- *Form 01:* Head Office and Regional Office / Zonal Office / Divisional office Man–Power Calculations.
- *Form 02:* Processing–Centre Man–Power Capacity and Throughput Calculations.
- *Form 03:* Branch and Sales Man–Power Calculations.
- *Form 04:* Overall Bank Business.
- *Form 05:* Fee Income.
- *Form 06:* Cost Efficiency.
- *Form 07:* Branch and Self Service Channel Information.
- *Form 08:* Channel Usage and Transaction Profile.
- *Form 09:* NPA Management.
- *Form 10:* Financial Inclusion Related.
- *Form 11:* Digital Marketing Related.

## Methodology of Research

The survey was filled by 36 banks (12 Private Sector banks and 24 Public Sector banks). Responses from these surveys were analyzed collectively to understand the performance of these banks on various productivity metrics.

In order to maintain confidentiality, results and analysis of the survey are presented bank category wise throughout the report. Banks have been divided into four categories—Private New, Private Old, PSU Large, PSU Medium. Bank category averages along with high, median and low values are presented to show variance amongst peers.

A similar survey was administered in FIBAC 2013 and in FIBAC 2011. Wherever possible, a comparison between the values in 2011 and in 2013 has been shown to give the readers an idea of the movement in the productivity metrics across bank categories in the last two years.

## Participating Banks (as shown in Table 1)

36 banks customers participated in the survey:

- 5 Private New banks.
- 7 Private Old banks.
- 6 PSU Large banks.
- 18 PSU Medium banks.

| TABLE 1: PARTICIPATING BANKS BY CATEGORY |                                  |             |
|------------------------------------------|----------------------------------|-------------|
| Sr. No.                                  | Bank                             | Category    |
| 1                                        | Axis Bank                        | Private New |
| 2                                        | HDFC Bank                        |             |
| 3                                        | ICICI Bank                       |             |
| 4                                        | Kotak Mahindra Bank              |             |
| 5                                        | Yes Bank                         |             |
| 6                                        | Catholic Syrian Bank             | Private Old |
| 7                                        | Federal Bank                     |             |
| 8                                        | ING Vysya Bank                   |             |
| 9                                        | Jammu and Kashmir Bank           |             |
| 10                                       | Karnataka Bank                   |             |
| 11                                       | Karur Vysya Bank                 |             |
| 12                                       | South Indian Bank                |             |
| 13                                       | Bank of Baroda                   | PSU Large   |
| 14                                       | Bank of India                    |             |
| 15                                       | Canara Bank                      |             |
| 16                                       | Punjab National Bank             |             |
| 17                                       | State Bank of India              |             |
| 18                                       | Union Bank of India              |             |
| 19                                       | Allahabad Bank                   | PSU Medium  |
| 20                                       | Andhra Bank                      |             |
| 21                                       | Bank of Maharashtra              |             |
| 22                                       | Central Bank of India            |             |
| 23                                       | Corporation Bank                 |             |
| 24                                       | Dena Bank                        |             |
| 25                                       | IDBI Bank                        |             |
| 26                                       | Indian Bank                      |             |
| 27                                       | Indian Overseas Bank             |             |
| 28                                       | Oriental Bank of Commerce        |             |
| 29                                       | State Bank of Bikaner and Jaipur |             |
| 30                                       | State Bank of Hyderabad          |             |
| 31                                       | State Bank of Mysore             |             |
| 32                                       | State Bank of Patiala            |             |
| 33                                       | State Bank of Travancore         |             |
| 34                                       | Syndicate Bank                   |             |
| 35                                       | UCO Bank                         |             |
| 36                                       | Vijaya Bank                      |             |



## Introduction to MSME / Shopkeeper Research

Research was conducted across four areas—Ability of small business customers to adopt digital, banking channel usage pattern, current satisfaction with banks’ digital offerings and willingness to adopt customized digital banking solutions if offered. Survey was filled by 500 small shopkeepers and 500 MSMEs representing all major sectors in the economy.

The survey included topics covering business profile of corporates, their current banking relationships, reasons for selection of primary bank, ability and willingness of customers to adopt digital channels, channel usage pattern for various banking transactions, reasons for high usage of cash and

cheque, importance of various attributes of digital banking channels, current satisfaction with digital banking channels, reasons for dissatisfaction and advocacy of primary bank’s digital solutions. Responses from this survey were analyzed collectively to understand the dynamics of the digital banking adoption by small business customers in India.

Respondents have been divided into two categories:

- *Shopkeepers*: Revenue upto Rs. 3 crore.
- *MSME*: Revenue upto Rs. 50 crore.

A brief snapshot of the participating respondents can be seen in Table 2.

| TABLE 2: PARTICIPATING CORPORATES BY CATEGORY |       |                                                                              |       |
|-----------------------------------------------|-------|------------------------------------------------------------------------------|-------|
| By size                                       |       | By sector (cont'd)                                                           |       |
| Less than Rs. 25 lakh                         | 256   | Travel, tourism and leisure (Hotels, Cafe's, Tour operators)                 | 49    |
| Rs. 25 lakh to Rs. 50 lakh                    | 154   | Individual professionals (Doctors / CAs / Lawyers, Architects etc.)          | 46    |
| Rs. 50 lakh to Rs. 1 crore                    | 52    | Individual travel agents                                                     | 53    |
| Rs. 1 crore to Rs. 10 crore                   | 359   | Real estate agents / brokers / financial advisors                            | 46    |
| More than Rs. 10 crore                        | 179   | Repair services (Car workshops, Electricians, Hardware shops, etc.)          | 62    |
| N                                             | 1,000 | Restaurants, bakeries, and coffee shops                                      | 51    |
|                                               |       | Shopkeepers (Grocery shops, Jewellers, Furniture shops, Medical stores etc.) | 83    |
|                                               |       | Showrooms (white goods, apparels etc)                                        | 41    |
|                                               |       | Small service providers (Salons, boutiques, tailors etc)                     | 60    |
|                                               |       | Traders (Wholesaler, Distributors)                                           | 58    |
|                                               |       | Civil Aviation and Aerospace                                                 | 1     |
|                                               |       | N                                                                            | 1,000 |

| By sector                                                                          |    |
|------------------------------------------------------------------------------------|----|
| Advisory and consulting (Legal, professional services, small IT shops, etc.)       | 42 |
| Exporter / Importer                                                                | 48 |
| Financial sector advisors (Brokerages, financial consultants, tax advisory, etc.)  | 53 |
| Food Commodity traders and wholesalers                                             | 44 |
| Knowledge sector (BPO/KPO/call centers)                                            | 40 |
| Logistics (Fleet operators)                                                        | 40 |
| Other goods traders, distributors and wholesalers (Steel/cement distributor, etc.) | 55 |
| Small sized manufacturing Type I-Auto components, metal works, etc.                | 40 |
| Small sized manufacturing Type II-Textile manufacturing, Apparel producers         | 43 |
| Small sized manufacturing Type III-Chemicals, Lubricants, Fertilizers, etc.        | 46 |

| By industry   |       |
|---------------|-------|
| Manufacturing | 129   |
| Services      | 539   |
| Traders       | 332   |
| N             | 1,000 |

# GLOSSARY

| ABBREVIATIONS |                                                                            |
|---------------|----------------------------------------------------------------------------|
| Agri.         | Agricultural                                                               |
| ATM           | Automated teller machine                                                   |
| BC            | Business correspondent                                                     |
| bps           | Basis points                                                               |
| CA            | Current account                                                            |
| CASA          | Current account and savings bank account                                   |
| CDM           | Cash Deposit Machine                                                       |
| CDR           | Corporate debt restructuring                                               |
| CIR           | Cost-income ratio                                                          |
| ECS           | Electronic clearing system                                                 |
| FX products   | Foreign exchange spot, derivatives, and financial risk management products |
| FTE           | Full time employee / equivalent                                            |
| FX            | Foreign exchange                                                           |
| FY            | Fiscal year                                                                |
| GNPA          | Gross non-performing assets (as per RBI definition)                        |
| HO            | Head office or corporate center of the bank                                |
| HR            | Human resources                                                            |
| IBA           | Indian Banks' Association                                                  |
| IT            | Information technology                                                     |
| LADS          | Loan against deposits and shares                                           |
| MIS           | Management information system                                              |
| MSME          | Micro, small and medium enterprises (as per RBI definition)                |
| NEFT          | National electronic fund transfer                                          |
| No.           | Number                                                                     |
| NPA           | Non-performing assets (as per RBI definition)                              |
| p.a.          | Per annum                                                                  |
| PB            | Primary bank                                                               |
| p.m.          | Per month                                                                  |
| POS           | Point of sale                                                              |
| PPI           | Pre Paid Instruments                                                       |
| RBI           | Reserve Bank of India                                                      |
| RO            | Regional offices / zonal offices / divisional offices of the bank          |

| ABBREVIATIONS |                            |
|---------------|----------------------------|
| ROA           | Return on assets           |
| ROI           | Return on investment       |
| Rs.           | Indian National Rupee      |
| Rs. cr.       | Rupees crore               |
| RTGS          | Real time gross settlement |
| SB            | Savings bank               |
| SBI           | State Bank of India        |
| Telcos        | Telecom companies          |
| Tx / Txs      | Transaction(s)             |
| vs.           | Versus                     |
| y-o-y         | Year on year               |

| TERMS                                             | DEFINITIONS                                                                                                                                                                                                                                                                                                                         |
|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Active accounts                                   | Accounts with at least one customer initiated transaction over the past six months                                                                                                                                                                                                                                                  |
| Back-office                                       | Activities like data-entry, filing, daily closing, concurrent checking / audit                                                                                                                                                                                                                                                      |
| Captive subsidiary                                | Wholly owned subsidiary of the company or of the group of companies                                                                                                                                                                                                                                                                 |
| FTE                                               | A full time employee is one who works on an activity full time. For employees with several roles, time spent is split across activities—for example, if a staff spends 1/4th of his time on an activity, 0.25 FTE is attributed to that activity. Probationary officers are considered, but trainees and interns are not considered |
| FTE from captive subsidiary                       | Headcount of employees, engaged in activities of the bank, employed by captive subsidiary of the bank / group                                                                                                                                                                                                                       |
| GNPA                                              | Gross non-performing assets as a percentage of gross advances outstanding for the corresponding fiscal year                                                                                                                                                                                                                         |
| In-house FTE                                      | Employees of the bank who are on the payroll of the bank                                                                                                                                                                                                                                                                            |
| Large companies                                   | Companies with revenue more than Rs. 1,000 crore per annum                                                                                                                                                                                                                                                                          |
| Mid companies                                     | Companies with revenue between Rs. 250-1,000 crore per annum                                                                                                                                                                                                                                                                        |
| Non-branch based outbound sales / marketing force | Employees engaged in sales / marketing and can be present in RO / ZO / HO but not in the branches                                                                                                                                                                                                                                   |
| Non-metro branch                                  | Includes branches in urban, semi-urban and rural areas                                                                                                                                                                                                                                                                              |
| Retail advances                                   | Includes home loan, private car loan, personal / clean / unsecured loan, student / education loan, gold loan, credit card and loan against deposits and shares, unless specified otherwise                                                                                                                                          |
| Sales                                             | Act of acquiring new customers for any product / service or cross selling / up-selling of new products to an existing customer. This also includes sales pitches and credit origination                                                                                                                                             |
| Service                                           | Act of resolving queries, grievances of existing customers. This also includes retention related activities                                                                                                                                                                                                                         |
| Single window                                     | The system facilitates delivery of all banking services at a single counter, that is, all customer needs are attended to at a single point of delivery                                                                                                                                                                              |
| Small companies                                   | Companies with revenue between Rs. 50-250 crore per annum                                                                                                                                                                                                                                                                           |
| Financial transactions                            | Only transactions that include a debit or a credit to a customer account                                                                                                                                                                                                                                                            |
| Very small companies                              | Companies with revenue less than Rs. 50 crore per annum                                                                                                                                                                                                                                                                             |

# FOR FURTHER READING

The Boston Consulting Group publishes other reports and articles on related topics that may be of interest to senior executives. Recent examples include:

**Global Asset Management 2014: Steering the Course to Growth**

A report by the Boston Consulting Group, July 2014

**Global Wealth 2014: Riding a Wave of Growth**

An article written by the partners of The Boston Consulting Group, June 2014

**Global Capital Markets 2014: The Quest for Revenue Growth**

A report by the Boston Consulting Group, May 2014

**Operational Excellence in Retail Banking 2014: No Compromise: Advocating for Customers, Insisting on Efficiency**

A focus publication by The Boston Consulting Group, May 2014

**How to Boost Bank Branches in a Multichannel World**

A focus publication by The Boston Consulting Group, March 2014

**Optimizing Operating Models in Wealth Management**

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