PLUM
INTERACTIVE TV

Advantages of using multi profiles for multiscreen
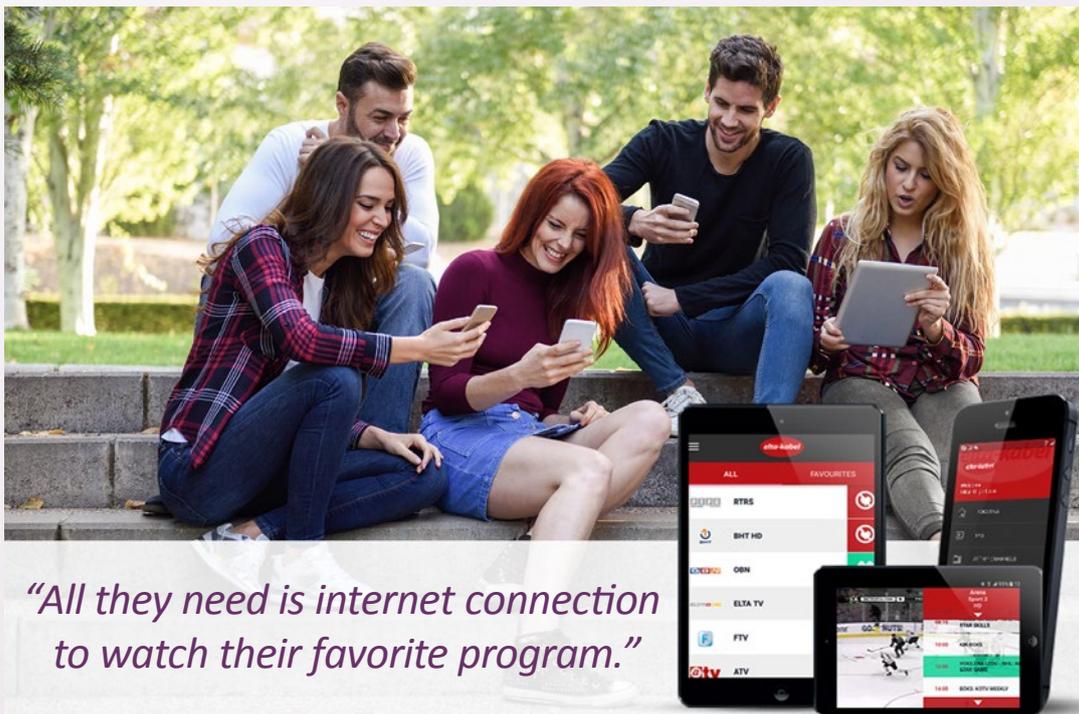
CASE STUDY BY PLUM

INTRODUCTION

iTV is a way for providers to improve their offer and to keep their users from leaving them and go to the competition. But there is another aspect in iTV and that is OTT which allows gaining new users outside of provider's network.

Elta-Kabel is Cable and internet provider in Bosnia and Herzegovina, with HFC network in Banja Luka, Prijedor, Doboj, Trebinje, Zvornik, Tuzla and many other cities all across the country. Elta-Kabel also has FTTH network on several locations. They decided to implement iTV in HFC, FTTH network and also to have OTT service in Bosnia, Slovenia and diaspora.

Due to national tendency of people leaving to work in European countries but still having roots in Bosnia and Herzegovina it is a very smart move that Elta makes by introducing OTT in their offer. That way people living abroad can still have their regional channels at the reach of their hand and keep their trusted provider.

Highlight moment in this case would be Linux STB that supports all advanced options that iTV service offers combined with Multiscreen option – Plum Web, Android and iOS applications.

*"All they need is internet connection
to watch their favorite program."*

LINUX STB AND MULTISCREEN

Since all functionalities are the same on all devices so Plum really offers the same experience on Multiscreen. It is up to the user to choose his favorite device for using interactive services.

STB is maybe the best choice for customers that are already used to watching TV at home and mobile applications are definitely the choice of new generations.

STB vendor whose box has been proven as a very good solution is Hybroad, company located in Beijing. Hybroad's R&D team has gained extensive experience on Hardware Design, Operation System, Drivers, Browser, Streaming Processing and System Integration.

Their Linux A312 OTT box was a perfect solution for Elta-Kabel who wanted a box that supports H.264, HLS and Full HD as well asH.265, MPEG-DASH and UHD resolutions for future innovations on the IPTV/OTT platform.

Hybroad offers extensive technical support, which is very important in case of any changes and updating of STB functionalities are needed, because they are constantly improving their products.

Plum application was easily integrated with A312 STB. Something very important is that after this integration, choice of box is not limited, any Linux box from their offer can be used with minimum effort for adjusting application. This ensures that Hybroad can keep up with any development of technology since newer models are already available in their catalogs.

STB enabled all functionalities of iTV on TV set in subscriber's home. This was a way to keep old subscribers, that are already used to Cable TV, happy, because their favorite way of watching TV is still present but at the same time improved with new options and functionalities.

STB can be used in OTT system with unicast but also with multicast in IPTV if it is placed inside provider's network.

Web application, Android and iOS applications can only receive unicast streams and they are generally intended for using over the internet.

Plum Android and iOS applications are native applications for mobile clients, and Plum web application was developed as a website, which enables easy updating.

These mobile applications are more suitable for younger generations that like having program accessible on the devices they usually carry with them – laptop and off course mobile phones and tablets. All they need is internet connection to watch their favorite program.

MULTI PROFILES ADVANTAGES/DISADVANTAGES?

Multiscreen is where multi profiles in OTT have proved to be very useful.

Multi profile streams and ABR (Adaptive Bit Rate) enable users who consummate content from another network to access content even if internet connection is poor. Service will still continue with small degradation in quality, because user device can detect if internet connection has degraded and it will switch to lower profile and then if internet improves it will switch back to higher profile again. This is something that is very useful for OTT because provider can not influence the environment when users are not in his network, but this way he is sure that he will always have service, even if it is degraded.

The more profiles OTT platform has the better service it will provide. If a platform has a large range of profiles, then degradation is always minimal and even in worst conditions service will remain functional. But there is a large consumption in Transcoder and Origin resources so the balance between number of profiles and cost of the system is very important.

Elta-Kabel decided to have 3 profiles for start and depending on number of OTT users later increase the number to 4-5 profiles. This way they reduce the cost of investment at the beginning but later they improve their service by adding profiles.

CONCLUSION

OTT enables providers to gain new users. This kind of system is good for providers who have lots of customers leaving abroad for a part of the year or constantly. By giving them multiscreen option outside their network they gained user who would otherwise subscribe to some other operator when leaving the country.

OTT is also cost effective when we look at digging and setting of the infrastructure. Since Elta-Kabel is Cable operator they now well how much it costs to place cables and get permits for digging, especially in crowded cites. With OTT solution provider doesn't have to worry about that since the infrastructure is not theirs. They are sending their content over the internet.

Advantages of multi profiles are very clear, but still compromise between quality and investment is very important for planning of OTT system. The best way to avoid large investment at the beginning of project is to start with smaller number of profiles and then increase it over time as the investment starts to pay off.