



# HCL's Verification and Validation Offering -

Unleashing the Next-Gen Testing Approach for the New Normal

Accelerate your transformation journey with comprehensive, specialized verification and validation testing services

Technology today has transformed the way businesses work and the recent pandemic has changed things further. The industry is grappling with challenges like infrastructure accessibility from home, remote working, automation of processes, rapid product releases, multiplicity and complexity of platforms and devices, evolving business models and interoperability at near real-time scenarios. Along with the increasing size and complexity of the ecosystem, quality assurance methods and sustenance need to be adjusted accordingly. Software-intensive systems are resulting in the testing landscape witnessing a shift to remote, specialized, high-end automated services.

Everything is moving to the cloud and back, especially in the new normal, resulting in changing the ways of consuming software offerings. There is a constant need now to support various devices and platforms to enable continuity and widespread access of services. With this plethora of possible connected devices and vast networks, simulating the ecosystem for testing is also getting trickier. New normal has also amplified the wave of newer features being added constantly thus reducing the ROI on automation. The business model is also changing from perpetual to subscription based to optimize cost, another big driver in the new normal. Add to it the disruptive competition from digital start-ups and an increasing demand from customer for low total cost of ownership (TCO).

To help business in their respective business transformation journey for the new normal and beyond, HCL is forming strategic partnerships with its by providing both comprehensive remote and on-premises verification and validation strategies that ensure business continuity, improve the quality of products and enable faster time to market. Our next-generation testing approach combines world-class standards for quality amid the evolving product and application ecosystems today to deliver faster, structured, and more effective testing solutions.



# **V&V Offering to Tackle Diverse Business Challenges**

#### **Talent**

Resource competency and retaining talent while optimizing cost

#### Regulations

Enterprises need to comply with stringent regulations for product and device standards

#### **Low Entry Barrier**

Rapid / more frequent releases needed to stay competitive

#### **Remote Working**

For business continuity in the new normal, having infrastructure to enable remote working will be a big challenge

#### Security

Interconnectivity of subsystems raises security, privacy and data security challenges specially with everything moving to the cloud in the new normal world

#### **Test Automation**

Given new normal and newer features & personalization leading difficulty in generating automated test cases and scripts and lower ROI on Automation

#### **Product Complexity**

Increase in cost of simulating networks and end user environments due to large number & variety of device types and product complexity

#### **Business Model**

Change of business model from perpetual to subscription model implies high upfront investment and higher security concerns





## **End-to-end Verification and validation expertize** you can count on - Services Catalog

Consulting Services **Testing Strategy Testing Tool** Assessment & Selection

Transformation Services **Test Automation Test Optimization** 

Operation Services Remote Manual Testina **Functional Testing** Desktop / Mobile App Testing **Embedded Testing** Integration Testing Test Data Management

Specialized Services Security Testing Performance Engineering Accessibility Testing **Localization Testing** Gaming Testing -Console & Online Lab as a Service -Set-up & Optimization

Testing as a Service Enablers Test COE Set up Crowdsourcing



# Why choose HCL's V&V offerings?

#### **Our Differentiators**

• HCL's 40+ years of experience across engineering domains and Verticals enabling us to bring value to customer

• 12,700+ Testing Engineers, 2500+ Automation Testers who can be leveraged for timely delivery of projects

- AI/ML based Testing Optimization capability leveraged to lower cost and bring about more efficiencies
- Full Testing life cycle services from strategy to automation, and full-scale deployment enabling complete end-to-end testing for customers
- Right shoring to enable 'follow the sun' delivery model

Focusing on SMEs & incubating and developing new, emerging technology



Horizontal & Vertical focused solution accelerators enabling faster go-to-market by bringing

- Up to 80% execution effort saving
- 100% user story coverage
- Up to 95% increase in testing effectiveness
- Canned libraries of key verticals to jump start automation from day 1

Strategic partnership with industry to incorporate their frameworks and best practices

**Breadth of** experience





State of the

**Art Labs** 

- HCL manages more than 125K sq. m of
- 100+ customer specific labs & 30+ HCL owned labs
- \$100 MN investments in labs across US,UK China, Europe & India
  - Enabling seamless execution of testing
  - Bringing cost down for customers by providing testing as a service

- To optimize & drive efficient approaches
- To enable project kick-off day1
- Engaged in technical solutioning, consulting and key technical talent so customer can focus on their business
- Solutions driven approach to optimize COQ/ value creation for the customers





HCL has been declared a Leader in Everest Group's Verification and Validation (V&V) Engineering Services PEAK Matrix® Assessment 2020

"HCL has retained its position as a leader in the verification and validation (V&V) space due to its sustained efforts to strengthen capabilities in V&V across all the four service functions – mechanical, embedded, network, and software. HCL's investments in labs and its strong partnership network enable it to provide end-to-end validation solutions to customers from multiple industries, while its strong global presence enables service delivery from offshore, nearshore, and onshore locations. Customers acknowledge and appreciate the efforts of HCL's V&V teams to strengthen domain knowledge and integrate intelligent quality assurance (QA) techniques in service delivery."

Akshat Vaid, Vice President, Everest Group



## **Bringing Delight to Customers**

#### **Business Benefits**

HCL V&V services can support customers at different stages of their testing maturity journey, unleashing various key benefits:

Ensuring customer business continuity in the new normal by offering remote testing solutions remotely in a secure manner.

Help customers achieve the cost optimization objectives by leveraging automation and AI/ML to bring in efficiencies, specially in the new normal

Customizable
Business models to
accommodate
changing needs and
priorities during new
normal



Customers can retain their focus on core business by entrusting their quality assurance need to HCL



Provide customers
with scalable and
optimized architecture
supported by our
reference
architecture and
best practices



We help develop world-class, robust products that deliver phenomenal user experiences



We aim to enable flexibility and automation for software integration



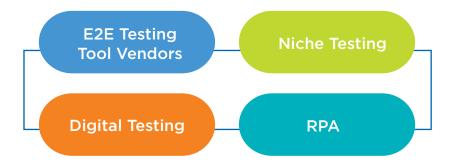
We offer seamless testing across multiple channels





#### **Tool Partnership**

- Partnership with 20+ leading testing tool vendors;
- Covers the entire testing spectrum and all new age technologies





HCL Technologies (HCL) empowers global enterprises with technology for the next decade today. HCL's Mode 1-2-3 strategy, through its deep-domain industry expertise, customer-centricity and entrepreneurial culture of ideapreneurship™ enables businesses to transform into next-gen enterprises.





As a leading global technology company, HCL takes pride in its diversity, social responsibility, sustainability, and education initiatives. As of 12 months ending on December 31, 2019, HCL has a consolidated revenue of US\$ 9.7 billion and its 149,173 ideapreneurs operate out of 45 countries. For more information, visit www.hcltech.com