

Introduction

Consumers are watching more video than ever. The video options available to them continue to multiply. Whether it's traditional linear live programming, on-demand video, streaming video, or even video game watching, the demand to be entertained through video is at an all-time high.

For many consumers, the set-top-box (STB) remains as the most important gateway for all of this video content. There are certainly other options to gain access to video, but the STB can still act as the preferred method for accessing all things video, provided that STB delivers an evolved experience. The right experience is key, and video service providers need to ensure their STB solution delivers it. Relying on legacy STB platforms is highly risky in today's competitive environment.



The Evolved STB Experience

Most preferred experiences leverage convenience, familiarity, and simplicity. For the STB experience, achieving these factors is critical. Video service providers should pay particular attention to this and select STB platforms that have evolved to deliver in this way.

At a high level, that typically means a platform that can seamlessly deliver the familiar linear channel line-up, but with the convenience of streaming options, all with a simple interface. But it's also the little things.

For example, for some consumers, a zero boot experience is key. When they turn on the STB, they want it to tune to the last channel watched. Having to navigate across multiple menus to get to that last channel is too complicated. Most streaming devices cannot duplicate this simple, yet desirable experience.

"With the same remote and STB, a customer does not need to be concerned with how the video is delivered to their home, they just want to push a button on the remote and watch TV," commented Jayson Keiper, Plant Manager of Innovative Systems' customer Comm1, based in Kanawha, Iowa.

As consumers embrace streaming capabilities, having a STB that can support streaming is imperative. But streaming capabilities alone may not go far enough. What is needed is streaming capability in routed mode, which supports HLS live streaming. The consumer does not know the technology behind this mode, but instead the experience is just like a traditional STB, tuning to unicast streams instead of multicast streams. This option gives service providers more options and capabilities for delivering streaming content.

Flexibility is also key with any STB platform. The flexibility to support cloud DVR, VOD, and other value added applications such as Restart TV contributes to a better customer experience. Adding the convenience of supporting applications such as cloud DVR on both a STB and on a third-party streaming device delivers the type of experience that creates competitive advantage. Some video platforms force service providers to make a choice – one over the other, rather than supporting both. But by supporting both, service providers cannot only deliver a better experience; they can also better monetize applications such as cloud DVR.



STB Replacement Cycle

Video service providers are constantly evaluating new technology to improve the customer experience, reduce costs, and hopefully improve profitability. For legacy video providers that often means a shift from legacy QAM-based video to IP video delivery. From national conglomerates to regional providers, all the way down to the smallest tier 3 provider, video operators are embracing change.

Comcast now offers a range of video products, including a hybrid-model of IP delivered video and streaming, even introducing a new STB called Xfinity Flex, which is now in millions of Comcast homes. In another example, regional operator WOW! late last year introduced WOW! tv+, a new IP-based video offer with integrated live channel and streaming content packages.

Smaller providers are embracing the change too. Innovative Systems has helped many of its customers convert their legacy video platform to the company's Multi-Generation TV (MG-TV) video platform. Iowa-based Rockwell Cooperative Telephone Association and Nebraska-based Pierce Telephone are but two examples of companies that have made that choice. Many small companies are also faced with end-of-life middleware decisions.

A shift to IP video means a shift in STB strategy, causing service providers to face important decisions about STB replacement. The IP video shift only illuminates the shortcomings of legacy STBs, many of which can no longer meet the needs of today's evolved video landscape. These STBs may lack the memory or the processing power required to run today's video applications. To remain competitive, replacing them is a priority.

Modern STBs, such as the Innovative Systems 5041W, deliver this needed power and memory in a desirable small form factor, with the added convenience of Wi-Fi connectivity for wireless placement. With that added power and memory, the IS-5041W can enable a wealth of video applications, including streaming, that meet the demands of varying demographics through a single STB platform.

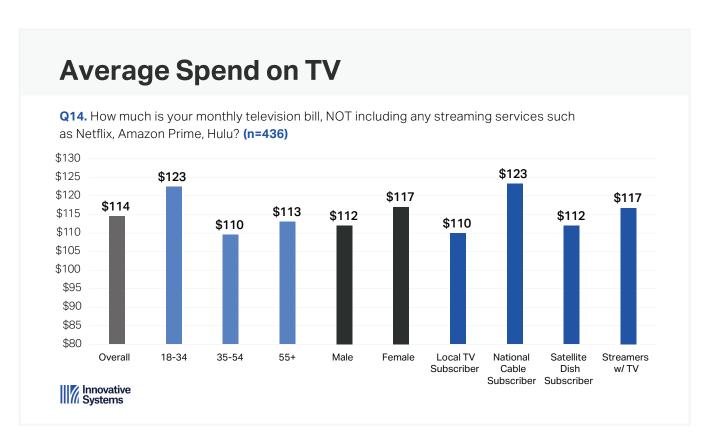
Because the 5041W can replace both current wired and wireless STBs, true self- install capability is now within reach, which can significantly reduce operational costs for video service providers. Beyond costs savings, the recent pandemic has also highlighted the value of self-installs. These and other factors make the IS-5041W a perfect STB replacement candidate.



STB Economics

A better video experience delivered through an evolved STB creates value, and service providers should not be afraid to charge for it. Innovative Systems has noticed a trend with smaller video service providers who are lagging behind larger national and regional service providers in their STB rental fees.

These larger providers typically charge and receive \$9 to \$12 per month for STB rental, while smaller tier-3 providers may be in the \$3 to \$8 range. And that's not even counting upcharges for cloud DVR. We encourage video service providers to take a fresh look at this pricing approach. Smaller service providers, relative to the prevailing market metrics, may be leaving too much STB rental fee money on the table as demonstrated in the infographic below from the 2021 Rural Video and Broadband Study, conducted by Pivot, showing that rural service providers may be undercharging by as much as \$13.00 per month relative to their competition.





Forecasts suggest that STBs per household may decline from an average of 2.5 to 1.5. That has implications for video ARPU and therefore, a higher STB rental fee is an important strategy to consider.

The decline in STBs is partially driven by the adoption of streaming devices. Some consumers are ditching traditional STBs in favor of streaming devices, leading video providers to embrace a streaming option for their channel line-up. National providers like Comcast and Spectrum already offer their channel line-up as an app for Roku and other streaming devices, even charging an access fee for it in some cases.

For rural cable providers that continue to support a small channel line up on analog lines, streaming is an important replacement strategy. Analog customers may have 5+ televisions with some channels in the home and most of the equipment providing this service is manufacture discontinued and at end of life. The streaming offering can be powered by inexpensive consumer streaming devices and modernize the experience for consumers as well as provide upsell opportunities for the service provider.

These changing consumer habits challenge video service providers to include streaming content options with their video service. In fact, consumers offered the highest satisfaction rating for TV service providers who offered both live TV and streaming video in our 2021 6th Annual Rural Broadband and Video Industry research study.



Conclusion

Like any technology, the role of the traditional STB is evolving to meet consumer expectations of convenience, familiarity, and simplicity. Momentum for STB evolution is also multiplying thanks to video service providers embracing the shift to IP video and dealing with end-of-life middleware scenarios, resulting in an important STB replacement cycle.

Indeed, the time to evaluate your STB and overall video strategy is now. By leveraging an evolved STB like the IS-5041W that delivers the varying video experiences for the differing demographics in any community, video service providers can improve the economics of video and maximize their return on video platform investment. The marketplace is too competitive and end customers have too many device options for video service providers to do otherwise.

