

Integrated TV Viewing Experiences: Seamlessly Onboard Apps and Premium OTT Services

The TV has become a smart platform that can deliver any and all content that consumer's desire, including apps, OTT content and live streaming content from around the world. As such, today's operators face increasing complexity as they seek to deliver TV services, OTT content and third-party apps in an integrated, single user experience, accessible across a growing number of embedded devices that vary from brand new to very old and resource-constrained.

Secondly, consumers and content service providers require a much more agile approach in which operators offer the ability to onboard new apps and OTT services in a very short timeframe, come up with intelligent ways to search apps, and offer new ways to monetize content.

The challenge is that each embedded device behaves differently and requires device-specific solutions if an operator decides to solve this natively. A unified approach that enables them to simultaneously introduce new services and apps across devices is necessary to simplify the process and reduce operational expenditures.

Resolving this issue demands a hybrid approach. Rather than continuing to develop big, closed software solutions, operators can now use small, modular software components that connect new web-based and open source technologies with existing legacy ecosystems, to avoid being locked into proprietary systems, and use new ways to boost performance and achieve better user experiences. One way to resolve this issue is to use an abstraction layer that separates the operator's backend, device specific middleware and operating system from the apps and OTT services, presentation and navigation layers on each device. To achieve an elegant and highly performant integration of OTT and TV, the abstraction layer or framework should work flexibly behind the scenes to adapt to each customer's unique appetite; operate independently from the device; and have its own mechanism in place so that the operator can manage apps and OTT services in real-time. The platform should also be able to support features that bridge the gap separating live TV and OTT content from features, such as contextual apps and widgets, and merge all content on to one screen.

Operators can implement a unified approach that uses the browser as a generic integration point to manage the apps and OTT services across devices. Fortunately, cloud-based platforms can be optimized and accelerated within a specific operator ecosystem and applicable STB/browser configurations to improve the user experience and minimize CPU and memory usage of the end device. Apps only need to be developed once to run on all devices and can be developed by anyone using an open Software Development Kit (SDK). This enables both operators and content providers to control the user experience in real-time, reduce costs, and rapidly introduce new apps and services.

With more than ten years of experience bringing OTT to the TV for companies such as Comcast, KPN, Liberty Global, NOS, Tele Columbus, beIN, and Ooredoo, Metrological sees a shifting need for a fluid and agile Application Framework and back end suite to onboard and integrate apps and OTT service in real-time. The future of TV will be about deploying new integrated experiences that are truly personalized and contextual to what consumers are watching on TV in real-time. The days of being locked into proprietary, legacy ecosystems are gone, and today's operators need a more elegant, unified solution—a flexible framework that allows them to aggregate and integrate content together to significantly enhance the user experience, delivering universal search, voice control, IoT integration, integrated billing and contextualization.