A New Broadcast Core: A Story of Tech Transformation

A legacy footprint reimagined in the cloud

For decades, DTH broadcasting powered television across Latin America. Our customer stood at the centre of that ecosystem as one of the largest DTH provider, delivering over 1,200 channels through a vast, satellite-led broadcast estate across the region.

But scale came with weight: five broadcast centres, hundreds of on-prem systems, and manual workflows stretched across borders.

While the signal was strong, the architecture was carrying too much.

When Scale Starts to Drag

Under new ownership and a clear strategic shift toward an OTT-first future, they faced a non-negotiable mandate: reduce operating costs by **60% without reducing services or disrupting viewers.**

Incremental upgrades wouldn't get them there, and the headend itself had to change.

Rethinking the Headend

Instead of modernising piece by piece, customer chose to re-engineer the broadcast backbone end-to-end.

Working with Tata Communications, the entire DTH workflow like contribution, processing, encryption, and distribution, was redesigned as a **Head End-in-the-Cloud,** delivered as a fully managed service. It was then layered directly onto Tata Communications' video network backbone across Latin America.

Hardware stopped being the centre of gravity, control did.

Headend, Re-Defined OR The New Broadcast Engine

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Unified Contribution at Scale: Signals from **1,000+ connected sites** like teleports, venues, and media hubs, including Tata Communications–owned teleports for uplink and downlink were aggregated across satellite, fibre, and internet-based SRT/RIST feeds, all orchestrated through a software-defined control plane.

Cloud Processing That Replaced Racks, Not Reliability: A platform-as-a-service model for transcoding, statistical multiplexing, and managed encryption moved into Tata Communications' Edge Media Cloud, dramatically reducing physical infrastructure while maintaining broadcast-grade redundancy and compliance.

Edge Cloud Scale: Processing was supported by Tata Communications' global Edge Media Cloud footprint, spanning **25+ edge locations** worldwide, with regional presence to ensure performance, scalability, and compliance.

Distribution That Stayed Invisible: Encrypted muxes continued flowing to affiliates over satellite, fibre, and IP, with blackout management, IRD authorisation, and content switching handled centrally, ensuring downstream partners experienced no disruption. The architecture delivers broadcast-grade reliability, with up to **99.999% SLA on transmission.**

24×7 End-to-End Assurance: A dedicated, in-region managed NOC monitored the entire signal path from ingest to egress, delivering predictable performance across a newly centralised broadcast operation.

Extensive Video Network Backbone Across LATAM: The architecture was layered directly onto Tata Communications' extensive video network backbone across Latin America, ensuring predictable performance at continental scale.

What used to be dozens of moving parts became one controlled broadcast system.

The Payoff

By enabling the transition without breaking the broadcast chain, Tata Communications helped the customer achieve measurable outcomes:

80%
reduction in physical infrastructure

$42M
CAPEX avoided

30%
annual OPEX reduction

55%
reduction in manual processes

13 teams
optimised through automation

Five broadcast centres consolidated into one

70%
cloud-based end state

All delivered without reducing channels, coverage, or viewer experience.

Built for What Comes Next

With the headend no longer tied to racks and real estate, the DTH provider, now operates a lighter, more agile, and cost-efficient broadcast backbone, one that supports today's DTH requirements while preparing the organisation for its long-term transition toward OTT and hybrid delivery models. The same cloud foundation also enabled additional workflows including cloud playout and REMI without requiring another architectural reset.

Because real transformation is all about **how smoothly you get there without dropping the signal.**

Explore **Tata Communications Media & Entertainment Services**
Write to us at **MES@tatacommunications.com**