

# A Broadcasting Revolution



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# Mining the data well

More personalised information about viewers is available to broadcasters than ever before. It is vital they tap into this rich seam to offer targeted services – or risk being left behind.

Never before has such a wealth of customer information been available to guide broadcasters' decisions as to what they commission and when it plays out, as well as enabling advertisers greater opportunity for targeted promotions – yet the industry remains in 'the foothills' when it comes to drawing on the material at their disposal. We are experiencing a paradigm shift in consumer behaviour, with far more data available about what individuals watch and when, opening up the opportunity for genuinely personal engagement. But, says JP Rangaswami, chief scientist for CRM business Salesforce, most broadcasters continue to operate at a generic level, harvesting information about viewers from panel and survey-based data.

"We previously only understood customers by their prior behaviour so neither their current activity nor their intent could be measured. And even the switch to cable and satellite platforms only allowed broadcasters to monitor the programmes households were watching – not who was there," he explains. "Fast forward to today and the data about the choices made by individuals and the feedback loops is available at a personal level."

While Rangaswami paints a gloomy picture of a TV industry broadly locked in the past some UK broadcasters – notably the BBC, Channel 4 and Sky – have been at the forefront of tapping into consumer data to bolster their relationship with viewers.

They have taken note of the benefits of gathering and analysing consumer data reaped by their emerging pure-play rivals such as Amazon, Netflix and YouTube to start delivering increasingly personalised experiences.

At the same time as allowing them to provide increasingly compelling, stickier consumer experiences they are also responding to growing demand from advertisers to offer their clients more laser-targeted solutions for their brands. It was a trend spotted by the UK TV industry in 2011 by publicly-owned, commercial free-to-air broadcaster Channel 4, when chief executive officer David Abraham dubbed data "the new oil." He kick-started a process that has included creating a new role for Gill Pritchard as director of audience, technology and insight and within three years C4 has built a database of more than 10m registered viewers.

"We've been able to use the scale of the database to have a new and more direct relationship with our viewers and to offer our advertisers new and innovative ways of better targeting the audiences they want to reach," Abraham said in February as the broadcaster hit the significant milestone. "In the next phase of our strategy we want to further unlock the behavioural insight the data gives us to help add greater insight to our creative processes."

Abraham said in February as the broadcaster hit the significant milestone. The database C4 has built up includes half of the UK's 16-24 year olds. It has been collected via its video on-demand service 4oD. Visitors to the 4oD service online are required to enter information including their name, date of birth, gender, postcode and email address to view programmes in the broadcaster's archive.

User activity, such as the shows watched, length of time spent viewing and customer journey is then tracked. According to C4 chief marketing officer Dan Brooke, this provides C4 with a comprehensive insight about each individual visitor.

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"By its very nature broadcasting has traditionally been about one person sending out a message to millions of people," says Brooke. "What we now have is a return path coupled with much more granular information about viewers' behaviour."

Meanwhile pay-TV platform and channel owner Sky is also ramping up its use of data around its 10m subscribers in line with their expectations. According to director of strategy and insight Lucien Bowater, the evolution in data is being matched with a cultural change in which consumers increasingly expect businesses including broadcasters to become more pro-active about the data they hold.

"There is a real shift in what customers are expecting," he said. "They want us to use information and insight to steer what we offer and improve our content and services and if we don't they're going to be disappointed."

Sky gathers data via three methods: publicly available demographic information; by collecting information from its set-top boxes and customer interactions; and via traditional research surveys.

Growing usage of cross-platform services is also helping to drive the steep change in the volume of consumer data being collected by broadcasters, according to Rangaswami. He points to the development of mobile and tablet apps which allow people to control which channels they are watching on their main TV, set remote recordings and view video content. This array of information from logged-in individuals opens up the opportunity to mine huge levels of granular data about individual's viewing habits.

"The smart mobile devices are encouraging people to register. Suddenly, whereas previously information was only available at a household level, broadcasters can now know what individuals are watching," says Rangaswami.

"Now we are not dealing with a household as an entity but each person. And on top of this you can also map their behaviours – learning when they are time-shifting content and where they are place-shifting from."

C4's Brooke says the impact of the data has "revolutionised our organisation". The broadcaster has used the data gathered to modernise divisions across its business from sales and marketing to content commissioning.

## Advertising

By tapping into the rich seam of consumer data C4 is able to provide advertisers with much more detailed information about viewers which in turn allows brands to target individuals more effectively. As media agencies become increasingly hungry for targeted solutions and improving the return on investment generated by the campaigns they run, C4's advertising has been one area to have benefited from some of the most tangible initial wins from the data available.

"If you're not buying advertising on 4oD based on our data then effectively you're buying it by genre which is a relatively crude way of doing things," Brooke says. "And while TV advertising revenues have not declined they have come under increasing pressure. Data undoubtedly reinforces and protects our core business of selling spot advertising."

C4's increased ability to deliver personalised campaigns has allowed the broadcaster to unlock additional revenue from advertisers which would previously have been spent with other data-savvy rival online media channels.

"Highly targeted ways of buying video ads means we are seeing growth rather than cannibalisation of our TV ad sales," Brooke says. "The new technology is allowing us to dip our bucket into other revenue ponds in a way we haven't been able to do in a long time."

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Over time C4 expects to serve registered viewers watching live TV via connected sets with targeted ads. "That is when things get particularly exciting and we will get a genuine revolution," he adds. "Linear TV is where the vast majority of consumption occurs."

Sky has also made the greatest practical gains in its advertising division. Its targeted AdSmart service, signed up its 100th client in March. Clients including American Airlines, Audi and Tesco, have run more than 700 live ad campaigns targeted according to a household's profile and location.

The system will, for example, simultaneously serve a young couple an advert for a sports car, a family an SUV and retired people a saloon in the same commercial break.

And as well as unlocking more revenue from existing clients, it has opened up the opportunity to win new business from local advertisers which have previously been reluctant to advertise on TV due to its generic breadth. Local businesses including private healthcare company BMI Hospital, Wessex Garages and Hampshire Ford dealership, Hendy which had previously decided country-wide TV advertising was impractical for them are among the partners to have signed up.

Seeking to build on what has been a profitable move, Sky signed a partnership with regional publishing company Johnston Press in May to super-charge the AdSmart proposition. The aim is to tap into the publisher's 1600-strong sales team, with contacts with an array of small and medium sized businesses, to offer its clients the ability to air ads aimed at their target demographic.

The same principle is being used to promote Sky's own services and TV shows. At an aggregated level the data is used to inform whether to advertise a Sky Atlantic or a Sky Living show during a Sky 1 show for example.

"If we were going to run a promotion for Sky Broadband but you had signed up last week we would use that time to tell you about some of the functions and features of the service you had just bought instead," Bowater adds.

## Commissioning content

While both broadcasters' greatest gains have been in advertising they have one eye firmly on the potential impact of a comprehensive consumer database on their content strategy. While the panel-based Barb audience measurement system will continue to provide a certain level of data to help inform content commissioning decisions, Brooke describes C4 as being "in the foothills" of exploring what shows are ordered and when they air.

"The extra knowledge we have about our viewers, and their likes and dislikes, will inevitably have an impact on scheduling and to a certain extent on what gets commissioned," he says.

Sky's content commissioning team is also taking an increasing interest in the viewers' data Bowater's central division holds, although it too remains at a relatively formative stage.

"This is a really interesting area and undoubtedly we're starting to get to the situation where this information can be an input. The content commissioning process will never be based entirely on an algorithm but for the content teams to have more information when making these decisions is great. It's a whole new world for them," he says.

"You have to validate it at each step and learn to trust it. There is cultural change involved as well but we are moving forward."

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## Social layer

Data-led content commissioning may initially take the form of different shows being piloted to distinct groups of people to see which version generates a more favourable response, according to Rangaswami. "It is technically possible for broadcasters to simultaneously trial the same pilot with two different endings in parallel before working out which got the higher traction and generally releasing that version." He says that such an approach can also be adopted by brands as they create increasingly sophisticated and editorially rich adverts.

On top of this, social media can be overlayed to fine-tune the groups of individuals which participate in a trial. Having like-minded users together into communities allows for more targeted initiatives.

Rangaswami likens it to a finessing of the traditional "sledgehammer" Amazon-style 'if you bought X you might also like Y' recommendations because of the relative simplicity of that engine. The online retail giant's system is unable to distinguish when you buy a gift for a family member with completely different likes, for example.

"One of the most powerful things about any community is the ability to make intelligent recommendations," he says. "You have a well-defined market you can sell services in to."

"Fine tuning is only possible when you start creating 'birds of a feather' communities because there is a selection bias you want. A broadcaster has the ability to have a question answered or piece of content tested by a particular group of people, such as all of those who watched the House Of Cards premiere at midnight for example."

Social media, fed by data, can also be used to promote TV shows more effectively, according to Rangaswami.

Its growth is creating a "transformational shift" as increasing numbers of people share forthcoming recommendations, what they are currently watching and links to Video-on-Demand (VoD) content with their networks of friends online.

This data can be paired be with consumers' actual actions, via mobile devices and the shows set to record on their set-top box to offer a comprehensive insight into their habits and preferences.

"Target the people who make suggestions to which people listen, whose tweets get favoured and retweeted. This is kind of viral movement is the smartest way to get volume," Rangaswami says.

Services such as pay-TV platform and broadcaster Sky's Twitter recording tool #WatchOnSky, which launched in April, aims to tap into this trend by allowing its customers to watch or record TV shows by clicking on icons which appear in tweets.

The service enables Sky's 3.7m Twitter followers to open picture links embedded within tweets to either jump to IPTV service Sky Go or send a remote recording request to their Sky + box. The broadcaster is likely to be tracking the usage carefully.

## VOD / EPG

Data will also help improve broadcaster's VoD and The Electronic Program Guide (EPG) services as they evolve into more sophisticated offerings. Rather than look to data to inform commissioning decisions in the short-term C4 is more likely to serve the same content via 4oD, adapting the service according to the profile it holds on the individual.

"Before too long when you visit the 4oD homepage it will be different from what other people see," says Brooke. "Like any business in any sector the more you know your customers the better you can improve the quality of what you offer to them."

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For example visitors who have previously watched the sitcom *The Inbetweeners* will be presented with a homepage which highlights student comedy *Fresh Meat*.

The BBC is among those eyeing the opportunity to personalise its VoD through its iPlayer platform, with director general Tony Hall making it the focus of his first major public address in October. His vision is to allow audiences to take ownership of the way they engage with the corporation's content.

Hall is urging the BBC to forge a "much closer relationship with audiences" and pledged a series of initiatives that will help viewers and listeners identify with the broadcaster as "my BBC".

"We should be treating them like owners not just as licence fee payers," Hall said last autumn. "People should not be saying 'the BBC', but 'my BBC', 'our BBC'. Our audiences demand to be involved and expect to participate. In the future they will talk to us and we will listen."

Chief among the director general's proposals is an ambition to supercharge the iPlayer. The BBC wants to extend the catch-up window from 7 to 30 days, subject to BBC Trust approval, whilst new functionality will be introduced to allow for a more bespoke experience when using the VoD service.

Separately the data also feeds into the changes made in March to Sky's EPG with the shake-up incorporating a better recommendation engine based on households' Sky+ Planner and downloads. It also informs the content the broadcaster makes available on-demand.

"We prioritise what programmes we offer on catch-up and boxsets by better understanding viewing behaviour," said Bowater.

Sky added 600,000 connected homes over the previous three months, taking its total base to 5.3m from 2.3m the previous year.

Chief executive Jeremy Darroch claims that these subscribers consumed more content, were more loyal and were more likely to recommend Sky.

"VoD accounts for 5% of viewing in our connected homes. If it was a channel, it would be the third biggest channel in those homes," he says. "Increased connectivity is transforming the customer experience."

The broadcaster is also reported to be developing a set-top box which will allow subscribers to record programmes in the cloud enabling them to be accessed from any device. A dedicated unit, dubbed Project Ethan, has been established to develop the set-top box which would store the Sky+ within a central data centre – the cloud – and make available across any device. This would allow Sky subscribers to pause what they are viewing on one device before continuing to view on another device at a later time – as well as crucially position Sky a step closer to the data about its subscribers' viewing habits.

"By starting people in a different place and showcasing the full range of services you get from Sky we will benefit from greater breadth of content consumption and greater value because we have made it easier for subscribers to access the services they love," says Darroch.

"In a connected home, total consumption of TV goes up. And connected boxes open up new revenues – such as Sky Store and technologies like AdSmart. They lay the turf for new, incremental revenue streams."

Rangaswami agrees that connectivity underpinned by data opens up wider commercial opportunities. Groups of friends who are simultaneously watching a concert or football match on TV can be offered a discounted bundle of tickets to a forthcoming event – if the broadcaster identifies their shared interest through the data which is available via their social network and registered device.

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"No marketing in the past could have figured that out because socio-economic targeting based on postcode, gender and age are very crude ways of segmenting markets," he says. "The broadcaster's ability to be aware of and react to make offers in line with the content becomes very interesting."

The risk if broadcasters fail to react to the opportunities to tap into data about viewers is that they become increasingly outdated, according to Rangaswami.

"The TV industry is in the stone age in comparison to other digital media. When I look at ways in which we have choice in music, film and online video sharing sites data mining is taken for granted."

Rangaswami points to the ability to subscribe to channels, like or dislike content, comment, share, view a variety of most-popular lists and receive recommendations as integral elements of any emerging online business.

Linear viewing and ad revenue may still be holding up, but he warns that as live broadcast loses market share to time and place-shifted viewing, a "cliff edge" begins to appear in ad revenue and it becomes increasingly vital broadcasters cater to an audience which expects increasingly personalised services.

"But like Skype – it's a matter of time. Now everybody pays Skype – 10 years ago no one did. Today's new entrants will become tomorrow's incumbents."

While there is undoubtedly a cultural shift that needs to be overcome broadcasters are benefitting from positioning their data divisions at the heart of their businesses and starting to reap rewards from the ripple effects. One key asset they have is trust. The heritage of the medium and strength of their established brands can be drawn on to engage consumers who are more likely to buy into any resulting service improvements."

Like the phone companies, broadcasters have dial tone – you switch on your TV channel and it works. It is reliable. As YouTube or Vimeo try to muscle in the current broadcast regime, the TV channels have a good relation with their customers," Rangaswami says.

Broadcasters are able to benefit from the increased levels of personalisation consumers expect from digital services to refine their own offerings in more targeted ways. And as their content budgets, advertising revenue and the battle to secure eyeballs becomes more pressured so they are more likely to actively develop more intelligent solutions across their businesses.

"There is no point having all this data if you are not able to tap into it to build better services, sell ads more profitably and generate higher retention in your customer base in what is becoming a commoditised environment," says Rangawami.

The broadcasters at the forefront of the data revolution have emulated the success they have seen from their emerging online rivals, such as Netflix, and placed data at the heart of their organisations.

More information about viewers is available than ever before and from an expanding number of sources. Collating this expanding wealth of information in a central location, from which it can be accessed by divisions across the business is critical to its adoption.

And the technology advances which are driving the paradigm shift also mean it is increasingly straightforward to gather and manage the expanding data pool centrally to drive a joined-up solution.

A range of other industries, from music to retail and publishing, have grappled with the need to understand their customers better and personalise the services offered to an ever more demanding customer base.

The maturity of the space means that sophisticated systems exist which can be quickly plugged into broadcasters' businesses before being tailored to meet the specific requirements of the TV industry.

After all - it isn't just people who expect personalised services but big businesses too.





## About Author

Alex Farber joined TV trade publication Broadcast in 2010 from New Media Age as a reporter. Rising to the role of digital editor he has written extensively about all of the UK's major broadcasters including the BBC, ITV, Channel 4 and Sky, as well as the biggest production companies, over the past four years.

Alex has focused particularly on the broadcasting industry's strategic and technological developments – breaking news and exploring developments across a variety of areas including VoD, second-screen, personalisation and other emerging revenue streams.

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