The Boston Consulting Group

FICCI

Indian Banks' Association

Productivity in Indian Banking: 2015

Inclusive Growth with Disruptive Innovations

Gearing up for Digital Disruption

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Saurabh Tripathi

Bharat Poddar

Yashraj Erande

Sreyssha George

Abhinav Bansal

August 2015

bcg.com

"By seizing the opportunities that disruption presents and leveraging hard times into greater success, through outworking / out innovating / outthinking everyone around you, this might just be the richest time of your life so far."

— Robin Sharma

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PREFACE

THIS REPORT IS THE fifth 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”, in 2013, a report titled “Consistency, Quality and Resilience: The Next Frontier for Productivity Excellence” and in 2014, a report titled “Digital Banking: Opportunity for Extraordinary Gains in Reach, Service, and Productivity in the Next 5 Years” 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 (34 banks in 2015), complemented with primary surveys on customers (over 3,600 customers surveyed in 2015). 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 report “Inclusive Growth with Disruptive Innovations: Gearing Up for Digital Disruption” is being published at a time when digital technology and its potential to transform banking is already well established in the minds of banking leaders across the world. The speed of digital adoption is being accentuated with the phenomenal growth of FinTech companies both in India and overseas. Progressive regulatory moves and innovations in infrastructure by NPCI have ideally positioned Indian banking for digital transformation. The year has also seen a significant boost to financial inclusion through the Jan Dhan Scheme. With the rapid growth in smart phones and internet, we expect around 33 percent of the internet users to be active digital bankers by 2020.

Today, banks need to learn to increase online banking from the experience of online shopping as well as engage with start ups that are developing innovative banking applications. HR practices also need to undergo a transformation to create an organization that is suitable for rapid innovation and prototyping of product and services. A recent study highlights that corporate customers will switch and even pay a premium to switch to banking partner capable of offering higher value, digitally-enabled services. The report also highlights the global best practices to provide guardrails for the journey in a rapidly evolving landscape.

EXECUTIVE SUMMARY

The Indian banking industry has witnessed many disruptive developments in the past one year and is braced to witness more in the coming months. The Prime Minister's Jan Dhan Scheme has led to a 27 percent increase in accounts in a single year. Internet access is growing at 34 percent per annum and has covered 20 percent of the population. Twenty three percent of the people with Internet access do digital banking. The number of people doing digital banking is now 13 percent of the total banked population; this number is growing at 20-25 percent per annum. Jan Dhan customers, however, did not have satisfactory activation of their debit cards. The FinTech industry in India, like the rest of the world, is attracting a lot of interest. Many non-banks have had significant success in penetrating banking customers for payment services. As many as 35 percent of digital banking customers also use mobile wallets from non-banks. Fifty percent of digital banking customers are keen to try out new payment banks when they are launched later this year. Amidst all this, bad debts have been a stubborn problem; after many years of decline, NPAs have shown an alarming uptick in retail lending.

Overall, these are exciting times. Disruptions such as these spur innovation. The report exhorts banks to be proactive and take advantage of disruption rather than deal with it reactively.

- Learn to increase online banking from the experience of online shopping. Online banking is two years behind online shopping. Banks should invest boldly to create first time trials and train their sales forces accordingly.

- Banks have a lot of data on their customers, and digital technology is quite agile. They need to leverage these to create offerings like 'people like you', personalized conservative wealth advice, and convenient and cool payment features that customers have come to expect as basic.

- Banks can leverage their vast ATM networks to encourage digital banking rather than predominantly cash withdrawals.

- Banks need to evaluate their own broader participation in markets and ecosystems that are natural extensions of their role of intermediation. They should consider markets like education, health care, housing, B2B etc., that have become quite sizeable. Such markets can provide the banks with data to offer credit to their customers.

- Together with NPCI, banks should further enhance the interbank payment system such that payments are not addressable only with a phone number or email id. The system should be able to send information along with the payment. Australia's New Payments Platform (NPP) is an advanced example to emulate. This will permit the banks to offer value added services to engage customers further.

- Banks need to engage with start ups that are developing innovative banking applications. This engagement could be in the form of early stage investments, an incubation facility on their premises, or a partnership.

- Banks could consider carving out a separate team within the bank to act and behave like a start up in order to create innovative products and services without any legacy burden. Such teams could be kept at arms length organizationally, to enable a free and fresh working environment.

- Corporate banking, which has so far been left out of the digital disruption phenomenon, is now poised for rapid innovation in product offerings for commercial clients, digital enablement of the sales force, use of analytics to advise corporate clients, and industry specific value chain solutions. Indian banks can be world leaders in this space.

- HR practices in banks need to undergo a transformation to create an organization and culture that is suitable for rapid innovation and prototyping of product and services. Technological knowhow has to permeate the organization; technology can no longer be the black box that it used to be.

The Reserve Bank of India has had a very supportive stance to spur this innovation in Indian banking. It needs to review which regulatory paradigm is most suitable for the digital context and promote innovations as above.

DISRUPTIVE DEVELOPMENTS IN INDIAN INDUSTRY

"The key is to embrace disruption and change early. Don't react to it decades later. You can't fight innovation."

— Ryan Kavanaugh

THESE ARE EXCITING TIMES for banks. The powerful forces of technology are disrupting them and, at the same time, giving them an opportunity to recreate themselves fundamentally. Because banking is a regulated industry, banks get a real window of opportunity to transform themselves.

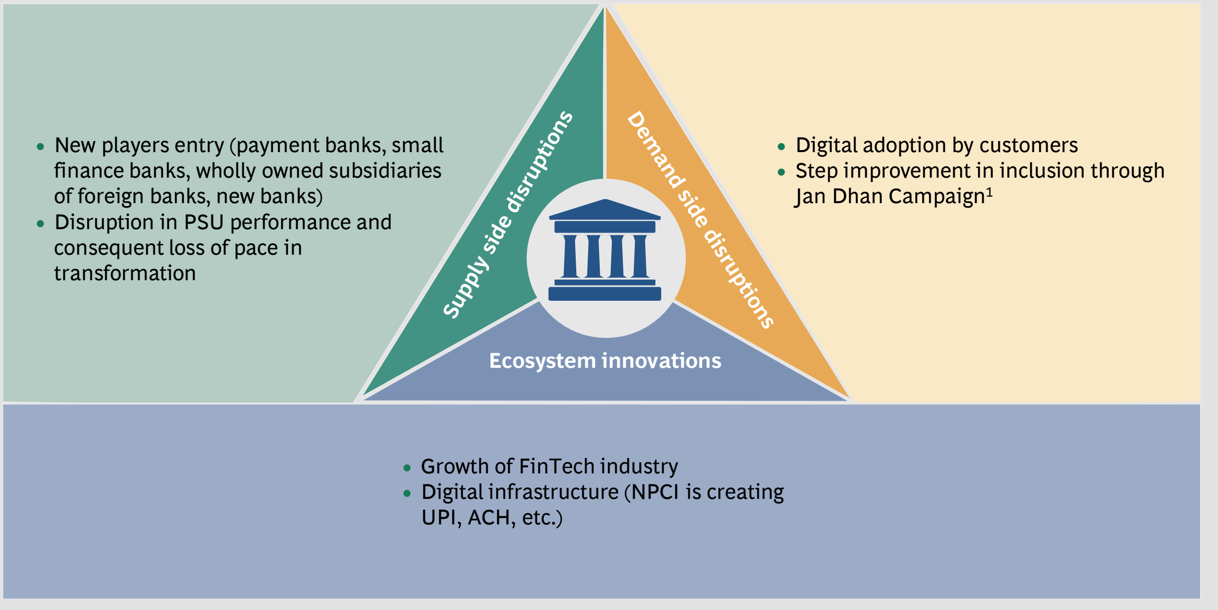
In India, as depicted in Exhibit 1.1, there are developments in the supply side, demand side and also in the supporting ecosystem. All this will have significant impact on Indian banking in the next few years. On the demand side, we see rapid adoption of the internet by customers, leading to interesting possibilities in digital banking. Simultaneously we are seeing a step change in new banking customers, driven by the Jan Dhan Scheme. On the supply side, we expect a significant number of new players to join the banking domain in the next few months. This will be quite unprecedented. At the same time, we are seeing considerable decline in public sector performance, driven by the massive build up of bad debt which has distracted banks away from their transformation process. All this is happening along with changes in the ecosystem. The global FinTech industry is attracting a lot of talent and is expected to be a powerful force for transformation as a competitor as well as collaborator. The payment infrastructure in the country is continuously evolving and proposed developments like the Unified Payments Interface (UPI) can dramatically change the payment experience of Indian banking customers.

Unprecedented New Account Opening Sans Digital Activation

As depicted in Exhibit 1.2, the number of accounts in the Indian banking industry grew by a whopping 27 percent in 2014-15. Sixteen percent of this growth came from the addition of new Basic Savings Bank Deposit (BSBD) accounts under the Jan Dhan Scheme. As a result, the percentage of BSBD accounts in the Indian banking industry went up from 22 to 30 percent within a year. This unprecedented and extraordinary development comes as a giant leap for banking in the country. Activation of these new accounts on debit cards is a powerful indicator of their viability. Customers with active debit cards will go to an ATM to withdraw cash rather than visit the branch. At some point in the near future, they will use their debit cards to pay merchants.

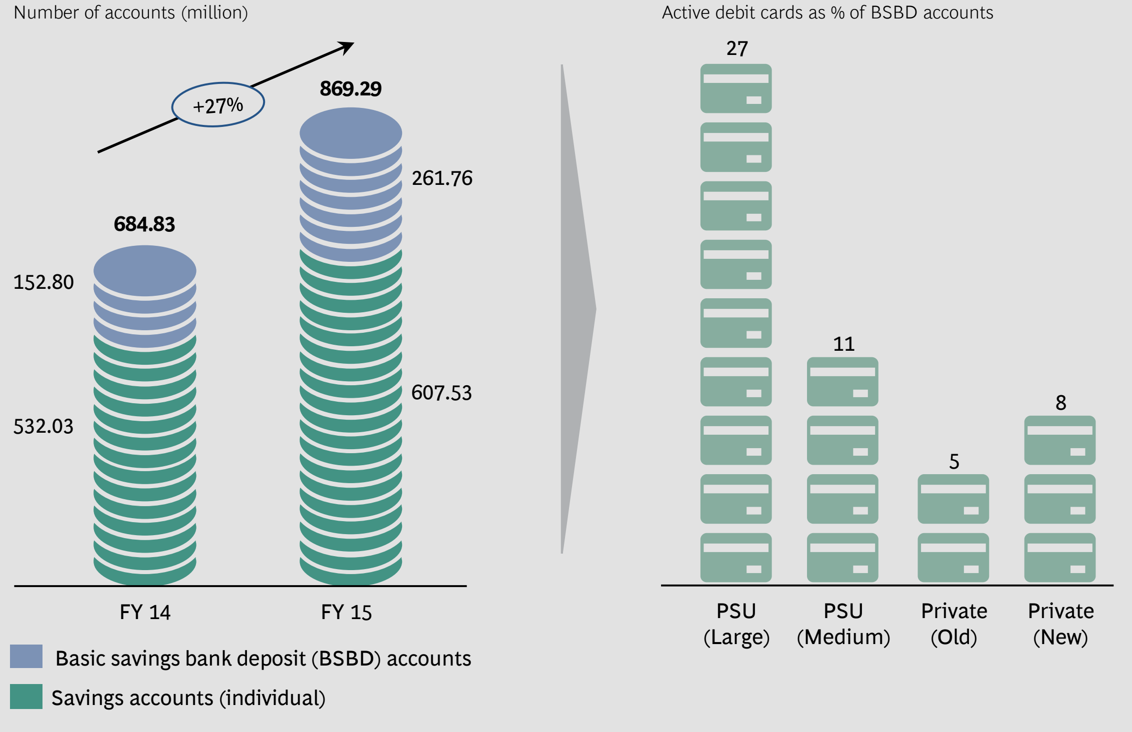
The activation levels of BSBD accounts for different bank categories are shown in Exhibit 1.2. While large PSU banks have achieved 27 percent activation, all other bank catego-

Exhibit 1.1 | Disruptive Developments in Indian Banking Landscape



Sources: BCG analysis.
[1]Jan Dhan Campaign, launched by the Prime Minister of India in August, 2014, is a financial inclusion mission to ensure access to financial services in an affordable manner.

Exhibit 1.2 | Unprecedented Intake of New Customers—But Poor Activation a Big Headache



Sources: FIBAC Productivity Survey 2015; BCG analysis.

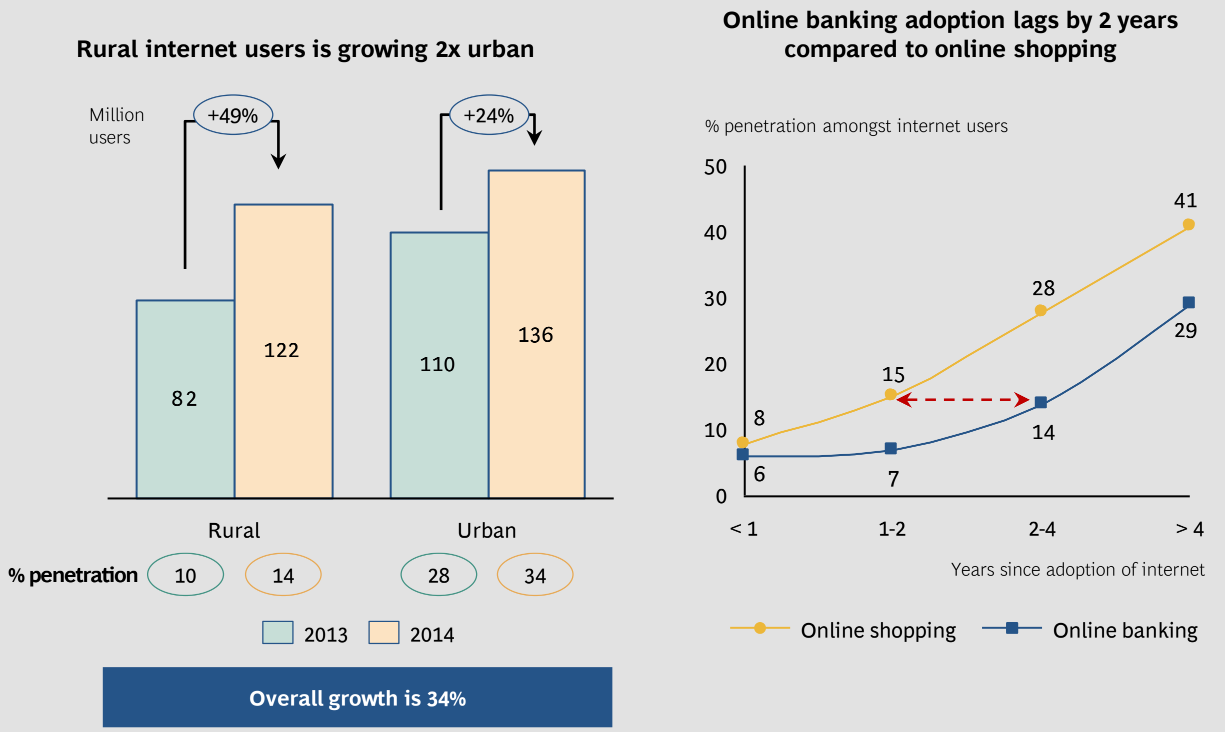
ries have activation at 8 percent or less. At such low levels of activation, the industry will have significant increase in branch transactions and a consequent deterioration in customer service levels next year.

Rapid Adoption of the Internet, Banking Lags Behind Online Shopping by Two Years

As depicted in Exhibit 1.3, the total number of internet users in India grew by 34 percent in FY 2014-15. The 49 percent growth in rural areas outpaced the 24 percent growth in urban areas. The penetration of the internet has reached as high as 34 percent in urban centres and 14 percent in rural areas. This is a major positive disruptive development in Indian banking. However, the adoption of online banking lags behind that of online shopping by almost two years. As depicted in Exhibit 1.3, in the very first year of gaining access to the internet, 6-7 percent of customers do online shopping as well as online banking. But over the next few years, as more and more people try online shopping, the percentage of online shoppers may reach about 40 percent. The online banking adoption curve is delayed by about two years in comparison. This means that the penetration milestones of online banking are achieved two years after the same milestones are achieved by online shopping.

As shown in Exhibit 1.4, currently we have 61 million online banking customers in India. This number is set to grow at 23 percent per annum to reach about 173 million by 2020. If lessons from online shopping are applied to better engage customers in online banking, we can accelerate this growth from 23 to 31 percent over the next five years and reach over 233 online banking customers by 2020. This will effectively bring the adoption curve of online banking forward by two years. The penetration of digital banking amongst internet users is about 23 percent today in India. At the current rate of adoption, this will reach only 25 percent by 2020. However, with concerted action from the banking industry, this number could be as high as 33 percent by 2020.

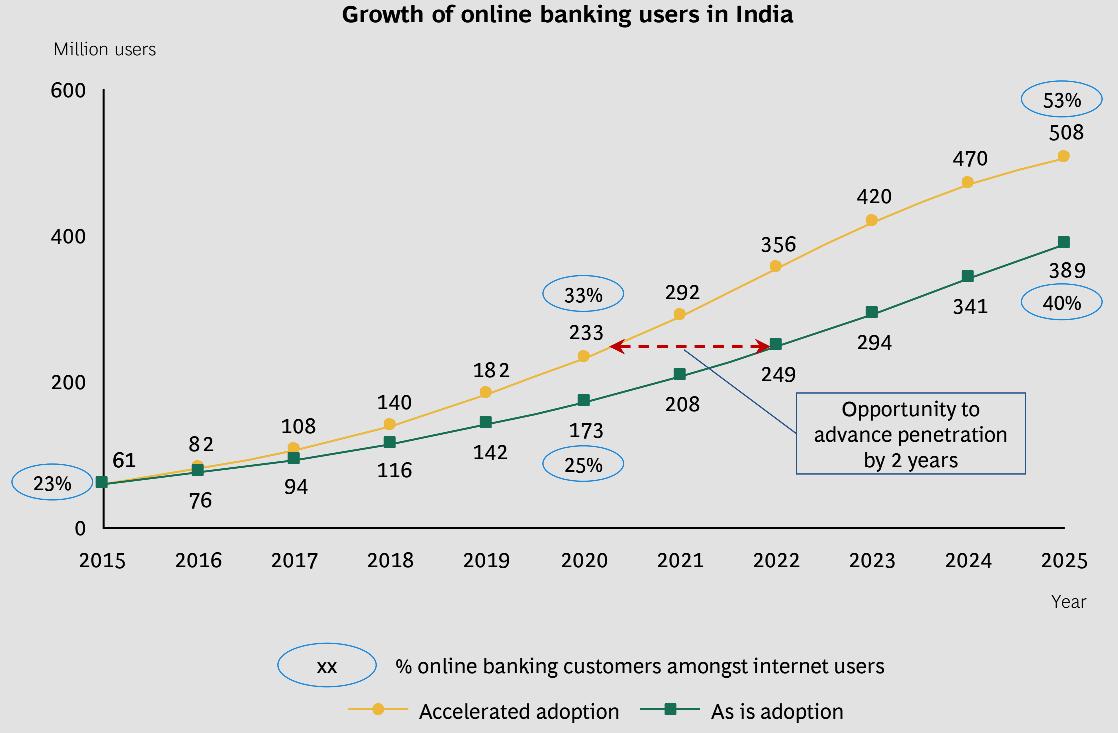
Exhibit 1.3 | Customers Are Adopting Internet Rapidly, However Adoption Lags by 2 Years Compared to Online Shopping



Sources: IAMAI, BCG IAMAI Digital@Bharat 2015 report; BCG analysis.

EXHIBIT 1.4 | Digital Banking Users Poised to Grow at 20-25% in Next 5 years

Penetration could be accelerated by 2 years by taking lessons from online shopping



Sources: IAMAI, BCG IAMAI Digital@Bharat 2015 Report, BCG analysis.

Entry of New Players—50 Percent of Digital Customers at Risk of Migration

Banking, like media, is a service that can be entirely consumed digitally. As a consequence, technology is becoming more and more critical by the day. The FinTech industry is the talk of the town in banking circles. Nimble start up entities are creating services and propositions that can address long standing pain points of customers. The start up scenario in India is quite healthy. There are a large number of entities already, as depicted in Exhibit 1.5. This space is poised to witness acceleration of activity. The entities are engaged in a broad spectrum of activities, ranging from payment solutions to lending innovations to back end solutions for banks.

The adoption of mobile wallets for recharge and e-commerce transactions is evidence of the power of technology to create propositions that can disrupt customer behaviour. As depicted in Exhibit 1.6, the total number of transactions on digital wallets (promoted by non-banks) already surpassed the total number of mobile banking transactions in 2013-14. These transactions are growing at the stupendous rate of 180 percent per annum, against 80 percent in mobile banking transactions. This is clear evidence of the substantial disruption in Indian banking.

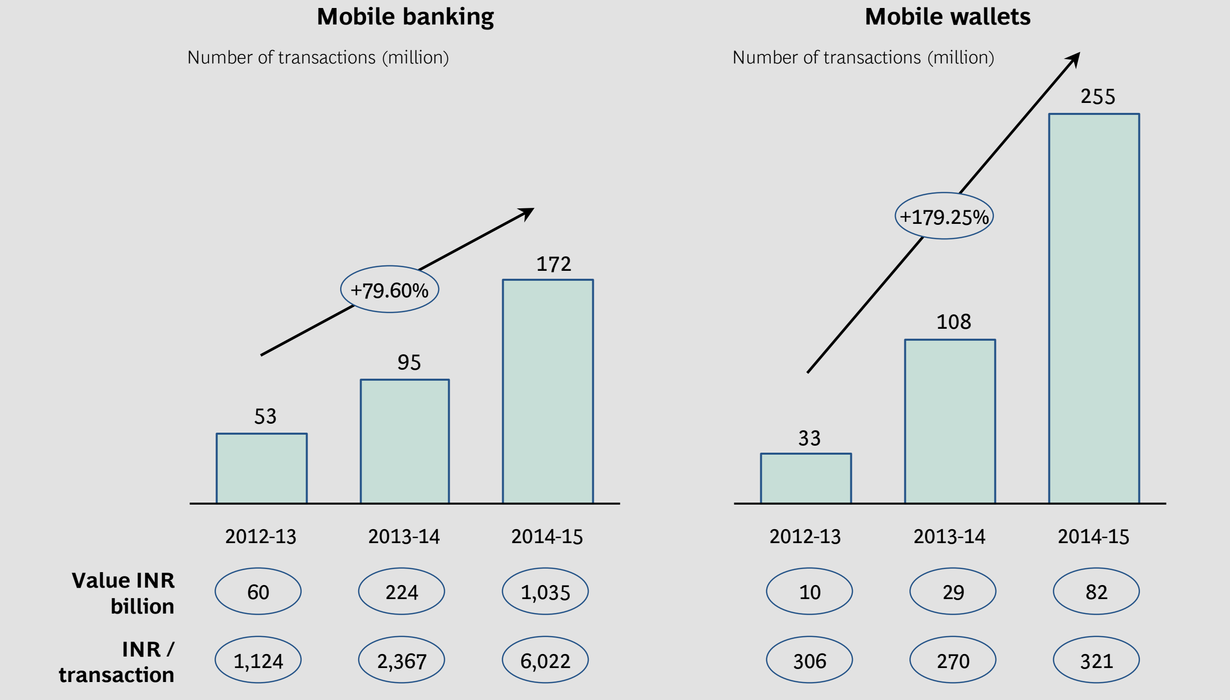
What is the interplay between banking and other competing services offered by non-banks? Customer research conducted by BCG has thrown up interesting insights that are depicted in Exhibits 1.7 and 1.8. Of the total banked population in India, 13 percent use digital banking. Forty two percent have access to the internet and yet do not use digital banking. And 45 percent have no access to the internet, and so have no choice of adopting digital banking. Among the 13 percent customers who do digital banking, 93 percent also do online shopping, as we would expect. Only 32 percent do online banking on their mobile phones as against 35 percent who use a digital wallet from a non-bank to do transactions. Twenty one percent of these customers use a mobile wallet from a non-bank and do not use mobile banking from their own

EXHIBIT 1.5 | Many Startups in Indian FinTech space

Area	Objective	Companies in the Indian market
Payment disruptions	B2C payments	One97 Enterprise Mobile Solutions Private Limited; One MobiKwik Systems Private Limited; Citrus Payment Solutions Private Limited; Oxigen Services (India) Private Limited; GI Technology Private Limited; My Mobile Payments Limited; ItzCash Payment Solutions Limited; Smart Payment Solutions Private Limited
	B2B payments	PayMate India Private Limited
	C2C payments	iKaaz Software Private Ltd; Instamojo Technologies Private Limited; Cibola Technologies Private Limited
Lending innovations	SME lending	Zen Lefin Private Limited; Amadeus Advisors Private Limited
	P2P lending	RangDe.Org —Non Profit; Fairassets Technologies India Private Limited; Milaap Social Ventures India Private Limited; Dipamkara Web Ventures Private Limited
	Crowd funding	Randommotion Advertising Private Limited; HuddleTech Services Private Limited; Ketto Online Ventures Private Limited; Fundlined
	Data and analytics based lending	GC Web Ventures Private Limited; Lendingkart Technologies Private Limited
Technology back-end solutions		Ezetap Mobile Solutions Private Limited; Brainy Lions Online Services Private Limited; Airpay Payment Services Private Limited; Epaisa Services Private Limited

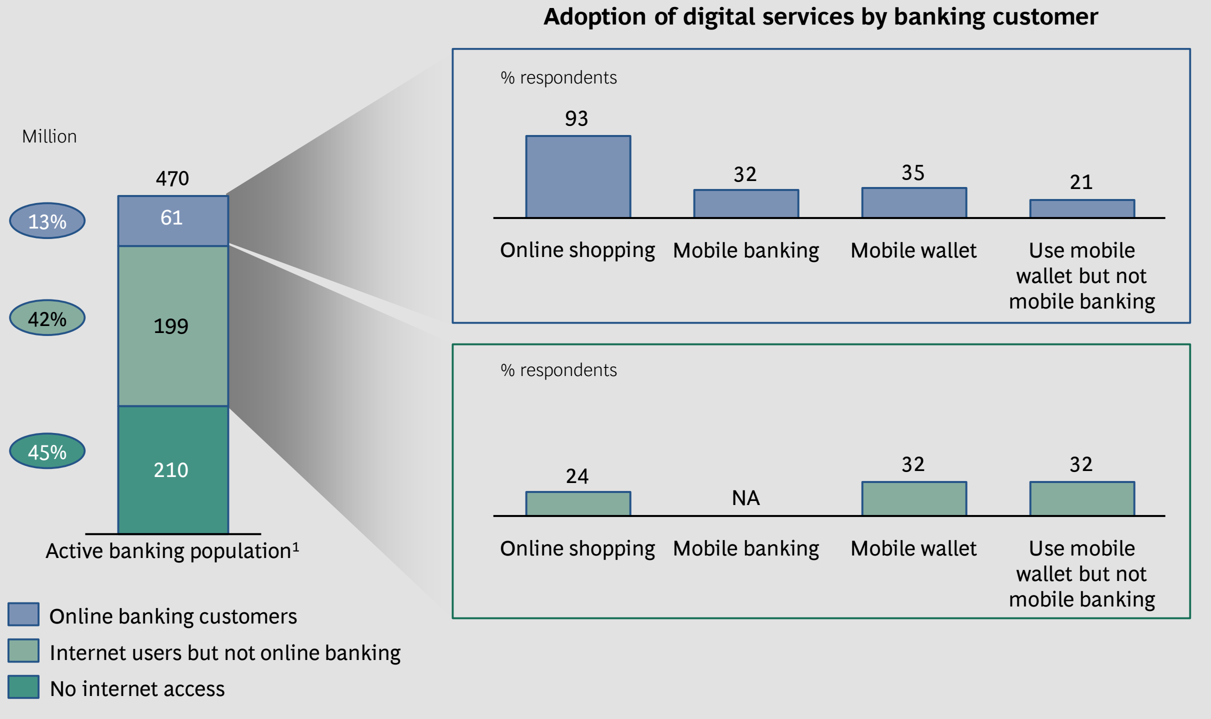
Source: BCG analysis.

EXHIBIT 1.6 | Customers are Adopting Non-Bank Offerings and Micro Transactions Getting Digitized



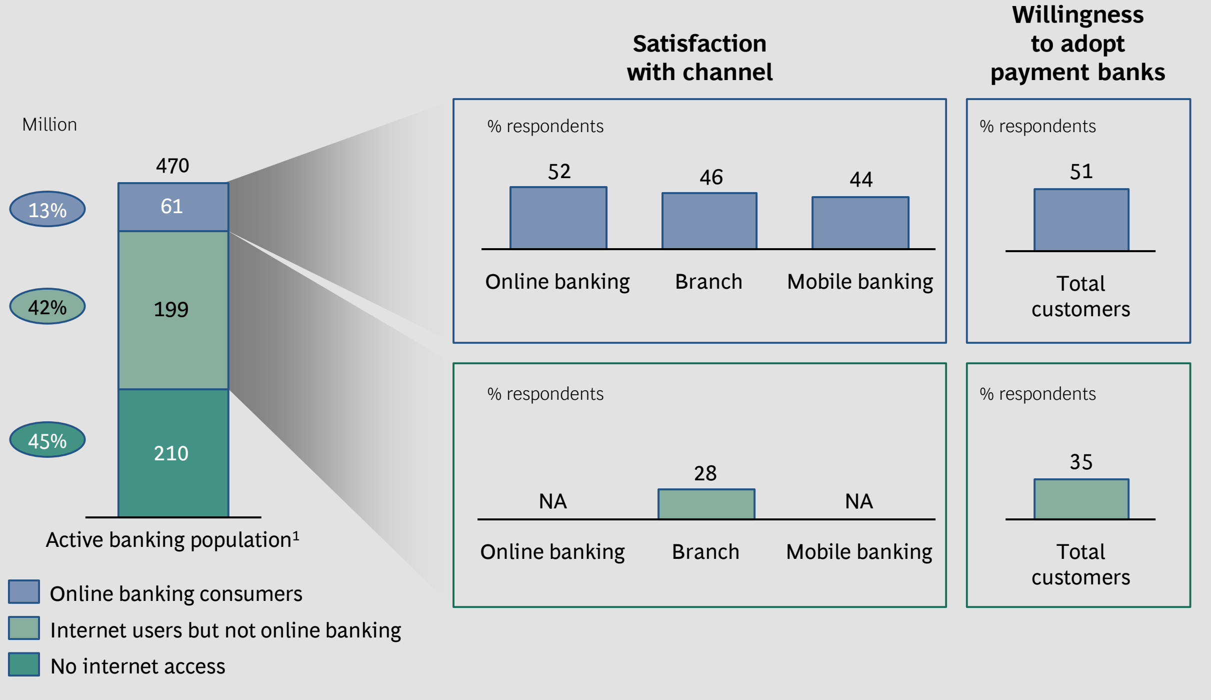
Source: RBI Payment System Indicators.

Exhibit 1.7 | Customers are Adopting Services from Non-Bank Attackers



Sources: BCG CCI India Digital Banking Survey 2015; World Bank Global Findex, BCG analysis.
[1] 470 million active bankers as 53% penetration in age group of 15+ years (900 million people above age of 15+). Not inclusive of accounts added in 2015 under Jan Dhan scheme.

Exhibit 1.8 | 50% of Digital Bank Customers With Internet Access are at Risk of Switching to New Entrants



Sources: BCG CCI India Digital Banking Survey 2015; World Bank Global Findex, BCG analysis.
[1] 470 million active bankers as 53% penetration in age group of 15+ years (900 million people above age of 15+). Not inclusive of accounts added in 2015 under Jan Dhan scheme.

bank. Among the 42 percent customers who have access to the internet but do not do digital banking, we found 24 percent doing online shopping, with 32 percent transactions done using mobiles wallets.

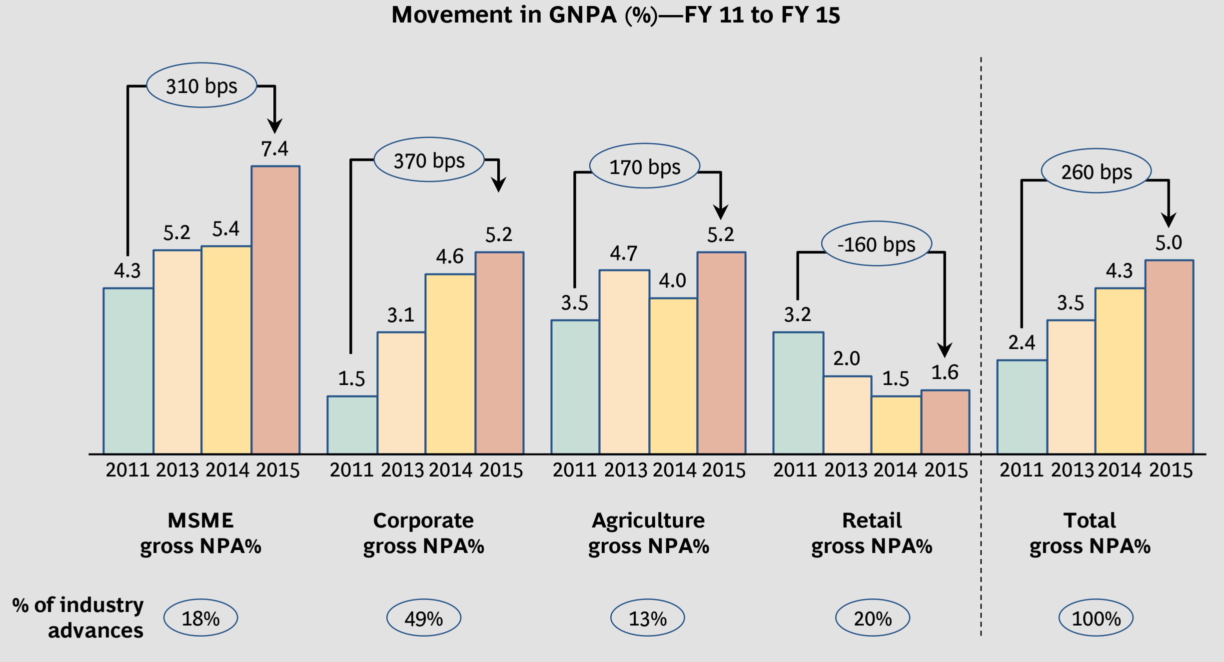
As depicted in Exhibit 1.8, fifty percent of digital banking customers surveyed by BCG said that they are very willing to consider new banks, created out of the existing wallets, which will serve them mostly online. This percentage is quite consistent across all customer segments that have used a wallet. Overall, 35 percent of customers who have internet access but do not use digital banking from their banks expressed keen willingness to consider wallets transformed into banks. Thus banks run the risk of losing their most digital savvy customers to the upcoming new entrants.

The satisfaction level of customers measured in the survey gives insights into customer preferences. Customers are most satisfied with internet banking and ATMs. This is followed by branches and mobile banking. Call centres are still a major source of customer grievance on service quality. Customers who do digital banking are much happier with their branches compared to those who do not do digital banking. This appears to be a direct consequence of lesser visits to the branches by the adopters of digital banking. The relatively lower satisfaction with mobile banking merits the attention of banks. If the mobile banking offering of banks is not convenient, the likelihood of customers migrating to attackers with highly user friendly mobile-based offerings is very high.

The NPA Cycle in Retail is Turning—Is Industry Ready With Collections and Predictive Analytics?

Exhibits 1.9, 1.10 and 1.11 depict a trend that this year's FIBAC benchmarking is picking up very powerfully. A lot has been spoken and written about the growth in NPAs in Indian banking. The focus has been on the corporate and MSME side where for a range of reasons, the NPAs have gone up dramatically. Retail business has been an oasis of quality for the last few years, where NPA levels had been coming down continuously for all types of

Exhibit 1.9 | NPA is a Major Set Back—Retail NPA Trend Reversing



Sources: FIBAC Productivity Survey 2011, FIBAC Productivity Survey 2013, FIBAC Productivity Survey 2014, FIBAC Productivity Survey 2015; BCG analysis.
Note: bps: Basis points; NPA: Non-performing asset; MSME: Micro, small and medium enterprise.

Exhibit 1.10 | NPAs Continue to be Grim, Few Pockets of Improvement

Bank type	Agriculture	Corporate	MSME	Retail – Home	Retail – Private car	Retail – Other[1]
PSU (Large)	4.36 / 5.92	5.00 / 5.14	5.66 / 8.45	0.90 / 0.94	1.19 / 1.72	1.69 / 2.05
PSU (Medium)	4.12 / 5.36	5.09 / 6.07	6.50 / 7.68	1.63 / 1.64	2.70 / 2.57	3.02 / 3.17
Private (Old)	1.28 / 3.02	1.86 / 4.72	2.66 / 3.81	1.41 / 1.57	1.19 / 1.42	0.98 / 1.27
Private (New)	1.25 / 1.08	0.87 / 0.88	1.92 / 1.62	0.57 / 0.40	0. 47 / 0.64	0.69 / 0.56

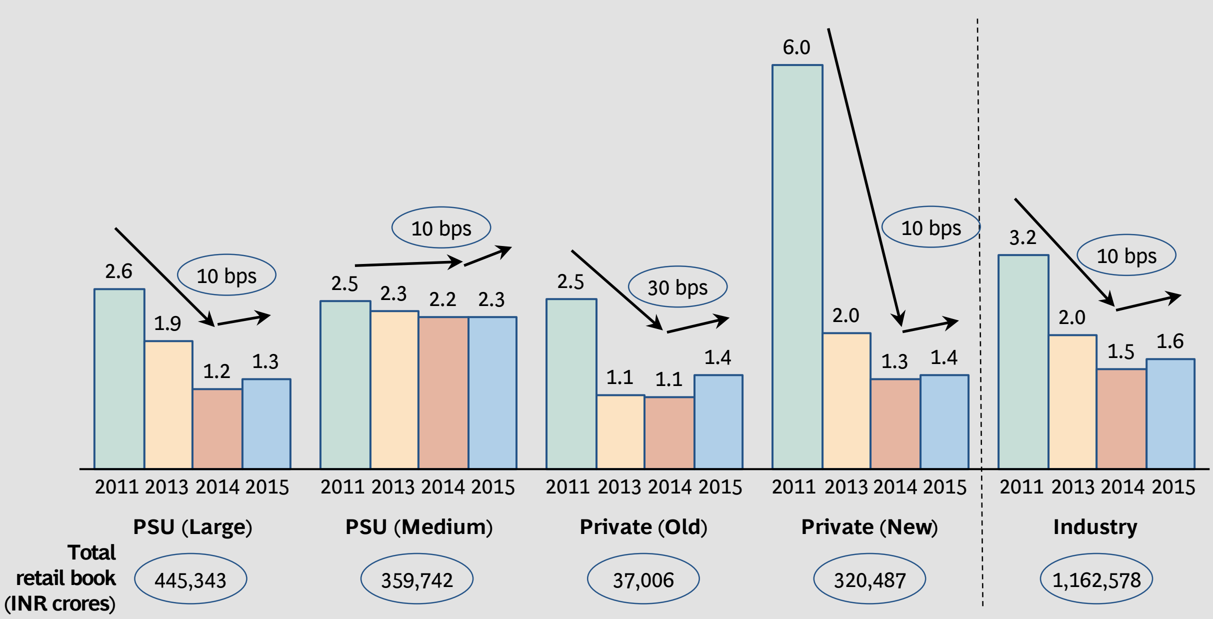
X / Y: X = Gross NPA (%) in FY 2013-14; Y= Gross NPA (%) in FY 2014-15

Change in gross NPA (%) in basis points[2]: 0 to 100; > 100; -1 to -100; < -100

Sources: FIBAC Productivity Survey 2014; FIBAC Productivity Survey 2015; BCG analysis.
Note: FY: Fiscal year; NPA: Non–performing assets; MSME: Micro, small and medium enterprises.
[1]Other retail loans include personal / clean / unsecured loans, student / education loans, credit cards, loan against deposits and security and non–agri jewel loans.
[2]Change in Gross NPA (%) in bps measured for FY 2014–15 over FY 2013–14.

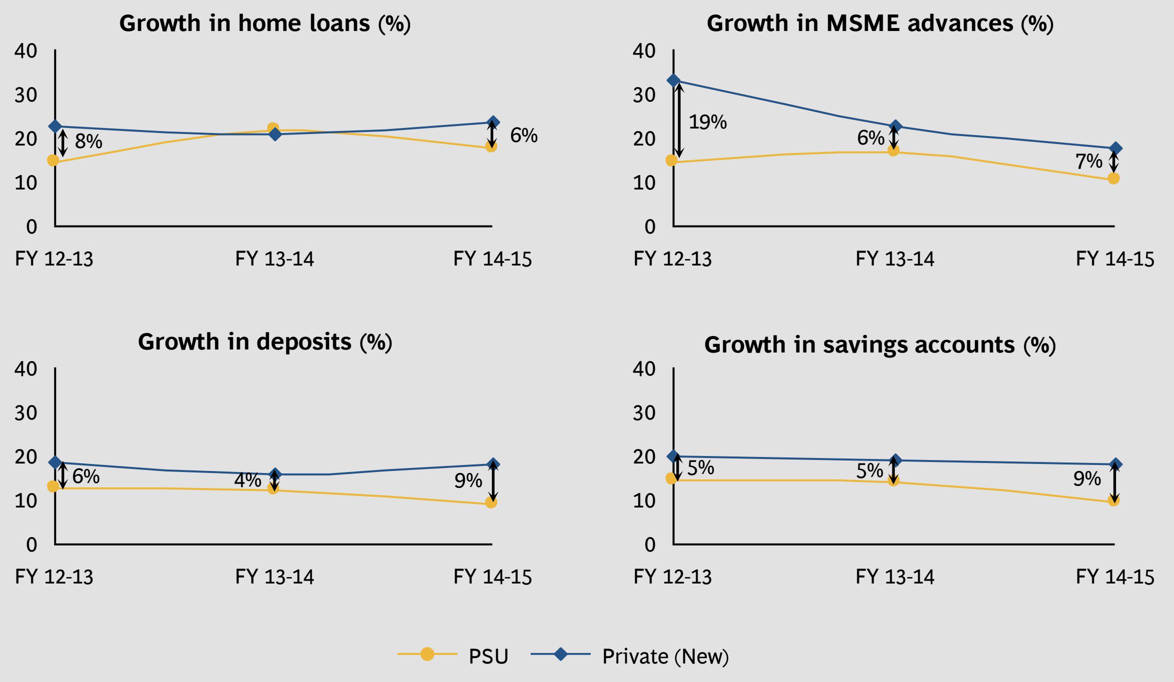
Exhibit 1.11 | Retail NPA Trend Cycle—Need to Invest in Capabilities Ahead of the Curve

Movement in retail GNPA (%)—FY 11 to FY 15



Sources: FIBAC Productivity Survey 2011; FIBAC Productivity Survey 2013; FIBAC Productivity Survey 2014; FIBAC Productivity Survey 2015; BCG analysis.
Note: FY: Fiscal year; bps: Basis points; NPA: Non-performing asset.

EXHIBIT 1.12 | PSU Banks Market Share Loss Accelerated Last Year



Sources: FIBAC Productivity Survey 2015; IBA; Bank annual reports; BCG analysis.
Note: FY: Fiscal year.

players in the industry. However, the trend seems to be reversing. Across all types of players, we notice an uptick in retail NPAs.

It is a topic that merits the attention of banks with great urgency. Banks have beefed up bad debt management over the last few years, but that has been mostly for commercial credit. The capabilities required to contain bad debt in retail are substantially different from commercial credit. The number of accounts is large, the amounts are small, rapid action is very critical, and action steps have to be industrialized. Doubtful accounts must be pursued well in advance with analytics and predictive modelling. Call centre capabilities have to be beefed up substantially. There is a clear call for action emanating from this research for banks to take note of.

Acceleration in PSU Banks' Share Loss—a New Normal or Just a Blip?

The environment is becoming more dynamic by the day. Competition is heating up and is expected to intensify with new entrants. Technology is becoming central to banks. In this context, many public sector banks have been distracted with massive bad debt issues. Several of them have not had a CEO for many months. The distraction and lack of clear leadership seems to have taken its toll on the market share of public sector banks last year. Across all the areas of business, as depicted in Exhibit 1.12, the share decline of PSU banks has accelerated. This could very well be a temporary blip. However, there is a reasonable case for it to be a more permanent structural change in the dynamics of Indian banking.

The rules of the game, going forward, will be based on agility and speed of response, fast time to market, technology and data management capabilities, specialized talent, and new paradigms in performance management. Public sector banks will need to undergo very rapid and intense transformation to keep pace. While board level governance reforms in public sector banks are finally being rolled out by the Government, it remains to be seen if the much needed reforms in HR practices and framework will also be taken up on time.

DISRUPTION AS AN OPPORTUNITY: LEVERAGING TRENDS PROACTIVELY

"The right man is the one who seizes the moment."

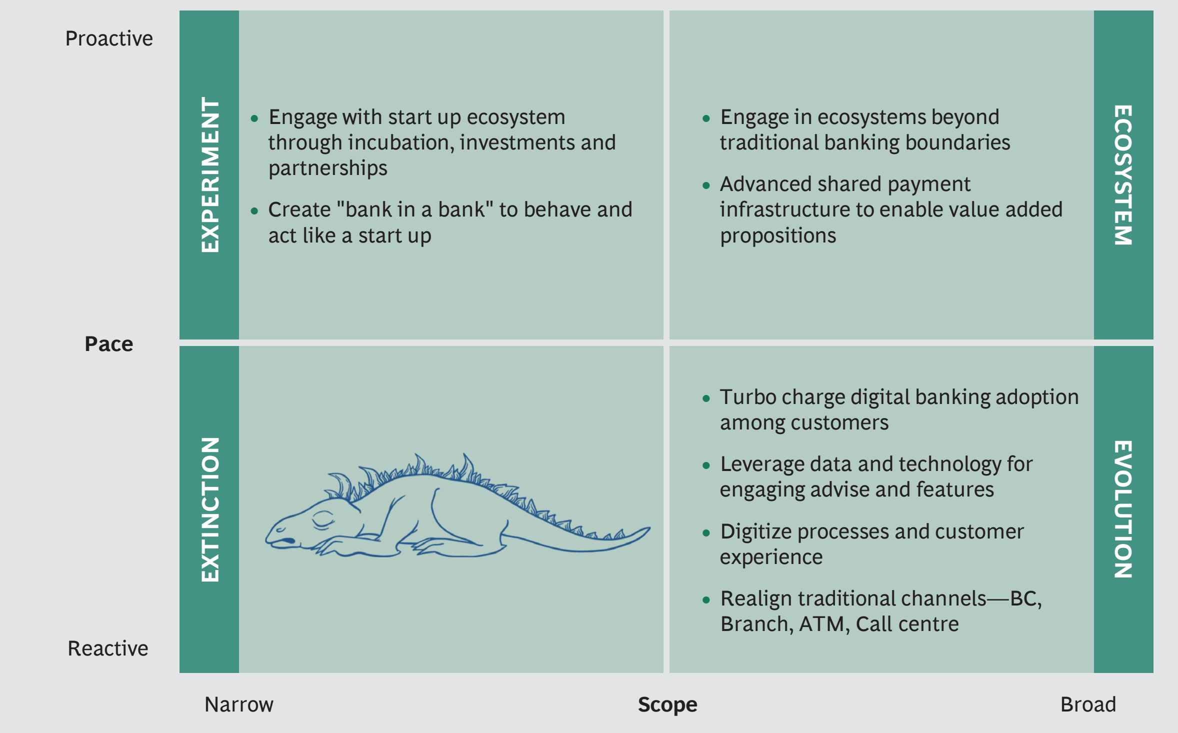
— Goethe

THE BEST APPROACH TO deal with disruptions is the aggressive approach. Instead of defensive measures to fend off new competition, banks are better off looking at opportunities for innovation and newer ways to add value to their customers. Trends in technology and customer behaviour offer new ways in which banks can engage with customers and entrench themselves in a position of advantage. Exhibit 2.1 is a framework suggesting various ways in which banks can act. Not acting is a sure way to become a defunct utility and face extinction. There is a long list of action points to enhance a bank's value proposition to its customers. These are broad based with incremental changes. They include ideas like digitization of processes to improve customer experience (covered in the FIBAC 2014 Report: Digital Banking); realignment of roles of traditional channels like branches, ATMs etc.; use of data analytics to offer advanced and engaging features and even advise customers; and finally, getting more customers onto the digital banking bandwagon. However, these are reactive approaches and are unlikely to bring banks to pole position in the context of disruption. Experimentation and ecosystem approaches are more proactive. Experimentation is about engaging with the start up world—either by partnering / investing / incubating them or by carving out a separate team at 'arms length' within the bank to act and behave like a start up. The boldest set of actions is in the ecosystem category. Here, banks go beyond their traditional boundaries of banking and engage with customers' lives beyond transactions, savings and loans. They leverage their position as a trusted intermediary into newer ecosystems beyond the purely financial world like health care, education, housing, automobiles etc.

How to Turbo-Charge Adoption of Digital Banking?

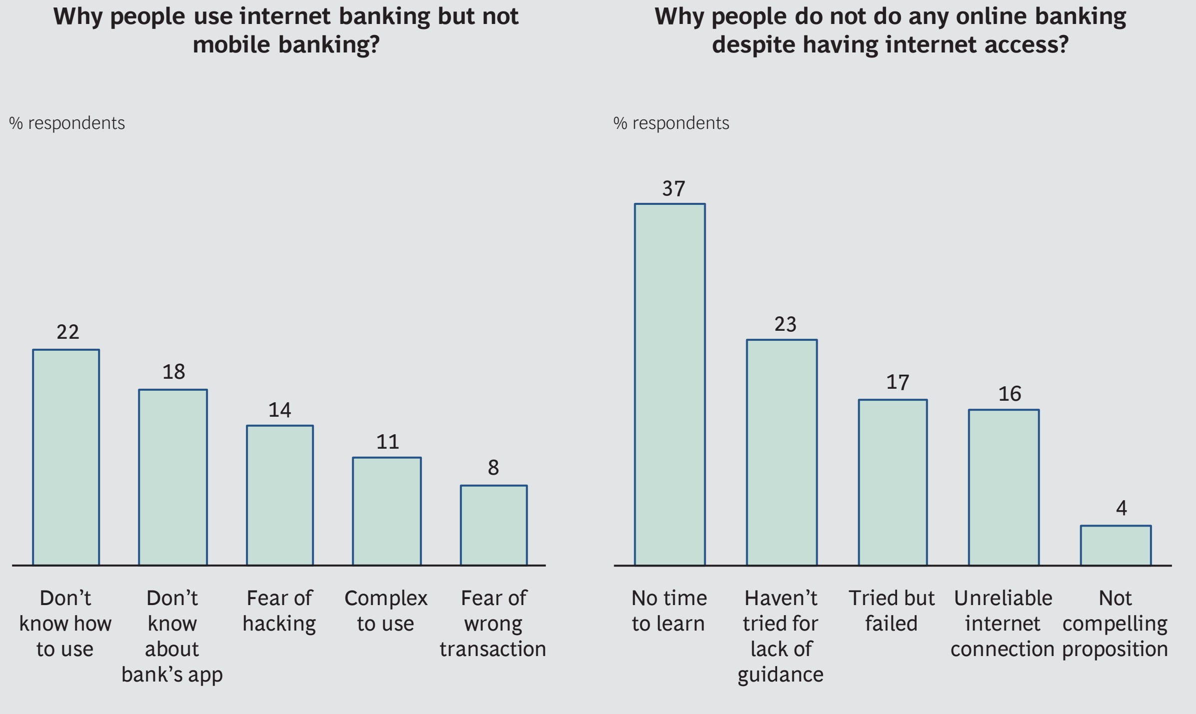
Only 23 percent of people with internet access do online banking. Only 13 percent of banking customers do online banking. The ability of banks to invest in advanced and innovative propositions for customers will be greatly enhanced as the digital banking customer base grows. It is possible to imagine that 33 percent of customers with internet access will do online banking by 2020. Digital banking has to create the same allure as online shopping, remove misconceptions about security, and most importantly, educate customers. Exhibit 2.2 conveys some powerful lessons. It highlights the main reasons why customers use internet banking but not mobile banking or do not use online banking at all. The topmost reasons for not considering mobile or internet banking are not misconceptions about safety, unreliable internet con-

EXHIBIT 2.1 | Proactive Approach to Deal with Disruptions—How to Make the Most of the Trends?



Source: BCG analysis.

EXHIBIT 2.2 | How to Accelerate Adoption of Online Banking?



Sources: BCG CCI India Digital Banking Survey 2015; BCG analysis.

nectivity, or fear of making a mistake; they are simply inertia, lack of awareness, and unwillingness to commit time to understand and adopt a new tool. Banks can individually and collectively make great strides in this area with more carefully designed initiatives towards customer education and awareness.

- Learn from online shopping. Online shopping firms realise the value of inducing trial through very powerful incentives and offers. The one-time expenditure on getting a customer on-boarded is miniscule compared to the lifetime value brought by a digital customer. Banks benefit tremendously when an offline customer turns digital for life. The costs of a lifetime of physical interactions are saved. Banks need seriously to consider how they can unleash creative approaches to drive a surge in the number of digital banking customers.

- Changing the sales process. Most customers find that they do not have the time to understand the new ways of banking. Customers are most engaged when opening the account. They have to be on-boarded onto digital channels with their value adding features like bill payments at that stage. The sales channel of banks is typically not equipped to educate customers. This has to change.

- Partnership with internet companies like Google and Facebook, who are making huge investments in furthering the reach of the internet. Stakeholders must ensure that online banking is one of the first few aspects about which a new netizen is educated.

Leverage Data and Technology to Enhance Customer Engagement

Non-banking attackers are betting on value additions that take customer engagement away from banks. How do banks stop banking from being just a utility? Exhibit 2.3 shows the top three features that customers value most from their digital banks. These top three picks are representative examples of innovations that banks must pursue to enhance the connect with their customers and

Exhibit 2.3 | How Can Banks Become More Interesting and Relevant?
Top customer picks in customer research

Payment related offerings

Pay friends in single click — 58%

Saving and expenditure

Shows where I stand vs. "people like me" — 58%

Investment related offerings

Conservative advice on savings — 54%

Sources: BCG CCI India Digital Banking Survey 2015; BCG analysis.

consolidate their position. These innovations fall under the categories of payments, savings, and investments. They are all natural extensions to the traditional role of banks. They are all feasible with the latest developments in technology.

- Payments: Customers want banks to make payments convenient. Banks, in turn, can remember payments that are made frequently by a customer. Often repeated payments may not need the same level of authentication. Payments to friends and family can be made faster and more convenient.

- 'People like you': Customers are getting used to successful internet companies like Facebook, Amazon, Google etc. that offer suggestions based on 'people like you' behaviour. This should be a natural extension for banks which have huge data on their customers.

- Wealth management for the mass market: This is a natural value addition to the role of a bank beyond its traditional functions of savings and transactions. Banks can leverage technology to create wealth management for the mass market with personalized advice, conservative recommendations in tune with market character, and ideas to reduce expenditure and improve return on investments.

Digitize Processes to Enhance Customer Experience

The core processes of almost all the banks can be 're-imagined' using technology to make them faster, safer, and more convenient to the customers. For a more detailed commentary on this topic, please refer to our report titled 'Digital Banking: Opportunity for Extraordinary Gains in Reach, Service and Productivity in the Next Five Years', published in 2014.

Realign the Roles of Physical Channels—BCs, Branches, ATMs

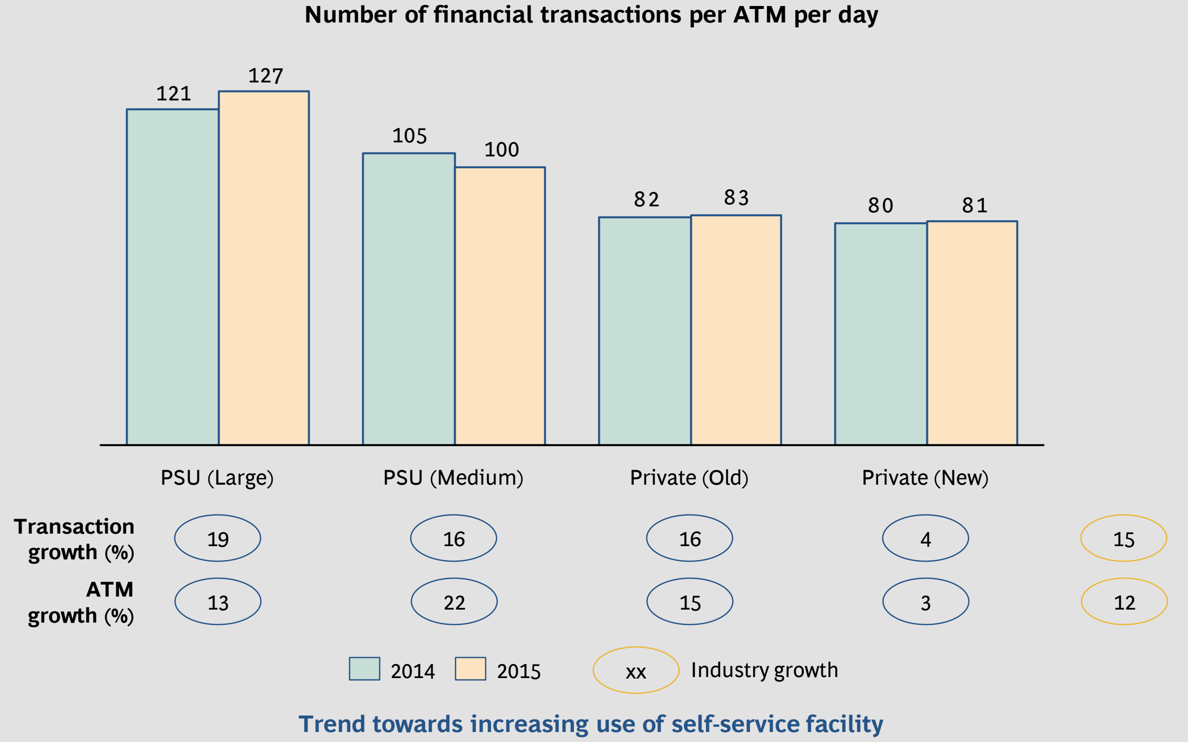
The traditional channels with physical interaction may not become extinct; but they need to be realigned to the new realities. As depicted in Exhibit 2.4, usage of ATM infrastructure is continuing to grow but at a slower pace. This retardation in growth will only increase as digital channel adoption grows. The ATM network is a major success story for Indian banking. This strategic asset can be repositioned to address the new circumstances. ATM units need to be positioned as multipurpose transaction points with capabilities to do a large number of different types of transactions like payments of various types, service requests, or applications for various products. Given that only 20 percent of the Indian population has access to the internet and that the bandwidth of cellular networks can be a major irritant, ATMs can play a very important role in bringing digital banking to the masses.

The Business Correspondents (BC) channel has been experimented with for many years. However, there have been doubts about its economic viability for the banks and for the BCs themselves. This appears set to change now. With the number of transactions and number of accounts rising dramatically, the cost per transaction of the BC channel will come down and reach the level of ATMs. Currently, BCs facilitate three or four transactions per day. This number is expected to grow to 13-15 over the next few years (as shown in Exhibit 2.5). With such economics, it is possible to envisage that along with physical channels (branches, ATMs, call centres) and digital channels (internet, mobile), BCs will emerge as the third leg on which banking can stand and spread.

Advanced Shared Payment Infrastructure to Support Value Added Services

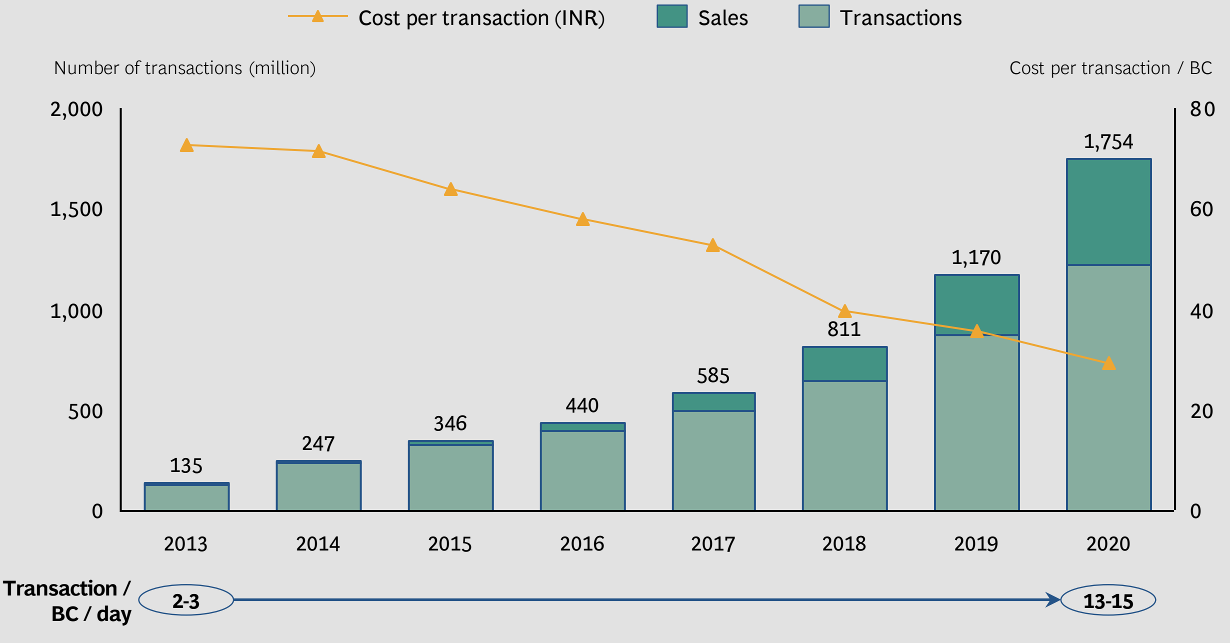
Payments are fundamentally interbank and the quality of customer experience depends upon the strength of the underlying interbank payment network. India has made good progress here with services like IMPS and ACH being run by National Payments Corporation of India (NPCI). Further investment and enhancements in the interbank payment infrastructure can arm the banks with services and features that will add a lot of value to customers and significantly enhance their engagement with their banks.

EXHIBIT 2.4 | Transaction Per ATM to Gradually Slow Down—Should Infrastructure be Diverted Towards Non-Cash Online Transactions?



Sources: FIBAC Productivity Survey 2015; RBI Payment System Indicators; BCG analysis.

EXHIBIT 2.5 | BC Economics Set to Improve—Could BC Emerge as a Powerful Distribution Channel?



Sources: FIBAC Productivity Survey 2015; BCG analysis.

It is instructive to look at the latest developments in this field in other markets. The latest is the implementation of the New Payments Platform (NPP) in Australia. Not only is NPP real time, it is also data rich. It allows up to 180 characters to be transmitted along with each payment. Transmission of data with each payment opens a large number of potential value added services.

- It helps merchants and retailers reconcile invoice details with payments made.
- It captures information on the basket and helps customers do better personal financial management.
- It helps facilitate frictionless payment flow between health care providers, insurance companies, and patients.
- It creates a system where end-to-end procurement can be managed by connecting buyers and suppliers, and supporting ordering, invoicing, escrowing, contingent or partial payments, charge backs, credits, reconciliation etc. (See Exhibit 2.6)

NPCI is developing a Unified Payments Interface (UPI) to support customers by using a wide range of addressing options like their mobile numbers or email IDs to send payments from one bank account to another. This is a very disruptive platform and will permit banks to offer services which will rival those on mobile wallets. NPCI and banks should seriously evaluate the possibility of enhancing the IMPS Scheme to have the capability to stream data with each payment.

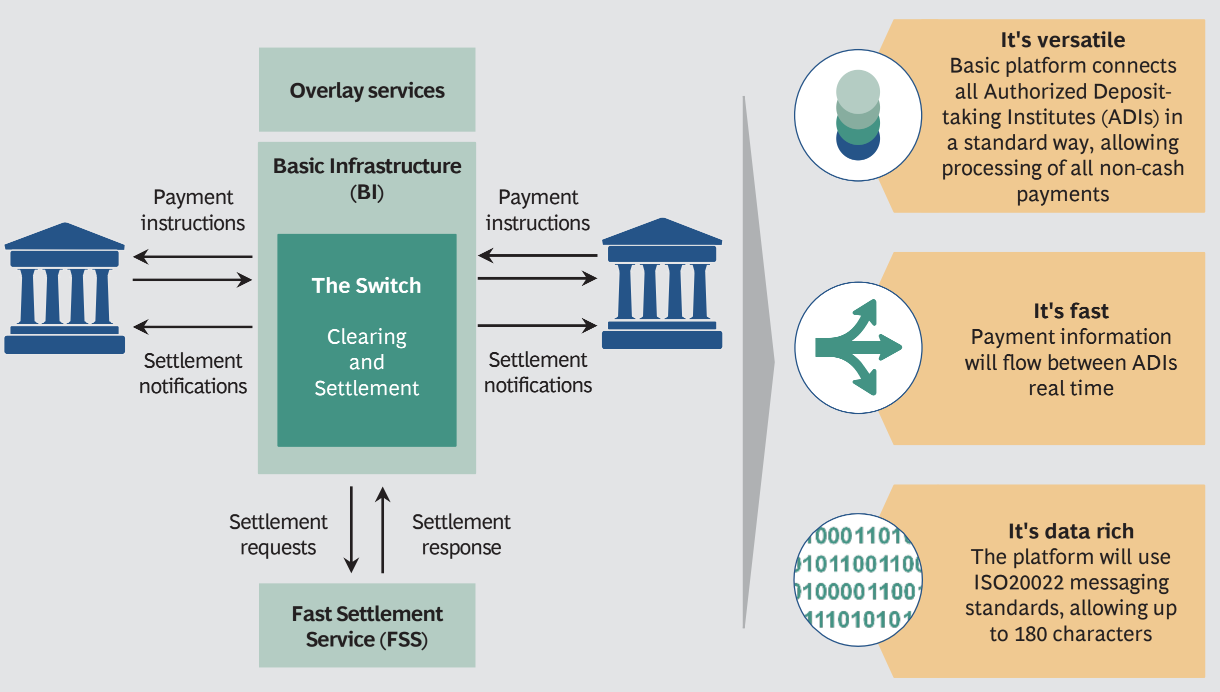
Ecosystem Strategies—Promoting Marketplaces as an Extension of Banking

Banks have traditionally played a critical facilitation role in trade. They create trust in trade transactions by ensuring payments on delivery of goods. In the digital context, this role can take a whole new meaning and can help the banks carve out a powerful value added role for themselves.

Shopping marketplaces are digital trading platforms that bring buyers and suppliers together. They create trust in the transactions

Exhibit 2.6 | Need to Further Enhance Capabilities in Payment Infrastructure

Example: NPP in Australia—value added services possible with messages along with payments



Sources: Australian Payments Clearing Association; New Payments Platform, Australia 2015.

by rating the suppliers and also the buyers based on their transaction history. Banks are the natural owners of such marketplaces, given the trust they enjoy and their ability to provide financial plumbing to make the payments integrated and seamless.

In response to the massive disruption caused by successful marketplaces like Alibaba and JD, leading banks in China have launched their own marketplaces as depicted in Exhibits 2.7 and 2.8. Needless to say, Chinese banks are much behind the non-bank marketplaces and there is significant catching up to do.

A marketplace need not be only for shopping. It can also be for services like education, health care, housing, etc. It does not have to be promoted by the bank itself, but rather can be partnered with by the bank, as a few Chinese banks are doing. The important issue is for the bank to be the key provider of payments in a marketplace and to have access to the transaction data so that it can be leveraged to make informed credit decisions.

Incubating Startups Within Banks

A lot of innovation is taking place in start ups. Technology-based innovation lends itself better to a start up environment rather than to the traditional culture in banks. Banks need to find ways to have access to this innovation. There are three key approaches that are evident:

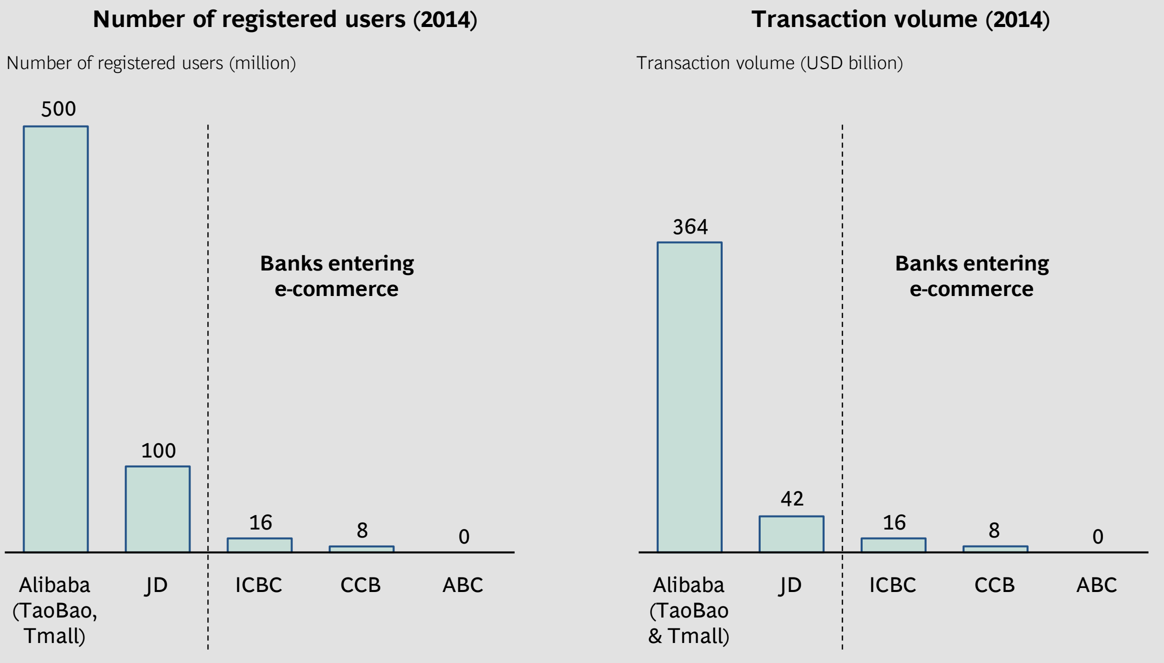
- Invest in a promising start up at an early stage.
- Provide incubation facilities—space, resources, and the ability to test new propositions—to start up entities in the financial technology arena in return for access to the intellectual property that they develop.
- Carve out a team within the bank with a mandate to leverage the latest developments in technology to re-imagine traditional banking services and create new innovative propositions. Isolate this team from the traditional organizational processes to create an environment that mimics a start up context as much as possible.

Exhibit 2.7 | Chinese Banks Moving Into Different Online Ecosystems / Marketplaces

	1 Industrial and Commercial Bank of China Limited	2 China Construction Bank Corporation	3 Agricultural Bank of China Limited	4 Bank of China Limited
Platform offered	B2C ecosystem offering 10,000 + products	B2B ecosystem B2C ecosystem Housing market	B2B ecosystem Supply chain management ad online financing	Tied up with Uni2Uni
Launch date	2014	2011	2014	2014
User base	16 million	8 million	11,200 companies	Uni2Uni is an online aggregator of 30 major ecommerce websites including JD, Dangdang
Transaction value (USD)	16.1 billion	7.40 billion	NA	
Unique value proposition	Offers flexibility in payment including shopping cash loans	Platform relying on lower fees	Eases traditional enterprises adoption of e-commerce	Bank of China aims to get data from e-commerce websites
Branches	17,460	14,856	23,622	11,514
Assets (USD)	3.32 trillion	2.67 trillion	2.57 trillion	2.46 trillion

Sources: BCG analysis; company annual reports and investor presentations.

Exhibit 2.8 | Banks Have a Lot to Catch Up with Established Marketplaces in China



Sources: BCG analysis; company annual reports and investor presentations.
Note: JD: Jingdong E-commerce (Trade) Hong Kong Corporation Limited; ICBC: Industrial and Commercial Bank of China Limited; CCB: China Construction Bank Corporation; ABC: Agricultural Bank of China Limited.

DIGITAL IN CORPORATE BANKING

"In business, what's dangerous is not to evolve."
— Jeff Bezos

Corporate Customers are Poised for Digitization

The corporate bank mainstay model is to sell large. Typically, they are involved in complicated transactions, lending, and cross-border arrangements through a relationship-oriented sales and services team. This model might seem ill-suited to the sleek simplicity of the point-and-click digital world. However, after rattling music, retail, travel and more recently, retail banking, digital disruption is knocking at the doors of corporate banks and is most likely reaching a tipping point.

A recent worldwide BCG survey of corporate banking customers reveals that the industry is on the cusp of a far-reaching digital shakeout. Survey data found that not only are business clients open to transacting over digital platforms and liaising virtually with their Relationship Managers (RMs), the majority of them are willing to switch—and even pay a premium—to work with banks that are capable of delivering the type of integrated, omni-channel service they have grown accustomed to in other spheres. Ease of access, seamless integration, quick turnaround times, and hassle-free processing have become so important that digitization has become a top selection issue.

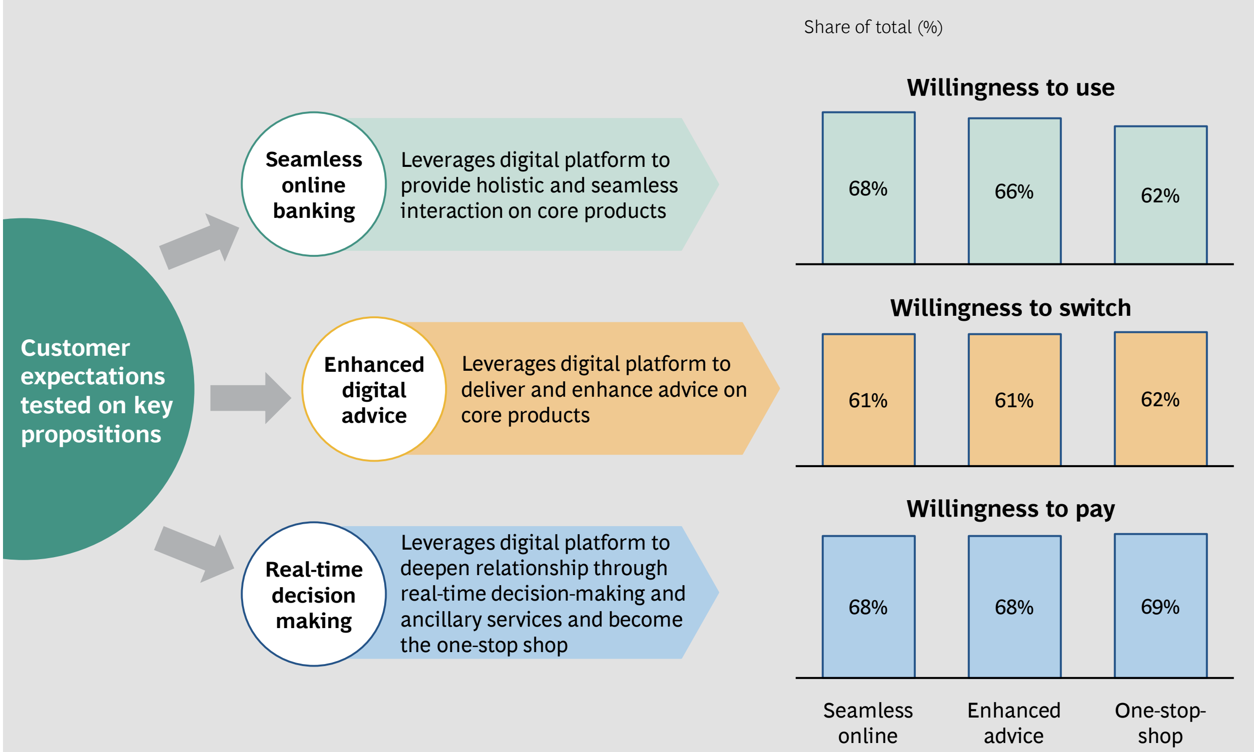
Globally, three digital customer value propositions are taking shape: (i) seamless online banking that offers convenient 'anytime, anywhere' access across channels and devices; (ii) enhanced digital advice that delivers targeted, high-value, client-centric service; and (iii) real-time decision-making support that allows clients to optimize working capital finance and cash management.

In a relationship business like corporate banking, it is difficult to get clients to switch banks. But our data shows that customers will switch—and even pay a premium to switch—to a banking partner capable of offering higher value, digitally-enabled services. Exhibit 3.1 shows that when the three value propositions were tested with customers, over 60 percent indicated their willingness to switch to a bank that offered them those services. Over two-thirds said they would be willing to pay to access the services offered. Thus digitization affords a unique, once-in-a-lifetime opportunity to change the bank's growth trajectory.

Corporate banks need to build key enablers rapidly to go digital. They need to digitize their operations; make IT more flexible; and develop advanced data capabilities. We discussed these topics in last year's FIBAC report.

In this year's report we discuss the front-end action agenda for the corporate bank:

EXHIBIT 3.1 | Majority of Companies Willing to Use Digital Propositions



Source: BCG analysis.

- An all-in-one single point digital platform
- Digitally enabled relationship management
- End-to-end value chain solutions

All-in-one, Single Sign-on Digital Platform

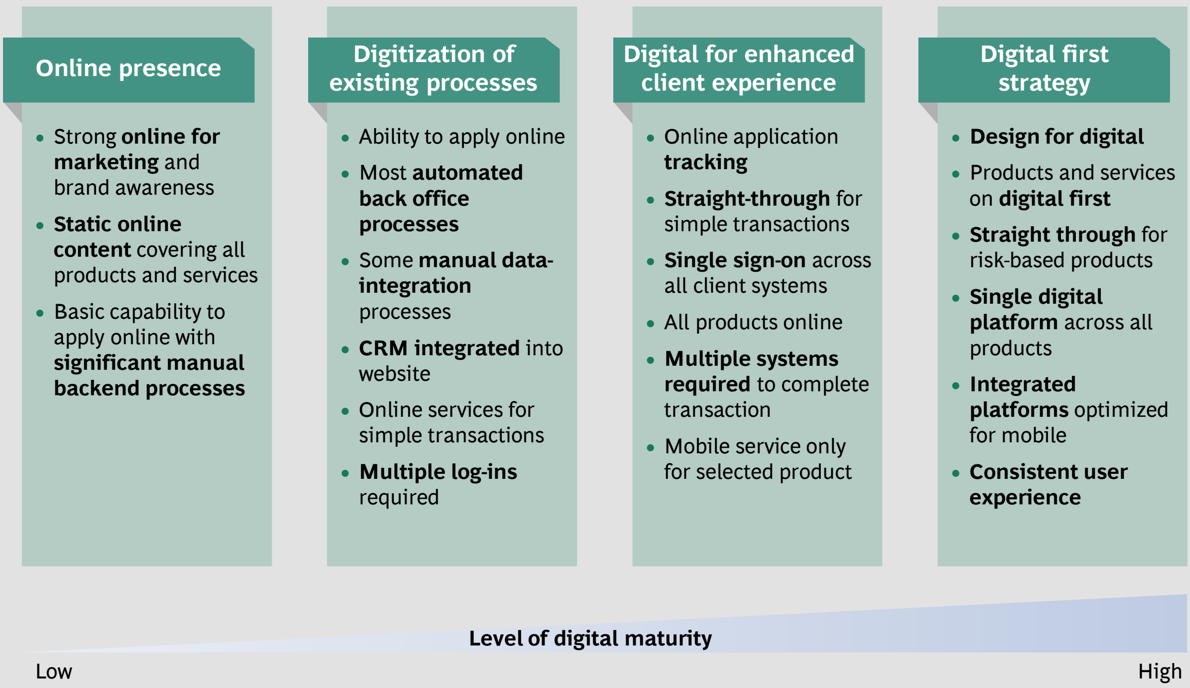
Corporate banks in India are at varying levels of digital maturity. See Exhibit 3.2 for BCG's definition of the four broad stages of digital maturity in a corporate bank. Most corporate banks in India are at stage 1 or 2, with reasonable online content and with the ability to apply online and offline services for simple transactions. Most foreign banks, even those with significant presence in India, are already at stage 3 or 4 digital maturity.

Current digital offerings, if any, by Indian corporate banks, are stand-alone products with limited integration. It is not uncommon for a customer of a corporate bank to have four or five different digital products from the same bank—each with its own credentials, security, sign-on and user interface. For example, one digital utility for remote printing of cheques, another one for uploading bulk payments, a portal for reconciling collections, another portal for viewing account statements, a utility to conduct forex transactions, another one for uploading trade documents—the list can go on and on.

Customers need to be convinced about each of these digital offerings one at a time. This is an onerous task that could take several months. These are corporate clients. They may require board approval to switch to online transactions, which could take a long time to procure. Legal documentation would need to be replicated for each product individually by both the company and the bank. Sign-on and security credentials would have to be established for each product separately. This is an unsustainable way of introducing digital solutions to corporate clients.

The answer is to create an 'all-in-one, single sign-on digital platform' for corporate customers. The best-in-class banks are able to offer 80-90 products and services from such

Exhibit 3.2 | Banks at Different Levels of Digital Maturity



Source: BCG analysis.

a platform. Exhibit 3.3 shows some of the typical products and services offered on the all-in-one portal. The customer is sold the product and on-boarded onto it just once. All the legal, IT integration and training activities happen at one time. This leads to improved customer experience and reduced costs for the bank. The cross-sell revenue (or number of products per customer) multiplies.

Desktop / large screen portals with host-to-host ERP integration abilities will continue to be the primary digital offering from the corporate banks. This is necessitated due to the high volume and size of transactions, complexity of products, and the need to scan and load paper documents. In addition, banks following best practices augment their primary internet portal offering with optimized mobile offerings. Mobile interfaces are typically used for approvals, alerts and quick viewing of balances. Creating these desktop and mobile offerings will require exhaustive back-end IT and data management infrastructure to make the front-end functional and user friendly.

Digitally Enabled Relationship Management

Corporate banks are sustained by the effectiveness of their relationship managers. Relationship management is the backbone of the corporate bank. Even in the digital age, clients need the support and advice of the RMs to navigate the complexity of corporate transactions, deposits and lending. However, the nature of these interactions is continually evolving.

Traditional relationship teams work largely with manual, paper-based processes. They spend more time in servicing, rather than selling. Use of data to drive insights and generate leads is limited. Client segmentation and target-setting is very basic and primarily revenue driven; marketing activities are restricted to carpet bombing with generic messages and offers.

Digital allows a much more engaged and rich relationship management. End-to-end digital processes enable RMs to devote time to sales activities. Data-driven insights help them tailor their advice regarding specific customer

EXHIBIT 3.3 | Integrated Single Sign-on Corporate Internet Features

1 Account information	• Online statements • View and print transaction history • Intra-day balance • ...
2 Payments and collections	• Originate payments: ACH, domestic wire, XB wire • Create templates / multiple payments, including recurring, payments, bulk files (e.g. salary, tax) • Import / export payment files • ...
3 Alerts (SMS, email, in portal, in mobile app)	• Approvals • Statement available • Returned items • Fraud-related • Balance (above / below threshold) • Outstanding authorization • ...
4 MIS	• Customized reports and ability to save template • Ability to view data at summary or detail level • Commercial card expense reporting • ...
5 Support	• Basic online help and demos • Secure messaging • Comprehensive quick reference guides • ...

Source: BCG analysis.

needs, and generate cross-sell / up-sell opportunities. Mining of customer transaction data enables granular segmentation that allows for customer-specific marketing campaigns and offers.

Exhibit 3.4 shows four elements of the digitally enabled relationship management of corporate customers. Client-specific targets and offers are created by harnessing the power of peer group analysis. RMs are pinged with smart triggers in real time to improve the effectiveness of their outreach efforts. Mobile / tablet apps provide timely, optimized information to the RMs on the field. Supervisors are able to monitor and contact the RMs at the click of a button.

Clients can be segmented into peer groups on the basis of variables like revenue, sector, and geography. This results in 2,000-3,000 peer sets, with a reasonable sample size. An example is leather goods manufacturers with a certain turnover in Chennai. Pareto analysis of clients in a set helps derive the theoretical maximum potential of the group. The theoretical maximum is then normalized for achievability factors to establish the market potential of the group. This can be used to set targets for the peer group.

Triggers and alerts for 'smart sales' are delivered automatically to the RMs. The triggers are defined by the nature of the business; the data analytics team creates algorithms to deliver these triggers to the RMs. Transaction data like opening of inland LCs / BGs in favour of non-bank customers provides leads for the bank to acquire new customers. These leads are transmitted to the RMs located close to the beneficiaries of the LCs / BGs. Some types of transaction and peer group analyses provide leads to up-sell / cross-sell to current clients. Attrition control triggers like a sudden spike in outflow from the account are instantly delivered to the RMs. The RMs are also alerted about sales and service related issues, such as meeting a core client on schedule, or delayed turn-around time for a service request.

RMs are provided with mobile phones and / or tablets to increase their productivity. They are required to do a series of activities away

Exhibit 3.4 | Digitally Enabled Relationship Management

Revenue potential identified using the peer group CUBE analysis	• Revenue, sector and geography cuts results in 2,000-3,000 potential peer sets • Potential derived for each client in the peer group basis the highest performers
Smart triggers programmed and delivered automatically to RMs (email, in-app)	• New customer acquisition leads through transactions like inland LC / BG issuances • Upsell / cross-sell leads based on triggers like transactions in the account, peer group analysis
Easy to use mobile / tablet app for RMs	• Ability to update and add client meetings (no need for end of day CRM reporting) • 360 degree view of client at touch of a button in one screen shot
Digital monitoring—Mobile / tablet app for supervisors	• Activity report of each RM—input metrics, for example, number of leads, number of meetings • Outcomes report for each RM—review on the basis of numbers

Source: BCG analysis.

from the branch or office before, during and after their meetings with clients. Digital mobile solutions have come as a great blessing for the RMs. They can schedule meetings on the go, and do not have to get back to the office to update their desktop based CRM data. They can access basic information about the client's performance and outstanding issues on the mobile app. Pricing tools, next best offers, and client-specific alerts are available on the app itself to help the RM conduct more targeted and productive meetings.

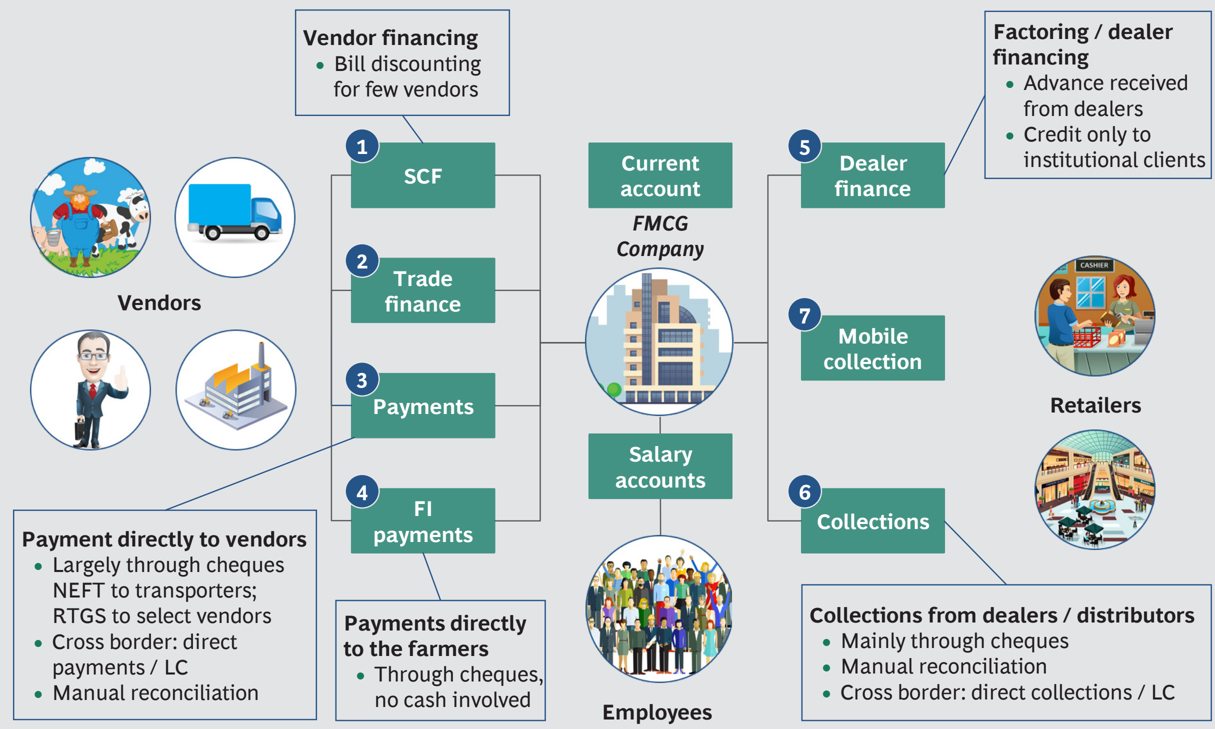
Supervisors are also provided with a simple mobile / tablet app to monitor the RMs. The activity report of each RM containing data such as the number of leads, number of meetings and the lead funnel, is available on the app. Supervisors can call the RM directly from the app itself and have a review discussion about their inputs and achievements.

End-to-end Value Chain Solutions

Most banks are organizationally structured to sell products. They have different teams to sell credit products, cash products, trade, treasury products, manage the supply chain, and so on. This arrangement works well in a growth environment where there is enough market demand to open new avenues and meet targets. However, this model quickly breaks down when the game shifts towards garnering a share of the wallet to grow profitably and efficiently. Garnering a share of the wallet requires cross-selling multiple products to the same customer. If the products are not integrated and if the outreach is not synchronized, the chances of success are limited. But banks that have created integrated solutions to address the end-to-end value chain and have digitally linked the whole experience have gained disproportionate market share in that value chain.

Exhibit 3.5 shows a simple value chain of the FMCG sector. Upstream in the value chain are numerous international and domestic vendors, and even financial inclusion vendors like milk suppliers and farmers. In the middle of the value chain is the FMCG company. Downstream there is a tiered distribution structure which culminates into end retailers. At each step in the value chain some informa-

EXHIBIT 3.5 | Digital End-to-end Sector-specific Value Chain Solutions Could Be Developed To Create Market Leadership In Niches



Sources: Client interviews; RM interviews; BCG analysis.

tion like bills and trade documents is exchanged; and some financial transaction like bill discounting and exchange of money takes place. In our interviews with FMCG companies, we found that all these commercial activities are carried out piecemeal by multiple banks and non-banks. In many cases a single bank would offer services at two or more places but in a disjointed manner with complete lack of synergy. The FMCG company and most players in the value chain have to deal with numerous manual paper flows and reconciliations to keep track of the invoices, payments, collections, remittances, credit, etc.

Few banks have looked at these problems end-to-end from the value chain perspective. Banks / non-banks that have created end-to-end digitally linked platforms for transacting across the value chain have generated significant efficiency in the system, created stickiness for their own products, garnered higher share of the wallet and established unassailable market position in niche sectors.

RE-IMAGINING HR PRACTICES IN A DIGITAL WORLD

"Alone we can do so little, together we can do so much."

— Helen Keller

THE COMMAND-AND-CONTROL STRUCTURES FOR managing a bank's human resources are structurally at odds with the agile, egalitarian, open, and real time world inhabited by its employees. This is forcing a fundamental re-think of the way the bank's HR practices should be considered.

Digital is Challenging all HR Practices and Mental Models

As shown in Exhibit 4.1, digital is reshaping every aspect of humanity itself—relationships, commerce, privacy, and social interactions to name a few. This change is influencing the dynamics at the workplace as well. Employees who are used to instant communication through chat platforms in their personal lives are still expected to send and read 'memos' and 'circulars' to communicate in the workplace.

Industrialized organizational structures relying on command-and-control alone are not adequate to deal with this fundamental shift. It is important to understand the fundamental change in the mindset of employees to understand the underpinnings of the new HR practices, as shown in Exhibit 4.2. The following are the main issues that merit consideration:

- From 'the boss is always right' to 'servant leaders'. From a mindset that the boss's experience and seniority will determine the course of an organization, the new world requires seniors to recognize that empirical validation is more important than experience alone. Hence the main role of the leader is to cast a team that is suited for the task at hand and then actively work to eliminate any bottlenecks that may come in the way of the team.

- From 'job stability' to 'challenge' and 'autonomy'. In the traditional world, employees sought lifelong employment and job stability. The banks, too, valued 'lifers'. In the modern digital world, the Millennials seek challenge and autonomy rather than stability. One study reveals that they are likely to change several jobs and even careers in the course of their lives. There are companies that encourage employees to quit instead of ring-fencing the lifers.

- From 'departments' to 'squads'. Traditional banks are structured around silos or departments. These silos create collaboration barriers as alignment of goals is within the department and not across departments. In the modern world, it is absolutely critical that all departments collaborate with each other to bring the best value proposition to the market in the fastest possible manner. Hence in modern

EXHIBIT 4.1 | Humanity is Changing: Interactions, Friendships, Relations, Commerce, Privacy...

Google — INFORMATION
+2 million search queries per minute
Page views on Google per day: **7 billion page views**

Flickr — PRIVACY
3,000 Photo uploads per minute

Twitter — INTERACTIONS
Tweets sent per minute: **100,000 tweet**

YouTube — ENTERTAINMENT
30 hours of video uploaded
1.3 million video views

Email — COMMUNICATION
204 million Emails sent per minute

Amazon — COMMERCE
Orders from Amazon per day: **9 million products**

Credit card — COMMERCE
165 million card transactions in the Eurozone **per day**

Growth chart — INFORMATION
Annual data growth rate: 60%

90% of the stored data in the world today has been created in just the past two years

Data can be stored much **more cheaply** (~10-15x cost reduction in 3 years[1]) and can be processed more quickly for **less money** (~50x reduction in cost of sequencing genome in 3 years)

Industrialized organizational models are not adequate

Sources: Gartner, BCG analysis.
[1]Storing 1 tera byte of data in 2010 cost ~€10,000 per annum compared to less than €1,000 in 2013.

EXHIBIT 4.2 | New Mental Models are Emerging to Engage a Modern Organization

Old mental model	New mental model
"Boss decides"—command and control • Experience is the primary guiding compass • Judgement and hierarchies count	**"Servant leaders"** • 'Empirical validation' more important • Test and fail fast mentality
People want **"job stability"** Organization values **"lifers"** Lateral recruitment hurts in-house talent	People want **"challenge and autonomy"** Millennials likely to change **many jobs and careers in their life** Incent new employees to quit **: $1,000 quitting bonus**
Silos and departments: collaboration leads to "division of credit"	New agile terms—**Squads, Tribes, Chapters** • Success requires business managers, programmers, statisticians...to talk in the same language
New recruits should **"earn their stripes"**	Welcome new recruits with a **"floor dance"!**
HR is the power center, cost center... • HR will worry about recruiting, training, staffing, promotions, attrition (voluntary / involuntary)... • HR controls 'people costs'	HR has to be an **internal service provider** HR has to drive agility, efficiency, culture
...many others...	**...many others...**

Sources: Press search; Expert discussions.

organizations, the notion of 'department' has been replaced with 'squad', 'tribe', 'chapter' and 'guild'. Squads are cross functional teams of six to eight people having a requisite skill set—for example, product, marketing, finance, operations, HR, IT, user interface design, etc.—that come together to achieve a purpose. For example, there can be a squad created with the purpose of building the best search functionality on a mobile app. Banks need to differentiate between the elements of their organization that 'run the bank' versus those that 'change the bank'. 'Change the bank' teams typically work in project mode and benefit most from agile organizational structures.

Big Data in HR

Global digital champions are using data and analytics aggressively to manage people practices better. As shown in Exhibit 4.3, there are six areas where application of big data is important in HR.

Real time experimentation can be used to evaluate the impact of the reward and recognition mechanism on employee happiness. For example, progressive companies have used data to study whether their employees react better to incremental but frequent versus substantial but (relatively) long drawn career progression.

Big data is being deployed to identify employees who risk attrition based on behavioural parameters—for example, sentiment analysis based on proxy variables. Early detection of 'at risk' employees helps organizations take proactive measures to prevent regrettable attrition. Over the long term, this also helps organizations make structural changes based on consolidated patterns.

Further, analytical algorithms are being used for scenario analysis to paint different 'what if' scenarios of people management situations. For example, 'what if competition poaches all the top talent involved in the mobile application development from our organization?'

Analytics is also being used to identify variables that best predict the success of new recruits. For entry level as well as lateral roles, this kind of analytics is critical. Fundamentally, organizations test candidates on cognitive, communication, behavioural / people and

Exhibit 4.3 | Learnings From Companies at The Leading Edged

Data-driven people management—6 key data-driven processes

1	**The experimentation advantage**	• Experiments determined the most effective approaches for managing people and maintaining a productive environment (including the type of reward that makes employees the happiest)
2	**A retention algorithm**	• Mathematical algorithm proactively and successfully predicts which employees are most likely to become a retention problem
3	**Predictive modeling**	• Use predictive models and "what if" analysis to continually improve forecasts of upcoming people management problems and opportunities
4	**An effective hiring algorithm**	• Predicting which candidates had the highest probability of succeeding after they are hired
5	**Calculating the value of top performers**	• Calculate the performance differential between an exceptional technologist and an average one (as much as 300 times higher)
6	**It doesn't dictate; it convinces with data** (culture)	• HR acts as internal consultants and influences people to change based on the powerful data and the action recommendations that they present; it uses data to change preset opinions and influence

Sources: Press search; BCG analysis.

technical skills. It is possible to use advanced analytical tools to award scores against these parameters and thereby enhance both the effectiveness and efficiency of recruiting. Further, digital tools also allow an organization to tap into social talent platforms to identify and source talent.

Compensation and rewards for performance are becoming much more data-backed as analytical tools are deployed to ascribe an economic value to an individual's performance. For example, technology companies are using data to establish the economic benefit brought by hiring an exceptional instead of an average technologist.

Finally, data and analytics are changing the culture of HR. From a mindset of dictating policies, the HR departments of progressive organizations are using facts and analyses to shape the organization's culture.

Five Point Digital HR Agenda for Indian Banks

As Indian banks embark on digital HR practices, they have a five point agenda as shown in Exhibit 4.4.

1. Leadership. The digital agenda has to be CEO-driven. Digital is central to the future of banks. Hence ownership of the digital agenda cannot be diffused across different organizational units. As an illustration, an Australian bank conducted a digital 'road show' to increase the awareness of key leadership and thereby drive ownership of digital at the C-suite level.

2. Organization design. Disruptive digital initiatives need cross functional collaboration—both for creating new ideas as well as transmitting and absorbing them into business-as-usual. This is very difficult to achieve in traditional departmental silos. Hence banks have to create new overlays between technology and business.

3. Talent management. Talent management practices in terms of attracting, recruiting, and developing talent needs to be completely overhauled. As mentioned earlier, banks need to use big data and digital tools aggressively to develop completely digitized, streamlined and modern talent management processes. Further, these innovations need to be done on a large scale and not in small pockets for the full impact to come through.

Exhibit 4.4 | Five Organizational Levers to Win in a Digital World

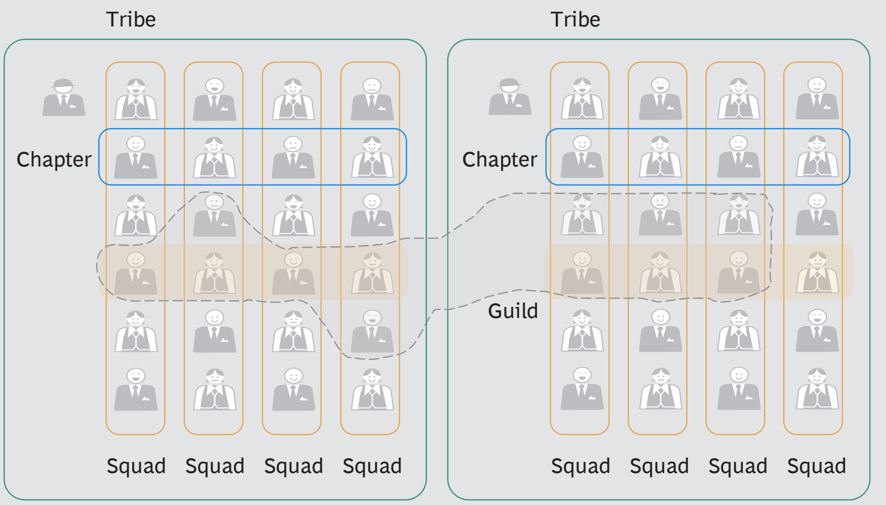
Leadership	• **Ownership of the digital agenda** is often unclear or diffuse, as well as, the digital vision itself (for example, role of CEO, board, CEO's leadership team); digital capabilities lacking
Organization design	• New structures and governance models needed to drive **collaboration** (for example, between IT and business, across functions, across business segments), **commercialization** of ideas (for example, embedded / core to central BU / product strategy)
Talent	• **New roles** (for example, product owner), **new skills** (for example, human-centered design) and **different ways of working** (for example, agile product development) must be established and integrated • **A talent ecosystem** (for example, build, buy, borrow) must be built at scale (for example; mid office, back office etc.) and while carefully assessing the digital competencies of existing talent base
Culture	• New culture must be nurtured to support the **digital mindset** (for example, tolerance for risk / agility / customer-centricity) and to retain digital talent (for example; digital employee value proposition)
Agile ways of working	• **Agile operating model** (for example, work configured in 7-8 member squads, tribes, guilds and chapters)

Source: BCG analysis.

EXHIBIT 4.5 | Agile Ways of Working: How to Make It Happen?

Case study—organizing for agility

Organize team structure based on agile principle and build agile organizations



Tribes
(120-150 people)
- Collection of squads
- To solve a specific business problem
- Share learnings

Squads
(6-8 member)
- Agile team
- Mini start-up
- Self organizing
- Squads by specialty

Chapters
- Similar competences
- Focus on personal development

Guilds
- Interest group
- Everybody can join

Source: BCG analysis.

4. Culture. A digital culture is one of agility, experimentation and customer-centricity. This culture has to be furthered within the organization. Teams and individuals have to be incentivized to innovate and experiment. Experimentation should not be seen as a discretionary spend but rather as a core strategic lever to identify pockets of disruptive opportunity ahead of the competition.

5. Agile ways of working. As mentioned earlier, banks need to distinguish between 'run the bank' and 'change the bank' teams. The 'change the bank' team needs to be structured in an agile manner as shown in Exhibit 4.5. The central unit of work is a squad with six to eight members, focussed on a common purpose. Fifteen to twenty squads come together to create a tribe. Tribes can be thematic, for example, a mobile banking tribe. Each squad within the tribe can focus on elements of the theme, for example, search functionality. Guilds are interest groups that comprise a mix of various tribes and squads. Chapters are overlays across tribes and squads with common functional themes, for example, marketing, finance etc. Squads work on their feet, in a non-rigid formation, to create new capability, test out new products empirically and deploy them on scale in quick time. Each squad can be dissolved after its purpose is achieved and a new squad constituted for the next purpose. In BCG's experience, global banks that have gone down this path have seen 40-60 percent productivity enhancement in a short period of time

CONCLUSION: The way people operate today is fundamentally different from the way they did a few years ago. Indian banks need to recognize this reality and reflect it in their operation and organizational structure. Leading global mainstream players—both banks and non-banks—have adapted their HR practices to reflect the modern organization and have witnessed huge gains in both people engagement as well as economic value addition. Indian banks need to learn quickly and adapt, in order to stay in tune with the times.

SUGGESTIONS FOR THE RBI AND THE GOVERNMENT

"The world is changing very fast. Big will not beat small anymore. It will be the fast beating the slow."

— *Rupert Murdoch*

India needs a vibrant, profitable and sustainable banking industry with a deep and wide reach. Banking has justifiably been a focus of Government policy. The Reserve Bank of India's (RBI's) policy stance has been proactive in nudging the industry towards innovative practices and business models. The journey has only just begun and there are a number of issues of regulatory policy and Government action that can push the frontiers of inclusion and quality in Indian banking.

- Electronic marketplaces are a natural extension of the banking business. Banks have traditionally supported trade by establishing trust in a market of buyers and sellers. Electronic marketplaces are a digital version of the same idea. The constraint of limiting bank ownership to only 30 percent should be reconsidered. The Financial Holding Company (FHC) model should be re-evaluated in this context. Banks and marketplaces could be independent subsidiaries of the same FHC. There is also the issue of regulatory arbitrage between banks and payment banks. Payment banks are allowed to be promoted and owned 100 percent by corporate houses, which can also have marketplaces to conduct business in the group. This is disadvantageous to banks.

- After the encouraging success of the Jan Dhan campaign for inclusion of the masses in the deposit business, similar bold measures are needed on the credit side. Inclusion of the masses in credit is much trickier than in deposit, due to the risk of bad debt. Given that the vast majority of the working population in India is engaged in the unorganized sector, it is unlikely that we will have reliable income information about them at any time in the near future. This severely hampers the provision of credit. We are now seeing the emergence of technology entities that try to evaluate risk by analysing surrogate data regarding payments made by individuals and small businesses. The policy architecture needs to be amended to facilitate the availability of payment data of individuals and small businesses (with their permission) to potential digital lenders. These could include data on utility bill payments, etc. Defaults on utility bills should also be included in the credit information bureau data.

- Regulatory framework needs to evolve in the light of trends in digital banking.

  - Innovation is the key word in light of the disruption created by technology trends. Regulation needs to encourage banks to innovate. Macro level constraints encourage creativity and innovation. Very detailed micro constraints lead to stifling of innovation.

  - RBI should re-evaluate the merit of continuing to use the branch as an instrument of regulation. Instead, with the spread of Aadhar, it is possible to regulate on the basis of customers. For example, the focus could be on 'how many customers of a particular type can be financed?' instead of 'how many branches a bank has in a particular area?'

- Sustainable inclusion requires that last mile costs be dramatically reduced. The core issue to resolve is cash. We need to attack cash at its primary origin point, i.e. at the merchant point of sale. We need to incentivise merchants and customers to use an electronic mode of payment at the point of sale.

  - The scheme of charges and payments between issuer, acquirer, merchant, and the network provider should be re-looked at for debit cards and similar products like mobile wallets. The scheme should reasonably compensate the acquirer for terminalization. It should not disincentivize the merchant from accepting electronic payment instead of cash. The scheme for ATM payments in India is very successful. We should replicate the success of ATMs in the debit card space.

  - Tax benefit for electronic payment at the merchant POS is a very powerful idea and should be implemented and monitored.

- Various elements of the value chain in banking are in the domain of state governments. The process of registration of mortgage or hypothecation of auto loans are physical steps that require wet signatures and visits to various government offices. This system needs to be re-engineered to permit electronic workflow. Similarly, the process of title search or hypothecation search needs to be made purely electronic with digitization of records and their availability online.

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 11 forms, which were filled up by each of the participating banks:

- *Form 01:* Head 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:* IT Expenditure
- *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 and Call Centre Metrics

Methodology of Research

The survey was filled by 34 banks (10 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 2014, in FIBAC 2013 and in FIBAC 2011. Wherever possible, a comparison between the values in 2011, in 2013 and in 2014 has been shown to give the readers an idea of the movement in the productivity metrics across bank categories in the last few years.

Participating Banks (as shown in Table 1)

34 banks customers participated in the survey:

- 5 Private New banks
- 5 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	Federal Bank	**Private Old**
7	Jammu and Kashmir Bank	
8	Karnataka Bank	
9	Karur Vysya Bank	
10	South Indian Bank	
11	Bank of Baroda	**PSU Large**
12	Bank of India	
13	Canara Bank	
14	Punjab National Bank	
15	State Bank of India	
16	Union Bank of India	
17	Allahabad Bank	**PSU Medium**
18	Andhra Bank	
19	Bank of Maharashtra	
20	Central Bank of India	
21	Corporation Bank	
22	Dena Bank	
23	IDBI Bank	
24	Indian Bank	
25	Indian Overseas Bank	
26	Oriental Bank of Commerce	
27	Punjab & Sind Bank	
28	State Bank of Bikaner and Jaipur	
29	State Bank of Hyderabad	
30	State Bank of Mysore	
31	State Bank of Travancore	
32	Syndicate Bank	
33	UCO Bank	
34	Vijaya Bank	

Introduction to Digital Customer Research

India is on the threshold of a digital revolution with the internet penetration increasing exponentially. However, banks have been unable to convert these customers into digital bankers. The aim of the digital banking customer survey was to understand the barriers that customers are facing while adopting digital channel.

The survey was carried out in two parts: qualitative—involving 20 focus group discussions and 15 in depth interviews, and quantitative—consisting of a survey of 3,648 customers across all tiers, demographics and age groups.

The respondents were divided into three categories as follows:

- Digital bankers: Customers who have carried on a financial / non-financial transaction on the internet through either wide-screen or mobile devices in the last six months
- Internet banking customers not using digital banking: Customers who are active on the internet but have not carried out internet / mobile app based banking in the last six months
- Jan Dhan customers: Customers who have opened a Basic Savings Bank Deposit (BSBD) account under the Prime Minister's Jan Dhan Scheme

The survey was designed to look at the following major themes:

- Current customer satisfaction with banks: This section focused on the major customer pain points with branch based banking
- Current digital banking behavior: Survey explored the major barriers and reasons for adoption of digital banking
- Mapping digital banking needs: A deep dive was performed on the services and channels customers currently use for digital
- Customer perception of bank versus non-bank apps: Survey explored why customers were ready to use smart-phones for e-commerce but not digital banking
- Current customer need and new ecosystem: Deep dive on new services / ecosystems which banks can provide based on customer need
- Mobile wallet: Survey explored the awareness and usage of mobile wallets and whether customers would be ready to adopt the same as payment banks in future
- Recently banked (Jan Dhan Scheme, etc.) perspective: Survey explored banking needs of this customer segment and their ability to adopt digital banking channels

Table 2 provides a snapshot of respondents.

TABLE 2: PARTICIPATING CUSTOMERS BY CATEGORIES

By type	
Digital bankers	1,572
Internet banking customers not using digital banking	1,000
Jan Dhan customers	1,076
N	**3,648**

By income	
Affluent+	620
Aspirers	2,189
Next Billion	693
Strugglers	146
N	**3,648**

By age	
18-25	1,094
26-35	1,496
36-45	803
46-55	255
N	**3,648**

By tier	
Tier 1	1,204
Tier 2	1,386
Tier 3 / 4	511
Rural	547
N	**3,648**

GLOSSARY

ABBREVIATIONS	
ACH	Automated clearing house
ADI	Authorized deposit-taking institutes
APCA	Australia Payments Clearing Association
App.	Application
ATM	Automated teller machine
B2B	Business-to-business
B2C	Business-to-consumer
BC	Business correspondent
BG	Bank guarantee
BPS	Basis points
BSBD	Basic savings bank deposit
C2C	Consumer-to-consumer
CCI	Centre for Customer Insights
CEO	Chief executive officer
CMS	Cash management system
CRM	Customer relationship management
ERP	Enterprise resource planning
FI	Financial institutions
FMCG	Fast-moving consumer goods
FY	Fiscal year
GNPA	Gross non-performing assets (as per RBI definition)
HR	Human resources
IAMAI	Internet & Mobile Association of India
IBA	Indian Banks' Association
IMPS	Immediate payment service
INR	Indian rupee
ISO	International Organization for Standardization
IT	Information technology
LC	Letter of credit
MIS	Management information system
MSME	Micro, small and medium enterprises (as per RBI definition)
NEFT	National electronic fund transfer

ABBREVIATIONS	
NPA	Non-performing assets (as per RBI definition)
NPCI	National Payments Corporation of India
NPP	New Payments Platform
P2P	Peer-to-peer
POS	Point of sale
PSU	Public sector unit
RTGS	Real time gross settlement
SCF	Supply chain finance
SME	Small and medium-sized enterprises
UPI	Unified Payments Interface
USD	US dollar
vs.	Versus
WOS	Wholly owned subsidiary

TERMS	DEFINITIONS
Active debit cards	Debit cards with at least one customer initiated transaction over the past six months
Deposits	Includes savings account, current account, individual fixed deposit, recurring deposit, non-individual term deposit, corporate deposits, interbank deposit and any other deposit
GNPA	Gross non-performing assets as a percentage of gross advances outstanding for the corresponding fiscal year
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
Financial transactions	Only transactions that include a debit or a credit to a customer account

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NOTE TO THE READER

About the Authors

Saurabh Tripathi is a Partner & Director in the Mumbai office of the Boston Consulting Group. Bharat Poddar is a Partner & Director in the Mumbai office of the Boston Consulting Group. Yashraj Erande is a Partner & Director in the Mumbai office of the Boston Consulting Group. Sreyssha George is a Principal in the Mumbai office of the Boston Consulting Group. Abhinav Bansal is a Project leader in the New Delhi office of the Boston Consulting group.

For Further Contact

If you would like to discuss the themes and content of this report, please contact:

Alpesh Shah
Senior Partner & Director
BCG Mumbai
+91 22 6749 7163
shah.alpesh@bcg.com

Ashish Garg
Partner & Director
BCG New Delhi
+91 124 459 7123
garg.ashish@bcg.com

Ashish Iyer
Senior Partner & Director
BCG Mumbai
+91 22 6749 7249
iyer.ashish@bcg.com

Bharat Poddar
Partner & Director
BCG Mumbai
+91 22 6749 7145
poddar.bharat@bcg.com

Neeraj Aggarwal
Senior Partner & Director
BCG New Delhi
+91 22 124 459 7078
aggarwal.neeraj@bcg.com

Pranay Mehrotra
Partner & Director
BCG Mumbai
+91 22 6749 7143
mehrotra.pranay@bcg.com

Ruchin Goyal
Partner & Director
BCG Mumbai
+91 22 6749 7147
goyal.ruchin@bcg.com

Saurabh Tripathi
Partner & Director
BCG Mumbai
+91 22 6749 7013
tripathi.saurabh@bcg.com

Yashraj Erande
Partner & Director
BCG Mumbai
+91 22 6749 7194
erande.yashraj@bcg.com

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Mr. Eqbal Manoj
Federal Bank

Ms. Nimisha Verma
HDFC Bank

Mr. Laxminarayan Achar
ICICI Bank

Mr. R. K. Sonawane
IDBI Bank

Mr. Vipon Malhotra
Indian Bank

Mr. K. V. Krishnan
Indian Overseas Bank

Mr. Syed Aadil Bashir
Jammu and Kashmir Bank

Mr. Anantha Padmanabha
Karnataka Bank

Mr. Dharmarajan
Karur Vysya Bank

Ms. Prashant Agarwal
Kotak Mahindra Bank

Mr. Deepak Singh
Oriental Bank of Commerce

Mr. Sanjeev Mehta
Punjab & Sind Bank

Mr. R. K. Anand
Punjab National Bank

Mr. Mohanan K.
South Indian Bank

Mr. M. K. Mohindroo
State Bank of Bikaner and Jaipur

Mr. Narayanan B.
State Bank of Hyderabad

Mr. Pawan Kumar
State Bank of India

Mr. S. Shivaswamy
State Bank of Mysore

Mr. Suresh Babu A. V.
State Bank of Travancore

Mr. A. C. Shankara
Syndicate Bank

Mr. M. V. Narasimha Rao
UCO Bank

Mr. Kundan Lal
Union Bank of India

Mr. T. M. Sooraj
Vijaya Bank

Mr. Hemendra Chanchlani
Yes Bank

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The Boston Consulting Group (India) Private Limited.
Nariman Bhavan
14th Floor
Nariman Point
Mumbai 400 021
India

Please contact FICCI at:
E-mail: apoorv.srivastava@ficci.com • Website: www.ficci.com
Fax: +91 11 2332 0714 — 2372 1504
Tel: +91 11 2348 7424 (D)
Mail: Mr. Apoorv Srivastava
Financial Services
Federation of Indian Chambers of Commerce & Industry
Federation House
1, Tansen Marg
New Delhi 110 001
India

Please contact IBA at:
E-mail: vijaya@iba.org.in • Website: www.iba.org.in
Fax: +91 22 2218 4222
Tel: +91 22 2217 4018
Mail: Mrs. Vijaya Tirodkar
Indian Banks' Association
Corporate Communications, Centre 1
6th Floor, World Trade Centre,
Cuffe Parade
Mumbai 400 005
India

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