Powering Your Digital Transformation on Cloud

The cloud-native, cloud-agnostic Digital Banking Suite from Finacle
Customers are banking very differently in the digitized world. Two decades ago, more than half of all banking transactions occurred within the branch; today, more than 90% of all transactions are conducted through digital self-service channels. With customers transacting from anywhere and at any time, bank transactions have increased exponentially. Sharp spikes on special shopping days, such as Cyber Monday, Big Billion Day, and Singles’ Day sales put further strain on already burdened banking systems. As transactions increase, banks are finding it unviable to maintain the IT infrastructure required to meet peak loads. Thankfully, the cloud provides a flexible IT infrastructure that can be scaled up or down, on-demand, with ease.

The cloud also gives banks the agility to match their new and nimble competitors, such as challenger banks, FinTech firms, and giant technology companies like Google, Apple, and Facebook. Now, they can differentiate their organizations in the only way there is – by taking new innovations to market with speed. A strategic cloud adoption program provides an agile IT foundation that enables incumbent banks to respond quickly and effectively to changes in the business environment.

The new players are also setting benchmarks in customer experience with highly personalized services and great user experience design. Again, the cloud is enabling financial institutions of all sizes, even those with fewer resources, to fight back. With cloud, banks can easily personalize their services at scale as well as rapidly design, test and deliver engaging experiences to customers. All of this requires banks to gather, sense and act upon massive data from diverse sources in real-time, which is much easier to do with cloud computing. This is why an increasing number of banks are taking even mission-critical applications to the cloud.

Given the benefits of agility, flexibility, and scalability at low infrastructure and computing costs, the question today is not “why” but “when” and “how” a bank should adopt the cloud.

At Finacle, we believe that a robust and flexible cloud ecosystem is a necessity for financial institutions that aspire to lead the digital transformation race and achieve significant business performance improvements.
Build Your Cloud Strategy with a Comprehensive Banking Platform

Finacle offers a cloud-native, cloud-agnostic digital banking suite that can be deployed flexibly – on a private, public or hybrid cloud – to suit a bank’s requirements.

The offerings are backed by our vast implementation experience spanning financial institutions of different sizes located in more than a hundred countries, serving a billion customers. We have partnerships with major global and regional cloud providers, including AWS and Microsoft Azure.

Deploying a suite of solutions combining comprehensive functionality and the flexibility to address a client’s specific challenges, Finacle has driven digital transformation in banks around the world. Finacle applications are cloud-native, running in a containerized environment orchestrated by Kubernetes that is supported in all cloud environments.

Finacle’s componentized structure allows banks to choose any combination of solutions matching their specific business priorities and modernization strategy. Whether a bank is looking to transition entirely to the cloud or do it progressively, in phases, Finacle provides the necessary flexibility and support.
SECTORS

- RETAIL BANKING
- BUSINESS AND COMMERCIAL BANKING
- MICRO FINANCE
- PRIVATE BANKING
- ISLAMIC BANKING

CAPABILITIES

CHANNELS
- Branch
- Internet
- Mobile
- Social
- Banking Agents
- ATM/POS
- Open Banking

ENTERPRISE CAPABILITIES
- Customer Management
- Digital Engagement Hub
- Advanced Analytics
- Payments
- Liquidity Management
- Virtual Accounts
- Limits and Collaterals

BUSINESS FUNCTIONS
- Deposits
- Lending
- Trade Finance
- Wealth Management
- Islamic Banking
- Treasury
Flexible Cloud Deployment Options

Banks may deploy Finacle in any of the following ways:

- **Private cloud**: Finacle applications are deployed in a bank-owned private cloud.
- **Public cloud**: Finacle applications are deployed on a public cloud infrastructure offered by providers such as AWS and Microsoft Azure.
- **Finacle-as-a-Service**: Finacle is made available in a SaaS (Software-as-a-Service) mode to clients who can subscribe to the applications of their choice and consume them as required.

Finacle SaaS on the Cloud

This service includes:

- **5 instances of chosen Finacle applications**, including Disaster Recovery, Production, Staging, Development, and Testing and Training.
- **Full stack managed service including** management and maintenance of Finacle applications, infrastructure applications, and cloud infrastructure.
- **Round the clock availability as a result of** cloud deployment, and high systems availability thanks to preventive monitoring and maintenance of applications.

Also, Finacle applications are built on a cloud-native framework based on Cloud Native Computing Foundation (CNCF) standards, and follow the Twelve-factor App Methodology. This cloud-native approach prevents vendor lock-in and allows applications to be ported to any Kubernetes-based environment on any cloud.
MICROSERVICES ARCHITECTURE
Finacle is built on microservices-based, componentized solution architecture in order to
decouple components. This makes the components more agile, available and scalable.
Finacle componentization is at the building block level with right-grained services, which
enables faster assembly of business components and bundling into smaller packages.
Banks can choose to deploy and upgrade Finacle components selectively and in a
progressive manner.

STATELESS PROCESSES
Finacle applications are executed as one or more stateless processes. The share-nothing,
horizontally partition-able nature of twelve-factor app processes means that the
applications can be scaled independently.

CONTAINERIZATION
Finacle applications are designed based on Microservices Architecture and can be run
within containers and container orchestration layers. Containerization allows Finacle
applications to run efficiently and reliably in all virtualized computing environments.
Docker is the preferred platform for containerization.

ORCHESTRATION
Finacle leverages Kubernetes for container orchestration in a cloud environment. It helps
define, manage and upgrade applications with ease.
DISTRIBUTED DATABASE AND STORAGE
Finacle’s storage and data approaches are based on Polyglot Persistence, wherein any of multiple data storage technologies are used based on appropriateness. Clients have a choice of several databases, such as EnterpriseDB, Oracle, and IBM DB2. Database sharding increases resiliency and scalability.

DECLARATIVE and RESTful Application Programming Interfaces
Declarative APIs allow developers to tell Finacle applications to achieve an outcome instead of specifying exactly what action to execute. Declarative APIs free developers from writing execution algorithms, so that they can focus on solving creative problems and building competitive differentiation. Finacle exposes a series of RESTful APIs for communication.

CONTINUOUS INTEGRATION/CONTINUOUS DELIVERY
Finacle offers a CI / CD pipeline and its own set of tools for automation. When there is any change to the code, a new container is built automatically and a container image is generated for testing, deployment, staging and eventually, production. This allows for Continuous Integration during development and Continuous Delivery during deployment.

SERVICE MESH
The service mesh controls how different microservices of an application share data with each other. Finacle uses Istio to provide insights and operational control over the microservices, and is a complete solution that satisfies the diverse requirements of microservice applications.

OBSERVABILITY AND ANALYSIS
Observability is a key capability provided by the service mesh. Elastic services ship logs from containers and visualize everything in Kibana. Prometheus is integrated into the Finacle Kubernetes cluster for monitoring. Finacle applications are capable of emitting events as logs, enabling observability and analysis.

CONTAINER REGISTRY AND RUNTIMES
Finacle integrates with Docker Hub, Azure Container Registry, Amazon Elastic Container Registry, etc. to provide a single interface to manage Docker images, perform vulnerability analysis, and decide who can access what with fine-grained access control.

STREAMING AND MESSAGING
Logs provide visibility into the behavior of a running application. They are the stream of aggregated, time-ordered events collected from the output streams of all running processes and backing services. The event streams from various Finacle applications are streamed to external storage and are search-enabled.
Finacle’s cloud partners have data centers in more than eighty countries around the world, enabling banks to comply with data residency mandates. Also, this strategy gives banks a choice of cloud providers, ranging from global names, such as AWS, Microsoft Azure, Oracle, and IBM, and regional providers such as Cloud4C in Asia.

The global players support international industry norms, cloud standards, operational governance models and regulatory requirements. In addition, they bring technology frameworks to support data privacy and encryption and ensure regulatory compliance. In particular, local cloud providers allow banks to meet data residency requirements.
Finacle has successfully partnered with financial institutions of various sizes across the globe in their cloud adoption journey. Our implementations have ranged from an end-to-end digital banking solution suite, including relevant partner solutions as a service, on cloud, to select banking applications. Here is what the transitions have delivered for some of our clients:

**Australian Military Bank (AMB)**

*Transformed to a nimble, new-age digital bank through the Finacle SaaS offering.*

**ABOUT THE BANK:**
- Australia’s longest serving mutual bank for defense personnel.

**REQUIREMENTS:**
- The Bank was seeking a modern digital engagement suite that would enable it to compete effectively with the Big 4 Australian banks.

**SOLUTION:**
- The Bank chose the Finacle SaaS offering for Australia consisting of Core Banking, Digital Engagement Hub, Online Banking, Mobile Banking and partner solutions.
- This is a complete end-to-end banking solution suite deployed on the cloud, enabling AMB to focus on innovation and stay in sync with digital-native customers’ expectations.
- The solution is hosted out of Infosys Cloud in Australia that conform to ISO-27001 standards for information security, and is PCI-DSS compliant.

**BENEFITS:**
- After going live in eight months, the Bank was able to show dramatic results on all KPIs – STP (>99%), customer onboarding in less than 10 minutes, and 46% expansion* on digital channels.

*The Internet banking and mobile banking channels have seen a 46% increase in registrations and more notably, a 116% increase in mobile app registration within months of going live.*
Used Finacle-as-a-Service as the lending platform for its retail banking operation

ABOUT THE BANK:
- Launched by Goldman Sachs in 2016 as an online platform offering personal unsecured loans and savings accounts to retail clients.

REQUIREMENTS:
- The client wanted to rapidly launch a digital-only retail banking operation.

SOLUTION:
- Marcus selected Finacle on a private cloud to launch in the U.S.
- Marcus deployed the Finacle solution to manage the complete consumer loan-servicing lifecycle. The private cloud model allows Marcus to achieve the necessary scale as well as provide enhanced functionality, business confidence and security to consumers.

BENEFITS:
- Marcus is now able to deliver extensive self-service capabilities on digital channels to design truly personalized products. The system gives end-consumers the flexibility to choose lending terms such as repayment amount and tenor.
- Marcus has designed and built modern technology operations by ensuring straight through processing across digital channels to the Finacle solution.
- The entire program was completed in just eight months, leveraging an agile implementation framework and the pre-configured U.S.-compliant Finacle Core Banking Solution. The solution provided out-of-the-box compliance for federal and state regulations, thus removing the potentially high cost and lengthy timeline of building a fully functional, compliant technology platform in-house.
- The Finacle solution provides a 24/7, real-time, scalable platform that has enabled Marcus to create products, open accounts and manage the entire loan-servicing lifecycle, including payments, whilst ensuring superior customer experience.
- Finacle’s open architecture, integration capabilities, and scalability have seamlessly aligned with and become part of Goldman Sachs’s wider ecosystem of enterprise applications.
Accelerating digital transformation on the cloud to provide enhanced customer experience

ABOUT THE BANK:
• One of India’s most progressive co-operative banks.

REQUIREMENTS:
• The Bank sought to gain agility and flexibility to scale on demand.
• It also needed to accelerate business transformation cost-effectively.

SOLUTION:
• Shivalik Mercantile Co-operative Bank leveraged Finacle SaaS, including Finacle Core and Finacle Digital Engagement Suite, on Cloud4C.

BENEFITS:
• The cloud has enabled it to quickly launch engaging digital banking experiences for customers.
• The API framework is giving the Bank the benefits of agility and easy collaboration with external ecosystems.
• The low cost cloud model has enabled Shivalik to accelerate its digital transformation cost-effectively.
Leveraged Finacle on the cloud for rapid launch and expansion in a new market.

ABOUT THE BANK:
• A large bank in the Philippines.

REQUIREMENTS:
• The Bank sought agile and low-TCO (Total Cost of Ownership) deployment of core banking for its Singapore operations.

SOLUTION:
• It deployed the Finacle Digital Suite, including Core Banking, Digital Engagement Suite and Treasury, on AWS Cloud.

BENEFITS:
• A seven-month go-live after kick-off enabled the Bank to meet speed-to-market requirements in a new region, namely, Singapore.
In summary, here are the key benefits of running Finacle on the cloud:

**Comprehensive solution suite:** Finacle digital engagement solutions have a very wide range of features and functionalities, from core banking to digital experience. Finacle has been consistently recognized in the industry for its functional richness.

**Faster time to market:** Deploying Finacle solutions in SaaS mode on the cloud is faster than setting them up on premise, which speeds up innovation and time to market for new initiatives. Banks can go live in a matter of a few months and focus on launching new business capabilities rather than building technical infrastructure.

**Scalability:** Auto-scaling helps traditional banks and startups ramp up digital banking compute services, in line with the key areas and pattern of business growth.

**Security:** Cloud compliance enables Finacle customers to use robust controls that meet security and regulatory standards, and thereby protect their data on the cloud. The security provisions and investments made by Finacle and its cloud partners are much stronger than anything a single bank would usually put together on its own.

**Software-as-a-Service:** Choosing the SaaS approach means banks can entrust the responsibility of managing applications and infrastructure to Finacle and focus their own energies on business innovation. Finacle becomes the single point of contact, which manages not just applications and the underlying infrastructure but also all the arrangements with cloud partners.

**Ease of integration:** On the cloud, digital banking systems integrate with other large workloads – General Ledger, Content Management, Artificial Intelligence Solutions, Anti Money Laundering, and Risk Management etc. – which can also be migrated up there. As the world moves towards open banking, integration and co-innovation with the ecosystem becomes very important and the cloud offers a lot of capabilities to enable this.
Experience That Speaks for Itself

An industry leading solution

Year after year, Finacle is recognized as a leader in independent industry assessments by major analyst firms.

Infosys Finacle was named as a leader, 11th time in a row, in the Gartner Magic Quadrant for Global Retail Core Banking, July 2019, Vittorio D’Orazio and Don Free

Rated as a leader in The Forrester Wave™: Global Digital Banking Platforms, Q3 2019

Rated as a leader in the IDC MarketScape of Worldwide Core Banking solution providers


The Most Awarded Solution in the Industry

21 industry awards for Infosys Finacle and its clients in CY19

Celent Model Bank Awards 2019
Beyond Banking – Paytm Payments Bank

IBS Intelligence Global Fintech Innovation Awards 2019
Best Digital Channels implementation – Infosys Finacle & Standard Bank
Best Payments System implementation – Infosys Finacle & Qatar National Bank
Most innovative use of Blockchain in Banking – Infosys Finacle & ICICI Bank
Most Innovative API / Open Banking model – Infosys Finacle & Paytm Payments Bank

Best Use of IT for Lending
Bank Rakyat Indonesia & Infosys Finacle

Best Use of Emerging or Innovative Technology
Infosys Finacle & Royal Bank of Scotland

IDC Real Results Awards 2019
Digital Banking transformation program
Infosys Finacle & Paytm Payments Bank

The Asian Banker Financial Technology Innovation Awards 2019
Best Cloud Base Initiative - Australian Military Bank
Join the Finacle Digital Banking Community

Get ready to power your digital transformation on the cloud

Banking in the digital age demands a system that is agile, enables personalization at scale, and minimizes total cost of ownership. Finacle on the cloud helps banks achieve exactly that.

It is a future-proof platform that accelerates innovation and profitable growth. Finacle cloud solutions enable clients to become agile, cost-effective, flexible digital banks, delivering innovative and personalized offerings to their customers.

Begin your cloud journey today!

Contact us today:
www.finacle.com  |  finacle@edgeverve.com
Finacle is the industry-leading digital banking solution suite from EdgeVerve Systems, a wholly owned product subsidiary of Infosys. Finacle helps traditional and emerging financial institutions drive truly digital transformation to achieve frictionless customer experiences, larger ecosystem play, insights-driven interactions and ubiquitous automation. Today, banks in over 100 countries rely on Finacle to service more than a billion consumers and 1.3 billion accounts.

Finacle solutions address the core banking, omnichannel banking, payments, treasury, origination, liquidity management, Islamic banking, wealth management, analytics, artificial intelligence, and blockchain requirements of financial institutions to drive business excellence. An assessment of the top 1250 banks in the world reveals that institutions powered by the Finacle Core Banking solution, on average, enjoy 7.2% points lower costs-to-income ratio than others.

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For more information, contact finacle@edgeverve.com www.finacle.com