Transform your TV service with the agility and interactivity of the cloud alongside broadcast-grade scalability and resilience.

Deliver compelling viewing experiences and increase audience reach while reducing service complexity and costs.
What are the drivers triggering TV service providers to move their on-prem TV services to the cloud?

They all want to improve their business outcomes. In the era of the streaming wars, the arms race to retain subscribers and optimize viewer acquisition cost is crucial to operate a thriving service.

By moving to the cloud, TV operators can:

- **Expand Reach**
  Offering the service in new markets with a click of a button.

- **Increase Engagement**
  Enabling interactive and personalized services that increase stickiness.

- **Boost Monetization**
  Supporting multiple monetization approaches and business models within a single service (AVOD, SVOD, TVOD, coupons, promotions, seasonal pass)

- **Improve Agility and Profitability**
  Increasing feature velocity and reducing costs by replacing self-sustained data centers (and associated overhead expenses) with the cloud.
The journey of TV to the cloud involves a three-step transition:

1. **Control plane** in charge of managing the TV service
2. **Video plane** in charge of preparing the video assets for distribution to any device
3. **Data plane** the intelligence layer, adding AI capabilities to every component of the TV platform
"Data meets TV" is the beginning of a new epoch in digital entertainment – the Cognitive TV Era. In this era, cloud TV converges with machine learning and AI. TV services will become "conscious" and capable of dynamically learning and adapting to users' behavior. Users will stop dealing with complex UI on the TV screen and simply have a conversation with their TV instead. They'll be able to come home after a long day at work and have their TV interact with them, offering them the opportunity to continue watching their favorite series where they left off.

The AI-infused platform will generate actionable insights for better understanding and prediction of user behavior, essential to expand market share and extend viewer engagement with the service. The entire user experience will become ‘predictive’– viewers will be presented with tailored content offerings as the service’s UX adapts based on real-time experiments, anticipating what the viewer would like to watch next.

Kaltura is an early mover to the Cognitive TV era, augmented by industry leading AWS machine learning and AI services, and is dedicated to enable service providers to deliver third-generation TV experiences to their users. Driven by AI-based user segmentation, users will benefit from targeted content, business offerings, and UX that adapts based on their ongoing habits, time of day and who is present in the room. Adaptive advertising will allow users to get advertising that is context-aware, served in real-time with the most appropriate ad format based on actual engagement. Super-aggregation of services, will grant users access all types of content via single system, giving them the ability to approach more types of content, like video games narration, the option to expand sources of content to follow based on their preferred celebrity and easily add and remove content sources from their package triggered by voice recognition.

The Control Plane

The challenges of moving the control plane to the cloud revolve around the ability to make the service scale to millions of viewers over IP while maintaining broadcast-grade availability.

Kaltura TV Platform features the "Iron Shield" mechanism, which activates smart caching algorithms to assure top-line service availability. This capability is designed to secure the playback experience during unusual peak times or system slowdowns, so that viewers will not encounter latency issues.

To ensure virtually infinite scale within a cost-effective framework, Kaltura built its service on-top of AWS, which allows the Kaltura TV Platform to scale itself automatically based on actual service load. This lets TV service providers seamlessly expand their service footprint and support millions of concurrent viewers. Service providers can grow at their own pace without investing heavily in on-premises infrastructure.

By migrating their services to Kaltura’s cloud-based TV platform, TV service providers can simplify their entire video delivery chain, improve time-to-market (TTM) of service rollouts by using unified cloud infrastructure, and reduce customer premises equipment (CPE) costs by moving to thin clients that require minimal memory and processing power.
The challenges of moving the video plane to the cloud involve bringing the live content source to the cloud and distributing it to viewers in a fast, secured and effective manner.

The transition from expensive satellite or terrestrial broadcast technology to IP-based solutions lets service providers manage the transmission of live video on top of IP infrastructure in a reliable and secure manner. The Kaltura TV Platform includes API integration with AWS Elemental MediaLive, a broadcast-grade live video processing service; AWS Elemental MediaConnect, a high-quality transport service for live video; and AWS Elemental MediaPackage, a highly scalable video origination and just-in-time packaging service, each feature API integration with the Kaltura TV Platform.

The platform's live video processing, powered by AWS, enables streamlined broadcast operations, including content transcoding, packaging and origination. This allows operators to deliver Pay-TV grade adaptive bitrate (ABR) streams to any connected device supporting all standard formats. The plug-and-play video processing is pre-integrated with Kaltura content management and EPG ingest, featuring Kaltura Multi-DRM support for maximal flexibility. By leveraging Lambda@Edge with Amazon CloudFront, the Kaltura TV Platform reduces latency and optimizes delivery of high-quality video to the end user.

By adopting the Kaltura TV Platform, TV service providers can benefit from fast and easy setup of linear channels or live events streaming while avoiding the complexity of building and operating broadcast-grade content acquisition and video processing infrastructure.
The Data Plane

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About Kaltura:
With the mission to power any video experience, Kaltura has emerged as the world’s leading Cloud TV platform. Kaltura’s Media and Telecom business unit helps telcos and content owners make the transition to a full-fledged Cloud TV service to deliver next generation TV experiences. The Kaltura TV Platform features personalized multiscreen access to linear, VOD and time-shifted TV as well as third-party content. It combines advanced monetization and personalization options with the ability to scale to millions of viewers anywhere in the world.

For more information:
Drop us a line or visit our website.