CASE STUDY

75%

Leading Global Embedded Technology Solutions Provider Reduces Overall Testing Efforts by 75% with iHarmony™ Embed Test Automation Platform

Client

Our client is a one stop solution for manufacturing, developing and maintaining of embedded computing products. It is also well known for digital transformation through digitizing paper documents and one touch scanning products.

Client Need

The client was looking for a test automation solution for an ID scanner with cameras and RFID. The client has manufactured 30000 devices across the geographical locations (India, US, Japan) and required their QE team to validate 5% of them on a random approach across batches remotely from its manufacturing facility at Indonesia.

It needed an end-to-end testing solution for hardware, platform and software to measure performance SLAs for key features like face matching comparison for live face image, image on ID card and image from IC Chip. It needed a solution that could access document camera and PCSC (for reading IC chip) parallelly using user application.

How We Helped

Innominds leveraged its home-grown Test Automation platform iHarmony™ Embed for Hardware Sensors, Connected Devices and Application Software testing of the ID scanner.

The client could test, validate, and verify devices efficiently using iHarmony™ Embed which

Supports parallel execution across multiple devices located in diverse locations

Sends test reports via email along with the error log and PyChart Metrics

Stores all the logs in a centralized server for future analysis

Innominds has backed iHarmony™ Embed with Appium, UI Automator, Windows SDK test tool, CTS, and Azure technologies to deliver high-quality products that are market ready.

Key Engagement Highlights

Test automation development of 200+ Python test scripts covering Boot Image, Camera, LED, Sensors etc.,
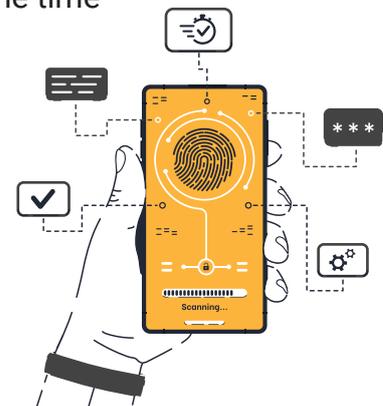
Tuned the face matching algorithm to ensure that product meets the operational performance as per the industry standard

Developed stress scripts for Performance, MTBF and stability for cameras

Tested Windows application development for parallel processing to utilize camera and RFID at the same time

Results

Reduced the overall testing efforts by 75%

Early detection of defects at factory level

About Innominds

Innominds is an AI-first, platform-led digital transformation and full cycle product engineering services company headquartered in San Jose, CA. Innominds powers the Digital Next initiatives of global enterprises, software product companies, OEMs and ODMs with integrated expertise in devices and embedded engineering, software apps and product engineering, analytics and data engineering, quality engineering, and cloud and devops, security. It works with ISVs to build next-generation products, SaaSify, transform total experience, and add cognitive analytics to applications.