

Digital Banking

Goldman Sachs - Indian Banks + Fintech Symposium

August 2021






Digital focus and Technology driven Transformation are two of the key pillars on which we are building a more sustainable organization



- ① Strengthen the organizational core and quality of our balance sheet significantly
- ② **Invest in technology capabilities to deliver on our Transformation plans**
- ③ **Act with relentless focus on making Axis digital**
- ④ Build granularity across all our business segments to drive sustainable growth
- ⑤ Deliver strong operating performance with improvement in return metrics
- ⑥ Create significant value among our key subsidiaries

Digital Banking – Axis Bank’s “silent revolution”

 D2C products	84% Digitally active customers (Q1FY22)	~74% Credit cards issued (Q1FY22)	67% New SA acquisition*	69% Fixed deposits opened**	60% PL disbursed**	57% New MF SIP sales (Q1FY22)	4.6 Mobile App ratings
 Transformation	250+ Services on digital channels	15% Market share in UPI (Q1FY22)#	14% Market share in mobile (Q1FY22)#	90% Digital transactions^^	65,000+ Staff on BYOD~	~975 Automated processes (IA)	300+ Employee tool Journeys
 Capabilities	~850 People dedicated to digital agenda	~150 In-house development team	~75% New hires from non-banking backgrounds	PB Scale big data Hadoop clusters	120% Lift of bank credit model GINI scores over bureau	~50 Apps on Cloud	Agile Enabled teams with CI/CD, micro-services architecture

140 mn
KTB¹ Customer base

4 mn
Non Axis Bank customers using Axis Mobile & Axis Pay apps

18%
Contribution of KTB channels to overall sourcing of Cards (in Q1FY22)



* Digital tablet based account opening process for Q1FY22

^^Based on all financial transactions by individual customers in Q1FY22

** digitally in Q1 FY22

by volume

¹ Known to Bank



Top 3

Our Digital Bank strategy

1

**Reimagine top
end-end journeys**

2

Transform the core

3

**Partner of choice
for select
ecosystems**

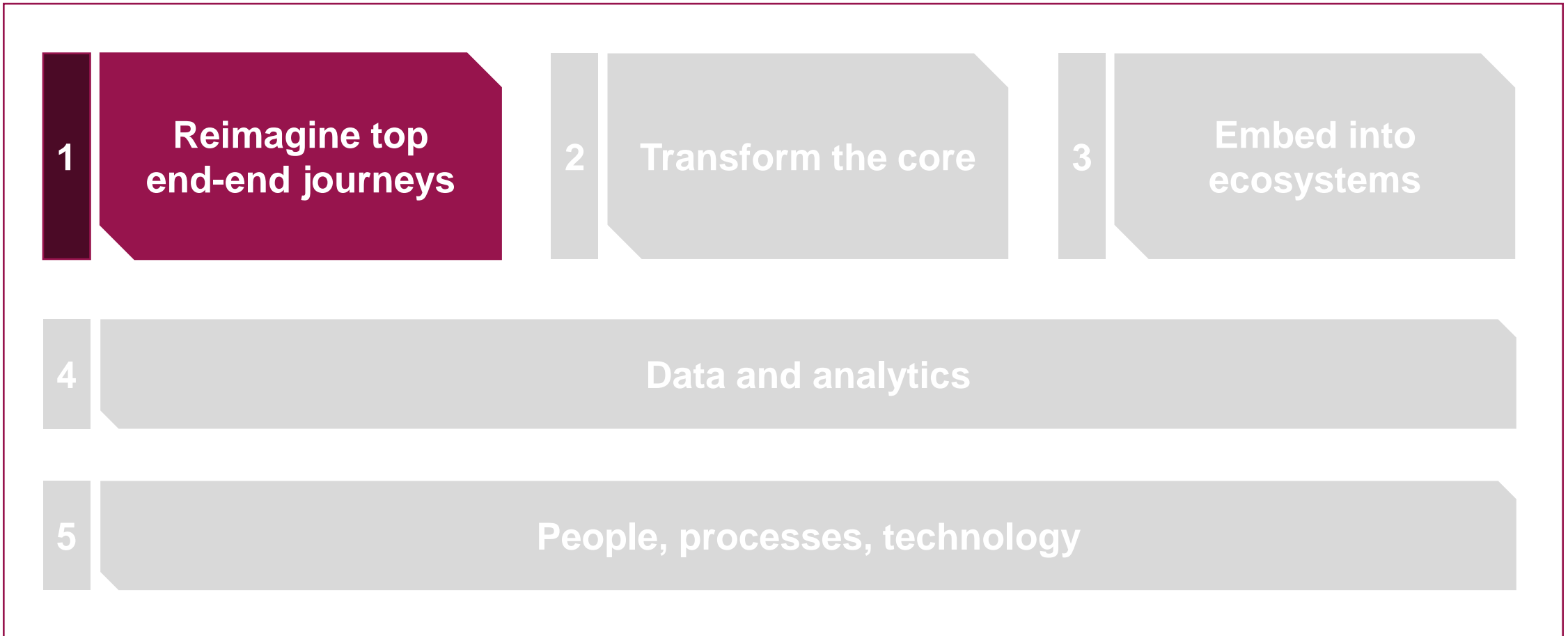
4

Data and analytics

5

People, processes, technology

Our Digital Bank strategy



OPEN: Axis Bank principles for reimagined customer journeys



O

0-based redesign; customer centric, design led and 0-operations

P

Proprietary in-house capabilities

E

Ecosystems capable; built for all Axis and partner channels

N

Numbers, Numbers, Numbers: Impact led and **metrics driven**

We continue to introduce and scale new products driven by our *0-based redesign philosophy*



Our product portfolio

Deposits		Investments & Insurance		Loans & Cards	
Saving Accounts	Current Accounts	Mutual Funds	General Insurance	Personal loan	Credit cards
Fixed Deposit	PPF	Forex card	Life Insurance	GST based business loans	Auto loans

New launches

Buy Now Paylater	GrabDeals	Cards lifecycle	Auto loan
O/W Remittance	Digital Gold	Insurance 2.0	ODFD

0-operations based redesigned journey with customer at the centre, minimum to no data entry and all checks done by machines with automated underwriting

Our BNPL product clearly demonstrates our OPEN principles in practice

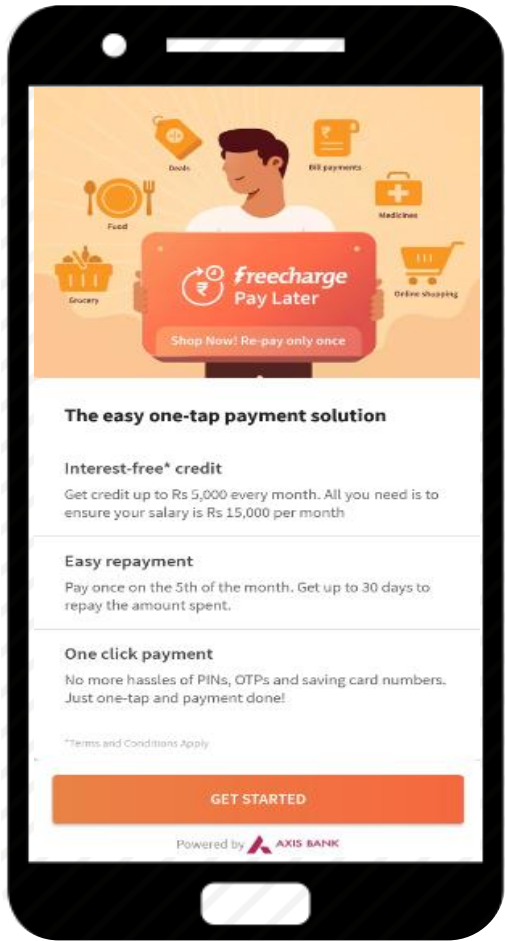


O Insta onboarding, decisioning & activation – 3 steps in less than 3 minutes

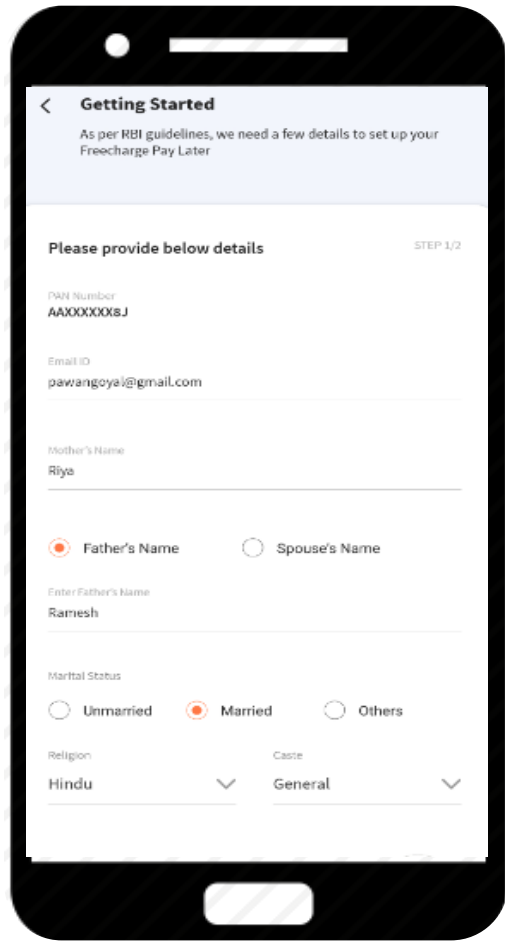
P Launched on the Bank's proprietary Jarvis LMS platform

E Built in partnership with Freecharge can be plugged in other platforms too

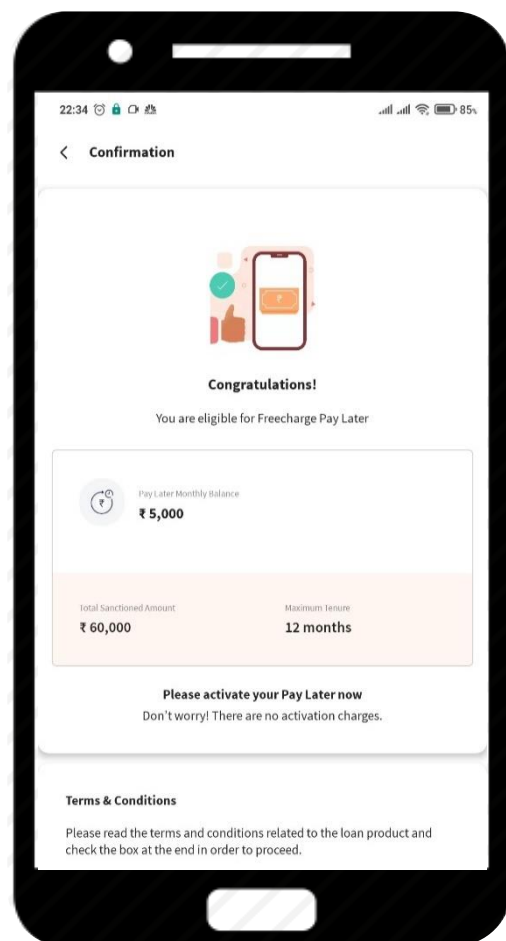
N 20x growth in customers onboarding over last 3 months



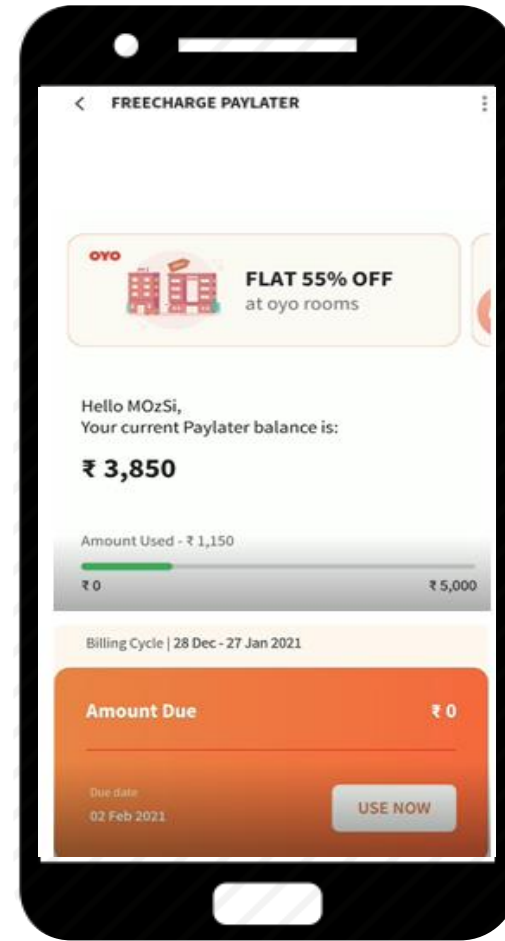
Customer clicks on paylater banner and can view details



Customer provides basic personal details

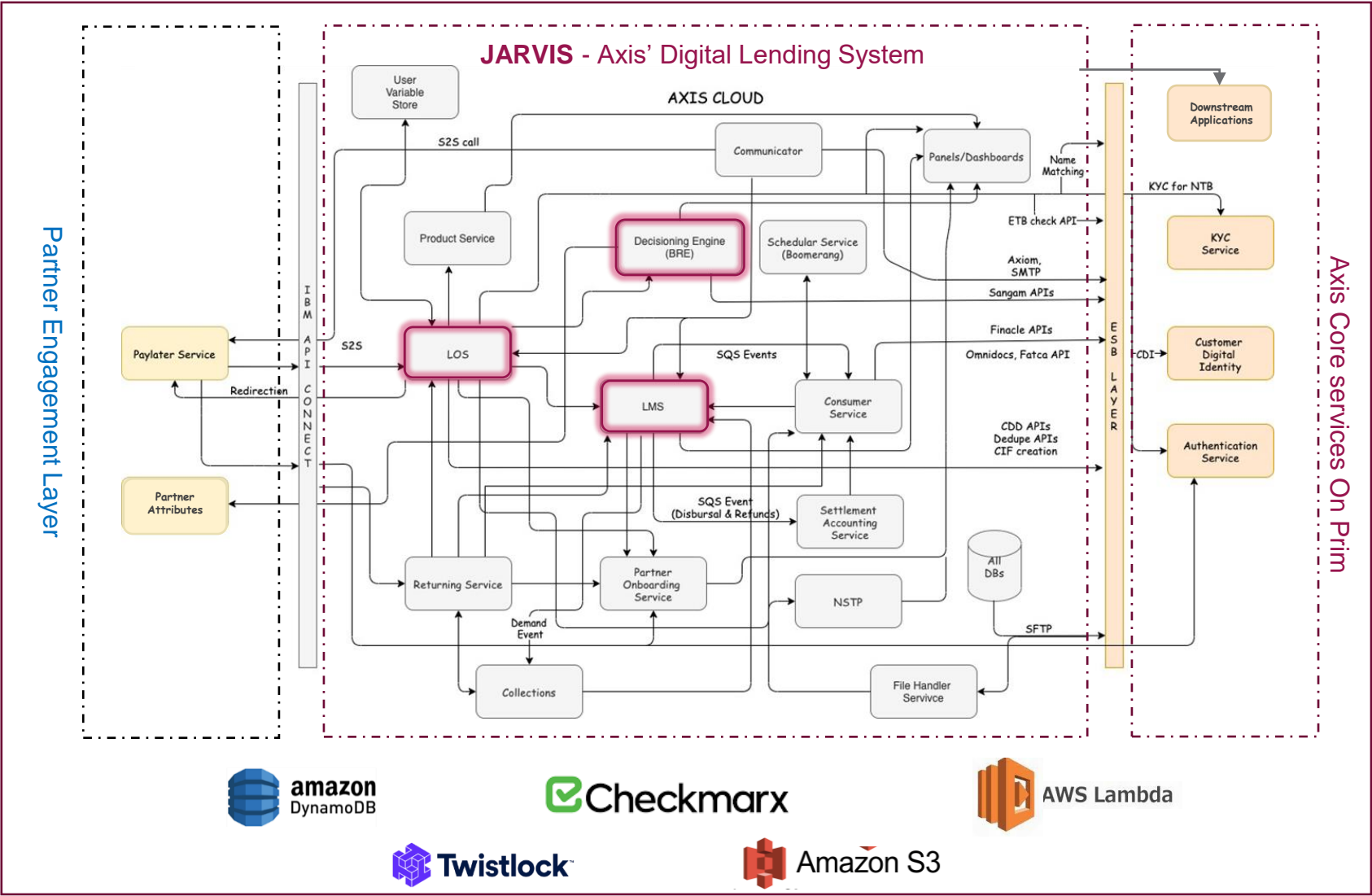


Customer is shown offer and Terms and conditions



Customer can view remaining and utilised limit at anytime

Introducing *Jarvis*, our cloud native, API oriented new age lending platform, an outcome of our *Proprietary in-house capabilities*



New age Loan Management System

- Supports small ticket, small tenor, limit/loan, multiple interest rate/fee structures
- 100% digital journeys – no manual intervention

Custom built, cloud native, API oriented

- Built, managed, run inhouse
- Built for partners
- Modular, loosely coupled
- 100% on AWS

Scalable and Customizable

- CI/CD in place with best practice AWS tools (externally recognized)
- Custom built BRE – runs multiple policies
- All forms of KYC supported

Integrated with downstream systems

- Collection & recovery
- Statutory & regulatory reporting
- Financial reporting

We have upgraded, re-platformed or hollowed out our legacy IT stack to make it digital-ready and our new end-to-end digital stack is on par with the best digital platforms anywhere

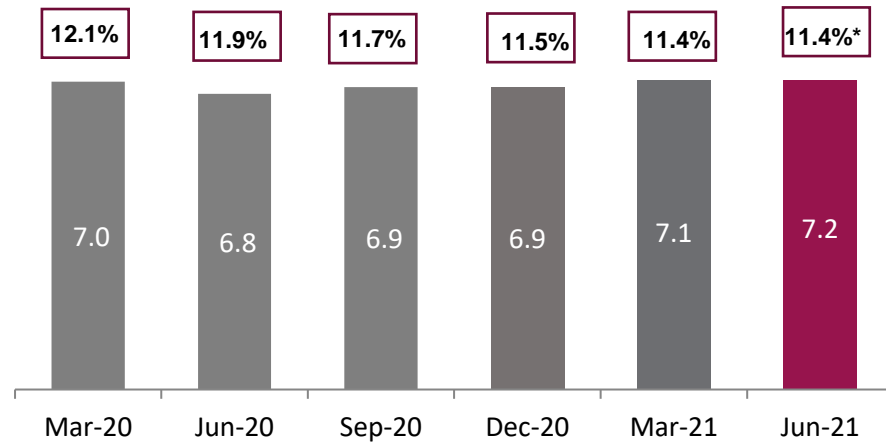
Our digital journeys have started to make visible impact on the *Numbers*

	Product	What we shared in Dec-20 (% Bank level acquisitions)	Latest Update (% Bank level acquisitions)	
Liabilities	VKYC SA	10%	22%	↑
	VKYC salary accounts	--	9%	↑
	FD (ETB and NTB)	73%	69%	↔
Assets	PL	58%	60%	↔
	Credit cards	52%	74%	↑
	Credit card portfolio (EMI conversion)	--	72%	↑

We are the 4th largest issuer of Credit Cards in the country; and continue to grow the Acquiring business through innovations and an integrated approach



Credit Cards in force (mn) & market share

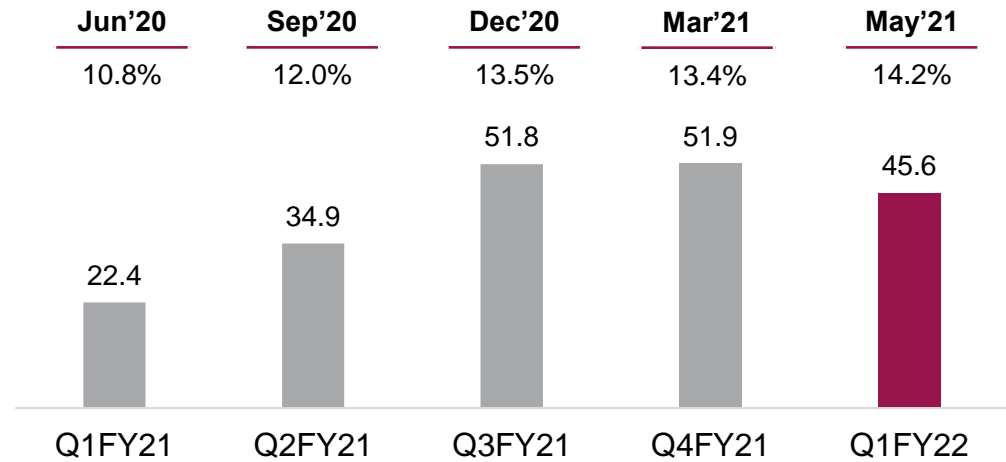


Flipkart Axis Bank Credit Card has been of the fastest growing co-brand portfolio with 1.2 million CIF within 2 years of its launch



Co-branded card partnership in collaboration with Flipkart; it has one of the best in class spends and engagement metrics

Throughput trend & market share



Market share source for the month in %: RBI data, Available till May'21

Innovations in Acquiring




- Android PoS:** State-of-the-Art terminal loaded with VAS such as Khaata & BQR.
- **33%** contribution to sourcing in Q1FY22.
 - **33%** higher activity and ticket size of transactions witnessed than other terminals
 - **Buy Now Pay Later:** Valued added service that offers cardless EMI facility allowing faster processing of high value transactions
 - **CX Index:** Captures merchants' experience around On-boarding, Usage & Service.

* Note: Figures in boxes represent market share. For the period Q1FY22, market share is as of month of May'21

WhatsApp Banking emerging as a significant channel





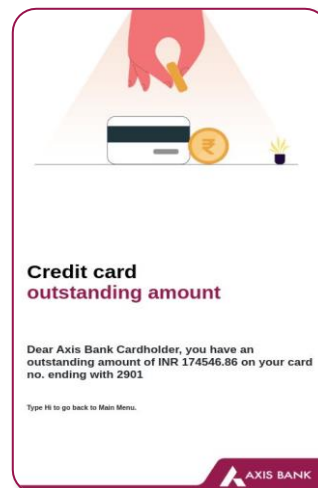
6 Months since launch (Feb 21)

1.3mn Customers registered

3.1mn Customer requests serviced

2.8mn Queries answered

0.4mn Pre-approved loan offer enquiries



Services offered on WhatsApp Banking

Account Related

- Get your Account Balance
- Generate Account/Mini Statement
- Order Cheque Book

Fixed Deposit Related

- Generate List of Fixed Deposits
- View your FD details

Credit Card Related

- Get your Outstanding Amount, Available Credit Limit
- Summary of Credit Card, Bill Payment details
- Block your Credit Card and many more to come.

What else you can do?

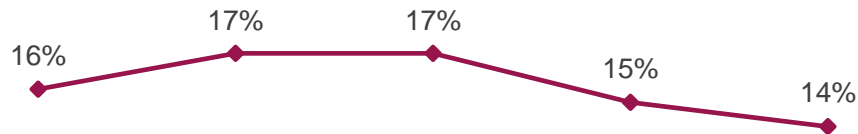
- Ask us Anything
- Get Pre-Approved Personal Loans in WhatsApp
- Apply for our Banking Products
- Locate Axis Bank Branches/ ATM and many more to come.

We have a high market share in Mobile Banking...



Axis Mobile is amongst the highest ranked Banking app on Apple Store (rating of **4.6**) & Google Play Store (**4.5**) and offers **250+** DIY services

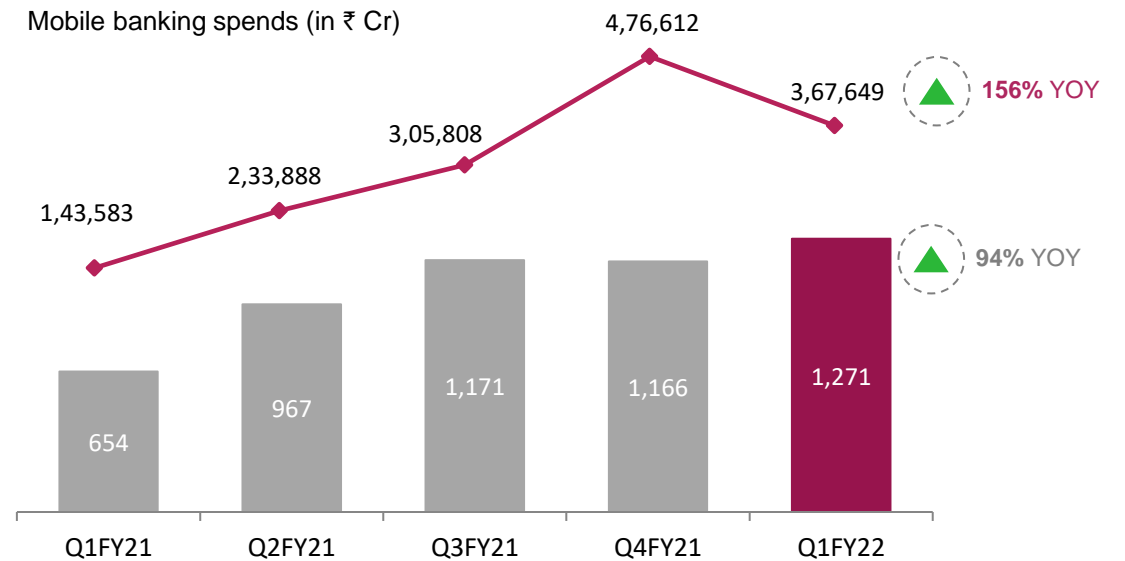
Mobile Transactions Market Share by Volumes



4 mn non-Axis Bank customers using Axis Mobile & Axis Pay apps

Q1FY21 Q2FY21 Q3FY21 Q4FY21 Q1FY22*

Axis Bank Mobile Banking Spends (in Cr) and Volumes (in Mn)



56% of Mobile Banking customers bank only on Mobile App with Mobile Banking logins at **15.75** of Internet banking logins



Axis Aha! answered **5.66 million** messages in Q1FY22

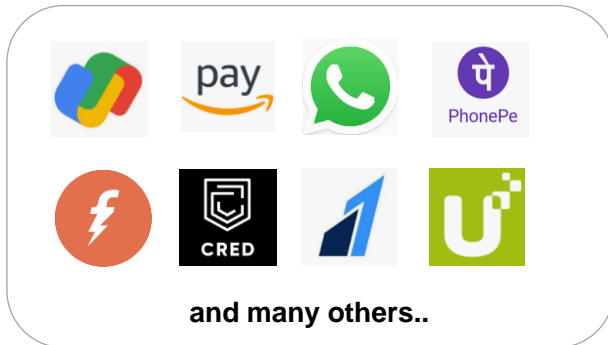
...and a strong positioning in the UPI space, with one of the lowest decline rates

-  We have developed best-in-class UPI stack that enables us to offer cutting edge customized solutions across SDK, Intent, Collect and Pay offerings apart from new use cases like UPI AutoPay
-  Dedicated IT cloud infrastructure to exclusively handle high volume UPI transactions has resulted in Axis Bank achieving one of the lowest decline rates as a remitter when compared to peer banks

Strong customer base and partnerships

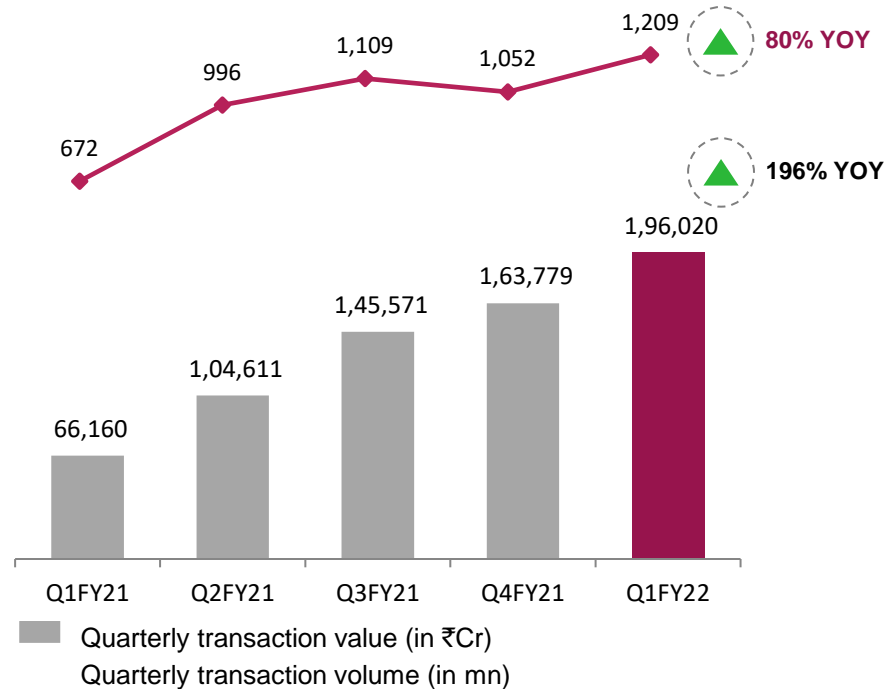
229 mn
Cumulative VPA base**

Marque partnerships across the PSP and acquiring side

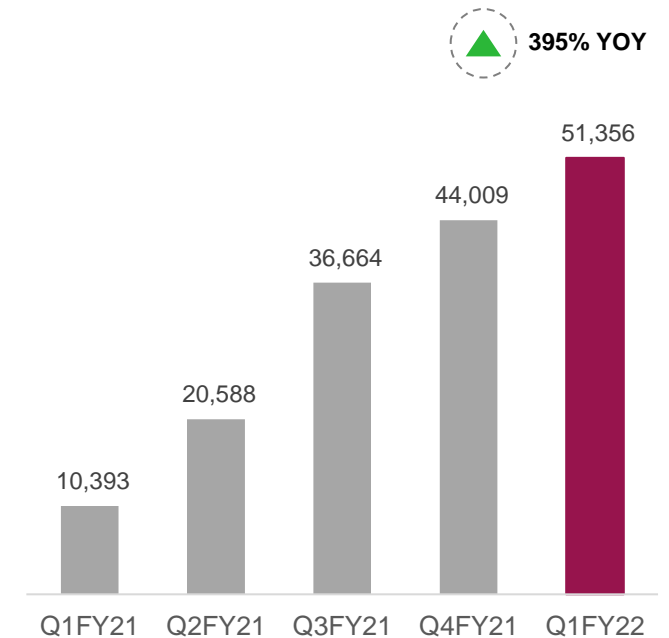


** A user registering VPA once in Axis Pay and once in Google Pay is counted as 2

UPI transaction value and volumes (as Payer PSP)



UPI P2M Throughput (INR cr)



The Bank maintained its strong positioning in the UPI space with a market share of 15% as Payer PSP (by volume) and 19% in UPI P2M Acquiring (by throughput) in Q1FY22

Technology led transformation project *Sankalp* is benefitting our CBG business



Digital Capabilities of the *Sankalp* App



Data Cockpit



Meeting Planner



Review Action Center



Customer 360



Lead Pipeline

Design principles



Differentiated

Scorecard determined swimlane basis risk & complexity

- Diligence and documentation processes well-differentiated across swimlanes



Digital first

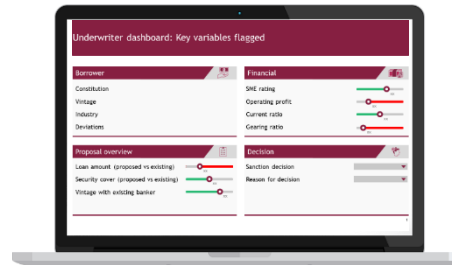
Digital collection and processing of documents/information



Parameterized evaluation

Data and scorecard driven underwriting approach

- Prepopulated data
- Improved quality by augmenting credit with digitally generated insights



Empowerment

Higher decisioning rights at geography with streamlined deviation culture



Collaboration and Transparent

All stakeholders on single platform



Impact

60%+

Reduction in docs required

30 mins

for pre-screening vs 1 day

2x

Increase in Asset productivity of RM (no of new NTB NOAs opened / month)

39%

YOY Growth in asset NTB accounts opened in Q1FY22

18%

YOY Growth in CBG Advances

The Bank also has a strong digital presence among corporate clients...

71%

Current Account customers registered for CIB/RIB/MB

78%

transactions being initiated digitally

9.7%

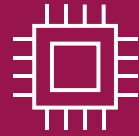
NEFT Payment market share (in Q1FY22)

1st

BBPS ranking in addition of number of Billers to BBPS Ecosystem

Project Neo

...and is working towards institutionalizing this further in a large-scale and agile manner



Replacement of 3 major core systems in progress



100+ members being onboarded across 20+ pods;
10 pods already kicked off



Work underway on reimagining **25+ digital journeys**

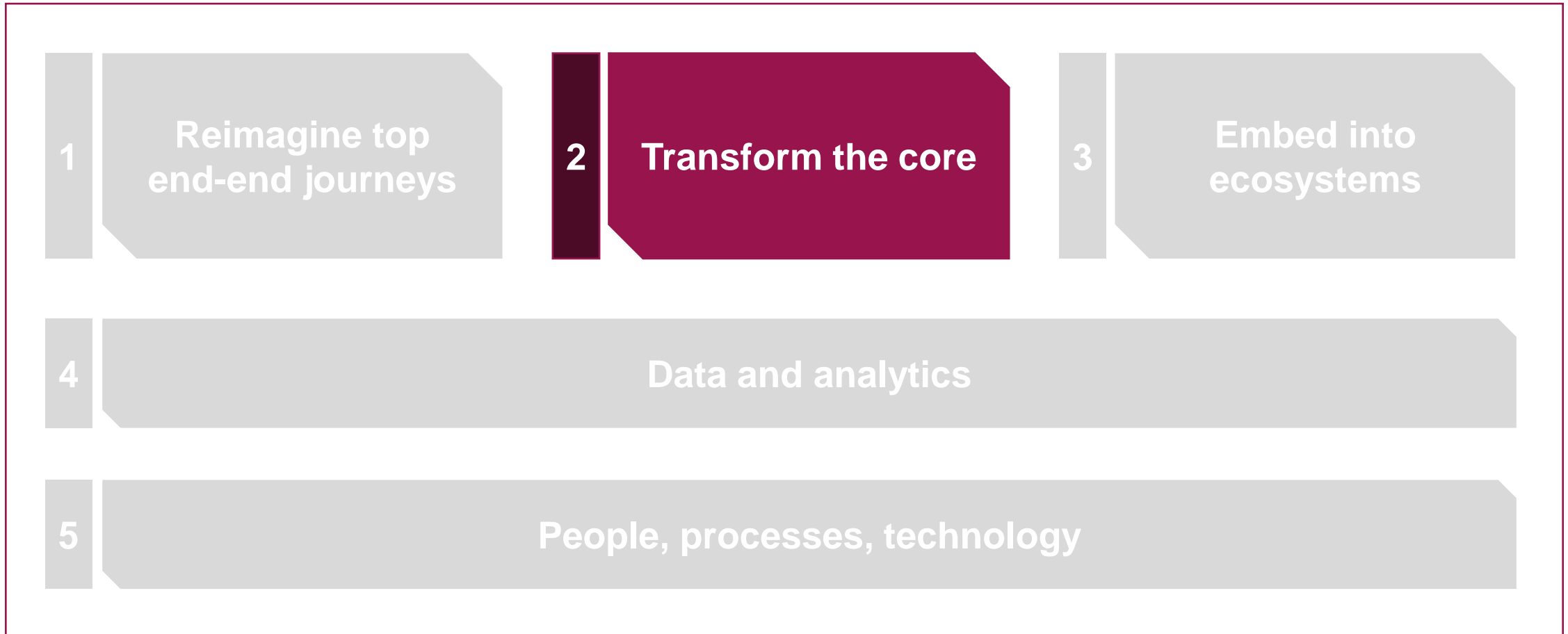


Agile operating model institutionalized



Cloud based development

Our Digital Bank strategy



We are running a *twin-engine approach* to upgrade our legacy IT stack to make it digital ready and have also built an in-house end-to-end digital stack that is at par with the best platforms



Build Digital

- New age digital platforms
- Cloud first
- Decoupled Engagement layer & Logic layer
- Micro services enabled

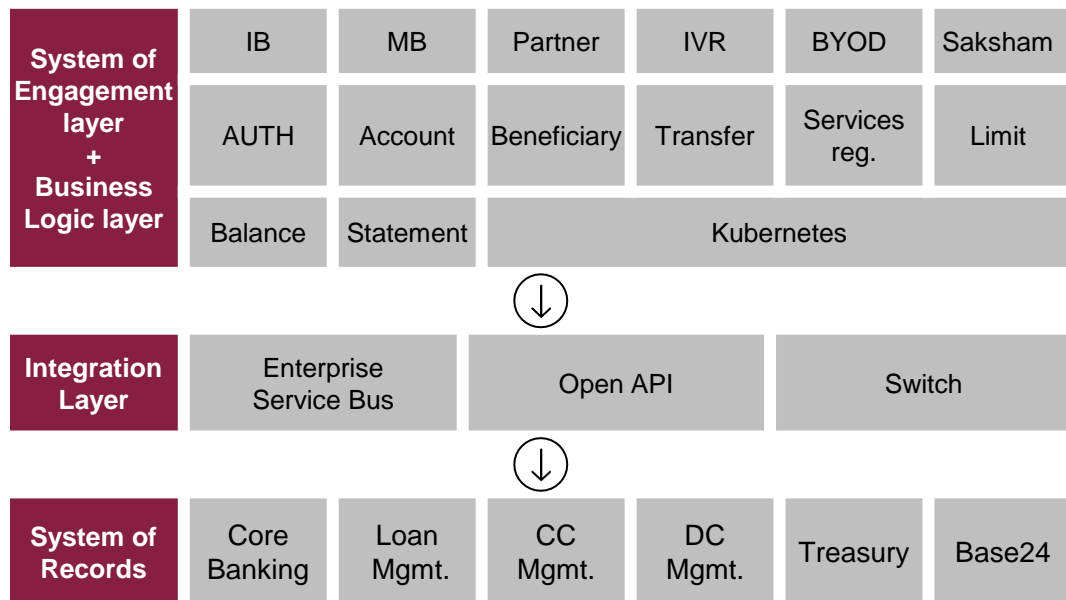


Modernize the Core

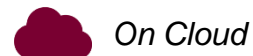
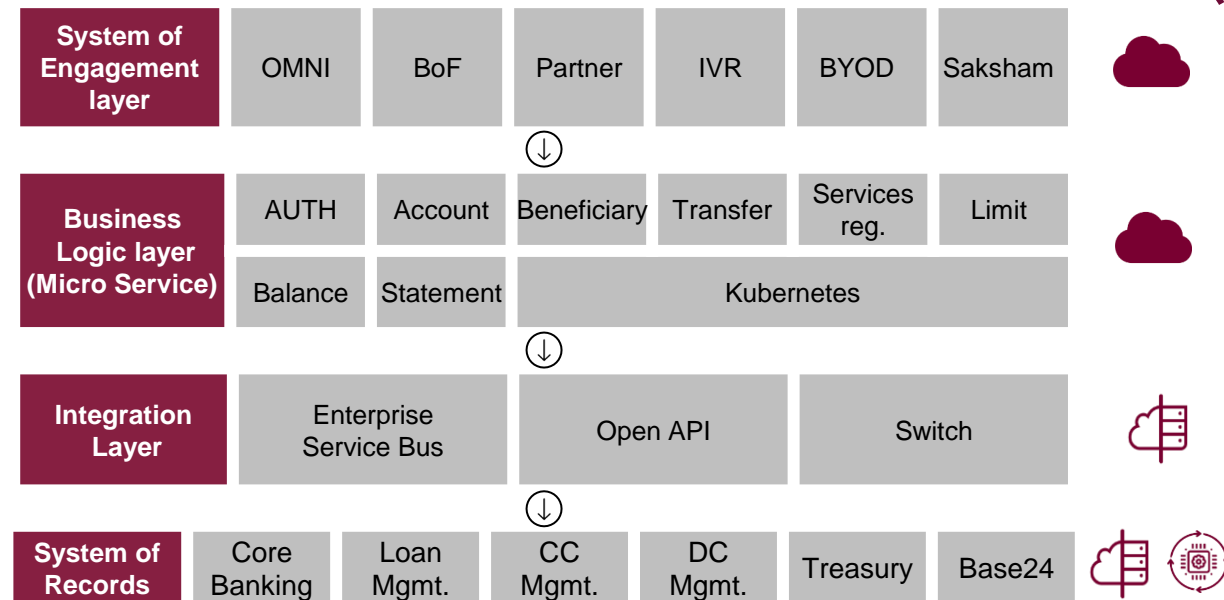
- Upgrade of Tech-stack
- Focus on modernizing the core, resiliency, sustainability, risk and governance
- Transform architecture, core systems, infrastructure and integration

Twin Engine Approach

FROM



TO



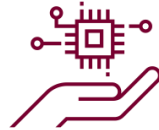
Resiliency at Axis

Built for Resiliency



Data Centre

Data Centers Expansion
DRM solution implemented
DR drill calendar for Apps



New Age Tech.

Adoption of SDN, Latest Enterprise Class Storage, HCI, Cloud, Engineered Systems, Tapeless Backup



Data

Maximum availability arch.
Always on methodology



Network

N+N Arch. for critical n/w components and dynamic routing protocols



Cloud

Cloud Platform & Technologies adoption with ~50 Apps live from Cloud



Standardization

Infra Standardization covering Hardware & Software tech



Monitoring


24x7 Resiliency Operation and Network Operating Centre monitoring using NMS Tools



Assessments




Business impact analysis, data centre and app resiliency audits

- **Continuous Technology Refresh** - Year-on-year >25% Refresh towards Latest Technology Adoption
- **Continuous Re-skilling** - Technology adoption of techniques like SRE, Technology Labs etc.
- **Governance** - IT Strategy of the Board, Management Reviews



Key Focus Areas

Strengthening to become Best-in-Class

 <p>Data Centres</p>	<p>Near DR¹ for Critical Apps</p>	<p>4 Physical data centres</p>	<p>100% Infra ~3 Year ageing</p>	<p>RTO² reduced by 50% for critical applications</p>	<p>Improved Infra availability from 99.99% to 99.999%</p>
	<p>Software defined single-pane management with orchestration</p>	<p>Near Zero Data Loss architecture</p>	<p>Standardized Hardware, OS & DB to Latest Tech/Platform</p>	<p>Software defined single-pane management with orchestration for network</p>	
 <p>Applications</p>	<p>Near Zero RPO³ for Critical Apps</p>	<p>Monitoring Customer-level application performance</p>	<p>Proactive approach to improve App Resiliency to 99.999%</p>	<p>70% Apps on Cloud targeted in 3 Years period</p>	<p>Skillset readiness for Cloud tech (Kubernetes, Containers, In-memory, Functions & Sharding)</p>
 <p>Service Delivery</p>	<p>Improved assurance of repeatable tasks</p>	<p>Improved reliability in Biz Services delivery</p>	<p>Reduce human intervention & errors</p>	<p>ITIL Framework implementation</p>	<p>Site reliability engineering (SRE) framework</p>

Built-in Security and Protection

Security by Design



Defence in depth through best in class security technology and process controls



Vulnerability and threat management across the entire tech. landscape



24 x 7 events monitoring by SOC through Next Gen SIEM, threat intelligence tools



Continuous RED Team exercises to proactively and timely vulnerability identification



Continuous transaction monitoring supplemented by real-time decline rules



Strengthening Cyber resilience program with focus on detect and respond/ recover activities



Security Analytics for enhanced security threat visibility



780 / 900
Bitsight Rating*

***BitSight Rating = Key Risk Indicator** of Over all Cyber Security. Cybersecurity ratings company based in Boston, US (2011). •Approach similar to credit ratings for financial risk.BitSight Security Ratings are calculated on a scale of 250-900 with a higher rating indicating better security performance.

Built-in Security and Protection

Key Capabilities



In-House Cyber Breach Assessment

For safely simulating multiphase, real-world attacks, and identify gaps / vulnerabilities in Bank's environment.



24x7 Dark Web Monitoring

- a. Fraudulent / Phishing sites
- b. Artificial Intelligence based Digital Risk Monitoring for Bank's sensitive data on Internet / Dark web



Cyber Security Threat Intelligence
from best-in-class commercial sources



Cloud Cyber Security Suite

Container security monitoring & vulnerability Scanning

Cloud security compliance monitoring



Cyber Security controls for DevSecOps Pipeline

Static analysis

Dynamic analysis

Real-time vulnerability monitoring and analysis

Cloud container image signing

Cloud secret keys and credential management

We have made considerable progress in our *Branch of the Future* project, which captures our automation efforts to enhance our frontline productivity



Objective: Reduce frontline time spent on servicing and operations

Initiatives

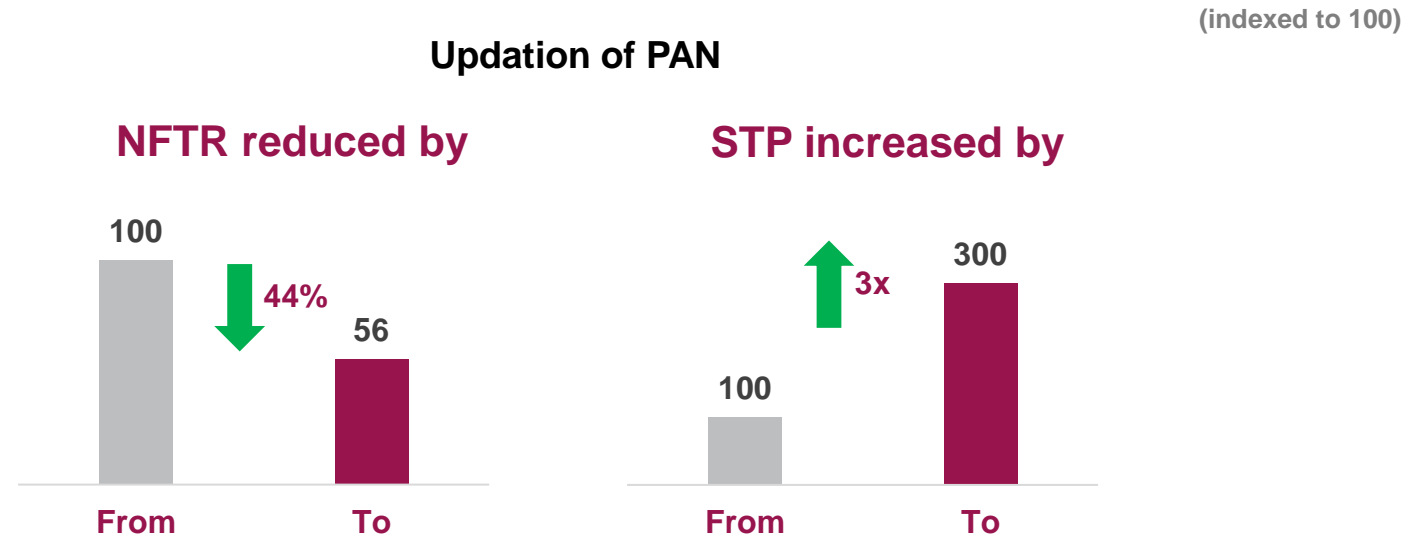
50+

Initiatives identified and underway

- 1 **Reimagine branch processes** leveraging digital
- 2 **Redefine frontline roles** to focus on relationship management
- 3 **Institutionalize Axis way**; build data and tech enabled operating rhythm
- 4 **Dil Se Open Branch model** – new branch layout to focus on customer experience

Progress made

Services accounting for **~65%** of request volumes in branches are now **digitally available**



We have also transformed our internal processes to empower our employees, release costs and enhance effectiveness

BYOD



Bring Your Own Device (BYOD) program, enabling staff to use bank apps on their devices thereby enhancing staff mobility and productivity and improvement in TAT

60,000

Staff onboarded

~3.5 lakh

leads delivered per month

400+

Compatible models /
OS flavours

7%

NFTR rate with AI, OCR , facial
recognition, and geo co-ordinates tracking

Future of work 2.0



~15,000

Staff coverage under
Hybrid Model

~2,250

employees across 22 central departments moved
to a 100% virtual format in two phases

130

candidates hired in alternate
formats under GIG-A Opportunities

Siddhi



Intelligent, comprehensive, proactive and hyper-personalized employee tool that enables meaningful customer conversations via analytics and empower managers to have control and meaningful coaching conversations

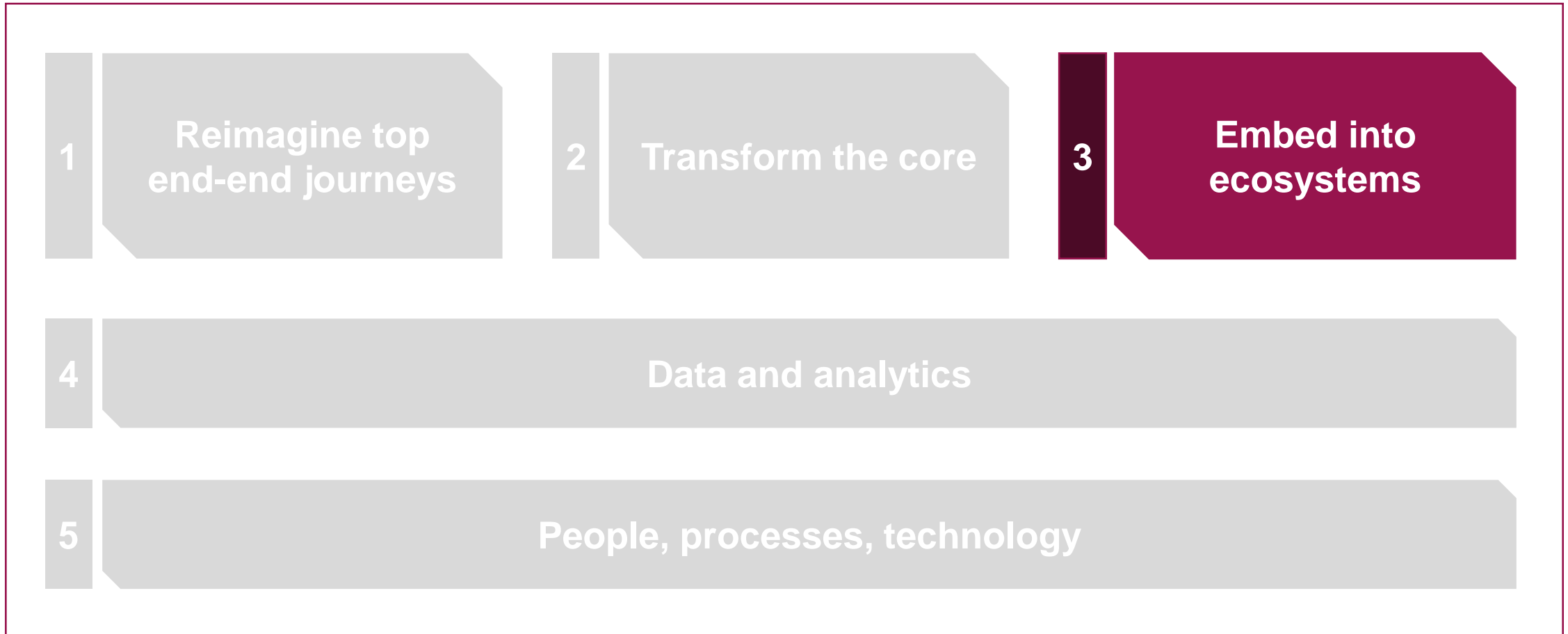
300+

Staff journeys across bank
and subsidiaries

Reduced

opex and capex for the bank while
delivering better frontline productivity

Our Digital Bank strategy



We are adopting a combination of approaches for the digital ecosystem
*Build our own capabilities, partner with fintechs where there is complementarity
and invest in areas that have adjacencies*



Grabdeals continues to scale; our Grabdeals Fest helped get significant customer traction



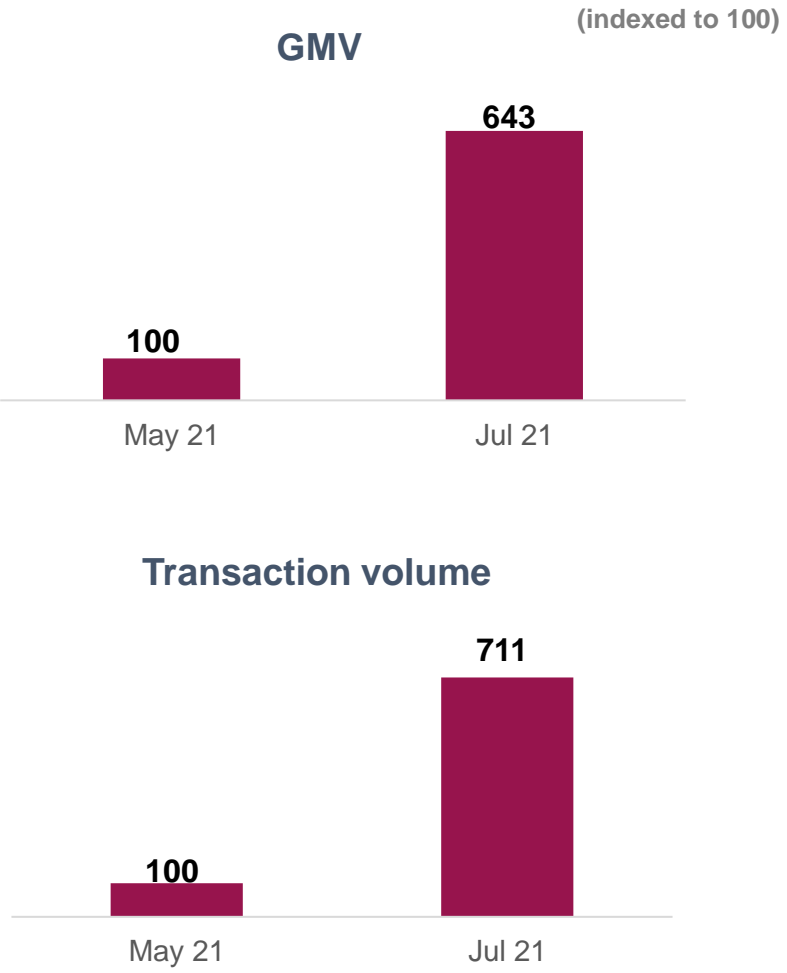
About Grabdeals

10 days **15%** Flat discount* **2** Partners*



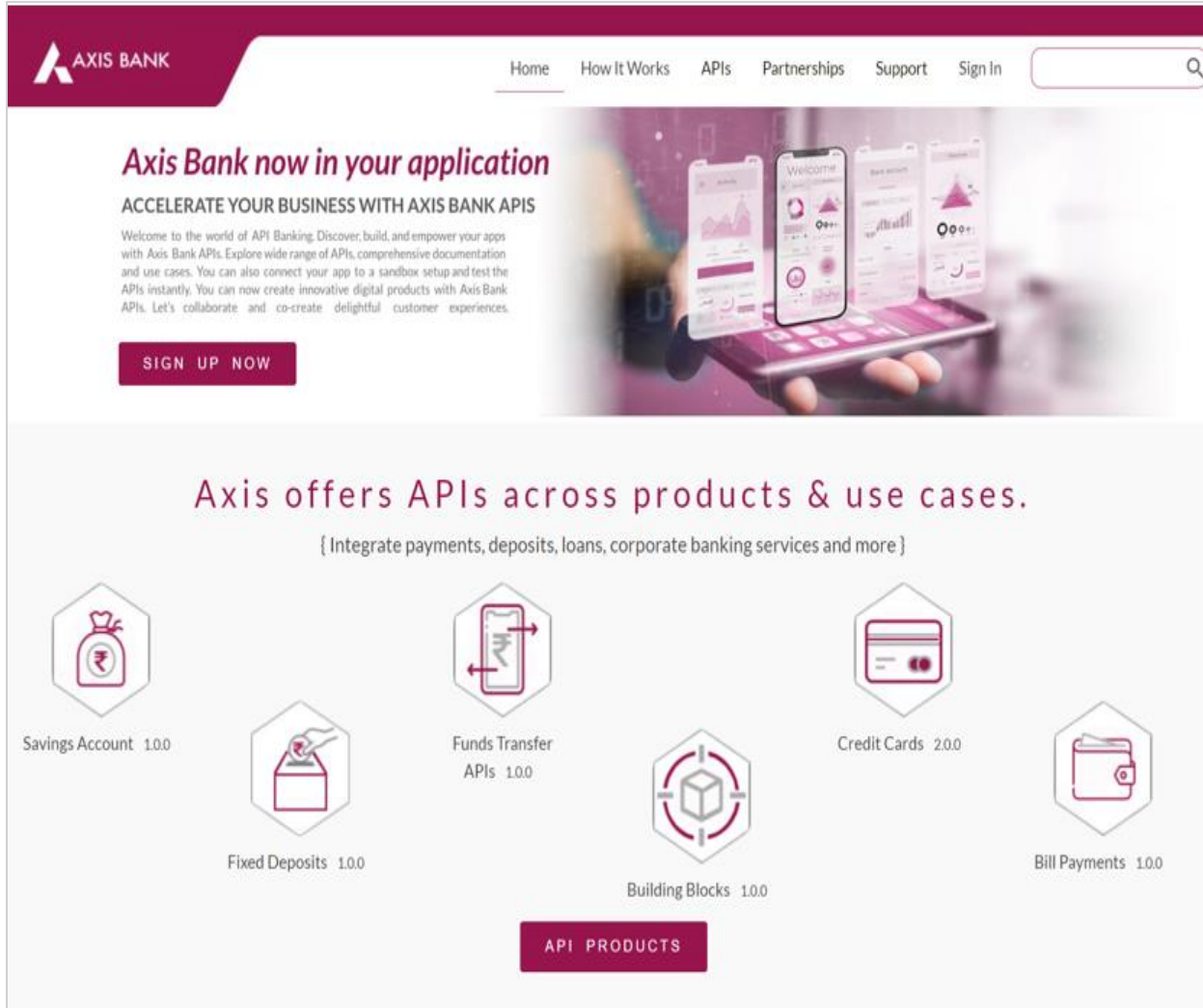
25 million impressions **8** mn views on YouTube

Evolution



*on Amazon & Flipkart

We now offer our partners API banking through a best-in-class Developer portal



<https://apiportal.axisbank.com/portal/>

~250 Number of APIs (including **~30** Corporate APIs and **~220** Retail)

7 Number of Partners onboarded in Retail

Best in Class Features

- Self Registration
- Real time IP/PCR Validation
- Flow Charts and Document Library
- Developer forum

Our Digital Bank strategy



1

Reimagine top
end-end journeys

2

Transform the core

3

Embed into
ecosystems

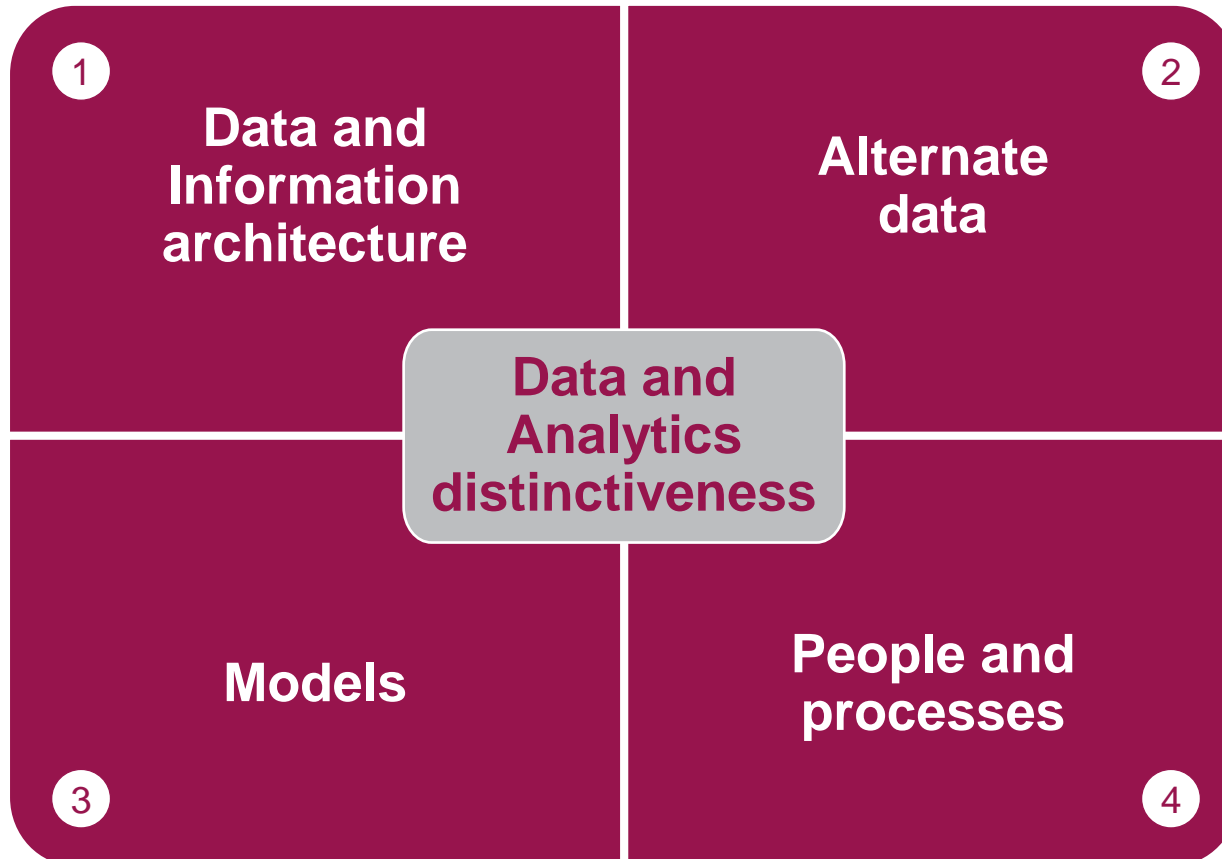
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Data and analytics

5

People, processes, technology

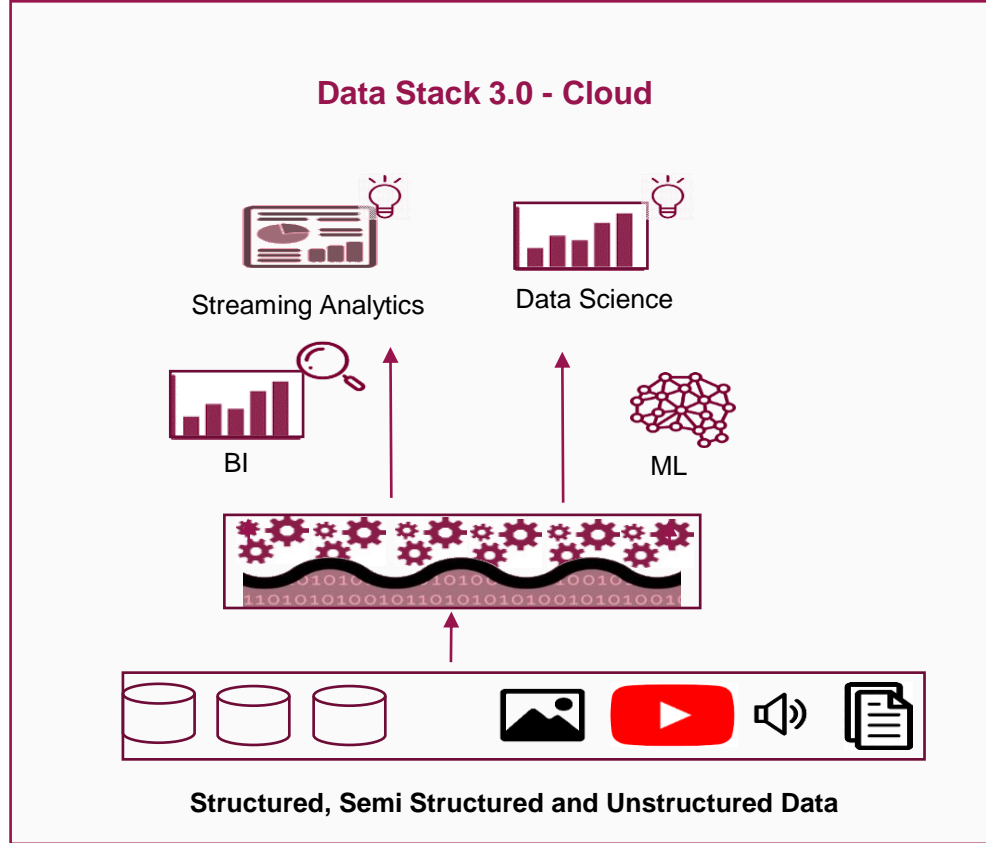
Distinctiveness to be driven by providing best in class analytics solution based on four levers



- We have begun our **cloud data infrastructure** journey
- We are building **alternate data platforms** to enable score-based underwriting for next 100 million+ customers
- We are also implementing large number of **credit and marketing models** leveraging advanced techniques with new age data to drive better predictive and to drive sourcing

As data increases, we have begun our cloud data infrastructure journey

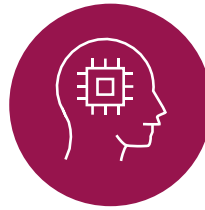
By 2022, 75% of all databases will be deployed or migrated to a cloud platform, with only 5% that will ever be considered for a return to an on-premises deployment, according to a recent forecast from Gartner



Big data clusters developed on Hadoop with PetaByte scale data



150+ use cases deployed across credit, fraud, marketing analytics on cloud decisioning platform



Multiple machine learning based credit models developed; **2000** attributes considered; up to **120%** lift on GINI over generic bureau models

- On the fly elasticity
- Separation of compute from storage

We are integrating alternate unconventional data in Axis ecosystem for risk-moderated business expansion, especially for new products or info-poor segments

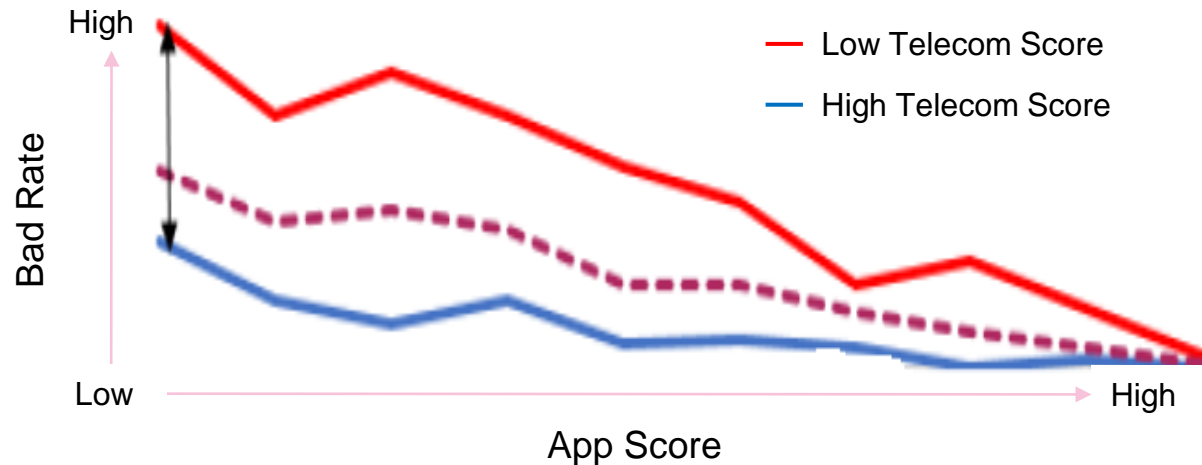


We are starting to use alternate unconventional data like telecom score and farmland health metrics for enabling underwriting capability for all Indians who walk through Axis doors

Telecom Score



Access to **surrogate credit** score for crores of subscribers of one of the top telcos enabling Bank to offer gamut of products to huge fresh pool

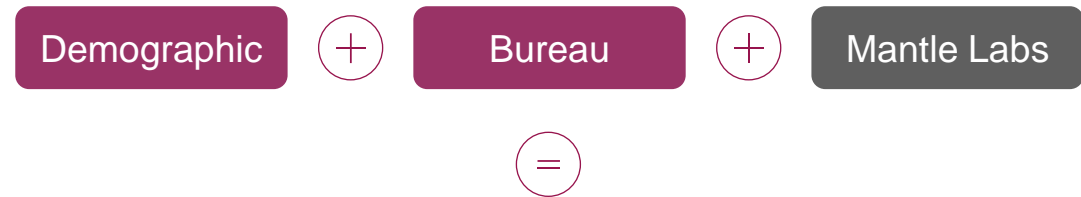


Validated on multiple products: Telecom score gives risk discrimination over and above underwriting scorecards

Farmland Health metrics

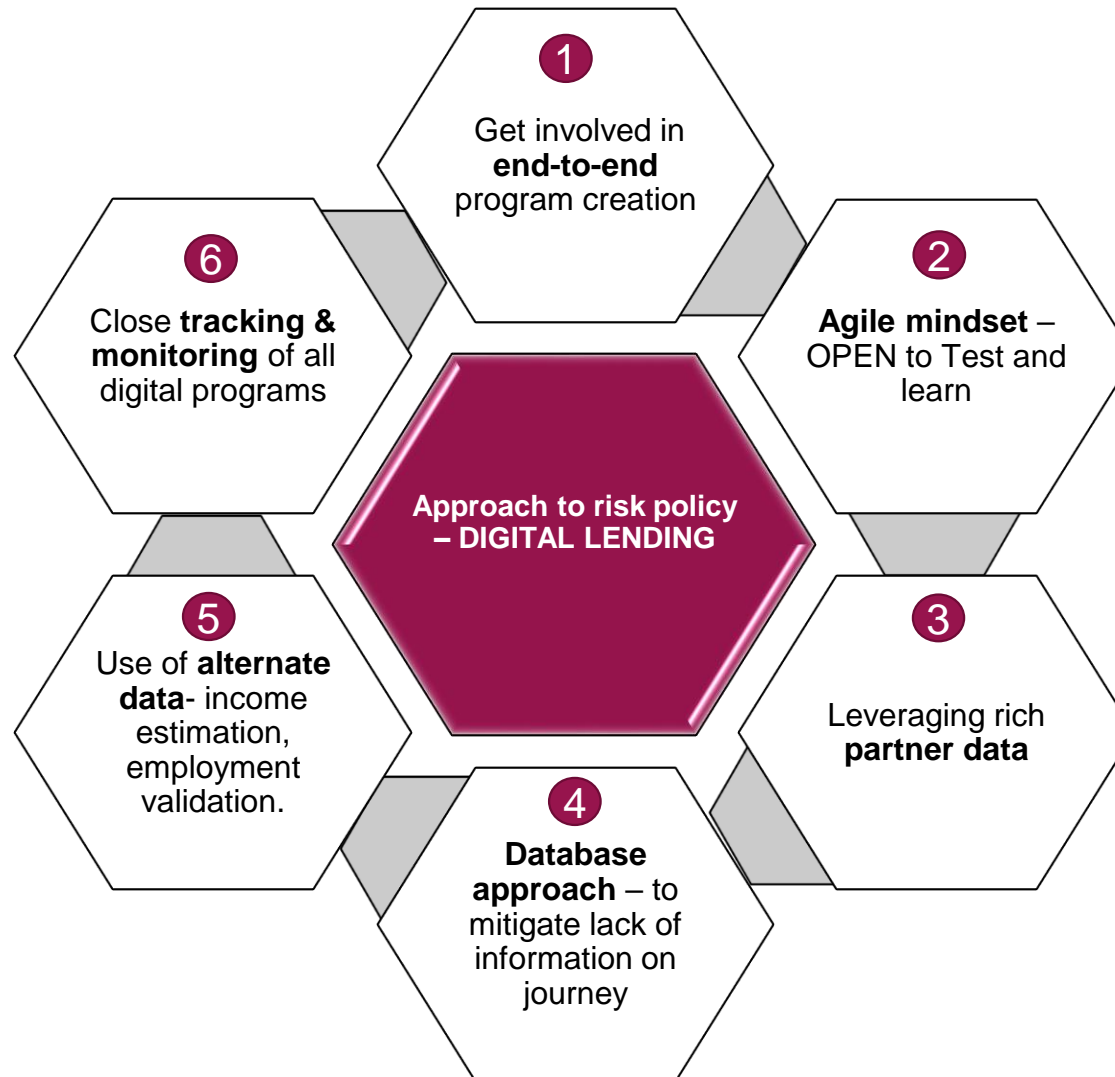


Crop Health Metrics generated from satellite images

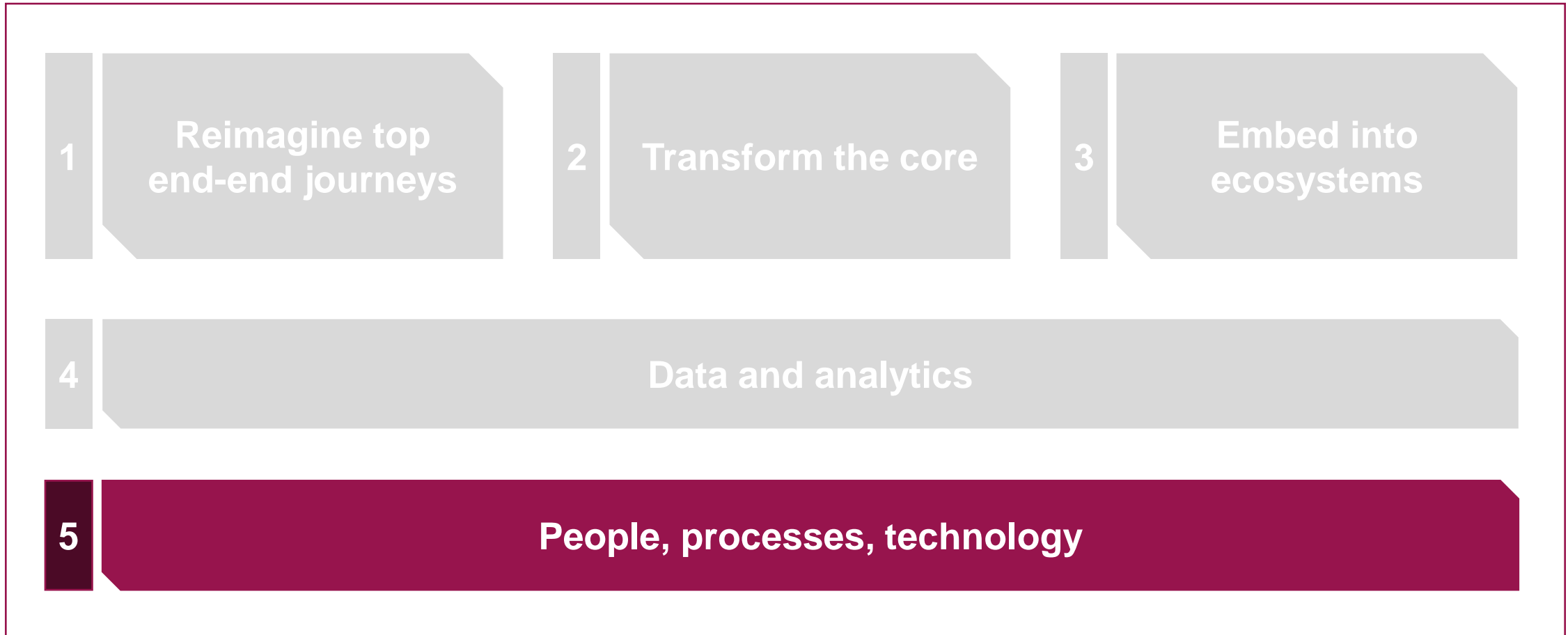


Inclusion in underwriting scorecard improves risk discriminatory power by **~10%**

Our digital underwriting policies are consistent with our **'OPEN'** philosophy



Our Digital Bank strategy



Four key enablers driving our successful digital strategy



1 Building the right talent

- ~ **850** people dedicated to digital agenda
- ~**75%** new hires from non-banking background
- ~**150** member full service inhouse team:
 - Design
 - Product managers
 - Developers: Front-end, back-end, full stack
 - Dev-ops
 - QA
 - Scrum masters
 - Digital marketers

3 Establishing agile processes

- Agile operating model established
- Cross-functional teams as end-end owners
- Operating rhythms across daily huddles, development in sprints, in-sprint automated user testing setup
- Dev-ops infrastructure set up. Info-sec checks integrated into development lifecycle
- Integration of Dev-Sec-Ops led to **70% reduction** in deployment time

2 Enabling the team through technology

- Leader among peers to take the **Cloud First approach**
- Only Bank to be invited as Keynote speaker at **AWS Summit 2021**
- **70%** of Applications and Infra planned on Cloud over next few years – including **100%** of new customer facing applications
- **500 deployments** in CI/CD mode
- Deployment in Kubernetes clusters for scale
- Modular microservices based architecture

4 Setting the right data infrastructure

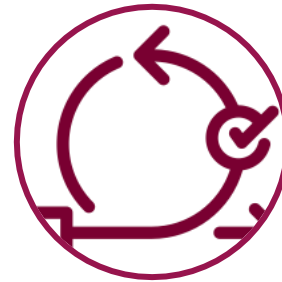
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Developing In-house Capabilities

*The Bank is focusing on developing its in-house capabilities which is evident from a **66%** increase in the IT team strength in the last 2 years*



- Bank has set up **Enterprise Architecture Practice**
- The Practice focuses on building a **sustainable governance structure to rationalize and optimize** the application architecture



- The Bank is also building its capabilities to deliver faster through introduction of **Agile Centre of Excellence (CoE)**
- Key roles such as **Agile Coach, Scrum Master** are being introduced across IT projects to drive adoption and leverage benefits



- With increasing focus on digital engagements, Bank has invested on talent experienced in **Customer Experience**
- Customer experience will be a **focal point** of all technology developments and enhancement



Subzero - our proprietary design platform is now live



Subzero is a collection of guidelines and components shared among designers and developers in order to create a streamlined and enjoyable user experience for all Axis Bank customers.

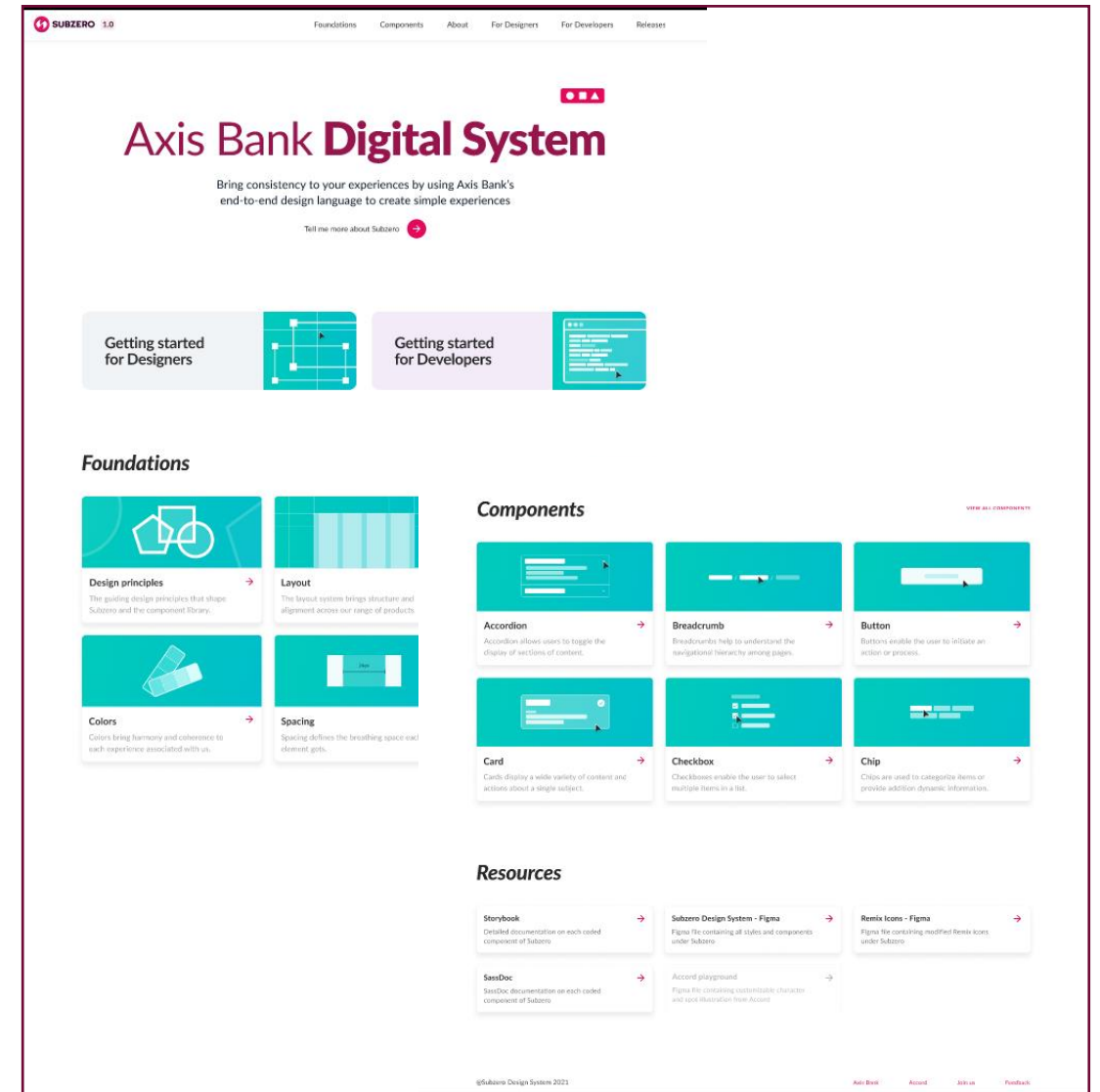


At its centre is the pattern library which contains reusable components and foundations, from the individual atoms to the full templates and pages..



Rather than focusing on pixels, developers can focus on application logic, while designers can focus on user experience, interactions, and flows.

Subzero will help reduce design and development time by ~20%, and provide consistency across customer journeys



In conclusion, our efforts are getting recognised...

India's **Best** Digital Bank



15%

Market share in
UPI transactions*



14%

Market share in
Mobile transactions*



4.6

App ratings
(Apple store)

* In terms of volumes for Q1FY22

Thank you

