



Mindtree

*Welcome to possible*

# Fine-Tuning Application Performance for a Leading Credit Card Company

## Client

A leading credit card company

## Industry

Banking and Finance

## Offering

Application development and maintenance

## Overview

Our client, one of the world's leading credit card company, decided to stabilize their anti-money laundering module and make it more robust to cater to the growing market. Specifically, they wanted to reduce time taken to process a huge number of transactions. Mindtree was required to arrive at a solution for tweaking performance by ensuring better collaboration among the various vendors, thereby speeding up implementations. In addition, the solution had to widen the scope of testing application performance.

The application was studied in detail and suggestions to improve its robustness were provided. Totally, 35 technical and 3 application design suggestions were made.

### Business challenge

Broadly, the client faced challenges associated with rapid market expansion, implementation delays including communication bottlenecks among stakeholders and the lack of synchronization between test environment and production.

#### Module-related issues

- A critical Anti-money laundering module was very unstable and unable to handle huge transactions.
- Critical batch jobs were consuming CPU time of 7-8 hours, sometimes even more.
- COBOL stored procedures were not well-designed, leading to frequent suspension of Java screens.

#### Implementation problems

- The test region had to be shared with multiple vendors
- Consensus of all stakeholders had to be sought for even a simple database update in the test region to prevent other teams from losing data.

#### New project problems

- On the implementation of a new project, technical documents were not being updated immediately.
- New business specs were also not being shared with all stakeholders

#### Synchronization difficulties

- Simulation and measurement of application performance was carried out only in the test region as access to production was very limited. As a result, test environments were not in sync with production and performance ideas could not be applied uniformly across all regions.

### Our solution

The Performance Task Force (PTF) team at Mindtree helped in identifying and implementing a robust and efficient solution for fine-tuning application performance. The process was completed in two phases: Solution formulation, Design and Implementation.

#### Solution formulation

- Mindtree first actively engaged with the customer to assess the application
- The application was studied in detail and suggestions to improve its robustness were provided. Totally, 35 technical and 3 application design suggestions were made.
- Weekly meetings with client managers were initiated for addressing the application gaps and discussing suggestions.
- All the suggestions were well accepted and appreciated by the client

#### Design and Implementation

Mindtree was assigned the responsibility of implementing these suggestions as well.

- Estimates and design for all technical suggestions were provided
  - A total of 20 technical suggestions were implemented until May 2014
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CPU usage of batch jobs has been reduced by between 30% and 33%. One of the changes in the DB2 Index reduced CPU usage by 80%.

### Business impact

Mindtree's proficient solution for fine-tuning the application resulted in substantially lower costs and enhanced performance. Specific ways in which the enhancements have benefited the customer:

#### Reduced CPU usage

- CPU usage of batch jobs has been reduced by between 30% and 33%. One of the changes in the DB2 Index reduced CPU usage by 80%.

#### Reduced costs

- One of the SQL query changes in DB2 Stored procedure resulted in annual savings of \$35,000 and reduction in runtime from 20 hours to 30 minutes.

#### Equipped to handle quantity

- The application can now process a huge number of transactions while batch run time has reduced drastically.
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## About Mindtree

Mindtree [NSE: MINDTREE] delivers technology services and accelerates growth for Global 1000 companies by solving complex business challenges with breakthrough technical innovations. Mindtree specializes in e-commerce, mobility, cloud enablement, digital transformation, business intelligence, data analytics, testing, infrastructure, EAI and ERP solutions. We are among the fastest growing technology firms globally with more than 200 clients and offices in 14 countries.