Over-the-Top TV Content Distribution

Differentiating in an Omniplatform Paradigm
At the intersection of the television and the Internet stands a whole new kind of consumer today. Uber-connected and empowered by technologies that are evolving by the nanosecond, this new avatar demands greater personalization and choice across a range of form factors. Indeed, this evolving omniplatform experience is redrawing the contours of the video delivery landscape and recalibrating the power equation between the consumer and the service provider.

Changing consumer preferences, rising expectations and disruptive new video services streamed over multiple devices are changing the dynamics of the broadcasting industry. With a majority of TV viewers also subscribing to catch-up TV, video-on-demand (VOD) and other such streamed services, Over-the-Top TV (OTT-TV) service providers face new business imperatives to meet consumer demands. For many service providers, the need for scalability and flexibility will mean a dramatic change in the way they approach content distribution while balancing costs.

The new generation OTT-TV merges linear broadcast channels with VOD, catch-up TV and other applications, delivering a converged, multidevice user experience. The emerging usage scenario, where the consumer can subscribe to content across devices, offers OTT-TV service providers an opportunity to lock in customers, reduce churn rate and increase revenues.

The OTT-TV marketplace today is a combination of traditional players, including broadcasters, cable companies and telecom service providers, and new players such as Netflix and Amazon. The new entrants—primarily companies providing video services on the Internet—are disrupting the television industry with innovative, on-demand video services delivered through unmanaged networks. Consumers around the world are rapidly embracing these services as they can be accessed not merely on TV, but on a slew of devices, including PCs, tablets, gaming consoles, set-top boxes and mobile phones.

The growing popularity of this new generation TV is also due to the control it provides the end user. With OTT-TV, consumers can choose what they want to view and can even personalize programs. Recent Accenture research (Accenture Video-Over-Internet Consumer usage survey 2012) has shown that OTT-TV services have a steep growth potential, as a growing number of people in Europe and the United States already watch Internet video on their TV sets—and more regularly. This offers service providers a huge opportunity—and challenge—to match quality and choice expectations, while still remaining profitable.

In this paper we discuss the strategic options available to OTT-TV service providers to meet that challenge while deploying scalable and cost-effective distribution models that also help confirm service quality.
Complexities and costs of video distribution

Figure 1: What happens in an Internet minute

639800 GB of global IP data transferred

<table>
<thead>
<tr>
<th>Botnet Infections</th>
<th>135</th>
<th>Botnet</th>
<th>204 million</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Wikipedia articles published</td>
<td>6</td>
<td>Wikipedia</td>
<td>Email sent</td>
</tr>
<tr>
<td>New mobile users</td>
<td>1,300</td>
<td>Mobile</td>
<td>Apps downloaded</td>
</tr>
<tr>
<td>In sales</td>
<td>$83,000</td>
<td>Amazon</td>
<td>Hours of music</td>
</tr>
<tr>
<td>New Linkedin accounts</td>
<td>100+</td>
<td>LinkedIn</td>
<td>Photo views</td>
</tr>
<tr>
<td>Facebook views</td>
<td>277,000 logins</td>
<td>Facebook</td>
<td>New Twitter accounts</td>
</tr>
<tr>
<td>Search queries</td>
<td>2+ million</td>
<td>Google</td>
<td>3,000 Photos upload</td>
</tr>
<tr>
<td>Video views</td>
<td>30 hours of video uploaded</td>
<td>YouTube</td>
<td>100,000 New Tweets</td>
</tr>
</tbody>
</table>

And Future Growth is Staggering

Today the number of networked devices = The global population

By 2015, the number of networked devices = The global population

In 2015, it would take you 5 years to view all video crossing IP networks each second

Source: Intel suggested data
Consumption of video across devices is steadily increasing. On an average, 30 hours of video are being uploaded on the Internet every day, and 1,300 new users of mobile devices are getting added every minute. The future growth of Internet video is expected to be staggering. A report by Intel predicts that by 2015, it will take five years to view the volume of video being transferred on the Internet in one second (see Figure 1). Already, the unprecedented demand for bandwidth, fuelled by Internet video, is forcing carriers to review their broadband plans. Telecom companies are also looking to overhaul the current regime governing data transfer over the Internet, so that they can collect higher fees from major online content providers.

Many telecom companies are contemplating the introduction of wholesale charges based on the volume of data passing through their networks, a bulk of which is due to online services. Moving forward, this could result in online content providers incurring substantially higher distribution costs.

This document outlines Accenture’s views on how OTT-TV content providers can be positioned to deliver content that matches the quality of traditional, DTT, satellite or cable liner distribution models without choking their bandwidth, and doing so in an economically sustainable manner. OTT-TV can replace the traditional broadcast TV if companies understand and embrace new consumer behaviors, and, in particular, if the quality perceived by the end user over unmanaged network is the same compared to the service via cable, satellite or terrestrial.

Quality of Service (QoS) is extremely important from a consumer experience perspective. When consumers are asked what it is that most frustrates or concerns them, they point first to advertising during the program, the time it takes them to download or buffer the content and the quality of the picture that they view (see Figure 2). These concerns are seen as far more important than the cost of the content or the connection that supplies it, the range of content or the user interface look and feel that they use to navigate through content choices. And, as TV connected in one way or another to Internet video becomes a mainstream choice, the impact of quality will loom even larger.

To compete with traditional broadcast content, Internet video has to provide an experience that can stand comparison on the larger screen. Consumers will not put up with a markedly inferior service—and as the novelty of video over Internet continues to wear off, it is anticipated that the insistence on the highest quality will grow.

**Figure 2: Frustrations/concerns with watching video content over the internet**

<table>
<thead>
<tr>
<th>Concern</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertising during the program</td>
<td>53%</td>
</tr>
<tr>
<td>Time required to buffer/download the video</td>
<td>51%</td>
</tr>
<tr>
<td>Video quality (i.e., poor definition)</td>
<td>45%</td>
</tr>
<tr>
<td>Cost of the video content</td>
<td>19%</td>
</tr>
<tr>
<td>Broadband/high-speed cost of downloading the video</td>
<td>19%</td>
</tr>
<tr>
<td>Range of programs available</td>
<td>17%</td>
</tr>
<tr>
<td>Navigation experience (i.e., search/epg)</td>
<td>12%</td>
</tr>
</tbody>
</table>

Source: Accenture Video-Over-Internet Consumer usage survey 2012
Watching content over broadband on a TV screen raises a number of significant issues about the quality. While lower quality for content accessed through a laptop or a smart phone finds more acceptance, users are not prepared to extend the same tolerance when it comes to watching content on the bigger screen. It has to be of high quality in terms of picture quality, speed of loading and ease of navigation.

For OTT-TV providers (and especially broadcasters), this finding highlights an important issue: quality of service is easy to guarantee in the context of a proprietary network, but considerably more difficult when the service runs through a Content Delivery Network (CDN) owned and managed by somebody else. Innovative services enabled by the broadband network cannot come at the expense of the quality of the picture and of the overall content.

In this backdrop, it is important that OTT-TV service providers carefully evaluate various distribution models and adopt the one that is economically sustainable and allows for service scalability.

Considering an unmanaged network, the main challenges for an OTT-TV operator are both technology and business related. In particular, OTT-TV operators should consider the following:

• Build the most effective technological parachutes to manage the intrinsic erratic characteristics of an unmanaged broadband network.

• Understand OTT-TV consumption patterns across multiple devices to appropriate consumption and estimate peaks volumes to plan carefully bandwidth needs to provide the appropriate viewer experience.

• Have a solution that can manage multiple CDNs, thus lowering costs when compared to external CDN, and better reliability for very large scale volumes.

Leveraging our experience with various players across the OTT-TV ecosystem, Accenture has developed both a technological solution and a business solution to address the above mentioned issues.

On the technological front we have incorporated some innovative elements into our Accenture Video Solution, an E2E hybrid broadcast and broadband platform to deliver content across multiple IP enabled devices such as:

• Adaptive streaming on all devices using a dedicated module capable of adjusting the quality of video delivered to clients based on changing network conditions

• A CDN load balancer using the “Resource Locator” module capable of distributing content through different CDNs and local streaming farms

(For more details, refer to the section titled The differentiator: Accenture Video Solution)

On the business side we have developed strong experience to accurately plan, size and manage a third-party CDN. In particular, we have:

• An estimation model to define appropriate consumption and peaks estimate in order to satisfy the short-term and medium-term bandwidth needs.

• Deep experience in managing CDN agreements and alternative content distribution technologies.
The Differentiator: Accenture Video Solution

The Accenture Video Solution is a preintegrated platform based on Accenture-owned software components as well as commercial off-the-shelf products which delivers digital video over broadband enabling seamless integration with the broadcast content across multiple IP enabled devices (connected TV’s, STB’s, gaming consoles, tablets, PC and mobile phones)

Adaptive streaming

Through adaptive bit rate delivery on PCs and set-top boxes, Accenture can deliver broadcast quality service—both standard and high definition—in an open Internet environment even if the broadband network is congested or unstable. Putting it simply, it means AVS can adjust the quality of video delivered to clients to changing network conditions to provide the appropriate viewer experience.

OTT-TV adaptive streaming involves a segmenter module, which is able to cut the content into chunks with the required quality/bit rate, and an adaptive library module embedded in the set-top box application. The library implements a proprietary bit rate control algorithm, which—on the basis of the calculated bandwidth capacity—chooses the proper chunk to be played runtime (so it is able to adapt the quality of the video to the bandwidth available dynamically).

CDN Load Balancer

Accenture has developed a pre-integrated module that allows improving the usage of different CDNs to reduce cost and support traffic burst, and to manage the different agreements and types of services between different allies to distribute content. The AVS Resource Locator facilitates distribution of traffic to the configured CDN (internal/external), load balancing of internal CDN Streaming Edge Server, addressing of client requests to the most suitably located streaming edge servers, stream geo-blocking outside the country.

Using the controller Graphic User Interface, the resource locator can be configured during runtime in order to change the video traffic distribution depending on multiple factors such as cost model of the CDN, content type (live, on-demand full-length, on-demand trailer), content format (HLS, smooth streaming, Mp4) and content popularity.
AVS Segmenter to stream on STB

Segmenter

Video Chunks + Manifest

Streaming Farm

Network

AS Library
- Buffer management
- Chunk selection
The rising popularity of Internet video is transforming consumer behavior. With more control over their viewing, consumers today can create highly personalized programming and use different devices to access content. This has brought about a drastic change in video consumption patterns. The emerging video consumer is a complex species and it is important for OTT-TV service providers to gain deep insights into video consumption patterns and changing consumer demographics so that they can provide a high-quality viewing experience while pursuing a sustainable business model.

The spectacular growth of Netflix in the United States, and Virgin Media and BBC iPlayer TV in the United Kingdom underpins the potential of video streaming services and the need for OTT-TV service providers to be prepared to address ever increasing bandwidth demands. A look at the consumption patterns of the services offered by these early movers provides some fundamental insights into emerging consumer preferences.

With more than 23 million subscribers in the United States, Canada, Latin America, United Kingdom and Ireland in early 2012 (see Figure 3), Netflix is the world’s leading Internet video subscription service that offers movies as well as TV shows. For about US$7.99 a month, Netflix subscribers can instantly watch unlimited films and TV episodes streamed over the Internet to their PCs, Macs and connected TVs. Netflix is in the process of extending these services to other devices as well. While Netflix has not officially disclosed the average number of hours its subscribers use the video service, various third-party estimates peg the figure at 10 hours a user per month.

Figure 3: Netflix’s US subscriber base

Netflix US subscriber base

Source: The Netflix Whirlwind, 2011-14 by Enders Analysis
The data published by BBC and Virgin Media on video consumption are more granular. By December 2010, BBC iPlayer received 145 million requests for programs across all platforms, driven by an all-time-high figure for TV requests on online platforms (see Figure 4). This represented a 38 percent increase over the previous year when BBC received a tad higher than 107 million total requests. On an average, every iPlayer user spent 1.2 hours per week watching BBC’s programs on the Internet.

Figure 4: iPlayer requests for streaming

Virgin Media BBC iPlayer TV requests
Online BBC iPlayer TV requests
Online BBC iPlayer radio requests

Source: BBC iPlayer Monthly Performance Pack-December, 2010
In 2010, Virgin Media predicted that total on-demand views for the next year would exceed one billion. The final total was a staggering 1,004,447,198, representing an overall increase of 14 percent over the previous year. The company’s TV customers watched on-demand programming for a total of approximately 490 million hours, working out to 2.5 hours per home per week (see Figure 5).

These figures on video consumption and Accenture’s research into consumer behavior offer some clear insights into emerging consumer preferences.

While the TV set is now only one of the many devices consumers want to watch video on, it still seems to remain at the center of consumer experience. As Accenture’s research clearly demonstrates, the percentage of people viewing Internet video on TV sets is going up.

Set-top boxes, gaming consoles and connected TVs show an almost identical usage model probably because these are three different access gateways to the same TV screen. Usage of these devices peaks during prime time, the weekend and specific live sport events. These devices show a higher access frequency and a greater average usage time than mobile screen devices.

PC, smartphone and tablet screens are preferred for watching shorter duration videos and clips. Usage is distributed during the day, except for specific live sport events and in the early hours of the afternoon.

But these are only early trends, and as OTT-TV services mature and devices incorporate more advanced features, viewing patterns are bound to change. Meanwhile, OTT-TV service providers will do well to constantly track video consumption patterns and derive actionable analytical insights from them to fine-tune and improve their distribution models.
Accenture’s experience with a European broadcaster showed that the average number of hours per user was about 13 hours per month which is more than the estimated average for Netflix subscribers. The average daily set-top box usage in this case was between 100 and 115 minutes and the corresponding figure for PCs was 60 minutes. This implies that the value for concurrent users increases during live soccer events, available only on the PC (see Figure 7) after 3 p.m. and in prime time (see Figure 6). The estimation of concurrent users is a critical element in defining bandwidth needs for peak hours. Estimation of daily distinct users is also critical to take stock of the daily data transferred to different devices.

Figure 6: Example of concurrent users during prime time for a European broadcaster (without live soccer event)

Figure 7: Example of concurrent users during prime time for a European Broadcaster (with live soccer event)
Planning for bandwidth needs: Accenture Estimate Model

To enable content delivery to customers over the Internet, OTT-TV content providers have either outsourced video delivery to pure-play CDN companies or have built distributed content hosting infrastructures across the Internet, verifying QoS in terms of latency, packet loss and reliability. From a networking perspective, QoS is the ability to provide different priorities to different users, applications and data flows to help monitor a specified level of performance with respect to a particular data flow. In this case, QoS guarantees a specific bit rate, jitter, delay, packet dropping probability and error rate. Higher the QoS, lower is the number of issues that can occur during data transfer.

As bandwidth needs grow, OTT-TV service providers may need to establish new business agreements or deploy alternative technologies with CDN providers to guarantee QoS to the end users. While doing so, service providers will need to review bandwidth needs from a cost reduction perspective as the costs charged to OTT service providers are typically based on bandwidth peaks or total data transferred. The picture gets complicated in this scenario as the increase in the number of consumers is not always proportional to the increase in bandwidth requirements.

From the OTT-TV service provider perspective, bandwidth demand is not easily predictable and is affected by many factors, such as the services provided, video formats, enabled devices, usage duration, concurrent playbacks, time of the day, catalogue refreshing and country average bandwidth.

From the CDN provider perspective, two criteria are important and are commonly used to charge OTT-TV service providers:

- the volume of data delivered, which effectively translates into cost per hour of viewing
- bandwidth peaks, which effectively translates into cost per number of concurrent users.

In this scenario, the main challenge for the service provider is to define the appropriate consumption and peaks estimate model to satisfy both short-term and medium-term bandwidth needs. Based on its experience with leading broadcasters and cable companies that have launched OTT services adopting Accenture Video Solution, Accenture has devised a consumption and peaks estimate model. This model estimates the “total daily data transferred” and “daily bandwidth peaks” forecast according to:

- The specific client service road map in terms of enabled devices (for example, PC, TV set, tablet), services provided (for example, live sport events, snack TV, Subscription Video-on-Demand, Transactional Video-on-Demand) and video formats (for example, Standard Definition, High Definition).
- The number of subscribers and average growth (this value is predicted by Accenture through a model benchmark carried out before the launch of an OTT-TV service).

This model also allows service providers to estimate the concurrent users, which is a key element of the bandwidth needs definition, and is particularly useful while evaluating daily bandwidth peaks.
This simulation illustrates how you can estimate bandwidth needs using Accenture Estimate Model in the following starting scenario:

- Number of subscribers: 2 millions
- Average subscriber growth: 11 percent
- Enabled devices: PC, TV set, tablet
- Services provided: Snack TV, SVoD, TVoD
- Video format: SD

The bandwidth demand estimate considers many factors, such as provided services, video formats, enabled devices and their average usage duration, as well as concurrent playbacks.

In this scenario, the figures (see Figures 8 and 9) show how specific drivers (HD video format and live sport events launch) impact the volumes of the data transferred, resulting in bandwidth peaks. These in turn lead to an increase in bandwidth needs.
Making the most of the CDN: Current possibilities for OTT-TV operators

The downside of OTT streaming is the nature and scale of the costs; streamers have to pay CDN providers to distribute content over the Internet, and are typically charged by the number of gigabytes delivered, which effectively translates into a cost per hour of viewing and bandwidth peaks. Consequently, a content provider’s distribution model should be able to sustainably address both current and future needs.

The global CDN market is very dynamic and fiercely competitive. As a result, streaming media and content delivery are heavily commoditized and CDN pricing is declining by more than 20 percent annually.

To make up for the eroding margins, most CDN providers are now offering value-added services, such as customer services, reporting, content management, managed services, storage hosting and marketing analytics among other services, to differentiate themselves.

Following this trend, pricing of CDN is also changing to include customer services, service-level agreement and content management. We can categorize CDN providers based on the type of services they offer.

CDN pricing approaches

<table>
<thead>
<tr>
<th>Bandwidth (Mbps per month)</th>
<th>Price (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>100</td>
<td>7</td>
</tr>
<tr>
<td>250</td>
<td>5</td>
</tr>
<tr>
<td>500</td>
<td>3</td>
</tr>
</tbody>
</table>

Pricing on small deals averages between $20 and $25 per Mbps

CDN providers based on the type of services they offer.

An advantage of this situation is that OTT-TV service providers can evaluate competing CDN offerings and quantify the business value of each offering. This would provide them leverage while negotiating a deal.

While most CDN providers go for annual contracts, we do not recommend service providers should opt for long-term contracts as cost models in this business change frequently. Further, it could be useful to negotiate a contract that provides flexibility of volume and allows the service provider to expand the scope of the solution offered.

Categorization of CDN providers by services offered

<table>
<thead>
<tr>
<th>Traditional or Pure Play CDN</th>
<th>Telecom CDN</th>
<th>CDN Management platform</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Backbone for streaming video (Live TV in telecom networks, Web TV, OTT-TV, Live streaming of arbitrary audio/video content)</td>
<td>• Historically dedicated CDN for telecom. Now deploying own CDNs to deliver digital content to enhance network investments and drive profits</td>
<td>• Offer solutions to companies building own CDN</td>
</tr>
<tr>
<td>• Expanding in secure mobile delivery and digital rights</td>
<td>• Own last mile and offers local delivery to end users</td>
<td>• Customized solutions for network service providers</td>
</tr>
<tr>
<td><strong>Characteristics</strong></td>
<td><strong>Characteristics</strong></td>
<td><strong>Characteristics</strong></td>
</tr>
<tr>
<td>• Global Delivery Network</td>
<td>• Main competitors to Pure play CDN providers</td>
<td>• Solutions oriented</td>
</tr>
<tr>
<td>• Full range CDN services including application acceleration</td>
<td>• Offer CDN services to hosting and network customers</td>
<td>• Helps network providers manage own CDN. Increased control over scaling, design and network costs</td>
</tr>
<tr>
<td>• Address all clients (B2B &amp; B2C) in terms of content and Application delivery</td>
<td>• Cloud computing and HD video delivery</td>
<td></td>
</tr>
</tbody>
</table>
Getting it right: Strategies for content distribution

How do various content distribution models compare and what are the applicable strategic options for delivering scalable, high-quality services at appropriate costs?

While OTT-TV service providers can choose from different content distribution models, our experience shows that each model has its own advantages and downsides. Distribution of online video can be a double-edged sword depending on the model chosen, as over time, increasing bandwidth needs can render the model economically infeasible. When bandwidth requirements grow at a faster pace than the revenues, OTT-TV service providers may also be forced to opt for alternative models to reduce distribution costs while verifying that they do not compromise on the quality of service (QoS) delivered to the end users.

Content distribution scenarios are relative to the maturity of the service provided and are closely linked to the business plan and strategy that a service provider chooses to pursue. Consequently, it is critical for service providers to define the interventions required in the short, medium and the long term so that they can design and implement a distribution architecture that can continually scale up to meet increasing demand. Accenture has identified three strategic approaches that OTT-TV service providers can take depending on their priorities. The first of these approaches examines various distribution models from a scalability perspective. The second analyses specific distribution models for strategic advantages to be derived from synergetic relationships with CDN providers. The third approach is a differentiated strategy where service providers can benefit from next generation models.

Strategizing for scalability

There are different content distribution models that service providers could choose depending on whether they are seeking scalability over the short, medium or long term (see Figure 10).

While starting a service, the simplest strategy is to opt for a single external CDN. However, this can at best only be a short-term option, as this will prove costly in the medium to long term. Even when a service provider is considering this as a short-term option, it is critical to verify that there is adequate bandwidth to start the service and also to accommodate increasing data volumes and spikes in traffic. If not, this model could become economically unsustainable even in the short term. For this reason, this model has limited applicability from a scalability perspective.

An increasing number of companies are distributing their content over two CDNs as this helps them reduce costs and offer increased reliability of service. Using multiple CDNs to deliver OTT-TV services also works well during very large scale events where distribution volumes are massive. By using a load-balancing solution, the service provider can distribute requests for content across multiple CDNs. This is a time-tested model which can be scaled up over time.

Theoretically, an alternative distribution strategy for service providers is to deploy their own CDNs. That will help the service provider realize benefits such as reduced video transmission costs, improved QoS, greater scalability and superior performance. With their own CDN it is also possible to explore new revenue streams such as enterprise offerings. While an owned CDN offers no solution for reducing bandwidth requirements, the capital expenditure involved in setting it up is massive. We will not recommend this model as it is fraught with huge costs and high risk. In principle, the idea of carriers taking control of video delivery makes a lot more sense as they own the last mile and also a number of carriers around the world are actively building their own CDNs.
Federated CDN is yet another emerging model where carriers and telecom companies are getting together to interconnect their CDNs to establish a global footprint. Service providers can avail strategic benefits from federated CDNs which include multi-country footprint, reduced video transmission costs, peer relationships with complementing players in the OTT-TV value chain and the capability to distribute video services globally. Service providers looking to scale up their services globally can benefit from this distribution model.

Strategizing for synergy

While building an owned CDN could be a costly and risky proposition, some CDN providers offer a solution for companies planning to build their own CDNs. This solution is in the form of a software license that lets customers add CDN services to their solutions portfolio and grow in a way where the OTT-TV service provider and the CDN provider can both leverage each other's network strengths to subsidize future network expansion. Licensed CDN enables last-mile providers to create new CDN-based revenue streams by delivering advanced CDN capabilities to their customers, while alleviating the strain on networks caused by huge volumes of OTT-TV content. This will work particularly well as the CDN provider is also benefitting from his relationship with the OTT-TV service provider.

Strategizing for differentiation: Next generation distribution models

A common drawback with all the scenarios described so far is that none of them allows the service providers to scale down their bandwidth needs. For this purpose, an alternative scenario for service providers is to offer their services independently and without direct commercial relationships with the owners of local infrastructure. Service providers can explore an Internet service provider (ISP) alliance solution which involves installing caching infrastructure within local ISP points of presence. While this involves additional expenditure on servers, it can be justified by providing value-added services (such as customized content) to the end users.

The concept of located content distribution, where the content can reside close to the consumer, paves the way for some pioneering content distribution models which will allow service providers to offer value-added services at extra charge. Prominent among these is what we refer to as the “home server content distribution” model. In this scenario, the OTT-TV service provider installs at the customer’s home a server that can stream content within the home, and adapt to multiple formats and devices. As this equipment will also have an internal hard drive to store content, the service provider can create content sales spots. The hard drive can also be used to store specific types of content such as VOD and catch-up TV. Over time this model can be scaled up to provide “enterprise offerings” for small and medium-sized businesses.

The localized models, such as ISP partnership and localized server distribution, could become potential models to overcome bandwidth bottlenecks so that OTT-TV service providers can deliver a range of services without compromising on QoS or reliability of service. These models will also provide telecom companies a great opportunity to throttle bandwidth to create a tiered pricing. Tiered pricing for bandwidth also implies that telecom companies are in effect creating a new digital class system based on bandwidth consumption.

Conclusion

Changing consumer expectations, bandwidth and infrastructural issues, and changing network pricing will have both operational and business implications for OTT-TV service providers. Success in the emerging business environment, driven by intense competition and increasing consumer demand, will depend upon the ability of a service provider to quickly embrace changing consumer behavior and sustainably deliver service quality. It is imperative that service providers gain deeper insights into video consumption patterns across devices and incorporate those into their distribution strategy. Bandwidth planning and the choice of the right distribution model are equally critical.
About Accenture

Accenture is a global management consulting, technology services and outsourcing company, with more than 246,000 people serving clients in more than 120 countries. Combining unparalleled experience, comprehensive capabilities across all industries and business functions, and extensive research on the world’s most successful companies, Accenture collaborates with clients to help them become high-performance businesses and governments. The company generated net revenues of US$25.5 billion for the fiscal year ended Aug. 31, 2011. Its home page is www.accenture.com.

About Accenture Media & Entertainment Industry Group

Accenture’s Media & Entertainment industry practice works with the world’s largest and most innovative media content enterprises in an increasingly complex digital environment.

We help clients in one of the world’s most dynamic industries find new ways to engage the digital consumer, seamlessly distribute digital assets via a multi-platform digital supply chain, optimize global operations and generate new revenues. Our deep industry knowledge, dedicated innovation centers and Global Delivery Network enable us to invest in forward-looking assets, solutions and services that help our clients drive profitable growth and deliver high performance.

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Francesco Venturini is the global broadcast lead within the Media and Entertainment (M&E) business practice of Accenture’s Communications, Media & Technology (CMT) industry group.

A broadcasting trendsetter with more than 15 years industry experience, Francesco is known for shaping transformational strategies enabling major broadcasters to compete more effectively in the fast changing landscape in the multiplatform digital era. From content creation to distribution, he helps clients develop strategies for digitally convergent products and services. A Communications, Media & Technology industry stalwart with strong financial acumen, he has been instrumental in shaping cutting-edge financial deals within the media industry.

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