



## Core Banking Modernisation

## Are you locked into the core?

The legacy core banking setup is being challenged by digital transformation, and we are at a turning point. It is time to rethink!



# If the answer is yes, then it is time to modernise your core

Core Banking Solutions (CBS) modernisation unlocks a digital revolution, seamlessly integrating emerging technologies, products, services, collaboration in the banking ecosystem, and much more. It is your key to unrivalled competitiveness and regulatory compliance.

## Why Indian banks must embrace core banking modernisation for a future-ready financial landscape?

Core banking modernisation is imperative for Indian banks to **navigate a future-ready financial landscape successfully**.

This transformation is essential to enhance customer experiences by providing **seamless and personalised services, foster innovation and agility for quick adaptation to market changes, improve operational efficiency** by reducing costs and manual processes, ensure compliance with evolving regulations, enhance scalability and flexibility to accommodate growth, strengthen data security and privacy, and ultimately gain a competitive advantage in the dynamic and technologically driven financial industry.

### Key trends from the industry



Banking success hinges on seamlessly integrating CBS with **advanced channels, risk management, and business intelligence**, shifting from pure functionality to holistic synergy

Banks adopt scalable CBS, driving transformation for efficient handling of complex multi-channel transactions and payments to cater to the demand for diverse products and channels

Banks prioritise core banking modernisation for **seamless digital experiences**, as outdated legacy systems hinder integration with modern platforms, causing disjointed and disruptive customer interactions

Banks must adapt to evolving needs by adopting **multi-core systems**-blending an existing CBS with a new core-to enhance customer service, expand channels, diversify products, and boost market share growth

Driven by evolving financial regulations and concerns about **consumer protection, digital assets, and climate issues**, banks are compelled to modernise core banking systems for enhanced agility and adaptability

Legacy banking systems with **hard-coded rules and poor documentation** poses hurdles, prompting banks to move towards modernisation for user-friendly experiences

The rise in **mergers and acquisitions** among banks necessitates the **consolidation of diverse CBS**, urging the imperative to modernise and standardise the solution through seamless integration of the two systems

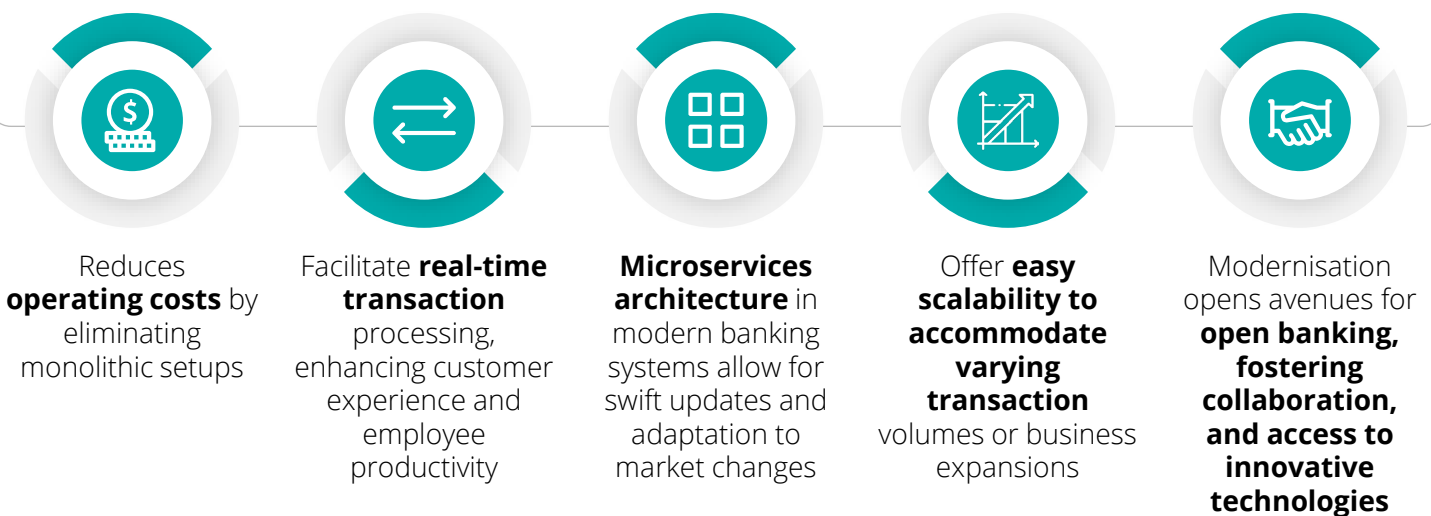
**Intense market competition**, driven by tech-savvy start-ups and neo-banks necessitates banks to embrace CBS modernisation for enhanced agility, including the adoption of **Banking as a Service (BaaS)**

# Next-generation core banking solutions

There has been a significant shift in the banking sector, leading to higher transaction volumes, straight-through processing, and overall growth in deposits and lending. This puts the requirement of next-gen solutions to overcome the limitations of legacy systems and enable banks to stay competitive, drive innovation, and deliver exceptional financial solutions to their customers.

## Effect of CBS modernisation on banks

Core banking modernisation revolutionizes financial institutions, enhancing operational efficiency, customer experiences, and overall competitiveness through streamlined processes, innovation, and improved security measures.



**16.62%**  
CAGR

**US\$370.50 Bn**  
2023–2027

Total transaction value is expected to show an annual growth rate from 2023 to 2027

**US\$9.6 Tn**  
45% GDP

**US\$175.4 Tn**  
67.6% GDP

Bank deposits in India have grown over the past two decades

**US\$2.2 Tn**  
Deposits

**US\$1.67 Tn**  
Loans

Banking sector reported deposits and loans in large volumes in FY23

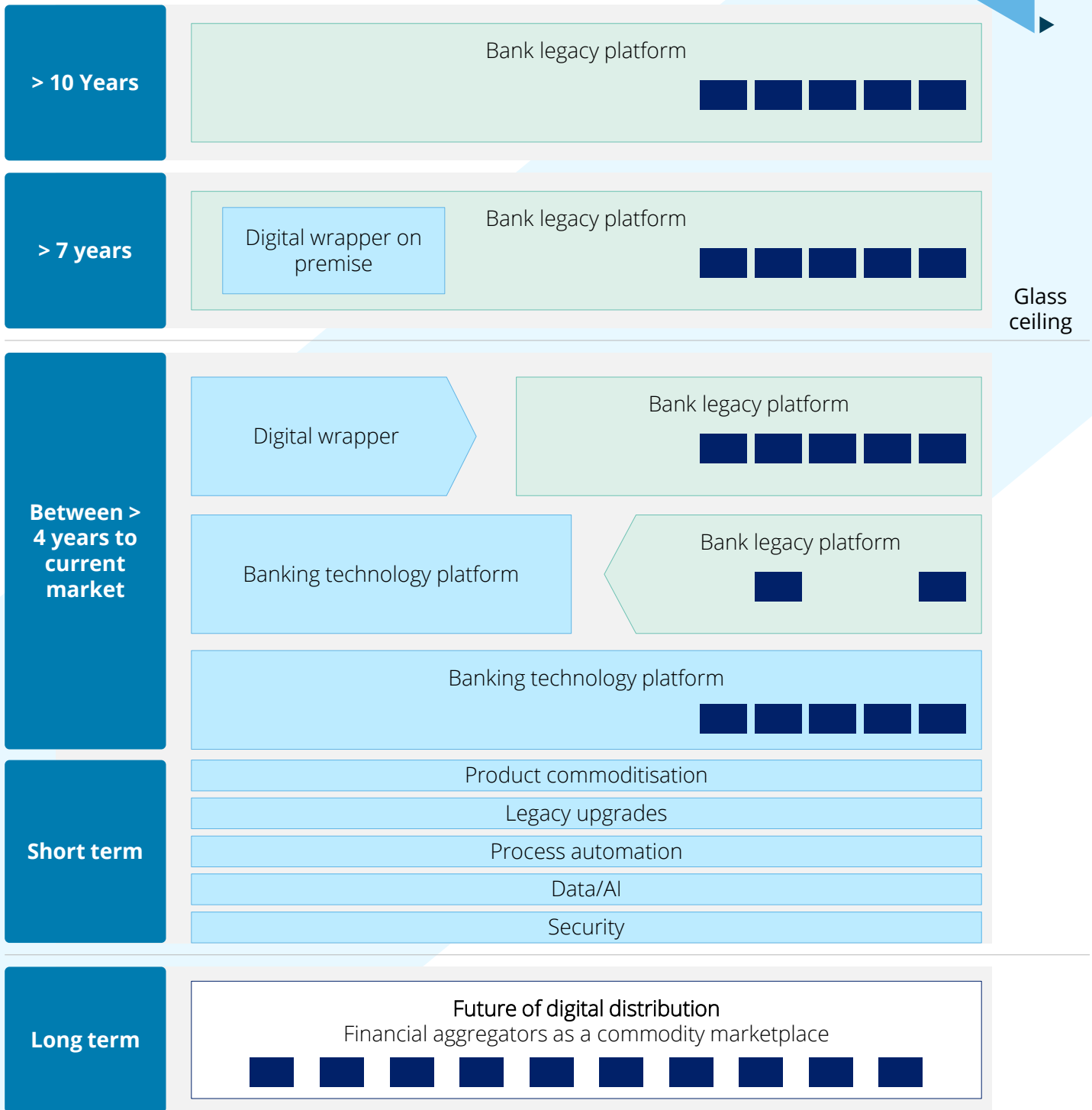
**30%**  
Investment Fintech

**27%**  
SaaS Fintech

Fintech in India is expected to grow over the years from 2022 to 2030

# Unlocking competitive advantage: Embrace innovation by rewriting your legacy

Banks must modernise their outdated systems to avoid rising costs and adapt swiftly to compliance and customer demands. Modernisation is crucial for enhancing customer experiences, strategically cutting costs, and seizing new business opportunities in a competitive market.



Undertaking core modernisation in banking requires a deep dive into the current landscape, strategic planning for short-term objectives, and careful consideration of long-term goals.

# Path for next-gen core banking modernisation

Banks must propel CBS modernisation to align with dynamic customer expectations, adapt to evolving regulations, and enhance competitiveness against digital fintech challengers.



## Real-time functionality

Many legacy systems process transactions in batches during an end-of-day process, which involves using shadow balances instead of real-time updates, posing a challenge in re-architecting interfaced ecosystems for real-time processing.



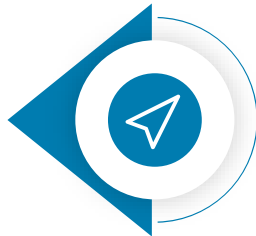
## Business rules are commonly hardcoded

Traditional systems often rely on hard-coded business rules, resulting in high costs and delays in changes. The lack of rule configuration through flexible parameterisation and user-friendly interfaces leads to disruption.



## Navigating regulatory landscape

In the heavily regulated banking sector, legacy systems fall short in adapting to frequent regulatory changes, hindering seamless functions such as KYC checks and anti-money laundering processes in an accessible format.



## Integrating disparate systems in M&As

Seamless integration of customer data, transaction histories, and operational processes. Transferring vast amounts of financial data can lead to errors, security concerns, and service disruptions.



## Extreme customisation

Legacy systems are often heavily customised and inadequately documented. This poses challenges in knowledge retention and hinders effective modernisation planning for ongoing business functionality.



## How can banks implement CBS modernisation



**Big bang modernisation:** Full core replacement requires thorough planning to cover all aspects, like:

- Digital capabilities
- Number of business products
- Volumes—to size the hardware
- Non-functional capabilities
- Data migration—including a history of the data to be migrated



**Progressive modernisation:** Gradual and phased approach to updating or replacing components of a bank's core banking system over time. This includes:

- Rollout of a new core banking system through selected modules
- Gradual migration of simpler products or customer segments in core banking to reduce load on the current CBS
- Decouple core banking and adopt microservices for modular business capabilities



**Greenfield banking:** Establishment of a new bank or the development of a new banking system from scratch without inheriting any legacy systems or infrastructure



# Path for next-gen core banking modernisation (1/2)

New-age core banking solutions can help Indian banks thrive by enhancing operational efficiency and fostering innovation.

## Service-oriented platforms

Platforms that offer service-oriented architecture (SOA)-based designs and enable real-time processing. Typically offered as hosted software-as-a-service (SaaS) solutions, these platforms generally utilise a licence and subscription-based model.

## Cloud-native platforms

Platforms that leverage microservices-based architecture with application programming interfaces (APIs) providing access to and from other internal and external services

### Big bang overhaul of CBS



The planning phase will be around 5–12 months, and execution around 18–42 months, depending on size. Key services will include:

- **Comprehensive system overhaul** to align with the digital era, ensuring a seamless transition from branch-centric to digital operations.
- **Digital-first architecture** provides a modern, customer-centric experience, integrating mobile and online platforms into the core for enhanced accessibility and functionality.
- **Robust compliance frameworks**, ensuring that the updated core banking systems meet the evolving regulatory requirements.
- **Integration of advanced analytics** into core systems for enhanced customer services, risk management, and strategic decision-making.

### Shift through progression



Facilitate large banks with legacy estate and numerous banking applications catering to various business lines, capabilities, products, and processes.

- **Phased approach to** establishing cloud-native cores for simpler services like digital channels, progressively expanding to more complex lines
- **Step-by-step transition**, allowing banks to move simpler product lines or specific customer segments like savings accounts and certificates of deposit to new cores, ensuring a smooth evolution
- **Extracting business capabilities** like product and pricing management, customer management, and statements from legacy systems, streamlining the core to a transaction ledger. This enables banks to integrate innovative microservices.

# Path for next-gen core banking modernisation (2/2)

New-age core banking solutions can help Indian banks thrive by enhancing operational efficiency and fostering innovation.

## Hybrid approach and legacy modernisation



A hybrid strategy ensures that banks retain the strengths of infrastructure systems while gaining the agility and innovation potential of the cloud.

- **Captive infra-to-cloud transition** seamlessly transitioning on-premise infrastructure-based core to the cloud environment preserves the benefits of infra while using the cloud.
- **Drive modernising complex legacy code** for banks, addressing challenges such as dated technology, poor documentation, and a lack of specific technical skills.
- **Identify key areas for modernisation**, including user interfaces (UIs), batch processing, and APIs within legacy core banking applications, leveraging cloud-native architecture.

## Technology stack implementation



Facilitating the bank's transformation journey to its new technology stack for seamless integration with existing operations in an agile manner for minimum friction during implementation.

- **Design** the plan for the build by prioritising business requirements, defining high-level user stories, ideal customer journeys, and appropriate sprint planning.
- **Build and test for implementation** with agile development, SIT and UAT testing, and in-depth stakeholder engagement, communication, and training for the transfer of technical and architectural best practices and incorporation of the user's behavioural insights.
- **Deploy pre-production** for due diligence and eventual organisation-wide roll-out.

## Modernisation of banking portals



Modernisation of customer touchpoints (i.e., websites and mobile apps) to translate banks' core banking modernisation into end-user value creation.

- **Product study**, KPI definition, user experience, VOC insights, and use case mapping, along with the creation of a product roadmap for the future.
- **Establish design principles** based on insights and use cases. identification of personas, creating customer journeys, and conducting benchmarking activities with competition.
- **Develop and deliver** portal designs based on UX principles and feature and functionalities aimed at elevating the experience of the bank's user base.

## Enterprise data modelling and migration



Remodelling of data from disparate sources across the organisation into a single platform/tool/system to create a single source/enterprise-level data repository.

- **Define** business and data use cases to accurately plan data re-architecture and remodelling, identify system performance and redundancy requirements, and map the source data model to a canonical data model.
- **Extract, convert, transform**, and migrate data from outgoing platform(s) to the canonical model, test the data compatibility, perform data integrity analysis for potential issues; and run pilot data execution.
- **Validate** migrated data and create a detailed data migration map and quality assurance document.



Ultimately, core modernisation is not just a technology play but requires a strategy that balances and promotes continuous synchronisation across three building blocks.



### The North Star

The identification of business use cases that fall within this sweet spot is critical to enable a phased core modernisation.

 **Product desirability**

What's desirable from a customer perspective? Will my customers love it? Will they tell their friends to check it out?

 **Business viability**

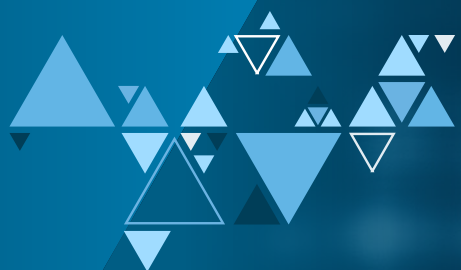
What's viable from a business perspective? Will it make money? How quickly?

 **Technical feasibility**

What's feasible from a technology perspective? What capabilities and new platforms are needed?

### Change management—a crucial component of the modernisation journey

Change management is crucial in banking modernisation, ensuring smooth transitions and maximising tech benefits. In today's dynamic banking landscape, embracing modernisation is essential for competitiveness. However, it involves significant organisational shifts. Effective change management facilitates seamless integration, minimises disruptions, and fosters adaptability. Engaging stakeholders, providing training, and fostering open communication channels are key to successful core modernisation.



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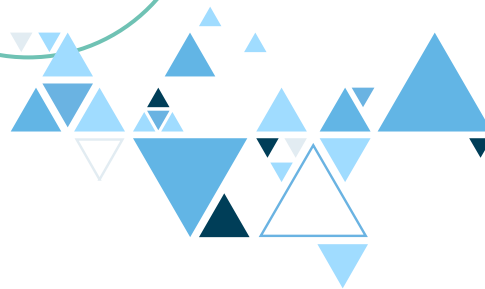
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