



Assured quality for a critical mobile application developed by a North American bank

The proliferation of smart phones and tablets means that industries such as banking are increasingly challenged by their customers to deliver "any-time" access to services via mobile devices. Failure to do so can result in dissatisfaction or even customer retention issues.

Here is how Mindtree helped a niche North American bank offer its customers a robust mobile banking application, thereby preserving customer satisfaction and staying competitive with larger banks that already provided similar applications.

The challenge

The bank had a niche base of tech-savvy and highly mobile customers, who were often travelling but needed to remain connected to their banking services. Its online system, built over a decade ago was used regularly by more than 10,000 customers from various parts of the world but was unable to support a new generation of mobile phones and tablets, thereby impairing a seamless user experience.

The customer wished to transition its existing online system to a completely new platform of mobility services; and had little room for error as its management had committed to launching a mobile app to trade analysts.

Lacking experience in the mobile space and faced with a short span of six months in which to release a mobile application, the bank found multiple application development vendors but lacked the expertise to perform comprehensive testing.

Mindtree was chosen to conduct end-to-end testing, collaborating with the bank and multiple vendors to ensure a world-class application that could be deployed on multiple Android and iOS devices.

Testing challenges included:

- How to ensure test coverage and identify the most critical hardware and platform combinations

Business impact

- Enabled customer to launch the app in six months
- Executed robust testing on a lean budget amounting to 5% of the total project cost
- Early-stage fault identification improved quality and ensured faster time to market
- Ensured 100% defect detection
- Created reusable test cases to support the customer's future road map

- How to select the right tools for the success of the testing program
- How to rapidly understand the network landscape and device landscape before testing
- How to conduct testing rapidly while ensuring quality

Our solution

Mindtree worked with multiple stakeholders to develop an approach to the implementation, in line with the build release plan. We took end-to-end ownership and accountability of testing and used a hybrid approach that combined manual testing using devices alongside emulators. In all, we logged more than 775 defects within a short period of time, which was a significant achievement for a project of such complexity.

We divided the project into three phases, with phase one devoted to iOS5, phase two to iOS6 and phase three targeting all versions of the Android operating system. Activities carried out by Mindtree included:

- Evaluating technical and functional requirements
- Creating acceptance criteria based on input from the business and developers
- Identifying HP QC as the project management and defect reporting tool
- Developing and standardizing defect reporting and retesting
- Maintaining project documents in a project repository
- Identifying the lead Android and iOS devices based on a weighted device-platform matrix

Mobile test lab

Mindtree also set up a dedicated state-of-the-art mobile test lab consisting of a wide range of Apple and Android devices, iMacs, PCs, emulators and IP Phones and a VPN tunnel that we built from the ground up.

Customer testimonial

'You have all done an amazing job on our first-ever mobile client. I can't express to you enough on how proud the entire management team and steering committee is with what you all have accomplished'.

About Mindtree

Mindtree is a global information technology solutions company with revenues of over USD 400 million. Our team of 11,000 experts engineer meaningful technology solutions to help businesses and societies flourish. We enable our customers achieve competitive advantage through flexible and global delivery models, agile methodologies and expert frameworks.