



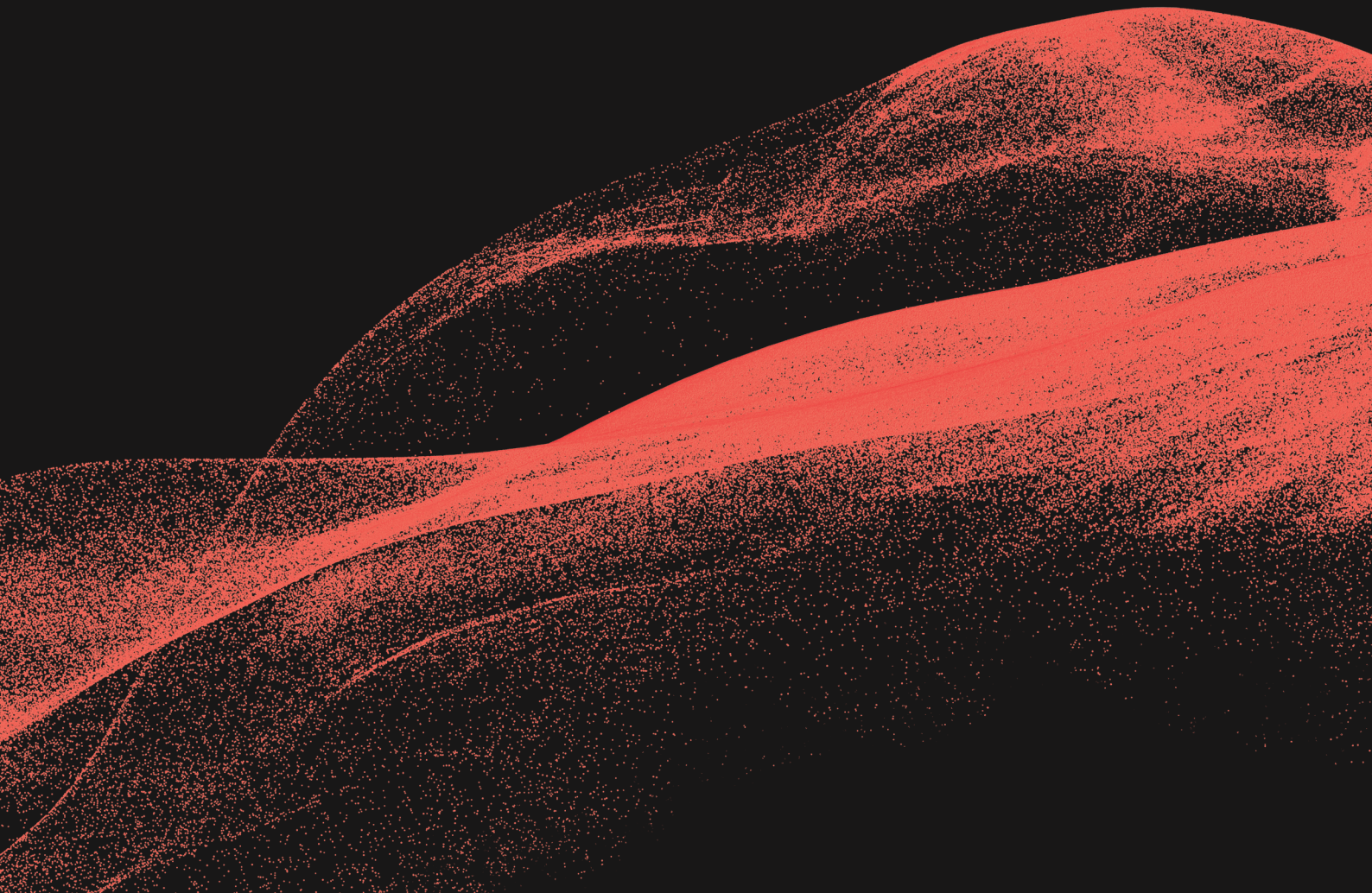
A Larsen & Toubro
Group Company

LTM

Enterprise Testing Services

iNXT Assurance

AI-Powered Quality Assurance for Connected
Products, Intelligent Devices, and Next-Generation
Digital Ecosystems



Products are no longer standalone. A car talks to a phone, the cloud, and back again. A wearable syncs with an app, feeds an AI model, and continuously evolves through software updates. Modern products now operate as connected ecosystems rather than isolated devices.

That changes what quality means. Testing individual features is no longer enough. Enterprises must assure every interaction across embedded software, connectivity, applications, cloud services, integrations, and customer experiences.

iNXT Assurance helps organizations Outcreate fragmented product testing through AI-powered, end-to-end quality assurance. Combining LTM's engineering heritage with intelligent automation, AI-IQA accelerators, and domain expertise, it enables enterprises to launch connected, intelligent products with greater confidence, speed, and reliability.

Where Connected Product Quality Breaks Down

As connected products become more intelligent and interconnected, assuring quality across the entire ecosystem becomes increasingly difficult.

- Fragmented validation across technology layers: Embedded software, connectivity, cloud services, and applications are rarely tested as one integrated system.
- Continuous releases outpace validation: Frequent OTA updates shorten test windows and increase the risk of production defects.
- Device variants overwhelm manual testing: Hardware, OS, network, and regional combinations create exponential test scenarios.
- Integration issues surface too late: APIs, cloud services, and third-party dependencies often fail silently until production.
- Limited visibility beyond release: Teams lack insight into real-world device behavior and customer experiences.
- Automation and compliance increase complexity: Brittle automation, evolving safety standards, and regulatory requirements add to quality assurance effort.

The result: Delayed launches, higher quality costs, inconsistent customer experiences, and reduced confidence in transformation programs.

Our Solution: AI-led Quality Assurance for Connected Products

iNXT Assurance delivers AI-led, end-to-end quality assurance for connected products, validating the complete ecosystem rather than individual technology layers. By combining deep domain expertise, intelligent automation, and AI-powered assurance, LTM helps enterprises accelerate releases, improve product reliability, and strengthen customer confidence.

The solution enables teams to:

- Validate connected ecosystems as one system across firmware, OTA updates, connectivity, APIs, cloud services, and applications
- Shift quality left through digital twins that reduce hardware dependencies and accelerate testing.
- Assure real-world connectivity across BLE, Wi-Fi, 5G, Thread, Matter, and multi-vendor environments.

- Reduce automation effort with self-healing scripts that adapt to evolving firmware.
- Accelerate issue resolution through AI-driven log analysis and root-cause diagnostics.
- Support industry-specific validation across medical, automotive, hi-tech, and other connected products.
- Sustain quality after release with continuous monitoring that identifies field issues early.

Predictable releases. Field-proven products. Experiences customers trust.

What iNXT Assurance Delivers

Six specialized assurance capabilities that validate connected products from silicon to customer experience.

01 · Connected Product Assurance:	The device itself. Validates embedded software, firmware, OTA updates, and hardware integration from bring-up through field readiness.
02 · Digital Experience Assurance:	What the customer sees and touches. Assures connected HMIs, mobile apps, infotainment, wearables, and customer journeys across physical devices and cloud-based test environments.
03 · Connectivity & Ecosystem Assurance:	How it all connects. Validates IoT ecosystems, device-to-cloud communication, APIs, and protocols including BLE, Wi-Fi, 5G, Thread, and Matter.
04 · Platform Assurance:	The systems behind the product. Assures the cloud platforms, enterprise applications, APIs, microservices, and data services that power connected products.
05 · AI-Powered Assurance:	Gets smarter each release. Applies intelligent test design, self-healing automation, and predictive analytics to improve quality with every release.
06 · Non-Functional Assurance:	Under real-world pressure. Builds performance, security, reliability, accessibility, compliance, and resilience into every release.

One assurance practice. One continuous thread of quality across embedded systems, connected products, IoT, mobile, web, OTT, cloud platforms, and production experiences.

Why LTM

As a Business Creativity partner, LTM combines deep domain expertise with AI-powered quality assurance to help enterprises build reliable, connected products with confidence. Key strengths include:

- 200+ engineers across media, automotive, medical, telecom, and hi-tech
- 10+ AI-IQA-powered accelerators
- 10+ device labs and testbeds with a 500+ device farm
- Expertise across 15+ connectivity protocols and 1,000+ interoperability scenarios
- Proven delivery through certified teams and playbook-led governance

AI-IQA Ecosystem with iNXT Assurance

AI-IQA embeds intelligence across the connected-product quality lifecycle. It continuously learns from engineering data, production telemetry, and user behaviour to improve testing, automation, and release decisions.



AI-IQA Capabilities

- **Plan Better:** Generate optimized test scenarios from requirements, specifications, and interfaces.
- **Test Smarter:** Automate testing with intelligent prioritization across device variants.
- **Detect Earlier:** Predict high-risk defects through AI-powered quality analytics.
- **Resolve Faster:** Accelerate root-cause analysis using AI-driven diagnostics across logs, traces, and connectivity signals.
- **Release with Confidence:** Improve release readiness through quality assurance dashboards and quality insights.



Channels Supported

- **Devices & Embedded:** Connected devices, embedded platforms, wearables & automotive systems
- **Media & Living Room:** Smart TVs, OTT platforms & set-top boxes
- **Apps & Experience:** Web, mobile & AI-enabled applications
- **Cloud & Integration:** Cloud platforms, enterprise applications, APIs & microservices
- **Connected Ecosystems:** Network protocols, IoT fleets & device-to-cloud environments

Outcreate Digital NXT Quality at Scale

Enterprises adopting iNXT Assurance realize measurable gains across quality, engineering productivity, and customer experience:

1.5× faster
release cycles
through digital
twin-enabled
automation

40% lower quality
costs through
reusable quality
assurance
accelerators
and self-healing
automation

60–80%
automation
coverage across
complex device
platforms

70% earlier defect
detection to
reduce production
incidents and field
escapes

Near-zero field
failures through
AI-powered
continuous
quality
monitoring

Platform Coverage

iNXT Assurance supports quality assurance across the modern digital ecosystem, meeting clients wherever their product and platform landscape sits today.

- **Connected Products:** Embedded Devices, Consumer Electronics, Smart Home, and IoT
- **Digital Platforms:** Embedded HMI, Infotainment, Device displays, Kiosks, Media devices
- **Cloud & Data:** AWS, Azure, Google Cloud, Kubernetes, APIs
- **Engineering Systems:** Firmware, Connectivity, Digital Twins, DevOps, CI/CD
- **AI:** Generative & Conversational AI, Intelligent Automation, Prompting

Stories of Outcreation

- Outcreating Connected Hearing Device Assurance for a Global Hearing Technology Leader
- Outcreating Regulated Medical Device Validation with Embedded Assurance & Audit-Ready Compliance for a Global Life Sciences Organization
- Outcreating Self-Service Kiosk Reliability Across Retail & Banking Environments Through Hardware, Payment, & User Experience Validation
- Outcreating Connected Media Experiences by Assuring OTA Updates, Playback Quality, Pairing, & Interoperability Across Streaming Platforms

See iNXT Assurance in Action

Accelerate connected-product quality through AI-powered assurance and end-to-end assurance.

Write To Us At

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