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IPTV: Now and Next

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Abstract— This keynote address wants to establish the current status of IPTV and define how it will evolve with the new ubiquity of Internet video and Smartphones with web access. In particular, the discussion centers on how IPTV will move across device boundaries and include features now associated with over the top offerings and social networks.

IPTV: NOW AND NEXT

Over the past 5 years, IPTV, television delivered over a private IP network, has gone from the lab to the living room. IPTV standards have emerged that define architectures, delivery devices, middleware and metadata. At the same time, TV, this immersive, immediate yet also intimate experience of the world, real and imagined, has moved out of the living room. IP video, “over the top” video delivered over the public Internet has gone viral. And Mobile TV, TV delivered to a mobile device, while still looking for a mass market is being facilitated by powerful new handsets with larger screen and more bandwidth. So what is next?

The fact that we are still making a difference between IPTV, IP video and mobile TV is one place to look for the future of TV. There is talk of “convergence” in the TV world right now with the Internet video and User Generated Content as well as telecommunication services to the TV that favors a more “connected” TV experience. Still, IPTV is essentially a broadcast replacement, or “me-too” TV, offering linear (real-time) TV programming, video on demand and good-looking Electronic Program Guides (EPG). And Mobile TV is dominated by short clips or limited TV channel offering.

But a focus on personal choices, user experience and integration with Facebook or MySpace (or other) is also emerging. It is well known that this is what the TV viewership is more and more interested by: high definition TV, personalization, relevant recommendations and interactivity: watch what you like and what your friends like, when you want it and on the device close to you. IP video and Smartphones already offer you this: you can add ratings in YouTube from our PC or phone, tell your friends in Boxee what you are watching, update your Facebook from almost anywhere. So why not from your TV without having to connect and disconnect PCs all the time? If TV is an experience not a device that experience should move with you.

TV is not exclusively delivered on a set-top box anymore but on any device: mobility is about people and people move from place to place and device to device. Viewers now describe their PC viewing the same way they describe their “STB viewing”. This is also a new avenue for IPTV: move from the living room or even the

house to the web and to the world as enabled by widgets delivered directly to the TV screen.

Broadband networks, from optical to 4G to high bit rate versions of WIFI enable this service mobility. In turn the service mobility also creates a need for more high-speed networks. TV is becoming the service that justifies the deployment of more broadband networks as it can be monetized: operators, who need to pay to transport bits, can now develop innovative business relationships for the connected TV experiences.

Finally, but very importantly, is there a role for Social Networks in IPTV? Social Networks essentially define a “group's brand”: who watches what and why. With multiple TVs per households TV viewing has become more isolated but still many shows are better consumed in a group. And with tools that create personal TV listings and DVRs to record them, they can be shared and rated socially. It's all about defining “identity” and “proximity”: adding social networks to IPTV can combine the “lean back” experience of watching with the “lean forward” interactions. Interactive TV has been around for a while, albeit without a real uptake. Are social networks finally giving it its sought after market?

Some pundits have claimed TV is dead. Maybe it is just changing for the better: with its solid integration to the Internet IPTV is now not only connected to a rich set of end devices but is also becoming mobile and of course social.

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REFERENCES

- [1] ATIS IIF, IPTV High Level Architecture, ATIS-0800007, Mar. 2007.
- [2] ITU-T, IPTV Focus Group Proceedings, 2008.
- [3] TISPAN, Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); Requirements for network transport capabilities to support IPTV services, DTS/TISPAN-01042-NGN-R2, 2007.
- [4] M.J. Montpetit, N. Klym, and E. Blain, “The Future of Mobile TV,” to be published in “Mobile TV” A. Cereijo-Roibas ed., Springer, Spring 2009.
- [5] N. Klym and M.J. Montpetit, “Social TV: Innovation at the Edge,” Communication Futures Program Oct. 2008.
- [6] M.J. Montpetit, N. Klym, and T. Mirlacher, “The Future of IPTV,” invited paper, Contel IPTV Workshop, June 2009.