Providing Financial Services to SMEs in an Increasingly Digital Ecosystem

August 2018
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Indian Banks’ Association (IBA) the only advisory body for banks in India, was set up in 1946 as an association to discuss vital issues of Banks. The onward journey of IBA has been progressive and enriched by the development of India’s banking sector since independence. Having bestowed with the status of the “torch bearer” for the banking industry, IBA has initiated several path breaking policies during the last seven decades which have eventually transformed the banking sector. Over a period of time IBA has evolved as the “Voice of the Indian Banking Industry”. At present IBA has 248 Members, 144 Ordinary Members comprising Public, Private, Foreign and Cooperative Banks and 104 financial institutions and Banking related organizations as Associate Members.
ANNUAL FIBAC PRODUCTIVITY REPORT ON THE INDIAN BANKING INDUSTRY, 2018

PROVIDING FINANCIAL SERVICES TO SMEs IN AN INCREASINGLY DIGITAL ECOSYSTEM

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AUGUST 2018 | THE BOSTON CONSULTING GROUP
“Behind every small business, there's a story worth knowing”

– Paul Ryan
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EXECUTIVE SUMMARY

The past decade has seen the Indian banking industry starting to undergo a transformation like it has never seen before. The rate of change in the industry continues to increase every passing year, with changes in the competitive landscape as well as the customer segments. There is rising competition from the new-age, more agile and technologically advanced fin-techs and NBFCs, while the banking industry continues to struggle with the problem of bad loans, which exerts a strain on the adequacy of capital of the banks. The market, however, continues to expand, with more and more new-to-credit customers entering the formal financial system, both retail as well as small businesses. This has opened up a plethora of opportunities for lenders. The economy is also showing signs of turning around in terms of credit growth, with advances having grown at nine percent in financial year 2017-18 compared to four percent in financial year 2016-17.

Thirty-four major banks in India participated in this year’s edition of the FIBAC survey, which covered a wide spectrum of themes like digital adoption, transaction profile, business metrics and organisational design. The BCG Retail Banking Excellence Survey (REBEX) was also conducted in India to help draw insights about the preference and behaviour of digital banking consumers and compare Indian consumers with those in fifteen other countries. Using insights from the extensive surveys that have been conducted in the recent times, the FIBAC report seeks to answer questions like - How have banks performed vis-à-vis peers in the recent years? What do they need to do in order to take the next leap? How can banks ensure that they maintain a healthy asset book? What do the different customer segments look for in a bank?

As per World Bank statistics, eighty percent of India is now financially included. This number was just thirty five percent in financial year 2010-11. Fuelled by demonetization, financial year 2016-17 saw a steep rise in deposits in bank accounts. The resulting uptick in digital adoption, albeit not entirely sustainable, saw the economy taking a step in the right direction. The growth in transactions at point-of-sale terminals continued in financial year 2017-18, and these transactions have almost tripled in the last two years. The rising smartphone and internet penetration, combined with the rising ‘e-literacy’ has set the tone for India to move from branch banking to electronic banking channels like mobile banking and internet banking. Transactions through these digital channels have grown by forty-eight percent in financial year 2016-17, whereas branch-based and ATM transactions have de-grown by eleven percent and five percent respectively. Southern and Eastern states in India are leading the way in the penetration of internet banking and mobile banking. Banks still need to work towards digitizing the end-to-end customer journeys, right from sourcing customers, to underwriting, disbursement and servicing.

The retail banking landscape in India is primed for change. Millennials are entering the workforce, and their preferences and behaviour are quite different from generation X customers. The retail consumer is becoming savvier by the hour, and is opening up to technology, digital channels as well as secondary banking products like mutual funds, insurance and credit cards in a large way. It is interesting to note that although digital adoption is rising, more than eighty percent of the people are still hybrid channel consumers, which means that they frequently use both branches as well as digital channels for transactions. The advice and guidance provided by relationship managers and branch staff continues to play a significant role in the deepening of banking relationships with consumers. Further, next generation consumers are willing to put their money not just in their bank accounts, but are also increasingly willing to invest in the capital markets. This opens up opportunities for banks to cross sell other products like mutual funds to these customers. This is evident from the strong growth in fee income, led by an impressive growth of nineteen percent in commissions from distribution of third party products in financial year 2017-18. Being cognizant of these trends can help increase the stickiness and lifetime value of a customer. Products, service, pricing and channels are the most important things that affect the decisions of customers to join, stay with or leave a bank. Action on these levers will separate the wheat from the chaff.
Another segment with huge untapped potential is the hitherto under-served MSME segment. Currently, in India, out of the total formal credit of around Rs. 100 lakh crores, only twenty-five percent is extended to MSMEs. Spurred by the introduction of the Goods and Services tax (GST), small businesses are increasingly getting formalized as well as digitised. The percentage of MSMEs using digital channels has increased from forty-one percent before the introduction of GST to forty-seven percent after GST. MSME lending in the economy is at an inflection point, and can be the next engine of credit growth. Currently, digital lending accounts for only four percent of total MSME lending. However, it is expected to rise to twenty-one percent over the next five years. This significant jump will close the gap with digital retail lending, which is expected to reach around forty-eight percent of total retail lending in five years. With a high degree of variability in the quality of assets in the MSME segment and the small ticket size of advances, success in this market will belong to players who have the resources and capabilities for reliable credit underwriting, and a comparative cost advantage through end-to-end digitisation. The advent of advanced analytics along with the ever-increasing data sources can help build models for robust credit decisioning for this segment, solving one of the most crucial roadblocks in lending to this segment.

It is an exciting time in the Indian banking industry, and the future of the incumbents in the industry will be determined by how they perform on the four key levers to take the next step – one, upping the ante on managing credit risk through robust credit underwriting, combined with pro-actively setting up early warning systems for potential default and streamlining their collections and recovery practices; two, building capabilities to adapt to the changing trends and embracing newer digital channels to reach customers; three, purposefully pursuing the growing customer segments like MSMEs and carving out their share in the ever-growing profit pie; and four, pre-empting and meeting the changing needs of their retail customers, who present massive growth potential. Banks must take resolute steps to mitigate potential risks and threats, and identify and leverage opportunities in order to be able to play their role in weaving the financial fabric of the nation.
State of the Indian Banking Industry
34 participating banks across four segments
In alphabetical order

<table>
<thead>
<tr>
<th>PSU – Large (6 banks)</th>
<th>PSU – Medium (15 banks)</th>
<th>Private – New (5 banks)</th>
<th>Private – Old (8 banks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank of Baroda</td>
<td>Allahabad Bank</td>
<td>Axis Bank</td>
<td>Catholic Syrian Bank</td>
</tr>
<tr>
<td>Bank of India</td>
<td>Andhra Bank</td>
<td>HDFC Bank</td>
<td>City Union Bank</td>
</tr>
<tr>
<td>Canara Bank</td>
<td>Bank of Maharashtra</td>
<td>ICICI Bank</td>
<td>Federal Bank</td>
</tr>
<tr>
<td>Punjab National Bank</td>
<td>Central Bank of India</td>
<td>IDFC Bank</td>
<td>Jammu &amp; Kashmir Bank</td>
</tr>
<tr>
<td>State Bank of India</td>
<td>Corporation Bank</td>
<td>Kotak Mahindra Bank</td>
<td>Karnataka Bank</td>
</tr>
<tr>
<td>Union Bank of India</td>
<td>Dena Bank</td>
<td></td>
<td>Karur Vysya Bank</td>
</tr>
<tr>
<td></td>
<td>IDBI Bank</td>
<td></td>
<td>Lakshmi Vilas Bank</td>
</tr>
<tr>
<td></td>
<td>Indian Bank</td>
<td></td>
<td>South Indian Bank</td>
</tr>
<tr>
<td></td>
<td>Indian Overseas Bank</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Oriental Bank of Commerce</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Punjab &amp; Sind Bank</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Syndicate Bank</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>UCO Bank</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>United Bank of India</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vijaya Bank</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Revenue pool: Indian banking revenue pool at Rs 7.2 lakh crores, growth led by fee income

FY18 revenue pools – Revenue of Rs. 7.2 lakh crores

<table>
<thead>
<tr>
<th>Category</th>
<th>Year-on-Year growth %</th>
<th>FY18 (E)</th>
<th>Change from FY17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deposits income (E)</td>
<td>+7%</td>
<td>1.82</td>
<td>+4%</td>
</tr>
<tr>
<td>Advances income (E)</td>
<td>+7%</td>
<td>2.77</td>
<td>+8%</td>
</tr>
<tr>
<td>Fee income (E)</td>
<td>+14%</td>
<td>1.73</td>
<td>+15%</td>
</tr>
<tr>
<td>Other income (E)</td>
<td>-7%</td>
<td>0.87</td>
<td>+3%</td>
</tr>
</tbody>
</table>

- **Slowdown in deposits growth driven by stagnating term deposits and base effect post demonetization**
- **Corporate lending revenue declined by 3% as NPAs saw an increase of ~4%**
- **Fee income continued robust growth while other income declined due to trading losses incurred by banks**

#### Notes:
- Revenue pool for deposits and advances measured as Net Interest Income (NII).
- Please note the revenue pools may reflect growth and share figures that are different vis-à-vis volume growth and share figures. The same is driven by (a) segment margins as well as (b) Gross NPAs (given no income is earned on such assets while interest cost continue to be incurred). A transfer price basis Indian Government’s long term bond yield has been used to measure revenue for deposits and cost of funds for advances.
- The revenue pool includes revenue of all banks as well as NBFCs

#### Source:
- RBI, Annual reports, Investor Presentations; BCG analysis

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**E = Estimated.**

1. **CEB** refers to commission, exchange and brokerage – includes retail charges, processing fee on advances, card fees but does not include fee earned on distribution of 3rd party products like insurance and mutual fund.
2. **IB** refers to investment banking and includes revenues from ECM – Equity Capital Market dealings; DCM refers to debt capital markets.
3. Miscellaneous income includes recovery from written off assets.
4. Category refers to the category of income in the revenue pool. Deposits income, advances income, fee income and other income are the four categories.
Deposits: Slowdown in growth in FY18; Savings account balances continue to outgrow current account balances

Composition of total deposits (FY18) (%)

<table>
<thead>
<tr>
<th>Industry</th>
<th>Savings</th>
<th>Current</th>
<th>Term deposits</th>
<th>Total deposits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSU-Large</td>
<td>8%</td>
<td>1%</td>
<td>2%</td>
<td>4%</td>
</tr>
<tr>
<td>PSU-Medium</td>
<td>7%</td>
<td>-4%</td>
<td>-1%</td>
<td>1%</td>
</tr>
<tr>
<td>Private-New</td>
<td>20%</td>
<td>17%</td>
<td>18%</td>
<td>17%</td>
</tr>
<tr>
<td>Private-Old</td>
<td>11%</td>
<td>9%</td>
<td>8%</td>
<td>9%</td>
</tr>
</tbody>
</table>

Growth in deposits (%)

<table>
<thead>
<tr>
<th>FY18 over FY17</th>
<th>FY17 over FY16</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSU-Large</td>
<td>8%</td>
</tr>
<tr>
<td>PSU-Medium</td>
<td>7%</td>
</tr>
<tr>
<td>Private-New</td>
<td>20%</td>
</tr>
<tr>
<td>Private-Old</td>
<td>11%</td>
</tr>
<tr>
<td>Total deposits</td>
<td>17%</td>
</tr>
</tbody>
</table>

Note: 1. Data of 6 PSU - Large banks, 9 PSU - Medium banks, 4 Private - New banks and 5 Private - Old banks included for the purpose of this analysis
Source: RBI Data, FIBAC Productivity Survey 2018; BCG analysis

1. Term deposits include Retail term deposits (< Rs. 1 Cr), Bulk term deposits and CDs (> Rs. 1 Cr), Interbank deposits and Retail recurring deposits

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Low-cost deposits: Metros driving current account balances growth; Rural driving savings account growth

Current account balances in FY18 (Rs. ‘000 crores)

- Metros have the largest share and growth rate in current account balances. However, marked fall seen in current account balances across urban and semi-urban locations.

Savings account balances in FY18 (Rs. ‘000 crores)

- Robust growth in savings account balances continued in rural locations with 15%+ growth in the last two years.

Source: RBI Data, Annual Reports, Investor Presentations; BCG analysis
Current accounts: After recording 17% growth post demonetization, growth in balances slowed down to 7%

Composition of current account balances in FY18
(Rs. ‘000 crores)

<table>
<thead>
<tr>
<th>Segment</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual</td>
<td>862</td>
<td>1,007</td>
<td>1,076</td>
</tr>
<tr>
<td>Corporate</td>
<td>515</td>
<td>590</td>
<td>636</td>
</tr>
<tr>
<td>MSME</td>
<td>254</td>
<td>306</td>
<td>328</td>
</tr>
</tbody>
</table>

1. Individuals include sole proprietors, partnership firms, trusts, HUFs, societies, association of persons, body of individuals, artificial juridical persons and such specified persons who do not fall under the definition of corporates or MSMEs.
2. Corporates include corporate entities not falling under the definition of MSME.
3. Definition of Micro, Small and Medium:
   - Manufacturing sector:
     - Micro: investment in plant and machinery (<inv>) < = Rs. 25 lacs,
     - Small: 25 lacs < inv < = Rs. 5 crores,
     - Medium: Rs. 5 crores < inv < = Rs. 10 crores;
   - Service sector:
     - Micro: inv < = Rs. 10 lacs,
     - Small: Rs. 10 lacs < inv < = Rs. 2 crores,
     - Medium: Rs. 2 crores < inv < = Rs. 5 crores.

Source: RBI Data, FIBAC Productivity Survey 2018; BCG analysis
Financial inclusion: 80% of India's adult population now financially included

India finally on the cusp of achieving financial inclusion

FY11  
35 out of 100 Indians financially included

FY14  
50 out of 100 Indians financially included

FY17  
80 out of 100 Indians financially included

1. Population above 15 years which has a bank account is considered for the purpose of financial inclusion
Source: 2017 Global Findex World Bank report
Basic Savings Bank Deposits (BSBD): Slowdown seen in growth in balances in FY18

Growth in direct benefit transfers (DBT) (%)
- 21% (FY17 over FY16)
- 115% (FY18 over FY17)

Growth in average balances (%)
- 36% (FY17 over FY16)
- 9% (FY18 over FY17)

Average balance in BSBD accounts in FY18 (Rs.)
- FY16: 1,521
- FY17: 2,066
- FY18: 2,258

Note: Data of 6 PSU - Large banks, 11 PSU - Medium banks, 5 Private - New banks and 6 Private - Old banks included for the purpose of this analysis
Source: Public data from Government of India, FIBAC Productivity Survey 2018; BCG analysis
Total advances: High growth in retail advances and a revival in corporate advances driving overall credit growth

Retail segment has shown healthy growth in advances across bank categories (19% in FY18 vs 16% in FY17)

Corporate advances have shown a revival in growth, with Private – Old banks leading from the front with a growth of 24% in FY18

<table>
<thead>
<tr>
<th>PSU - Large</th>
<th>PSU - Medium</th>
<th>Private - New</th>
<th>Private - Old</th>
<th>Banking Industry²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail</td>
<td>17%</td>
<td>1%</td>
<td>20%</td>
<td>16%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>18%</td>
<td>14%</td>
<td>23%</td>
<td>19%</td>
</tr>
<tr>
<td>MSME¹</td>
<td>9%</td>
<td>6%</td>
<td>20%</td>
<td>10%</td>
</tr>
<tr>
<td>Corporate</td>
<td>4%</td>
<td>8%</td>
<td>13%</td>
<td>7%</td>
</tr>
<tr>
<td>Total</td>
<td>6%</td>
<td>-14%</td>
<td>12%</td>
<td>11%</td>
</tr>
</tbody>
</table>

1. Definition of Micro, Small and Medium: For manufacturing sector – Micro: investment in plant and machinery ("inv") < = Rs. 25 lacs, Small: Rs. 25 lacs < inv < = Rs. 5 crores, Medium: Rs. 5 crores < inv < = Rs. 10 crores; For service sector – Micro: inv < = Rs. 10 lacs, Small: Rs. 10 lacs < inv < = Rs. 2 crores, Medium: Rs. 2 crores < inv < = Rs. 5 crores

Notes: 1. Data of 6 PSU - Large banks, 10 PSU - Medium banks, 4 Private - New banks and 5 Private - Old banks included for the purpose of this analysis. 2. This data is only for the banking industry, and NBFCs have not been included for the purpose of this analysis.

Source: FIBAC Productivity Survey 2018; BCG analysis
MSME advances: Private - New banks and NBFCs changing the game on MSMEs

<table>
<thead>
<tr>
<th>Growth in MSME Advances</th>
<th>FY17 over FY16 (%)</th>
<th>FY18 over FY17 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSU – Large banks</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>PSU – Medium banks</td>
<td>8%</td>
<td>0%</td>
</tr>
<tr>
<td>Private – New banks</td>
<td>13%</td>
<td>22%</td>
</tr>
<tr>
<td>Private – Old banks</td>
<td>7%</td>
<td>6%</td>
</tr>
<tr>
<td>Banking Industry(^1)</td>
<td>7%</td>
<td>6%</td>
</tr>
<tr>
<td>NBFCs</td>
<td>16%</td>
<td>24%</td>
</tr>
</tbody>
</table>

- Emergence of a two-speed world in MSME advances – private banks lending to MSMEs at a rapid rate while PSU banks continue to be constrained.
- In MSME lending, Private – New banks have grown at an impressive rate of 22% in FY18, which is almost at par with NBFCs.

\(^1\) This data is only for the banking industry - NBFCs have not been included for the purpose of this analysis. The analysis including NBFCs has been done in chapter 2.  
Note: Data of 6 PSU - Large banks, 10 PSU - Medium banks, 4 Private - New banks and 5 Private - Old banks included for the purpose of this analysis.  
MSME advances: Private - New banks focusing on small enterprises; PSUs lending more to micro enterprises

Composition of MSME\(^1\) advances in FY18 (%)

- **PSU - Large**
  - Micro: 14%
  - Small: 43%
  - Medium: 43%

- **Private - New**
  - Micro: 13%
  - Small: 34%
  - Medium: 52%

- **PSU - Medium**
  - Micro: 15%
  - Small: 45%
  - Medium: 40%

- **Private - Old**
  - Micro: 17%
  - Small: 36%
  - Medium: 45%

- **Banking Industry**
  - Micro: 14%
  - Small: 42%
  - Medium: 43%

- **Public sector banks are continuing their legacy of being the banks for the masses, with a large number of loans being sanctioned under the MUDRA initiative**

- **Public sector banks are showing a much higher exposure to micro enterprises, as compared to private sector banks**

1. Definition of Micro, Small and Medium: For manufacturing sector – Micro: Investmen in plant and machinery ("inv") < = Rs. 25 lacs, Small: 25 lacs < inv < = Rs. 5 crores, Medium: Rs. 5 crores < inv < = Rs. 10 crores; For service sector – Micro: inv < = Rs. 10 lacs, Small: Rs. 10 lacs < inv < = Rs. 2 crores, Medium: Rs. 2 crores < inv < = Rs. 5 crores

Note: Data of 6 PSU - Large banks, 12 PSU - Medium banks, 3 Private - New banks and 5 Private - Old banks included for the purpose of this analysis

Source: FIBAC Productivity Survey 2018; BCG analysis
MSME advances: Advances to small enterprises witnessing the highest growth among sub-segments

Maximum growth seen in advances to small enterprises mainly because of Private - New banks

Despite high NPAs, banks continue to increase lending to medium enterprises; there is a need to be vigilant in this segment, and credit underwriting is extremely important

Growth in amount of MSME advances in FY18 over FY17 (%)

- Micro: 17% (PSU - Medium), 15.9% (Banking Industry)
- Small: 25% (Private - New), 24% (Private - Old)
- Medium: 11% (Private - Old)

Note: Data of 6 PSU - Large banks, 12 PSU - Medium banks, 3 Private - New banks and 5 Private – Old banks included for the purpose of this analysis

Source: FIBAC Productivity Survey 2018; BCG analysis
MSME advances: Despite healthy increase in MSME credit in FY18, massive room for growth still exists

Growth in MSME credit (FY18 over FY17)

MSME credit as % of total credit (FY18)

Note: Data of 15 public sector banks and 7 private sector banks included for the purpose of analysis
Source: FIBAC Productivity Survey 2018; BCG analysis
### Fee income: Robust growth seen in fee income; other income lags primarily due to trading losses

<table>
<thead>
<tr>
<th>Income Type</th>
<th>Growth in FY18 over FY17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fee Income</td>
<td>+14%</td>
</tr>
<tr>
<td>CEB¹</td>
<td>+15%</td>
</tr>
<tr>
<td>Forex</td>
<td>+3%</td>
</tr>
<tr>
<td>Distribution</td>
<td>+19%</td>
</tr>
<tr>
<td>IB/DCM²</td>
<td>+10%</td>
</tr>
<tr>
<td>Trading income/(loss)³</td>
<td>-19%</td>
</tr>
<tr>
<td>Miscellaneous Income⁴</td>
<td>+19%</td>
</tr>
<tr>
<td>Other Income</td>
<td>-7%</td>
</tr>
</tbody>
</table>

#### Growth in FY18 over FY17

- Growth of 19% seen in distribution income is driven by a strong growth in sale of 3rd party products, especially mutual funds.
- A reduction of 19% in income from sale of assets and investments and profit or loss on revaluation is primarily due to losses incurred by banks on sale of bonds with the onset of an increasing rate regime.

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1. CEB refers to commission, exchange and brokerage – includes retail charges, processing fee on advances, card fees but does not include fee earned on distribution of 3rd party products like insurance and mutual fund. 2. IB refers to investment banking and DCM refers to debt capital markets. 3. Trading income/loss refers to income from sale of assets and investments and profit or loss on revaluation. 4. Miscellaneous income includes recovery from written off assets.

Source: RBI, Annual Reports, Investor Presentations; BCG analysis.
Fee income: Banks leveraging growth in mutual funds to boost fee income

- Breakout compounded growth of ~27% in AuM\(^1\) in mutual funds has resulted in a surge in mutual fund commissions.
- 71% growth in mutual fund commission was largely driven by an increase in the share of equity schemes from one-fourth of the total AuM in FY14 to one-third of the total AuM in FY18.

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1. AuM stands for assets under management
2. This figure is as per disclosures mandated by SEBI and reported by AMFI

Source: AMFI data
Income from distribution: AUM contributed by retail segment grew at a robust CAGR of 32% in last 4 years

Compounded growth in total mutual funds' assets under management in different customer segments for FY18 over FY14 (%)

- Rapid growth in AuM\(^1\) contribution by retail segment is driven by higher transparency, growth in systematic investment plans and unattractiveness of other avenues of investment (fixed deposits, gold, real estate)

- AuM\(^1\) contributions by corporates and HNIs\(^2\) have also shown a healthy growth of 23% and 30% respectively, in FY18 over FY14

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1. AuM stands for assets under management 2. High Net Worth Individuals – defined as investing Rs. 5 lakhs and above 3. FIs refer to Financial Institutions 4. FIIs refer to Foreign Institutional Investors

Source: RBI Data
Four Imperatives for Banks to Take the Next Leap
Building the Right Capabilities to Serve MSMEs
"Strengthening the real backbone of the Indian economy"

Leveraging the Real Power of Digital
"Using digital to transform end-to-end customer and employee journeys"

Strengthening the Credit Management Muscle for the Next Credit Cycle
"Keeping your house in order"

Understanding the DNA of the Indian Digital Banking Consumer
"Keeping pace with changing consumer preferences"
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MSMEs account for ~25% of formal credit in India

- Formal MSME borrowing accounts for ~25 L Cr which is ~25% of total credit in the country.
- There are two forms of MSME borrowing from formal channels – borrowing in the name of the entity (~15 L Cr) and borrowings in the name of the individual (~10 L Cr, mostly in the name of proprietor and family) which is then channeled to support business needs.
- MSME borrowings in the individual name are significant in the lower turnover segments and often use gold and family property as security.

**Notes:**
1. Large corporate borrowing includes entities with cumulative outstanding borrowing of greater than 50 Cr.
2. MSMEs borrowing in entity name include loans taken in the business name (in commercial bureau) with cumulative outstanding borrowing of <50 Cr.
3. MSME borrowing in individual name include loans individuals in retail credit bureau analytically tagged as borrowing for business purposes.
4. Retail and agri borrowing includes remaining individual borrowing in the retail credit bureau.

**Source:** TransUnion CIBIL analysis; BCG analysis
MSME formal credit growing fastest in the Rs. 2L-1Cr segment

Formal credit growth in loan segments of different ticket sizes (%)

- Nano (< Rs. 1 crore loan size) account for 40% of credit demand (primarily on account of proprietors borrowing for business)
- The mini and micro (2L-1Cr) segments lead in credit growth, registering a significantly higher year-on-year growth compared to overall small ticket loans. This can be attributed to the increasing formalization and digitization of MSMEs

Formal MSME credit outstanding in each loan slab as a % of total (%)

- 3% 9% 28% 33% 27% 100%

1. Mar’16-Mar’18 CAGR  
2. Consist of borrowing both in entity and individual name. Loan slabs for entity level borrowing defined at an enterprise level, basis the maximum credit exposure in past 8 quarters, loan slabs for individual level borrowing basis individual loan size

Source: TransUnion CIBIL data and analysis; BCG analysis
GST has accelerated formalization of MSMEs

% formal\(^1\) MSMEs\(^2\) (> Rs. 3 lakh in turnover)

<table>
<thead>
<tr>
<th>Turnover p.a. in Rs.</th>
<th>Overall</th>
<th>3L-10L</th>
<th>10L-1Cr</th>
<th>1 Cr+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-GST</td>
<td>26%</td>
<td>18%</td>
<td>65%</td>
<td>92%</td>
</tr>
<tr>
<td>Post-GST</td>
<td>61%</td>
<td>61%</td>
<td>96%</td>
<td>99%</td>
</tr>
</tbody>
</table>

\(^1\) Existence of a formal record through registration with any one Government act/authority like GST, EPFO, Factory Act, Municipal/Local corporation etc.  \(^2\) MSMEs defined based on annual business turnover of up to Rs. 250 Cr 3. API refers to Application Program Interface

✿ MSMEs\(^2\) with any formal registration/license with the Government have increased considerably, with GST being the primary driver. The impact is most felt in the Rs. 10 lakhs – Rs. 1 crore segment (< Rs. 20 lakh segment is exempted from GST registration)

✿ As GST filings grow, lenders will be able to access a granular and verified data trail through APIs\(^3\) which can be used for authentication, credit assessment and monitoring of MSME enterprises

Source: BCG Omidyar Network MSME survey analysis (N=1514): Data weighted to be representative of (Rs. 3L+ turnover) MSME universe w.r.t Turnover x Sector X Geo (U/R); BCG analysis
Data connectivity, demonetization and a maturing data infrastructure has triggered digitization of MSMEs

<table>
<thead>
<tr>
<th>% digital(^1) MSMEs (&gt; Rs. 3 lakh in turnover)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall digital</td>
</tr>
<tr>
<td>Pre-GST</td>
</tr>
<tr>
<td>Digital in accounting processes</td>
</tr>
<tr>
<td>41%</td>
</tr>
<tr>
<td>Digital in receiving payments</td>
</tr>
<tr>
<td>Pre-GST</td>
</tr>
<tr>
<td>Online sales</td>
</tr>
<tr>
<td>Pre-GST</td>
</tr>
</tbody>
</table>

- MSMEs with digital presence have grown considerably, with close to 50% MSMEs today having adopted digital in at least one of accounting processes, payments or sales.
- Degree of digitization of MSME increases with turnover. Urban, young-proprietor firms, newer firms associated with cluster or larger ecosystem, are significantly more digital.
- Digital payments is emerging as a key enabler, which will result in digital data trails that can be leveraged to assess customer financials and credit behaviour.

1. ‘Digital’ MSMEs are those who have adopted digital across any one of accounting processes OR payments (>30% payment receipts through online banking, wallets/UPI apps, cards) OR online sales (sales on e-commerce platforms/websites).
Source: BCG Omidyar Network MSME survey analysis (N=1514): Data weighted to be representative of (3L+ turnover) MSME universe w.r.t Turnover x Sector X Geo (U/R); BCG analysis.
Data connectivity shifts in India have been dramatic

- There has been a dramatic surge in data connectivity in India. With decreasing data and smart phone costs, mobile data consumption in India has leapfrogged 8x in the last three years.
- More MSMEs are now digitally savvy and reachable, aiding lenders in acquiring customers digitally and having richer data to assess and service them.

1. Smartphone refers to 4G models.

Sources: Credit Suisse report “India Market Strategy”, May 2018, The Mobile Economy, GSMA, IDC Quarterly Mobile Phone Tracker - Final Historical, 2018Q2; BCG analysis.
Demonetization has triggered current account growth: Bank transactions a precious source of data

<table>
<thead>
<tr>
<th>Year (FY)</th>
<th>Current Accounts (in crores)</th>
<th>Savings Accounts (in crores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015 (FY15)</td>
<td>5.3</td>
<td>117</td>
</tr>
<tr>
<td>2016 (FY16)</td>
<td>5.7</td>
<td>135</td>
</tr>
<tr>
<td>2017 (FY17)</td>
<td>6.9</td>
<td>150</td>
</tr>
<tr>
<td>2018 (FY18)</td>
<td>7.7</td>
<td>165</td>
</tr>
</tbody>
</table>

PMJDY accounts as a percentage of total savings accounts:
- 2015 (FY15): 13%
- 2016 (FY16): 16%
- 2017 (FY17): 19%
- 2018 (FY18): 20%

Note: 2018 numbers estimated basis BCG FIBAC survey
Source: PMJDY website, RBI database; BCG analysis

The growth in current accounts has accelerated post demonetization. A significant percentage of this growth can be attributed to MSMEs who have transitioned into formal banking channels in compliance with government mandate.

Additionally, 33 crore savings accounts are estimated to have been opened under Pradhan Mantri Jan Dhan Yojana, accounting for ~20% of total savings accounts.
Huge number of new digital data sources have emerged over the last few years; significant implications on lending

Entity data
- Ministry of Corporate Affairs
- Udyog Aadhaar
- Company website
- Shop & Establishment
- EPFO\(^1\)
- ESIC\(^2\)
- SMERA\(^3\) rating

Financial & Tax data
- GST
- Income tax return
- TDS (Form 26AS)
- Service Tax
- TIN\(^4\)

Credit bureau data
- Entity level credit data (Commercial bureau)
- Individual credit (Consumer Bureau)

Individual data
- Permanent Account Number
- Voter Id
- Driving License
- Professional Registration

Utility data
- Electricity
- Telecom
- Gas
- Internet
- Vehicle Registration Certificate

Social and mobile data
- Social footprint
- Account verification
- Social profile & connections
- SMS data
- Geo location
- Call logs
- Phone hardware data

Notes: Representative list, EPFO: Employee’s Provident Fund Organisation, ESIC: Employee’s State Insurance, TIN: Taxpayer Identification Number, SMERA: SME Rating Agency of India
Source: BCG case experience
Significant amount of data available for each MSME

- **70+ data sources available for underwriting**
- **500 MB+ digital data available per MSME**
- **6000+ data points for analysis**

**Source**
- Bank accounts
- Bureau
- GSTN
- MCA
- ... 

**Data size**
- 25 MB
- 1-2 MB
- 25-50 MB
- 50-75 MB
- ... 

**Number of variables**
- 200+
- 500+
- 800+
- 800+
- ... 

- Several new players have emerged to provide common access to these data sources through a single platform
- In addition, lenders are investing in advanced analytics to leverage the intelligence from this data and develop an edge
- Critical to also have a robust data architecture and governance to manage and preserve data for model building and validations

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1. MCA refers to Ministry of Corporate Affairs
Source: BCG case experience, Expert interviews
Primary sources of credit insight set to change with increasing data availability

- Bank statements have emerged as a powerful predictor of MSME credit behavior. In addition, advanced analytics has enabled lenders to generate granular insights from bank statements which was previously not possible.

- Advanced analytics is enabling lenders to assess bureau data at a thread line level and also bring surrogate data into their credit models for a more accurate view of borrower behavior.

Relative weight of metrics

- Audited financials
- Account operations analytics
- Bureau
- Borrower/Management profile

Size of the bubble denotes the relative importance of different parameters in credit assessment.

Source: Expert interviews, BCG case experience
NPA profile also shows a sweet spot in the Rs. 2 lakh to Rs. 1 crore ticket size segments, across lender types

Lender wise % gross NPAs\(^1\) (by loan slab\(^3\))

- **PSU Banks**
  - <2L (Nano): 22%
  - 2-10L (Mini): 13%
  - 10L-1Cr (Micro): 10%
  - 1-10Cr (Small): 6%
  - 10-50Cr (Medium): 2%

- **Private Banks**
  - <2L (Nano): 25%
  - 2-10L (Mini): 17%
  - 10L-1Cr (Micro): 7%
  - 1-10Cr (Small): 2%

- **NBFC**
  - <2L (Nano): 22%
  - 2-10L (Mini): 11%
  - 10L-1Cr (Micro): 11%
  - 1-10Cr (Small): 7%

- **Fintech**
  - <2L (Nano): 14%
  - 2-10L (Mini): 13%
  - 10L-1Cr (Micro): 10%
  - 1-10Cr (Small): 6%

- **Total NPAs**
  - <2L (Nano): 22%
  - 2-10L (Mini): 17%
  - 10L-1Cr (Micro): 17%

- The delinquencies are particularly high in the nano and small and medium segments.

- There is a sweet spot in the Rs. 2L-1Cr segment across lender types with relatively low delinquencies and high growth rate.

- Availability of new data forms and next generation analytics capabilities will enable lenders to build robust underwriting and monitoring capabilities to address NPA challenges.

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1. NPAs calculated basis accounts in 90+ days past due
2. Fintech includes digital lenders lending from their balance sheet for business loans
3. Loan slabs for entity level borrowing defined at an enterprise level, basis the maximum credit exposure in past 8 quarters, loan slabs for proprietor level borrowing basis individual loan size

Source: TransUnion CIBIL data and analysis; BCG analysis
End-to-end digitization of the MSME lending process will significantly reduce turnaround time

<table>
<thead>
<tr>
<th></th>
<th>Traditional (5-7 day TAT(^1))</th>
<th>Digital (~hours TAT(^2))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer data</td>
<td>Manual form filling</td>
<td>Digital data capture/autofill</td>
</tr>
<tr>
<td>KYC</td>
<td>Paper based</td>
<td>eKYC</td>
</tr>
<tr>
<td>Account Transaction Analysis</td>
<td>Manual</td>
<td>Automated</td>
</tr>
<tr>
<td>Fraud detection</td>
<td>In-person field visits/telephone</td>
<td>Surrogate data based</td>
</tr>
<tr>
<td>Sanction Agreement</td>
<td>Wet Signature</td>
<td>eSign</td>
</tr>
<tr>
<td>Repayment</td>
<td>PDC based(^2)</td>
<td>eNach/eMandate</td>
</tr>
</tbody>
</table>

- MSME lending, especially in smaller ticket sizes is ready for digital with significantly improved TAT\(^1\).
- Initially, the focus will be on small ticket unsecured lending. However, as the ecosystem matures, even the secured lending will become more digital.

1. TAT stands for turnaround time
2. PDC refers to post dated cheques
Source: BCG case experience
Multiple digital enabler models have emerged which support MSME lenders

- Multiple enabler models have emerged to support end-to-end digital lending journeys. Most of these models focus on data – primarily using common platform based access and analysis.

- In addition, surrogate data is set to increase in prominence – multiple business models have emerged to access and analyze alternate data sources such as telecom and utility bills, including building alternate credit scoring models.

**Digital lending enablers**

- **API aggregators**
  - Enable API based digital data access from public and private sources

- **Credit scoring and verification platforms**
  - Alternate data based credit scoring and verification services

- **Data extraction and analytics platforms**
  - Extract, analyze and present third party data in lender formats

- **Surrogate data providers**
  - Telco and other surrogate data e.g., includes SMS, geo location, call logs etc.

- **Digital process enablers**
  - Enable digital lending processes such as eSign, eKYC, eStamping etc.

Source: BCG case experience
Opportunity for digital lending more pronounced in MSMEs in certain sectors and sizes

**Turnover slabs of MSME (Rs.)**

**Sector-wise usage of Internet**

**Enterprises (%)**

- Non-Trade Services
- Manufacturing
- Trade
- Total MSME

**Sector-wise penetration of registration**

**Enterprises (%)**

- Non-Trade Services
- Financial Activities
- Educational Activities
- Transportation, Travel Agency
- Self-Employed Professionals
- Non-Trade

**Non-trade services - Usage of Internet**

**Enterprises (%)**

- Hotel & Restaraunts
- Financial Activities
- Educational Activities
- Transportation, Travel Agency
- Self-Employed Professionals
- Non-Trade

**Non-trade services - Penetration of registration**

**Enterprises (%)**

1. Formal record in at least one of the Government act/authority like VAT, EPFO, Factory Act, Pollution Board, Municipal/Local corporation etc

Note: Enterprises with turnover less than Rs. 2 lakhs have not been considered

Source: MOSPI Government survey data 2016
Digital lending has the potential for ~15 L Cr disbursements over next five years

Estimated MSME digital lending disbursement over the next five years (Rs. L Cr)

- Currently, digital MSME lending accounts for only 4% of total MSME lending. However, it is expected to increase to ~21% by 2023.
- The key drivers of this growth are increasing MSME digitization and readiness for digital lending as well as ecosystem readiness in terms of data sharing and access.

Note: Digital lending definition considered for estimation includes digital sourcing, digital data driven underwriting and digital customer journeys (upto sanction).
Sources: CIBIL, BCG-ON Digital lending survey (N=1514), BCG "Buzz to Bucks" survey (N=18000)
Interventions from Government and RBI: strengthen infrastructure, drive adoption, implement reforms

Continue to strengthen India stack
(Accelerate consent layer, Raise eKYC OTP limits, reinforce eSign legality, improve eNach quality, build UPI 2.0 collections features e.g., deduction at source/escrow)

Democratize data access with consent
(Mandate all institutions with customer data to share through standard API framework)

Strengthen registration mechanism
(Expand MCA to include proprietorship and partnerships, standardize SIC¹ for streamlined reporting and benchmarking)

Expand credit bureau infrastructure
(Augment bureaus with surrogate data, mandate bureau quality and submission)

Build incentives for digital transactions
(Incentivize digital payments, and strengthen dispute resolution in UPI)

Reforms for ease of business
(Streamline labour laws and permits, simplify taxation to reduce admin burden with size)

¹. SIC stands for Standard Industrial Classification
Source: BCG case experience
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Understanding the DNA of the Indian Digital Banking Consumer
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Overall shift towards digital channels continues; POS transactions almost tripled in the last two years

Total transactions in FY16, FY17 and FY18 (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>Mobile</th>
<th>ECS¹</th>
<th>POS</th>
<th>Internet</th>
<th>NACH</th>
<th>NEFT (Branch)</th>
<th>Cheque</th>
<th>Cash</th>
<th>ATM³</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY16</td>
<td></td>
<td></td>
<td>22%</td>
<td>8%</td>
<td>8%</td>
<td>14%</td>
<td>7%</td>
<td>11%</td>
<td>43%</td>
</tr>
<tr>
<td>FY17</td>
<td>5%</td>
<td>11%</td>
<td>12%</td>
<td>2%</td>
<td>5%</td>
<td>16%</td>
<td>11%</td>
<td>7%</td>
<td>35%</td>
</tr>
<tr>
<td>FY18</td>
<td>+20%</td>
<td></td>
<td>21%</td>
<td>10%</td>
<td>9%</td>
<td>5%</td>
<td>5%</td>
<td>7%</td>
<td>30%</td>
</tr>
</tbody>
</table>

Growth in total transactions (%)

<table>
<thead>
<tr>
<th></th>
<th>FY16 over FY15</th>
<th>FY17 over FY16</th>
<th>FY18 over FY17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital channels</td>
<td>67%</td>
<td>94%</td>
<td>48%</td>
</tr>
<tr>
<td>Branch based⁴</td>
<td>-4%</td>
<td>-19%</td>
<td>-11%</td>
</tr>
<tr>
<td>ATM³</td>
<td>15%</td>
<td>6%</td>
<td>-5%</td>
</tr>
</tbody>
</table>

1. ECS transactions can be initiated offline or through online channels 2. UPI did not exist in FY16 3. ATM/CDM includes withdrawals transactions at ATM and deposit transactions at CDMs. ATM and Mobile transactions included are financial transactions only 4. Branch based channels include cash and cheque. Cash transactions refer to counter cash transactions within branch

Notes: 1. Data of 5 PSU - Large banks, 8 PSU - Medium banks, 3 Private - New banks and 3 Private - Old banks included for the purpose of cash transactions and NEFT transactions at branch 2. FIBAC data is used for NEFT from branches, Counter cash and E-POS transactions

Source: RBI data, FIBAC Productivity Survey 2016, 2017 and 2018; BCG analysis
Mobile banking emerging as the preferred digital channel among digitally active customers

### Digital adoption by savings bank account holders

<table>
<thead>
<tr>
<th>Year</th>
<th>% active on mobile banking</th>
<th>% active on internet banking</th>
<th>% that use ATM/debit cards at ATMs</th>
<th>% that use ATM/debit cards at POS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY17</td>
<td>3%</td>
<td>6%</td>
<td>41%</td>
<td>19%</td>
</tr>
<tr>
<td></td>
<td>1%</td>
<td>8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY18</td>
<td>21%</td>
<td>18%</td>
<td>60%</td>
<td>36%</td>
</tr>
<tr>
<td></td>
<td>17%</td>
<td>20%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. This activation % has been calculated as a % of active savings bank accounts. Active account defined as an account with at least 1 user initiated transaction in the last 6 months 2. Accounts active on mobile banking and internet banking defined as accounts with at least 1 transaction to mobile banking and Internet banking in the last 6 months (as of 31st Mar 2018) 3. Accounts that use ATM/Debit card at ATM and POS are defined as accounts which have performed at least 1 transaction on ATM and POS in the last 6 months (as of 31st March 2018) Note: Data of 4 PSU - Large banks, 6 PSU - Medium banks, 2 Private - New banks and 4 Private - Old banks included for the purpose of this analysis Source: FIBAC Productivity Survey 2018; BCG analysis

- Mobile banking activation is at 21% for private banks. Shift in preference seen from internet banking to mobile banking for digital customers across bank categories
- After reaching a record high of card usage post-demonetization, marginal drop seen in ATM and POS for private players; public banks continue to increase penetration
Banking industry continues to invest in next generation electronic points of service to serve customers better

Electronic points of service\(^1\) as a percentage of traditional outlets\(^2\) for FY17 and FY18 (%)

- **Overall Industry**
  - FY17: 17%
  - FY18: 19%
  - Increase: +10%

- **PSU - Large Banks**
  - FY17: 26%
  - FY18: 28%
  - Increase: +10%

- **PSU - Medium Banks**
  - FY17: 15%
  - FY18: 18%
  - Increase: +16%

- **Private - New Banks**
  - FY17: 7%
  - FY18: 8%
  - Increase: +13%

- **Private - Old Banks**
  - FY17: 15%
  - FY18: 21%
  - Increase: +34%

Electronic points of service as a percentage of traditional outlets have increased from 17% in FY17 to 19% in FY18, suggesting a continued drive by banks to invest in such channels.

Surprisingly, this percentage is lower in Private – New banks (8%), due to greater preference of customers for digital channels as compared to electronic points of service. Higher percentage in public banks shows that they cater to the mass segment which is more hybrid in nature.

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1. Electronic points of service outlets include cash and cheque deposit machines, passbook printing machines and internet kiosks.
2. Traditional outlets include branch and ATMs.

Note: Data of 4 PSU - Large banks, 14 PSU - Medium banks, 4 Private - New banks and 8 Private - Old banks included for the purpose of this analysis.

Source: FIBAC Productivity Survey 2017 and 2018; BCG analysis.
Private banks with only a quarter of the total ATMs getting over half the hits by own customers on own ATMs

Hits by own customers on ATMs (%) in FY18

<table>
<thead>
<tr>
<th></th>
<th>PSU Banks</th>
<th>Private Banks</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hits by own customers on other ATMs</td>
<td>62%</td>
<td>42%</td>
<td>53%</td>
</tr>
<tr>
<td>Hits by own customers on own ATMs</td>
<td>38%</td>
<td>58%</td>
<td>47%</td>
</tr>
</tbody>
</table>

Share of total ATMs (%) as on 31st March 2018

<table>
<thead>
<tr>
<th></th>
<th>PSU Banks</th>
<th>Private Banks</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share of total ATMs</td>
<td>73%</td>
<td>27%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Note: Data of 4 PSU - Large banks, 7 PSU - Medium banks, 4 Private - New banks and 5 Private - Old banks included for the purpose of this analysis
Source: RBI data, FIBAC Productivity Survey 2018; BCG analysis
As a part of the EASE mandate from the government, banks need to lower customer complaint resolution time

Complaints\(^1\) not resolved even after 7 days from lodging the complaint (%)

- **PSU - Large**: 41%
- **Private - New**: 40%
- **Private - Old**: 67%

**Complaints per 1,000,000 current and savings accounts per day**

- **PSU - Large**: 738
- **Private - New**: 396
- **Private - Old**: 202

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1. Complaints refer to complaints received by inbound call centres
   Note: Data of 4 PSU - Large banks, 4 Private - New banks and 4 Private - Old banks included for the purpose of this analysis
   Source: FIBAC Productivity Survey 2018; BCG analysis
Eastern and southern states leading the charge as India continues on the digital journey

Accounts with at least one financial transaction on internet banking in the last six months of FY18, as a % of total active\(^1\) savings bank accounts (FY18)

<table>
<thead>
<tr>
<th>States and UTs</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telangana</td>
<td>21.70%</td>
</tr>
<tr>
<td>Manipur</td>
<td>21.40%</td>
</tr>
<tr>
<td>Mizoram</td>
<td>20.40%</td>
</tr>
<tr>
<td>Andhra Pradesh</td>
<td>18.20%</td>
</tr>
<tr>
<td>Puducherry</td>
<td>16.40%</td>
</tr>
<tr>
<td>Arunachal Pradesh</td>
<td>15.90%</td>
</tr>
<tr>
<td>Odisha</td>
<td>15.90%</td>
</tr>
<tr>
<td>Nagaland</td>
<td>15.60%</td>
</tr>
<tr>
<td>Kerala</td>
<td>15.10%</td>
</tr>
<tr>
<td>Assam</td>
<td>14.10%</td>
</tr>
<tr>
<td>Jammu And Kashmir</td>
<td>13.30%</td>
</tr>
<tr>
<td>Karnataka</td>
<td>12.60%</td>
</tr>
<tr>
<td>Meghalaya</td>
<td>12.60%</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>12.40%</td>
</tr>
<tr>
<td>Tripura</td>
<td>12.00%</td>
</tr>
<tr>
<td>Bihar</td>
<td>11.80%</td>
</tr>
<tr>
<td>Andaman and Nicobar Islands</td>
<td>11.60%</td>
</tr>
<tr>
<td>Chandigarh</td>
<td>11.30%</td>
</tr>
<tr>
<td>India Average</td>
<td>11.30%</td>
</tr>
<tr>
<td>Chattisgarh</td>
<td>11.00%</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>10.80%</td>
</tr>
<tr>
<td>Delhi</td>
<td>10.60%</td>
</tr>
<tr>
<td>Dadra and Nagar Haveli</td>
<td>10.50%</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>10.10%</td>
</tr>
<tr>
<td>West Bengal</td>
<td>10.10%</td>
</tr>
<tr>
<td>Sikkim</td>
<td>9.80%</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>9.70%</td>
</tr>
<tr>
<td>Maharastra</td>
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</tr>
<tr>
<td>Haryana</td>
<td>8.90%</td>
</tr>
<tr>
<td>Jharkhand</td>
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</tr>
<tr>
<td>Himachal Pradesh</td>
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</tr>
<tr>
<td>Rajasthan</td>
<td>8.10%</td>
</tr>
<tr>
<td>Daman And Diu</td>
<td>7.80%</td>
</tr>
<tr>
<td>Gujarat</td>
<td>7.40%</td>
</tr>
<tr>
<td>Goa</td>
<td>6.70%</td>
</tr>
<tr>
<td>Punjab</td>
<td>5.20%</td>
</tr>
<tr>
<td>Lakshadweep</td>
<td>0.40%</td>
</tr>
</tbody>
</table>

1. Active account defined as an account with at least one user initiated transaction in the last six months (as of 31st March 2018)

Note: Data of 15 public sector banks and 9 private banks included for the purpose of analysis.

Source: FIBAC Productivity Survey 2018; BCG analysis
Southern states outshining the rest of India in mobile banking adoption in savings accounts

Accounts with at least one financial transaction on mobile banking in the last six months of FY18, as a % of total active\(^1\) savings bank accounts (FY18)

<table>
<thead>
<tr>
<th>States and UTs</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telangana</td>
<td>10.00%</td>
</tr>
<tr>
<td>Dadra and Nagar Haveli</td>
<td>8.10%</td>
</tr>
<tr>
<td>Chandigarh</td>
<td>6.50%</td>
</tr>
<tr>
<td>Andhra Pradesh</td>
<td>6.30%</td>
</tr>
<tr>
<td>Delhi</td>
<td>6.00%</td>
</tr>
<tr>
<td>Puducherry</td>
<td>5.80%</td>
</tr>
<tr>
<td>Karnataka</td>
<td>5.50%</td>
</tr>
<tr>
<td>Mizoram</td>
<td>5.40%</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>5.00%</td>
</tr>
<tr>
<td>Kerala</td>
<td>4.70%</td>
</tr>
<tr>
<td>Haryana</td>
<td>4.40%</td>
</tr>
<tr>
<td>Manipur</td>
<td>4.40%</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>4.30%</td>
</tr>
<tr>
<td>Jammu And Kashmir</td>
<td>3.90%</td>
</tr>
<tr>
<td>Gujrat</td>
<td>3.70%</td>
</tr>
<tr>
<td>Arunachal Pradesh</td>
<td>3.40%</td>
</tr>
<tr>
<td>India Average</td>
<td>3.40%</td>
</tr>
<tr>
<td>Sikkim</td>
<td>3.00%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>States and UTs</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nagaland</td>
<td>2.90%</td>
</tr>
<tr>
<td>Andaman and Nicobar Islands</td>
<td>2.80%</td>
</tr>
<tr>
<td>Daman And Diu</td>
<td>2.70%</td>
</tr>
<tr>
<td>Meghalaya</td>
<td>2.60%</td>
</tr>
<tr>
<td>Goa</td>
<td>2.50%</td>
</tr>
<tr>
<td>Odisha</td>
<td>2.50%</td>
</tr>
<tr>
<td>Uttarakhand</td>
<td>2.50%</td>
</tr>
<tr>
<td>Himachal Pradesh</td>
<td>2.30%</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>2.30%</td>
</tr>
<tr>
<td>Chattisgarh</td>
<td>2.10%</td>
</tr>
<tr>
<td>Tripura</td>
<td>2.10%</td>
</tr>
<tr>
<td>Punjab</td>
<td>2.00%</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>1.80%</td>
</tr>
<tr>
<td>Assam</td>
<td>1.70%</td>
</tr>
<tr>
<td>West Bengal</td>
<td>1.60%</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>1.50%</td>
</tr>
<tr>
<td>Bihar</td>
<td>1.10%</td>
</tr>
<tr>
<td>Jharkhand</td>
<td>1.00%</td>
</tr>
<tr>
<td>Lakshadweep</td>
<td>1.00%</td>
</tr>
</tbody>
</table>

---

1. Active account defined as an account with at least one user initiated transaction in the last six months (as of 31st March 2018)

Note: Data of 15 Public sector banks and 7 private banks included for the purpose of analysis.

Source: FIBAC Productivity Survey 2018; BCG analysis
India moving towards a cashless economy with ATMs per branch showing signs of degrowth

The number of ATMs and branches of banks has shown muted growth across categories. This can be attributed to the overall shift towards digital channels.

ATMs per branch of PSU – Large and Private – New banks have decreased due to slower growth in ATMs as compared to branches.

Number of ATMs per Branch

<table>
<thead>
<tr>
<th>Category</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSU - Large</td>
<td>2.1</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>PSU - Medium</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Private - New</td>
<td>3.1</td>
<td>3.0</td>
<td>2.9</td>
</tr>
<tr>
<td>Private - Old</td>
<td>1.6</td>
<td>1.7</td>
<td>1.6</td>
</tr>
</tbody>
</table>

Growth in number of Branches in FY18 over FY16 (%)

<table>
<thead>
<tr>
<th>Category</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSU - Large</td>
<td>2.8%</td>
</tr>
<tr>
<td>PSU - Medium</td>
<td>1.4%</td>
</tr>
<tr>
<td>Private - New</td>
<td>6.0%</td>
</tr>
<tr>
<td>Private - Old</td>
<td>3.7%</td>
</tr>
</tbody>
</table>

Growth in number ATMs in FY18 over FY16 (%)

<table>
<thead>
<tr>
<th>Category</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSU - Large</td>
<td>1.3%</td>
</tr>
<tr>
<td>PSU - Medium</td>
<td>2.6%</td>
</tr>
<tr>
<td>Private - New</td>
<td>3.1%</td>
</tr>
<tr>
<td>Private - Old</td>
<td>4.9%</td>
</tr>
</tbody>
</table>

Note: Data of 6 PSU - Large banks, 10 PSU - Medium banks, 4 Private - New banks and 6 Private - Old banks has been included for the purpose of this analysis.

Source: RBI data; FIBAC productivity survey 2018; BCG analysis.
Banks still betting on digital turnaround even in wake of rising NPAs

Capital expenditure on IT assets (Rs. in crores)

Note: 1. Data of 6 PSU – Large banks, 11 PSU - Medium banks, 4 Private - New banks and 7 Private - Old banks has been included for the purpose of this analysis
Source: FIBAC Productivity Survey 2018; BCG analysis
The demand for digital and analytics staff showing a rapid rise across bank categories

Digital\(^1\) and Analytics\(^2\) Staff per 1000 FTEs\(^3\)

- With more and more customers shifting to digital channels, banks are increasing digital staff to meet the needs and changing preferences of these digital consumers.
- Analytics staff has also increased substantially, especially in private banks. It shows the increasing importance of analytics in banking.

1. Digital staff includes digital marketing staff, social media staff, digital design staff, digital customer experience staff, digital banking channels staff and business IT team.
2. Analytics staff also includes in business intelligence unit staff, IT staff and management Information system staff.
3. FTE stands for full-time equivalents.

Notes: 1. The total FTE includes the staff of captive subsidiary as well as the outsourced staff. 2. Data of 4 PSU - Large banks, 12 PSU - Medium banks, 4 Private - New banks and 5 Private - Old banks has been included for the purpose of this analysis.
Source: FIBAC Productivity Survey 2018; BCG analysis.
Digital adoption can be catalyzed through end-to-end customer journey digitization

### Digital building blocks in end-to-end customer journey

<table>
<thead>
<tr>
<th>Sourcing</th>
<th>Pre-sanction</th>
<th>Sanction</th>
<th>Disbursement</th>
<th>Repayment</th>
<th>Account service</th>
<th>Collection</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-channel sourcing</td>
<td>e-KYC</td>
<td>Automated rule engine</td>
<td>Digital disbursal documents</td>
<td>e-Mandate</td>
<td>Automated service mgmt.</td>
<td>Automated monitoring &amp; EWS²</td>
<td>Partner management</td>
</tr>
<tr>
<td>Pre-approved/pre-qualified</td>
<td>Digital data capture</td>
<td>Income validation</td>
<td>Payment through H2H¹ connections</td>
<td>Auto bank reconciliation</td>
<td></td>
<td>Scheduled customer reminders</td>
<td></td>
</tr>
<tr>
<td>Integration to asset ecosystem</td>
<td>e-Sign &amp; consent</td>
<td>Online fee payment</td>
<td>Online welcome kit</td>
<td></td>
<td></td>
<td>Rule based collection mgmt.</td>
<td>Partner payouts</td>
</tr>
<tr>
<td>Salesforce digitization</td>
<td>Enriched/surrogate data capture</td>
<td>Physical data digitization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Automated dedupe</td>
<td>Automated collateral valuation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Automated bureau check</td>
<td>Automated collateral valuation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Automated income assessment</td>
<td>Rule based risk control</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Automated field investigation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. H2H stands for host to host. 2. EWS stands for Early Warning Systems  
Source: BCG case experience
Building the Right Capabilities to Serve MSMEs
"Strengthening the real backbone of the Indian economy"

Leveraging the Real Power of Digital
"Using digital to transform end-to-end customer and employee journeys"

Strengthening the Credit Management Muscle for the Next Credit Cycle
"Keeping your house in order"

Understanding the DNA of the Indian Digital Banking Consumer
"Keeping pace with changing consumer preferences"
NPA situation continues to worsen; however, high variability seen in asset quality of MSMEs and corporates

<table>
<thead>
<tr>
<th></th>
<th>Agriculture</th>
<th>Corporate</th>
<th>MSME</th>
<th>Home</th>
<th>Pvt Vehicle</th>
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</thead>
<tbody>
<tr>
<td>PSU - Large</td>
<td>6.4</td>
<td>13.6</td>
<td>6.2</td>
<td>1.0</td>
<td>1.8</td>
</tr>
<tr>
<td></td>
<td>8.6</td>
<td>20.2</td>
<td>10.9</td>
<td>1.2</td>
<td>1.6</td>
</tr>
<tr>
<td>PSU - Medium</td>
<td>6.9</td>
<td>21.6</td>
<td>12.9</td>
<td>2.4</td>
<td>4.2</td>
</tr>
<tr>
<td></td>
<td>8.6</td>
<td>29.0</td>
<td>14.4</td>
<td>2.7</td>
<td>3.4</td>
</tr>
<tr>
<td>Private - New</td>
<td>2.9</td>
<td>5.6</td>
<td>1.3</td>
<td>0.5</td>
<td>0.9</td>
</tr>
<tr>
<td></td>
<td>3.4</td>
<td>5.9</td>
<td>2.9</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Private - Old</td>
<td>2.7</td>
<td>7.7</td>
<td>5.0</td>
<td>1.3</td>
<td>1.3</td>
</tr>
<tr>
<td></td>
<td>2.6</td>
<td>10.1</td>
<td>4.7</td>
<td>1.5</td>
<td>1.1</td>
</tr>
<tr>
<td>Banking Industry</td>
<td>5.9</td>
<td>14.3</td>
<td>7.3</td>
<td>1.2</td>
<td>1.7</td>
</tr>
<tr>
<td></td>
<td>7.6</td>
<td>19.6</td>
<td>10.8</td>
<td>1.4</td>
<td>1.5</td>
</tr>
</tbody>
</table>

1. This data is only for the banking industry - NBFCs have not been included for the purpose of this analysis

Note: Data of 5 PSU - Large banks, 12 PSU - Medium banks, 3 Private - New banks and 6 Private - Old banks included for the purpose of this analysis

Source: FIBAC Productivity Survey 2018; BCG analysis

♦ Retail loans continue to be the silver lining with lowest overall NPAs as well as lowest addition of NPAs in FY18 over FY17

♦ Significant variance seen in NPAs in MSME advances, with public sector banks bearing the brunt as compared to their private sector peers
Banks with higher number of centralized credit and risk staff having lower NPAs in retail and MSME

Centralized credit and risk staff as a % of total staff in FY18 vs Gross NPA in retail and MSME segments in FY18 (%)

- Private banks largely have a high percentage of centralized credit and risk assessment staff, as a result of which they have lower GNPAAs in the retail and MSME segments.
- Despite higher GNPAAs in the retail and MSME segments, public sector banks still have lower percentage of centralised staff designated to credit monitoring and risk.

Note: 1. Data of 5 PSU - Large banks, 10 PSU - Medium banks, 4 Private - New banks and 5 Private - Old banks included for the purpose of this analysis
Source: FIBAC Productivity Survey 2018; BCG analysis
Retail advances with lowest slippages (2%) and highest upgradations (21%) in FY18

Slippage ratio of standard assets into NPAs in FY18 (%)
(Ratio of slippages into NPAs during FY18 to Standard assets as on 31st March 2017)

- **Retail**: 2%
- **MSME**: 7%
- **Corporate Advances**: 11%

Upgradation ratio of NPAs into standard assets in FY18 (%)
(Ratio of upgradations into standard assets during FY18 to NPAs as on 31st March 2017)

- **Retail**: 21%
- **MSME**: 6%
- **Corporate Advances**: 4%

Note: Data of 5 PSU - Large banks, 10 PSU - Medium banks, 3 Private - New banks and 5 Private - Old banks included for the purpose of this analysis
Source: FIBAC Productivity Survey 2018; BCG analysis

- Stress continues in MSME and corporate advances with 7% and 11% slippage ratio respectively, in FY18
- Recoveries have also proved to be difficult in MSME and corporate advances with upgradation ratios in single digits (6% and 4% respectively)
In MSME advances, loans to medium-sized enterprises have the highest gross NPA of ~16%

Gross NPA (GNPA) in MSME Advances for FY18 (%)

<table>
<thead>
<tr>
<th>Bank type</th>
<th>MSME</th>
<th>Micro</th>
<th>Small</th>
<th>Medium</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSU – Large</td>
<td>10.9%</td>
<td>9.8%</td>
<td>11.0%</td>
<td>13.7%</td>
</tr>
<tr>
<td>PSU – Medium</td>
<td>14.4%</td>
<td>11.5%</td>
<td>14.4%</td>
<td>23.3%</td>
</tr>
<tr>
<td>Private – New</td>
<td>2.9%</td>
<td>2.7%</td>
<td>1.8%</td>
<td>7.9%</td>
</tr>
<tr>
<td>Private - Old</td>
<td>4.7%</td>
<td>4.5%</td>
<td>4.9%</td>
<td>4.7%</td>
</tr>
<tr>
<td>Banking Industry</td>
<td>10.8%</td>
<td>9.4%</td>
<td>10.4%</td>
<td>15.9%</td>
</tr>
</tbody>
</table>

- PSU - Medium banks have ~23% gross NPA - highest in the industry in the "medium" segment
- Gross NPA of Private – New banks across segments is significantly lower as compared to other bank categories. This shows a healthy asset book

Note:
1. This data is only for the banking industry - NBFCs have not been included for the purpose of this analysis
2. Data of 5 PSU—Large banks, 12 PSU—Medium banks, 3 Private – New banks and 6 Private – Old banks included for the purpose of this analysis

Source: FIBAC Productivity Survey 2018; BCG analysis
Robust underwriting, early warning systems and digitization of collections key to managing NPAs

Key levers to manage NPAs

1. Robust credit underwriting
2. Implementing Early Warning Systems
3. End-to-end digitization of collections

Source: BCG case experience
Robust credit underwriting: Better credit decisions can be taken using superior models and non-traditional data

**Comprehensive Input**
- Electricity consumption
- Return filing consistency
- Bill Payment
- ...

**Non-traditional data**
- Sector growth rate
- Sector investment
- Sector bad rates
- ...

**Sector specific inputs**
- Financials
- Account operations
- Bureau
- ...

**Basic underwriting model dimensions**

**Build Underwriting Model**
- Machine learning based models – supervised as well as unsupervised models can be used

**Superior Model Output**
- Automated decision (enriched using non-traditional data and sector inputs)
- Granular eligibility output e.g. Peak level funding requirement

Source: BCG case experience
Implementing Early Warning Systems (EWS): Imperative for banks to become proactive rather than reactive

- **Analytical models**
  - Five inputs – lending, firmographic, financial, transaction and experiential
  - Model should predict bad accounts several months before default (depending on the tenure of the loan)

- **EWS workflow**
  - Workflow to validate risk score and next steps (including client discussions and cross-sell / up-sell)
  - Potential to incorporate self learning into EWS

- **Organizational enablers**
  - Build strong accountability across the organization
  - Clearly define KPIs / KRAs for follow up with customers
  - Tools and MIS to monitor
  - Performance of the model, outcomes and compliance of EWS

Source: BCG case experience
End-to-End digitization of collections: Potential to massively improve real-time access and tracking

- Customer segmentation & actions:
  - Automated customer segmentation basis risk profile
  - Early warning signals to identify high risk customers
  - Workflow based actions customized for customer segments

- Rule based allocation:
  - Rule based real time allocation of customers to collection agents/ callers through workflow

- Feet-on-Street tool kit:
  - Real time access to customer payment status
  - Functionality to enable settlement on-the-fly

- Monitoring:
  - Online display of performance of collection agents, scorecards, collection MIS

- Dialer system:
  - Workflow based auto dialer with access to customer level help scripts
  - System based feedback capture mechanism to feed into subsequent workflows

Source: BCG case experience
Building the Right Capabilities to Serve MSMEs
"Strengthening the real backbone of the Indian economy"

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Understanding the DNA of the Indian Digital Banking Consumer
"Keeping pace with changing consumer preferences"
BCG conducted primary research to understand the behavior of Indian and global digital customers

30+ banks covered
- PSU – Large: 7 banks
- PSU – Medium: 12 banks
- Private – New: 5 banks
- Private – Old: 7 banks

2,563 respondents
- Digital customers responded via an online survey
- Nationally representative sample

Customer centricity
- Reasons to join, leave and deepen relationships with a bank

Digital banking
- Banking interactions: type and frequency
- Digital banking features valued
Channels, products and pricing key influencers for joining and increasing business with a bank

Joiners

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertising &amp; Marketing</td>
<td>5%</td>
</tr>
<tr>
<td>Image &amp; Brand</td>
<td>5%</td>
</tr>
<tr>
<td>Sales Process</td>
<td>5%</td>
</tr>
<tr>
<td>Channels</td>
<td>11%</td>
</tr>
<tr>
<td>Products</td>
<td>11%</td>
</tr>
<tr>
<td>Customer Service</td>
<td>8%</td>
</tr>
<tr>
<td>Pricing</td>
<td>11%</td>
</tr>
</tbody>
</table>

Volume increasers¹

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertising &amp; Marketing</td>
<td>4%</td>
</tr>
<tr>
<td>Image &amp; Brand</td>
<td>5%</td>
</tr>
<tr>
<td>Sales Process</td>
<td>4%</td>
</tr>
<tr>
<td>Channels</td>
<td>9%</td>
</tr>
<tr>
<td>Products</td>
<td>7%</td>
</tr>
<tr>
<td>Customer Service</td>
<td>6%</td>
</tr>
<tr>
<td>Pricing</td>
<td>9%</td>
</tr>
</tbody>
</table>

Leavers

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertising &amp; Marketing</td>
<td>3%</td>
</tr>
<tr>
<td>Image &amp; Brand</td>
<td>5%</td>
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<tr>
<td>Sales Process</td>
<td>5%</td>
</tr>
<tr>
<td>Channels</td>
<td>7%</td>
</tr>
<tr>
<td>Products</td>
<td>9%</td>
</tr>
<tr>
<td>Customer Service</td>
<td>10%</td>
</tr>
<tr>
<td>Pricing</td>
<td>8%</td>
</tr>
</tbody>
</table>

▼ Poor customer service is the key reason for customers leaving a bank
▼ Advertising and branding are not key determinants when it comes to customers joining or leaving a bank

¹ Volume increasers refers to customers who increase number of products or balances in account with a bank
Source: REBEX Consumer Survey 2018
Savings account joiners: ~40% respondents opened primary saving accounts due to their employers' mandate

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>joined as it was mandated by employer</td>
<td>39%</td>
</tr>
<tr>
<td>joiners liked the bank’s products &amp; services</td>
<td>28%</td>
</tr>
<tr>
<td>joined because the bank was closest to home</td>
<td>26%</td>
</tr>
<tr>
<td>joined because someone else opened an account for them</td>
<td>7%</td>
</tr>
</tbody>
</table>

Globally, this is only 15%

- For 46% of the respondents, the decision to open an account was not triggered on their own, but was mandated by an employer or opened by someone else on their behalf.

Notes:
1. Question asked: “For each of these products, what statement best describes why you chose to do so specifically at the bank you chose, as opposed to selecting another provider for this?”
2. Based on survey of 1,533 respondents
Source: REBEX Consumer Survey 2018
Volume increasers: Credit cards and life insurance products helping banks increase product penetration

Percentage respondents holding other products with primary savings account (%)

<table>
<thead>
<tr>
<th>Product</th>
<th>PSU - Large</th>
<th>PSU - Medium</th>
<th>Private - New</th>
<th>Private - Old</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life insurance</td>
<td>72%</td>
<td>66%</td>
<td>78%</td>
<td>64%</td>
</tr>
<tr>
<td>Credit card</td>
<td>53%</td>
<td>62%</td>
<td>75%</td>
<td>52%</td>
</tr>
<tr>
<td>Long term deposits</td>
<td>50%</td>
<td>48%</td>
<td>58%</td>
<td>36%</td>
</tr>
<tr>
<td>Personal loan</td>
<td>31%</td>
<td>36%</td>
<td>41%</td>
<td>40%</td>
</tr>
<tr>
<td>Non-life insurance</td>
<td>24%</td>
<td>23%</td>
<td>31%</td>
<td>12%</td>
</tr>
<tr>
<td>Mortgage</td>
<td>9%</td>
<td>15%</td>
<td>16%</td>
<td>12%</td>
</tr>
</tbody>
</table>

Notes: 1. Data of 7 PSU – Large; 12 PSU – Medium, 5 Private - New and 7 Private - Old banks included for the purpose of this analysis. 2. Based on 1,500 respondents who disclosed their primary bank account.

Source: REBEX Consumer Survey 2018

- Mortgage products have a low penetration across all bank categories.
- PSU – Large banks have significant scope to improve penetration of several products (personal loans and credit cards)
Primary banks leveraging relationships with customers to cross sell more products

A majority of the respondents held 5-6 financial products

Primary banks are having nearly two times the product penetration as compared to other banks

Number of products held per customer

- Products with primary bank:
  - PSU - Large: 3 (
    - Products with primary bank: 5
    - Products with other banks: 2
  - PSU - Medium: 3
  - Private - New: 4
  - Private - Old: 3

- Number of respondents:
  - PSU - Large: 632
  - PSU - Medium: 180
  - Private - New: 663
  - Private - Old: 25

Notes: 1. Data of 7 PSU – Large; 12 PSU – Medium, 5 Private - New and 7 Private - Old banks included for the purpose of this analysis 2. Based on 1,500 respondents who disclosed their primary bank
Source: REBEX Consumer Survey 2018
Digital channels help drive acquisition as well as deepening

Percentage of respondents for whom digital channels\(^1\) are "most important" (%)

<table>
<thead>
<tr>
<th>Region</th>
<th>Leaving</th>
<th>Joining</th>
<th>Increasing Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global</td>
<td>8%</td>
<td>17%</td>
<td>18%</td>
</tr>
<tr>
<td>India</td>
<td>9%</td>
<td>18%</td>
<td>18%</td>
</tr>
</tbody>
</table>

Number of respondents:
- Global: 41,953
- India: 2,563

\(^1\) Digital channels include mobile and internet banking

Source: Data for India as per REBEX Consumer Survey 2018; data for global based on REBEX Consumer Survey 2016 covering 16 countries
Over 80% of the customers in India and China frequently use both digital & face-to-face channels for transactions

Segment composition across 10 participating countries (% respondents)

<table>
<thead>
<tr>
<th>Country</th>
<th>Only digital</th>
<th>Hybrid</th>
<th>Only face to face</th>
</tr>
</thead>
<tbody>
<tr>
<td>Netherlands</td>
<td>38%</td>
<td>13%</td>
<td>5%</td>
</tr>
<tr>
<td>UK</td>
<td>47%</td>
<td>13%</td>
<td>14%</td>
</tr>
<tr>
<td>France</td>
<td>41%</td>
<td>16%</td>
<td>13%</td>
</tr>
<tr>
<td>Canada</td>
<td>46%</td>
<td>13%</td>
<td>13%</td>
</tr>
<tr>
<td>USA</td>
<td>51%</td>
<td>16%</td>
<td>13%</td>
</tr>
<tr>
<td>Germany</td>
<td>55%</td>
<td>13%</td>
<td>16%</td>
</tr>
<tr>
<td>Russia</td>
<td>64%</td>
<td>7%</td>
<td>5%</td>
</tr>
<tr>
<td>Japan</td>
<td>38%</td>
<td>38%</td>
<td>7%</td>
</tr>
<tr>
<td>China</td>
<td>80%</td>
<td>15%</td>
<td>11%</td>
</tr>
<tr>
<td>India</td>
<td>76%</td>
<td>11%</td>
<td>18%</td>
</tr>
</tbody>
</table>

♦ Higher share of customers in India use both digital and face-to-face channels frequently, which implies the continued importance of branches, despite increase in digital channels

♦ However, the proportion of customers transacting only face-to-face is much lower in India compared to many developed countries such as UK, France, Canada, USA and Germany

Note: 1. Based on responses received from survey of ~60,000 respondent globally 2. Digital customers are those who use digital channels for transactions at least once in 3 months and have visited a branch less than once or never for a transaction; Hybrid customers are those that use digital channels for transactions at least once in 3 months and also visit branch at least once in 3 months for doing a transaction, and face to face customers are those who visit branch for a transaction at least once in 3 months and have used digital channels less than once in a year for transactions

Source: Data for India as per REBEX Consumer Survey 2018; data for global based on REBEX Consumer Survey 2016 covering 16 countries

72 | PROVIDING FINANCIAL SERVICES TO SMEs IN AN INCREASINGLY DIGITAL ECOSYSTEM
When joining a bank, almost half the interactions happen through physical branches and relationship managers

Top five modes of customer interactions while joining a bank (% respondents)

<table>
<thead>
<tr>
<th></th>
<th>Determine need</th>
<th>Learn options</th>
<th>Decide provider</th>
<th>Advice on best offer</th>
<th>Onboarding</th>
<th>Check status</th>
<th>Submit extra info</th>
</tr>
</thead>
<tbody>
<tr>
<td>Branch</td>
<td>33%</td>
<td>23%</td>
<td>22%</td>
<td>20%</td>
<td>30%</td>
<td>21%</td>
<td>28%</td>
</tr>
<tr>
<td>Relationship manager (RM)</td>
<td>26%</td>
<td>28%</td>
<td>26%</td>
<td>28%</td>
<td>20%</td>
<td>19%</td>
<td>20%</td>
</tr>
<tr>
<td>Call centre</td>
<td>3%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>4%</td>
<td>6%</td>
<td>5%</td>
</tr>
<tr>
<td>Bank website</td>
<td>9%</td>
<td>16%</td>
<td>12%</td>
<td>10%</td>
<td>18%</td>
<td>22%</td>
<td>17%</td>
</tr>
<tr>
<td>Bank application</td>
<td>5%</td>
<td>6%</td>
<td>5%</td>
<td>5%</td>
<td>10%</td>
<td>12%</td>
<td>8%</td>
</tr>
</tbody>
</table>

Note: 1. Based on survey of 2,563 respondents
Source: REBEX Consumer Surveys 2018

- Dedicated RMs play a key role in guiding customers in decision making
- ~20% customers feel comfortable using bank website for sign-up, submitting information and checking account status
Online account status check, paperless sign-up and instant chat most preferred features in digital channels

Preference for different features in digital channels for respondents using digital channels (% respondents)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Very important</th>
<th>Fairly Important</th>
<th>Not important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online status check</td>
<td>59%</td>
<td>24%</td>
<td>17%</td>
</tr>
<tr>
<td>Paperless sign-up</td>
<td>56%</td>
<td>25%</td>
<td>19%</td>
</tr>
<tr>
<td>Instant chat</td>
<td>51%</td>
<td>25%</td>
<td>24%</td>
</tr>
<tr>
<td>Customer reviews</td>
<td>50%</td>
<td>26%</td>
<td>24%</td>
</tr>
<tr>
<td>Mobile capture¹</td>
<td>50%</td>
<td>26%</td>
<td>23%</td>
</tr>
<tr>
<td>Real-time info saving²</td>
<td>50%</td>
<td>27%</td>
<td>23%</td>
</tr>
<tr>
<td>Simulation tools</td>
<td>49%</td>
<td>27%</td>
<td>23%</td>
</tr>
<tr>
<td>Product Comparison</td>
<td>49%</td>
<td>28%</td>
<td>23%</td>
</tr>
<tr>
<td>Video Tutorials</td>
<td>47%</td>
<td>26%</td>
<td>27%</td>
</tr>
<tr>
<td>Pre-filled forms</td>
<td>48%</td>
<td>28%</td>
<td>25%</td>
</tr>
<tr>
<td>P2P platform³</td>
<td>43%</td>
<td>28%</td>
<td>28%</td>
</tr>
</tbody>
</table>

1. Mobile capture: feature in which a customer is able to submit paperwork to the bank by photographing it with their smartphone camera 2. Real-time capture info: Information entered by customers in one channel (e.g. branch, or a mobile device) is saved in real time, so that they can continue their task on another channel seamlessly 3. P2P platform refers to peer-to-peer lending platform

Source: REBEX Consumer Survey 2018; based on survey of 2,563 respondents
Appendix: Primary research conducted on 2,563 respondents

- % respondents
  - Male: 52%
  - Female: 48%

- Job Profiles
  - Employed/Service: 79%
  - Student: 15%
  - Unemployed: 5%
  - Retired: 1%

- Age Brackets
  - 18-25 yrs: 33%
  - 26-40 yrs: 47%
  - 40-60 yrs: 18%
  - 60+ yrs: 2%

- Geographical distribution
  - North India: 27%
  - West India: 24%
  - South India: 29%
  - East India: 20%

- Annual Income Brackets
  - Low < Rs. 3.5 lacs: 21%
  - Low Middle Rs. 3.5 to 10.5 lacs: 23%
  - Upper Middle Rs. 10.5 lacs to 24 lacs: 35%
  - High > Rs. 24 lacs: 21%
GLOSSARY

REFLECTIONS ON THE STATE OF THE INDIAN BANKING INDUSTRY

Individuals: Includes sole proprietors, partnership firms, trusts, HUFs, registered societies, association of persons, body of individuals and artificial juridical persons

Financial inclusion: Population above the age of 15 years which has a bank account is considered to be financially included

Retail Advances: Includes advances given for home loans, personal loans, education loans, auto loans, credit card loans, loans against deposits & shares, non-agriculture jewel loans and other retail loans

Micro, Small & Medium Enterprises (MSMEs) Advances: Includes advances given to entities defined as MSMEs by RBI

Corporate Advances: Includes advances given for working capital and term loans, given for business purposes to corporates other than Micro, Small & Medium Enterprises

NBFCs: Non-Banking financial companies registered under the companies act engaged in the business of loans and advance but do not hold a banking license

Retail Commissions: These consist of fee income earned through mutual fund brokerage, insurance commissions and other miscellaneous retail commissions

Commercial Commissions: These consist of fee income earned through commissions on inland and foreign letters of credit, guarantees and bills

FOUR IMPERATIVES FOR BANKS TO TAKE THE NEXT LEAP

Digital transactions: These include transactions done through mobile banking, ECS, POS, internet banking, NACH and UPI

Branch Based Transactions: These include transactions through NEFT (in branch), cheque and cash transactions.

Electronic points of service outlets: These include cash and cheque deposit machines, passbook printing machines and internet kiosks.

Traditional outlets: These include branch and ATMs

Formalization: Existence of a formal record through registration with any one Government act/authority like GST, EPFO, Factory Act, Municipal/Local corporation

Digital MSMEs: These are those who have adopted digital across any one of accounting processes OR payments (>30% payment receipts through online banking, wallets/UPI apps, cards) OR online sales (sales on ecom platforms/websites)

PMJDY Accounts: Refers to accounts launched under the Pradhan Mantri Jan Dhan Yojana, which is a financial inclusion scheme launched in 2014.

Fintech: This includes digital lenders lending from their balance sheet for business loans

Volume increasers: This refers to customers who increase number of products or balances in account with a bank

Digital customers: These are customers who use digital channels for transactions at least once in three months and have visited a branch less than once or never for a transaction

Hybrid customers: These are customers who use digital channels for transactions at least once in three months and also visit a branch at least once in three months for doing a transaction

Face-to-face customers: These are customers who visit a branch for a transaction at least once in three months and have used digital channels less than once in a year for transactions

Mobile capture: Feature in which a customer is able to submit paperwork to the bank by photographing it with their smartphone camera

Real-time capture information: Information entered by customers in one channel (e.g. branch, or a mobile device) is saved in real time, so that they can continue their task on another channel seamlessly
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  A report by The Boston Consulting Group, July 2018

- **Corporate Banking in India: A Call for Action**
  A report by The Boston Consulting Group, May 2018

- **Global Retail Banking 2018: The Power of Personalization**
  An article by The Boston Consulting Group, May 2018

- **It’s Not a Digital Transformation Without a Digital Culture**
  An article by The Boston Consulting Group, April 2018

- **Reinventing Banking for the Digital Age**
  An article by The Boston Consulting Group, February 2018

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  An article by The Boston Consulting Group, December 2017

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- **Global Payments 2017: Deepening the Customer Relationship**
  A report by The Boston Consulting Group, October 2017

- **Getting Bank Automation Beyond the Pilot Phase**
  An article by The Boston Consulting Group, August 2017

- **FIBAC 2017 - Finance in Digital Era: Navigating the Knowns and Unknowns**
  A report by The Boston Consulting Group in association with The Federation of Indian Chambers of Commerce and Industry (FICCI) and India Bank’s Association (IBA), September 2017

- **Encashing on Digital: Financial Services in 2020**
  An article by The Boston Consulting Group, June 2017

- **Customers Steer Digital Trends Driving Retail Banking Transformation**
  An article by The Boston Consulting Group, May 2016

- **Retail Banks at the Crossroad**
  A report by The Boston Consulting Group in association with Efma, June 2016
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**PSU - Large Banks**
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Shashi Bhushan Panda
Bank of India
V.C. Chellaram
Canara Bank
Rohit Grover
Punjab National Bank
Sanjay Gadge
State Bank of India
Sumit Srivastava
Union Bank of India

**PSU - Medium Banks**
P.S.Chakraborthy
Allahabad Bank
ACV Subrahmanyam
Andhra Bank
Kirti Shintre
Bank of Maharashtra
Kanak Raju
Central Bank of India

**Private - New Banks**
Yash Parekh
Axis Bank
Anil Belligundu
HDFC Bank

Sunil Kumar Jadli
Corporation Bank
Jai Singh
Dena Bank
Anirudh Behera
IDBI Bank
S. Ravi
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R K Shetty
Indian Overseas Bank
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Oriental Bank of Commerce
A N Singh
Punjab & Sind Bank
D Srinivasa Reddy
Syndicate Bank
Avinash Shukla
UCO Bank
Prafulla Kumar
United Bank of India
Sooraj T Malayil
Vijaya Bank

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Ragesh M
Catholic Syrian Bank
Sankaran G
City Union Bank
John Louis
Federal Bank
Syed Aadil Bashir
Jammu & Kashmir Bank
Manjunatha Bhat
Karnataka Bank
Dharmarajan H
Karur Vysya Bank
A. Seetharaman
Lakshmi Vilas Bank
Kurian Abraham
South Indian Bank

Shashank Mundra
ICICI Bank
Sachin Kadam
IDFC Bank
Prashant Agarwal
Kotak Mahindra Bank