

# Featured in this issue:

Does big data mean the end for audience research? Joe Lewis explores. What's next on BARB's development agenda? Is it taking longer for people to watch recorded programmes?

"Space is big. You just won't believe how vastly, hugely, mind-bogglingly big it is. I mean, you may think it's a long way down the road to the chemist's, but that's just peanuts to space."

Douglas Adams, Hitchhikers Guide to the Galaxy

As Douglas Adams quite nicely put it, space is big. Incomprehensibly so in fact. Distances and concepts previously thought of as big are mere specks of dust in comparison to space.

Now some people would have you believe that traditional consumer surveys are mere specks of dust in contrast to big data. But what is big data? Everyone's got it, it seems. But where does it come from, what does it say, and what exactly should we be doing with it?

Now, working at BARB, I'm familiar with the term big data and of its obvious benefits and potentials. It's not a new concept as it has been around for some years. Circulation figures, sales data and general election polling returns are all forms of it. In times gone by, I worked for the Office for National Statistics and used big data from national insurance returns to calculate household income statistics for the treasury. Believe me, that was a big dataset.

Big data is not something that has suddenly appeared, although the road to get to it has now been nicely paved. I refer, of course, to digital consumption and access.

The continued proliferation of IP delivered services now offers a wealth of real time, census information on purchase and consumption points. In a media measurement world, this means that it is possible to see the actual number of devices accessing content and what was delivered. So there we have it, no more 95% confidence intervals - goodbye sampling error, we don't need you anymore.

Given all this great census based information, surely we don't need surveys then? Well, of course if your census information explains all avenues of consumption and you know and understand who



it is that is consuming them, then no you wouldn't. But it doesn't and here's where we at BARB must put a bit of a reality check in place.

The majority of television viewing comes from over the air transmissions with no census information or return path datastream available. This consumption is completely anonymous to broadcaster and advertiser alike. If you go home, switch the TV on and watch something on Freeview, no-one will automatically know. And additionally, no one will know what it was you actually watched.

Some will argue that existing forms of television measurement are in danger of becoming out of touch with the real world. But it's not that BARB hasn't joined the real world. We very much work in the real world, balancing the hard realities that need to be faced on both sides of the argument.

Firstly, let's look at the Olympics. The BBC put on a very impressive offering, both via the television set and via its online services. The Olympics drove a bumper month for BBC Online with traffic to its services at levels never seen before. I'm sure most of us reading this enjoyed the great services being

delivered. I know I



The BBC reported that some 106<sup>1</sup> million requests for online coverage Olympics were made during the games. That is a very impressive amount of

viewing in only two weeks and is based on actual data received back to the BBC.

In terms of measurement, this is clearly an example of big data possibilities, and a very exciting one at that. But what about television? How does that compare with TV viewing as a whole? Well, at BARB we don't traditionally use terms such as requests although an equivalent would be to aggregate the 1 minute reach of each and every BBC Olympics programme event.

If we did this over the same period, what would we get as an equivalent to requests? The answer is that, during the Olympics, there were 2.3 billion BBC Olympics programme BARB video views to the television set. So in this case it seems that census based measurement captured less than 5% of all viewings.

This example shows the clear disconnect of the total universe consumption and that explained by census IP based measurement (aka big data). Until content is delivered nearly universally via this method there will always be limitations on what is being measured, no matter how granular and impressive that measurement is. As an industry we need to be aware of this and clear on the substance. Otherwise we are in danger of both overstating the significance and, more disturbingly, misinterpreting the insight.

Secondly, we need to know who was watching. This seems like an obvious question, but is it being asked? Returning to the BBC Olympics, who made these 106 million requests? What was their age, their social grouping, do they have children, what ethnic background are they from? Do we indeed care?

Of course we care and the BBC audience measurement team go to great lengths with a variety of additional bespoke surveys to find out just that. Simply put, we will never get this level of information from the raw census data itself. Goodbye reach and frequency.

So, am I some sort of luddite, standing in the way of progress? Perhaps I am like Arthur Dent, Douglas Adams' reluctant hero who was ignorant of mankind's impending doom? Maybe big data advocates are like the dolphins who heeded the warnings, moved with the times and left the rest of us behind with the immortal words "so long, and thanks for all the fish"? Well, pragmatism is a better description of our approach. I am as keen as the next person on the benefits of big data, it interests me greatly and I relish working with it. Yet I can't help but wince as protagonists claim it is the answer to all and everything for media measurement. It's simply not the case and, given the scale of industry investment which is made off the back of BARB numbers, it's critical we don't get this wrong.

But what of sample surveys I hear you ask? Knowing the demographics of a sample is all well and good but where does that get you when you're trying to measure consumption in a niche and fragmented world? After all, isn't it the case that BARB measurement is already littered with zero rating minutes for channels big and small and this will only be exacerbated further with the more services and delivery mechanisms on offer?

These issues are significant for us at BARB and ones that we are addressing. But it's not simply a case of replacing one form of measurement with another. There is a third way and its one BARB has been working towards for some time.

It is clear that samples would need to increase significantly in order to accurately capture and report all forms of media consumption in the digital world. It is also clear that current big datasets either only explain a small part of today's reality, perhaps existing in multiple different forms and places with little care as to who it is doing the consuming.

The alternative is that BARB is actively pursuing the ability to integrate additional datasets into its gold standard survey data with the objective of delivering unified measurement. This will allow accurate, granular reporting of viewing across the fragmented digital ecosystem (based on census information) but with behavioural insight and context gained from knowing who is doing the viewing (survey based).

Unified measurement can only come from a measurement design that dovetails both sources of information, making them even stronger when they are put together. A critical component to this solution can be seen in BARB's plans to rollout Kantar Media's Virtual Meter software to a further 500 homes on its panel (on top of the existing 100). This software will allow the future integration of survey consumption of television content via PCs, laptops and in time tablets, with site centric data. More news on our future plans can be found in the What's next? section of the BARB website.

Joe Lewis, Research Manager, **BARB** 



(1) Source: http://www.bbc.co.uk/mediacentre/latestnews/2012/ sport-online-figures.html

# The BARB agenda - what's next?

Throughout BARB's history, television broadcasters have used new technologies to enhance viewers' enjoyment of their favourite programmes. This story of continuous progress includes improvements to picture quality, delivery of a greater choice of channels and making it more convenient for viewers to watch programmes at a time that suits them.

In parallel, BARB has pursued the progressive development of its audience measurement system. Our strategy has been unwavering. Put simply, it is to measure and report all television viewing that takes place in the home.

So what's next on the agenda?

The internet revolution of the last 20 years has been the source of many innovations. Information delivery through a telephone line, touch screen interactivity and intuitive content apps are notable in that they are starting to have some effect on viewers' relationship with their television sets.

UK broadcasters and platform operators have built on these features of the internet in compelling ways. TV Player apps and EPGs that allow viewers to go back and forward in time are prominent developments to help them watch what they want at their convenience.

BARB's priority is to identify new measurement techniques that allow tracking of these new forms of viewing. Equally, we need to recognise the enduring importance of established patterns of viewing behaviour. While the distribution of television is now completely digital, people continue to follow viewing habits that were formed in analogue times.

So the challenge is to embrace new means of measurement and reporting that can work in tandem with tried and trusted techniques. At the same time, we need to keep a focus on ensuring that the quality of our reporting meets the industry's expectations of the gold standard that we provide.

In this context, BARB has three strategic development priorities.

### Going beyond the television screen

Television screens continue to dominate the nation's viewing, although the use of computer screens has been on the rise. This could be a desktop, a laptop or perhaps a more mobile device such as a tablet or smartphone.

Earlier in 2012, BARB established a programme of tracking viewing through desktops and laptops using a web-TV meter that has been developed by Kantar Media Audiences. Installing these meters on computers in our core panel homes will deliver new insight into how viewing is taking place across different screens in the home.

Following an extensive programme of work from proof of concept onwards, BARB is committed to rolling the web-TV meters out to 600 of its panel homes. As the rollout of the technology continues, the industry is determining reporting protocols in advance of the results being published.



Alongside this established development, BARB is actively considering ways in which this capability can be extended to include viewing through tablets and smartphones.

### Going beyond seven days

Digital technology has made it easier for viewers to record their favourite programmes on occasions that they know they can't watch them live. It has also made it possible to watch programmes that they forgot to record or, perhaps, didn't realise that they wanted to record.

For many years, BARB has been a global pioneer in reporting viewing that takes place after the original time of transmission. Seven day consolidated ratings are seen to be the gold standard definition of audience levels to programmes and commercials.

To take our service forward, BARB is in the final stages of determining how we can report on viewing that takes place more than seven days after the original transmission. Proof of concept and pilot work has been completed to the satisfaction of BARB and our underwriters. The focus is now on establishing how the reports can be produced most effectively within the context of established data delivery timetables.



### Working with other data sources

Many of the new forms of television are characterised by their use of internet protocols. While this form of distribution may represent a relatively small proportion of television viewing now, we have to recognise the changes in data delivery speeds through both broadband and mobile networks. This is likely to make these types of viewing experience more attractive and more common.

The opportunity this provides to BARB lies in the metadata that can be embedded in the programme and advertising content delivered through this platform. Collection of this information will not reveal who is watching, but it will accurately identify the number and duration of viewing sessions.

Project Dovetail is being launched by BARB with the objective of bringing this site-centric data together with the viewing data that comes from our established panel of homes. This will make the most of the complementary strengths of the two sources of insight through an integration process that leads to unified audience reporting.

This is an important project in the long-term development of television audience measurement. We anticipate having more news on next steps in the project during the first half of 2013.

We welcome conversation about our future developments.

Please contact justin.sampson@barb.co.uk to let us know what you think.





# Is it taking longer for people to get around to watching recorded programmes?

Most analysis into time-shifted viewing focuses on what happens within seven days of the original broadcast. What is perhaps less well known is that BARB also publishes information within the disaggregated viewing files that shows time-shift viewing that takes place beyond seven days through Sky+ boxes. Looking at this over time makes it possible to see how much additional viewing takes place outside of the seven day reporting window and to consider whether the playback tail is growing.

The first chart shows the percentage cumulative of Sky+ playback mapped back to the day that the broadcast programme was recorded. We've looked at three snapshots that cover all time-shifted viewing during a 4 week period in September/October in 2008, 2010 and 2012. It does not include any on demand viewing or content that was recorded but never watched back.

Looking firstly at 2008, we can see that 89% of all Sky+viewing was played back within seven days of broadcast. Extending this to 28 days we saw that 97% of all playback

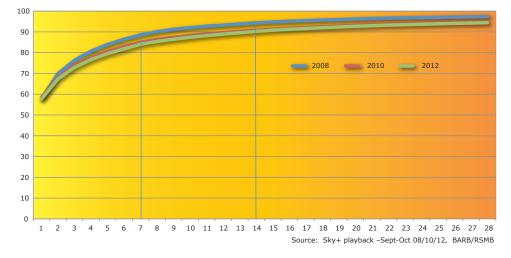
viewing had taken place within this time.

When BARB and RSMB revisited the analysis in 2010, it could be seen that there was a decrease in the proportion of content being consumed within seven days. 85% of all playback had taken place so that it could be included in consolidated seven day figures, with the proportion rising to 95% playback viewing within 28 days of broadcast.

As we revisited the analysis this year, there was an expectation that there might be more evidence that it is taking longer for people to get around to watching programmes they have recorded. However,



% of all Sky+ playback by length of time since broadcast



it does not seem to be a clear-cut case. While the amount of playback within seven days has decreased to 84%, the shift is marginal compared to the change seen between 2008 and 2010.

There are a variety of possible reasons for this slowdown. It may be content related or it could come about due to differences in behaviour between early and late adopters of Sky+. In terms of measurement however, it suggests that BARB's seven-day consolidated ratings are capturing 84% of all Sky+ playback. As we prepare to publish viewing up to 28 days from all devices, the proportion of playback that we are reporting could increase up to 94%.

There are, however, interesting differences when looking at different types of content. The chart to the right highlights the amount of Sky+ playback viewed within seven and 28 days of broadcast by channel genre type.

Understandably, sports and news channels see the most playback viewing within both seven and 28 days. By the latter point, 99.4% of recorded sports content has been watched, with the corresponding figure of 99.8% for news. Children's channels and movie channels have the largest time-shift tail with, respectively, 24% and 19% of playback viewing taking place outside of the current seven day reporting window.

# 77 days 28 days 95 90 85 80 75 70 65

Entertainment

Other

Music

% of Sky+ playback by channel genre

Source: Skv+ playback 17th September - 14th October 2012, BARB/RSMB

Documentary

All this data is available to be analysed within the published respondent level data files and only relates to playback viewing via Sky+ boxes.

Childrens

For more information about this and other types of analysis, contact: joe.lewis@barb.co.uk.

# You watch it, we measure it

The BARB website has undergone a redesign and we welcome your thoughts on the new look. Check it out at www.barb.co.uk.

The restyled site consists of four sections: viewing data, what's new, what's next and resources. Within viewing data you will find everything to do with audience figures - the weekly viewing summary and the much used top 30 and top 10 programmes, along with the monthly data and the quarterly channel reach reports. What's new includes our latest news and bulletins (restyled What's new, What's next) with an archive section for past press releases and bulletins. What's next summarises the priorities that we are focusing on to ensure that the measurement of television viewing keeps pace with developments in how viewers can watch their favourite programmes. The resources section holds a vast amount of information for you including panel facts and figures, TV facts and reference documentation.

There is no longer a separate Subscriber Only section of the website. Instead restricted sections are contained within the relevant sections of the site. So if you are a BARB user and want to have free rein to all the content, look for the login link on the home page. This will ask you to enter your email address and password, which should be unchanged from those you used to access our old site.

If you don't have access to the restricted sections and are a BARB user, contact Sarah Mowbray on sarah. mowbray@barb.co.uk who will forward your company registration key and details on how to register.

Please do go and look around the new look BARB website and let us know what you think.



### **Letter of consent**

Thank you to those of you who have returned their letters of consent to the 2013 rate card (and terms and conditions of use). For those that haven't, please return two signed letters, with your company details included, along with the licence(s) applied for, to BARB - the deadline was 7th December, so a swift response is important.

Contact sarah.mowbray@barb.co.uk if you need any further information.

