



Capitalising on Convergence 2 The blizzard of content

▶ **Intellect is writing a second report on convergence following on from 2005's 'Capitalising on Convergence', to analyse and discuss how the converged market place has changed over the past three years and make recommendations about the way forward. The report will be written in seven chapters, with each chapter being published on Intellect's website, focusing on the seven topics the Department for Business Enterprise and Regulatory Reform (BERR), and the Department for Culture Media and Sport's (DCMS) Convergence Think Tank will be looking at over the year.**

The fourth instalment of the report looks at universal access to high quality content in a converged environment. Is public service content different in a converged world? What is content? In a converged world we believe the whole is greater than the sum of its parts. Like many things when looked at through the prism of convergence, public service content goes from being something straightforward and intelligible to a tricky and multi-faceted entity.



Capitalising on Convergence Chapter 4

1. What is content?

Whilst we can surely all agree that news, entertainment, sports, weather - the things we currently see and recognise public service broadcasters delivering - are all examples of public service content, there is likely to be some disagreement when we come to things like information about schools, health care, transport, indeed the whole 'eGovernment' agenda. Is this public service content? Does the fact that this information in a converged world is capable of being delivered in text, audio and video, across a variety of broadcast and Internet platforms mean that it is public service content? Is it now different?

You can prevaricate on this but the simple answer is yes, and no. The content, whilst more varied, much bigger in amount and produced by a greater variety of organisations, is roughly the same. What is wildly different is the means and efficiencies of its delivery and the citizen's interaction with it. In a converged world it is important and appropriate to think of content in a holistic fashion, as services the citizen wants to use and experience, not simply as something that broadcasters deliver. In the same way as we have learnt to look at a variety of different mediums - books, films, and adverts - as 'text', we must now adapt our understanding of public service content to fit this new age. We must also accept that the citizen's relationship with the content has changed: for so long it was the passive recipient of pushed out content. Now this content is being pulled in, modified, discussed and republished.

In its purest form public service content is about communicating with the citizen.

It will clearly come in different shapes and flavours but information from the local council on bus time-tables, video content about what's on at the local museum or an episode of EastEnders fundamentally still falls into the what the first Director General of the BBC, Lord Reith defined as the purpose of the BBC: to inform, educate and entertain the citizen. Even more importantly they are all funded by taxpayer's money. In our definition public service content is just something that the citizen wants or needs to know: it's about communicating messages and as the communication platforms evolve so does it. So it is different.

And at the same time it's not. In the modern age people have always wanted good broadcast content, readily available public information, and the flexible and responsive delivery of public services. It is just that these things have often been difficult and expensive to deliver. What convergence of digital media is offering is clearly an opportunity to address some of these problems of delivery. Unsurprisingly the BBC has thought long and hard about the effect that convergence has had on its core business and has concluded for them that the change is not to the content itself but to how that content is distributed. The current Director General Mark Thompson, as long ago as 2006 when discussing a technology that the BBC were hoping to bring to market called then the 'myplayer' said 'Content is not different, it is just the way it gets to market is different. On the contrary, technology means that we can fulfil that public service mission more effectively than ever before.'

This is the case not just for the BBC but for all public services. A broader definition of content that incorporates not only public sector broadcasting, but public sector information requires an adjustment of understanding of what content can be, and how it will engage the citizen.

What opportunities and challenges do new media and new platforms present to the provision of public service content?

The biggest opportunities that new media and platforms present to the provision of public service content is reach and engagement. Paradoxically reach and engagement are also the biggest challenges that public service content will have to address. New platforms allow broadcasters and public services to be accessed and deliver products and services on demand. Again we are witnessing the shift away from things being pushed out at appointed times and places by public service providers to being pulled in when and where the citizen or viewer wants. However this poses different opportunities and threats for the two different entities. Let's look at them separately: firstly the broadcasters, secondly the public services.

Broadcasters

For broadcasters the new media and platforms present three major challenges around the number of platforms, the quality of service provision and behavioural changes that these innovations allow and encourage. We will look at them in turn.

New platforms

With the introduction of digital channels on Sky, near universality of Broadband, the launch of Freesat and the ongoing use of DTT, analogue radio, and digital radio the number of delivery platforms has continued to grow at pace over the last 5 years. This growth offers both challenges and opportunities to deliver public service content to the UK population. In the case of broadcasting the BBC has decided to ensure its programmes are delivered over a mixed economy of platforms including terrestrial analogue, digital Freeview, Freesat, Free To Air via satellite, cable, Sky and most recently over Broadband, simulcasting and by use of the iPlayer.

This model is followed to a greater or lesser extent by the other PSBs. However there is a cost associated with this extensiveness of delivery, and questions are asked about the wisdom of license payers money being used in this way. For the commercial broadcasters - apart from their obligations as part of their license - there isn't yet a compelling case to deliver content to platforms that don't have significant viewing figures. The model used by BT in its BT Vision service and initially by Channel 4 in the 4OD service, which couples paid content with public sector content, is a way of offsetting these costs. In the case of radio the move away from AM transmission where listening figures are low, has left certain platforms struggling for audience share. Despite significant growth in terms of household penetration, DAB radio remains in the shade of FM broadcasting which continues to command more listeners and has a higher coverage of the population. For commercial broadcasters simulcasting is prohibitively expensive and this has destabilised the platform. Indeed for tethered listeners, radio delivery by DTT, DTH or broadband Internet is increasing in share.

This question of how audience share is distributed across platforms is a crucial one and will need to be carefully considered in future license fee settlements. It is likely that time-shifted online viewing of PSB content will continue to grow: currently this is a free service that does not require a subscription. This position will need to be reconsidered going forward. Similarly if overall transmission costs continue to rise there will need to be a careful calibration and measurement of the public value of distribution across a number of platforms. Questions like what is the primary method of distribution and for what sort of content and for which segment of the population will all have to be addressed.

Looking forward it is perfectly reasonable to imagine a world where broadcast transmission is reserved primarily for the live 'mega events' where real time viewing is crucial and all other content will be pulled on demand, using the remaining capacity of the broadband pipe as one of a number of delivery options. Since most homes will have access both to internet and to broadcast platforms, the ability to offload popular content onto the broadcast channels should reduce the core network capacity requirement and cost of NGA. These issues, created and driven by the proliferation of new platforms, will need to be examined and planned properly.

Service provision

Today public service broadcasting is carried over platforms with very stringent availability criteria. However, the new commercial converged delivery mechanisms may be merely best efforts level provision, especially following some regulatory changes in Brussels and the likely impact on coverage due to Next Generation Access data rates. NGA becomes particularly pertinent when considering Broadcast TV delivery over Next Generation Access Networks particularly as a digital divide in terms of broadband speeds, if not access, is likely to persist for many years. This fundamentally changes the provision picture when content needs 10MBit/s (MPEG4 HD video for example) but the delivery mechanism for 40% of the country can do this but only at a service level of 90%. A simple illustrative example of this is that only around 80 terrestrial Broadcast transmitters are needed to cover around 85% of the population and this is acceptable to commercial broadcasters. An extra 1,100 transmitters are needed for the PSBs to extend coverage to a population of 98.5% How best to address this gap in NGA and secure a satisfactory level of service provision will clearly have consequences for PSBs.

Behavioural changes

Having any number of different distribution platforms showcases technology as an additive to the viewing experience; it improves, strengthens or alters the experience by allowing more choice. For broadcasters it appears to be a good thing.

Mass audience shows are often necessarily bland in their offering but the more platforms and channels that convergence offers means that riskier, edgier and more inventive shows are likely to be created by public sector broadcasters. There doesn't seem to be a problem (yet) of audience cannibalisation across the different platforms. Whilst the iPlayer continues to grow at an enormous pace, so much so that it is pointless to quote its latest figures, so out of date will they be at the release of the next ones (last month saw an increase from 42 million to 71 million in download requests) it is not yet damaging TV viewing figures and has encouraged the use of other on demand services. The amount of TV viewing has remained pretty constant between 1997 and 2007 at about 25 hours a week per adult. Mass audiences may well be fragmenting but they seem to be exploring more and more quality content in the long tail and the public sector broadcasters are ideally positioned to exploit this trend. This may change as the longer term consequences of this step change in audience behaviour become clearer but it already appears clear that the iPlayer and on demand viewing is part of a complementary rather than complimentary distribution service.

So much for the good news. Time shifting does pose other problems though. Adult content or content with an element of violence is currently regulated via warnings given prior to transmission and the “Watershed” of after 9pm only. This works reasonably well in linear broadcasting but is clearly ineffectual in a non-linear world. Also content is not currently regulated in the same way over all the different delivery platforms and may encourage the idea of restricting certain content to certain platforms. This in turn plays into a crucial area and thorny issue for a PSB: the issue of trust. Any erosion of trust in public service broadcasting would be enormously damaging to its brand and to the continuation of its licence fee. Trust remains a core value of PSBs and a key differentiator in the market, which, at the moment, has the effect of pulling up standards and raising the quality of other broadcasters by throwing inferior offerings into focus. The standards PSBs are set by government and the regulator are high and must remain so. There is the potential in a fragmenting media world to chase audience share and to compromise on rigorous and on occasion, restrictive codes of practice to compete with quicker, less regulated competitors. This should be resisted and a virtue should be made of the maintenance and protection of trust and standards. Once trust is lost with the viewer or consumer it is incredibly difficult to regain.

Public services

For public services online, on demand information allows more citizens to better engage with what they want, when they want. It offers alternative routes to market to meet a diverse range of needs, and greater value for money. However with an increase in reach and a diversifying of routes to market comes the threat of losing well-known and accepted methods of information transfer.

The government has a desire to educate and interact with the citizen on a number of core functions including health and education online, and is well on the way to growing e-Government services, like the vehicle licence renewal, paying ones income tax and TV licence online. However questions remain about whether this one delivery platform will be sufficiently inclusive for the government to achieve its objectives. Recent numbers from Ofcom have about 58% of the population with broadband connectivity in the home and whilst this figure is set to rise, this is not a sufficient level of coverage for a public service provider. Even in countries with the most developed broadband penetration - South Korea and Japan - take up plateaus at around 70% of the population. These 30% who do not have broadband access fall into three main categories. There are those who genuinely cannot afford a computer or the subscription. There are those who are too ill or frail to avail themselves and finally there are those who lack the education or the wherewithal to use the services on offer. Over time many of these problems may be solved as the younger computer and media savvy demographic begin to take advantage of these services. However there is a significant legacy issue that will need to be addressed. The issue of universal access will not disappear based on demographic changes alone and this means that online services cannot replace the plurality of existing service provision.

It is too early to judge whether this manifestation of the digital divide will improve, however it appears that increasing the number of platforms is unlikely to increase the take-up of services. As such it is clear that there are both benefits and potential dis-benefits associated with content delivery over multiple platforms. There will always be a majority of people who will only have access to one platform either on the grounds of availability, cost or simply ease of use. If Public Sector content in its widest form is to be made available to as many people as possible then multiple delivery mechanisms clearly have a vital part to play in achieving this objective. Viewed in this context the potential reach that multiple platforms offer to content providers is an enormous opportunity and a potential threat.

Is plurality of content provision still important and why?

Considerations of plurality fall into three areas. The first is associated with choice. This choice may be in terms of a favoured broadcaster, the diversity of opinion, or the delivery mechanism. Choice is of value to the consumer, but for a broadcaster, with transmissions over multiple platforms, choice comes at a cost. If there is too great a choice of programmes then it becomes difficult for a broadcaster to reach a sufficiently large enough audience to enable him to invest in good quality programming. Resources will be spread thinly, rather than allocated according to audience share and this could lead to a decline in standards. Viewed in this fashion plurality of choice presents significant difficulties to broadcasters.

The second issue that plurality is concerned with is the quality of the delivery. There are a number of permutations of content delivery here including live or recorded, in standard or high definition, and the availability and reliability of the transmission.

Some consumers appear less concerned with the transmission quality: we are already seeing the market stratifying with some consumers prepared to allocate different values to different events. They will accept lower transmission quality in return for a cost reduction but at the same time may be prepared to pay a premium for high quality real time delivery (a live football or rugby match for example). The growth of high definition (HD) sets in the UK has been phenomenal and raises the issue of simulcast in HD and standard definition (SD). The amount of HD content actually available to be viewed by most people has been extremely low. Apart from recorded media such as Bluray DVDs, until the recent launch of Freesat only Sky was transmitting HD TV. Hopefully this situation will improve as both satellite and other platforms extend their HD offer.

The third issue that plurality of content provision throws into focus is the efficiency of accessing that content which, in a competitive market, will lead to consumer choice. Economists will argue that for the market to work well, all three of these elements of plurality need to be in place. However even this analysis is somewhat simplistic. Content varies in value, scope, range, affordability and cost of delivery. The programmes which cost the most to make - a costume drama for instance - may attract a smaller audience than a quiz show that is cheap to make yet will deliver huge audiences. Similarly, Community TV is valued by many as a way of keeping in touch with their local area. However the audience that community TV services in a particular area is likely to be small, so costs need to be managed to ensure there is a suitable rate of return. In an age of multiple platforms plurality is as important as it ever was in providing network resilience but it now comes with the added complication of better availability of content.

In some countries these complications have led to consolidation in the Broadcast market, where fixed costs have been relatively high and the marginal cost of each extra viewer or user is effectively zero. Markets structured around a small number of large players can operate very efficiently, as big players can benefit from economies of scale and scope. This is one of the reasons explaining why there has been a high degree of industry consolidation and a relatively small number of large players in the US, for example, which has a large single market and where there tends to be very little regulatory intervention or indeed concept of PSB. For the UK ensuring that plurality of content provision is maintained remains a priority.

How can we ensure that public service content reaches audiences in a converged world? Is access sufficient?

Identifying a successful route to market is of vital importance to any organisation, providing as it does the method of delivering a product or service to its point of demand. For many years the way public service content has been distributed has been blessed with a stable and well-defined route to market in the shape of citizens accessing information through a small number of channels. For public service broadcasters this meant mass audience linear broadcasting, for government departments this meant core offices with some satellite branches, mail, and occasionally telephonic transactions. The model was primarily a retail one though with citizens visiting 'shops' to access services. And then all change.

Over the last 10 years from having well defined routes to market, developments in distribution mechanisms have provided public service content with any number of existing and new platforms to reach the citizen: in no particular order there is currently the analogue TV platform (admittedly for not much longer), Digital Terrestrial Television, satellite, cable or broadband, analogue and digital radio, text messaging as well as the more traditional mail or 'shop' options. The choice is dizzying but trends are emerging. A retail analogy is an interesting one to explore here: behavioural research is now detailing a new shopping experience where consumers go online to research the product or service they are interested in buying before visiting a shop, or increasingly commonly now, conducting the entire transaction online. This new behaviour is spilling over into how the citizen expects and wants to deal with public services. The products or services are being 'pulled' through by the engaged and informed citizen - in the shape of on demand broadcast services or vehicle licence renewal requests - rather than being 'pushed' out by the core. This has always been the primary promise of first generation convergence: the citizen is empowered by developments in digital technology and equipped to throw off the shackles of traditional public service content. Information, communication and entertainment flow freely across the networks and platforms to the end user.

This is clearly a huge development and, more importantly, a good thing for both the citizen and the public sector. It improves people's quality of life, provides greater value of money to tax and licence payers alike and allows greater experimentation with different types of content across different platforms for the Public Sector. However, as with any disruption of established models there are some painful processes to go through. Whilst individual platform costs continue to fall, it is clear that to distribute content across multiple platforms is more expensive than over a single platform. It will require a rethink across the board as to how the government distributes its resources to maximise access at acceptable cost. It poses a number of challenges to policy makers and is right at the heart of any transformational government agenda. However, its potential is huge.

There is a tendency when discussing convergence to imagine the answer to all things is Next Generation Broadband access is, depending on your preference, fibre to the cabinet or fibre to the home.

As the questions grow, the answer remains the same. How can we ensure the content, be it broadcast or public service delivery, gets out there and reaches citizens in a converged world? Fibre will do it. How do we increase the efficiency and prosperity of the UK? Fibre will deliver those benefits. How can the government better interact with its citizens? You guessed it; fibre is the critically enabling infrastructure to allow this change to take place. Sadly it's not so simple. Whilst it now appears that the debate about Next Generation Broadband has moved on from a question of if it will happen to a question of when and how it will happen, it is unlikely that this is a problem that will be resolved anytime soon.

It remains the perennial debate in the communications industry and the numbers that dominate it are becoming increasingly familiar. To roll it out to about 80% of the country should cost around £16 billion give or take, and depending on the solution deployed - be it fibre to the home or fibre to the cabinet - will take between 5 and 10 years to reach that 80%. Since the anticipated cost of extending fibre to the remainder of the country is likely to be high, this would still leave 20% of the country without this service provision. Due to the laws of diminishing returns the market is unlikely to provide a solution to this problem through fibre alone as the business case does not, at the moment anyway, stack up. Recent thinking promoted by the Broadband Stakeholder Group's report on the economic and social value of Next Generation Broadband has framed the debate in terms of what economists call an 'option value' - in simple terms the value in a policy of wait and see where you can learn from the other choices and deployments that are made elsewhere. The point we have appeared to have reached in the UK is that 'we must do it right, but not right now'.

So if not fibre, then what? How will the public sector content needs of the citizen be met? The UK is already pursuing a policy of a mixed economy of distribution mechanisms. Broadband delivery of services online is clearly going to play a huge part in the future of public service content, both broadcast and in the delivery of public services. These public services will continue to expand onto the two way digital platforms, partly as the demographic profile of the citizen changes and also if they become more confident and (a big "if" this one) trusting of how the government uses and protects their data.

However to reach those parts of the country and society that fibre cannot, will require other platforms to perform successfully: satellite is one that can potentially reach those for whom fibre is not an option and should be able to deliver a high quality, high bandwidth broadband service at an acceptable cost to close to 100% of the UK by geography. It is important to acknowledge that a 'one size fits all' solution is not the way forward. We should consider how best to mix and match distribution technologies to satisfy the citizen's demand.

Again though difficult decisions must be made. It would be wrong to try and make all public sector content available on all platforms: a sensible 'horses for courses' approach should be adopted which means that citizens know where certain information can be found. The discovery of content becomes a problem when the blizzard of information that already engulfs the citizen and viewer becomes too thick for them to see through and make an informed and accurate choice. The citizen wants to use these services but part of their success criteria must be that the electronic guide ensures that they can be easily found and used.

The point to make here is that a certain demographic of citizen in the UK is becoming increasingly tech savvy: the stats on this one are clear and revelatory. BT's 21st Century Life Index Report, which was released recently, examines the digital world as it stands today compared with the visions of the public 10 years ago. It found that the proportion of the population spending more than five hours per week online has doubled in the last 10 years from just 24 per cent in 1998 to 57 per cent in 2008. We can expect this figure to grow again over the next 10 years.

We also know that the UK citizen uses the internet commercially more than in any other European nation with some 40% of citizens saying that they had used online services to make a purchase, Germany was second with a return in the mid twenties. Three quarters of us now use the internet to keep in touch compared to 44% ten years ago.

As the citizen and consumer spends more time and money online they will increasingly expect that the way they transact and deal with the private content will be replicated in the way they access and engage with their public content. This will not be a one way controlled push relationship, but one where the citizen is pulling, discussing and modifying the value from the public sector before republishing the results. It will be dominated by the words of Web 2.0 generation: dialogue, interaction, and community. Public sector content will be at the heart of this evolution but it is without doubt that we are already on a direction of travel that cannot be reversed. Access at this point is crucial and will be provided in a number of different ways. To ensure access to services and content may well require public sector intervention: as communication is becoming akin to a utility, as much a citizens right as access to water, electricity and other public services, particularly because of the importance of universality for broadcasters and public sector services.



Intellect is the trade association for the UK technology industry.

Intellect provides a collective voice for its members and drives connections with government and business to create a commercial environment in which they can thrive. Intellect represents over 800 companies ranging from SMEs to multinationals. As the central hub for this networked community, Intellect is able to draw upon a wealth of experience and expertise to ensure that its members are best placed to tackle challenges now and in the future.

Our members' products and services enable hundreds of millions of phone calls and emails every day, allow the 60 million people in the UK to watch television and listen to the radio, power London's world leading financial services industry, save thousands of lives through accurate blood matching and screening technology, have made possible the Oyster system, which Londoners use to make 28 million journeys every week, and are pushing Formula One drivers closer to their World Championship goal.

In the past 12 months 14,500 people have visited Intellect's offices to participate in over 550 meetings and 3,900 delegates have attended the external conferences and events we organise.

The technology industry contributes over 10% of the UK GDP and directly employs over a million people in the UK.

For further information visit www.intellectuk.org



Intellect Russell Square House 10-12 Russell Square London WC1B 5EE
T 020 7331 2000 F 020 7331 2040 E info@intellectuk.org W www.intellectuk.org

© Intellect July 2008

Author: Sam Ingleby, Digital Communications Programme Manager
T 020 7331 2161 E sam.ingleby@intellectuk.org
W www.intellectuk.org/convergenceconversation