

MIGRATING TO IP VIDEO: HOW CABLE CAN REMAIN COMPETITIVE



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Transitioning to IP: The necessary next steps for cable operators

Cable operators nationwide are scrambling to keep up with emerging competition from streaming services including OTT applications and virtual MVPDs. With this constant pressure comes the need for transitioning to IP (Internet Protocol) distribution.

Over the past few years, the transition to IP has shifted from an option to a necessity. Operators are no longer asking 'should I?' but, rather, 'how can I?' In order to keep up with consumer demands driven by new OTT services and V-MVPDs, as well as Comcast's X1 video platform, Tier 2 and 3 operators are coming up with ways to compete. For some, that means syndicating Comcast's X1 video platform or distributing consumer IP devices, like Roku, to their customers as a way for integrating the next-generation IPTV service into their offerings.

But there are more cost-effective and smarter options for the smaller providers that want to retain subscribers and increase revenue. Transitioning to IP distribution is not as scary as it may seem and there are routes that cable providers can take to migrate to IP while keeping operations in-house and ensuring that CAPEX and OPEX investments stay low.

While the rise of OTT and V-MVPDs may be daunting to cable operators, both nationwide and internationally, they should have comfort in knowing that, according to a survey by Leichtman Research Group, 82 percent of households are sticking with traditional pay-TV services. It is, however, important to sustain that number, and transitioning to IP can play a significant role in maintaining existing subscriber levels.





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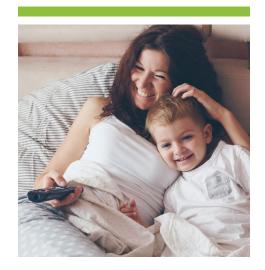
The importance of moving to IP: Why should you?

As the consumption of video by consumers is constantly adapting and changing, cable operators must begin offering IP video services for several distinguishing reasons:

- Competition with OTT and V-MVPDs: Operators can offer a fully robust video product by aggregating streaming services and presenting those services along-side their classic services.
 Evolution Digital conducted a consumer research study in which cable subscribers and cord cutters reported frustrations with search functionality for TV shows and movies on cable services using legacy set-top boxes. They also cited that switching to separate devices to watch OTT services was equally frustrating. Most notably, the research reported universal acceptance and interest in an IP hybrid box that aggregates OTT apps with IP linear and Video on Demand options lets them seamlessly search across platforms.
- Lower costs: Customer premise equipment, operation and innovation are at a much lower cost when an operator transitions classic services to IP at an organic pace. Despite the upfront investment, video offered in IP gives the cable operator lower operational costs and bandwidth savings while maximizing revenues. The operator is also able to offer higher tiers for their data product.
- TV Anywhere: When an operator moves to IP, it now has the infrastructure to offer video on the go. Netflix reported that nearly half of its users watch video on their smart phones.
 That should give pause to cable providers, as consumers are adding portable viewing to their traditional big screen viewing when enabled by convenience and portability.



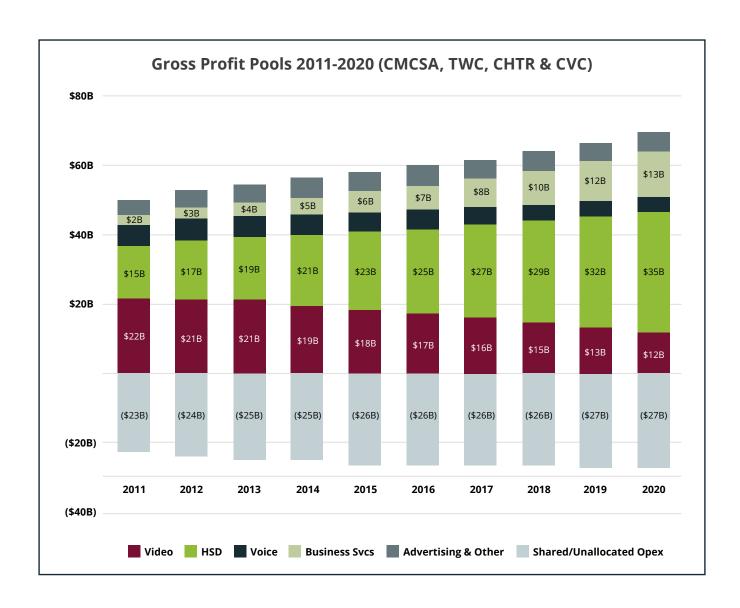
- Connected Devices: In a study conducted by Accenture, among those who plan to buy a TV, 61% plan to buy a connected TV and 25% plan to buy a 4K TV. Smart TVs are on the rise and it is a market that the likes of Roku, Amazon Fire and Apple TV are targeting. On an IP video platform, cable operators can offer alternatives to legacy set-top boxes in favor of app-based services that cater to this connected market. IP Video also offers a way for cable operators to offer a 4K service directly to 4K-capable connected devices without exorbitant investment to update legacy infrastructure.
- Convenience: Content will always be king when providing a robust video service; however, how it is delivered and its value to the consumer and advertiser has changed. There is a growth segment in the industry by offering a broadband-delivered video product. The best way to fully integrate an operator's service is to package broadband and the best programming line-up integrated into one device.





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 Profitability: As shown in the research graph conducted by Deutsche Bank below, broadband continues to be a high revenue share for operators and will continue to rise going into 2020. Operators need to capitalize on this trend by improving their broadband infrastructure with higher data caps and faster Internet speeds. This move will also support an unmatched IP video service, as moving from MPEG2 to MPEG4 is bandwidth saving.



So why haven't you moved to IP yet?

While we have outlined the overwhelming benefits of beginning the transition to IP video in the next few years, we understand the challenges that come with shifting to this infrastructure.

- Infrastructure costs: Based on the common misperception that all services must all be in IP to realize the benefits described above, the marketplace has proposed technology for a complete IP simulcast of all services. That technology comes at an astronomical cost without a clear value proposition to be able to charge more for the same service. If going all-IP is focused on cost and incremental value to the subscriber, the ROI cannot be measured in decades. Cable operators must be able to leverage investments that are currently committed to expanding bandwidth for popular OTT services, rather than doubling down for the same product.
- Legacy Footprint: It is not only costly, but also cumbersome, to reclaim SD and MPEG2 legacy set-top boxes from the field. But, when the broadband product is growing along with band width, legacy infrastructure must be traded off. But the advent of new, low-cost hybrid QAM / IP set-top boxes make the transition much easier and cost-effective than previous technology transitions. A hybrid set-top box is an organic transition of IP services to enable the most costly and the most valuable functionalities to be transitioned last after a mid-sized operator has saved enough money from transition non-linear services, first.



- **Obsolescence:** Legacy set-top boxes that are not IP-enabled are a market that is declining, both in revenue generation potential and market share in the pay-TV industry. But that doesn't mean the set-top box industry, as a whole, is going away any time soon. According to SNL Kagan, worldwide STB shipments are on track to reach 273 million in 2016, up slightly from 269 million in 2015. Though it is important to note that innovation is key in the growth of the set-top box market including all-IP and IP hybrid boxes. There is a ceiling for legacy set-top boxes that only offer QAM linear channels.
- Complexity: In order to take full advantage of the cost savings offered by going IP, cable operators must avoid locking into another single-vendor proprietary technology scenario. With few choices for a vertically integrated, open solution for IP video delivery, cable operators are in a perpetual investigation and justification to invest in resources both internally and through systems integrators. That justification has been elusive since the investment can dramatically delay the ROI of going IP. Beyond technology, cable operators have been faced with product (re)definition to attempt to reduce the upfront costs of going IP by removing major features. This daunting task is frequently cast negatively as an inventor's dilemma, since many product owners fear cannibalization of well-established revenue streams by lower-cost, less-featured IP alternatives.

Evolution Digital's eBOX®: The key for graceful IP transition

Cable operators must make the eventual migration to IP to remain competitive in this dynamic environment. Fortunately, Evolution Digital serves as a resource and technology-transition partner to the Tier 2 and 3 market.

The award-winning eBOX IP Hybrid Set-Top Box, powered by TiVo®, is the first step towards an IP solution. As a hybrid box, eBOX helps cable operators make that graceful migration to IP by integrating QAM linear channels with IP delivered linear and non-linear content.



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Aggregation of content is key in catering to a consumer market that demands programming on one user interface, through one set-top box on the HDMI 1 input. In Evolution Digital focus groups, consumers cited that OTT services do a better job of organizing content and providing recommendations for programs that they may want to watch. However, research participants were equally frustrated with having to switch TV inputs to watch content on another device.

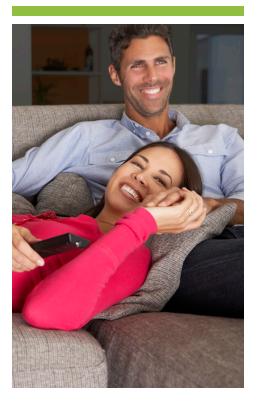
eBOX enables not only a fully-managed IP service, but also harmonious competition with OTT, as it aggregates the operator's full cable line-up with popular OTT streaming services including Netflix, Hulu, Amazon and YouTube. eBOX evens the playing field with emerging competition of new streaming services with the cable channels that cannot be consumed on these alternative offerings including live events and sports.

eVUE-TV™: A fully-managed IP distribution platform

eVUE-TV is Evolution Digital's IP video platform that enables cable operators to deliver all of their classic video services in IP. eVUE-TV delivers thousands of hours of Video on Demand content, a full line-up of IP linear channels and network DVR features up to whole-home parity via a unified platform. eVUE-TV puts the power back into the cable operator's hands to present their high-value video services, giving customers the full breadth of a robust video offering across traditional and new devices.

eVUE-TV is seamlessly integrated with world-renowned applications to enable users to search across IP linear, Video on Demand and recorded programs, giving consumers choice and helping operators compete with the features offered by OTT services such as Netflix and Hulu. The platform easily supports binge watching, a phenomenon in viewing, as it aggregates all of the operator's available content onto a single solution.

Evolution Digital's new eVUE-TV managed IP Video on Demand platform provides a low-cost solution for operators to deploy IP



video content through servers installed within an operators' network. Best of all, eVUE-TV removes the complexity of transitioning to IP video by managing all aspects of the deployment including content ingest and encoding, DRM, subscriber management, content management, content distribution and integration with an operator's billing system. The end result – operators are able to cap their investment in legacy QAM Video on Demand systems and grow new revenue from IP video.

Even with rising expenses for programming and an environment in which many video options are literally just a click away, eVUE-TV provides streamlined, cost-effective and flexible delivery of IP video including IP linear, IP Video on Demand and network DVR, simplifying the delivery of time-shifted viewing.

Conclusion: Future-proof your video service by going IP

Cable operators now have the power to grow with their market in terms of innovation, choice, aggregation and simplification and deliver content the way consumers want. Evolution Digital provides easy, flexible and cost-effective solutions to mid-sized cable operators to take their services IP and deliver a superior viewing experience. Evolution Digital's managed solutions simplify the transition process and solve many of the challenges facing operators, including flexible investment and pay-as-you-grow options.

With eBOX deployed in combination with eVUE-TV, cable operators can now take the leap into migrating to IP distribution with the assurance of costs savings with a trusted resource in the cable industry. Cable operators successfully implementing Evolution Digital's solutions, such as Wide Open West and members of the National Cable Television Cooperation, are paving the IP video path and are quickly becoming the next innovators in the pay-TV industry.



Learn more about how Evolution Digital can help take your video offering to the next level at **evolutiondigital.com/iptv-transition**.