

BD-Live usage: the story so far



Far from a pointless exercise shunned by users, BD-Live features are being enjoyed by growing segments of consumers, if one goes by actual usage data collected and analysed by TODD COLLART, Senior VP New Media at Deluxe Digital Studios. And the BD-Live story has only just begun.

Are consumers utilising and leveraging BD-Live capability that enables a BD player to connect to the Internet? The trend is very positive, especially if one goes by actual worldwide consumer data of BD-Live titles from six Hollywood majors using Deluxe's BD-Live services.

As of May 2010, 100 million BD discs have been inserted into connected Blu-ray players – a nearly two-fold increase since September 2009. The average number of inserts has risen from 4 million a month six

players. What have we learned over the past 6 to 12 months?

- Internet-connected BD players enable a great movie-watching experience. Not only can one watch BD movies and enjoy BD-Live material, but these players often ship with alternative movie services built-in, such as Netflix, Lovefilm, Cinemanow, Amazon, Vudu, and others.

- Blu-ray player compatibility, especially BDJava, is improving. However, many players still ship without integrated local storage – a requirement for certain BD-Live content including streaming video. Therefore, additional consumer education about additional storage is required.

- Player performance can materially impact the overall consumer experience, especially the BD-Live experience. Improvements in areas such as network startup times, local storage write performance, and virtual file system updates need to be addressed in order to deliver a compelling BD-Live experience.

- The costs for developing BD-Live are not only related to launching the product or application. It's one thing to provide a turnkey solution (e.g. 'I can BD-Live enable your disc'), but we are finding that publishers are not necessarily thinking about the long-term maintenance costs (server, bandwidth, refresh...). If the Blu-ray format is successful, these discs will be in the market for at least 10 years. That is one thing I have learned from my InterActual experience which exceeded 150 million 'web-connected' DVD

consumers – it is necessary to maintain these services and capabilities for the life of these formats.

- Trying to replicate what you can do with a game console or in a computer's browser does not translate well into the Blu-ray experience. The BD player is ideal for watching movies – that's what people are doing with it. Therefore, the types of experiences we are trying to deliver, especially via BD-Live, really need to focus on how to enhance that core movie experience. I believe we are going to see studios integrating BD-Live into a broader marketing strategy. I think the best way to maximize the opportunities presented by BD-Live is to focus on the overall consumer experience it can provide.

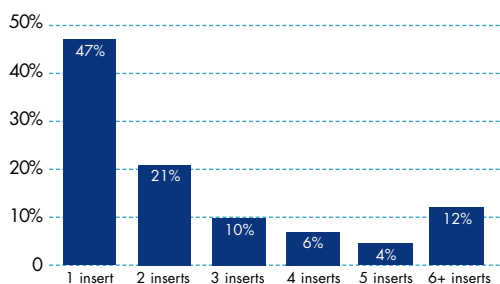
Fundamentally, the best BD-Live experience is one in which the BD-Live technology is transparent and seamless to the consumer. That is, the focus should be on the experience that BD-Live is enabling, rather than focusing on the underlying technology called "BD-Live."

The BD-Live areas in which we are seeing success fall into four categories:

Ensure the disc is BD-Live-enabled

It is not possible to BD-Live enable a disc after it has shipped. If you want to have a disc that has the opportunity in the future to be BD-Live enabled, you have to put some

Percentage of users inserting a BD-Live disc in a player and number of insertions



Source: Deluxe Digital Studios

months ago, to over 8 million a month. And the number of unique, connected BD-Live enabled players exceeded 12 million, as of May 2010.

Of the 100 million BD discs inserted, 60% were from North America, 35% Europe, and 5% from the rest of the world. The prominence of North America in the usage figures is more a function of the fact that the major studios ship their BD-Live titles in the US first, rather than usage patterns. As titles are now released internationally, the balance will likely change.

Based on Futuresource projections, we are seeing upwards of 35% of US-based BD households using BD-Live features. In Europe, the number is closer to 18%. From a BD player perspective, the PS3 console accounted for 98% of connected BD-Live usage some 16 months ago. Now it is under 80%, with the availability and growth of Internet-ready BD consumer electronics



BD LIVE

BD-Live enabling software on the disc. We call this "bootstrapping" which is software placed on the BD disc that can check for additional content and software updates each time a disc is inserted into a web-connected player.

The boot-strap allows our clients to future-proof their discs. They may not have a BD-Live strategy now, but they should make sure that all of their discs in the field participate in their BD-Live strategy once they launch it. A side benefit of bootstrapping is that it offers a mechanism for gathering certain anonymous usage data. For example, it is possible to

experience. Live Lookup provides additional information about cast, crews, music and more. Extra relevant information can be displayed on screen while the movie is running, either on top of the movie or within a window.

Providing timely content can also be especially pertinent for franchise properties. In the case of a sequel, the provision of content from the original disc release can be very appropriate and



gain insight into repeat-viewing behavior, which may be particularly interesting in terms of a specific promotional campaign.

Leverage BD-Live to promote market-relevant content around the movie-watching experience

Film trailers do not need to reside on the disc, they can be served online. After being inserted into a BD-Live enabled player, the disc checks for the latest trailers available online. When it finds new material, the trailers are seamlessly presented to the consumer as if the trailers were coming from disc. Deluxe has logic that automatically detects a consumer's Internet bandwidth and player performance and dynamically determines if a trailer can be delivered, and whether it can be delivered in standard definition or high definition format. Based on the demographic of the current Blu-ray user (early adopter, technology savvy, better network environment), 75% of consumers are receiving trailers in high definition resolution.

Augment the core movie experience to make movie-watching even better

Twentieth Century Fox's Live Lookup is a good example of how to enhance the movie

original *Transformers* Blu-ray disc.

Use the BD disc to communicate with consumers and fans, extending the experience beyond the disc itself

I think you'll see studios leveraging their distribution to provide access to additional movie content, even potentially in the form of electronic sell-through (EST) or video-on-demand (VOD) transactions. *Wolfman* from



Universal is a case in point. Consumers that buy the 2010 BD version have the ability to stream the original 1941 version via BD-Live, including trick play and scene selection.

Universal and others are going one step further and enabling consumers to access content on secondary devices, such as handsets and computers. These studios are leveraging Deluxe's pocketBLU technology, a

leveraged with existing discs. For example, certain additional behind-the-scenes content regarding Paramount's *Transformers: Revenge of the Fallen* was only made available to consumers who bought the

secondary device application already shipping on iPhone, Android, Blackberry, Nokia and PC/Mac. The idea is to extend the BD experience onto a handset; for example, using pocketBLU as a basic remote control to navigate the disc.

An interesting pocketBLU feature is the ability to push the experience off the disc and into an environment more conducive to actual navigation, and at a much lower cost than trying to operate in a BD-Java environment. While watching a movie on a TV, you can turn your handset horizontally and see the movie timeline and time-synchronized bonus content. This is called "timeline scrubbing." The pocketBLU application also offers the ability to purchase music tracks from iTunes.

Studios are also making the on-disc bonus material available to pocketBLU-enabled handsets. Once the network checks that the user owns a legitimate copy of the BD disc, he or she is able to stream or download the bonus content from the web to their handset. They can then take a portion of the movie-watching experience with them. The pocket BLU application will support the ability to take the whole feature with them in the future. So, imagine you are watching a movie or TV

series on your BD player, but don't have time to finish it in your living room. You will be able to pause the BD disc and then resume watching on your favorite pocketBLU device.

In summary, BD-Live is certainly here to stay. With the vast majority of Blu-ray players shipping with Internet capability, BD-Live is sure to play an

ever larger role in content delivery and marketing campaigns.

BIOGRAPHY

TODD COLLART oversees Deluxe's new technology initiatives, including network services (BD-Live, Digital Copy), digital distribution, R&D, and intellectual property development. His team has shipped over 1,000 Blu-ray skus, 200 of which are BD-Live-enabled. Todd was President & CEO of InterActual, best known for inventing "connected DVD." InterActual's technology was the predecessor for advanced interactive features included in Blu-ray. Contact: www.bydeluxe.com