Thinking outside the box

The changing demands in user behaviour and content consumption have brought a diversity to the modern day media landscape that requires a more holistic solution than the traditional STB alone, writes Oliver Soellner, member of the management board at ABOX42

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The continuing rise of IPTV is transforming what was a purely linear product into a complete TV experience, which includes live TV, on-demand services and third-party content. This new world of connecting the TV to the internet means opportunities as well as challenges for operators, developers and integrators. No one needs to be reminded that there are a lot of changes going on in the content delivery sector. But a careful analysis is essential in building a roadmap for the future. Right now, there are three main players who are looking to change their game and take advantage of all that IPTV has to offer. First of all, cable operators want to upgrade their TV service offering to a more modern and rich service, featuring live TV (DVB) enriched with IPTV or OTT channels, nPVR and VoD for a complete first-screen offering. These operators are looking for an upgrade from a legacy system to a modern interactive TV solution. There are also IPTV operators who need to switch from first or second- generation IPTV solutions to a modern solution with interactive TV features, a modern UI for a top user experience and a rich feature set, including HbbTV, nPVR, nTimeshift, VoD, third-party services such as YouTube and Smart TV applications). And there are the new OTT players – mobile operators, for example – who are looking to enrich their service offering with a TV proposition. These are looking for innovative solutions, even fully hosted and managed.

Technology

From a technology perspective, it seems clear that the growth in bandwidth will drive high quality video services in mature markets. In developing countries, adaptive streaming technologies and highly efficient video codecs will help to deliver compelling TV services to new markets and regions. Given these trends, companies already need to be thinking about upcoming hardware and solutions that will allow them to deliver more innovative and feature-rich products, and their outlook needs to be global and adaptable. In the Asia Pacific region, for example, you see some operator requirements for Android, for defined application support, which you might not see as much of in other regions. Operators also need to be ready for UHD content, which may not be available in bulk now, but is just around the corner. Within a year or so, 4K content will be made more widely available by broadcasters and content providers. New STB's will need to be adapted for the HEVC/H.265 streaming format for highly efficient video decoding (a new standard which reduces the required bandwidth by 40 per cent). Ultimately, the end user wants a feature-rich product that offers a range of services and just one set-top box in the living room, and this is what we have to provide, no matter where the customer is.

Software

The days of hardware-centric set-top box solutions are long gone. What's required now is a sophisticated software concept which can deliver operator-grade products with a Linux operating system for a fully controlled environment, and also operator-grade Android for certain markets and market segments where Android is of relevance. It is still a challenge to deliver all new technologies and options across to all operators. In the last fifteen years, traditional TV products showed very few real innovations. In the last two to three years, this has changed dramatically. Now operators need to think about how their product offerings and TV services will continuously evolve over the next five years and decide on a solution which is not closed, but allows them to follow technology innovations, without having to reinvent a

solution over and over again. The software solution is key to this strategy, and platforms need to be flexible enough to accommodate varying global operator demands. Momentum is shifting from project-based proprietary software to a cross-platform software concept. This can be helpful to operators in replacing existing first or second-generation IPTV solutions, or by helping a customer to provide compelling solutions in mixed network environments (cable, DSL, fibre) with a unified user experience and product approach. Set-top box companies can no longer be hardware providers; they need to be total set-top box solutions companies, which encompasses hardware, software and services. New partnerships are key as well, allowing sharing of skills and services, eliminating the burden of a single company trying to do everything itself. A combination of hardware platforms, software and solutions will offer extra flexibility and ultimately a comprehensive set-top box solution to customers.

Fast and flexible deployment

This new cross-platform approach allows for fast and flexible deployment via IPTV and can open up new opportunities for customers. It becomes simpler to augment services or quickly add types of services for existing customers.

In the past when most operators moved into IPTV, there were normally a few different stakeholders involved: providers for the middleware, the head-end system, transcoding, DRM, playout to set-top boxes. It ended up being a complex project with twelve months' development time or more, and a lot of cost and frustration. With a more flexible software-based system and intelligent partnerships with existing platforms a kind of 'one-stop-shop' for operators can be provided, which eliminates those complicated moving parts in the delivery chain. The customer could roll out a customised IPTV service within a quarter, with the essential ingredients operated by the set-top box company and its partner.

There's no hardware investment for the IPTV solution itself, no maintenance and no major development needed from the operator side. The only thing required of the customer is to roll out the set-top box hardware and do the marketing for the service and the billing. Whether it's telcos, new entrants such as FTTH operators, DVB-C customers who want to upgrade their networks to more interactive features or pure OTT customers who do not own the networks and want to start a TV proposition on top of an existing infrastructure, the transport infrastructure is ultimately not important. Customers have the ability to offer the same TV packages independent of the network infrastructure that they use.

Emerging opportunities

Developing markets bring a host of new opportunities. Though there are challenges of infrastructure in some cases, many new markets aren't encumbered by legacy systems and broadcast chains. There is the potential for huge growth in Asia, Africa and South America.

There are a couple of countries in Africa that are especially of interest and there are an increasing number of requests for both Hybrid and IPTV solutions. There is an upcoming programme in three African countries where a mobile provider is aiming to provide TV services over mobile networks with an LTE/4G router providing Wi-Fi in the end users' homes, since broadband internet with landlines is not widely deployed.

Our ability to provide new services to customers around the world means not just an improvement in business. It also sets the stage for an incredible new flexibility in how TV is distributed and watched. New types of channels will begin popping up, which could never exist in the old model, with regionalised or specialty content finding audiences who have yet to be properly served.

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