



Case Study: Banking

Private cloud helps bank cut its data center footprint

The bank was aware of the benefits of cloud computing. Given the volume of its sensitive data, the client needed a structured, seamless and secure migration.

Banks need to be cautious when dealing with their customers' financial information. So, when one of the world's largest banks wanted to create a private cloud across its six data centers and some of its lab environments, it sought an experienced vendor to manage the migration. Several technical challenges, including migrating applications that used a database management system in the backend, had to be resolved. Performance issues with apps that process large messages as well as issues with monitoring the migration's process also needed to be addressed.

The bank had already tried to carry out the migration internally, but it faced problems with manual workflows, lack of a structured approach and ad hoc communications. In addition, its line-of-business teams were reluctant to participate in the transformation program.

At a glance

One of the world's largest banks wanted to cut costs by creating a private cloud. We helped it securely migrate more than 800 applications. As a result, the bank has lowered its total cost of infrastructure ownership and now enjoys a more flexible IT setup, improving time to market.

Outcomes

- Migrated more than 800 applications to a private cloud.
- Improved productivity by 25% with a migration tracker system that enhanced task visibility.
- Reduced infrastructure footprint by 25%, lowering the total cost of ownership.

Despite this, Cognizant was happy to take on the engagement, which included:

- Consolidating the bank's scattered technology footprint to reduce management and operational overheads.
- Reducing its reliance on legacy applications with security vulnerabilities.
- Categorizing up to 4,000 applications and migrating more than 800 of them to a private cloud based on OpenStack software, a Cloud Foundry application platform and a Windows Azure Pack platform-as-a-service suite.

The bank's portfolio included more than 1,400 .NET Framework applications across development, user acceptance testing and production. More than 800 of these applications required specific intervention. As part of a multi-vendor team providing migration and application readiness services, Cognizant performed a full analysis of the application source code before developing a migration strategy and designing a cloud deployment architecture.

We deployed more than 20 experts to ensure the successful and timely completion of engagement deliverables, adopting an agile scrum methodology with structured communication between on-site and offshore teams to provide visibility into ongoing work. For the five-plus applications using a Sybase database management system, we were able to avoid installing driver-hosting machines that identify and load the required components during runtime. We split larger modules into multiple components to overcome performance issues with message processing.

Migration tracker

Our team developed a custom application to help the bank's project management office monitor the migration. We provided the migration tracker free of charge so that the client's project managers, senior leadership and other stakeholders could use it extensively, improving their productivity.

- Reduced migration costs by 20% with specialist consulting.
- Reduced cloud ramp-up times by 35%.

To help the organization align with its transformation objectives, we created and delivered a tailored cloud competency workshop program across its locations. We also carried out application baselining and remediation activities before deploying applications in the Windows Azure Pack environment. This was preceded by build verification and performance tests to validate application performance.

Our team used a cloud management platform to abstract dependencies and address application onboarding prerequisites. The team captured engagement-specific lessons learned in an operational run book and a guidance document for future reference.

Using automation

Throughout the project, we used various approaches to quickly migrate legacy applications under predefined standards. We also applied a security governance framework using automation scripts, automated infrastructure provisioning and adopted a migration factory methodology. The migration factory model helped the team carry out application assessments and migrations in parallel, enabling the migration of more than 800 applications over three years.

Our efforts led to the bank hosting its applications on a scalable, standardized, secure and highly available cloud architecture. It can now ramp up applications faster, enabling delivery of products to the market in less time. Additionally, the bank has minimized its application and infrastructure footprints, leading to operational cost savings. Although this was a multi-vendor project, the bank credited Cognizant for the exceptional work we delivered and the team spirit we demonstrated.

About Cognizant Banking and Financial Services

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