

This globally recognized hotel and resort company wanted to provide its loyalty program members with the best experience possible by enhancing its digital services.

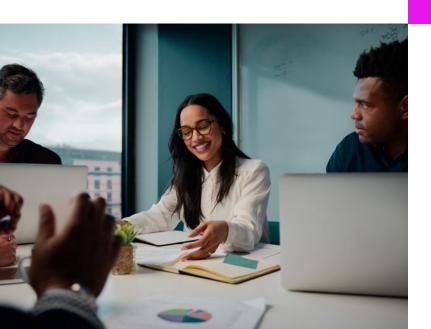
As the adoption of smart devices exploded in the early 2010s, demand for travel information and services on these devices skyrocketed. Company executives moved quickly to invest in mobile development to meet the need. The primary focus was on building stickier guest relationships with members of the chain's highly successful frequent traveler program. However, those efforts were derailed by highly manual and slow software QA and testing processes which made it difficult to get these new services to market quickly enough.











In 2011, the company turned to Apexon to streamline its quality engineering (QE) processes and accelerate its ability to launch new digital services. It also helped lay the foundation for the expansion of its mobile services to international markets in different languages.

# THE CUSTOMER JOURNEY

2011

2014

2015

2017

2019

2022

- Digital quality engineering engagement kickstarted
- Mobile automation engagement kickstarted
- QA strategy, methodology and processes
- App testing SPG iPhone app
- Device testing -Android and iPad
- Mobile web application testing

- Automation execution
- iOS and Android mobile automation
- Executed overall around 67k cases across all releases for both releases as well as test flight
- Mobile Keys phase

   successfully
   automated 14 mobile
   key without lock
   feature cases
- iOS and Android mobile automation
- Executed overall around 67k cases across all releases for both releases as well as test flight
- Enterprise automation CoE and governance (Aries, GraphQL, AEM) - supported content testing services build by supporting all the languages through automation
- App dome testing
   successfully
   supported the
   build for EN-US
   language through
   automation
- Dashboarding

   to provide
   testing insights
   while evaluating
   the technology
   stacks

**THE RESULTS** 

## **KEY OUTCOMES**



# DRAMATIC INCREASE IN MOBILE USE

From insignificant in 2011 to almost 50% of all online traffic



# UNIFIED AUTOMATION FRAMEWORK

Supporting multiple digital channels and enterprise applications with different device configurations (web, Aries, AEM, GraphQL, Microservices, API, mobile)



# INTERNATIONAL LANGUAGE SUPPORT

For up to 17 languages and 11 regional brands



# IMPROVED COVERAGE

Increased coverage of automated test cases: 90% of P1 test cases of what can be automated: ~80% of overall test cases of what can be automated



#### FASTER TIME-TO-MARKET

For critical new mobile apps and services



# DASHBOARDS & REPORTS

Improved visibility with dashboards capturing key quality KPIs/metrics

**OUR METHODOLOGY** 

# THE DIGITAL LIFECYCLE

Apexon works with companies across the digital lifecycle.



#### **GO DIGITAL**

LAUNCH & EXPERIMENT



#### **BE DIGITAL**

**AUTOMATE & ACCELERATE** 



### **EVOLVE DIGITAL**

BE INTELLIGENT & AUTONOMOUS

Enable digital adoption in a quick, and agile manner





Build digital infrastructure and foundation for enterprises to scale

Apexon's integration testing on 4-5 device platforms in 17 languages helps to give the client's international users an exceptional mobile experience.



Leverage data engineering to make strategic decisions and get digital right every time

Apexon deployed automated user experience testing to ensure mobile instances are always running at peak levels.

Apexon developed a federated dashboard to provide detailed reports for trends and root cause analysis, automated screen captures, CI integration with Jenkins.

THE CHALLENGE

# TO EXPAND MOBILE OFFERINGS

As the hotel chain looked to expand its mobile offerings it ran into several challenges including:



#### **QE Processes**

Slow, manual QE processes made it impossible to respond to market demand quickly enough to meet demand



#### **WCAGS**

All digital services had to meet ADA web content accessibility guidelines (WCAGs) across its web and mobile channels



#### **Advanced Digital Services**

The company wanted to offer advanced digital services that required complex technical skills for connectivity and personalization



#### **Global Customer Base**

It's global customer base required localized content in 17 different language, putting more pressure on delivery cycles THE SOLUTION

## **QUALITY ENGINEERING**

Apexon deployed a Quality Engineering (QE) initiative and developed an app that accelerated the company's ability to launch new digital services.

This dramatically streamlined mobile testing and QA processes.

Among the features included in this implementation:

WITH APEXON HANDLING THE STREAMLINED MOBILE **TESTING AND QA PROCESSES,** THE CLIENT WAS ABLE TO **FOCUS ON DEVELOPING NEW DIGITAL SERVICES FOR THEIR** INTERNATIONAL AUDIENCE **OF TRAVELERS** 



Test automation based on Selenium and Cucumber leveraging Apexon's own test automation platform



Addition of a Quality Automation Framework which further accelerated new digital service deployment and reduced costs

- Unified Scripting Across Digital Platforms The right tool for web, mobile (including native, hybrid, and mobile web), and web service test automation solutions
- Federated Dashboards & Detailed Reports Trends and root cause analysis, automated screen captures, CI integration with Jenkins
- Data Driven Run a single test case against multiple test data sets provided through CSV, XML, JSON, Microsoft Excel or your own database
- Increased Collaboration with Manual Testers, Developers and Business/Project Owners - Behavior-driven and keyword-driven
- Cloud Based Supports cloud-based execution of test scripts, CI/CD pipelines
- Streamlined/Structured Approach Abstracting the technical implementation away from the operational components
- Selenium Driven Automated Testing Web, Mobile, GraphQL, AEM test automation, support to multi-lingual applications
- Reusable Test Assets Highly maintainable and repeatable tests that utilize reusable test assets, proper modularity, and semantic structure



Multiple agile development and test initiatives for native, mobile web and desktop to ensure a premium user experience. This included:

- 20 combinations of desktop browsers
- 6 different combinations of mobile web
- Device compatibility testing with a range of iOS and Android devices



Agile testing comprised of 2 week "sprints", followed by regression and end-to-end testing



2 months of integration testing on 4-5 device platforms in 17 languages



Early triage of potential issues and analysis of content



Apexon is a pure-play digital engineering services firm focused on helping companies accelerate their digital initiatives from strategy and planning through execution. We leverage deep technical expertise, Agile methodologies and data-driven intelligence to modernize systems of engagement and simplify human/tech interaction.

We deliver custom solutions that meet customers' technology needs wherever they are in their digital lifecycle. Backed by Goldman Sachs and Everstone Capital, Apexon works with both large enterprises and emerging innovators — putting digital to work to enable new products and business models, engage with customers in new ways, and create sustainable competitive differentiation.



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**FEELING SOCIAL?** 









