Mobile App Automation and Performance Testing for a Leading Global Bank

About The Client

The client is a leading US based private bank with a global presence and provides personalized wealth management services to ultra-high-net-worth clients, including many entrepreneurs and senior corporate executives.

The Need

The project scope covered two private-banking mobile apps; one for bankers and another for clients. The apps were compatible with the latest iOS devices such as iPhone and iPad.

Both the apps had monthly releases for enhancements in functionalities. A regression suite of 210 test cases had to be manually tested at each monthly release for 3 different regions (US, APAC and EMEA) and 2 test environments (IST and UAT). The client wanted to reduce the regression testing time and utilize it for other release activities.

The Solution

The client engaged Hexaware to conceptualize and provide a testing strategy to address its business challenges.

Hexaware started the engagement by evaluating different mobile test-automation tools and frameworks to expedite the release testing. It then recommended the egg Plant Mobile testing solution for automation and performance testing.

The key features of the solution are as follows:

- Created an efficient and easy-to-maintain hybrid framework (eggPlant and LoadRunner) to support test automation and performance testing
- Made test scripts reusable, that is, they could be run on different test environments consisting of common business scenarios and in different regions
- Conducted automated testing to validate the data-driven functional behavior of the apps
- Created a reusable regression suite of test scenarios, which can be used across various test cycles, for future upgrades and maintenance releases
- Conducted mobile device-level performance testing by leveraging the automation framework to see the mobile transactions' response times (including the page rendering time), which helped to pinpoint client-side performance issues
- Proposed using the tool for localization testing, as the apps supported multiple languages
- Delivered 2 apps that were compatible with the iOS platform,2 test environments, and 210 test cases, which included 3 regional cases (US, APAC and EMEA) and 2 test environments (IST and UAT)

Value Delivered

- Saved more than 60% of the test execution effort by automating functional and device-level performance testing using the same script and runtime for both types of testing
- Reduced script development effort by 20% due to the framework's in-built script portability capability
- Enhanced test coverage and reduced the apps' regression testing time by 50% per cycle, across regions and test environments
- The tool can automate not only mobile app testing but can also automate desktop web application testing using image recognition
- The testing tool and the framework were also used for foreign language and localization testing of the mobile app, as required

The eggPlant Setup
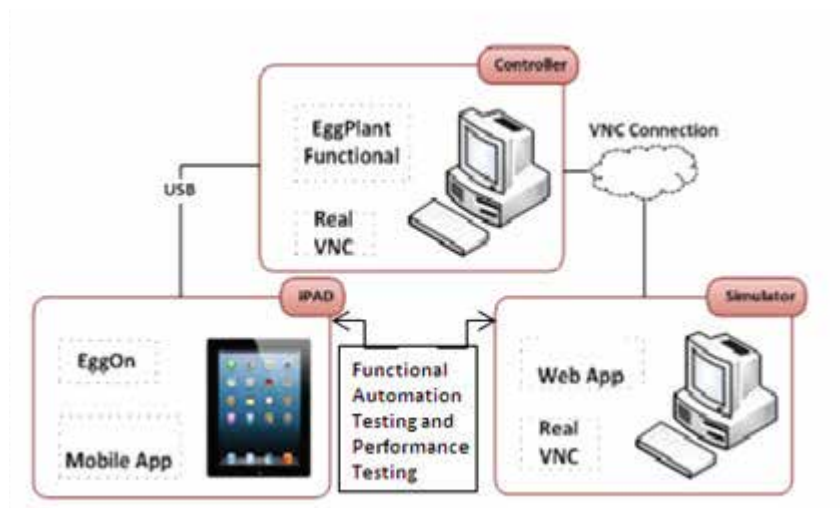
The Automation Framework
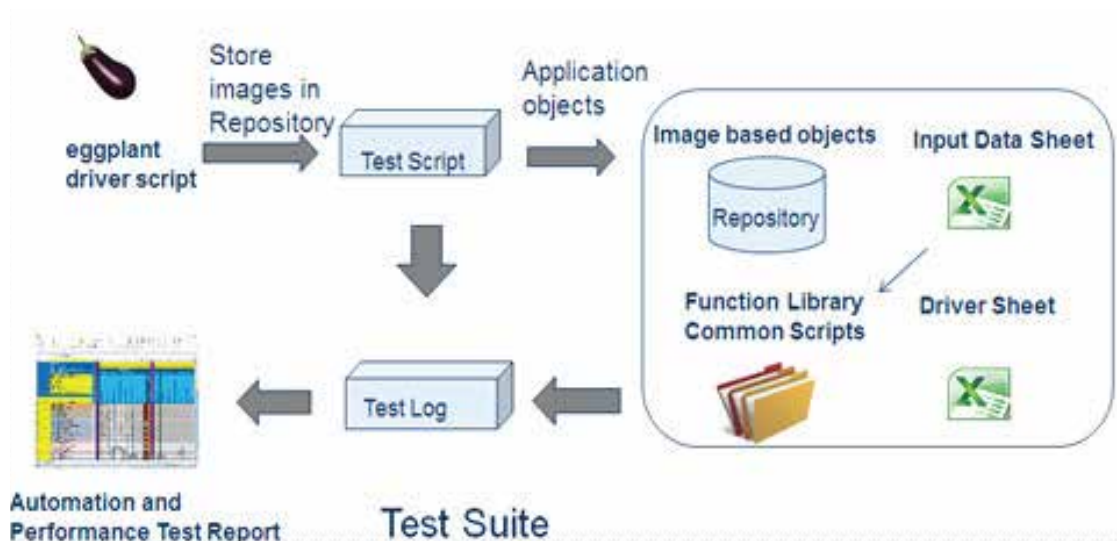
About Hexaware

Hexaware is the fastest growing next-generation provider of IT, BPO and consulting services. Our focus lies on taking a leadership position in helping our clients attain customer intimacy as their competitive advantage. Our digital offerings have helped our clients achieve operational excellence and customer delight by 'Powering Man Machine Collaboration.' We are now on a journey of metamorphosing the experiences of our customer's customers by leveraging our industry-leading delivery and execution model, built around the strategy— 'Automate Everything, Cloudify Everything, Transform Customer Experiences.' We serve customers in Banking, Financial Services, Capital Markets, Healthcare, Insurance, Manufacturing, Retail, Education, Telecom, Professional Services (Tax, Audit, Accounting and Legal), Travel, Transportation and Logistics. We deliver highly evolved services in Rapid Application prototyping, development and deployment; Build, Migrate and Run cloud solutions; Automation-based Application support; Enterprise Solutions for digitizing the back-office; Customer Experience Transformation; Business Intelligence & Analytics; Digital Assurance (Testing); Infrastructure Management Services; and Business Process Services. Hexaware services customers in over two dozen languages, from every major time zone and every major regulatory zone. Our goal is to be the first IT services company in the world to have a 50% digital workforce.

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