

STRENGTHENING THE CORE FOR REGIONAL EXPANSION

CASE STUDY

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The bank's EMOC core banking replacement programme laid the foundation for a common operating platform to support its regional operations and enhance product offerings

For Singapore-based DBS Bank to realise its goal of becoming the leading regional bank in Asia, it was imperative to build a robust and flexible technology platform to support its ever expanding operations in the region. DBS, the largest bank in Southeast Asia by total asset, operates from over 200 branches across 15 markets. The ability to operate on a standardised platform was critical for its regional expansion strategy, in particular the 13 emerging market countries that it has started operations in.

With the aim of enhancing its core banking product offerings, providing a standard operating platform and strengthening its core banking systems, it embarked on a core banking replacement programme, which it termed the Emerging Market Overseas Countries (EMOC) Core Banking Replacement Project. This was conceived to replace various legacy systems which the bank used in these different countries.

DBS Bank selected Finacle UBS from Infosys as the core banking platform for the programme through a third party professional vendor selection consultancy, who evaluated the most popular core banking solutions available in the industry.

"The Infosys solution was selected following evaluation as we found that it met our needs and objectives. Through the process of implementation, we were able to build a good rapport with the vendor's team, which helped in ensuring the success of the project," said Ng Peng Khim, managing director, Institutional Banking Group Technology.

The bank embarked on the implementation of Finacle in Singapore and its key markets across the region as part of the bank's strategy to entrench its leadership with enhanced core banking product offerings, and strengthen its technology platform. "Through the partnership with Infosys, the bank was able to see improvements in various aspects following successful implementation, leading to a better experience for our customers," he said.

The programme comprised the roll-out of a suite of applications in a standardised manner: Finacle 10.2, Trade, accounting ledger, capital reporting, interfaces with internet banking and other channels, Risk and Finacle Treasury in 13 countries over 28 months.

The countries and cities covered include: Hong Kong, United Kingdom-London, Taiwan, South Korea-Seoul, India, China, USA-Los Angeles, Vietnam-Ho Chi Minh City, Japan-Tokyo, Malaysia-Labuan, United Arab Emirates -Dubai, Indonesia and Singapore.

The roll-out included two new countries (Vietnam and Dubai). It also included liquidity management for Singapore and a Global Customer Information Database (GCIN).

The challenge

Under the best of conditions, core banking replacement is a challenging, high-investment and time-intensive project, what more when it is done simultaneously across 13 countries within a somewhat optimistic timeframe. In delivering this mission-critical project within such an aggressive timeline across 13 locations, DBS Bank demonstrated its exceptional ability to execute and willingness to push the envelope. It also signalled the strong collaboration across

different functions within DBS, a necessary ingredient for a successful and progressive corporation.

There were several challenges – DBS Bank's EMOC segments were supported by multiple legacy systems from different vendors, with some of these systems facing end-of-life or end-of-support issues.

The staff supporting or operating these systems had different skill sets that were not transferable. Furthermore, the business needs systems intended for regional rollouts required significant localisation due to system incompatibility, hampering speedy adoption. Decentralised hardware setups also meant that there were unnecessary redundancies.

The bank also needed to ensure the timeliness of group consolidation and regulatory reports. With all these factors in mind, the impetus to transform the fragmented technology landscape in EMOC into a unified, flexible and scalable platform that can spearhead and support DBS' growth Vision was clearer than ever.

The solution

A centralised platform was developed to ensure scalability, rapid deployment and to eliminate redundancies. This platform is built in "hooks" for future growth and made possible the deployment of the core banking suite of applications to two new branches. In addition, the application architecture was designed to insulate the core from secondary functions such as balance inquiry, reporting, amongst others.

A middleware layer was designed to handle queries on intra-day balances and transactions from channels such as internet banking, manage financial reconciliation with GL and product processors and provide regulatory and MIS reporting.

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Front-End **Processing** Analytics & Reports Global Integrated Credit Risk Customer Trade Finance Identification Mart Platform Financial Account Reconciliation Opening Finacle & Regulatory Loans Module Reporting Local Integrated Customer Financial MIS **Payment** Information Platform Engine System Business R R Finacle **Database** Limit & Warehousing R Collateral System For Global Credit Credit Module Factoring System Application System Credit (Exposure Approval Platform Aggregator & Transaction Regulatory Data Store Reporting) R Pricing Calculator General R Ledger System Credit Scoring Analytics Model Platform Upgrade or New Modules R - Regional **X**DBS Systems with Enhancement Made

Figure 1. DBS Bank's lending systems architecture

Source: DBS

The process

To complete the rollout, DBS Bank engineered a unique and innovative implementation methodology. It involved running specific phases in parallel, wherein the design of the succeeding phase begins while the user acceptance testing is being conducted in the current phase. This allows for the optimum utilisation of teams and resources while ensuring standardisation of the process, product, configuration, and chart of accounts.

The implementation was led by a centralised team which focused on standardisation without compromising on local requirements. This allowed for more effective programme management in terms of prompt decision making, enhanced risk management and proper prioritisation of issues

The bank's core team regularly interacted with local bank users to manage expectations and requirements and there was constant update to internal and external stakeholders

The project team was organised by tracks to build bench strength. Teams were aligned to different tracks and adapted to deep dive in to business process and application to build domain and system knowledge.

Iterative consultations with country teams were conducted to ensure local requirements were not compromised during standardisation. The domain-country matrix approach built the

project team toward rapid replication. Experience gleaned from earlier deployments further strengthened subsequent rollouts.

Requirement tracks were run concurrently within and across phases with the SMEs unifying respective tracks. The team also needed to decide on a set of requirements that would allow for a single source code while meeting unique business needs across the region, which is a complex challenge for most. The strategy was therefore for Infosys – where possible – to provide parameterisation to allow functionalities to be turned off or on, according to the needs of the countries. A strong change and release management process was put in place to oversee any changes to the single source code.

The benefits

The EMOC core banking initiative provided standardisation, flexibility, agility, scalability and transferability to DBS Bank. Standardised chart of accounts and product codes facilitated group level consolidation, MIS and regulatory reporting. Highly parameterised configuration allowed DBS Bank to roll out new products and services quickly. In fact, during the implementation, two new countries which were not in the original plan were quickly and successfully added into the plan.

The platform also enabled new functionalities and capabilities not available in legacy systems which helped increase the bank's deposits and improved the efficiency of it cash management business. Regional processing centres across the region leveraged on this new platform to deliver new or facilitate existing functions such as centralised cheque processing, finance, credit and trade finance processing.

Referring to the speedy roll-out of the programme and the results achieved, Ng said, "This would not have been a success without the excellent teamwork and collaboration with my colleagues across many parts of our bank."

The future

The programme delivered a consistent customer experience across all the DBS Bank locations in EMOC segments. This is consistent with DBS Bank's vision to become the leading bank in Asia. The new functionalities also allow the bank to deliver new services needed by its corporate clients (e.g. liquidity management) in other geographies for now and into the foreseeable future.