Connect me if you can - IPTV challenged

After many years of promise and double-digit growth last year, IPTV at last seems to be on the verge of a breakthrough. But are subscribers about to switch their loyalty to the open internet? BOB AUGER, President of Newmérique, a digital media consultancy, takes stock of the latest developments.

When Google CEO Eric Schmidt took the stage at the San Francisco Android developers conference in May 2010 he was sure of one thing: television is an important part of the connected home and not just an entertainment island. The announcement that American households will have access to Google TV by Q4 2010 has delighted some industry pioneers, who for almost 20 years have dreamed of uniting the internet and television. But could it also spell an end to the IPTV story, relegating the concept of a walled garden controlled by telecom service providers to a footnote of TV history?

This year's IPTV World conference in London, the sixth in the series, was yet another successful event. It was an endorsement of a maturing industry with a double-digit growth in subscriber numbers in countries around the world. France remains the flagship for IPTV; its 8 million subscribers represent more than 40% of the country's broadband lines and almost a third of the total worldwide IPTV audience.

In the United States, the number of IPTV households grew by 60% in 2009, according to research company Point Topic, which reported that the US entered the New Year with 5.6 million connections. This was helped in part by the growth of FiOS TV, the Verizon Fibre-to-the-Home (FTTH) service, which claimed 3 million subscribers by the end of March 2010.

Has IPTV's time gone?

These figures for IPTV fade into insignificance when set against the global number of internet users, which was 1.8 billion by May 2010. According to data analysts Com-Score, an 80% majority claims to watch video on the open internet. In the UK alone, ComScore reported that 5.5 billion online videos were watched in the year to February 2010, up 37% on the previous total.

There's little doubt that we are all doing it. The boss of YouTube UK, Bruce Daisley, told a recent conference, "Everyone on the planet watches 10 YouTube clips a month." It was a statistical conjuring trick, but it showed that video on the open internet has become part of our lives.

Quality has always been in the eyes (and the ears) of the beholder. Audio from a Compact Disc player is superior to MP3, Betamax cassettes offered better video than VHS, FM radio sounds better than DAB: the list is almost endless. But, however good a format might be from a technical point of view, the ultimate choice of what will and won't succeed is made by the consumer and very often it has little to do with technical superiority.

The best argument for IPTV is the guaranteed quality of service that a managed subscriber connection can offer. A video of a kitten playing with a ball of string, shot on

a mobile phone at 12 frames per second, can attract millions of viewers, even if "buffering" appears on the screen every few seconds.

When the content is more valuable – a feature film or a sporting event for example – users expect a rather better connection and currently IPTV wins over the open internet almost every time. Average broadband speeds are rising, however, at least for residents of urban areas, and streaming video from content distribution networks has reached the point where quality is "good enough" for many viewers.

Connected TV, consumer confusion

The popularity of Over-the-Top (OTT) broadband services such as BBC iPlayer (free to UK residents) and Sky Player (included in the satellite TV subscription) illustrates the problem for IPTV operators: "Content is King" wherever it is found. Now that Project Canvas has been given the go-ahead in the UK, IPTV operators have one more competitor to worry about.

High-street electrical retailers will soon have a whole new aisle, featuring set-top boxes with the Project Canvas seal of approval and "companion boxes" from Logitech for Google TV. These are needed to bring connected TV to conventional receivers, but they will soon be joined by connected TVs incorporating built-in internet access. According to Samsung, up to 60% of their new sets sold in Europe will be internet enabled by 2011 and Sony is working closely with Google TV to bring a range of connected "Bravia" screens to the market.

So, put yourself in the position of the consumer who has just brought home their first connected TV. Many will plug in their existing set-top box from Freeview, Sky or Virgin and continue to watch TV programmes as before. Others will go online through their Blu-ray or PS3, while still using broadcast TV for most of their sport and entertainment viewing. For these groups little will change, at least at first, but they have brought a Trojan horse into their household.

An adventurous few may read the manual, or more likely an on-screen request, and allow their TV to search for a WiFi internet connection. Once they take this step into the unknown, they receive more than they bargained for. A door opens into a world that is neither internet nor broadcast; not always free but not conventional Pay TV either: a connected world offering video on demand that ranges from yet more kittens to premium content and everything else the open internet has to offer. It is not going to happen overnight.

In a recent report the UK research organisation Analysys Mason predicted that between now and 2015 the number of Pay TV households in Europe will increase to 145

million. In the same period, the number of IPTV subscribers in Europe is forecast to grow from 15.4 million to 29.6 million.

According to Senior Analyst, Cesar Bachelet, "New entrants, notably IPTV and pay-DTT operators, are challenging the dominance of established cable and satellite pay-TV operators. There will inevitably be winners and losers, as the various players seek to attract customers from a shrinking pool of potential new subscribers."

Significantly, the potential connected TV audience is absent from the report data, perhaps because of an assumption that Google TV, Project Canvas and other connected boxes will only link to the world of the internet where "everything is free and it's all rubbish"? If this was ever true, it is not now, as millions of users of catch-up services such as iPlayer and Sky Player, Sony's Crackle and YouTube's premium services, among many others, will testify.

Despite Steve Jobs' almost infallible touch when it comes to electronic toys and the success of iTunes in selling music and Apps, Apple TV has bumbled along at the bottom of the sales charts for several years, with an uncharacteristic product that lacks consumer appeal.

At the D8 conference in June 2010 Jobs said "TV is going to lose in our eyes until there is a better go-to-market strategy. No one wants to buy a box. Ask TiVo, ask Roku, ask us … ask Google in a few months." Could it be that, for once, Jobs has got it wrong?

Google TV arrives

Google TV is more than the internet on television, which both Apple and Microsoft have tried and failed to deliver. It is a new platform, not a search engine with big ambitions. Crucially, it is an open platform, much more so than Project Canvas.

The adoption of the Android operating system means that the body of experienced developers needed to bring exciting apps to the platform already exists. Android phone manufacturers such as HTC will enable that essential link between the fixed TV in the living room and the mobile phone.

In partnership with Intel, Google arranged to put the Atom CE4100 processor inside the boxes, providing sufficient horsepower to ensure glitch-free performance, and they didn't stop there. Google has ensured that open source video technology is in place by buying ON2 Technologies and then giving away the licence for the VP8 codec, by-passing the need for expensive licensing of proprietary technology

The list goes on. They invited Sony to make the launch TVs, enhanced Blu-ray players and PlayStations; they gave Logitech the job of producing the "companion box" to upgrade existing TVs; they got the Dish Network to integrate Google TV into its HD DVR; they sweet-talked Adobe by incorporating Flash into the specifications.

With all these key elements secured, Google CEO Eric Schmidt could announce Google TV at the conference in San Francisco, confident that the enthusiastic developer community would eagerly port their Android mobile phones app to the next generation of TVs.

Most company chiefs would have sat back and congratulated themselves on their perfect planning at this point, but Schmidt was not finished yet. He grasped the importance of securing a retail channel that will deliver connected TV to the consumer. Best Buy CEO Bryan Dunn was with Schmidt on the stage in San Francisco to pledge his chain's commitment to Google TV, "And I want one right now" he told Sony boss Sir Howard Stringer.

A good deal for advertisers

One final detail remained to complete the picture. How all this will be paid for. Where IPTV operators have to fund substantial

infrastructure before they can get online, Google TV uses the open internet. And as a platform provider rather than a content aggregator, Google will have no up-front acquisition costs to finance. So, the company can concentrate on what it does best: selling its expertise in online advertising and marketing, based on user "clicks".

Data from the market research company Diffusion Group shows that US advertisers spent more than $80 billion on broadcast and cable TV last year, much of it on scattergun TV spots costing many thousands of dollars. In comparison, Google took $23 billion last year from online advertising associated with its search engine, in return for providing precise information on how many potential customers "clicked through" to the advertiser's web site.

Charges for conventional TV advertising are based on "costs per thousand", an imprecise number that relies heavily on market research to identify who and how many watched a given channel at a given time. According to Diffusion, Google will charge around $30 per 1,000 video viewings and advertisers will know from minute to minute how many times a link has been clicked.

Google has a message for advertisers: "Now your TV advertising becomes interactive… Every advertiser has a website."

It's a refrain that has been heard before, but this time it sounds credible and if Google TV succeeds in taking just 20% of advertising sales away from traditional channels, it will add $16 billion to its bottom line in the US.

Not everyone shares the view that addressable advertising will benefit platform operators. At an Informa Telecoms conference in Bucharest in June 2010, Futures Director at the media buying agency GroupM, Adam Smith, told the audience that, although advertisers may get a return on investment based on identifying a single member of the target audience, "Advertising is about converting a wider audience of potential customers," he said.

However, Smith added that the interest in addressable advertising from GroupM's clients is shifting towards video advertising on the web "I get the feeling that the time for addressable advertising on TV has come and gone now," he said. Could Google TV be the answer that he seeks?

Web freedom is the nail in IPTV coffin
Perhaps there is to be no happy financial ending for Google TV, Project Canvas or competitors yet to be announced. At least buyers of connected TVs will not suddenly find the service fades to black, in the way that previous technology-based platforms have

done – remember Disney's Moviebeam? Once the link between TV and IP is made, viewers might find it hard to revert to conventional broadcasting, with "nothing on" any of the few hundred channels from terrestrial or satellite broadcasters. Free-to-air or not, how can that compare with the open internet?

IPTV as a separate platform may slowly fade away as well, since whatever deals are done, the content on offer from a single telecom operator will never match the possibility of every film ever made available online? This is not about piracy, nor is it about low-quality rip-offs, though both will continue to exist. Connected TV is about maximising the opportunities to sell to the consumer, whether physical or digital.

If IPTV does cease to be a viable commercial proposition, it will not be because the technology turned out to be flawed, but because the ride on the connected Trojan horse turned out to be much more enjoyable than anyone had predicted.

BIOGRAPHY

BOB AUGER was founder and MD of top London DVD authoring house Electric Switch in 1990, then produced over 400 educational DVDs for the Ohana Foundation in Hawaii. He is now head of DVD consultancy Newmérique. Bob is specialising in the range of video delivery technologies. Contact: bob@newmerique.com

BD-Live: an exercise in perseverance

Having just completed U2-360°– At the Rose Bowl's *Blu-ray disc, ANDY EVANS, Founder and Managing Director of London high-end authoring house The Pavement, offers a reality check on the trials and tribulations – and ultimate satisfaction – of producing a BD-Live title.*

Clients worry about costs as soon as you mention BD-Live. They are worried about developing and maintaining a website. The idea that BD-Live material is up there and left stagnating is a real concern to them. They want to sell the disc, get the money and bye-bye.

It was a battle just to boot-strap the disc with a BD-Live link to at least make it future-proof. At that time they struggled to really understand what BD-Live was or what commitment it would be to include it, together with the fact that they did not know what content or features would eventually exist on the BD-Live section. It was not a priority focus for them to get a decision on whether to boot-strap or not. Getting the double disc DVD and single BD-50 out to hit the street date was the priority.

The idea for BD-Live came about because on all the previous DVD titles U2 did there was DVD-ROM content for the computer. Whilst you can include ROM on a Blu-ray, with so few computers with BD-ROM drives, it would be a waste of time and money at this point in time to include it. U2 has a very active fan base generating content that ends up on U2.com, from fans taking cameras to

concerts to uploading pictures and messages. For fans to watch the concert on a DVD and then go to their PC to see this additional material on the Internet is one thing, but to be able to watch the HD content from the Blu-ray disc and then, via BD-Live, to access their own user-generated material, all on their TV set, is another, more exciting, experience which the band eventually has come around

to value. It is the fans who contribute to drive the brand, no longer the band itself.

Having continued discussions with U2 and the management primarily to educate them on what BD-Live is and what it can do, they are getting more and more interested about the possibilities. Starting with simple features like iTracks with user-generated information related to songs popping up on screen and exclusive content, they are also now understanding how far you can take BD-Live. Future ideas to include selling tickets and merchandise, and streaming live material.

Generally speaking, when it comes to BD-Live production, there are internal politics that we see the clients are facing. Who will pay for it? The video production department gets squeezed budgets and the marketing department does not want to spend extra money. They do not seem to talk to each other when we come to discuss BD-Live. This can create a lack of awareness of what they could do with the format and the potential of their own products. That ends up causing delays and mistakes. Everyone is so geared to DVD for 10 years that it is many peoples benchmark for a BD title in terms of budget, costs, and production procedure. But Blu-ray is a different animal.

Extra content is a big issue. Distributors sometimes get a licence for the movie, but little else. They are often not allowed to put up a bespoke website, biographies, interviews, other film bits, or simply do not have the money or internal resources to manage it.

There is another issue on the technology front. Buffering and connection delays are big problems. Consumers are use to inserting their DVD or Blu-ray discs into the players under their TV and get instant access to the film. They can also accept delays and buffering when they use their computers to download video because that is the environment they used to. But they do not expect – and accept – these delays on their living room TV with BD-Live,

and it can be a rude awakening when they first experience it. 'How do you solve that?' is a question I get about it all the time.

It's also a challenge to get clients to push the production of a BD-Live up the priority ladder. In general on many DVD and Blu-ray productions, time is of the essence and clients hardly ever seem to have the time and resources they'd like to have. On the U2 project, we effectively had two weeks to produce, from

design to masters, a double-disc DVD with DVD-ROM material, screen saver, wallpaper, together with a BD disc with four hours of material and boot-strapping for BD-Live.

Future-proofing a Blu-ray disc with a boot-strap during production can cost as little as £500, which will then allow you to activate that BD-Live feature as and when you like once the disc is pressed – or not. Keeping a BD-Live feature active for 12 months with pretty much unlimited text and images and changing or adding in one video clip per month starts at about £3,000 per year, which is in addition to the regular BD authoring budget. That's a long way from the £50,000 pricetag I have heard as expectations for BD-Live from many clients.

BD-Live is not for every title, far from it, but I do think that it can be considered for many genres and applications, and I'd recommend at least looking into it before you release the disc. Looking into it after release will cost a lot more as it means having to repress the discs.

BIOGRAPHY

ANDY EVANS began his career in multimedia solutions and Virtual Reality simulations at the BT Research Laboratories. He then joined post-production facility TVI which he eventually relaunched as a DVD production studio, Stream. Andy left Stream in 2000 to form The Pavement. In 2008, the company opened its Blu-ray division. Goldcrest Group invested in The Pavement at the beginning of 2009 in a bid to develop the company's Blu-ray, DVD, online, mobile and production services. Contact: Andy@thepavement.com