



Cloud TV

getting over the OTT hype

Is Over the Top Over?

In the last decade, a period that some in the TV business would categorize as the OTT era, TV service providers and media companies have mostly been “toying” with OTT; it never really became a fundamental part of their primary business strategy. Until recently, it was a “me too” or a “check the box” approach, enabling them to take part in the OTT hype with a cool app of their own and say they were listening to their consumers.

The secular shift in video consumption has brought new competitive pressures that challenge the economics of the traditional TV distribution business, forcing traditional TV industry players to rethink their initial approach to OTT. OTT capabilities such as personalization, multi-screen delivery and flexible monetization coupled with operational and financial benefits are now understood to be crucial for the future success of any TV distribution business.

To capture a growing share of today’s \$475 billion consumer video market¹, media companies and service providers have begun to realize that OTT technologies – far from being just a nice to have addition – have the potential to transform their business and help them stay relevant. However, fully embracing OTT isn’t as straightforward as it sounds and it’s nothing like launching a cool OTT app. Companies who considered relying on these new technologies to help transform the core of their TV distribution business soon realized OTT has to go through an industrialization process to mature and become a carrier grade service. Suddenly, legacy TV distribution didn’t seem all that bad; high reliability, low cost of video delivery and a bunch of important regulatory and business features developed over several decades were things operators and media companies going direct-to-consumer could not just dismiss.

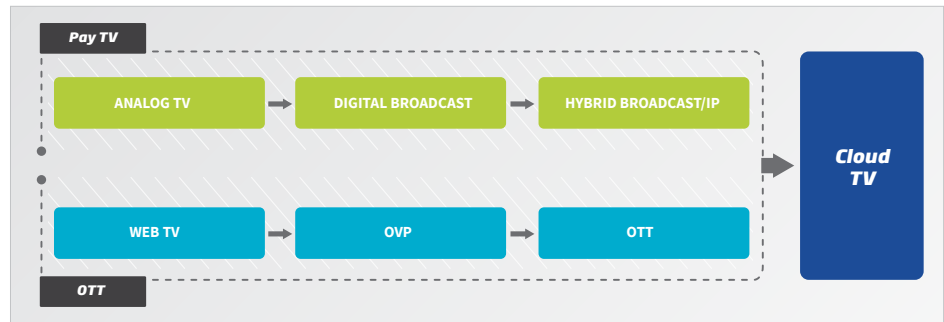
A new class of TV distribution solutions is now required; one that fully embraces the innovation and benefits of OTT, but still maintains some of the critical core capabilities of traditional Pay-TV. We call it **Cloud TV**.

¹ Strategy Analytics Report: How Operators Can Capture a Share of the \$700 Billion Global - (Video Market 2018)

Welcome to the Era of Cloud TV

Cloud TV combines the best of OTT and Pay-TV capabilities to deliver next generation premium TV services. It embraces the cost structure, agility and personalization of OTT with the scalability, reliability, and security of carrier grade Pay-TV, bringing together the best of both worlds.

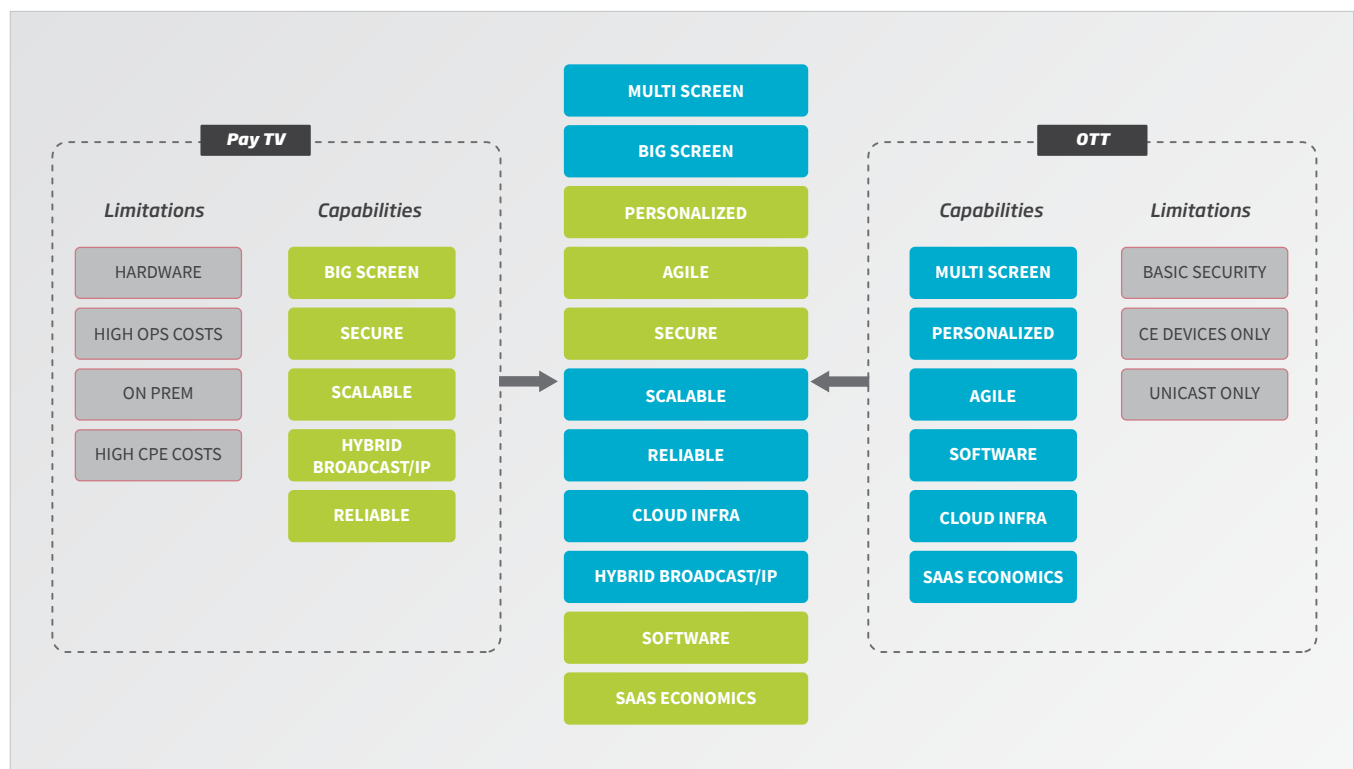
OTT has been around for a decade now; and Pay-TV technology is very mature. But Cloud TV is truly a new industry category powered by technology that simply didn't exist. Until now, the industry evolved in two parallel technology and operational tracks: on the



one hand traditional Pay-TV distribution that started from analog, moved to digital broadcast, then evolved into hybrid broadcast and IP delivery into STBs. On the other hand, web video that evolved into OVPs and OTT platforms. Cloud TV is the convergence of these two technology tracks, fueled by the move of the TV industry from hardware to software, from on-prem to cloud and from one screen to multiple screens. Cloud TV has emerged as a new category that now combines Pay-TV building blocks like middleware and CAS with OTT back-ends and cloud-based video processing workflows.

Why Cloud TV?

Cloud TV is about combining the best of OTT and Pay-TV capabilities to deliver next generation premium TV services

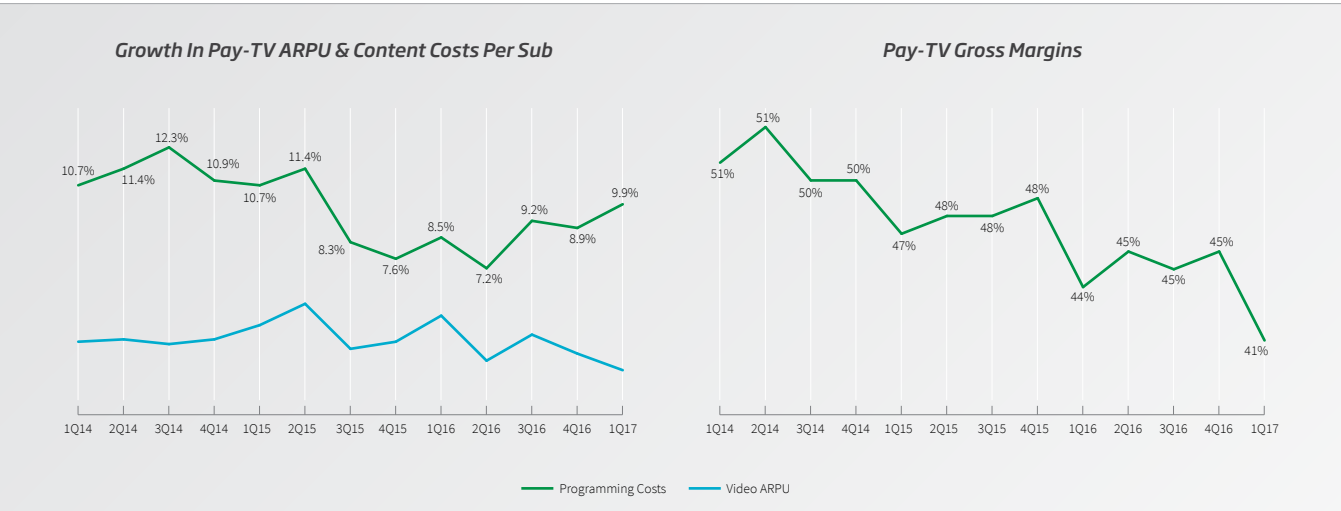


Cloud TV Transformation

The primary driver for Cloud TV is the realization of both video service providers and media companies that they need to transform their legacy TV distribution business. This transformation has three primary axes, detailed below.

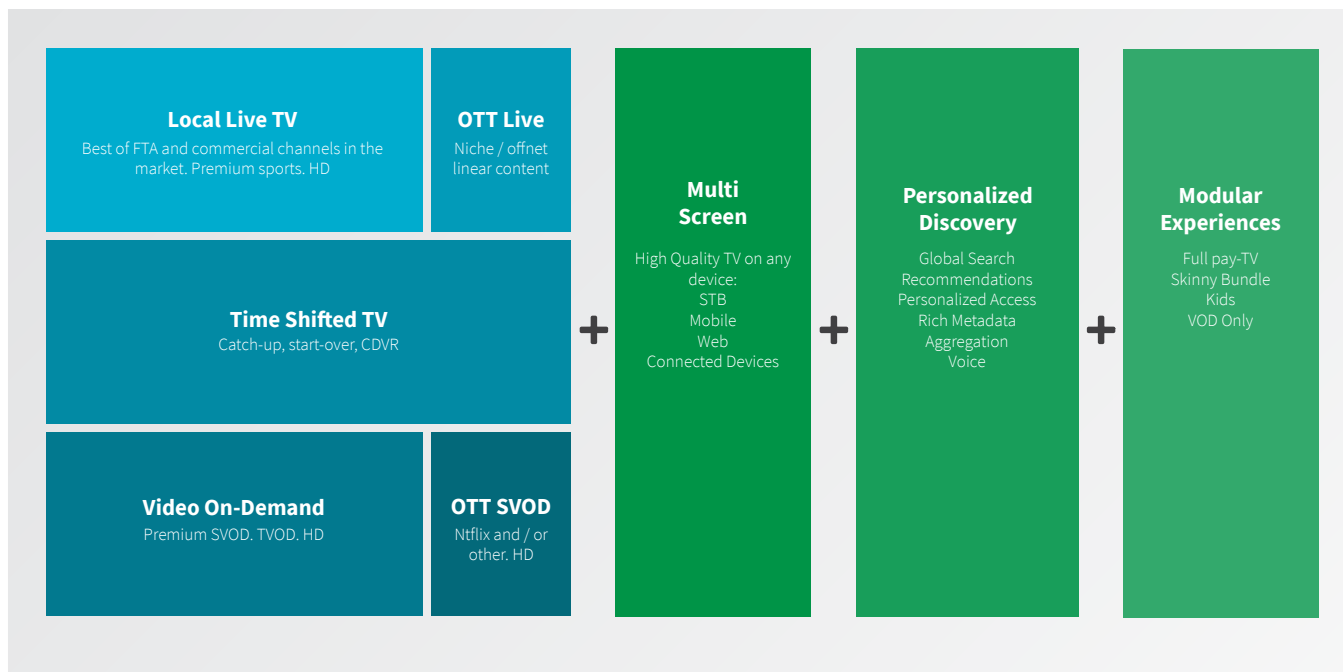
Balance Sheet Transformation

To remain competitive, those who wish to offer consumers a video service must change their balance sheet to significantly reduce the costs of operation. Telcos must have TV as part of their multi-service bundle but they can't really afford to spend as much as they used to on the service. Meanwhile, media companies that wish to go direct to consumer must also control their spending in this new business adventure. In other words, one of the drivers of Cloud TV is the need to improve efficiency and reduce operational costs.



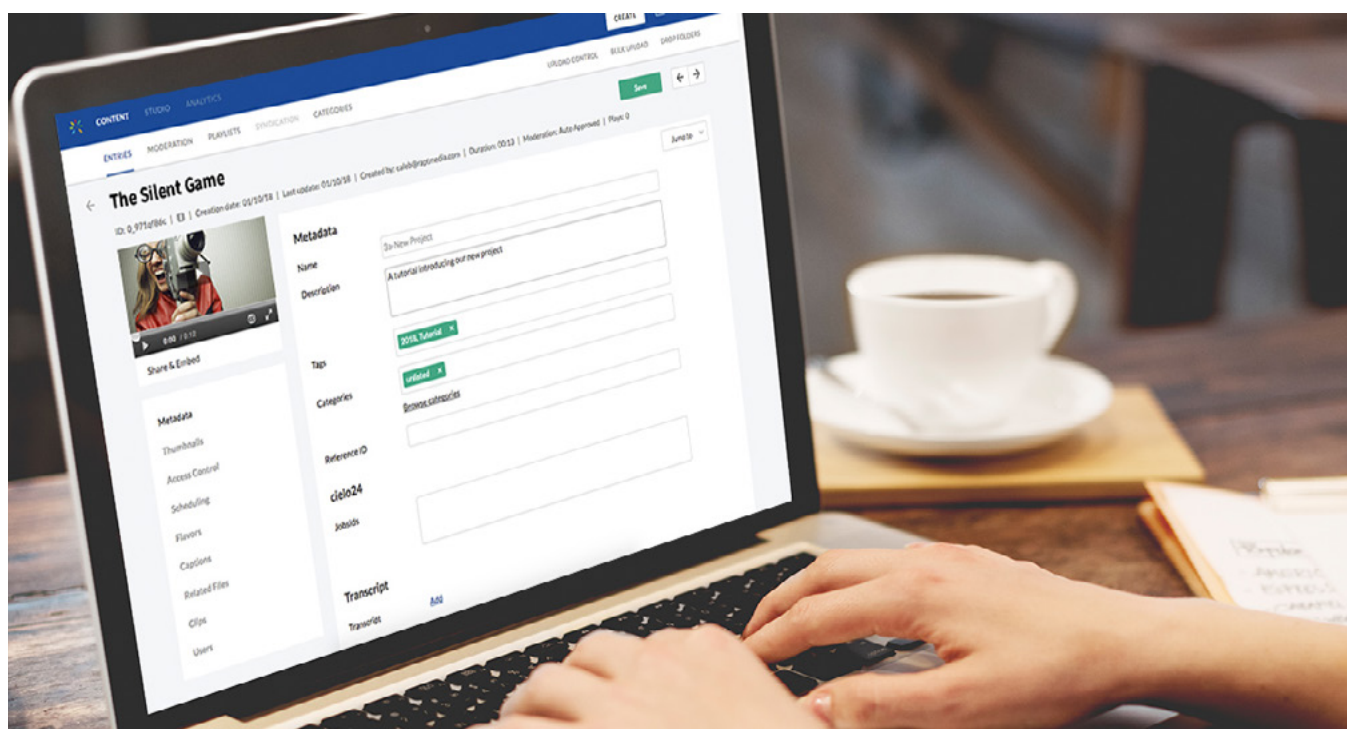
Consumer Experience Transformation

Increased competition on every pair of eyeballs means video service providers must meet and exceed consumer expectations and increase their ARPU. Cutting costs cannot come at the expense of superb user experience. When it comes to video aggregation, consumers have new standards for the video services they are willing to pay for: they are continuously looking for the service that collects all traditional linear content, OTT content and on-demand/time shifted TV content in an easy-to-use manner with advanced discovery and personalization that ideally removes the need to constantly proactively search for content. At the same time, given pricing pressure and increased churn rates, video service providers need ways to promote content and up-sells to their user base, to retain subscribers and to deliver capabilities such as addressable advertising that increases revenue per household.



Operational Transformation

Those in the TV distribution business long enough realize the market is moving at a different pace now, therefore a fundamental driver for Cloud TV transformation is the need for operational agility. The ability to launch fast and adapt the service quickly in response to consumer feedback and market dynamics has become a key driver for success. But it isn't just about speed, it's about the operational process and ability to gather data, understand consumer behavior and act on it as an integral part of the service evolution.



Cloud TV Transformation KPIs

When discussing Cloud TV transformation, it's important to understand the KPIs by which video service providers can assess where they are in the journey. A proposed approach is to look at the three transformation categories above, each of which offers a number of measurable KPIs.

Balance Sheet

KPI	Cloud TV Impact
CPE Cost	Reduced STB cost due to move to OTT technologies and transition of some of the business logic to the cloud (e.g. DVR)
Installation Cost	Self-install or simplified installation
Customer Service Cost	Proactive monitoring reduces customer service calls
Business Operations	Simpler, unified ability to manage content, offers and subscribers
Technical Operations	Outsourced to Cloud TV vendor
Technology Cost	Reduced TCO and proactive product roadmap
Content Cost	Improved analytics help understand content usage to support licensing decisions and help in content rights negotiations

Consumer Experience

KPI	Cloud TV Impact
NPS	Increase Net Promoter Score compared to legacy service and improvement in NPS over time.
ARPU	Increased ARPU due to: (1) content up-sell (2) services up-sell: CDVR (3) addressable advertising
Churn	Ability to slow down churn rates
Competitive Features	Features compared to the competition

Operations

KPI	Cloud TV Impact
Time to launch	Time to launch initial service or major updates to the service
Annual Upgrades	Number of major feature upgrades per year
Code to Cash	Time to deploy new service enhancements
Targeted TV	Ability to mine user data and use it to improve NPS, ARPU and reduce churn
Multi-Market	Ability to leverage a single platform to launch different services in multiple geos or to multiple market segments within the same geo

Early Examples of Cloud TV: The Vodafone Case

There are very few Cloud TV services that have been deployed at scale; services that truly embrace OTT while still enjoying the best of Pay-TV are hard to come by. As a relatively late entrant into the TV distribution business, Vodafone Group was well positioned to be one of the pioneers of this approach.

In 2016, Vodafone Group introduced Vodafone TV, a ground-breaking, operator-grade multi-screen Cloud TV service that blends content from multiple sources - including live TV, catch-up TV and VOD, as well as apps like Netflix, HBO Go & Now TV. Now Vodafone TV customers can first select the content they are interested in and then decide from what source they want to watch e.g. linear TV, VOD, or from an app like Netflix. Vodafone TV is currently live in Italy and New Zealand, as well as in Spain, where it replaced an existing local TV platform.

The Cloud TV solution developed for Vodafone TV is the first in the world to commit to 99.995% availability across all devices. This is essential for the successful delivery of live event broadcasts (e.g., sports) over IP, and puts Vodafone TV at the forefront of the emerging Cloud TV market. Vodafone also claims to be the first service provider in the world to launch a full-blown end-to-end Cloud TV service of this scale – currently live in three countries, with further countries due to go live this year.

Vodafone's TV transformation journey

Drive convergence and improved business outcomes with cloud TV



Vodafone's Cloud TV Vision

Vodafone Group's vision back in 2014 was expansive. According to Nuno Sanches, Head of TV products VF Group: "We wanted to be first out of the block with a new genre of cloud-based TV service that could be easily and cost-effectively replicated and launched in new Vodafone markets without each country having to start from scratch."

This is significant because many service providers looking to launch a TV service across multiple countries have a roadmap that sees each local entity starting over and building its own platform. This is typically due to each entity having a different legacy infrastructure, and/or other market-specific challenges/requirements that make a single common platform a hard goal to reach. With Vodafone TV, Vodafone Group is in fact accomplishing its goal.

Sanches continues: "We also wanted our OTT service to be all things to all men: offering the resilience and breadth of a traditional Pay-TV service, with a broad range of local and global content, combined with the speed and agility of an OTT solution." As such, Vodafone Group's vision was to design the world's first multi-country, operator-grade TV service that relies on a single, common, cloud-based platform and blends live TV and on-demand entertainment.

Vodafone recognized that there were considerable opportunities available to a new type of TV provider borne out of the collision of two separate market forces: the mobile industry's drive towards quad-play convergence, and the OTT revolution poised to transform the TV industry. Vodafone Group believed then (and today) that Cloud TV was the future: blending the features, agility, openness, business models, device reach, and personalization of OTT, with the scalability and reliability of Pay-TV.

The problem was that none of the OTT services on the market at that time provided the equivalent of an operator-grade service. As a tier one global service provider, Vodafone's customers expect world-class service – and its new TV service needed to meet these rigorous requirements too.

Vodafone also wanted the solution to be able to address any device and provide a seamless experience moving between devices. As a result, the focus has been on ensuring that the service is fully scalable, so that customers can access all of their live TV channels, recordings, catch-up and video on demand content seamlessly anywhere – and on any device.

Vodafone Group now offers a Cloud TV service that amalgamates the best of OTT and Pay-TV.



What's Next in Cloud TV?

Anyone can launch an OTT service; getting over the OTT hype and launching a Cloud TV service that truly transforms your business at all levels – cost, experience, and operations – is far from easy. It is key to start from the KPIs. How would you like your TV service to look 12 months from now? Which aspects of your TV distribution do you wish to transform?

Looking at the fast pace in which this industry evolves, it is safe to say we will see the launch of a growing number of Cloud TV type services in the coming years. But this is just the beginning. Cloud TV means the innovation and agility of OTT is now merging into the mainstream television business and this movement has the potential to transform the way hundreds of millions of “traditional” TV consumers experience TV. To quote Andrew Olson, former Director of Product Planning & Design at Sky “I don’t think any of us can project what five years out is going to look like, anymore. What I do know we’re going to need to do is we’re going to have to move more quickly than we ever have and maybe even more quickly than we’re comfortable with. We’ll need to reinvent ourselves, we’ll need to take risks.”²

² Behind the Scenes: The making of Sky Q (<https://youtu.be/vFrAPsdtgx8>)

About Kaltura

Kaltura's mission is to power any video experience. A recognized leader in the Cloud TV, OVP (Online Video Platform), EdVP (Education Video Platform) and EVP (Enterprise Video Platform) markets, Kaltura has emerged as the fastest growing video platform, with the widest use-case and appeal.

Kaltura is deployed globally in thousands of enterprises, media companies, service providers and educational institutions and engages hundreds of millions of viewers at home, in work, and at school. The company is committed to its core values of openness, flexibility, and collaboration, and is the initiator and backer of the world's leading open- source video-management project, which is home to more than 150,000 community members.

The Kaltura Media and Telecom business unit is focused on solutions for content and service providers looking to create next generation TV experiences. The Kaltura TV Platform enables customers to quickly launch a comprehensive Pay-TV service with advanced monetization, social interaction, and personalization tools. Kaltura provides a cross-device experience for all content types -- live, VOD and catch-up.

For more information visit: corp.kaltura.com/solutions/cloud-tv/

Call us: +1800-871-5224, or visit corp.kaltura.com/company/contact-us

