Screen reality 2009

3 screen convergence – idealistic dream or potential reality

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Executive summary

The Screen reality 2009 report investigates convergence across PC, TV and mobile with a view to predicting developments within the sector in 2009. It looks at previous technology-driven attempts at converged services including bringing Internet to the living room TV, mobile video calling and mobile video streaming, and likely developments over the coming year.

Mobile Internet and catch-up TV services are identified by the report as two of the most successful converged services of recent times, and it predicts that services like iPlayer and 4oD have the potential to become some of the first truly successful multi-channel services, converged across the PC, TV and the mobile.

Introduction

Recent history is littered with failed attempts at convergence. They've usually been driven by technology. Companies tried to converge products simply because it became possible to do so. There are lots of companies trying to roll out converged products and services right now, such as Yahoo! and Intel's joint venture to put widgets on a TV and Sony's 'Play TV' add-on for turning its PS3 games console into a video recorder.

Even Obama and McCain were competing in the US Presidential race by exploiting the convergence of broadcast and Internet media. For example, Barack Obama's multi-channel campaign strategy had a massive social media presence to tie into his broadcast messages. This allowed him to reach out to and engage both loyal and undecided would-be voters.

Companies often fail to think about two key important considerations. Firstly, we use products in a social and physical environment and they need to fit into our context of use to be successful. Secondly, the design of products has to take into account human factors and ergonomics. They need to be designed to suit our bodies and senses.

The convergence of TV and online

Satellite TV and cable companies attempted to bring the Internet to the living room TV but this never really took off.

The TV has a unique position in our homes. It normally takes centre place in our living rooms, where we generally spend most of our waking hours at home. Living rooms are one of the few communal places in our homes so living room entertainment is best when everyone can enjoy it. The TV is perfectly suited to this social environment. Watching TV is a passive activity that everyone can take part in together.

Browsing regular websites is a very different type of activity. It's usually a solitary affair where one individual chooses what to look at, reads at their own pace and decides when to jump to the next website. Browsing websites on TV's doesn't fit well into the living room's social context. It's not necessarily something which everyone else in the living room can enjoy. Checking and writing emails or other types of messaging on the living room TV is even more unsociable as such messages are often private. Teenagers are unlikely to message their friends or check their My Space pages in front of their parents.

Human factors – know your users

There are also several human factors which explain why Internet on the TV hasn't taken off:

- Browsing the Internet or sending emails requires lots of interaction but we don't normally have a keyboard or mouse to use in our living rooms

- They're also awkward to use when sitting on a sofa far away from the TV

- Constantly having to switch between looking at the keyboard on our laps and then refocusing our eyes on the TV screen further away at the other end of the living room quickly tires our eyes

Looking at the opposite situation we see that it's become very common to watch videos on PC's using the Internet. A recent Redback Networks and YouGov[1] poll found that nearly half all UK residents who have an Internet connection had watched video online. Watching short clips on sites like YouTube suits the interactivity and short attention span we normally have on the Internet.

Catch-up convergence

However, PC's are also being used like TV's. People can watch programmes they missed on TV by streaming them or downloading them from online catch-up TV services like the BBC's iPlayer and Channel 4's 4oD. PC's are now replacing the small TV's that teenagers used to have in their bedrooms.

Catch-up TV services have hit a chord with users and they now want even greater convergence: to be able to watch catch-up TV in their living rooms and on their actual television sets. However, most people don't have the necessary equipment to connect their PC's to their TV's, or they don't know how to. Apple has tried to make this easier with their Apple TV product but it hasn't been popular. The BBC is also planning its own device to connect TV's to the Internet.

Once a product emerges that does this successfully, watching Internet catch-up services like the iPlayer and Kangaroo (the joint venture by the BBC, ITV and Channel 4 still in development) will be watched in living rooms up and down the country.

However, people don't really want another set-top box or remote control in their living rooms. These services will really take-off when we see widespread consolidation into existing set-top boxes (much like Virgin Media has already done with iPlayer) or into TV's themselves, much in the same way that Freeview has been.

Convergence and mobility

The mobile phone is perhaps the most obvious target for convergence but also has the most examples of failed attempts. Unlike a TV, a mobile phone is personal and we don't share the experience of using it as much with others, so we can use it for whatever we want. It's no wonder then that handset manufacturers and mobile network operators have tried to add every possible functionality on to our mobile phones in the hope of increasing their revenues.

Video calling – the new MMS?

2-way video calling never flourished. It simply wasn't that well suited to mobile contexts of use for several reasons. Users need to look at the screen at the same time as hearing what the other person is saying. They need to use the speakerphone which allows other people to listen in on their conversation or plug-in headphones especially for the video call, which can be inconvenient.

The other issue which phone companies didn't predict is that people often feel awkward seeing each other during a phone call and rarely want to add the video element unless it's to speak to someone they really miss. Finally, while it's convenient to be able to make a phone call while walking it's dangerous to walk when looking at the phone's screen during a video call! Couple all this with the inflated price of video calls, it isn't likely to take-off anytime soon.

Internet on the move

The 'mobile Internet' first arrived on mobile phones in the form of Wireless Application Protocol (or WAP) browsers in the UK in 1999. The experience was staggeringly poor compared to what people were promised by mobile phone operators and manufacturers. The idea was very popular. Here was an example of convergence that users really wanted.

The mobile phone is ideally suited for using the Internet when out and about because we always have one with us. It's perfect for those frequent situations where a person is bored and wants a quick distraction (such as reading the news), or when they need information about where they are (such as a local map). However, many people felt let down by the poor imitation of the Internet available on their phones.

Since then the mobile Internet user experience gradually improved but was constrained by the mobile phone's physical design and interface. Small screen sizes made it difficult to look at content and it was difficult to move around a website using tiny joysticks or directional keys on the keypad. Also, the basic web browsers produced meant that many websites designed for PC's couldn't be viewed when there wasn't a mobile-friendly version. This all contributes to the Office for National Statistics[2] finding in 2007 that fewer than 1 in 5 UK adults used a mobile phone to go online.

The biggest leap forward in mobile-Internet convergence has come from Apple with the iPhone. In February 2008, just 7 months after it first launched in the US, Google was getting 50 times more searches from the iPhone than from any other mobile phone. The iPhone's large screen and multi-touch interface made it easy to view and move around websites not designed for mobile phones. It's a great example of how thoughtful design and good ergonomics can make convergence successful.

In 2009 we will see mobile Internet use will increase significantly in the short-term but the companies that will see most success will be those that have websites specifically designed for mobile devices, rather than just offering mobile to their standard online sites.

Email on mobile phones is another example of convergence which only became popular when the user experience and ergonomics was up to it. People didn't want to type emails using mobile phone numeric keypads or and or 'write' using stylus-based handwriting recognition. RIM (manufacturers of Blackberry devices) worked how to add a usable QWERTY keyboard to a small device and by adding a small keyboard at the bottom of device meant that people could use their thumbs to type more relatively well.

In 2009 email will become more popular on mobile phones as other handset manufacturers and application developers follow the lead of the Blackberry and offer better and better input methods. For example, the launch of the T-Mobile/Google G1 has seen a choice offered between touch screen and keyboard input.

Mobile video – stream or download?

Video streaming has been available on mobile phones for some time. Some operators stream broadcast TV live to handsets over 3G radio signals. This has had low uptake for 2 reasons. Firstly, video quality is poor. The EU has backed a European standard which will help provide better quality by not relying on 3G signals. However, this won't overcome the second, more important issue. Broadcast TV doesn't easily fit with the mobile user's context of use.

At home we plan our time around TV schedules by making sure we're free and in our living rooms to watch a programme when it starts e.g., Eastenders at 8:00 p.m. on a Monday. Most people aren't going to do that when they're mobile, so they'll end up tuning in at random times and part-way through programmes, finding that they've missed half the story line.

Mobile users will want to start a programme when they're ready to start watching, whether it's a short clip while filling some dead time or watching a film on train.

Jupiter Research and Forrester's recent Mobile TV report[3] revealed that mobile TV adoption is still only at just one per cent, but 15 per cent said they would like to record shows and watch them later on their mobile phones. The successful mobile-video services will take this into account. For example, BBC's iPlayer has been popular on the iPhone and streams video over the Wi-Fi whenever a user chooses a programme. It's

now possible to download iPlayer programmes and onto Nokia's N96 mobile phone (and various portable media players) to watch later.

New services like this which allow mobile users to control what they watch and when they watch it will be much more popular than the less flexible services. An application which allows users to download programmes to devices like the iPhone would be a huge hit.

So, we might prefer to be at a football match in person at the stadium or watch it live at the pub, rather than watch a broadcast on our handsets. However, we might be interested in interacting with other fans during the game through social networks and user-generated content. The sharing of such content supports the fan experience, making it richer and more satisfying. Mobile and content providers would be advised to consider the context in which users are likely to use their services and contextualize them accordingly. We believe 'context' will be a key determinant in whether they take-off or not.

Conclusion – the future of convergence

The opportunities for convergence are increasing by the day with new mobile operating systems and platforms emerging, such as Google's Android, and Internet speeds getting faster and faster for both PC's and mobile phones.

Convergence can bring benefits to users. A multi-channel approach can enable users to access or create content in more situations and to do completely new things.

In the increasingly 'on-demand' world we live in it seems that catch-up TV services offer a tantalising example of successful convergence. Already very popular through the PC, many consumers would jump at the chance to be able to use these services through the TV as well, and with larger screen mobile devices like the iPhone now becoming more widespread, the potential is there for mobile too. This creates a real market opportunity for a true multi-channel iPlayer or similar service.

If companies trying to make converged products or services want to avoid some of the previous mistakes, they'll need to consider the context in which they'll be used, take notice of what their users actually want and ensure they continuously involve users throughout the design process.

References

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