

MEDIA & ENTERTAINMENT

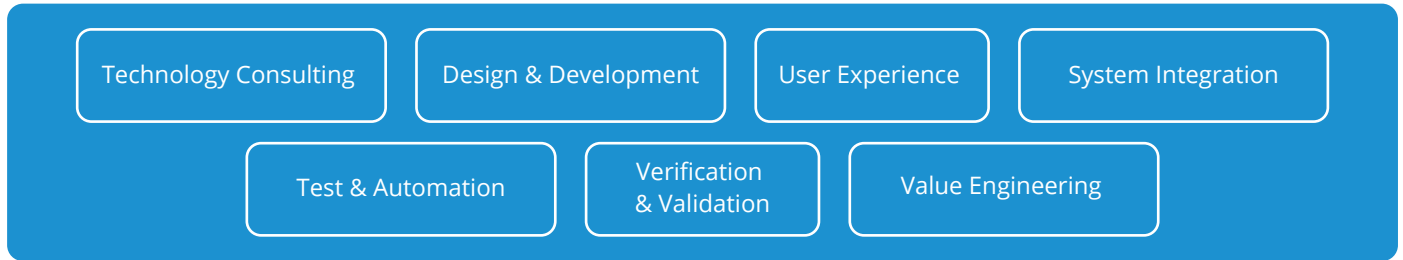
Engineering Possibilities for
New Age Media



There has been a phenomenal growth in content consumption, owing to an increase in online content distribution mediums, a boom in the content library, and a massive surge in the usage of Smart TVs and second screen devices. While this comes as a boon for the consumers, the production houses, operators and media broadcasters have been saddled with an uphill task to retain customers and promote brand loyalty in a fiercely competitive market. Despite the challenge, the current content consumption trend has brought in a plethora of opportunities that could catapult ecosystem players ahead of their competition to reap greater benefits, arising out of next-gen services and their deployment.

L&T Technology Services supports the ecosystem players with a complete suite of engineering solutions, be it linear or over-the-top (OTT), to cater to the diverse requirements of the end consumers.

WHAT WE OFFER



Linear TV

- Cable, Satellite & IPTV
- RDK Roll-out
- Android TV
- Head-End Integration
- CAS & DRM Integration
- Middleware Porting
- VOD Services Enablement
- App Store Development
- Cloud DVR



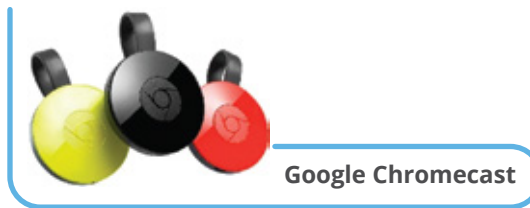
Over-The-Top (OTT)

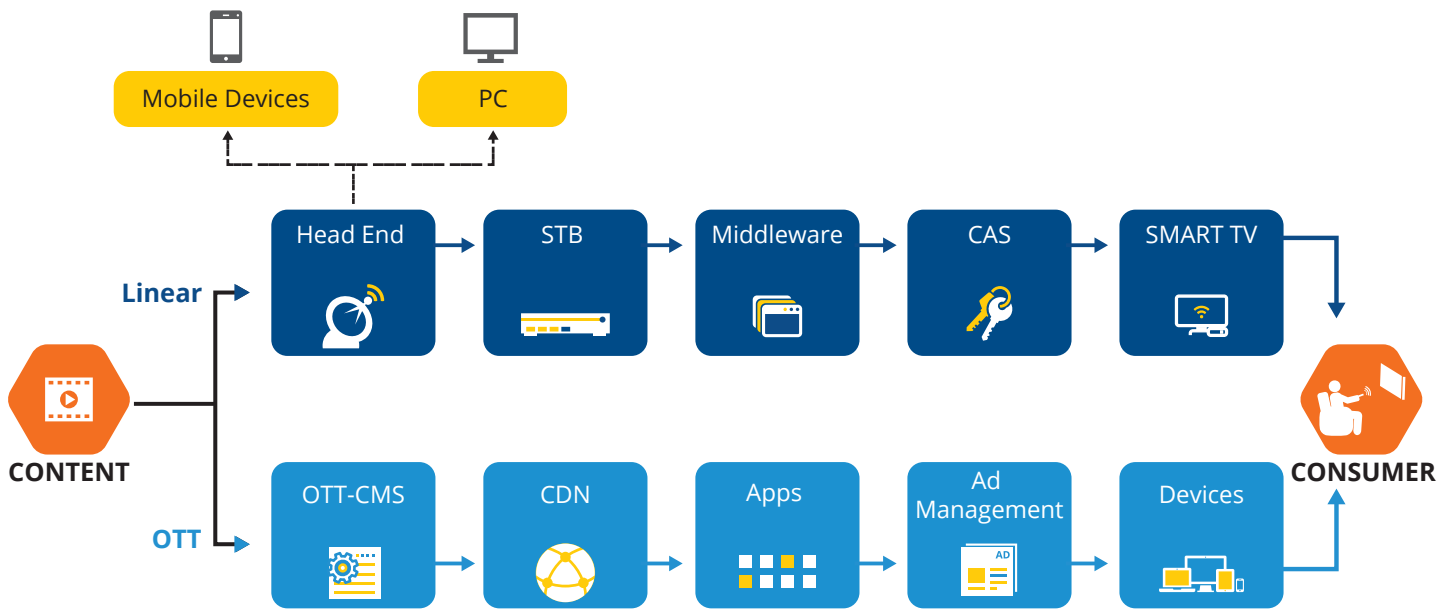
- Client App & User Experience
- CMS - Content Management System
- Live TV & VOD Streaming
- AVOD, SVOD, TVOD, and FVOD Models
- Content Security
- Cloud Services
- Targeted Ads
- CDN Integration
- Content Monetization
- Analytics



Devices

- Smart TVs
- Smart Phones
- Tablets
- STBs
- Streaming Media Players (Apple TV, Roku, Amazon Fire TV & Google Chromecast)
- Game Consoles
- Smart Watches
- Fitness Bands





THE POSSIBILITIES WE CREATE

- Enhanced viewing experience
- Multi-platform and multi-device content delivery
- Scalable OTT with reliable adaptive streaming
- Longtail content monetization
- User personalization
- Reduced operational cost
- Minimized time to market
- Creation of new revenue streams
- Security on content, platform, and application levels
- Customer retention and loyalty
- Improved system efficiency



WHAT MAKES US DIFFERENT



SCALE

66+
Operators
across the globe



DEPTH

100+
STBs and gateways
engineered and
200+
applications developed



SECURITY

A dedicated center in Israel with
1500
man-years
of collective experience in offering
specialized IoT security consultation
& implementation



TALENT

1900
certified engineers across
the globe



PAY TV

A leading integrator of Pay TV
across the world, with
100 Million
deployments

SUCCESS STORIES

Enabled Next-Gen STB with Multi-tuner support for North American MSO

- 60% improvement in EPG (Electronic Program Guide) performance
- 85% offshore development
- 40% reduction in NRE costs
- Enabled production of 1.5 million STB units

Developed Mobile TV Application for a Leading DTH Operator

- 20% reduction in development cost through hybrid architecture for optimum code reuse across platforms
- 40% reduction in verification cost by adopting test strategy with main and derivative devices, thereby optimizing testing effort without compromising coverage
- Attainment of market leader position for the customer

Enabled On-Demand service with Content Personalization

- Instant access to a huge on-demand library of latest content with a wi-fi connected PVR
- AI-based personalization of video experiences powered by a third-party recommendation engine
- User interface (UI) design for an enhanced customer experience

Test Automation for Multiplatform Application Suite

- Automated 95% of the testing for the entire test suite
- Enabled cost savings of up to 30% due to improved efficiency
- Saved test execution time by 50% through automation

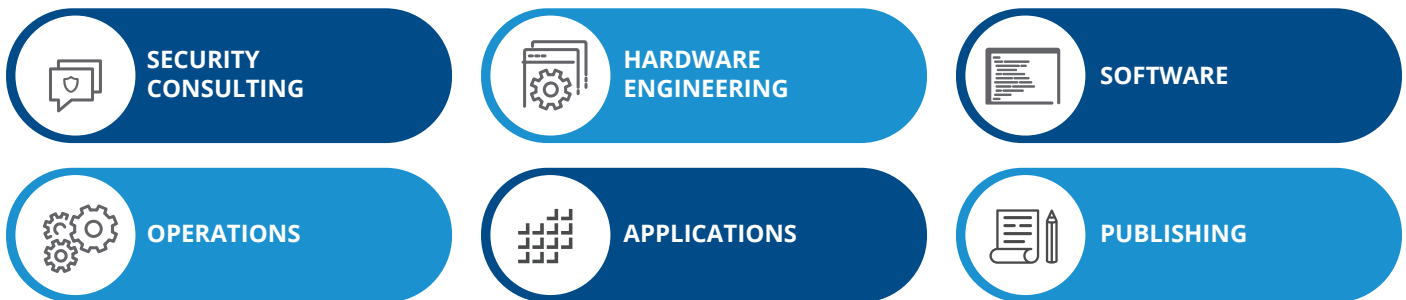
Launch of Catch-up and Restart TV for a Swedish Satellite Broadcaster

- STB enabled with Trick Play mode
- Catch-up TV - Up to 7 days of broadcast content made available to watch on demand
- Enabled subscribers with long tail content to download and watch their favorite programs anytime, anywhere and on any device, in both offline and online modes

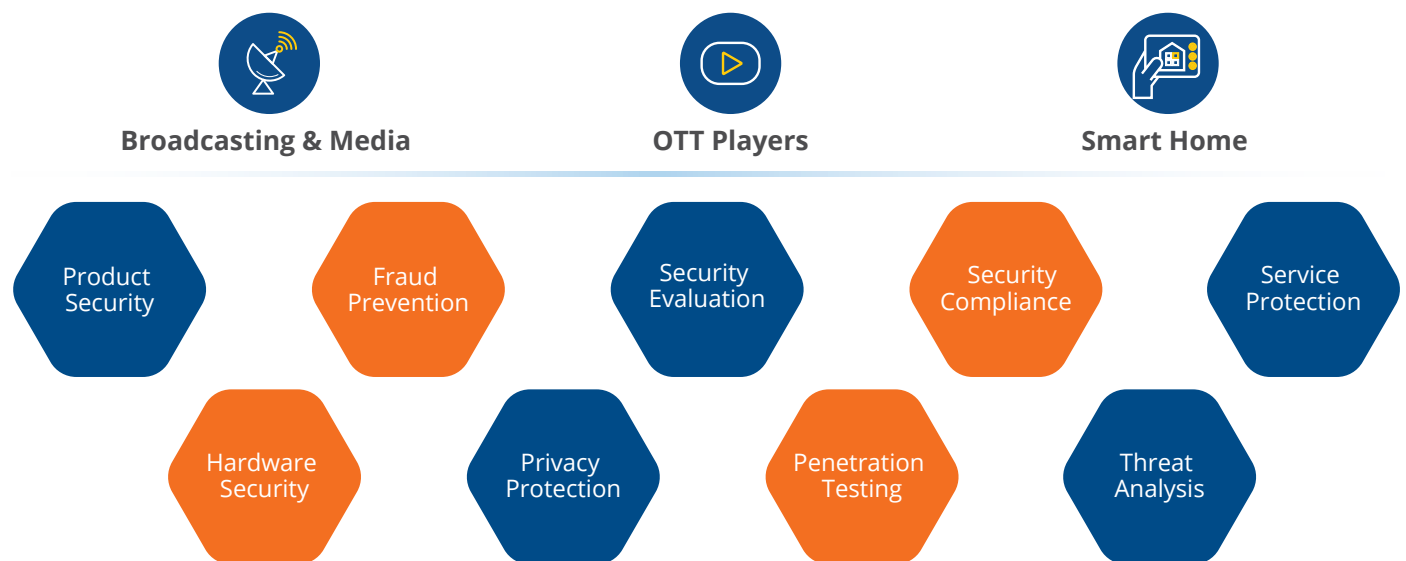


SECURITY CONSULTING & ASSESSMENT

WHAT WE DO



WHAT WE ENABLE



WHAT MAKES US DIFFERENT



100+
Developers



Dedicated Security
Center of Excellence



Cryptographic
IPs

SUCCESS STORIES

Rollover of a Smart Card Clock for 100 Million+ STBs

- Prevented revenue loss of \$1 billion due to piracy
- Made all the server side and client side adjustments for over 100 million STBs without any downtime
- Helped the broadcaster avoid expensive smart card replacements

Security Audit & Vulnerability Assessment for RDK Middleware

- Discovered vulnerabilities in JTAG authorization that could lead to an insecure boot
- Identified security gaps in signing software images that could lead to cyberattacks and infiltration by rogue software
- Assisted in building a robust architecture that facilitated the design and deployment of a secure middleware

ASIC Design of Secure Chip Module for PayTV Smart Cards

- Provided protection against piracy to multiple operators, resulting in revenue savings of over \$1 billion
- Provided in-built security during all the phases, from design to post production
- Designed over 15 secure ASIC chips that are used in PayTV Smart Cards

Digital Rights Management for E-Books

- \$2 million of revenue protected against piracy threats
- Assisted in launch of a secure e-publishing platform
- Assisted the publisher in building new revenue models for digital publishing

Multi DRM Integration and Hardening

- Assisted TV operator in protecting content by using multiple DRM protocols
- Ensured license immunity against numerous hacks
- Added extra security points and verification to the DRM servers

For more information visit us at www.LntTechservices.com

Reach us at info@LntTechservices.com



About L&T Technology Services

L&T Technology Services Limited is a publicly listed subsidiary of Larsen & Toubro Limited with a focus on the engineering services space, partnering with 52 Fortune 500 companies and 51 of the world's top ER&D companies. A leading pure-play Engineering, Research and Development services company, we offer design and development solutions through the entire product development chain, across various industries such as Industrial Products, Medical Devices, Transportation, Telecom & Hi-tech, and the Process Industry. We also offer solutions in the areas of Mechanical Engineering Services, Embedded Systems & Applications, Engineering Process Services, Product Lifecycle Management, Engineering Analytics, Power Electronics, Machine-to-Machine (M2M), and the Internet-of-Things (IoT).