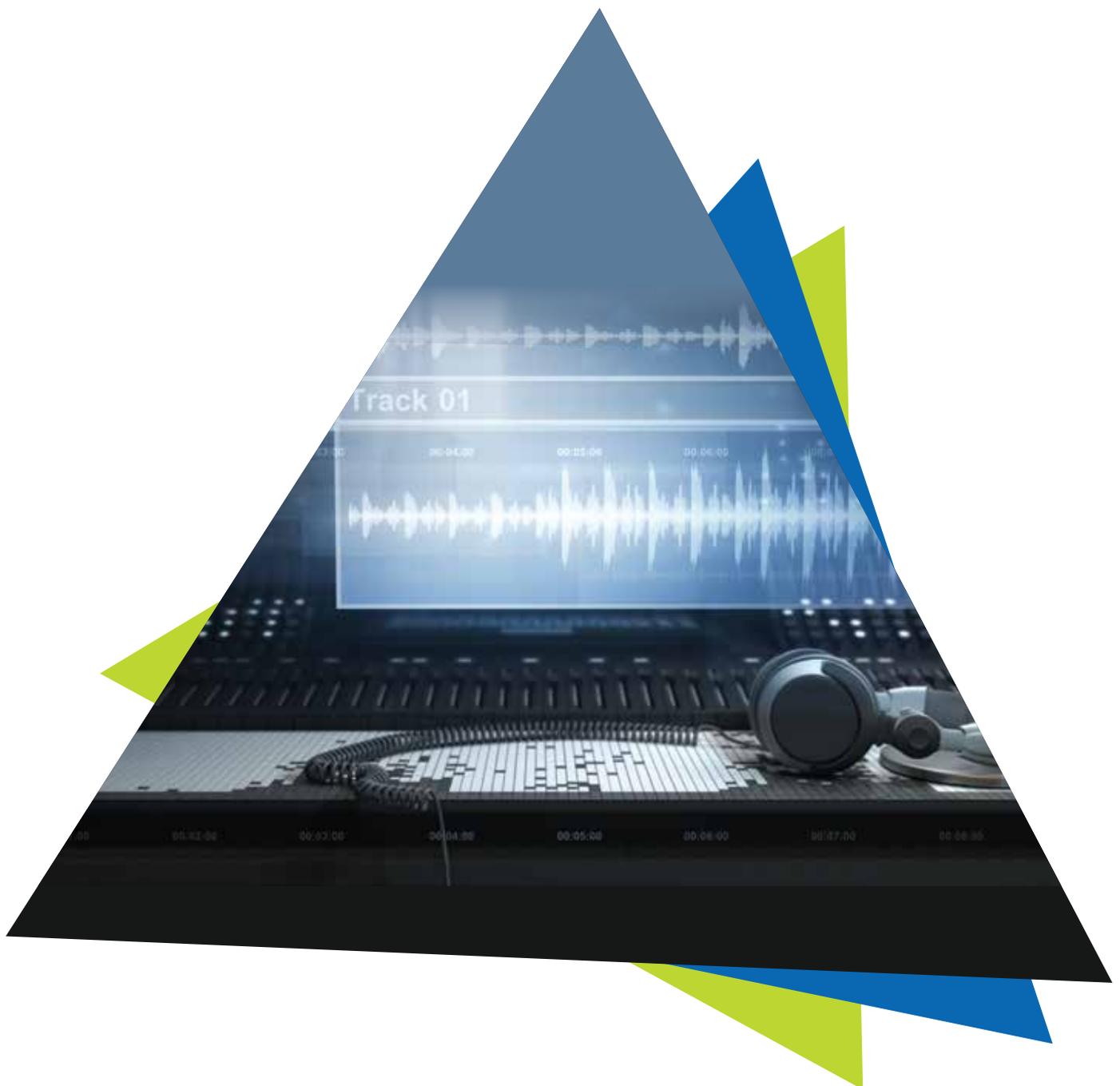# Managed Complex Device-agnostic Test Operations for Test Automation across Platforms

About the Client

A leading satellite radio and online radio broadcaster headquartered in New York with coverage over entire North America

Business Challenges/Objectives

06 — Testing all the three application layers, with emphasis on business intelligence and API testing

01 — To implement test automation solution for the customer's three key services being upgraded

05 — Reduce the total cost of ownership of QA activities

02 — To ensure customer's services are available in a seamless way, on various channels such as web and mobile devices across multiple platforms

04 — Adhering to the better-quality product and aggressive timelines while testing multiple versions

03 — Automation should be reused for Android/iOS/Web/Windows Surface applications

HCL's Approach and Solution

HCL adopted the flexible onsite-offshore working model and was involved across all areas and components. It took on end to end responsibility of testing on multiple platforms and back end API services. Our team was working as part of the core team, participating in specification review, test planning, and manual testing on different devices and infrastructure support. The testing scope was identified as functional, performance, smoke, regression, automation, and compatibility testing.

HCL deployed an in-house framework for QA automation and customized it for the customer to accelerate script development. This framework supported iOS, Android, and Windows mobile platforms.
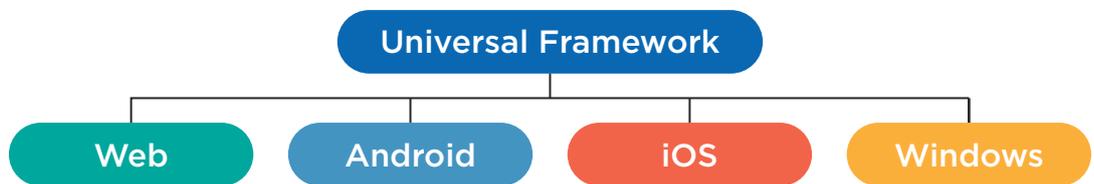
HCL team provided customer QA automation solution which automates the applications on various platforms. The framework could integrate with any new tool with minimal effort and was able to provide functional, regression, performance, and longevity testing.

It performed continuous parallel execution on regression/smoke sprints in local and cloud using test droid. It had an excellent reporting mechanism and facility to capture screenshots for failed test cases.
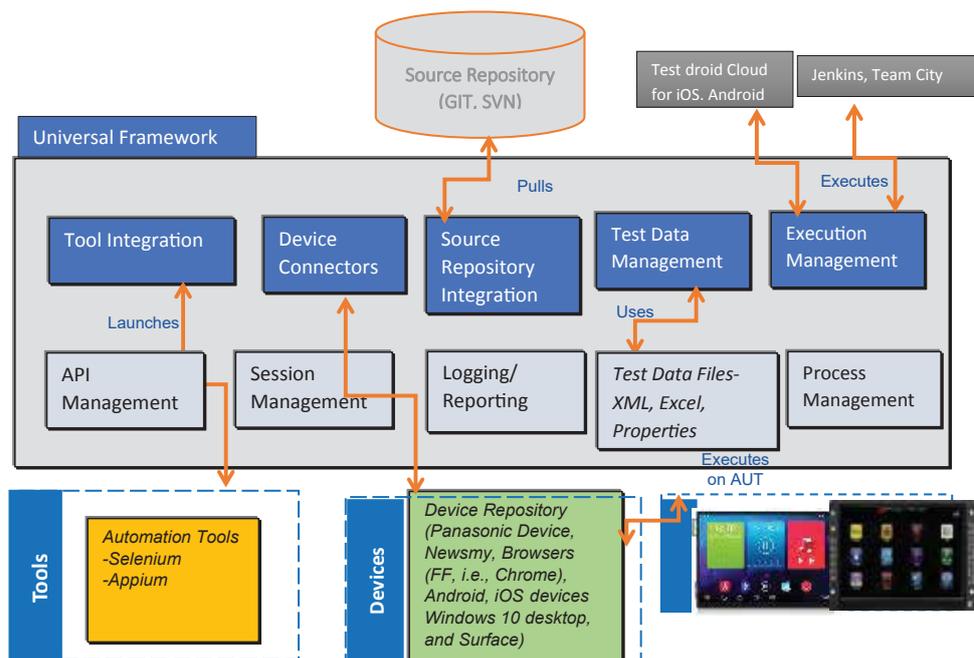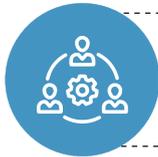
Benefits Delivered

Achieved test coverage of **100%** and automation coverage of **76%**

Tested **100%** of all web, Android, iOS, business intelligence testing for all critical business transaction

Increased people productivity by saving **40%** test design effort

Increased mobile applications rating from 2.8 to **4.7**

More than **1400** hours savings through test automation, shortened time to market, and achieved cost reduction through test automation and offshore leverage

Improved quality by identifying 450+ defects while executing **3000+** functional test cases

HCL