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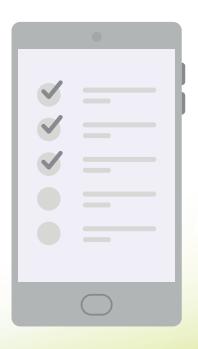
Digital Banking Maturity

Charting the road ahead for digital retail banking in India November 2023

Table of contents

Ex	ecu	tive summary	5		
Se	ctic	n 1: Overview	7		
Bu	ildir	ng blocks of DBM	8		
Sig	nifi	cance of DBM in today's banking landscape	11		
Se	ctic	n 2: Global benchmarking results and			
dig	gita	l banking trends	13		
Glo	oba	benchmarking results	13		
Global digital banking trends					
	1.	End-to-end digital banking processes	17		
	2.	Banking apps as a Platform (BaaP)	18		
	3.	Cross-platform and ecosystem solutions	19		
	4.	Personal Finance Management (PFM)	20		
	5.	Facilitating app usage for all clients	20		
	6.	Democratising investments	21		
	7.	Challenger banks	21		
	8.	Mobile first	21		
Se	ctio	on 3: Key insights from the Indian market	23		
A.	Th	e overall DBM score	23		
В.	As	sessing Indian banks customer journey effectiveness	24		
C.	Inc	lian banks on the DBM spectrum	24		
D.	Eva	aluating channel-wise performance	25		
E.	Sp	read of functionalities: Indian banks and Digital champions	26		
F.	Analysis from a customer journey sub-steps perspective				
	1.	Personal Finance Management (PFM)	27		
	2.	Beyond banking	30		
	3.	Ecosystem and account aggregation	32		
	4.	Product cross-selling (complementary)	33		

5. Investment services	34			
6. Bancassurance	36			
7. Customer support	37			
8. Channels accessibility	39			
9. Account and product management	41			
10. Information gathering	44			
11. Card management	46			
12. End relationship	48			
G. Key takeaways	49			
Annexure 1: DBM survey methodology	55			
Onboarding and selection of banks				
Research methodology	55			
Questionnaire structure				
Annexure 2 – UX research	59			





Executive summary



In today's banking landscape, customers' expectations are nothing less than seamless, personalised experiences and unwavering consistency across every touchpoint and channel. As customer attention spans shorten and choices in the market grow, banks must proactively meet the needs of their evolving customer base.

In India, our Digital Public Infrastructure (DPI) forms the backbone of digital banking transformation. Aadhaar, for instance, has been a cornerstone of DPI, while the introduction of the Unified Payments Interface (UPI) strengthened the digital payment infrastructure. Combined with other initiatives, including account aggregators, Open Network for Digital Commerce (ONDC), and Open Credit Enablement Network (OCEN), DPI enables India to catalyse value creation across sectors. This has transformed how a customer interacts with businesses, governments, and fellow citizens, thereby pushing banks to the next stage of their digital transformation journey. Recognising that the satisfaction and loyalty of their clientele hinge on the quality of interactions and services provided, banks are actively re-architecting their approaches to customer engagement.

To thrive in the future, banks must embrace innovation, engage customers at every touchpoint, and use data to drive personalised offerings. In today's competitive market, decision-makers in banks need to understand the maturity, latest trends and developments in digital retail banking channels, and what the best UX looks like – both across the globe and within the country.

In this context, this Digital Banking Maturity (DBM) report is uniquely positioned to help. This report is the world's largest benchmarking study of digital retail banking channels, encompassing 304 banks from 41 countries across five continents, including key economies, such as the US, China, India, the UK, and Brazil. This comprehensive analysis highlights leading digital trends in the banking industry, including but not limited to, personalised products and offerings, banking as a platform, and value-added services.

The DBM Index classifies these 304 banks into four levels, with the top 10 percent recognised as "Digital champions," followed by "Digital smart followers," "Digital adopters," and "Digital latecomers," respectively. A bank's position in the index is determined by its level of digitisation across six customer journeys, broken down further into 17 customer journey sub-steps. These sub-steps are designed to cover the entire customer value chain. This segmentation offers valuable insights such as areas where digital champions have invested, growth of innovative functionalities, and products experiencing significant digitisation rates.

Of these 17 customer journey sub-steps, this report (section 3F) takes a detailed look at the 12 sub-steps that are most relevant to the Indian banking space and offer significant potential for value creation.

These sub-steps are:

- 1. Personal Finance Management (PFM)
- 2. Beyond banking
- 3. Ecosystem and account aggregation
- 4. Product cross-selling (complementary)
- 5. Investment services
- 6. Bancassurance
- 7. Customer support
- 8. Channels accessibility
- 9. Account and product management
- 10. Information gathering
- 11. Card management
- 12. End relationship

This report delves into the features offered by Indian banks in these 12 sub-steps and explores opportunities for further digitisation by comparing these local offerings with global best practices. Indian banks can consider adding these functionalities in each of the 12 customer journey sub-steps in the next stage of their evolving digital maturity, keeping the unique needs of Indian customers at the forefront. Growing digitisation amongst Indian banks has led to an explosion in the quantity of data generated and processed. While this report explores customer journeys on digital channels, financial institutions must have a strong governance mechanism that includes robust controls and compliance frameworks, and a secure consent management system to protect its customers.

From the above-mentioned 12 customer journey sub-steps, we specifically call out 4 key sub-steps below:

- Personal finance management Categorisation of transactions, spending limits by category, cashflow projections, financial feed, etc.
- Beyond banking Personalised non-banking financial offers based on customers' digital footprints, marketplace offerings, availability of value-added services, such as offering tickets for cinema and theatre etc.
- Ecosystem and account aggregation Aggregation of account history from other banks, spending aggregation across multiple accounts, etc.
- Account and product management Display of the carbon footprint of the account and carbon calculator



Section 1: Overview

Digital transformation in the financial services industry has reached an inflection point. This tectonic shift in the industry has been brought about by evolving consumer preferences, fintech-led disruption in the ecosystem, and regulator-induced changes.

An evolving customer base has become increasingly tech savvy and is ready for greater digital engagement with its banks. The pandemic also played a key role in accelerating digital services utilisation, leading to increased technology adoption.

Indian banks have been enhancing their digital services, recognising the need to adapt in the modern banking landscape. Although traditionally reliant on legacy systems, their digital transformation journey has yielded significant achievements. By integrating advanced technology and using alternative data, banks aim to improve customer experience, streamline operations, and bolster security. Combined with the rise of innovation-oriented fintechs, this has created a new business model that includes collaboration and co-creation with other players in the financial ecosystem. Several banks are increasingly looking to fintechs and their offerings as key pieces of the customer needs puzzle, seeking to leverage novel digital tools and platform capabilities.

Also, a favourable regulatory regime-supporting emerging technologies, open data, and ecosystem-level partnerships, is shaping the financial services landscape from the top-down. Regulators have struck a balance between consumer protection (including data security, privacy, and ethical use) and rapid innovation. Initiatives such as sandboxes allow financial ecosystem players to experiment, collaborate, and deploy new solutions with faster go-to-market timelines and greater adoption amongst customers.

In a response to the above, banks have accelerated their digitalisation journey and are re-evaluating the conventional banking business model.

Indian banks have already increased investments in both internet and mobile banking to become more customer responsive. Central to the rapid success of this digital transformation journey is a foundational approach based on India Stack that supports inclusive growth.

Government initiatives, such as EASE, that deal with public sector bank reforms, have pushed banks to improve digital services. Customer-centric digital transformation and embedding data-driven decision-making into PSBs' ways of working have been central themes across EASE frameworks. Further, the introduction and regulation of data fiduciaries (account aggregators) has propelled open banking. This will result in more widespread data sharing and fuel other openbanking use cases. Therefore, it becomes imperative for banks to have a strong governance mechanism, which includes robust controls and compliance frameworks, and a secure consent management to protect its customers.

Digital-only account opening has gained traction within Indian banks. The Covid-19-induced lockdown was a pivotal moment - one that accelerated digital onboarding of new users. For instance, India's largest PSU opened 64 percent¹ of savings accounts, i.e., 78.6 lakh accounts digitally. Further, the number of loans sanctioned digitally witnessed a 15 percent growth in FY2022-23, reaching 13.39 lakh. For another leading private-sector bank, 94 percent² new loan applications were received through digital channels in FY2022-23. Another private-sector bank disbursed 55 percent³ of personal loans and sources 67 percent fixed deposits digitally.

Beyond account opening, digital payments also attained prominence during the pandemic. In India, contactless payment modes such as UPI QR codes complemented the "new normal" of social distancing. UPI volume jumped at a CAGR of 88 percent, from 12,518 million in FY2019-20 to 83,751 million in FY2022-23. RBI-DPI⁴ (Digital Payment index) demonstrated the rapid adoption of digital payments across the country in recent years. DPI Index increased from 207.84 for March 2020 to 377.46 in March 2023 (DPI base year is 2018 with the value as 100).

At the cusp of change, it becomes more imperative for banks to learn about their performance relative to local and national competitors. Stopping at local market intelligence would be akin to touching the tip of the iceberg. Being aware of the global landscape and the best practices adopted by global peers will present a broader view to the Indian banks.

¹ Source: SBI Annual report FY2022-23

² Source: HDFC Annual report FY2022-23

³ Source: Axis Bank Annual Report FY2022-23

⁴ Source: https://www.rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=54100

Building blocks of DBM



The Deloitte Digital Banking Maturity survey is the largest⁵ global benchmarking exercise of digital retail banking channels. It covers 304 banks from 41 countries and five continents, with participation from key economies such as the US, China, India, the UK, and Brazil. The study focusses on digital retail banking across three channels—public websites, internet banking, and mobile apps and seeks to cover functionalities across customer journeys.

The survey is aimed at gauging what global leaders are doing to stay ahead in the digitalisation race. DBM is a part of Deloitte's Digital Banking accelerator suite, which empowers banks to adopt and respond to change.

Across the world, amidst growing emphasis on digital offerings, banks must look to transform into digitally enabled platforms and co-create effective value propositions, along with other ecosystem players. Most players have undergone some form of digital transformation and achieved significant value from modernising their front, middle, and back offices. The next step in this natural evolution is to develop end-to-end digital customer-facing solutions to meet a growing demand for do-it-yourself services.

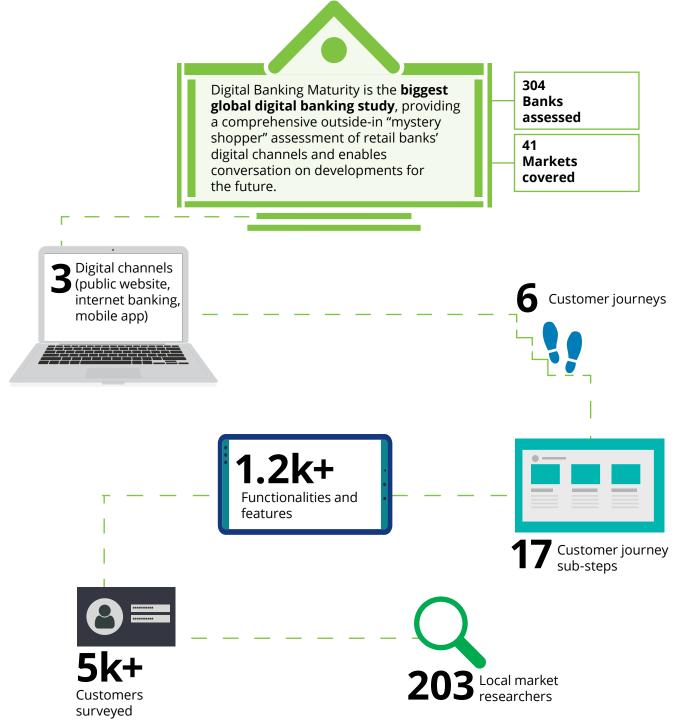
In this context, Digital Banking Maturity (DBM) takes on significant relevance. It measures the front-office capabilities of banks to engage with customers. The Digital Banking Maturity survey provides visibility into the front-office's digital maturity in unlocking business objectives, including but not limited to, personalised products and offerings, banking as a platform, value added services, etc.

DBM provides a comprehensive outside-in "mystery shopper" assessment of retail banks' digital channels and enables discussion about developments for the future. It empowers banks to understand both existing and emerging digital propositions to refine their digital strategies.

The DBM research comprises functionality benchmarking (which is based on customer needs research) and UX best practice identification. The DBM survey methodology, covering functionalities benchmarking and customer needs research, is outlined in Annexure 1, while the UX study methodology has been covered in Annexure 2. It may be noted that the UX study was was done for a limited set of banks globally and the results were shared with those banks. As such, the UX study findings are not included in this report.

 $^{^5} https://www2.deloitte.com/hu/en/pages/deloittedigital/articles/digitalbanking maturity 2022.html\\$

The digital banking maturity study can help banks respond to change



Components assessed in order to compare digital maturity between banks and identify best practices



Functionalities benchmarking

Analysis of 1208 digital functionalities through a "mystery shopper" approach on real retail current accounts in each bank

- Assessment of six customer journeys
- Analysis of digitalisation of 19 banking products
- Functionalities library with world's leading practices



Customer needs research

Survey-based research focused on identifying the 26 most important banking activities and preferred channels (branch, Internet, mobile), covering over 5,000 responses

Customer preferences between channels in terms of most common banking activities



User experience study

Analysis of general principles and best practices of user experience in banking

- Assessment of 15 selected scenarios reflecting key areas of customer activity at top UX banks from 10 countries
- Identification of best practices and general leading principles in banking apps UX

Functionalities benchmark

An exhaustive overview of banks' digital maturity

UX best practices

Guidelines and insights into UX of digital banking channels

Significance of DBM in today's banking landscape



The DBM study is a biennial exercise that serves as a valuable tool for banks to comprehend prevailing digital trends and craft compelling customer propositions.

DBM enables banks to answer three important questions:

- a. How mature are your digital retail banking channels and what is the state of the competition?
 - Gain insights into how a country is positioned within global markets and how an individual bank fares when compared with local and global leaders.

b. What are some key global trends and innovations?

- Learn more about the latest trends, developments, and functionalities across the customer value chain in digital retail banking channels.
- c. What does the best-in-class UX look like?
 - Examine global best practices and select leading principles of UX of digital banking channels.





Section 2: Global benchmarking results and digital banking trends

Global benchmarking results

As mentioned earlier, through the three-pronged exercise-functionalities benchmarking, customer needs research, and UX study, the DBM index classifies banks into four groups based on their digital banking maturity scores:



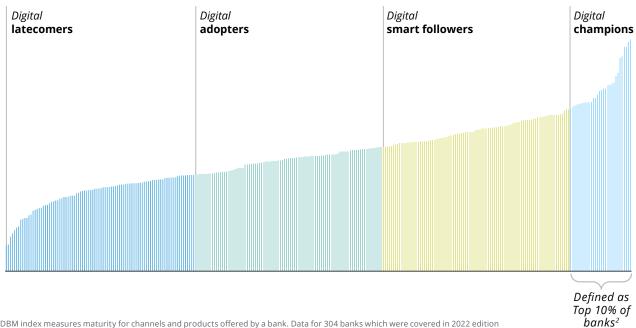
The top 10 percent banks, responsible for setting key digital trends and having adopted market-leading practices, have been christened as "Digital champions". These are the banks that currently enjoy a lead in their digital transformation

endeavours across customer journeys, and provide customers a compelling user interface. Digital champions shape key digital trends and typically employ more innovative strategies, acting as pioneers.



Figure 2.1

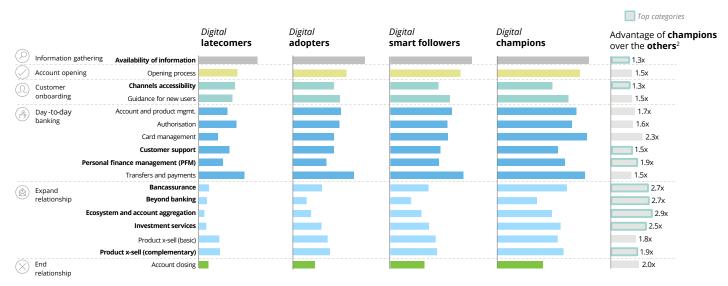
DBM index1



Note 1. DBM index measures maturity for channels and products offered by a bank. Data for 304 banks which were covered in 2022 edition Note 2. Selection of 30 banks defined as Digital champions

An indication of the advantage Digital champions hold across the spread of customer journeys can be viewed below. Digital champions lead the pack when it comes to the number of functionalities offered. The graph depicts the ratio of functionalities between Digital champions and other banks across the 17 identified customer journey sub-steps covered in the survey. For instance, in Bancassurance, digital champion banks offer 2.7 times the functionalities provided by the other banks.

Figure 2.2 - Percentage of functionalities offered by banks

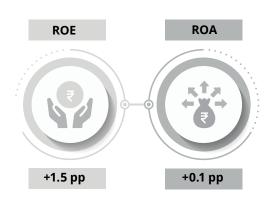


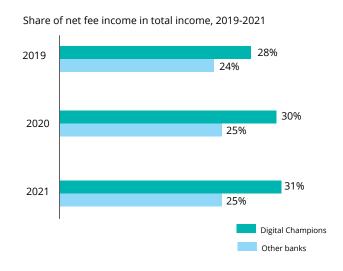
Note 1. Data for 304 banks which were covered in 2022 edition

Note 2. Ratio of functionalities % between Digital champions and other banks score

This initial lead across functionalities allows Digital champions to expand their relationship with customers and corner more of the market. This can be observed if we compare key KPIs for digital champion banks with their peers.

Figure 2.3 - Selected KPIs of incumbent Digital champions: Average difference with peers

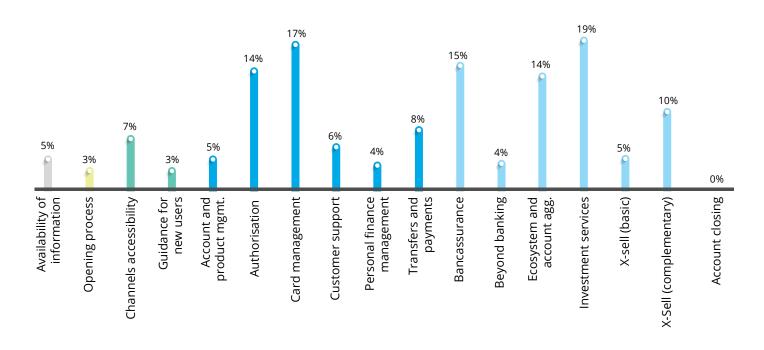




Note 1. Incumbents – banks with long-established position on the market. Challengers – relatively small bank competing with large long-established banks, Note 2. Average difference to peers – peers are incumbent banks in the same countrythat were covered in the DBM survey

By making strategic investments, particularly over the past 2 years, digital champion banks have gained a significant advantage over their peers. There has been a sharp growth in functionalities offered by Digital champions on investment services, bancassurance, card management, authorisation, and ecosystem and account aggregation in 2022 viz-a-viz 2020.

Figure 2.4 - Digital champions increase in advantage over peers
Difference between the percentage of functionalities implemented by Digital Champions in 2020 and 2022, pp



From a product lens, transactional products and bancassurance are the groups where end-to-end digitalisation processes grew the most (surpassing double digit growth rates).

♣ Avg. growth for the whole group Result in 2020 Growth in 2022, pp **Credit products Bancassurance Saving & Investment Transactional Products** +8% +11% +6% +11% +8 +1 +13 +11 +14 +10 +12 +8 +7 +5 +11 +5 +6 Cash loan Mortgage Debit card Car loan Life insurance Non-life insurance Mutual funds Pensions **Unit-linked** Currency account Current account **Brokerage account** Saving account Credit card Overdraft Term deposit

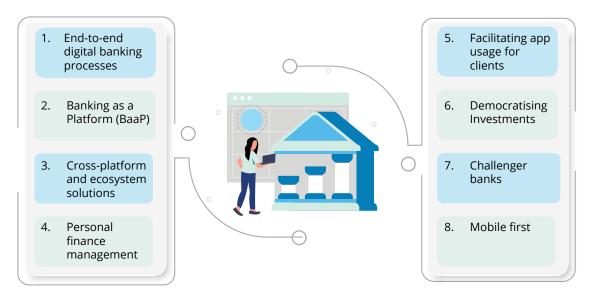
Figure 2.5 - Percentage of digital end-to-end functionalities related to banking products offered by banks

Note 1. Sample of 193 banks which were covered in 2020 and 2022 edition

These takeaways could prove valuable for charting out a digital strategy, including the prioritisation of customer-centric digital services and offerings for banks.

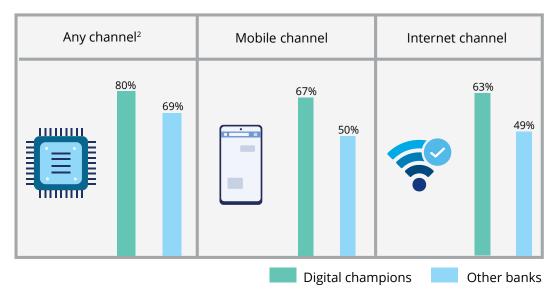
Global digital banking trends

Leveraging results from a benchmarking exercise of over 1,200 functionalities, a customer-needs survey that evaluated banking channel usage and the UX of key selected players, we have identified eight digital trends and areas that influence the banking sector. In the subsequent section, we will deep dive into a few of these trends.



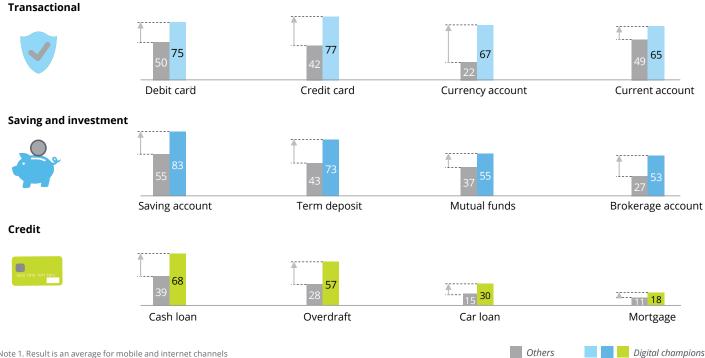
1. End-to-end digital banking processes Most banks understand that digital banking processes are integral to evolve their portfolio of offerings and meet changing customer expectations. For basic offerings, such as account opening, Digital champions offer fully digital processes through internet banking and mobile apps, while most other banks offer this on only one channel or another. However, there is significant scope across the board for end-to-end digital application methods for products such as mortgages or car loans. At present, mortgages are offered by 18 percent and car loans by 30 percent of Digital champions, respectively. Displaying the application status progress bar and offering a facility to prepay mortgage loans are some best practices followed by Digital champions.

Figure 2.6 - Percentage of banks offering end-to-end current account (CA) opening method



Note 1. Data for 30 banks classified as Digital champions and 274 other banks which were covered in 2022 edition Note 2. % of banks offering end-to-end remote CA opening process in either internet banking, mobile banking or both channelsNote 3. Includes data from internet and mobile banking channels

Figure 2.7 - Percentage of banks offering fully end-to-end product opening method in mobile or internet channels



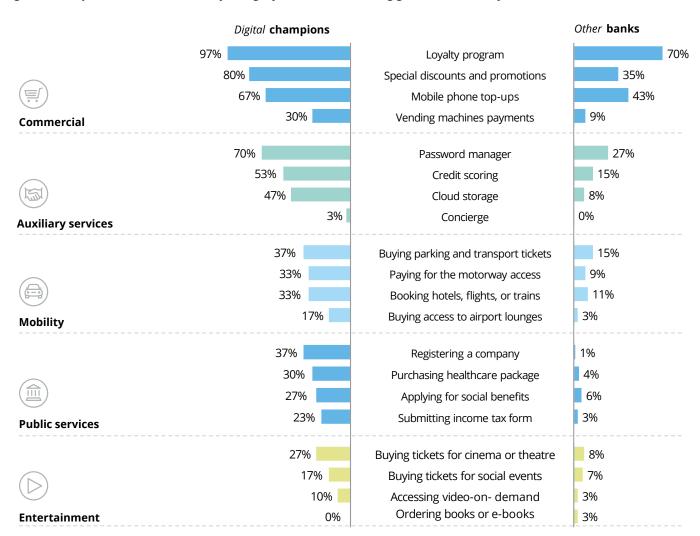
Note 3. In many cases of Digital champions, debit card is issued automatically with an account. It can lower actual score

As banks continue to digitise, the differentiating factor will be the number and nature of functionalities they offer. Employing user-centric functionalities such as descriptive buttons, progress trackers, and information on the status of the application will make contactless processes smoother and more convenient for customers. It is imperative, however, to back this up with a robust complaint recording and addressal system to ensure customers are not stranded without help.

2. Banking apps as a Platform (BaaP)

The natural evolution of banking apps lies in service expansion. While initially sticking to traditional products, banks began incorporating other financial services offerings in their digital channels, including insurance, investments, and others. Offerings have started to transcend the Financial Services space, as bank apps have begun offering the ability to book travel tickets, purchase tickets for movies etc. These value-added services can boost engagement and customer loyalty and aid efforts to acquire and retain customers. Value added services act as important differentiators and are mainly adopted by Digital champions.

Figure 2.8 - Top value added services by category, % of banks offering given functionality



Note 1. Data for 30 banks classified as Digital champions and 274 other banks which were covered in 2022 edition

With banks engaging other ecosystem players on their platform, banking platforms can catalyse innovation in the digital functionalities offered to customers.

A platform-based approach can also help banks monetise customer data. An increase in the time spent on the app will build a loyal customer base. In the long-term, this will allow banks to collect more customer data and personalise services accordingly. Post the pandemic and amidst a general rise in e-commerce activities, banks are also exploring the option to implement solutions designed for e-commerce sales.

Globally, apps have also started hosting marketplaces, including for automobiles, real estate, etc. Automotive marketplace functionalities are more common amongst Digital champions than those for real estate marketplaces. However, a significant number of banks still need to catchup and incorporate these functionalities.

3. Cross-platform and ecosystem solutions

Banks take advantage of cross-platform solutions to offer services that make banking more convenient and efficient. Cross-platform solutions owned and operated by third parties hold the potential to radically expand the financial services sphere. Banks are developing APIs and entering partnerships with FinTechs to further strengthen their digital channels and foster a broader banking ecosystem.

Initiatives across the world are also accelerating the adoption of open banking use cases. MAS Singapore and The Association of Banks, for example, have published an API Playbook to support data exchange and communication between banks and FinTechs.

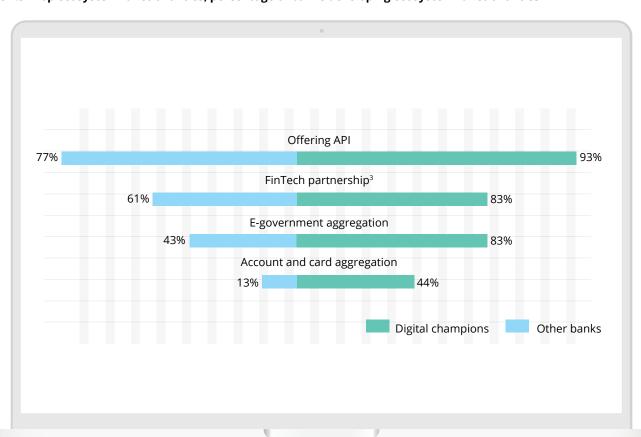


Figure 2.9 - Top ecosystem functionalities, percentage of banks developing ecosystem functionalities

Note 1. Average score of 193 banks participating in both 2022 and 2020 edition, classified as Digital champions and other banks

Note 2. Data for 30 banks classified as Digital champions and 274 other banks which were covered in 2022 edition Note 3. Data including banks developing at least one FinTech partnership in any segment

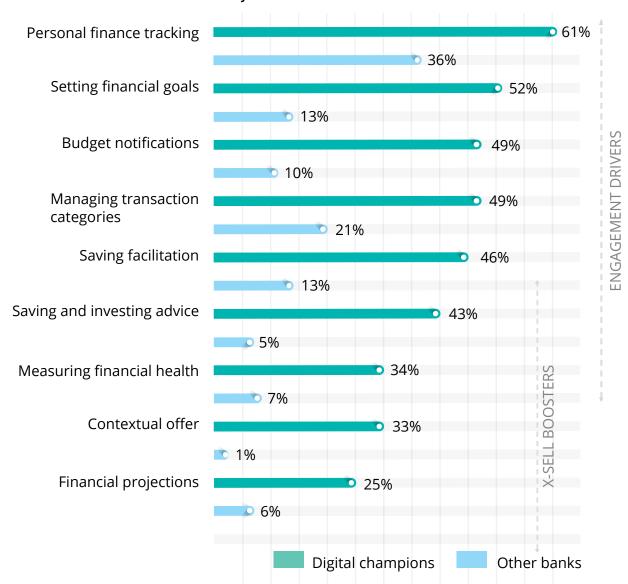
4. Personal Finance Management (PFM)

PFM encapsulates the broad range of services offered to empower customers by providing them with agency. PFM gives customers greater control over their spending, saving, and investing, allowing them to predict their expenses and offering them access to their spending behaviour. Banks use this data to provide customers with personalised recommendations and advice at their fingertips. Additionally, supported by regulations, such as

PSD-2, banks enable their customers to connect multiple accounts and have a clear and complete overview of their finances in one place.

Banks utilise PFM functionalities to increase the time and frequency of mobile app usage. A few Digital champions have pivoted to implement functionalities for cross-selling, directly converting collected data into revenue-generation opportunities.

Figure 2.10: % of PFM functionalities offered by banks



Note 1. Data for 30 banks classified as Digital champions and 274 other banks which were covered in 2022 edition, includes data from internet and mobile banking channels

5. Facilitating app usage for all clients

As part of an effort to reach out to new-age banking customers, Digital champions are increasingly offering features such as GIFs/emojis with payment transfers, financial feed, tagging transactions (akin to social media).

Banks are also undertaking steps to make their apps more accessible to differently abled people. A few functionalities tied to social responsibilities, such as accessibility statement, sign language availability, and colour contrast adjustment are being provided by Digital champions.

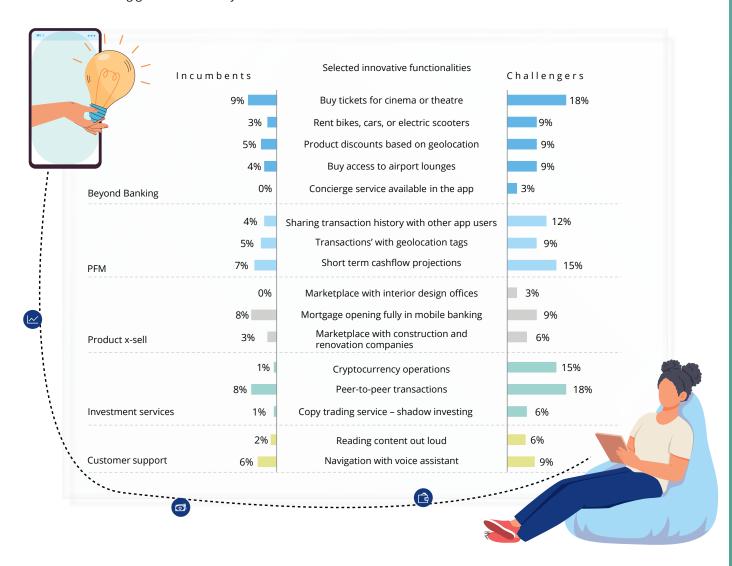
6. Democratising investments

Investments once viewed as complicated are now a democratised product due to a combination of easier access to information, greater access to learning resources and the convenience of mobile-based platforms. Beyond merely offering seamless investment offerings, Digital champions are uniquely placed to learn from customer data to make product suggestions or, at the least, ensure clients make informed decisions. For example, setting up an investor profile after the user answers a few questions about their investment goals, financial knowledge, and risk appetite, and recommending investment options that best suit customer needs.

7. Challenger banks

Challenger banks are small banks that compete with traditional behemoths. They take up considerable importance in the DBM discussion as their USPs can often have a digital-only or mobile-only presence. In the Indian context, neobanks could be seen as equivalents. Their USP is often attached to their dedication to innovate, making them trailblazers in the BFSI space.

Figure 2.11 - Challengers are more likely to differentiate themselves by adopting innovative solutions % of banks offering given functionality



8. Mobile first

For the period of 2020-22, digital maturity of the mobile channel has grown faster than for internet banking. There is a growing preference to use mobile apps for services areas, such as looking for product information, managing personal accounts, and active investing.

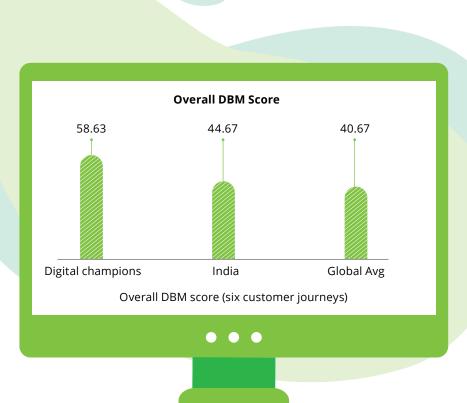


Section 3: Key insights from the Indian market

A. The overall DBM score

Indian banks* are well positioned in their overall digital maturity score, lying above the global average, but with enough progress to catch-up to Digital champions.





^{*} Note: In this section, "Indian banks" refers to the 8 banks surveyed as part of the DBM exercise. More information can be found in Annexure 1



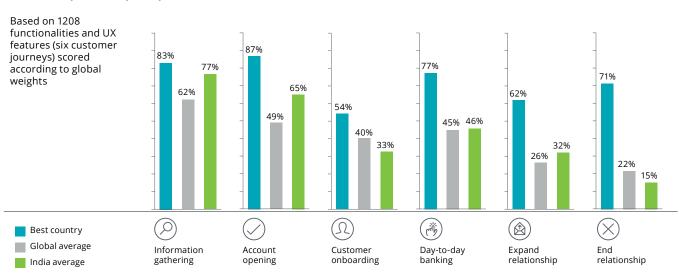
B. Assessing Indian banks customer journey effectiveness

Based on 1,208 functionalities and UX features scored according to global weights, Indian banks scored higher than the global average across a majority of customer journeys.

There is still significant scope for Indian banks to improve in three customer journeys - expand relationship, customer on-boarding, and day-to-day banking.

Figure 3.2 - Digital Banking Maturity score by customer journeys

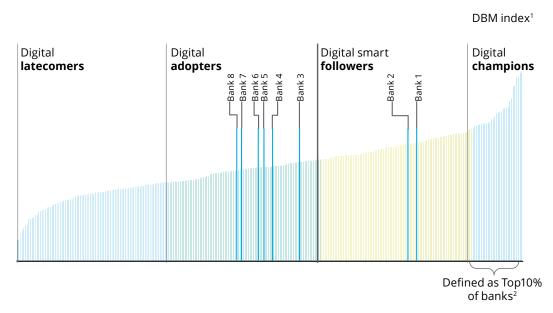
DBM score by customer journey, %



C. Indian banks on the DBM spectrum

Two out of the eight surveyed Indian banks were classified as digital smart followers, securing a rank in the top 25 percent of the banks surveyed across the globe.

Figure 3.3
In DBM 2022 India was ranked 19th globally.



Note 1. DBM index measures maturity for channels and products offered by a bank. Data for 304 banks which were covered in 2022 edition Note 2. Selection of 30 banks defined as Digital champions

D. Evaluating channel-wise performance

Indian banks performed better, both overall and across channels, (i.e., internet and mobile banking) compared with the global average. Yet, their DBM scores lag against Digital champions highlighting that Indian banks stand to learn from the prowess of global industry leaders.

Figure 3.4 - DBM score by channel - Internet banking

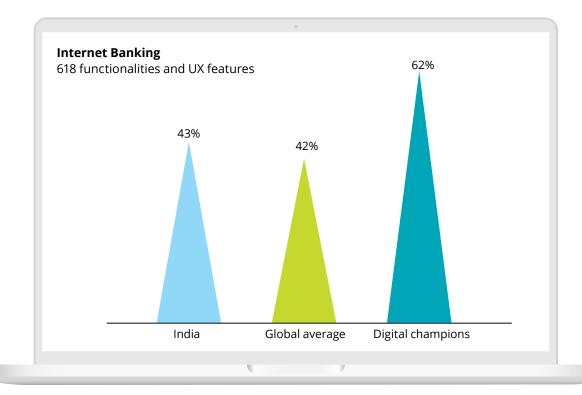


Figure 3.5 - DBM score by channel - Mobile banking

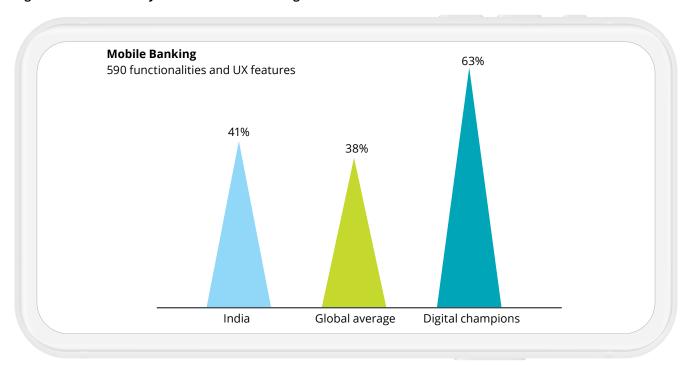
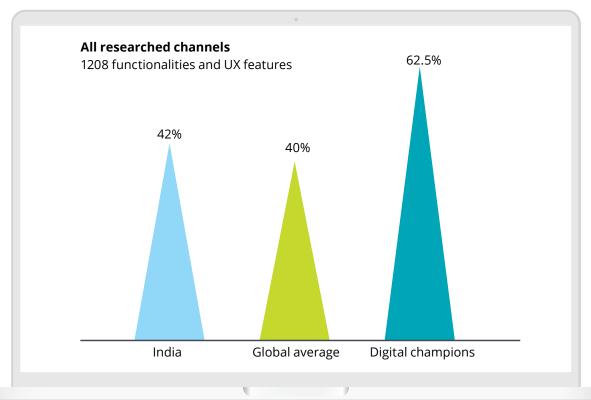


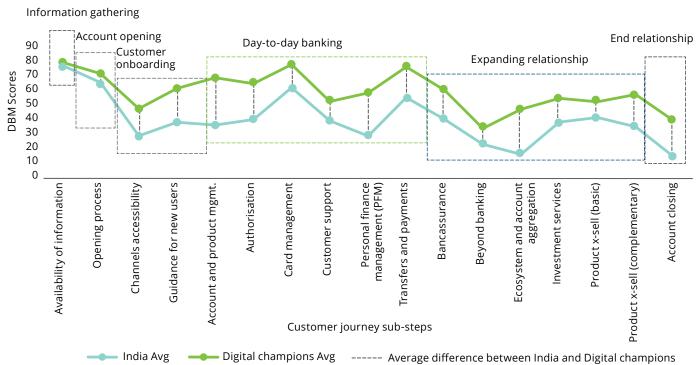
Figure 3.6 - DBM score across channels



E. Spread of functionalities: Indian banks and Digital champions

The graph below provides insights into the average spread between the functionality's percentage offered by Digital champions and Indian banks. For example, there is a spread of 30+ percentage points between the Personal Finance Management (PFM) functionalities offered by Digital champions and Indian Banks on average.

Figure 3.7



F. Analysis from a customer journey sub-steps perspective

In this section, we will take an in-depth look at Indian banks and their performance across 12 key customer journey substeps. We juxtapose our findings with reflections on global leading practices to identify opportunity areas for Indian banks.



Personal Finance Management (PFM)

What is PFM?

PFM functionalities help customers control the money they spend; predict how they will spend, save, invest it; or analyse it.

What is going well

 Indian banks are on the course to provide customers with the ability to set their own financial goals. Twenty-five percent of Indian banks provide this functionality on the app, while 57 percent of Digital champions do so.

Insights from global benchmarking

- 1. Automatic categorisation of transactions and manual change of categories is offered by 29 percent and 23 percent Digital champions, respectively, in internet banking.
- 2. Customised product recommendation based on the "current financial situation" and profile is being offered by 23 percent Digital champions.
- Functionalities such as personalised advice for saving and investing in goals, and estimating upcoming expenses based on history, is offered by only one Indian bank. Forty-seven percent and 26 percent Digital champions provide these functionalities, respectively.
- Functionalities empowering customers to utilise diagnostic tools to measure their financial health are absent from the offerings of surveyed Indian banks. Seventeen percent Digital champions offer this functionality.

BBVA Bank, ⁶ Spain and Barclays⁷ provide **automatic categorisation of transactions**.









Value for client

- Improved access to banking products and services
- · Convenience and time-saving
- Improved User Experience (UX)



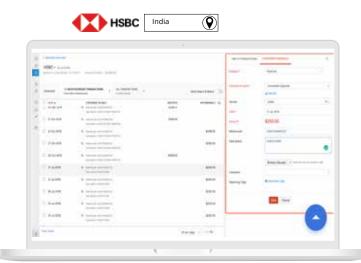
Value for bank

- Growth of product volumes / cross-sell
- Customer engagement boost
- Enhanced customer loyalty and satisfaction

⁶ https://www.bbvaaifactory.com/money-talks-how-ai-helps-us-classify-our-expenses-and-income/

 $^{^7\,}https://www.electronic payments in ternational.com/news/barclays-spending-feature/$

HSBC allows its users to **categorise transactions.** A leading private bank in Poland enables customers to **filter transactions by categories**, improving PFM.⁹





Value for client

- Convenient and time-saving
- · Personal financial planning
- Personal financial insights

Value for bank



- Innovative brand image
- Customer engagement boost
- Enhanced customer loyalty and satisfaction
- · Customer analytical data
- A leading bank in Austria and Central and Eastern Europe allows customers to plan their expenses by **setting the limit for specific merchants and categories.** Another leading bank in America **suggests category-wise spending limits** based on user expenses with a similar profile. Users can also set up both fixed and flexible spending budgets using the app
 - Singapore's leading consumer bank facilitates personal financial planning by **offering short-term account balance and** cashflow projections.¹¹

Value for client



- Convenience and time-saving
- · Personal financial planning
- Personal financial insights
- Improved User Experience (UX)



Value for bank

- Gathering customer analytical data
- Customer engagement boost
- Enhanced customer loyalty and satisfaction
- Innovative brand image

⁸ zoho.com/in/books/kb/banking/auto-categorization-of-transactions.html

⁹ Internal Deloitte DBM Research

¹⁰ Internal Deloitte DBM Research

¹¹ Internal Deloitte DBM Research

A snapshot of the functionalities that are offered/can be offered by Indian banks has been illustrated below:

Catch up with local competitors	Get inspired by the best international players		
Selected differentiators that are present in at least one surveyed Indian bank	Selected differentiators that are not present in any surveyed Indian bank		
Personal Financial Management	Automatic categorisation of transactions		
21% Set and track savings goals Set spending limits for specific categories Money locked on current account	Current account balance history on chart 25% Filter transaction by merchant 19% Set financial goals		
Set spending limits for specific categories	Filter transaction by merchant		
Money locked on current account	Set financial goals		
Budgets notifications 8% Advice for saving/ investing goals	37% Widget on home screen Long-term tracking of assets and liabilities		
29% Change past transaction by added rules	16% Financial feed		

Note: In the above image, the box on the left covers functionalities that are present in at least one of the eight surveyed Indian banks. The pie chart (and percentage within) represents the share of all surveyed banks (304) that provide this functionality. For example, in the image, "Personal Finance Management" is present in at least one surveyed Indian bank and is offered by 38 percent of the globally surveyed banks. The box on the right covers functionalities that are not offered by any surveyed Indian bank. For example, "automatic categorisation of transaction" is provided by none of the surveyed Indian banks but 35 percent of all banks surveyed globally.

This functionality benchmarking was done at the time of the survey. Banks may have incorporated some of the functionalities as part of their service offerings.





What is beyond banking?

Leading banks are becoming multi-service platforms, with offerings in areas such as mobility, e-government, healthcare and e-commerce. This refers to functionalities that enable recharges, food, transport, entertainment, cloud storage, taxes, medical services, and access to marketplaces, etc.

What is going well

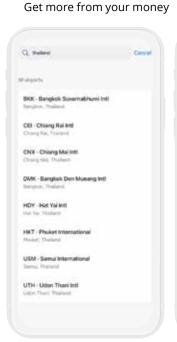
- Indian banks are providing value added services to their customers, e.g., hotel, flight, and train bookings from the bank app.
- Indian banks provide facilities for repayments of utility bills, credit card bills, loans, subscriptions, Fastag, insurance premiums, donations, etc.

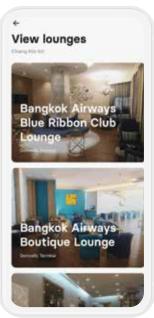
Insights from global benchmarking

- 1. Offering personalised non-financial offers* based on the customer's digital footprint.
- 2. Providing a marketplace for real estate, automotive, etc. and facilities for ordering food, access to social events, medical/health care packages through the app. Offering these value-added services would be a step forward for the banking app to become a super app.
- 3. Providing storage space for documents.

Revolut bank provides access to a range of airport lounges through its mobile app¹²

UK







Value for client

- · Convenience and time-saving
- Improved UX



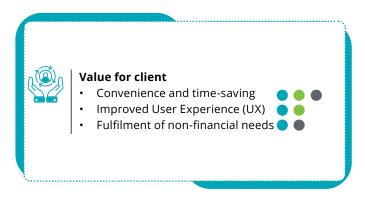
Value for bank

- Innovative brand image
- Customer engagement
- Enhanced customer loyalty and satisfaction

^{*}Non-financial offer relates to non-banking product offers

¹² https://twoticketsanywhere.b-cdn.net/wp-content/uploads/2022/03/revolut-premium-lounge-access.png

- One of the largest and most innovative financial institutions in Poland saves customers' time by **offering cinema and theatre tickets** for sale, all in one place.¹³
- A leading Chinese bank offers various car-related services including a convenient automotive marketplace.¹⁴
- One of the largest private-sector banks in Brazil boosts customer's engagement by **providing personalised, non-financial offers.**







¹³ Internal Deloitte DBM Research

¹⁴ Internal Deloitte DBM Research



Ecosystem and account aggregation

What is ecosystem and AA?

These are functionalities related to cross-platform solutions and aggregations that strengthen the ecosystem, for example, aggregation of accounts, balances, cards, investment accounts, or the marketplace

What is going well

- Banks have realised the importance of open banking in enabling the financial services ecosystem. They are providing APIs to community developers to come up with innovative solutions.
- Indian banks have entered multiple partnerships with FinTechs around payments, lending, blockchain initiatives, personal finance management, etc.

Insights from global benchmarking

- Indian banks have begun providing aggregation services for saving accounts, credit/debit cards, and account histories. Approximately 25 percent Indian banks are offering these features, viz-a-viz 50 percent of their global counterparts.
- Forty percent digital champion banks provide extra handholding for their customers by providing search engine autocompletion while aggregating, and 23 percent provide feedback when the account aggregation process does not give the desired outcome. Only 12 percent of Indian banks offer the former, while none offer feedback.
- 3. Banks can offer a 360-degree view of spending habits of the customer across the accounts that the customer holds.

A leading national financial institution based out of Luxembourg offers **convenient switches between accounts**, allowing the customer to operate all accounts from one bank.

Value for client

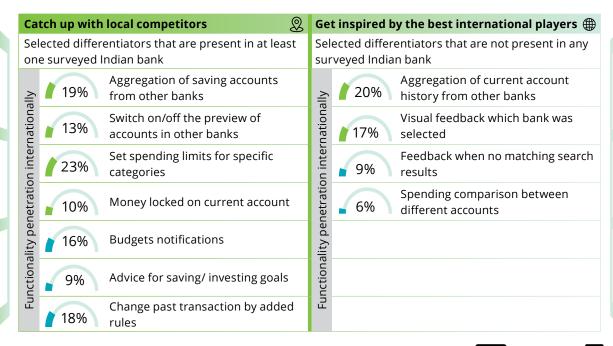


- Improved access to banking products and services
- · Convenience and time-saving
- · Personal financial planning
- Personal financial insights
- Improved User Experience (UX)

(*)

Value for bank

- Gathering customer analytical data
- Customer engagement boost
- Enhanced customer loyalty and satisfaction







Product cross-selling (complementary)

What is product cross-selling?

Functionalities related to avenues of sharing information and cross-selling of products such as cheques, DD, overdraft, credit card, debit card, lending, and deposit products in an end-to-end digital and innovative manner.

What is going well

- 1. Indian banks are sharing product information (cheque, bank draft) including fee, commission, etc., on the app. They are also offering information around the fee, commission on internet banking for car loans, and mortgages. However, there is scope for improvement within mobile apps.
- 2. Thirty seven percent Indian banks provide end-to-end opening for mortgages* on both internet and mobile channels.
- 3. Twenty-five percent Indian banks provide mortgage application statuses to customers on the app, viz-a-viz 40 percent global champions.
- *Home loan in case of Indian Banks

Insights from global benchmarking

- 1. Thirty percent global champions provide pricing of the overdraft and an interactive calculator that compares the cost of the overdraft facility offered by various hanks.
- 2. Offering information with transparency on current interest rates, fee/commissions on bank drafts.
- 3. Given the global footprint of today's customers, a currency converter feature would be useful.

A Chilean bank and financial services company enables the customer to choose a property and apply for a mortgage through the same platform

Value for client

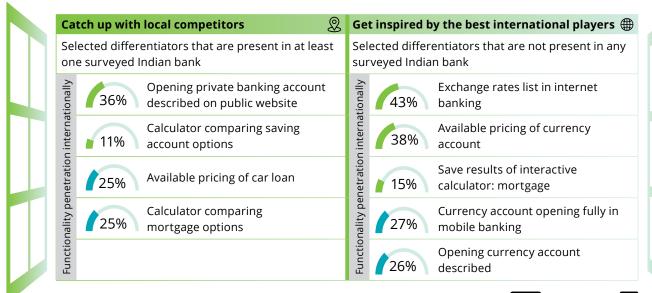


- Improved access to banking products and services
- Convenience & time-saving
- Personal financial planning
- Improved User Experience (UX)

Value for bank



- Growth of product volumes/cross-sell
- Innovative brand image
- Gathering customer analytical data
- Customer engagement boost
- Enhanced customer loyalty and satisfaction









Investment services

What are investment services?

These are functionalities, such as information and provisions of opening a brokerage account, investing in stocks, mutual funds, ULIPs, pension funds, other portfolio products that a bank provides its customers with.

Indian scenario

The NFT marketplace or cryptocurrency are not under regulatory purview. Hence, these functionalities are not being offered by Indian banks. Further, there are limited pension products in India (like NPS and ABPJ). Hence a price, quotation, and interactive calculator comparison for pension products is not present.

What is going well

- Indian bank apps have higher maturity for products, such as mutual funds, and provide offers from multiple MF providers (either in app or through links). They also provide an interactive calculator comparing mutual fund products.
- 2. Robo-advisory tools for customers to create their own investing portfolios are available. While 50 percent Indian banks offer these tools on their internet-banking channel, only 25 percent banks offer it on the mobile app channel.
- 3. Indian banks are on the course to provide interactive calculators, comparing options for mutual fund investments. At present, 25 percent Indian banks are offering this option.

Insights from global benchmarking

- Disseminate information about current fees/ commissions, pricing, and provide an interactive calculator for pension funds.
- 2. Showcase offers from more than one provider for ULIP and pension products.
- For brokerage, ULIP, and pension funds, no Indian bank offers an interactive calculator service on the app. Twenty-three percent, 33 percent, and 53 percent Digital champions offer these functionalities, respectively.



A global bank with a strong European base **offers robo-advisory tools to create investing portfolios**, facilitating investment management for the customers.¹⁵



Tatra Banka, 16 Slovakia, facilitates planning customers' retirement with the possibility to **open a pension fund online.**



Value for client

- Convenience and time-saving
- Personal financial planning
- Improved User Experience (UX)
- Improved access to banking products and services
- · Personal financial insights



Value for bank

- Growth of product volumes/cross-sell
- Enhanced customer loyalty and satisfaction
- Customer engagement boost
- Reduced cost-to-serve
- Innovative brand image
- Gathering customer analytical data



¹⁵ Internal Deloitte DBM Research

 $^{^{16} \,} https://www.tatrabanka.sk/en/personal/savings-investments-insurance/pension/supplementary-pension-saving-iii-pillar$

Ca	tch up with l	ocal competitors	Get inspired by the best international players			
	Selected differentiators that are present in at least one surveyed Indian bank			Selected differentiators that are not present in any surveyed Indian bank		
>	15%	Calculator comparing pensions options	Functionality penetration internationally	25%	Current quotation of pensions assets	
ationally	9%	Pensions from more than one provider		21%	Available pricing of unit-linked	
n intern	14%	Calculator comparing mutual funds options		17%	Innovative investments: crowdfunding	
netration	30%	Questionnaire to define investment profiles		10%	Current quotation of unit-linked assets	
ality per	23%	Alerts due to portfolio deviations		10%	Calculator comparing pensions options	
Functionality penetration internationally	11%	Opening unit-linked described				
1	8%	Unit-linked opening fully in mobile banking				





What is bancassurance?

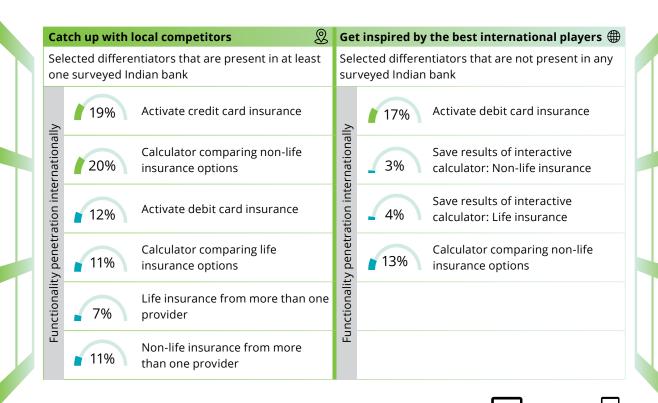
Functionalities related to life and non-life insurance offered by banks to its customer via a digital workflow.

What is going well

- 1. Indian banks provide basic information on life and nonlife insurance products on their website.
- 2. Indian banks offer life and non-life insurance purchases to be made from the convenience of the mobile app.

Insights from global benchmarking

- 1. Delighting their customers with the option to save findings of the interactive calculator.
- 2. Providing life and non-life insurance products of more than one provider. At present only one of the surveyed Indian banks does so.





Customer support

What is customer support?

Customer support functionalities are designed to enhance the customer experience by providing access to help wherever needed, e.g., login and unblocking.

What is going well

- 1. Virtual assistant and/or chatbot functionality is offered by 75 percent of the surveyed Indian banks. These chatbots can answer simple questions or execute transactions.
- 2. Most Indian banks offer information about the bank's privacy policy or direct users to the policy through a link on the app.
- 3. Indian banks are on course to provide pre-authenticated customer centre calls. While 25 percent Indian Banks provide this facility, 43 percent global champions provide this service.

Insights from global benchmarking

- 1. Video chat and other immersive options to communicate with bank representatives through the mobile app is provided by 24 percent of Digital champions.¹⁷ Only one Indian bank provided this facility.
- 2. Banks should assign a dedicated remote advisor to their customers, a service currently offered by 23 percent Digital champions. Only one Indian bank offers the option to connect with a remote advisor.
- 3. Banks should offer the facility to schedule an appointment with a bank advisor in a branch or elsewhere from the app. This is currently offered by almost 50 percent digital champion banks.
- 4. With the advancement in and the availability of data, chatbots can be put to advanced use cases—53 percent Digital champions provide this functionality.
- 5. Indian banks may provide access to the call history and documentation sent by the remote advisor in digital banking. Thirty three percent of Digital champions provide this service.

Davivienda enables the customer to skip queues with appointment scheduling.¹⁸









Value for client

- Improved access to banking products and services
- Convenience and time-saving
- Improved customer service
- Improved User Experience (UX)



Value for bank

- Innovative brand image
- Customer engagement boost
- Enhanced customer loyalty and satisfaction

¹⁷ Findings are as on date of survey. Banks may have added functionalities subsequently

¹⁸ https://www.acftechnologies.com/case-studies/davivienda-innovates-with-video-banking

ING Poland is enhancing accessibility by providing the **option of video chatting with a consultant for individuals who use sign language.**

Value for client

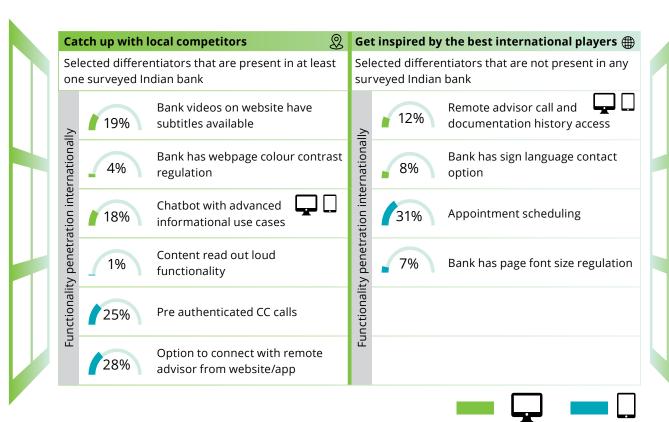


- Improved access to banking products and services
- Improved customer service
- Improved User Experience (UX)

(*)

Value for bank

- Innovative brand image
- Enhanced customer loyalty and satisfaction





What is channel accessibility?

This refers to accessibility-related functions that cater to customers, for example, automatic access to internet and mobile banking once the account has been opened, lite version of the app/website, and investing and brokerage accounts.

The Indian scenario

Features such as augmented reality, apps for children have still not been explored or are nascent in the Indian market.

What is going well

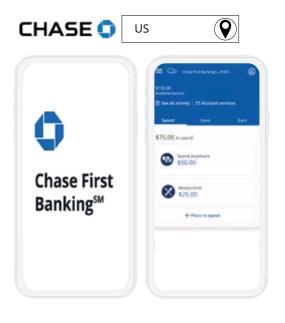
- 1. Indian banks provide automatic access to mobile and internet banking once an account is opened.
- 2. With the push by the government towards financial inclusion (for example, launch of UPI lite), lite versions of apps have gained relevance. Indian banks are adopting lite versions of apps (although a few had to roll-back as there was limited uptake).
- 3. Indian banks are on the course to provide interactive demos for savings accounts on the app. Fifty percent Indian banks provide this functionality as compared with 43 percent of Digital champions.

Insights from global benchmarking

- Seventy-three percent Digital champions provide "apponly" features to increase the uptake of the mobile app. On the other hand, only one Indian bank follow a similar strategy.
- 2. Ninety-three percent Digital champions provide shortcuts to some functionalities in the app, while 25 percent Indian Banks offer them.

Barclays Bank¹⁹ and Lloyds Bank²⁰ offer the functionality to **switch current accounts through mobile apps.** This includes the transfer of all payment orders (such as direct debits, salaries, recurring expenses) and the ability to set up payment redirection from the old account.

PNC Bank,²¹ Pennsylvania and JPMorgan Chase (JPMC)²² provide **separate app for children.** Chase offers an app for kids (ages 6-17), and teen banking (aged) 13-17.²³





Value for client

- Convenience and time-saving
- Improved UX

Value for bank



- Growth of transaction volumes
- Innovative brand image
- Customer engagement boost
- Enhanced customer loyalty and satisfaction

¹⁹ https://www.barclays.co.uk/current-accounts/switch-bank-account/

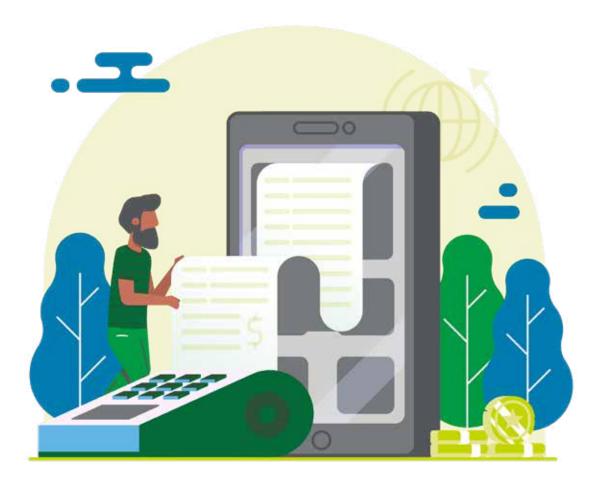
²⁰ https://www.lloydsbank.com/current-accounts/switch.html

 $^{^{21}\} https://www.pnc.com/en/personal-banking/banking/savings/s-is-for-savings.html$

²² https://www.chase.com/digital/customer-service/helpful-tips/personal-banking/first-banking/getting-started

²³ https://personal.chase.com/personal/first-banking/

	Cat	cch up with local competitors	Get	inspired by the best international players	
		ected differentiators that are present in at least e surveyed Indian bank	Selected differentiators that are not present in any surveyed Indian bank		
	ationally	30% Current account demo	ationally	Light version of public website for mobile	
	ation intern	Specific products for mobile banking	ation intern	Current account switch initiated in internet banking	
	Functionality penetration internationally	7% "Lite" mobile app	Functionality penetration internationally	10% Separate app for children	
	Function	78% Shortcuts in app	Function		





Account and product management

What is account and product management?

These are functionalities related to managing the account and other peripheral activities, for e.g., account-related details and paperless account statements.

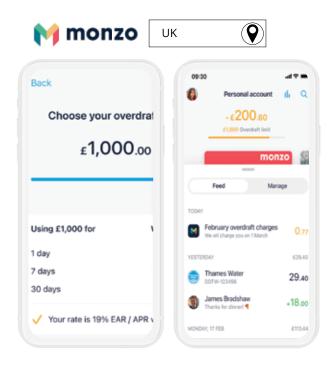
What is going well

1. Fifty percent Indian banks allow customers to change their personal details (name, email) on their own on the mobile app.

Insights from global benchmarking

- 1. Indian banks are on course to allow the change of the name of the account. While 37 percent Indian banks provide this feature on internet banking, it is yet to be adopted on mobile apps.
- 2. Changing the overdraft limit from mobile channel is offered by 60 percent Digital champions.
- 3. The functionality to choose display data before logging into the app is provided by 25 percent of Indian banks, while 30 percent Digital champions offering this.

HSBC Bank²⁴ and Monzo Bank²⁵ offer the functionality to **change the overdraft limit on the mobile app.**





Value for client

- Convenience and time-saving
- Improved UX



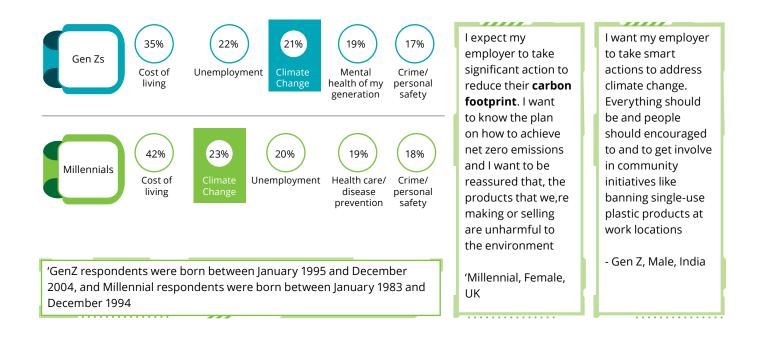
Value for bank

- Growth of transaction volumes
- Innovative brand image
- Customer engagement boost
- Enhanced customer loyalty and satisfaction

Per Deloitte's Millennials Survey 2023, 50 percent Gen Zs and 46 percent millennials say they are pressuring businesses to drive change on environmental issues. The survey of more than **22,000 Gen Zs and millennials across 44 countries** examines their evolving relationship with work, how they continue to make lifestyle and career decisions based on their values, and underscores the continuing concerns around finances, **climate change**, and mental health.

²⁴ https://www.hsbc.co.uk/current-accounts/products/overdrafts/

²⁵ https://monzo.com/overdrafts/



Gránit Bank addresses ESG requirements by **displaying the carbon footprint generated by the account.** It was also the first commercial bank to make **Mastercard Carbon Calculator available to its customers.**²⁶

UOB²⁷ and Natwest²⁸ Bank have a higher ESG **score and provide carbon footprint information.** Mastercard through its offering "Mastercard carbon calculator"²⁹ **provides APIs for account-specific carbon footprint.**



²⁶ https://www.mastercard.com/news/europe/en/newsroom/press-releases/en/2021/november/granit-bank-becomes-first-commercial-bank-to-make-mastercard-carbon-calculator-available-to-its-customers/

²⁷ https://www.uobgroup.com/uobgroup/newsroom/2021/uob-carbon-insights.page?path=data/uobgroup/2021/197&cr=segment

²⁸ https://www.natwest.com/banking-with-natwest/our-purpose/climate/what-is-a-carbon-footprint/carbon-footprint-calculator.html

²⁹ https://www.mastercard.us/en-us/vision/corp-responsibility/priceless-planet/carbon-calculator.html

Cat	tch up with l	ocal competitors	Get	t inspired by	the best international players		
	lected differentiators that are present in at least le surveyed Indian bank			Selected differentiators that are not present in any surveyed Indian bank			
_	40%	Earlier repayment of mortgage loan	_	30%	Change overdraft limit		
internationally	38%	Personalise internet banking	Functionality penetration internationally	9%	Debt renegotiation functionality		
n intern	59%	Change name of account		2%	Account carbon footprint information		
netration	37%	Family current accounts		47%	Change name of account		
ality per	18%	Send account number by e-mail / sms / messenger					
Functionality penetration	51%	Notification management					
	14%	Choose data to display before log-in	ш				





Information gathering

What is information availability?

It is the functionality of the bank providing information on **products**, **value proposition**, **charges**, **interest rates**, and **the process** of applying for specific products.

What is going well

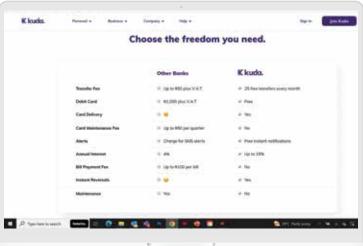
- Indian banks are providing information regarding savings accounts and other products, such as lending, mortgage, etc.
- 2. Indian banks also provide an overview of the products dedicated to specific groups, e.g., senior citizens, NRIs, Gen Zs, and millennials.

Insights from global benchmarking

- 1. To differentiate their offerings, Indian banks may compare their offerings with other banks and share this information.
- 2. The information should be made available in an intuitive way on digital channels.
- 3. The first or initial interactions between a bank's digital channel and the customer needs to be reimagined.

"Kuda Bank," a mobile-only bank, presents to the customer how its offerings compare with those of other banks.³⁰







Value for client

- Convenience and time-saving
- Personal financial insights

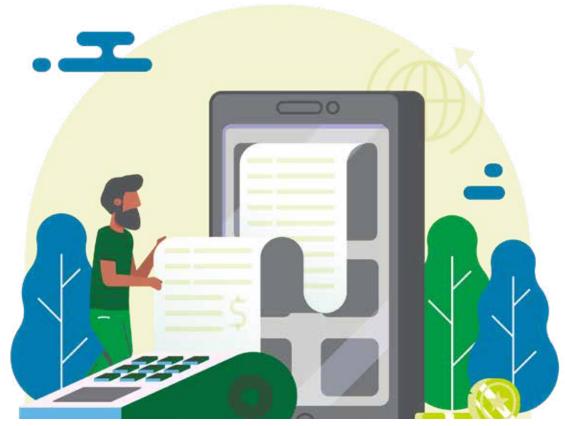


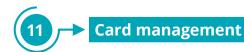
Value for bank

 Customer engagement boost

³⁰ Internal Deloitte DBM Research

Catch up with local competitors	Get inspired by the best international players		
Selected differentiators that are present in at least one surveyed Indian bank	Selected differentiators that are not present in any surveyed Indian bank		
Option to recommend the bank among family/friends	Account comparison with other banks		
Option to recommend the bank among family/friends Compensation after successful recommendation	Account comparison with other banks		





What is card management?

Card management functionalities involve services such as activate and block cards, set/reset limits, change pin codes, and restrictions other than POS/ATM/foreign transactions.

What is going well

- The functionality to block cards or activate blocked cards is offered by almost all Indian banks for debit and credit cards.
- 2. Most Indian banks allow customers to activate their new cards on the app, while only 25 percent allow closing cards on the mobile app.

Insights from global benchmarking

 Facility to set up payment restrictions (other than on PoS, ATMs, and country limits; for example, restricted payments in casinos) on debit and credit cards is offered by 57 percent of Digital champions through their mobile apps.

Barclays³¹ and RBS Banks³² allow customers to **block payments to gambling websites** via debit card.

NAB provides the functionality to restrict transactions with certain merchants such as gamblers.³³





Value for client

- Better customer security
- Improved customer service



Value for bank

- Innovative brand image
- Enhanced customer loyalty and satisfaction

³¹ https://www.barclays.co.uk/help/mobile-banking/spending/merchant-control/

 $^{^{32}\,}https://www.rbs.co.uk/life-moments/Struggling-financially/manage-your-gambling.html$

³³ https://www.nab.com.au/help-support/financial-wellbeing/gambling-restriction

Cato	ch up with local competitors	Get	<mark>t inspired by the best internati</mark> onal players (
Selected differentiators that are present in at least one surveyed Indian bank			Selected differentiators that are not present in any surveyed Indian bank		
ionally	43% Modification of credit card limit	ionally	36% Close debit card		
Functionality penetration internationally	Modification of daily spending limit of debit card	on internationally	Debit card payments restrictions (Restrictions other than POS/ATM/ foreign transactions)		
enetratio	11% Recyclable plastic card availability	penetration			
nality p	36% Close credit card				
Function	13% Credit card payments restrictions	Functionality			





What is end relationship?

These are functionalities that banks provide for closing accounts. It also includes making the customer aware of the overall account closing process.

What is going well

1. Indian banks provide information for closing the account mostly on their website.

Insights from global benchmarking

- The functionality to close the current account end-to-end on the mobile app and internet banking is offered by only one Indian bank as compared with 23 percent Digital champions.
- 2. Providing a questionnaire to justify the account closure and capturing this feedback is offered by only one Indian bank as compared with 30 percent Digital champions.

A progressive Brazilian bank offers customers a simple mobile app-based process to close their accounts.³⁴



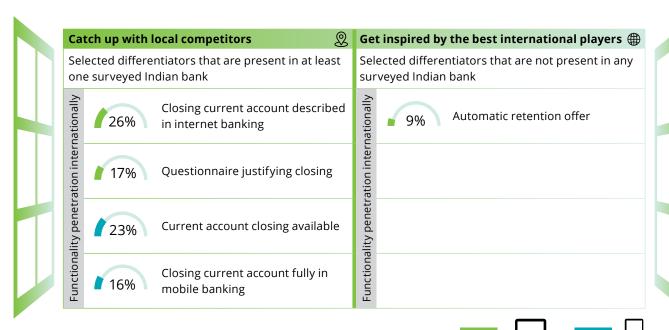
Value for client

- · Convenience and time-saving
- · Improved customer service



Value for bank

Reduced cost-to-serve



³⁴ Internal Deloitte DBM Research

G. Key takeaways

Key insights from the functionalities offered by Indian banks and their global peers, across the 12 aforementioned customer journey substeps, have been summarised below:



Personal Finance Management

- Automatic categorisation of transactions
- Estimating expenses based on customer data
- Display a/c balance & cash flow projections
- Setting spending limits by category
- · Displaying financial feed



Beyond Banking

- Marketplace for automobiles, real estate
- Personalised non-banking financial offerings
- Access to value-added services (looking booking flights etc)
- Monetisation of customer data
- · Personalised non-banking financial offers



Account and Product management

- · Visibility of carbon footprint on app
- · Access to carbon calculator



Ecosystem and account aggregation

- Aggregating customer account history across banks
- Spending comparison across customer accounts



End relationship

• End-to-end account closing in the channel



Product Cross-selling (complementary)

• End-to-end in-channel opening of mortgage products



Investment services

Provision of robo-advisory services for investment advice



Customer Support

• Scheduling an appointment on the mobile app



Channels Accessibility

· Gamification to facilitate onboarding



Bancassurance

 Hosting offerings/products from more than one provider



Information Gathering

· Overview of products (saving, lending)



Card Management

• Restricting payments to certain channels/ merchants



Annexure 1: DBM survey methodology

The 2022 Digital Banking Maturity Survey (DBMS) covered 304 banks from 41 countries. The scope of the survey was to provide an analysis of digital retail banking, through the lens of customer journeys. DBM analysed three channels—internet banking, mobile apps, and public websites. The survey seeks to document the state of digital functionalities, create an understanding of customer needs in national and global markets, and identify best-in-class UX practices.

The DBM exercise commenced in June 2022. After rigorous benchmarking, a detailed mapping of functionalities and extensive quality and accuracy checks, the research finally concluded in October 2022. The functionality benchmarking was done at the time of the survey. Banks may have incorporated some of the functionalities as part of their service offerings.

A brief overview of the survey methodology has been outlined below:

Onboarding and selection of banks

Selecting a representative mix of banks was crucial for ensuring that the outcomes of DBM 2022 reflect the state of the Indian banking ecosystem. A framework for selecting banks was devised accordingly, keeping in mind the importance of a diverse set of characteristics and representation of the range of banked populations. A few factors that were taken cognisance of included the following:

- a. Customer segmentation
- b. Ownership structures
- c. Market caps
- d. Existing digital infrastructure
- e. A variety of products

Based on the parameters above and a few more factors, the eight Indian banks that were selected.

Research methodology

Surveyors opened a "savings account" with chosen banks to answer sections related to internet and mobile banking, keeping in mind the need to maximise the number of questions that could be answered.

The research or data collection portion of this survey could be broadly divided into two sections:

Core research

It comprised a survey of 1,200+ objective questions (phrased to be answered as either True or False). These questions were designed to gauge bank offerings and capabilities across customer channels and product categories. Core research was standardised across banks and geographies for ease of comparison.

UX research

This portion saw surveyors adopt the role of a customer and simulate 15 scenarios across the customer lifecycle. These ranged from customer onboarding and account opening to fund transfer and account closing. UX research, therefore, had a more qualitative approach.

Questionnaire structure

Core research questions were divided into four broad sections including the following:

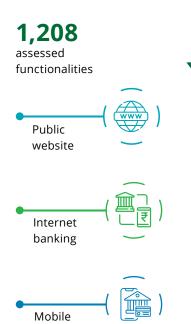
- 1. Panel
- 2. Public website
- 3. Internet banking
- 4. Mobile banking

The panel introduced basic introductory questions, which were not a part of the comparative analysis, but included other important details, such as the bank's name, account opening date, and so on.

The public website sought information on bank's offerings that were publicly available. Through 107 questions, it sought to evaluate whether the bank sufficiently and thoroughly disseminated information, as part of its customer acquisition strategy.

Internet banking had 380 questions that looked at the features that banks provide to customers accessing the digital portal through desktops or laptops.

Finally, mobile banking, with 463 questions, sought to study the extent to which a bank's offerings are available on their respective mobile banking applications.



An analysis of various banking products offers insights into the four categories of financial products, with different functionalities for each:

90 Credit products

- Cash loan
- Overdraft
- Car loan
- Mortgage

114

Deposit and investment products

- Savings account
- Term deposit
- Mutual funds
- Unit-linked
- Pensions

40

Insurance products

- · Life insurance
- · Non-life insurance

268

Transaction products

- Current account
- Currency account
- Private banking
- · Debit card
- Credit card

The functionalities tested across sections were broadly bucketed into six customer journeys:

- Information gathering
- Account opening

Banking

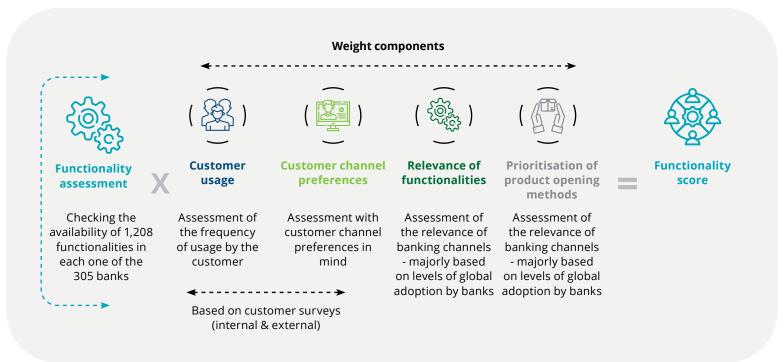
- · Customer onboarding
- · Day-to-day banking
- Expand relationship
- End relationship

Within each channel, sub-journeys were further identified, which included account management, transfers and payments, card management, ecosystem and account aggregation, personal finance management, and account closing, amongst others

Ecosystem and account aggregation

Day-to-day banking Account and product management Authorisation **Account** End Card management relationship opening Customer support Personal finance management Opening process Account closing Transfers and payments Information **Customer onboarding Expand relationship** gathering Channels accessibility Product x-sell (basic) Guidance for new users Product x-sell Availability of information (complementary) Bancassurance Investment services Beyond banking

Additionally, questions and functionalities were also assigned a weight, as across 1200 questions, some offerings were deemed to be more significant and relevant. The criteria for assigning weightage have been added below:

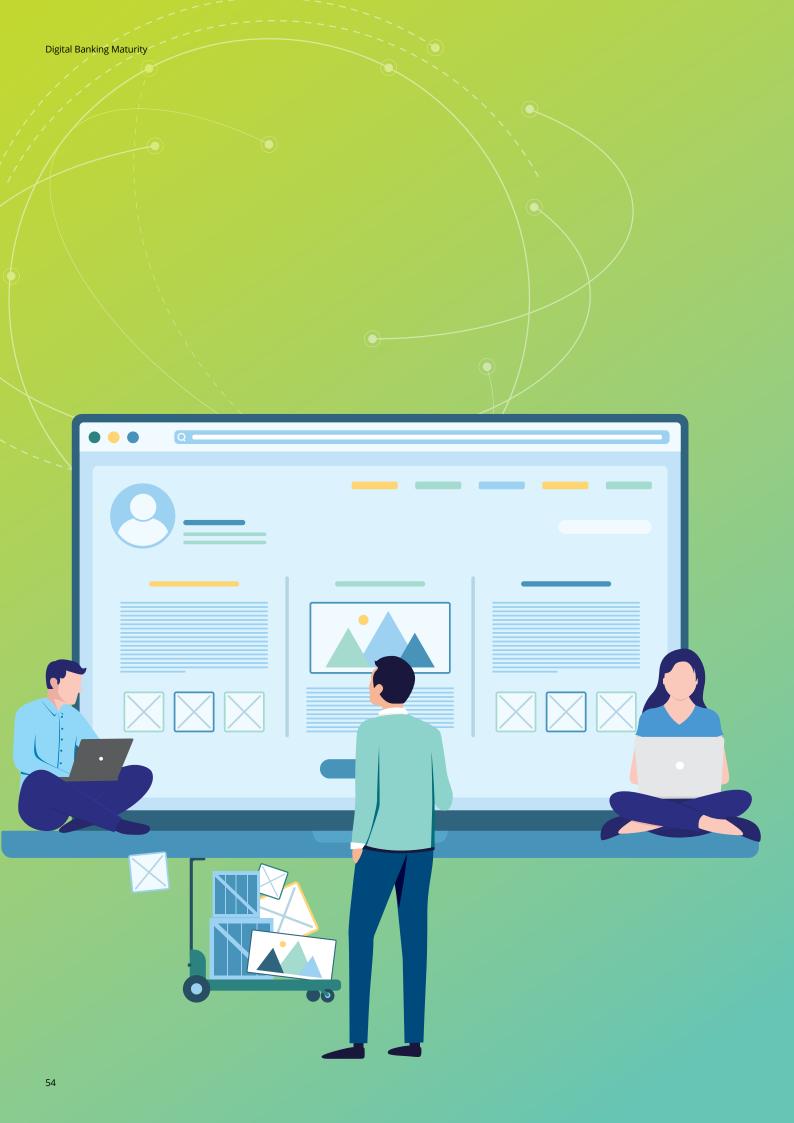


For assigning weightage, 5,000 respondents were surveyed. The survey provided insights on what customers perceived to be important through the journey, which including the following:

- 1. Looking for information about current accounts
- 2. Account opening and/or debit card application
- 3. Account management
- 4. Customer support
- 5. Checking current balance or transaction history
- 6. Making payments/transfers
- 7. Applying for a personal loan
- 8. Active investing

Finally, given that the survey was standardised and designed to cater to banks across the world, certain India-specific functionalities, including UPI-integration, were absent from the list of functionalities. Similarly, some offerings beyond the purview of Indian banking regulations were a part of the survey. This was unavoidable, as in its current state, the survey does not account for regional law differences.

Together, the three steps, functionality benchmarking, customer needs research, and a user experience study led to the Digital Banking Maturity (DBM) benchmarking and UX assessment of digital banking channels. This assessment was used to understand the digital banking maturity levels of banks and their customer UX.

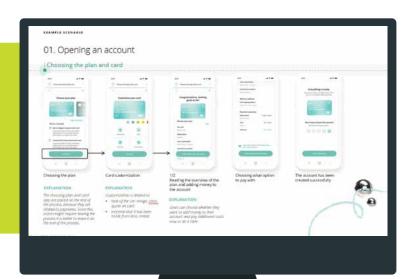


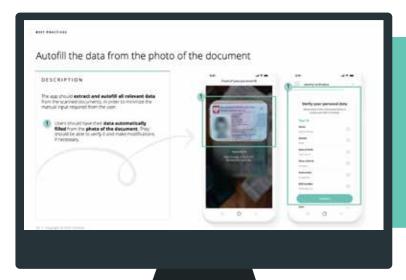
Annexure 2 – UX research

For the user experience study, 15 scenarios were assessed, which highlighted key customer activities at the top 10 banks from 10 countries with the best-in-class UX. The aim was to identify best practices that have been distilled into the hypotheses of optimal, user-friendly solutions.

Key digital banking user flows, analysed and refined

End-to-end user scenario analysis of the top 10 UX banks across markets was conducted to gauge optimal experiences. Best practices were identified for 15 key scenarios (with each step of the customer Journey represented) and refined to create hypothetical optimal user-friendly flows.





Dos and don'ts in one place

A playbook has been compiled to accompany user flows covering key aspects to consider when designing optimal experiences.

Numerous retail customer journeys, such as looking for investment opportunities, using internet banking, making payments to beneficiaries, were evaluated and 15 key customer journeys were synthesised. Deloitte followed the user through their banking journey—from opening an account and day-to-day banking activities to closing an account.





Throughout the research process, we also examined outof-the-box, user-oriented features that stood out in our comparison of different banking apps and contributed to exceptional user experience.



Based on the insights coming from the analysis of 10 top UX banks, optima user flows have been hypothesised for each of the scenario.

Best UX practices were identified thanks to the deep-dive research on select players

First, we looked into existing solutions implemented in 10 best-in-class banks in 10 different countries.

We went through the preselected user flows, step by step, to **identify** the best user-oriented solutions, as well as the missing pieces.

Then, we synthesised our results and created brand-new flows for each scenario.

We listed and detailed key aspects needed to provide the best possible user experience: Best practices, things to avoid, and other user-oriented solutions to consider.









More than 100 user experience-specific insights were grouped into six value creation categories to create a blueprint, known as the user experience matrix. This matrix can be used as a reference point when designing features or flows of banking applications.

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