



Where others see products,
we see experiences

CONSUMER ELECTRONICS

HCL ENGINEERING AND R&D SERVICES

Industry Outlook

The consumer electronics industry rests on the pillars of continuous innovation and accelerated technology adoption. With shrinking product cycles, decreasing margins, and constantly increasing customer expectations, the only way to outdo competition and remain profitable is to stay ahead of the curve in providing next-generation customer experiences.

With almost 14 years of experience in innovating consumer electronics devices, platforms, and solutions, HCL understands this market and the trends that drive consumer behavior.

HCL has traced the entire cycle from concept to manufacture, at an accelerated pace, for some of the world's leading consumer electronics companies.

Consumer Electronics Capabilities



Mobility

- 10+ years old practice
- Home appliance domain expertise across mechanical, controls & sensors design, electronics (hw / sw), system engineering and testing
- Certifications: ISO9001, ISO17025, IEC 61508
- In-house capabilities include EMI/EMC lab, prototyping, CE certification and embedded software labs
- \$15M+ investment in test labs, prototyping/manu. infra



Digital Lifestyle

- 9000+ person years experience
- Capabilities across android, windows, iOS and upcoming platforms Tizen, Firefox.
- Mobile software apps – Native, Hybrid, Mobile web
- Product design/ Hardware design, VLSI design
- Firmware BIOS/ Diagnostics/ BSP
- Verification and Validation
- New product realization & certifications

White Goods



- 3000+ person years experience
- 12+ years experience in project execution
- Expertise across all service layers- system integration, system validation
- Core development services, middleware stack, region specific customization, audio/video codecs, platform dev. And customization, Testing, end customer support

Services and Solutions



Accelerated Product Launch

- Feasibility analysis and rapid prototyping
- Concept to prototype
- OS version upgrade
- Application Migration
- Localization



Platform Build and Acceleration

- Software Framework Development
- Middleware Enablement
- Open source support
- Platform Customization/ Sustenance



Quality and Compliance

- Device and application testing
- Conformance and pre certification
- Release testing
- Certification support



Smart Product Enablement

- Cloud and connectivity enablement
- UxD services
- Application development
- 3rd party app support



Service Line Units



Acceleration

- Digital Supply Chain Mgmt.
- Platform Acceleration Suite

Value

- App Test Factory

Technology

- Product Intelligence
- Internet of Things

HCL in Consumer Electronics



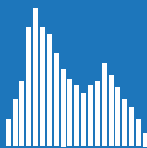
Investments in Android CoE, \$1.5 Mn on DTV platform and \$15 Mn+ investment in Test Labs, Prototyping and manufacturing infrastructure



Strong presence in Europe and APAC apart from America



Customers include 2 major mobile and digital lifestyle OEMs, top 3 white goods manufacturers, 4 major platform vendors and 2 network operators



50+ projects executed on digital lifestyle, multiple projects underway in retail, healthcare, hi-tech and BFSI

*%
PROFIT*

Over 7 solutions and IPs in the last 1 year alone on M2M, cloud, Mobility, Testing– Aegis, DTAf, Android OS Upgrade

10000+ person years of experience

HCL has been ranked a leader in consumer electronics by Zinnov for the maturity and relevance of its services in this industry

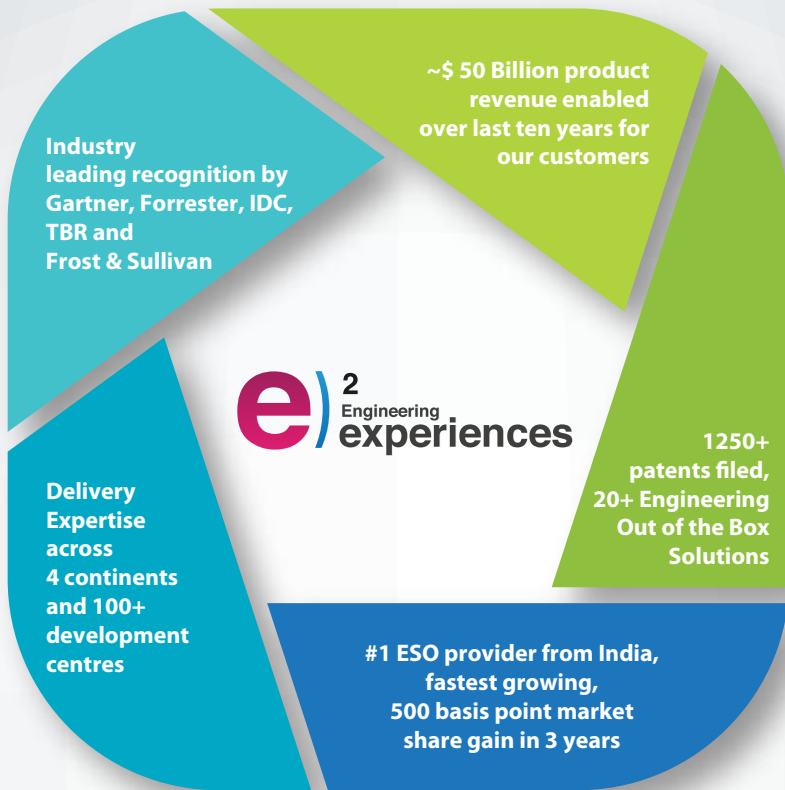
Experiences Engineered for our customers (Case Studies)

- 1 VAVE (Value Analysis, Value Engineering) - Teardown Analysis, Benchmarking, Cost Modeling, Re-Engineering for a Vacuum Cleaner manufacturer in USA
- 2 Development of Testing tool so as to enable Remote Device Testing for a leading White Goods Manufacturer resulting in substantial cost saving
- 3 Complete Development, Testing , Release and Maintenance for a high end Camera with a highly Modular SW design
- 4 Responsible for Platform Customization, Software Development, Product Maintenance & Sustenance for a leading mobile OEM for last 9 years. Worked on approximately 30+ models for the company.
- 5 Ownership for software development and testing for a full range of HDTVs consisting of all TV ranges from 19" to 65" models for world-wide regions. Contributed significantly to the development and testing of high-end models up to 84" size



Look here





Hello, I'm from HCL's Engineering and R&D Services. We enable technology led organizations to go to market with innovative products and solutions. We partner with our customers in building world class products and creating associated solution delivery ecosystems to help bring market leadership. We develop engineering products, solutions and platforms across Aerospace and Defense, Automotive, Consumer Electronics, Software, Online, Industrial Manufacturing, Medical Devices, Networking and Telecom, Office Automation, Semiconductor and Servers & Storage for our customers.

For more details contact: ers.info@hcl.com

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