



Reliability at  
scale for a leading  
**public broadcaster**  
improved viewer  
experience, boosts  
user engagement  
by **40%** in one  
year



# Client \* Overview

The client is one of the world's oldest, largest, and reputed public broadcasting organization. **It creates cutting-edge content that is engaging, educational, award-winning, and always pushes creative boundaries.** Mindtree is the **sole partner-of-choice** for **quality engineering services** for the client's **digital media services**.



# Business Challenges



The client needed a makeover of its **core services, applications, and solutions** to compete with global content providers with a strong content catalog, deep pockets, and a huge viewer base. Some of the challenges the client faced were:

- **Sustain and increase market share:** The client is a leader in its home market, but is increasingly facing competition from online content providers and Over-the-Top (OTT) platforms amidst rapidly changing audience consumption patterns. It needs to provide compelling content experiences to capture viewer attention and market share
- **Provide high-quality content at lower costs:** The firm is constantly striving to deliver high quality content to a wider audience while minimizing costs
- **Increase online and on-demand content consumption:** The organization aims to power the next generation of audio/video (AV) on-demand content consumption across TV, mobile, web, set-top boxes, consoles, other devices, and access methods



# Mindtree's Quality Engineering Services

The client embarked on a multi-year transformational journey overhauling its legacy systems and migrating to the state-of-the-art infrastructure and architecture on the cloud. This required in-depth testing across the client's content supply chain – from content ingestion to final delivery on a viewers device.

**Mindtree managed the quality engineering requirements of the client's content pipeline, which includes:**

- **60+ content workflows, 300+ micro-services, billions of annual program requests, over 80,000 annual content hours and terabytes of metadata**
- **Device certification for proprietary media player functionality across 300+ TVs/Gaming Devices, 50+ Mobiles and Tablets every year**
- Efficient usage of consumer bandwidth, **Adaptive Bit Rate (ABR)** and **Digital Rights Management (DRM)**
- **Non-functional testing** such as accessibility, performance, GDPR compliance, personalization tests, and multilingual tests





# Solutions

## Highlights

Mindtree provided quality engineering services and developed 20+ test accelerators across multiple distributed agile teams that serve multiple geographies.

### **Key solutions delivered by Mindtree:**

- Designed and rolled out a customized test strategy blueprint for digital projects
- Developed a common test strategy for different divisions by analyzing the client's testing processes, suggesting area of improvements viz-a-viz industry standards
- Partnered in continuous deployment strategies-bringing down production deployment times from three to four weeks to several times a day
- Developed custom automation frameworks across Web, Mobile, Desktop, Cloud, and Data covering all layers of testing like Unit, Functional, UI, API, Non-Functional Requirements, Performance, Regression and Data Transformations
- Developed multiple test accelerators and frameworks leveraging Voice, Chatbots, RPA, Analytics, AI/ML and Cloud
- Provided event-based test automation to cope with asynchronous and stateless workflows
- Exposed test automation services through a self-service portal, enabling faster testing cycles



A photograph of a diverse family of three—a woman with curly hair, a man, and a young girl—sitting on a couch. They are all smiling and looking towards the right. A large brown stuffed bear is sitting on the couch between them. The background is a bright, indoor setting with large windows.

## Client Benefits

Mindtree's innovative quality engineering services delivered:

- Improved viewer experience, content stickiness and engagement
- Approximately **40% YoY** increase in **average weekly viewing minutes** on the **OTT platform**
- **70% faster testing cycles** and **80% automation coverage** across heterogeneous technologies
- **60% Total Cost of Ownership reduction** for quality engineering



# Technology Landscape



## Applications

- Java, Groovy, Node.JS
- Microservices
- Optimizely, ATI, Airship
- Akamai, Redis
- Jenkins, OpenStack, AWS services, Dockers
- Hadoop, Spark

## Tools

- WebdriverIO, Appium, Espresso, Nightwatch, Cypress
- Postman, Puppeteer, BrowserStack
- Gatling, Jmeter, Ansible
- Testrail, Jira, GitHub
- Wit.AI, AI/ML – Node and Python Libraries
- APIs: Slack, Jira, Salesforce, TestRail



## About Mindtree

Mindtree [NSE: MINDTREE] is a global technology consulting and services company, helping enterprises marry scale with agility to achieve competitive advantage. "Born digital," in 1999 and now a Larsen & Toubro Group Company, Mindtree applies its deep domain knowledge to 275+ enterprise client engagements to break down silos, make sense of digital complexity and bring new initiatives to market faster. We enable IT to move at the speed of business, leveraging emerging technologies and the efficiencies of Continuous Delivery to spur business innovation. Operating in more than 15 countries across the world, we're consistently regarded as one of the best places to work, embodied every day by our winning culture made up of over 22,000 entrepreneurial, collaborative and dedicated "Mindtree Minds."