

# Automation of Framework for a Mobile Application

## Objective

Existing system in use: Store Mobility Application Suite  
The Suite had three components: Inventory Management System (IMS), Inventory Logistics System (ILS) and Mobile Point of Sale (MPOS).

As per the business requirement, Pyramid's objective was to automate the testing of the mobile application framework. Some of the major challenges coming in the way were: Multiple devices (iPhone, iPad, Blackberry, Android) and different mobile browsers, operating systems, hardware configurations, networking platforms and above all the non-availability of a standard automation tool. Other than this, Pyramid's objective was to overcome all implementation challenges posed by OCR recognition, synchronization issues and the test environment.

## Challenges

- ▶ Development of automation scripts for the Store Mobility application suite comprising of Inventory Management System (IMS), Inventory Logistics System (ILS) and Mobile Point of Sale (MPOS)
- ▶ R&D for addressing automation of test data setup and overcoming backlog for enhancement requests
- ▶ Debugging and validation of test automation scripts

## Approach

Pyramid Mobile Automation team created an OCR based Automation Framework to be used for the automation of regression tests carried out on Mobile Applications. Apart from this, the same OCR was used on a specific area rather than the entire screen.

Scripts were not only run but were executed so appropriate changes could be made and queries could be rectified successfully.

## Business Benefits

- ▶ Reduction in test cycle time by 65 percent - leading to a never before increase in the client's application speed to market
- ▶ Reduction in efforts put in by individual testers by as much as 40 percent
- ▶ 600 automated scripts executed on a nightly basis in less than 8 hours compared to a time frame of more than 2 weeks taken up by manual testing
- ▶ Investment in mobile automated testing resulting in a breakeven ROI in 11 months
- ▶ Cost savings of up to 50 to 70 percent for a single mobile application

## About Pyramid

Pyramid Consulting Inc. is a global technology and process driven software solutions company offering customer centric solutions. With knowledge and experience of the entire IT lifecycle, we help enterprises streamline core IT processes and augment their competitive advantage. Pyramid's global delivery model harnesses productive tools, agile methodologies, iterative processes and expert frameworks to provide innovative and cost-effective solutions.

Our domain and industry experts engineer robust technology solutions for clients in a wide range of industries including retail, logistics, healthcare, insurance, software development, financial services, media, publishing and telecommunications.

### Global Headquarter

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North Carolina  
Virginia  
Texas

#### Canada

Ontario  
**Europe**  
United Kingdom

#### India

Noida  
Hyderabad

#### Asia Pac

Singapore

## Industry Segment

Retail

## Customer Profile

A leading American retailer of home improvement, construction products and services specializing in selling its products to home owners and professional home services companies

## Technology and Tools

- ▶ Desktops installed with QTP v10.0, SOTI Pocket Controller Pro and ActiveSync, QC add-ins and Informix ODBC driver
- ▶ Motorola Mobile Devices inclusive of MC75A Devices (IMS and MPOS), MC9090 Devices
- ▶ Connectivity to desktop via USB and other multiple versions of Windows Mobile
- ▶ Quality Center v10.0 – Repository for all manual tests and automated scripts

## Solution Highlights

- ▶ Development of automation scripts
- ▶ Automating test data setup and creation
- ▶ Backlog of the enhancement request
- ▶ Debug and Validation of test automation scripts
- ▶ Quality Assurance and Peer review of test automation scripts

## Related Solutions

- ▶ Unified Functional Testing (with Test Automation)
- ▶ Nonfunctional Testing (Performance, Security)
- ▶ Specialized Testing (Devices) Testing-as-a-Service
- ▶ Support, Maintenance, Re-engineering and Performance tuning