Smart Home Testing Made Easy with Robotic Automation

Cognizant helps a leading telecom company automate at the physical-digital boundary with TEBOT.

The Business Challenge

The customer, a leading US based telecom conglomerate, was developing a smart home automation and security solution.

Cognizant was brought in for End-to-End Assurance of the home automation system. The challenges were:

- Testing of multiple smart / IoT devices
- Lack of Interoperability
- Numerous scenarios to be tested
- Low automation coverage

Our Solution

Cognizant TEBOT was leveraged to achieve End-to-End Automation of all the components within the smart home ecosystem.

TEBOT eliminates human intervention in testing by automating at the physical-digital boundary.

A “Zero Touch” integrated automation solution was leveraged to ensure faster time to market.

An Offshore Lab was also set up to test the home automation system remotely though mobile devices.

Since Cognizant TEBOT is a device independent solution, Cognizant reused the automation scripts against multiple OS and devices.

Parallel execution increased productivity and reduced cycle time. This resulted in zero defect leak in production and better customer experience.

TEBOT in Action

A dedicated Automation Lab was setup with multiple TEBOT units to simulate various test situations for home automation.

Cognizant TEBOT automated testing for devices such as sound sensor, glass break sensor, motion detecting camera, LDR based detection, door sensor, motion sensor and flood sensor.
Benefits

- **25% Reduction in Regression Cycle Time**
- **40% Reduction in Total Cost of Ownership**
- **90% Reduction in Manual Regression Testing Effort**

"This is amazing, what you have achieved in automation Home Security is commendable; the offshore lab & TEBOT solution makes us achieve faster time to market." - VP, IOT and Home Security LoB, Client Organization

"Very impressed with the home security testing lab - esp the thought leadership of using Raspberry Pi kit to connect and control the devices while testing is excellent. This is the future thinking at its best." - VP, IOT Platform, Client Organization

About Cognizant

Cognizant (NASDAQ-100: CTSH) is one of the world's leading professional services companies, transforming clients' business, operating and technology models for the digital era. Our unique industry-based, consultative approach helps clients envision, build and run more innovative and efficient businesses. Headquartered in the U.S., Cognizant is ranked 230 on the Fortune 500 and is consistently listed among the most admired companies in the world. Learn how Cognizant helps clients lead with digital at www.cognizant.com or follow us @Cognizant.