

CASE STUDY

A leading Bank of Indonesia Transforms Core Banking with Finacle on Google Cloud Platform





About the **Bank**

A leading bank in Indonesia, originally established as a securities investment corporation in 1966, is today a global financial institution offering a comprehensive range of financial services. With operations spanning 14 countries and regions and over 370 outlets worldwide, it boasts one of the most extensive international presences among financial institutions in its home country. It is dedicated to building customers' wealth and contributing to national economic growth. As part of its mission to achieve excellence, the bank continues to focus on comprehensive transformation, customer engagement excellence, and operational performance, embodying its vision to become regional leader.

Its Indonesian operations are recognized as one of the prominent banks in the country, with assets totaling IDR 22.86 trillion and 12 offices across Indonesia. The bank provides a full range of corporate and consumer services and is committed to becoming a financial institution that can be relied upon and trusted.



Redefining Banking **Through Digital Excellence**

Recognizing the growing demand for speed, convenience, and seamless access to financial services, the bank aimed to be digital inside out. The Bank focused on adopting next-gen digital solutions to elevate customer engagement, drive ubiquitous automation, and enable data-driven decision-making. At the same time, the bank remained committed to expanding its use of cloud computing and emerging technologies while ensuring compliance with security protocols and regulatory requirements.

Additionally, to safeguard IT operations and maintain system integrity, the Bank has reinforced its cybersecurity measures. This strategic focus ensures resilience against evolving threats while supporting the Bank's long-term digital transformation journey.

In response to the evolving landscape of digital technology, the bank recognized the need for a transformative shift in its core banking system. To stay ahead in innovation, the Bank embarked on a strategic upgrade, migrating to a cloud-based digital platform. In 2023, the Bank set a vision to complete this migration in 2024, marking a significant step in enhancing operational efficiency and service delivery.

The Bank's Strategic Objectives

As part of its vision to become a the regional leader, the bank set forth key objectives for its digital transformation journey. The goal was to modernize its core banking system by adopting a cloud-first approach, ensuring scalability, seamless integration, and regulatory compliance.



Seamless Platform Migration with Cloud Adoption

The Bank aimed to upgrade its core banking platform while retaining all functional requirements and features. To achieve greater resilience and operational efficiency, the bank decided to transition to a cloud-based deployment model.



Effortless Integration

With 30+ third-party systems connected to its ecosystem, The Bank prioritized seamless integration while minimizing changes to external configurations. A new listener had to be developed to maintain the queue-based integration mechanism previously supported by IBM MQs for interfacing with TIBCO ESB.



Data Security, Encryption & Compliance

To enhance data security and regulatory compliance, The Bank sought to implement end-to-end encryption for data in transition, particularly within ETL/DWH systems. This included encrypting PII (Personally Identifiable Information) data at both the Customer Data Hub (CDH) and Core Banking Systems using pgcrypto functions and a Custom API for secure data migration.



Optimized End-of-Day (EoD) Processing & Performance Enhancement

To improve system efficiency, the Bank set an objective to reduce EoD execution time, enabling faster reconciliation and improved system availability.



Seamless Migration with Minimal Downtime

Recognizing the critical nature of banking operations, the Bank planned to migrate all customer and account data, including historical records, within a standard weekend window, ensuring minimal downtime and business continuity.

Why **Finacle**?

The Bank had a long-standing relationship with Infosys Finacle and when they decided to move to cloud, they chose Finacle to be their technology partner. The bank wanted to leverage Finacle's expertise and experience with 500+ installations across 100+ countries.

Finacle ensured a smooth transformation and came with the following advantages -



Comprehensive and componentized capabilities

Finacle offers an extensive range of solutions that address the retail and corporate banking functional requirements of the Bank, along with emerging needs. These solutions cater to diverse banking operations, enabling the Bank Indonesia to streamline processes and enhance customer experiences seamlessly. Additionally, Finacle's componentized structure empowers the Bank to select a tailored combination of solutions aligned with the bank's specific business priorities and modernization strategy.





An advanced technology platform

Finacle's cloud-agnostic, cloud-native architecture played a crucial role in the Bank's transition to Google Cloud Platform (GCP). This transformation required the successful integration of existing on-premise Finacle Internet Banking and Finacle RLOS with Finacle Core on GCP. With this move, the bank gains the flexibility to scale operations up or down based on demand. Additionally, Finacle's open API capabilities enable seamless connectivity, allowing the Bank to co-innovate effortlessly with customers, partners, and the broader developer ecosystem.

To enhance operational efficiency, Finacle provides a robust DevOps framework with continuous integration, continuous delivery, and automation tools for managing container lifecycles while maintaining strict separation of configuration from code. Its embedded real-time analytics deliver personalized, contextual experiences across all channels and devices, while its strong security foundation safeguards infrastructure, data, and applications. Furthermore, Finacle's multi-channel and multi-currency capabilities support the Bank's operations across major geographies, ensuring a seamless banking experience for customers.



Risk mitigated transformation

Infosys Finacle has a strong track record of successfully delivering complex banking transformations globally, including Southeast Asia. Drawing from this expertise, the Bank aimed to modernize its banking systems through a strategically executed, progressive approach, ensuring minimal disruption to operations and business continuity.

By leveraging Finacle's next-generation Core Banking and Customer Data Hub (CDH), the Bank sought to transition to a more agile and resilient digital ecosystem. The deep collaboration between the Bank and Infosys Finacle intended to foster a shared vision, streamline issue resolution, and accelerate innovation, ultimately enabling the bank to enhance customer experiences and drive future-ready growth.



Transforming Strategic **Vision into Reality**

The project sign off was in June 2023 and by August 2024, the SIT/UAT was signed off. The Bank went fully live on September 2024. The Bank used CASA, Loans, Payments and Trade Finance as part of Finacle Core suite. Both Retail and Corporate customers are onboarded using Finacle CDH module. Consumer durable loans, personal loans are originated using RLOS solution. The Bank uses both Retail and Corporate Internet banking.



Strategic Upgrade and Cloud Migration

The Bank went ahead with an upgrade of Finacle and moved to Google Cloud Platform. The migration ensured that the new cloud-based platform was seamlessly integrated with the Bank's existing Internet Banking and Loan Origination System, both of which remained on-premises.



Phased Migration Approach and Data Transition

The implementation took a progressive approach with a duration of 13 months which include UET training, customization porting, SIT and UAT. This ensured a smooth transition with no disruptions to customer services. The migration of all customer and account data, including historical data, was done with a minimal downtime over a standard weekend. A read replica for production data base was introduced for ETL operations, reducing system load and enhancing performance.



Open API Integration

The Bank has built their own mobile banking application where Finacle APIs are consumed for various operations ranging from customer details enquiry, balance fetch, payments etc. The Bank has partnered with external vendors where loans are created in Finacle. These loans are created from a system called Partnering Hub where Finacle's customer creation APIs, loan creation and disbursement APIs are consumed.



DevOps Deployment and Automation

A docker deployment and integration with GIT for image building was implemented in DevOps deployment. To encrypt the Personally Identifiable Information, Customer Data Hub (CDH) used the product feature of enabling field level encryption. To encrypt the Personally Identifiable Information fields in migration data, a Custom API was built.



Regulatory Compliance

34+ reports covering security, networking, cloud infrastructure, and Integrated Management System were submitted to regulatory authorities to ensure compliance. As a result, OJC compliance, data security, and the ability to adapt to evolving regulations were successfully achieved.



Transforming Banking with **Google Cloud**

By adopting Finacle on Google Cloud, the Bank has gained the agility to scale seamlessly with growing business demands while maintaining robust security and full control over its data. With cloud-native capabilities, the bank can accelerate feature releases, deploy quick fixes, and drive faster innovation, enabling a superior time-to-market for new products and services.

The Finacle and Google Cloud Advantage

With Finacle on Google Cloud, the Bank benefits from:



Scalability: Auto-scaling capabilities dynamically adjust resources to match evolving workloads, ensuring high performance during peak demands.



Advanced Security: Industry-leading security measures safeguard data integrity, ensuring compliance and resilience in a rapidly evolving threat landscape.



Faster Innovation: The cloud-native infrastructure enables quicker deployments and continuous enhancements, empowering the bank to stay ahead of customer expectations.



Intelligent Insights: Access to Google Cloud's advanced AI and analytics solutions helps drive data-driven decision-making and personalized banking experiences.



Transformational **Outcomes:**

The bank's collaboration with Finacle has enhanced operations, customer experience, and innovation, aligning with its vision to become a regional leader, and to meet evolving market demands.

Engage Better:



Unified Customer View for Personalized Banking

With operations spanning multiple geographies and product lines, the Bank requires a comprehensive, 360-degree view of its customers. Finacle's Customer Data Hub (CDH) ensures a unified repository of customer insights, empowering the bank to anticipate needs, personalize offerings, and drive deeper engagement across retail and corporate banking segments.



Customer-Centric Product Design for Local Market Needs

Indonesia's diverse banking landscape demands products tailored to individual and business-specific needs. With Finacle's flexible product design capabilities, the Bank can craft customized loan products, personalized deposit structures, and adaptable servicing cycles that align with customers' financial goals, enhancing accessibility and satisfaction.



Embedded Analytics for Contextual Insights

Finacle's embedded analytics, powered by an advanced engagement architecture, enables the Bank to deliver hyper-personalized experiences. By analyzing customer behavior across digital and physical channels, the bank can proactively offer relevant services, optimize cross-sell strategies, and enhance customer lifetime value.

Operate Better:

Accelerating Efficiency with Automation

The Bank operates in a dynamic and highly competitive banking environment, where efficiency and agility are critical. Finacle enables the bank to streamline operations through rule-based automation, API-driven straight-through processing, and process orchestration. The Bank was able to reduce EOD execution time from 12 hours to 4 hours. It eliminated manual interventions, leading to enhanced transaction speed, reduced errors, and improvement in overall service delivery.

Scalability with Cloud

Finacle empowers the Bank to harness the potential of the cloud in fortifying their resilience. The cloud-native platform offers a wide range of features to elevate availability, observability, security, and scalability.

Innovate Better:

Accelerating Innovation with Personalized Banking

Finacle's configurable product factory enables the Bank to rapidly launch innovative financial products while offering personalized bundling. Customers can mix and match services like savings, credit, and investments, while the bank structures tailored offerings to enhance engagement and cross-sell opportunities. This agility ensures faster go-to-market strategies aligned with evolving customer needs.

Seamless Connectivity with Minimal Disruption

The Bank achieved effortless integration with 30+ third-party systems, ensuring continuity while reducing external configuration changes. By developing a new listener to support its queue-based integration mechanism, the bank maintained smooth interoperability with TIBCO ESB, enabling uninterrupted operations and enhanced system efficiency.

Way Forward

The core banking transformation of this leading Bank in Indonesia with Finacle on Google Cloud Platform marks a significant milestone in its digital evolution. By adopting a cloud-first approach, the Bank has enhanced operational efficiency, security, and scalability while ensuring seamless integration with existing systems. The migration enabled automation, data-driven insights, and personalized banking experiences, positioning the Bank for sustained growth in a competitive landscape. With this transformation, the Bank is now equipped to drive innovation, streamline operations, and deliver superior customer experiences, reinforcing its position as a trusted financial institution in Indonesia.



Why we exist

To inspire better banking so that billions of people and businesses can save, pay, borrow, and invest better.

How we do it

Our solutions and people help banks to engage, innovate, operate and transform better, so that they can improve their customers' financial lives, better.

What we offer

A comprehensive suite of industry-leading digital banking solutions and SaaS services that help banks engage, innovate, operate and transform better.

Finacle is an industry leader in digital banking solutions. We are a unit of EdgeVerve Systems, a wholly-owned product subsidiary of Infosys (NYSE: INFY). We partner with emerging and established financial institutions to help inspire better banking. Our cloud-native solution suite and SaaS services help banks engage, innovate, operate, and transform better to scale digital transformation with confidence. Finacle solutions address the core banking, lending, digital engagement, payments, cash management, wealth management, treasury, analytics, AI, and blockchain requirements of financial institutions. Today, banks in over 100 countries rely on Finacle to help more than a billion people and millions of businesses to save, pay, borrow, and invest better.

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