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PERCEPTION tv

Meeting the operator challenge:

Delivering a consistent off net multiscreen TV experience

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How PerceptionTV and Amino have developed a complete cloud-based OTT multiscreen platform to deliver a consistent TV experience to the home, tablet and smartphone

Introduction:

Operators live in uncertain but interesting times. While the main TV remains resolutely at the heart of entertainment consumption, the inexorable rise of multiscreen viewing brings new pressures as they seek to retain, attract and drive new revenues from their customers.

Consumers now have more choice: multiple sources of content – on-demand and streamed live – delivered to any device, anytime, anywhere. With this explosion of content availability, question marks emerge in the minds of the consumer over the necessity to take pay-tv packages – and if they do, how can it become more personalised, flexible and relevant to their viewing habits.

In this white paper, two key players in the industry – Amino and PerceptionTV – examine the key trends in the industry and how the shift to multiscreen service delivery can best be managed by operators not only to meet these new challenges but also to prosper.

The current landscape:

There's no doubt viewing habits are changing. More and more viewing is now happening away from the main screen on tablets and smartphones, with recent reports highlighting:

- 25% of respondents indicated they watch video on a laptop, tablet or mobile on a daily basis *(Source TNS Connected Life Study (2014)*
- 72% of people use mobile devices to view at least weekly, with 42% doing so outside the home. *(Source: the Ericsson Consumer Lab Study (2013)*
- Multiscreen consumption peaks around major sporting events with the Olympics and the World Cup boosting viewing by almost 400% in Q2 2014 year on year *(Source: Adobe 2014)*

The good news for operators is that this move towards "TV everywhere" is driving pay-tv consumption. A recent Viacom report - "*TV Here, There, (Not Quite) Everywhere'* – revealed that 72% of viewers now watch increasing amounts of TV – with a resounding 98% of users saying that TV everywhere adds value to the pay TV subscription – and two thirds of the survey sample confirming it adds "a lot of value." Critically, the survey revealed that users were 93% more likely to stay with their service provider if they offered TV everywhere services.

How operators are responding

So how are operators responding to what is becoming less of a threat and what appears to be a significant opportunity – where declines in linear TV viewing can actually be more than offset by increased consumption of multiscreen services?

Certainly, there is no shortage of innovation – with several operators already offering cloud-based multiscreen services. In discussions with the wider operator community Amino and PerceptionTV have determined a number of key drivers which must underpin service delivery in this new environment. These include:

- A consistent branded experience across all screens is critical
- Highly cost-effective service delivery – particularly for new market entrants
- The user interface has become a vital tool in creating value for the overall pay TV service and by replicating across multiple screens seamlessly increases brand loyalty and the opportunity to upsell this opportunity to customers
- Far from replacing the in-home set-top box, consumers remain very loyal to the home television experience – with linear and catch-up viewing as very much a "family" experience, particularly around major sporting and cultural events

What shapes the Amino/PerceptionTV solution?

Amino and PerceptionTV began working together in early 2014 to develop a new kind of multiscreen solution that would meet these rapidly evolving market demands. Bringing together their deep experience and expertise in IP-based entertainment delivery, they saw an opportunity to deliver a joint solution that would deliver a seamless experience – wherever the consumer might be. In short, "TV as it should be."

The solution is based on three key elements:
- HTML 5 as a key enabler for the multiscreen experience
- Amino and Perception's combined expertise in IP-based entertainment service delivery
- The centrality of the STB and "main TV" to the multiscreen experience

HTML5: the key enabler for the multiscreen experience
The way people watch TV content is clearly evolving – from the simple live linear viewing to include any permutation of OTT, catch-up, nPVR, local PVR, main-screen, second-screen, tablet, smartphone and companion screens viewing that the consumer demands.

At the same time, there is considerable standardisation and industry momentum - across premium OTT content giants, W3C, the Smart TV Alliance and Open IPTV Forum - to evolve HTML5 towards a powerful, feature-rich application environment, providing a common technology platform across all screens regardless of underlying operating system.

OTT service providers such as YouTube and Netflix have already introduced HTML5 Media Streaming Extensions for handling adaptive bitrate content and Encrypted Media Extensions via W3C along with DRM support including PlayReady, MPEG-DASH for adaptive bitrate and DIAL (Discovery and Launch) for launching main screen viewing from a tablet.

When combined with new generation STB system-on-chips with powerful multicore processing capabilities and dedicated graphics processors, HTML5 now offers a future-proof, common platform on which to design and deliver a consistent user experience across set-top boxes, tablets and smartphones in the future.

Amino and Perception: the combined expertise

For Amino and PerceptionTV, this important industry trend underpins the combined cross platform solution to support the needs of this rapidly developing market. The service platform is end-to-end and fully scalable and can be rapidly and cost effectively deployed by operators and service providers concerned by the complexity of live streaming and OTT service delivery.

PerceptionTV: fully automated, seamless delivery

Perception™ is an advanced IPTV middleware platform fully integrated with its own proprietary video server platform. It provides a comprehensive set of features for channel presentation, video on demand, user profiles, social network integration, billing, content packaging and marketing. However, its main competitive advantage lies in the seamless integration of live TV channel distribution with fully automated cloud-based catch-up TV, cloud PVR and VoD.

Integrated catch-up TV is a truly amazing TV viewing experience. Viewers don't need to remember to record programs on a PVR set top box. Nor do they need to shift from the main TV experience to app-store type environments to access catch-up. They simply scroll backwards from the live point in the EPG for up to seven days and can click to watch any program that has been broadcast.
Viewers can also search the entire recorded output of the channels by genre or other metadata field making this the ultimate in personalized TV viewing. Perception's™ cloud PVR functionality enables viewers to record programs and store them indefinitely subject for playback on TV or on other connected devices. Operators can configure the amount of storage allowed and can offer this as an added-value service to users or charge a small monthly premium for it.

A near perfect TV viewing experience across multiple screens, enabling live TV and on demand viewing across, STB, IOS and Android devices, PC's and Macs.

- No more TV guides: all the programming information is on screen on the STB and in the iOS and Android Apps via a content-rich Electronic Programme Guide (EPG)

- Perception's EPG can scroll backwards and select enabled programmes and watch them at the click of a button. When a programme is selected by a viewer a pop up box appears which can include synopsis information. If the programme is currently being transmitted the viewer has the ability to watch the programme live or from the beginning.

- Social media capability: a "*share this*" function on the Apps tweets the details of the show to a subscriber's pre-set Twitter account along with a pre-defined Thumbnail.

- nPVR functionality - enabling recordings to be set from the EPG grid or via the red record button available when watching individual live TV channels

- VOD with multiple library catalogues based on parameters including programme series, genre, language or channel. The content is available in the form of an interactive digital store, where the assets are categorized by type, genre, actors, awards received, or any other parameter that the operator defines.

Amino's A150: the key to delivering user experience on the main screen

The main TV continues to be a central part of the viewing experience, and the era of Smart TVs has sparked much debate in our industry over the last few years about the future of the STB. This is a debate we follow and participate in at Amino, and offered our perspective in a blog post last year see blog post

We can see the attraction, in theory at least, for replacing the need for a STB and developing and deploying a Smart TV app to deliver an operator branded experience to the main screen experience. However, this approach has a number of drawbacks for pay TV opcos when moving from theory to practical real world application.

The Smart TV SDK environment is highly fragmented across different TV manufacturers, giving the opco less consumer visibility on what is essentially "just another app" in a screen of competing services. Likewise, the opco has no control the TV firmware updates in the field and the consumers could be left confused about "who to call" for support should problems arise with their service.

Of course, there are still many households out there with "not so Smart TVs" that the opco cannot reach with a TV app – and for many people purchasing a TV remain very much a "personal thing" rather than an operator imposed choice. Certainly, several operators who have trialled and tested an "app first" approach to service delivery have stepped back from widespread deployment as these key issues have arisen.

So how do these trends shape Amino's thinking when it comes to developing connected devices? The latest platform – the A150/550 – has been very much shaped by the demand for improved performance, enhanced user experiences and the benefits OTT/HTML5 features can deliver in this new multiscreen environment. The A150 is a proven STB to power main TVs in OTT multiscreen deployments, enabling a consistent HTML5-based user interface across TV, mobile and online. Because of these capabilities we can deliver a compelling and rich experience with cloud-based service providers like PerceptionTV.

Conclusions:

The market for cloud-based OTT multiscreen service delivery is evolving rapidly to become a key element in operator service offerings. We hope this white paper has mapped out the current market state, initial operator responses and the key component parts in successful service evolution and delivery. Our view is that there a number of fundamental features that are driving the market:
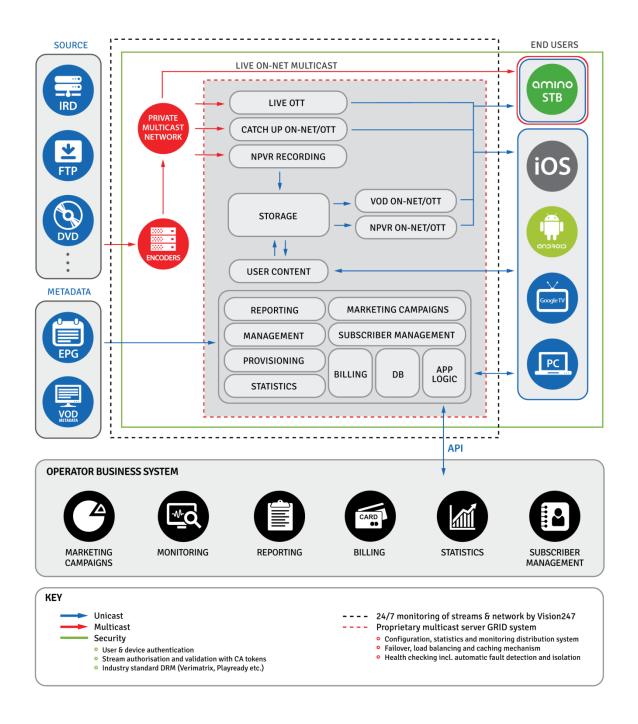
Users want:
- A consistent user experience so that navigation, catch-up, VoD and recording are all accessible in the same user friendly way wherever the customer might be and what ever device is being used
- A service that always works – HTML5 as the industry standard key enabler for the multiscreen experience, delivering this expectation
- The main TV as the family focal point in the home, with future proof confidence as the 4K UHD "big TV" experience arrives

Operators need:
- A platform solution that is commercially viable, rapidly deployable and available in a modular format enabling the services to be launched in line with market growth
- Consistent service delivery – HTML5 being the industry standard key enabler for the multiscreen experience
- Confidence that the technology is ahead of the market and its support organisations are able to deliver a continued roadmap of new services and features in line with customer requirements

Amino and PerceptionTV now have the ideal solution to meet these needs – and enable the delivery of a consistent off net multiscreen TV experience.

Perception Platform Architecture

The schematic below shows the architecture of the Perception Platform from input sources to end user devices. This advanced IPTV middleware is fully integrated with its own proprietary video servers, which results in an exceptionally fast and resilient platform.

To find out more about the Amino/PerceptionTV solution e-mail:
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About Amino

Amino Communications is an IPTV solutions provider with a clear mission – to connect people to the entertainment experience they love. With consumer viewing habits changing rapidly, Amino innovates – developing new products and platforms to enable operators to deploy quality, value-added services that drive customer retention and growth. With over five million devices sold, our award-winning IPTV solutions are deployed worldwide by major global, regional and local operators and service providers. Amino Communications is a wholly owned subsidiary of Amino Technologies plc and listed on the London Stock Exchange Alternative Investment Market (AIM: symbol AMO). We are headquartered near Cambridge, in the UK. Find out more: www.aminocom.com

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About PerceptionTV

PerceptionTV Ltd. is a high growth media technology company providing leading edge multiscreen IPTV solutions to Telco's, broadcasters, content owners and ISPs. The firm provides global sales, support and managed services of Perception, a white label on-net and OTT platform that delivers live streaming TV, catch up TV, video on demand and network PVR. Headquartered in London, PerceptionTV delivers innovative, compelling and state of the art platform products and services worldwide. Find out more: www.perceptiontv.

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