

The video revolution

Implementing direct-to-consumer video demands careful orchestration—and the right partner

In a fast-changing pay TV environment, momentum is swinging toward a business model that consumers have long pined for but once seemed entirely futuristic: direct-to-consumer (DTC) content delivery. From HBO Now to Viacom's Noggin to CBS All Access to the World Wrestling Federation's, WWE Network Subscription Video on Demand (SVOD) offering, providers are pursuing new opportunities that challenge longstanding assumptions about distribution channels.

It's a transformation that thrusts premium video providers into a highly demanding environment where decisions around technology platforms, software support, scaling models and consumer experiences can have enormous impact on business success – and perceptions of the category at large.

So far, the record is uneven. Early endeavors have exhibited a mix of sustained and reliable performance coupled with some high-profile gaffes. Problems involving live streams of the 2015 NCAA Final Four tournament, for example, marred the debut of Dish Network's groundbreaking Sling TV initiative (they've since been fixed).¹ The WWE Network initially was overwhelmed by demand when it launched in February 2014, and had to halt new order processing.²

The good news is that overall, direct-to-consumer video services have held up reasonably well in the face of rising usage and demand. For the category to thrive, however, DTC video services must do better than that. They must perform as well as traditional television platforms, which rarely fail.

Because of these imperatives, identifying the right business partners for forward-thinking video delivery endeavors is every bit as important as determining what television programs have the potential to become breakout hits.

“My strong advice would be to work with someone like Clearleap, because it's not easy to build this yourself.”

–Roger Lynch, CEO of Sling TV

IBM's contribution

IBM has a deep appreciation of the stakes involved in video's transformation. IBM's investments in the technologies, intellectual property and support systems video providers need to make smooth transitions into the direct-to-consumer environment have made the company a significant behind-the-scenes player in the movement.

IBM Cloud Video's platform, supports DTC initiatives for many prominent industry participants. These implementations and others supported by IBM Cloud Video share a common theme. For content providers whose main business is producing, acquiring and presenting compelling video content – in other words, the business of television – IBM Cloud Video offers a robust solution to the seemingly vexing requirements for creating and sustaining a scalable online video presence.

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DTC video 2.0: a blueprint for getting there

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TV services, which rarely fail. As Braxton Jarratt, General Manager, IBM Cloud Video, put it, “For programmers that are looking to go to a paid subscription model, there’s a lot to do, and a lot to get right.” Finding a partner with experience in a wide range of disciplines, including video encoding/transcoding, content marking and metadata assignment, user interface design, streaming delivery, product packaging and customer billing/relationship management is a key component in deploying a successful DTC experience. And, as content providers make the transition from a 1.0 to a 2.0 solution, the right combination of experience and platform flexibility are crucially important to launching an updated service.

In the case of one premium content provider, IBM arrived on the scene in April 2013, more than a year after the premium video service had launched and achieved marketplace presence. Challenges relating to multiscreen device support, streaming quality, user experience and customer satisfaction led to IBM’s engagement, which spanned areas ranging from this content provider’s playback quality to its search functionality to its support for additional digital devices. As a result of this far-reaching role, the work IBM performed for this content provider represents a blueprint of sorts for the advancement of DTC video initiatives at large. Among critical components premium content providers must address to make this transition to a “DTC 2.0” environment are:

- **Content preparation.** A first step in this process revolves around a fundamental necessity: creating an archive of content. In the case of this particular content provider, that meant ingesting, coding, marking and assigning metadata records to more than 4,000 hours of video encompassing not only this content provider’s own assets, but also those maintained by other premium services that ride on the same platform. These include Starz, CBS/Showtime, Fremantle Media and others. Their assets are managed via a rich, dashboard-style interface that allows scheduling and oversight teams from each provider to orchestrate highly detailed arrangements of availability windows, menu structuring and playout parameters using a powerful web-based portal that helps to reduce complexity by applying automated workflows. For example, a comprehensive string of program presentation

commands can be applied en masse to a selected group of titles, helping eliminate the need to repeat manual entries. Also important is the ability to keep up with an ever-changing content mix, typified by in-season series such as HBO’s “Game of Thrones” in which new episodes and related content are added frequently.

- **Device support.** This particular premium content provider is among a number of IBM customers that have tasked IBM with managing support for multiple device families, including smart TVs, Android and iOS devices, video game platforms and more. For this content provider, additional key elements were full Airplay support for iOS devices and the addition of Chromecast capability. IBM collaborated with a mobile application designer to completely rebuilt the Android and iOS apps for tablets and smartphones, along with a new web portal that makes use of responsive design to support mobile access. Across this wider device umbrella IBM introduced common search functionality, so that users can intuit how to find content in a more consistent way no matter what device they’re using. In each instance, devices fetch instructions from IBM Cloud Video’s server-resident application program interfaces (APIs) that share a common framework for functions like program bookmarking, search and watchlists. That allows rapid scaling for a changing consumer electronics environment, because new devices can make use of the same pre-built API environment.
- **Video streaming management.** Another key ingredient for satisfaction – possibly the biggest influence of all – is the quality of video playback itself. Here, IBM has contributed to significant improvements for its video streaming clients by maintaining constant watch over stream dispersal, network conditions and playout sessions from IBM’s global network operations center in Atlanta. In addition, IBM Cloud Video’s cloud-based infrastructure makes it possible to ramp within seconds to hundreds of thousands of concurrent users to handle special events and peak usage. In the case of this particular content provider, advance testing and load balancing produced certainty that the application could accommodate hundreds of thousands of concurrent streams prior to launch. Working with quality assurance partners, IBM Cloud Video continues to monitor and assess playback quality so customers can make capacity adjustments in advance of any potential pressures.

A related contributor to experiential quality, careful monitoring of actual usage sessions are logged in detail and made available for export to analysis engines that allow for deeper understanding of concurrency patterns, program preferences and other key metrics.

- **Business model support.** On the business management side, the IBM Cloud Video platform's flexible architecture provides support for a variety of models including AVOD, SVOD, TVOD and TVE to help enable powerful business capabilities. This flexibility is supported by IBM Cloud Video's powerful API's which facilitate swift integration with a wide range of billing and authorization systems giving content providers the ability to manage their own payment relationships. For some, that's an attractive proposition and a counterpoint to third-party relationships that typically demand revenue splitting with partners. Additionally, IBM Cloud Video's user management system, for example, enabled this particular content provider not only to conduct requisite authorization checks for playback permission, but to pull user-specific account and usage information onto subscriber management screens service agents can review. This capability is especially important as premium video publishers begin to take on some of the customer service management duties that historically have been handled by distribution intermediaries.
- **Consumer insight.** The IBM Cloud Video platform introduces innovative marketing and customer relationship possibilities. Content provider customers can analyze usage patterns and write customized business rules so that, for instance, subscribers who have been relatively dormant might get a reminder notice about the upcoming debut of a new original-series episode, says Hillary Henderson, Sr. Director Product Strategy and Management, IBM Cloud Video. Improvements in big-picture data analysis also are possible. "Customers can also export subscriber data to business intelligence systems, so they can start to analyze churn rates and other metrics," Henderson says.
- **Seamless cutover.** Because this content provider enlisted IBM after the service had launched – a scenario that is likely to become more common as first generation DTC services evolve – IBM needed to integrate hundreds of thousands of session profiles along with customer

records, credit card accounts and other payment and usage data into a new platform, without disrupting these existing relationships. One particularly telling moment around this content provider's implementation came when the service made its final cutover to the IBM Cloud Video platform. Any user who had paused a video stream playing over an Android smartphone, for example, was able to resume the requested video following the transition to IBM Cloud Video's platform on a smart TV set in the living room – with no reason to suspect a major systems implementation had occurred.

Taken together, the progression from content ingest to publishing to user playback to billing and usage analysis makes today's new field of play for premium video providers with DTC ambitions. The manner in which these critical functions perform will have significant influence on business success and achievement of DTC strategy goals. In the case of this particular content provider, signs of positive impact from IBM's engagement came within just a few weeks of the service's relaunch, as subscriber disconnects were slashed by 50 percent and the weekly rate for new sign-ups quadrupled, providing clear indications of improving user satisfaction. Those sorts of numbers suggest a bright future not just for this content provider, but for a DTC category that seems poised to reshape the business of television altogether.

The end result is something the DTC category needs: happy customers and positive reviews.

Achieving this sort of positive feedback requires a deft touch across all of the critical logistics and management requirements of the premium online video category, from video asset ingest and cataloguing to content publishing to the collection of usage metrics and statistics.

About IBM Cloud Video

IBM Cloud Video delivers reliable and scalable video streaming services globally. Combining robust video functionality and exceptional cognitive abilities, IBM Cloud Video provides one of the most comprehensive video offerings available today. For more information on IBM Cloud Video, please visit www.ibm.com/cloud/video.

Footnotes

1 Carnette, J., Dish's Sling TV: The Good, the Bad, and the Ugly, The Motley Fool, 4/12/2015, <http://www.fool.com/investing/general/2015/04/12/dishs-sling-tv-the-good-the-bad-and-the-ugly.aspx>

2 Stewart, J., WWE Network: Company says 'demand' prevented most from ordering before fix, Newsday, 2/25/2014, <http://www.newsday.com/sports/pro-wrestling/wwe-network-company-says-demand-prevented-most-from-ordering-before-fix-1.7185258>



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