



ATTRACTING AND RETAINING CABLE SUBSCRIBERS IN THE NEW AGE OF TV VIEWING



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Video Consumption is Rapidly Changing

With the proliferation of virtual MVPD (V-MVPD) services of the likes of Sling TV, DirecTV Now, Hulu and Layer 3, cable operators are under siege to innovate by migrating to IP video distribution to enable long-term viability and provide growth opportunities.

Operators are faced with multiple challenges when thinking of ways to make their product more viable in the constantly and rapidly changing pace of television viewing. First, operators must innovate with legacy equipment that is already in the consumer's home.

Second, video consumption among consumers is changing, as TV Anywhere on any device is becoming mainstream, with 17.9 percent of gross minutes watched of television being on TV-connected devices, PCs, smartphones and tablets. Consumer viewing habits have also evolved towards binge and non-linear watching. Just ten years ago, watching a television program at its scheduled time was the norm. However, with the rise of DVR and over-the-top (OTT) services, viewers can now seamlessly stream full seasons of their favorite TV shows for elongated periods of viewing, now termed 'binge watching.' In other words, consumers have become "media addicts."

In this Evolution Digital white paper, we will explore the above factors that cable operators must now address to stay competitive in the pay-TV space. Then, more importantly, we will address how operators can cost-effectively address these trends to reverse the loss of video subscribers, introduce new revenue streams, play on the hype of consumer changes and enhance their service offerings.



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I. Challenges Facing the Industry: Traditional Video Product is Losing Value

Comcast is a behemoth that has captured a large segment of the pay-TV market through its innovative X1 platform. Cable operators are considering alignment with the product but may find it challenging to know where to begin, how to implement the new technology, how to cost-effectively do so and more. Comcast solved the problem of migrating network and customer premise equipment (CPE) to IP through investment:

- According to Comcast's Annual Report (2012-2016), it has invested \$39.6 billion to date to upgrade cable network and CPE over the past 6 years.
- Launching the X1 platform with IP CPE, cloud DVR, IP linear, IP Video on Demand, StreamTV and Broadband-Only video services.

As a result, Comcast has grown its video subs by 160,000 in 2016 as the rest of the global cable industry has declined.

According to [S&P Global](#), in the United States, the cost of a multi-channel TV service subscription is the prominent reason for cutting the cord. However, it's noted that approximately one-quarter of cord-cutters are satisfied with OTT services or a combination of OTT and over-the-air (OTA) channel programming. That leaves three-fourths of the market space still viable candidates for cable operators to target, retain and attract.

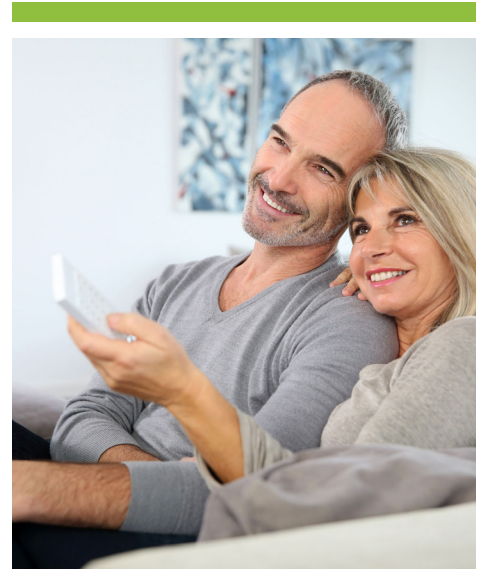
Now more than ever, is the time for operators to begin aligning with the "Comcast Solution." And, the good news is that it is entirely possible for smaller operators to have an offering just as robust and innovative as the X1 solution, but without spending the money and resources that the huge conglomerate has spent.



II. The Operational Perspective

The operational perspective is simple: reduce capital expenditures and operational expenditures while enabling new revenue opportunities. This can be done by gracefully transitioning to IP in a series of steps:

- Transition to IP-capable CPE: It's no secret that operators generate great income from the set-top box. By offering an IP-enabled box with legacy capabilities, like a hybrid box with QAM channels and IP functionalities, cable providers are able to deliver features such as a modern user experience, OTT video services, IP Video on Demand (VOD) and network DVR (nDVR) all to HDMI 1 in the living room. These features not only re-invigorate the video product, but they also lower the overall capital expense of pay-TV.
- Migrate traditional video services to IP: Consumers are increasingly wanting to choose when to watch their programs, what devices to watch on and where to watch. With investment in IP-capable CPE underway, operators can invest in IP video services that work across leased CPE, as well as customer-owned CPE like mobile devices, streaming boxes and smart TVs. Great examples are IP VOD and nDVR that enable viewing of pay-TV services across all devices. Transitioning VOD to a network-based IP service will lower operating expenses by reducing real-time traffic on the operator's internal production network. Transitioning DVR to a network-based IP service will lower capital expenditures by offering DVR features on much cheaper hybrid CPE without the in-home hard drive. The IP transition facilitates all of that, but doesn't need to be done all at once. By offering a hybrid set-top box, operators can cost-effectively transition their video services to IP with a pay-as-you-grow model.



- Use hosted services as much as possible: Some IP video technology works best “on-net” and in close proximity to users, but not all. As services transition to IP, certain technology operations can be scaled up “in the cloud” and leveraged across a number of different operators. Technology, such as user experience, credit card billing systems, user preferences, recording schedules, national content encoding, national content storage and entitlement management, all can be hosted in multi-tenant, high availability cloud operations. Operators don’t need to hand over the keys and can even enjoy cost savings by hosting these functions in their own data centers. True cloud hosting enables spreading cost across many operators, as well as modern business models like content-as-a-service and pay-as-you-grow.

From an operational perspective, the transition of video services to IP offers cost savings while enabling innovation and new revenue opportunities.

II. The Product Perspective

The product perspective applies to acting upon consumer trends and habits to offer a more compelling video service through IP. Legacy services and products offer limited innovation, so it is key that operators begin to take the necessary steps to move forward with innovation in IP.

- Tying new video services to high-performing HSD services: transitioning video services to IP will provide operators with an easy way to require higher HSD tiers. Linking universal search and all OTT services to HDMI 1, combined with bundling opportunities, gives operators a big advantage over V-MVPD services.



- Expand service to COAM: Operators have the ability to offer video services on any device, so they can let consumers choose how they would like to enjoy their cable service. By investing in an IP video solution, operators can grow revenue through expansion of usage and directly compete with V-MVPDs. Video services on COAM enable new business models like bring-your-own-device and broadband-only TV.
- Upgrade video services in more homes, tied to HSD services: The lower CAPEX and OPEX related to IP Video enables operators to expand the reach of modern user experiences, HSD-dependent OTT usage on HDMI 1 and great features like universal search across their entire customer base.
- Innovate with apps: As an operator transitions video services to IP, the offerings can become more robust. For example, by enabling IP, operators are able to offer services like Netflix and Hulu in conjunction with traditional video services. It is widely known that the perfect television solution isn't in the market yet, as V-MVPDs lack the breadth and depth of channels that consumers want with a frustrating set of options. This is a space that cable operators can take advantage of by coupling all programming into one cheaper and more flexible modern alternative.
- New revenue generation: Cable operators can easily find new ways to generate income including the enhancement of DVR. First, if a customer does not currently have DVR service, operators must find new ways to entice those consumers to add DVR features cost-effectively into their homes through functionalities like catch-up TV. For homes that currently have DVR, operators must boost that service by adding more storage and simultaneous streams. This is especially necessary, as V-MVPD services, like YouTube, offer unlimited cloud DVR storage.



From a product perspective, it is clear that transitioning video services to IP enables growth in all areas of an operator's business. Combined with the operational perspective of ultimately lowering cost, the stars are aligning to kick off this exciting effort to finally innovate on video products.

III. The Link to Broadband Access

While new subscriptions to traditional pay-TV services may slowing, broadband adoption is increasing steadily. According to [Akamai's 2017 State of the Internet Report](#), "increases in connection speeds and broadband penetration have helped enable the Internet to support levels of traffic that even a few years ago would have been unimaginable." In fact, Internet connection speeds have increased 15 percent year over year. This is a huge area of growth opportunity for cable providers, as they are able to bundle Internet packages with TV services, a capability not yet available with V-MVPD services like Sling TV.

Also on the rise in broadband-only homes is the usage of antennas for TV reception. [Parks Associates reports](#) that 15 percent of those homes use an antenna, a percentage that has steadily risen since 2013. That same report states that, while pay-TV subscriptions have decreases slightly since 2014, 81 percent of U.S. broadband households still subscribe to a pay-TV service, indicating that bundling services has kept ISPs in the traditional video business with room to grow when those providers offer a compelling bundle of Internet and traditional pay-TV at a price point that makes sense to the customer.

Operators can capture back cord-cutters by having a high-quality and highly-efficient broadband video offering that includes high or unlimited data caps, fast streaming and bundled costs. While the broadband-only household market has options, such as V-MVPD services, even coupled with fast Internet still has issues with buffering and efficiency. Just recently, [Sling TV suffered service outages nationwide during Game 1 of the NBA Final Tournament](#). The problem asserts that, even with the fastest and best connection in the household, viewers can still miss their favorite programs, especially



Internet connection speeds
have increased
15 PERCENT
year over year.



large events, because streaming TV over the Internet is 'best effort TV.' With an open Internet connection, OTT and V-MVPDs will always lack the consistency and reliability that cable operators hold, and it is a fact that operators need to reassert every day to consumers.

Transitioning traditional video services to IP enables operators to capture this explosive market without the need for a complete overhaul of operations. By investing in the IP video transition, operators provide themselves with an opportunity to capture video revenue by adding video to broadband-only homes. A broadband video offering based on the concepts presented in this white paper are superior to today's OTT and V-MVPD products, enabling a new market for operators.

IV. The Evolution Digital Ecosystem

Cable operators currently face many challenges, especially when it comes to containing their costs and competing with new video services and keeping up with the X1 model. However, Evolution Digital offers the perfect solution for Tier 2 and 3 operators hoping to gain back their market and retain subscribers by transitioning to IP. Evolution Digital supports IP CPE through its revolutionary eBOX® IP Hybrid Set-Top Box, powered by TiVo®.

eBOX delivers a scalable IP video platform that the operator and consumer want at a price that makes sense to all. Capabilities include:

- Whole-home IP enabled television offering with QAM live linear channels, network DVR, mobile viewing, IP Video on Demand, IP Pay-Per-View, Catch-up/Start-over TV and IP Linear.
- Aggregation of content across services including Netflix, Hulu, YouTube, Pandora and more.
- App-based Video on Demand that limits CAPEX with proven increased usage, introduction of dynamic ad insertion for VOD assets, increased usage metrics and depth toward targeted ad insertion.



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Evolution Digital's eVUE-TV® IP Video Platform, available on eBOX and many other devices, is a fully-integrated solution that enables a full IP Video on Demand catalog combined with live QAM or IP channels, OTT apps and Pay-Per-View. eVUE-TV is available on a variety of set-top box and retail device user experiences, delivering IP VOD, IP linear channels, network DVR and TV Anywhere functionalities. The single back-office and managed platform takes the burden off of the operator with a pricing model that is affordable to both the cable provider and the subscriber.

The value and benefits of eBOX and eVUE-TV are unparalleled. Operators are able to leverage their QAM investment, lower the cost of CPE, reclaim bandwidth, grow video subs, launch new services in new markets and maintain control of product and roadmap. This is all done through a managed back-end which makes it easier for the operators, as they don't have to go through multiple vendors. Evolution Digital is a low-cost one-stop shop.

Conclusion:

Cable operators are at a juncture in the marketplace: adapt or fall behind. The opportunities to generate new revenue streams, sustain subscribers and enhance their current offerings are bountiful. What most operators are aware of is clear: the transition to IP is imminent. By migrating to IP, cable operators combat trends like cord-cutting and OTA viewing by offering apps integrated with their high-value services like high speed data access, while adding DVR features into the home, simplifying the user experience, lowering costs and enabling TV Anywhere.

Evolution Digital provides a fully-integrated and managed solution to enabling operators to transition to IP distribution through a collaborative approach through its eBOX and eVUE-TV solutions. Evolution Digital delivers new IP-driven technology solutions that enhance the operator's offering to help the operator remain innovative.



To learn more about Evolution Digital's eBOX IP Hybrid STB, please visit **evolutiondigital.com/ebox**. For more information on eVUE-TV, visit **evolutiondigital.com/evue-tv**.