How Online Media Services Have Fulfilled The Public Service Objectives

Ofcom Public Service Broadcasting Review: 2008-2013

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Ian Maude | ian.maude@endersanalysis.com | +44 7900 698 498

Gill Hind | gill.hind@endersanalysis.com | +44 207 851 0913

Joseph Evans | joseph.evans@endersanalysis.com | +44 207 851 0915

Michael Underhill | michael.underhill@endersanalysis.com | +44 207 851 0913
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Executive summary

- Much has changed since Ofcom's Second Public Service Broadcasting (PSB) Review. Back in 2008, digital switchover was only just underway, two thirds of households had a broadband connection and fewer than 1 in 5 people owned a smartphone. Today, digital television is universal, 85% of homes have broadband, with average download speeds five times faster, and smartphones and tablets are becoming ubiquitous
- Broadcast television remains the main source of information, education and entertainment for the majority of people. But television viewing has shown signs of decline, especially among younger adults and children. The main cause is increasing use of the internet, which has become a major medium in its own right, accounting for a rising share of overall media consumption, as well as consumer and advertising expenditure
- Much of the growth in internet usage since 2008 has accrued to mobile devices, which now account for half of all time spent online. Usage of online video and social media has also exploded. Services such as YouTube and Facebook have become key channels for content sharing and discovery, providing new routes to market
- This is the context for analysing the extent to which online media contribute to the Public Service Objectives (PSOs) established for Public Service Broadcasting, as set out in the 2003 Communications Act, covering cultural activity, news and current affairs, sports and leisure, education, factual, children's and young people's content, and community interests. This report focuses on the provision of relevant online media services
- Relevant media content is now available over the internet from a huge number of sources. There are hundreds,
 if not thousands, of online services. Providers include pure-play internet media businesses, broadcasters,
 traditional media, government, non-governmental organisations, and public and international institutions
- As a result, internet users have a huge variety of choice in many of the categories covered by the PSOs. In news and current affairs, there are more than 200 online English-language sources in the UK. In many other categories too there is a vast range of content online, much of it unavailable on broadcast television
- As well as affecting how media content is distributed and consumed, the internet is changing the nature of the content on offer. The range of online media which contributes towards the PSOs includes:
 - Existing traditional media that can be viewed online. This includes feature films, television programmes, coverage of sporting events and news and current affairs content from broadcasters and print publishers, some of which is redistributed via video-on-demand (VOD) services and social media platforms

Executive summary

- Original traditional media created for the internet. This includes television series, such as House of Cards, commissioned and distributed by Netflix, as well as news and features on websites like Huffington Post
- New forms of content only available online, ranging from short form video on YouTube, to interactive learning programmes to socially-driven news and entertainment services such as BuzzFeed
- Over two thirds of online media services at most fulfil one or two PSOs, underlining the level of specialisation on the internet. Many services offer interactive elements that cannot be replicated on broadcast television, though they can be replicated online by broadcasters. Social media and mobile apps are increasingly important channels to reach and engage with internet audiences, and this is reflected across all the PSOs
- Innovative business models and new players are emerging in the categories covered by all PSOs. The degree to
 which media content fulfilling each PSO is available depends on the economics of content rights and
 production, the size and nature of potential audiences, their willingness to pay (which in turn depends on the
 value placed on the content by consumers and alternatives available), and value to advertisers
- In a few genres, the internet is ahead of traditional broadcasting, notably those in which interactivity is a major enhancement, such as music and education. In news and current affairs, online services often match television's output, arguably providing more breadth and depth, though accuracy and impartiality are less sure
- In addition, the internet is enabling services targeting niche audiences and interests not viable on broadcast television such as services for small audiences within particular locations, e.g. hyperlocal websites and services, and widely dispersed audiences across multiple countries, e.g. niche sports and cultural events
- 'High cost' media such as feature films, television drama and major sports events are still controlled by rights holders and broadcasters, but there is increasing investment by online services in TV-quality programming, such as Netflix's original TV series, Digital Theatre's arts productions and Joumeyman Pictures' documentaries
- As with the internet generally, most online media services offering PSO-related content are free at the point of use, funded by advertising, however many service providers also use other funding models. Growth in consumer spending on digital media suggests that people are increasingly comfortable paying for content online
- The answer to the question "How have online media services fulfilled the PSOs?" varies by PSO, but increasing investment in and usage of online media is driving up the internet's contribution across the board

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2. Methodology

- 3. Internet trends
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- 5. Public Service Objectives
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Methodology | Introduction

- This report has been produced for Ofcom's Third Public Service Broadcasting (PSB) Review, and assesses the extent to which online media services contributed towards the fulfilment of Public Service Objectives (PSOs) in the period between 2008-2013
- These objectives are set out in Section 264(6) of the 2003 Communications Act* (see Appendix)
- The PSOs were established for public service television broadcasting. In recognition of the growing role of online media, Ofcom's remit for reviewing media services was extended by the Digital Economy Act 2010 beyond television to include radio and on-demand programme services and other internet services
- Since Ofcom published its second PSB Review in 2009, continued growth in access to the internet and consumption of online content, particularly to smartphones and tablets, which were not widely in use at the time, have made it even more important to assess the relative significance of online media
- Unlike broadcast television, data relating to online media usage, including video-on-demand and other internet services, remains limited. There is no data source that provides a comprehensive view of the overall internet audience or online consumption or the audiences and usage levels of individual services across devices
- As a result, we have taken a three-pronged approach:
 - The first element was a market mapping exercise, designed to provide a picture of the overall contribution of online media services towards the PSOs over the review period as a whole
 - This report summarises the key findings from this exercise
 - The second part was a series of 12 case studies to illustrate specific examples of how online media services help to fulfil individual PSOs, focusing on the unique characteristics of online media
 - These case studies also can be found on Ofcom's website for the Third PSB Review
 - In addition, we conducted several interviews with key players working in digital media, which informed our overall analysis

^{*}http://www.legislation.gov.uk/ukpga/2003/21/section/264

Methodology | Scope of research

- For the purposes of this project we consider on-demand programme services as defined in section 368A of the 2003 Communications Act* (see Appendix)
- In the 2003 Act, "on-demand programme services" are defined as services whose "principal purpose is the provision of programmes the form and content of which are comparable to the form and content of programmes normally included in television programme services"
- However, defining the services we look at this way would mean excluding new forms of audiovisual content. For example, much of the content on YouTube, the leading internet video platform, takes the form of short clips, many created and uploaded by users, rather than traditional television programmes. Increasingly, internet users might watch, say, a YouTube video about cooking instead of a cookery show on television
- Hence, we have delineated online media services as follows:
 - Video-on-demand (VOD) services: as per the "on-demand programme services" definition above, expanded to include services offering other forms of video content
 - Other internet services: typically providing text, pictures, video clips, audio clips, or other interactive content, excluding any service which could be defined as a VOD service
- Ofcom's remit for reviewing such services covers only services "where there is a person who exercises editorial control over the material included". Therefore, we have not assessed the impact of content distribution platforms such as YouTube, Facebook and the mobile operating systems
- Only online media services accessible to UK audiences via the internet were included in our analysis
- Only services in which the majority of content was provided in one of the languages of the UK were considered
- In general, aside from language, content and pricing, the evidence suggests that UK internet users often do not
 distinguish between UK and non-UK domiciled organisations when selecting which online media to use,
 therefore both UK and non-UK based services have been included in this review

^{*}http://www.legislation.gov.uk/uksi/2009/2979/made

Methodology | Key data sources

Video-on-demand services

- We included regulated "on-demand programme services", as described in the 2003 Communications Act, as well as other internet video services not covered by the Act
- The data sources used to identify relevant video-on-demand services were:
 - The Directory of Notified Services provided by the Authority for Television On Demand (ATVOD), the UK's independent co-regulator for the editorial content of UK video on demand services that fall within the statutory definition of On Demand Programme Services (ODPS)
 - This directory is principally made up of TV-like services that fall under UK jurisdiction (essentially decided by whether the service provider's head office is in the UK and/or editorial decisions are made in the UK)
 - At present, there are about 120 services listed in the directory
 - The European Audiovisual Observatory's MAVISE database, which includes about 250 on-demand audiovisual services available in the UK
 - On-demand audiovisual services are interpreted in a wider sense than "on-demand audio-visual media service", as defined in the European Audiovisual Media Services Directive
 - Services listed in MAVISE extend beyond TV-like offerings to include branded channels on iTunes,
 YouTube and other platforms, as well as smartphone video apps that provide other forms of video content, e.g. short-form clips
 - The top 400 internet video services and top 100 YouTube channels listed by comScore in its Video Metrix database, ranked according to number of UK unique users
 - Unlike ATVOD and EAO directories, the Video Metrix database is based on the video services used by its panel of users and therefore captures a wider range of video offerings
 - At present Video Metrix only tracks PC-based internet usage, and so does not cover sites and services
 exclusively available via mobile devices

Methodology | Key data sources (cont.) and limitations

Other internet services

- For other internet services, i.e. services offering a range of content including text, pictures, video, audio and other interactive content (see above for the definition), our key sources were:
 - The top 400 websites and services ranked according to number of users as listed by comScore under its
 Multi-Platform Media Metrix panel (covering both PC and mobile device users)
 - The top 100 websites and services ranked on the same basis by Nielsen on its UK NetRatings panel (also covering PC and mobile consumption)
- In addition, we carried out an extensive programme of desk research to identify other relevant services; particularly those exclusively available via mobile devices, as well as services providing specific content related to one or more of the PSOs (for example, local information or programming for children)
- Key sources included Apple iOS and Google Play app stores, newspaper and magazine articles and recent industry awards

Limitations of data sources

- Whilst every attempt has been made to create a database of all key online media services fulfilling any of the public service objectives, it is simply not possible (or desirable) to generate a comprehensive list
- Reasons for the former include the limitations of the sources used, as well as our self-imposed restrictions on the number of sites and services
- The latter is simply a practical point, there is not enough time to cover every sites or service across each PSO
- Therefore, we believe that our approach, based on using a range of different data sources, including usagebased panels, directories and desk research provides a reasonable indication of the range and scope of online media services available in the UK today

Methodology | Public Service Objectives

PSO	PSO content	PSO fulfilment test	2003 Communications Act
PSO1 Cultural activity	"cultural activity in the United Kingdom, and its diversity, are reflected, supported and stimulated by the representation in those services (taken together) of drama, comedy and music, by the inclusion of feature films in those services and by the treatment of other visual and performing arts"	Includes UK-originated or financed content or in the case of music or visual or performing arts UK artists or events	264(6)(b)
PSO2 News & current affairs	"those services (taken together) provide, to the extent that is appropriate for facilitating civic understanding and fair and well-informed debate on news and current affairs, a comprehensive and authoritative coverage of news and current affairs in, and in the different parts of, the United Kingdom and from around the world"	Includes news and/or current affairs content*	264(6)(c)
PSO ₃ Sports & leisure	"those services (taken together) satisfy a wide range of different sporting and other leisure interests"	Provides sports and/or leisure interests content	264(6)(d)
PSO4 Education	"those services (taken together) include what appears to OFCOM to be a suitable quantity and range of material on educational matters, of material of an educational nature and of other material of educative value"	Features educational or teaching material	264(6)(e)

*See slide 12

Methodology | Public Service Objectives (cont.)

PSO	PSO content	PSO fulfilment test	2003 Communications Act
PSO5 Factual programming	"those services (taken together) include what appears to OFCOM to be a suitable quantity and range of material dealing with each of the following, science, religion and other beliefs, social issues, matters of international significance or interest and matters of specialist interest"	Offers factual content, e.g. documentaries	264(6)(f)
PSO6 Religion	"the material included in those services that deal with religion and other beliefs include — - material providing news and other information about different religions and other beliefs - material about the history of different religions and other beliefs; and - material showing acts of worship and other ceremonies and practices (including some showing acts of worship and other ceremonies in their entirety)"	Offers religious content or content related to beliefs*	264(6)(g)
PSO7 Children's & young people's programming	"those services (taken together) include what appears to OFCOM to be a suitable quantity and range of high quality and original material for children and young people"	Provides original content for children or young people*	264(6)(h)

*See slide 12

Methodology | Public Service Objectives (cont.)

PSO	PSO content	PSO fulfilment test	2003 Communications Act
PSO8 Community & regional	"those services (taken together) include what appears to OFCOM to be a sufficient quantity of material that reflect the lives and concerns of different communities and cultural interests and traditions within the United Kingdom, and locally in different parts of the United Kingdom"	Provides content for specific communities (UK or non-UK) or regions (UK only)	264(6)(i)
PSO9 Programmes made outside the M25	"those services (taken together), so far as they include material made in the United Kingdom, include what appears to OFCOM to be an appropriate range and proportion of material made outside the M25 area"	Not assessed*	264(6)(j)

*See slide 12

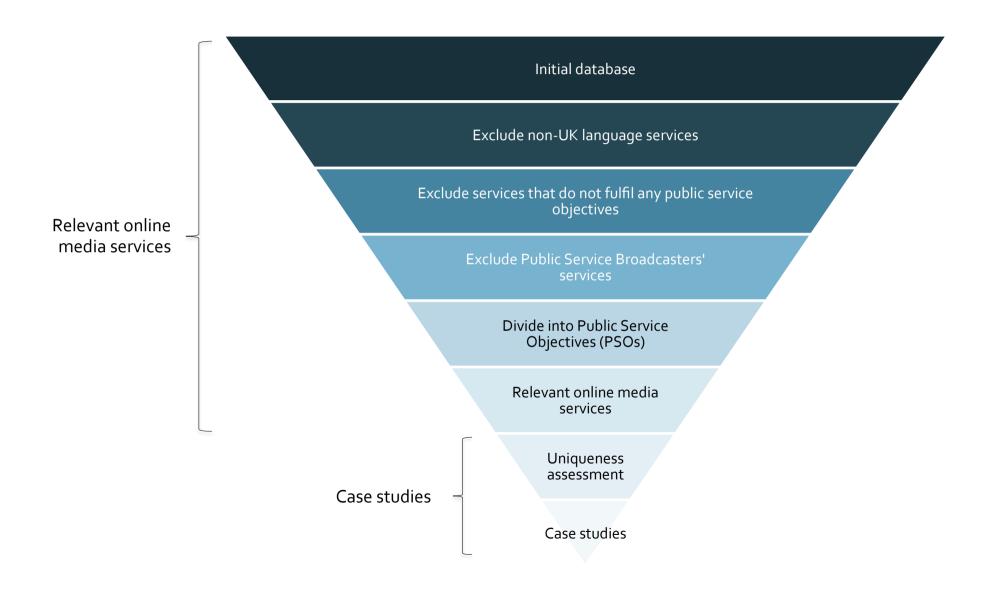
Methodology | Public Service Objective fulfilment tests

- The database of online media services was too large to be able to test whether every service contributed towards each PSO. For reasons of practicality and simplicity, therefore, we applied our own tests
- The PSO fulfilment tests we used are set out in the tables on slides 9-11
- The main differences between the PSOs as set out in the 2003 Act and the PSO fulfilment tests were:
 - PSO2 News & current affairs: we only judged if a service provided news and/or current affairs content
 - PSO6 Religion: we only judged if a service offered religious content or content related to beliefs
 - PSO7 Children's and young people's programming: we only judged if a service provided original content for children or young people
- It was not possible to determine if content on a particular online media service was made outside the M₂₅ area or not, therefore we did not address this PSO

Methodology | Relevant online media services and case studies

- Based on the list of relevant online media services, other data and our own analysis, we have prepared this report on the contribution of online media towards each PSO over the period of the PSB Review, i.e. 2008-2013
- The second element of the project is a set of 12 case studies to illustrate specific examples of how online media services help to fulfil the PSOs, focusing on the unique characteristics of online media
- The case studies were selected from the list of relevant online media services that we identified (see slides 6-8)
- The final criterion for selecting case studies from the database was *uniqueness*. This broke down into several elements that we considered *desirable*, although not individually *essential*, for a case study:
 - Original or unique content: is there content that fulfils public service objectives and is not available through traditional media, or elsewhere online?
- Unique functionality: does the service offer new ways of engaging with content, especially ways that are only
 possible online? For example, interactive content, use of mobile device functionality
- Unique services to complement the PSO content: e.g. discovery or recommendation services, personalisation, social integration etc
- We considered using quantitative criteria, such as audience size or rapid growth in usage, to identify potential case studies. However, such measures risk ignoring whether a service offered something unique. Also, audience data is not available for many services. Finally, we wanted to avoid heritage bias, where the online operations of heritage media benefit from their offline brand, even when the services are not unique or interesting
- Therefore, we decided that a qualitative study, based around the idea of uniqueness, was the most appropriate way of selecting services to be analysed further as case studies

Methodology | Selection criteria for online media services and case studies



Methodology | Service categories and examples

• Services were categorised according to how they monetise their content. Services could use multiple models

Type of organisation	ı	Examples	VOD services	Other internet services
Broadcasters	Public service broadcasters	The Public Service Broadcasters are the BBC, ITV, Channel 4 and Channel 5	BBC iPlayer, ITV Player, 4oD, Demand 5	BBC News, ITV News, Channel 4 Scrapbook, milkshake
	Non-Public service broadcasters	All other TV broadcasters and platform operators	Sky Go, Dave On Demand, Now	Sky Sports News, Cartoon Network
Non broadcasters	Traditional Media	Media businesses whose main focus is on 'traditional' media, e.g. print, radio	A ₃ M	Guardian, NME, Capital FM, Liverpool Echo
	Internet Media	Media businesses whose main focus is online, though they could have 'traditional' assets	Netflix, Amazon Prime Instant, iTunes	Vice, Buzzfeed, Medium, Spotify
	Corporate	All other for-profit companies	PGA Digital Golf Academy	Red Bull, Arsenal Football Club, ASOS
	Public & International Institutions	Public bodies, e.g. museums, galleries, arts bodies. Typically not for profit	Smithsonian channel	The Tate, Science Museum, National Galleries Scotland
	Academia, Archives & Libraries	All educational institutions, including archives and libraries	Gresham College	Khan Academy, iTunesU, Duolingo
	Government & Non-Governmental Organisations	All government and charity online media services	Khan Academy, It Gets Better	National Trust, Mumsnet, local council websites

Methodology | Funding models

• Entities were categorised according to primary type of output and company/organisation type. These categories are exclusive

Funding model	Definition
Ad-funded	Sells space onsite or in-app for advertising
Commercial	Funded through unrelated business operations
Discrete purchase	Sells content or products directly
Government	Given funding by government programmes
Licence fee	Funded through the licence fee
Not for profit	Not attempting to monetise significantly
Subscription	Sells subscriptions to content

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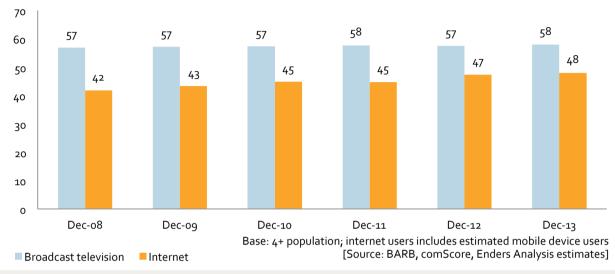
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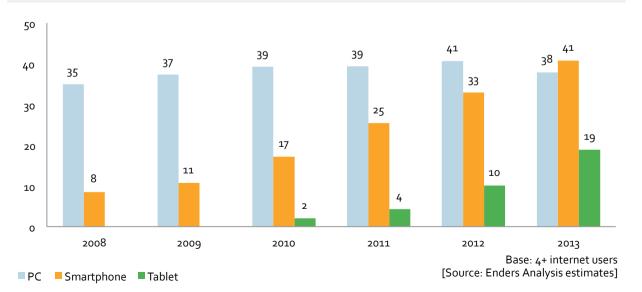
Internet trends | Audience growth

- Since 2008, the number of people accessing the internet in the UK has grown steadily while the television audience has been broadly stable
- In December 2013, about 95% of the population watched broadcast television, down marginally compared to December 2008
- Over the same timeframe, we estimate that the internet's overall reach increased by about 10ppts to 80% of the population
- The key driver of the growth in the internet audience has been rapid adoption of mobile devices
- More than four times as many smartphones and tablets as PCs were shipped in the UK in 2013: smartphones accounted for three quarters of mobile phone sales, and tablet sales surpassed those of PC, which fell sharply
- Smartphones' affordability and functionality have improved significantly and the range of apps has expanded their capabilities and consumer appeal; we estimate there are now more smartphone users than PC internet users in the UK
- Tablets' appeal has grown as the form factor has proven superior to PCs for various activities – notably watching video and 'sofa surfing' – and by the end of 2013 we estimate that 31% of the population used a tablet

Broadcast television viewers versus internet users (m)

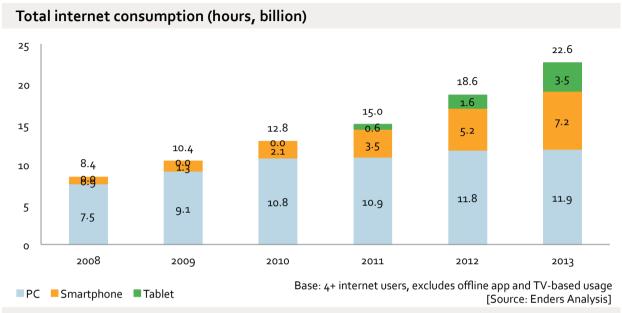


Internet users by device (m)

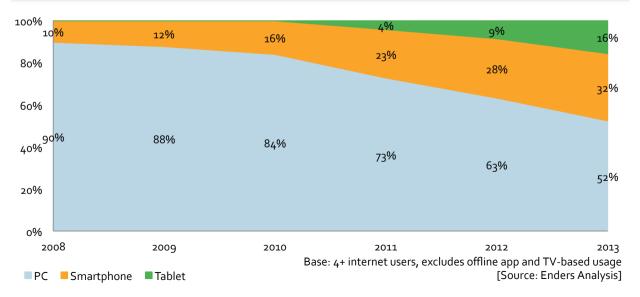


Internet trends | Usage of online media

- The rapid uptake of smartphones and tablets has driven significant growth in internet consumption since 2008, with a significant amount of incremental usage to smartphones and tablets
- Another contributing factor has been the growth in broadband speeds. Ofcom estimates that average fixed line connection speed increased 5x to 17.8Mbit/s between 2008-2013
- Smartphones have evolved from being only used when out and about to all-purpose, all-location connected devices, whilst tablets are used mainly for web browsing and media consumption at home
- In total, we estimate that aggregate time spent online increased 70% between 2008 and 2013, with the device mix shifting dramatically
- In 2013, we estimate that smartphones and tablets
 accounted for 48% of all internet usage, up from 10%
 in 2008, with the PC set to account for less than half
 of all usage in 2014 as penetration and usage of
 mobile devices continues to rise
- Native 'apps' have become the dominant method of accessing the internet via mobile devices. comScore data for the US suggests that time spent online using apps outstrips browser time by 5 to 1, and anecdotal evidence suggests a similar ratio in the UK



Share of internet consumption (% of total)

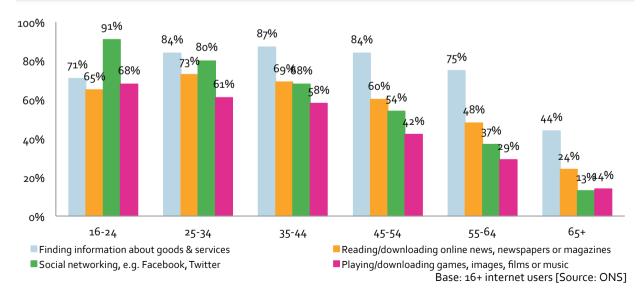


Internet trends | Media-related activities

- Broadly, the proportion of internet users using the internet to access media content continues to rise steadily, as more content becomes available via mobile devices, which account for a growing share of the audience and consumption
- Despite the rise of apps and the continued move of services to online, traditional activities – notably web browsing and email – still have significantly higher penetration than other functions
- Whilst there is relatively little variation in penetration of common internet activities over time, age is still a key factor for certain activities
- Nearly three times as many internet users between 16-24 access social networks compared to those over 65, and over twice as many specifically access online media content, such as news, games, films and music, compared to the older cohort
- Social media services such as Facebook, which is now used by more than 35 million people in the UK, and Twitter, with its real-time information on news, events and sports, have become key channels for content discovery and sharing

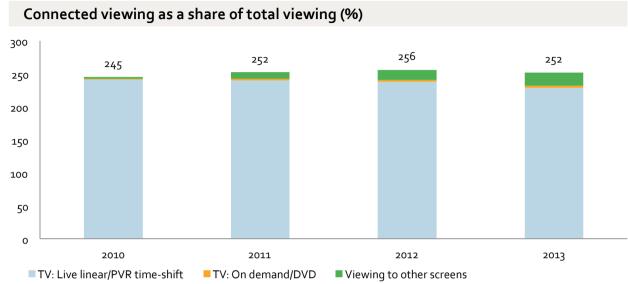
Selected internet activities by audience reach (% of internet users) 80% 73% 67% 66% 62% 59% 59% 58% 60% 40% 40% 33% 31% 20% 0% Q1 2008 Q1 2009 Q1 2010 Q1 2011 Q1 2012 Q1 2013 Q1 2014 Finding information about goods & services Reading/downloading online news, newspapers or magazines Social networking, e.g. Facebook, Twitter Playing/downloading games, images, films or music Base: 16+ internet users [Source: ONS]

Selected internet activities by age, Q1 2014 (% of age group)

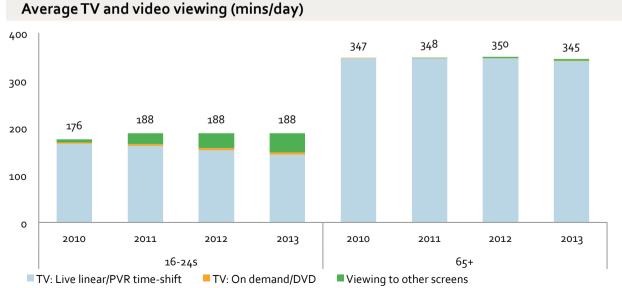


Internet trends | Over-the-top video

- Unlike print media, television has not caved in to the internet. Overall viewing to the TV set has remained remarkably resilient, with viewing levels reaching an all time high in 2011/2012
- But in 2013, for the first time, there was a decline in television viewing across all age groups (though 2012 was boosted by London Olympics and Paralympics), which has continued in 2014
- Different trends are emerging between younger and older viewers. In the last two years, there is clear evidence of a sharp fall in viewing to the TV set among younger adults and children, while older people's viewing has remained almost flat
- The main cause of the decline is increasing access to smartphones and tablets. Other factors include growing accessibility of online video and other interactive content and faster broadband speeds, which are conducive to video consumption
- Television shows and feature films are increasingly widely available online from broadcasters and videoon-demand services such as Netflix
- Other forms of online video have also improved dramatically, with growing investment in video made for the web from both pay and ad-funded services



BARB changed its methodology in 2010 [Source: Enders Analysis, based on BARB/InfoSys+ and other sources]

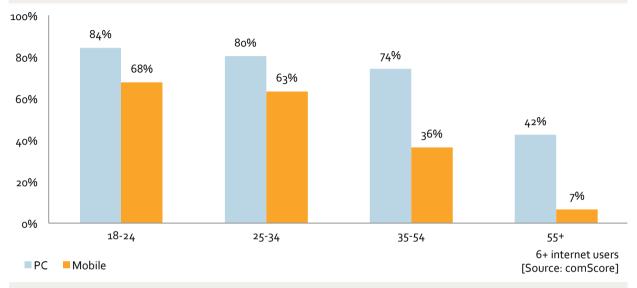


BARB changed its methodology in 2010 [Source: Enders Analysis, based on BARB/InfoSys+ and other sources]

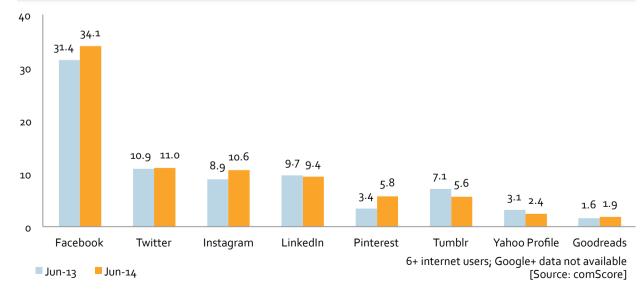
Internet trends | Social networking

- As noted on slide 19, use of social networks skews heavily young
- There is a great deal of variation in the growth of social networks
 - Facebook remains the sole 'social superpower' across all demographics, and has emerged as major challenger to Google for internet eyeballs and internet display advertising
 - Twitter's user growth 'problem' is apparent in the year-on-year comparisons
 - Instagram and Pinterest are both growing fast, raising the possibility that Facebook will own the two largest social networks by users in the near future (in addition to Whatsapp)
 - Not captured in this data are mobile apps which occupy a similar space to social networks but which do not have a web presence
- Increasingly, social media is not just a channel for communication, but a platform for sharing and hence discovering media content

Share of internet users accessing social networks by age, March 2014 (% of total)

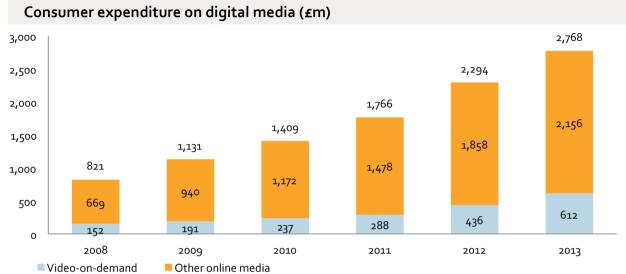


Top 10 social networks by unique users (m)



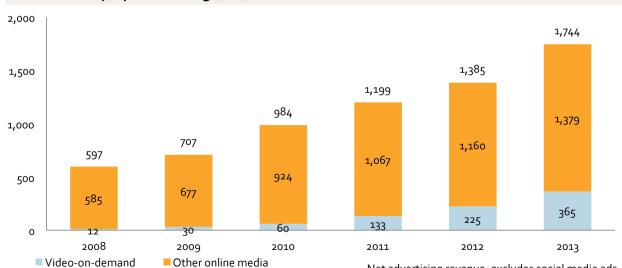
Internet trends | Consumer and advertising expenditure

- Out of the £4.5 billion revenue generated last year by digital media content in the UK, about 60% was derived from direct consumer spending and 40% from online advertising
 - Consumer expenditure includes digital games, music, video, books and newspapers, but excludes mobile apps not covered by these categories
 - Online advertising is for online display advertising only excluding ads on social media services such as Facebook and Twitter, as this is not directly content related
 - This equals just over one third of broadcast television industry revenue of £12.6 billion, comprising £5.9 billion from pay-TV services, £4.1 billion from advertising and £2.6 billion from public funds (e.g. BBC licence fee)
- Based on these figures we estimate that digital video services generated just under £1 billion in 2013, up from £165 million in 2008
 - Most of the growth in revenue comes from increasing spending on subscription-based and transactional video-on-demand services
 - Internet video advertising has also risen sharply in the last three years



Includes digital games, music, video, books and newspapers [Source: ERA, BPI, BVA/OCC/ERA/IHS, Kantar Worldpanel, Enders Analysis estimates]

Internet display advertising (£m)



Net advertising revenue; excludes social media ads [Source: IABUK/PwC, Enders Analysis estimates]

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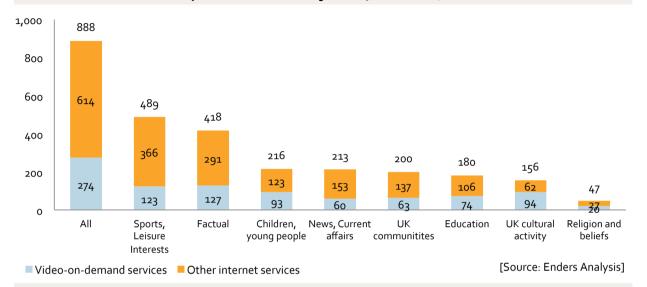
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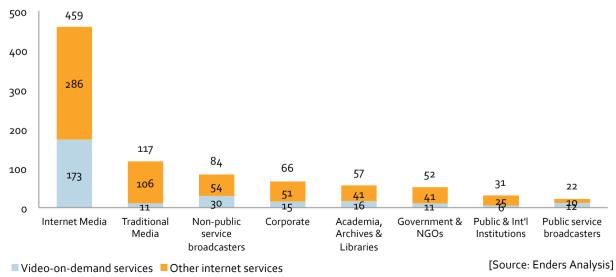
Key themes | Huge selection of services

- There are now hundreds, if not thousands, of online media services that provide content related to one or more of the Public Service Objectives (PSOs), versus five Public Service Broadcasters (PSBs)
- Based on the database we developed, a list of relevant online media services accessible to UK internet users was created against each PSO. From this filtered list, we stripped out services without any English, Welsh or Gaelic language content
- The final dataset consisted of 888 services, of which 274 (31%) are video-on-demand (VOD) services and 614 (69%) focus on other forms of content, e.g. text, images, etc. However, many smaller services are not included (see slide 68 on hyperlocal websites)
- Of the PSOs, the objective most widely catered to is sports and leisure interests, followed by factual, children's, and news and current affairs; at the other end of the scale there are few services providing original content on cultural activities (as defined for this project) and very few covering religion and beliefs, the latter perhaps reflecting lack of interest or difficulties of funding such content
- The online media services we recorded are split roughly 50:50 between internet media companies and other organisations including traditional media, broadcasters, academia, government, public institutions and so on

Online media services by Public Service Objective, June 2014



Online media services by organisation type, June 2014



Key themes | Existing, original and unique content

- As well as affecting how existing media content is distributed and consumed, the internet is supporting the development of original content, as well as enabling entirely new content forms
- Broadly, the range of online media content which contributes towards the various Public Service Objectives can be segmented into three categories

Existing 'traditional' media redistributed online

- Includes feature films, television programmes, coverage of sporting events and news and current affairs from broadcasters and print publishers
- Mainly distributed by traditional media companies via online platforms and services, e.g. BBC iPlayer, ITV Player, Sky GO, Mail Online and so on
- Catalogue films and TV shows are also available via video-on-demand (VOD) services such as iTunes and Netflix
- Some full-length Channel 5 and BBC programmes (via BBC Worldwide) are available on YouTube after the Public Service Window

Original 'traditional' media created for the internet

- This includes television series, such as House of Cards and Orange is the New Black, commissioned and distributed by Netflix, as well as news and features on websites like Huffington Post and VICE
- Arguably, it also includes other TV-like content such as the video documentaries produced by Journeyman Pictures and the theatrical productions filmed by Digital Theatre
- Investment in original content for the internet by traditional media companies, including broadcasters, remains limited, though there are exceptions, such as the BBC's proposal to make BBC₃ an online only channel

Unique content only available online

- This includes unique forms of content that are only available online or that can only be supported on the internet
- The former includes short form video available on-demand which would not work in a linear schedule, as well as many hyperlocal sites which could not be supported in print
- The latter includes services which provide online interactive and community-based features. Examples include online learning programmes from the likes of Khan Academy, socially driven news and entertainment such as BuzzFeed, and music playlists via Spotify

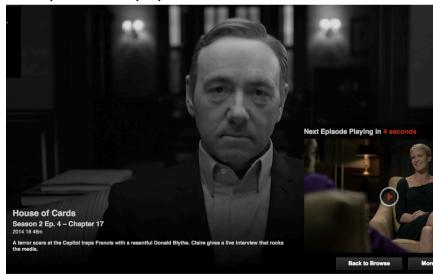
Key themes | Unique functionality and services

- In addition to original or unique media content created for the internet, we also assessed services for other elements of uniqueness, specifically focusing on:
 - Unique functionality, for example providing new ways of engaging users that are only possible online such as interactive content or use of mobile device functionality
 - Other unique services which complement PSO content, e.g. discovery or recommendation services, personalisation such as individual content playlists, social integration and so on
- Services that are only possible online include online learning programmes where users get real-time feedback, and learning by doing for computer science and language skills (for example, see Online Academies case study)
- Interactive services also provide some of the most innovative original content for children consisting of educational material and social online games, which is not possible via other media (for example, see Bin Weevils case study)

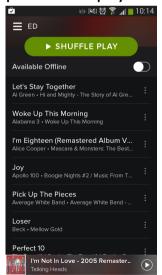
Duolingo quiz



Netflix next episode auto-play



Spotify personalised playlist



YouTube video and comments

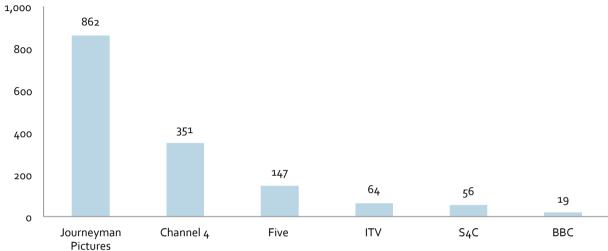


[Source: Duolingo, Netflix, Spotify, YouTube/Zoella]

Key themes | Plurality and choice

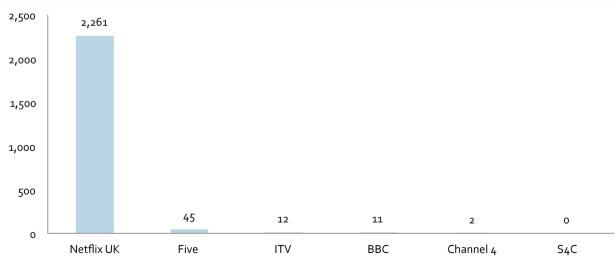
- Media plurality is about ensuring that the public has access to and is exposed to a range of different opinions, views and information
- Ofcom provides a useful definition based on 1/ ensuring that there is a diversity of viewpoints available and consumed, and 2/ that no single media owner or voice has too much influence over public opinion and the political agenda*
- In news and current affairs, the first of these goals appears to be met on the internet; we recorded 213 online media services providing coverage, ranging from UK newspaper websites, to other countries' newspapers' online editions, to online services such as Huffington Post and VICE
- Unlike broadcast news, there are no rules about impartiality online, and inaccurate or even misleading information can be widely distributed, creating potentially significant risks
- The internet's greater choice extends across many of the PSOs – in factual programming, Journeyman Pictures offers over 860 documentaries (for purchase), compared to less than 650 via the PSBs online video players, whilst Netflix's UK service has more than 2,200 feature films versus just 70 at the time of writing available to watch on the PSB's online services

Factual programmes available online, 28 September 2014



Excludes talk shows [Source: Journeyman Pictures, Pubic Service Broadcaster websites]

Feature films available online, 28 September 2014



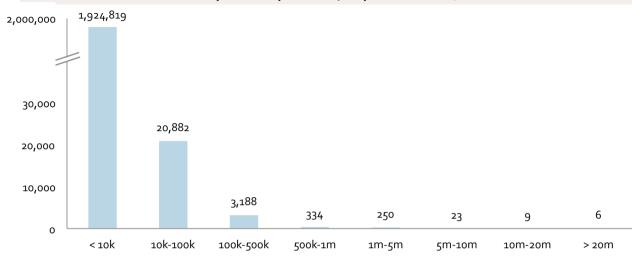
[Source: AllFlicks, Pubic Service Broadcaster websites]

^{*}http://stakeholders.ofcom.org.uk/binaries/consultations/measuring-plurality/statement/statement.pdf

Key themes | Niche content and rise of specialists

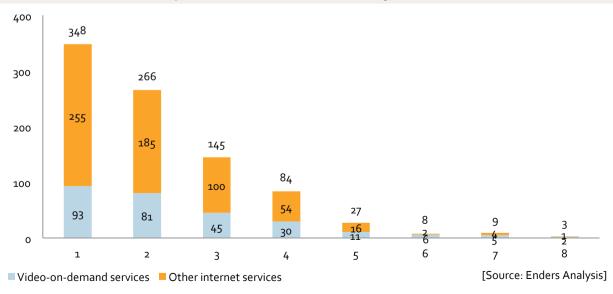
- One characteristic of the internet is that it enables the development of services targeting niche audiences and interests that are difficult to support on other media. These include services for small audiences within particular locales or with a special interest, as well as widely dispersed audiences across multiple countries or regions
- For example, whereas the number of people in the UK seeking to learn Mandarin or with an interest in contemporary Japanese art may be small, online media has the ability to reach and combine such previously hard-to-target audiences
- Thus, the internet has supported the rise of niche services, ranging from amateur websites, to semiprofessional networks, to fully fledged specialist companies and organisations
- This is reflected in our study of nearly 900 online media services, with most specialising on a particular area or form of content. Of the services we researched, 39% only fulfil one of the PSOs, 30% fulfil two, and 31% fulfil three or more
- Just three online media services contribute towards all eight PSOs: the BBC, Sky and YouTube

Number of internet sites by UK unique users, September 2014 (not to scale)



Sites accessible to UK internet users; PC internet users only [Source: comScore]

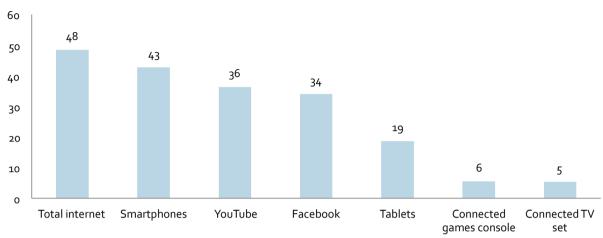
Online media services by number of Public Services Objectives fulfilled, June 2014



Key themes | New routes to market

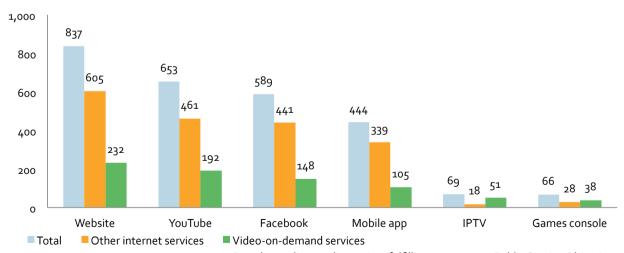
- A major development in the last few years is the increasing number of routes to market
- In 2008, the PC was the dominant device for accessing the internet and almost all online services were based on HTML web pages; since then there has been sharp growth in mobile device penetration and apps have emerged as the key method of mobile interaction
- HTML-based websites, which can be accessed by any device with an internet browser, remain the most common protocol: 94% of the online media services we recorded offering content fulfilling one or more of the PSOs have a dedicated website
- YouTube and Facebook have become key cross-device platforms; the vast majority of VOD services have YouTube channels, though many broadcasters only offer promotional clips, and most online media services have Facebook Pages, often primarily as a promotional and community tool
- The importance of the mobile internet is reflected in the number of online media services with mobile apps (50%), although each platform, e.g. Apple iOS, Android, Windows Phone, is based on proprietary technology and requires its own dedicated app
- A growing number of VOD services including those of the PSBs and subscription services such as Netflix can be accessed on connected TV sets

Internet audience by platform, June 2014 (m)



Base: 6+ internet users; PC, smartphone and tablet only; mobile internet includes smartphone and tablet users
[Source: comScore, Ofcom, Enders Analysis estimates]

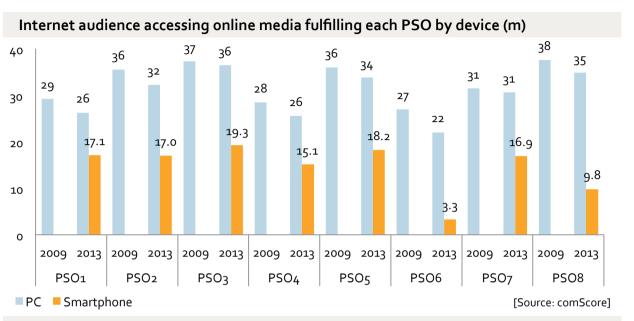
Number of online media services by platform, June 2014



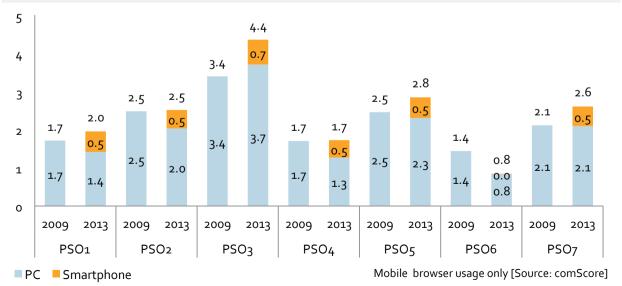
Based on online media services fulfilling one or more Public Service Objective; many services operate across multiple platforms [Source: Enders Analysis]

Key themes | Increasing audience scale and usage

- Broadly, the shift to mobile devices is reflected in the online audience and consumption patterns for relevant online media services for each of the Public Service Objectives: declining PC internet users, offset by growing numbers of smartphone users
- Overall usage appears to have risen across all the PSO categories between 2009-2013 (see slides 9-11 for the full list of PSOs), with the exception of Religious content, which has fallen dramatically
- Mobile usage data in the lower chart represent mobile browser access only, and excludes app usage, which accounts for the majority of overall mobile internet consumption, therefore overall growth in usage is likely to be significantly higher for most content categories
- PSO8 (UK community related content) is excluded from the lower chart, due to its scale, but increased substantially



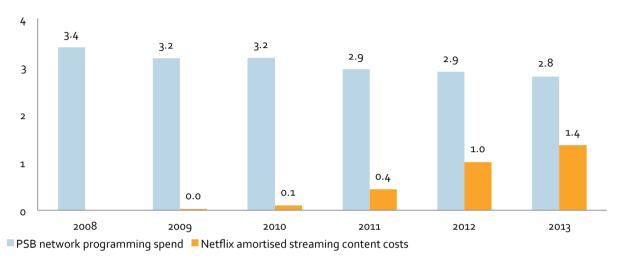
Aggregate usage of online media services for PSO by device (bn, mins)



Key themes | Moving up the content value chain

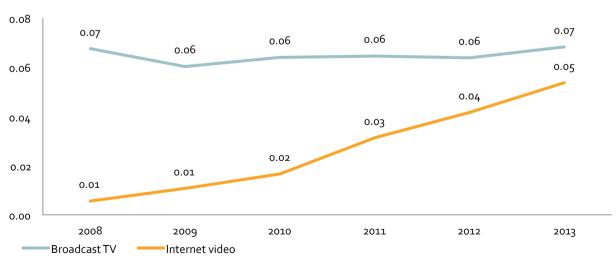
- As the internet audience grows in scale, and associated pay and advertising revenues increase, so investment in content for the internet is rising
- Probably the best known example is the huge rise in investment in streaming video by Netflix, which spent £1.4 billion on content licensing and original shows in 2013 (of which over a quarter was on original series such as House of Cards and Orange is the New Black), equal to half the overall programming spend of all five PSBs
- Albeit on a smaller scale, there is increasing investment across a range of genres. For example, Journeyman Pictures and Digital Theatre are ramping up spend on TV-quality documentaries and arts productions respectively
- In addition, strong growth in internet advertising, worth £6.3 billion in 2013, is supporting more investment in ad-funded content. Examples include more professional videos on YouTube and wider, more in depth coverage on news and entertainment sites such as BuzzFeed and Vice (see case studies)
- We estimate ad revenue per hour for online video is approaching that of broadcast television, with ITV's CEO Adam Crozier stating at the company's Q4 2013 result presentation that ad pricing for ITV Player was 4-5x the station average for airtime ads

PSB network programming spend vs. Netflix streaming content costs (£bn)



Netflix costs converted using BoE spot fx rates [Source: Ofcom, Netflix, Enders Analysis estimates]

Advertising revenue per viewing hour for broadcast TV vs. internet video (£)

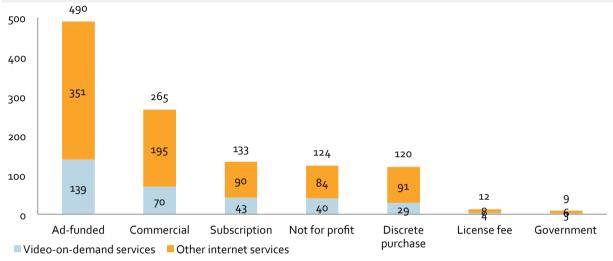


Excludes BBC TV viewing and online adult consumption; net revenue [Source: Enders Analysis estimates]

Key themes | Range of funding models

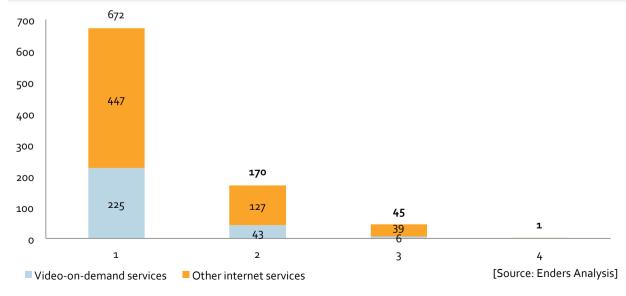
- Across the internet, the majority of online media services are still free to internet users at the point of use, primarily funded through selling ads
- This is also the case with online media services offering PSO-related content, with more than half of those analysed for this report carrying adverts
- The next three most frequently-used commercial funding models are 1/ linking to other business operations, e.g. tie-ins with TV channels, 2/ subscription-based models, for example, to online music services such as Spotify, SVOD services such as Netflix, and newspaper sites like the Sun and the Times, and 3/ discrete purchase, e.g. transactionbased services like iTunes
- There are also a number of not-for profit (NFP) services, many based around less overtly commercial categories, e.g. education and religion
- Although the majority of online media services offering PSO related content depend on a single funding source, a substantial number have multiple revenue streams
- This can be seen across sectors. For example, while Netflix relies on subscription income, Amazon Instant Video offers subscription (via Amazon Prime), online rental and one-off purchases

Online media services by funding model, June 2014



Many services have multiple revenue streams [Source: Enders Analysis]

Online media services by number of funding models, June 2014



Key themes | Summary of online media services

PSO	Availability and range of services	Unique characteristics	Conclusions
PSO1 Cultural activity	Video-on-demand services – 94 Other internet services – 62 Middling number of services, heavily skewed to video and music	Shorter form drama and comedy are possible; new business models (e.g. bundling content and low cost all-you-can-eat subscription packages) lead to new ways of consuming, e.g. binge viewing TV series	Actual content is similar to broadcast; new distribution channels offered by online lead to incremental consumption
PSO2 News & current affairs	Video-on-demand services – 60 Other internet services – 153 Middling number of services, largely text-based apart from broadcasters	Real-time (unlike print) and on- demand (unlike broadcast). Low start-up costs make hyperlocal services viable	Any geography or topic is well catered for online, but trust and impartiality are harder to ensure in a real-time socially driven environment
PSO3 Sports & leisure	Video-on-demand services – 123 Other internet services – 366 Largest number of services, heavily non-video, taking in many small services	Online games represent a new category of leisure interest, and community-based features are popular with sports fans	Niche leisure interests are covered extensively online, but broadcasters retain the rights to major sports events
PSO4 Education	Video-on-demand services – 74 Other internet services – 106 Middling number of services with multiple video-based lessons	Online educational services exploit the two-way connection of the internet, in contrast to passive broadcast education	One of the most exciting areas: lectures from top universities are available to watch online, and students can learn, practise and be assessed on the internet

Key themes | Summary of online media services

PSO	Availability and range of services	Unique characteristics	Conclusions
PSO ₅ Factual programming	Video-on-demand services – 127 Other internet services – 291 Large number of services, more than half of which cater to "special interests"	Native online video tends to be short and low-budget. Some of the most typical online text services are public collaborations such as "wikis", outside the scope of the report	Broadcast-quality content is rare in this category, with exceptions such as Journeyman Pictures. Online is ideally suited to researching specific topics on-demand
PSO6 Religion	Video-on-demand services – 20 Other internet services – 27 Smallest number of services, fairly evenly split between video and other	The internet enables interactive concordances for religious texts and faith-based community forums	Few major services providing high quality services around religion and beliefs, possibly due to narrower addressable audience than for other objectives
PSO7 Children's & young people's programming	Video-on-demand services – 93 Other internet services – 123 Middling number of services, fairly evenly split between video and other. Numbers are bolstered by individual YouTube channels	New content genres such as teen video logs and virtual worlds for children offer community-based and interactive features not available on broadcast television	A lot of the content for pre-school children is redistributed broadcast content, however older children have access to entertainment made by other young people on YouTube
PSO8 Community & regional	Video-on-demand services – 63 Other internet services – 137 Middling number of services, tending to lower cost text-based websites	Very specific communities have dedicated services online, due to the low barriers to entry online, with hundreds of hyperlocal services available in each of the nations	Small and underserved communities are represented online; although it is not clear that there is much money in running such services; many are small scale independent services not run on a commercial basis

- 1. Executive Summary
- 2. Methodology
- 3. Internet trends
- 4. Key themes

5. Public Service Objectives

6. Appendix

PSO1 UK cultural activities | overview

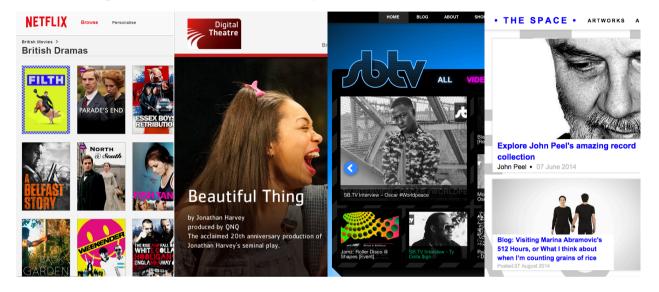
Public Service Objective

"that cultural activity in the United Kingdom, and its diversity, are reflected, supported and stimulated by the representation in those services (taken together) of drama, comedy and music, by the inclusion of feature films in those services and by the treatment of other visual and performing arts"*

Key findings

- Growth in over-the-top video, added to declining television viewing, which fell across all across all age groups for the first time in 2013, has pushed the online's video share of TV and video consumption to 10%, and more than a quarter amongst 16-24s
- The vast majority of this is to pure-play services, including subscription-based offerings such as Netflix and ad-funded services like YouTube
- A small amount of original TV-quality programming is now being funded by the likes of Netflix, and online services such as Digital Theatre are making other cultural content not broadcast on television available to the online audience. In music especially, the internet is becoming a, if not the, mainstream channel for discovering, sharing and listening

Netflix, Digital Theatre, SB.TV and The Space screenshots



Descriptions and links for selected services

Digital Theatre	Live and on-demand theatrical productions	www.digitaltheatre.com
Netflix	On-demand TV and film video service	www.netflix.com
SB.TV	Online broadcaster focused on urban music	www.sbtv.co.uk
The Space	Showcase for UK visual and audio artists	www.thespace.org
Rijksmuseum	Digitised art from Amsterdam's Rijksmuseum	www.rijksmuseum.nl/en

*www.legislation.gov.uk/ukpga/2003/21/section/264, clause (6)(b)

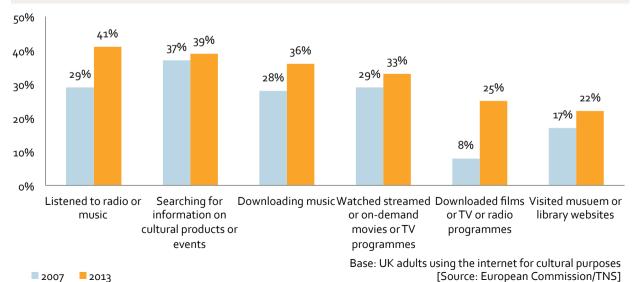
[Source: organisation websites]

PSO1 UK cultural activities | market context

- The most common form of participation in a cultural activity continues to be watching or listening to a programme on TV or radio
- While more and more people are accessing the internet, and more cultural content is available online, it is unclear whether this is translating into greater interest in art and culture
- What is clear is that the internet is enabling people to discover, consume and share arts and cultural content and experiences in new ways
- Film and television: Over-the-top video now accounts for 10% of TV and video consumption, though this includes short-form user-generated clips, as well as films and television shows
- Music: Internet distribution including download-toown, subscription and ad-funded streaming generates half of all spending on recorded music
- Visual and performing arts: Theatres, concert halls and galleries are using the internet to make shows available both live and on-demand, reach wider audiences and provide deeper context

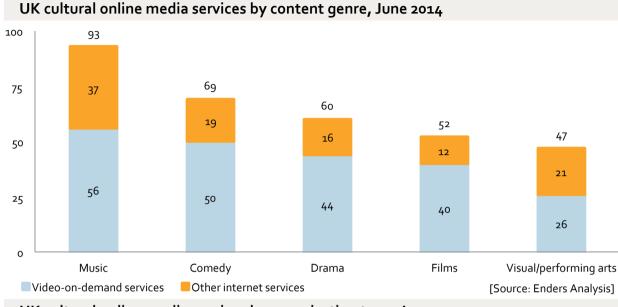
Have done at least once in the last 12 months (% of total) 100% 77% 77% 80% 61% 53% 49% 52% 60% 41% 39% 40% 37% 40% 20% 22% 20% 0% Watched or Been to the cinema Visited a museum Been to the theatre Been to a concert Seen a ballet, a listened to a or gallery dance performance cultural or an opera programme on TV or radio Base: UK adults [Source: European Commission/TNS] 2007 2013

Cultural activities on the internet (% of total)

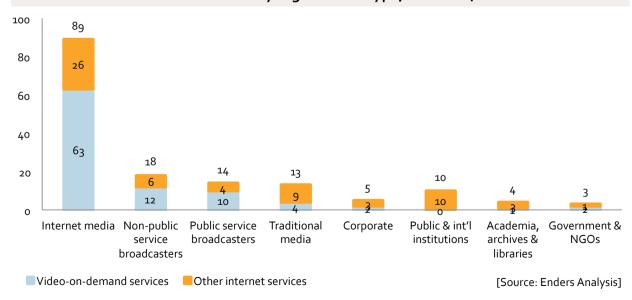


PSO₁ UK cultural activities | online media services

- Of the online services we analysed, 156 offered some relevant cultural content. The majority (62%) were primarily video services, in stark contrast to the total database of PSO-relevant entities, of which 31% are primarily video
- Many services delivering cultural content are simply new routes to market for traditional content, whether that is a broadcaster putting its videos online, an internet media service licensing TV and films from content owners, or an art gallery providing digital exhibitions of its collection
- However, some services offer original cultural material – from low budget comedic YouTube channels to full TV series from Netflix
- Additionally, entities offering even non-original content through a new channel can provide services that create and cater to different consumption habits:
 - Services such as Netflix can habituate users into watching television shows at less regular rates than are offered by linear scheduling
 - Convenience is a factor: although people may be able to visit the National Gallery, they can see its collection at a time of their choosing with an internet connection

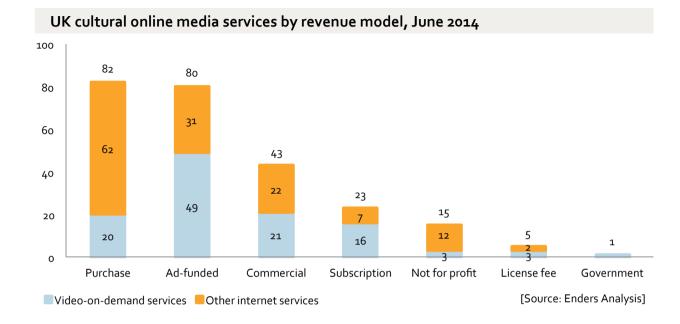


UK cultural online media services by organisation type, June 2014



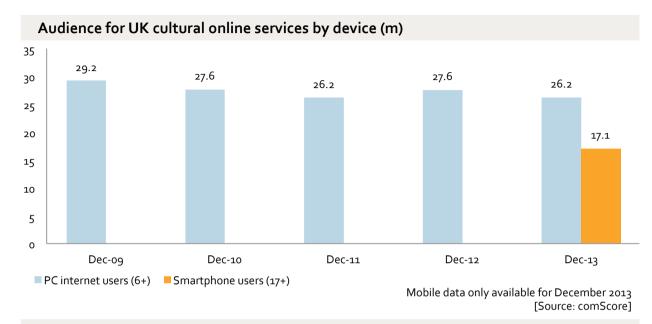
PSO₁ UK cultural activities | online media services

- Cultural content online is seen as valuable: paid services are overrepresented in this set versus the overall set of online media services across all eight PSOs
- Purchase of individual pieces of content, for example feature films, television series, music albums, and other forms of content, as well as advertiser-funding, are the most common funding models, the latter highlighting the wide appeal of many forms of cultural activity (see next slide)

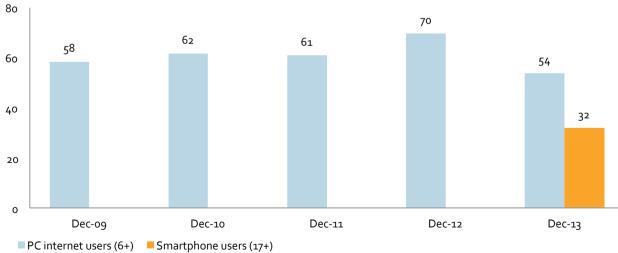


PSO₁ UK cultural activities | online usage

- The number of unique PC visitors to cultural services appears to be fairly flat over the past five years, with a slight downward trend. Assuming an increasing number of people who primarily go online via mobile and who do not strongly under-index on cultural services, we can posit a slight rise in users over time
- The effect of increased mobile usage is more apparent when looking at time spent on cultural services – the time on PCs has dropped much faster than PC users, meaning that many people continue to use PCs at least once a month, but their time online is shifting to other devices
 - These are patterns we see repeated across all the categories of media researched for this project
- Given the prevalence of video content amongst these services, it is likely that there is a lot of uncaptured consumption, via tablet, over Wi-Fi and in apps (the preferred way to consume video on mobile)
- Some sites at the centre of providing cultural material attract huge audiences. In June 2014, 62% of the UK online population visited a BBC site, a large portion of whose output supports and reflects UK cultural activity



Average time per user on UK cultural online services by device (minutes)



Mobile data only available for December 2013; mobile browser only [Source: comScore]

PSO₂ News & current affairs | overview

Public Service Objective

"those services (taken together) provide, to the extent that is appropriate for facilitating civic understanding and fair and well-informed debate on news and current affairs, a comprehensive and authoritative coverage of news and current affairs in, and in the different parts of, the UK and from around the world"*

Key findings

- Across the population, television continues to be the main method for accessing news and information on what is happening in the UK and around the world. Nevertheless, there is growing divergence between age groups
- Older people still rely on television news, but, according to an Ofcom survey in April 2014, the internet is now the most popular source for 16-24s
- Online-only services such as BuzzFeed and VICE, spanning entertainment-oriented snippets to detailed journalism covering serious issues in depth, are encouraging younger people to engage with news and current affairs
- Social media has become a powerful way of discovering breaking stories, but branded services remain the core sources

*www.legislation.gov.uk/ukpga/2003/21/section/264, clause (6)(c)

BuzzFeed, Journeyman Pictures, Vice and Truthloader screenshots



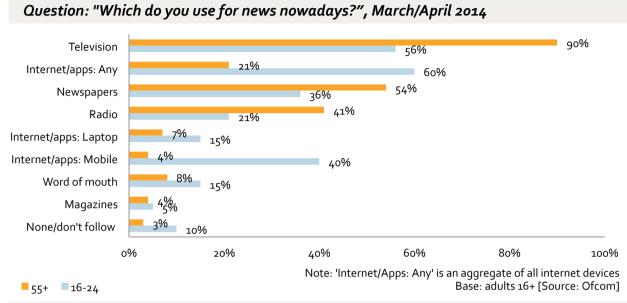
Descriptions and links for selected services

Journeyman Pictures	Online independent documentary maker	www.journeyman.tv
Buzzfeed	Social news and entertainment site	www.buzzfeed.com/
Truthloader	News and current affairs channel on YouTube	www.youtube.com/user/ truthloader
VICE	Investigative news and features website	www.vice.com/en_uk
Ampp3d	Data-focused stories content from Trinity Mirror	www.mirror.co.uk/news/ ampp3d/

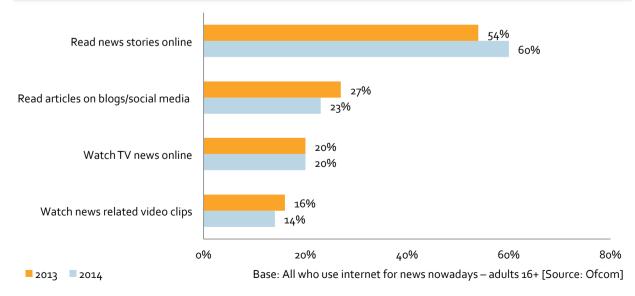
[Source: organisation websites]

PSO₂ News & current affairs | market context

- News has always occupied a central position in public service television broadcasting
- Recent surveys from Ofcom and Reuters have highlighted the rising importance of online media for accessing breaking news, whether through search engines, news websites or social networks, along with an expanding range of news content.
- Ofcom's report into news consumption in the UK indicates that TV news is still the most popular way of getting news, as claimed by 75% of its survey sample in 2014, compared with 78% in 2013
- Other data presented by Ofcom and Reuters point to major changes in digital news consumption due to the rapid growth in online access via websites and mobile apps
- Many of the changes in news consumption among the young look to be lasting and irreversible, though it is not yet clear how these changes will affect viewing to the TV set as they get older

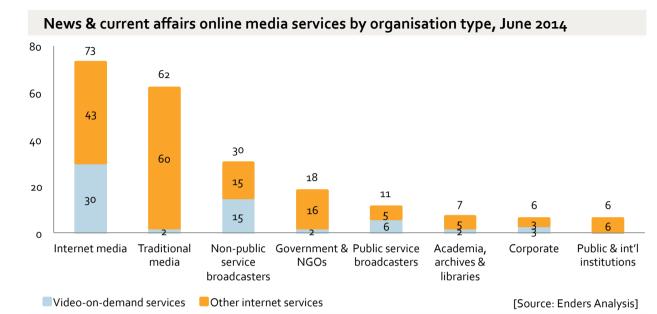


Question: "In what ways do you access and use news online?", March /April 2014

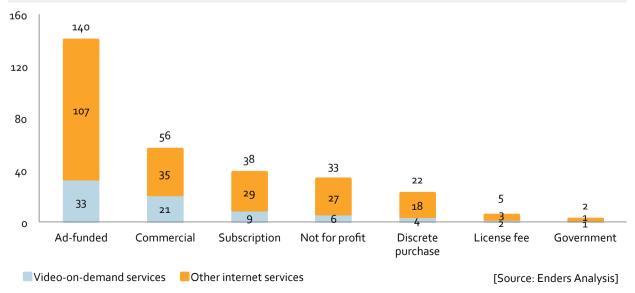


PSO₂ News & current affairs | online media services

- We recorded 213 online services offering news and current affairs coverage in the UK, addressing a virtually unlimited range of subjects and opinions
- Most traditional media companies and broadcasters put their existing news content online, much of which can be viewed without charge
- Some online news services have become strong brands, such as Vice and Huffington Post, providing up-to-the-minute news, as well as in-depth articles. Many are free at the point of use, funded by advertising, and cater to and attract younger audiences than traditional news providers
- The majority of online news services are still textbased, in part due to the cost of producing and distributing video. Increasingly, many feature short videos from news agencies and other sources, as well as user-generated clips from YouTube
- Whilst social media is an increasingly powerful source of breaking news, and most news providers have a social media presence, branded websites and/or apps remain the core news platform
- BuzzFeed is an excellent example of an online news (and entertainment) service that optimises its content to be shared via social media and consumed on mobile phones

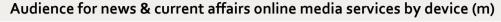


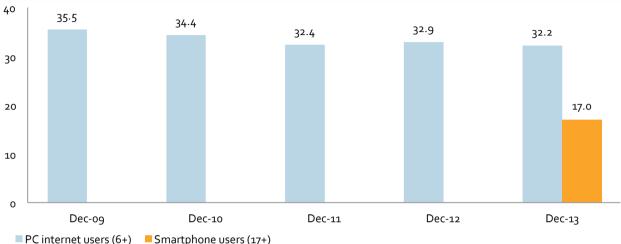
News & current affairs online media services by revenue model, June 2014



PSO₂ News & current affairs | online usage

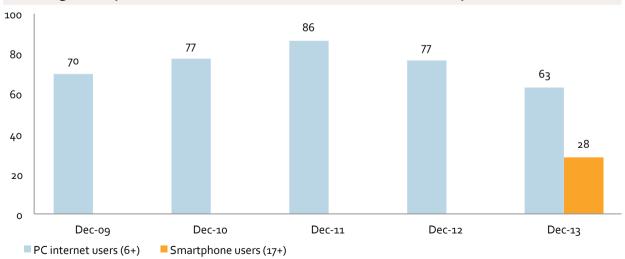
- The audience shift to mobile devices for news and current affairs content is shown in these charts
 - The upper chart shows the number of PC-based internet users accessing news and current affairs websites between December 2009 and December 2013, demonstrating mild decline, followed by stabilisation
 - By 2013, the mobile audience for news/current affairs was still significantly lower than that to the PC, but growing fast (smartphones have been widely available only since 2009)
- Overall consumption of online news and current affairs appears to be rising, though incomplete data for mobile devices makes it impossible to be sure
 - Aggregate usage was flat in December 2013 vs.
 December 2009, according to comScore
 - This excludes mobile apps, which in the US account for 80% of mobile internet usage
- Huge growth in traffic to certain online news services including traditional providers, such as the Guardian and Mail Online, and internet-only players, such as Vice and BuzzFeed, indicates that online news will continue to attract significant audiences





Mobile data only available for December 2013 [Source: comScore]

Average time per user on news & current affairs online services by device (minutes)



Mobile data only available for December 2013, mobile browser only
[Source: comScore]

PSO₃ Sports & leisure interests | overview

Public Service Objective

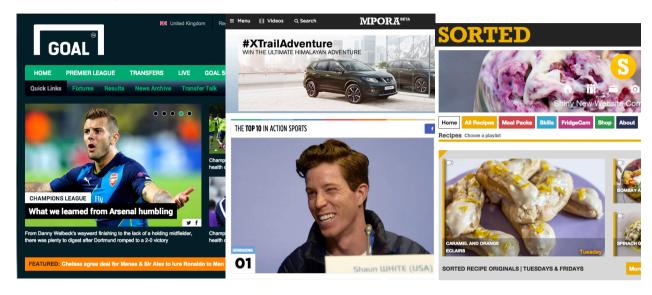
"those services (taken together) satisfy a wide range of different sporting and other leisure interests"*

Key findings

- Audiences for many sports events remain robust and, following the 2012 London Olympics, participation in sport is rising, according to Sport England
- Broadcast and video rights to the most popular professional sports leagues such as Premier League football are controlled by pay-TV operators notably Sky and BTTV, and can only be watched live on their platforms (though highlights are available through the BBC and in short form on News UK newspaper websites and mobile apps)
- Pirated video of many rights-based sports is widely available online, despite the attempts of the broadcasters and others to clamp down
- Niche sports, such as outdoor action sports, are more widely available over the internet
- Other leisure activities are also widely represented online, many taking advantage of the internet's unique interactive capabilities to create new ways for audiences to engage

*www.legislation.gov.uk/ukpga/2003/21/section/264, clause (6)(d)

Goal.com, Mpora, and Sorted Food screenshots



Descriptions and links for selected services

Goal.com	London-based football-focused website	www.goal.com
Mpora	Main website for action sports network	www.mpora.com
Sorted Food	Recipe and cooking website and YouTube channel	www.sortedfood.com
RHS	Gardening website	www.rhs.org.uk
Twitch	Livestreams of videogames	www.twitch.tv

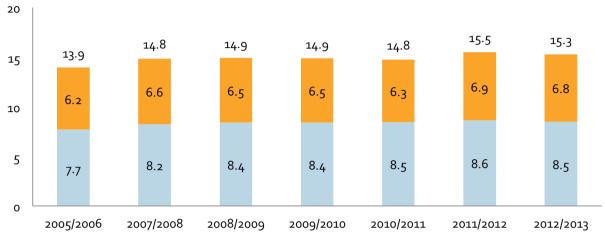
[Source: organisation websites]

PSO₃ Sports & leisure interests | market context

- Audience levels for many sports events remain robust and, following the 2012 London Olympics, participation in sport is rising, according to Sport England
- Viewing of TV sports channels remains significant, accounting for about 8% of total TV viewing, and an even higher share on the five main PSB channels; much of the improvement due to the 2012 London Olympics and Paralympics
- Sport continues to be the largest revenue-generating genre for multi-channel broadcasters, accounting for 43% of revenue In 2013, with revenue reported by sports channels rising 13%, mainly due to increased activity by BSkyB and the launch of BT Sport*
- Pay-TV and free-to-air broadcasters retain live rights to most popular sports, including 'listed events', and other major sports, such as Premier League football, exclusively on Sky and BT Sport
- Whilst the cost of live and on-demand rights to popular sports events remain beyond the reach of almost all online only sports services, online coverage is increasing, particularly for niche sports
- In addition, many online sports sites offer fans a chance to interact in ways that are not possible with broadcast media

*p.165, Ofcom Communications Market Report August 2014

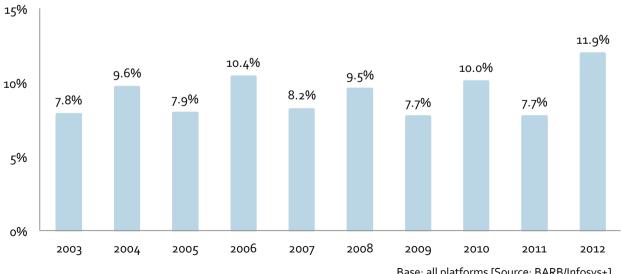
Number of people in England participating in sport at least once a week (m) 20



Adult participation in 30 minutes, moderate intensity sport Base: adults 16+ [Source: Sport England]

Sports channels' share of TV broadcast minutes (% of total)

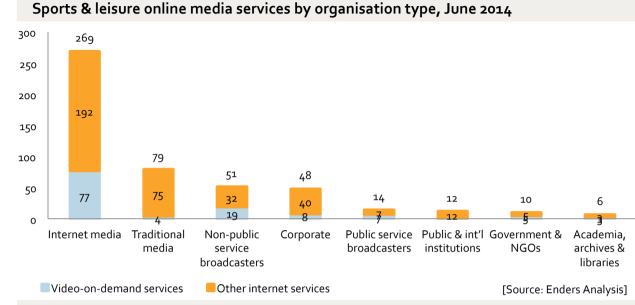
■ Men ■ Women



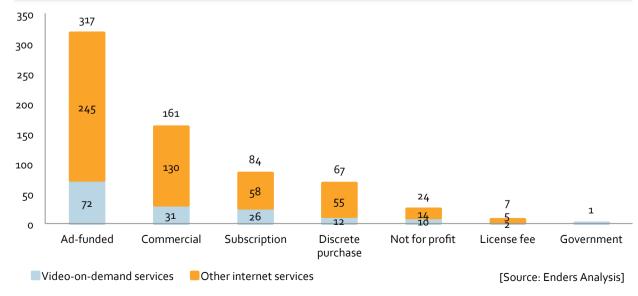
Base: all platforms [Source: BARB/Infosys+]

PSO₃ Sports & leisure interests | online media services

- More than half of the services analysed contained material relevant to sports and leisure interests, making it the most frequently fulfilled objective in the database. Of these, 210 contained material relating to sports specifically
 - The non-sports entities varied in focus, but the most common leisure interests covered are cooking, fashion and especially gaming
 - The prevalence of game-related services can be explained by the congruence of the medium and the activity: you cannot cook online, but you can play games online
- These services are generally ad-funded and online native, suggesting that there is enough of an audience to maintain dedicated ad-funded services
- Niche and highly specific leisure interests are very well catered for online, compared to traditional media.
 Action sports, comic books, anime and bodybuilding are all served by one or more entity analysed
 - This is partly due to the lack of geographical restrictions for content distribution (so a large but diffuse audience is as attractive as a large concentrated one), and partly due to the ease of discovery offered by web search

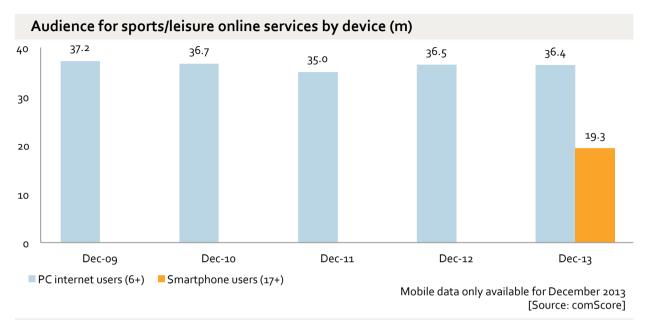




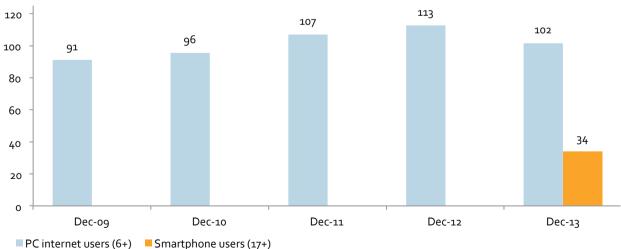


PSO₃ Sports & leisure interests | online usage

- Sports and leisure interests commanded a very large audience throughout the review period – 81% of the total PC audience and 64% of the total mobile audience accessed a service in this category in December 2013
- Consumption within this category has increased on a per person basis over the past five years, and it has remained with the PC to a greater extent than others
 - Possibly this is a result of in-depth guides and discussions of leisure interests being more suited to desktop consumption – many of the entities surveyed consist of medium or long-form text posts
- Consumption is widely distributed the category has a very long tail of small entities catering to niche interests, which aggregate to large audiences



Average time per user on sports/leisure online services by device (minutes)



Mobile data only available for December 2013, mobile browser only
[Source: comScore]

PSO₄ Education | overview

Public Service Objective

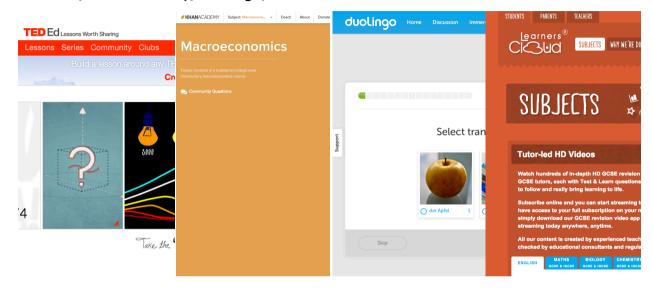
"those services (taken together) include what appears to OFCOM to be a suitable quantity and range of material on educational matters, of material of an educational nature and of other material of educative value"*

Key findings

- The internet has largely replaced television as a key channel for learning, with public service television no longer broadcasting educational programmes (the last course-related Open University programme was shown on BBC2 in 2006)
- Schools, colleges and universities increasingly make recordings of lessons available via websites and platforms such Apple's iTunesU (which offers over 50,000 free lectures from local colleges and elite universities)
- But in the last few years the internet has come into its own as an educational platform across a vast range of subjects. Options range from simple lessons to structured programmes, many free at the point of use
- Increasing adoption of mobile devices means that learning can take place anywhere anytime; classrooms are no longer required

*www.legislation.gov.uk/ukpga/2003/21/section/264, clause (6)(e)

TED-Ed, Khan Academy, Duolingo, and Learners Cloud screenshots



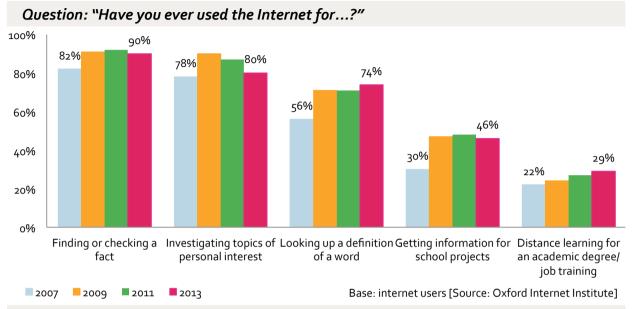
Descriptions and links for selected services

Codecademy	Interactive programming/coding courses	www.codecademy.com
Duolingo	Online and app-based language learning service	www.duolingo.com
Khan Academy	Interactive learning service	www.khanacademy.org
TED-Ed	Interactive educational website	ed.ted.com
Learners Cloud	Subscription-based interactive learning website	www.leanerscloud.com

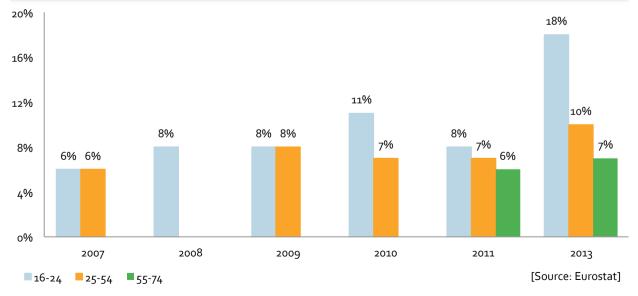
[Source: organisation websites]

PSO₄ Education | market context

- Ever since Lord Reith, the BBC's first Director General, stated that the broadcaster's mission was to "entertain, inform and educate", education formed a core part of the television landscape, with programmes for schools and the Open University broadcasting course-related programmes on BBC2 until 2006
- In the last few years, however, much of this territory has been ceded to the internet
 - Students of all ages now use the internet as a primary source of information
 - Schools and universities increasingly post audio and video recordings of lessons onto websites and platforms such Apple's iTunesU
- More recently, there has been a surge of innovation and investment in online education
- A key area of growth has been around interactive learning, ranging from simple lessons, such as those provided by TED-Ed and Khan Academy, to more structured programmes from dedicated service providers such as EdX (backed by Harvard and MIT) and Coursera (a US for-profit enterprise)

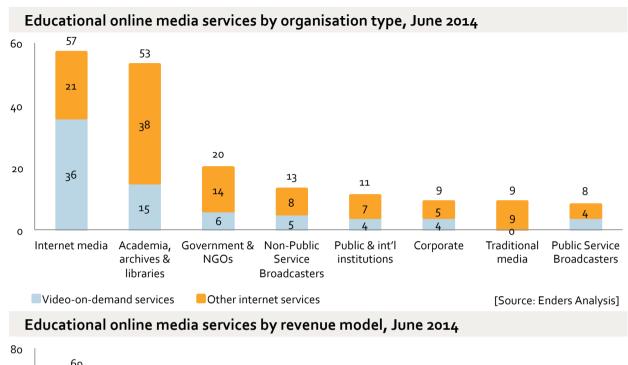


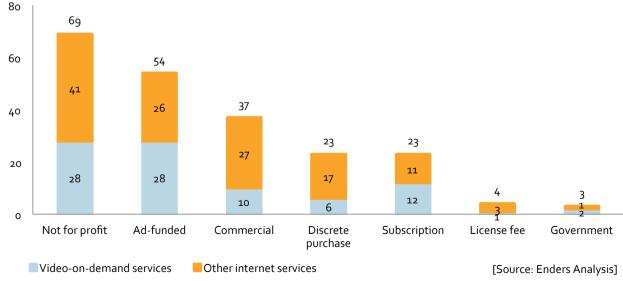
Individuals studying an online course within the last 3 months (% of age group)



PSO₄ Education | online media services

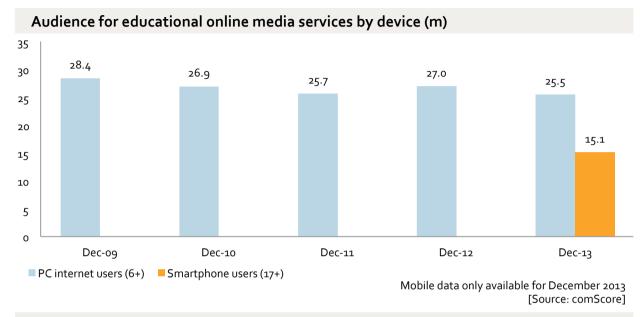
- Across all platforms, 180 entities in our dataset provide educational material. Unsurprisingly academia, archives and libraries are the most highly represented in this category, on a par with internet media companies in absolute terms
- In terms of content type, online-native educational services, such as Ted-Ed or Khan Academy, are much more likely to concentrate on video than the online offerings of existing educational organisations.
 Indeed many popular educational services consist only of a YouTube channel
- Consonant with education's status as a social good, the most common business model for the education services we inspected is not-for-profit, although given the state resources involved in education generally the relative lack of popular government-funded services is surprising
- One feature of online educational services that distinguishes them from other educational media is interactivity: the internet offers the possibility of taking scored tests, getting feedback, or producing a project in a way closer to classroom learning than to, say, an educational television programme



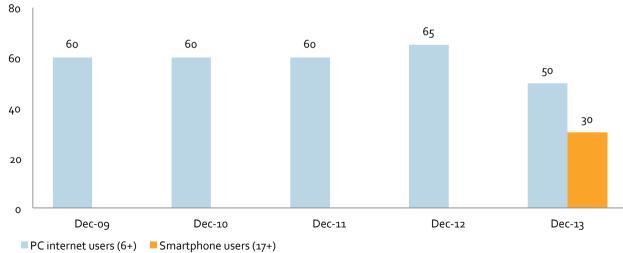


PSO₄ Education | online usage

- The audience for educational services is smaller than most, but still represents more than half of the total online population
- Mobile data for the latest year shows that a large proportion of the audience for educational services access them on their smartphones.
 - This is likely due in part to the presence of highquality educational mobile apps, of which Memrise, Duolingo and Coursera are current examples
 - It also suggests a pattern of people learning in much more diverse contexts than are possible with traditional educational media: a Duolingo language session on mobile can be fitted into a lunchtime queue
- Across all devices, per-user consumption appears to be increasing. In addition, several high-profile services which have launched during the review period, whose usage is not captured in PC usage data, implying overall consumption is even higher



Average time per user on educational online media services by device (minutes)



Mobile data only available for December 2013, mobile browser only
[Source: comScore]

PSO₅ Factual | overview

Public Service Objective

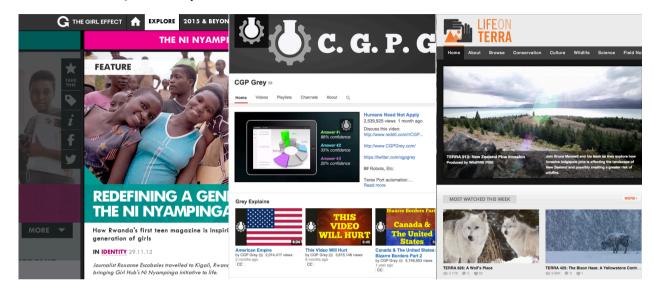
"those services (taken together) include what appears to OFCOM to be a suitable quantity and range of material dealing with each of the following, science, religion and other beliefs, social issues, matters of international significance or interest and matters of specialist interest"*

Key findings

- Television accounts for the majority of high-value factual programming such as documentaries and history and nature programmes, which continue to attract significant audiences
- Broadcasters, platform operators and new internet media firms are making professional video content available free at the point of use online
- Limited commercial prospects of niche factual and current affairs content means that ad-based models cannot generate large enough audiences
- Factual programming on the internet falls into three categories: low production value online only content, often short form; old television shows which may be accessed via aggregators such as YouTube and Netflix; and a small number of TV-quality shows from the likes of Joumeyman Pictures for a fee

*www.legislation.gov.uk/ukpga/2003/21/section/264, clause (6)(f)

The Girl Effect, CGP Grey and Life on Terra screenshots



Descriptions and links for selected services

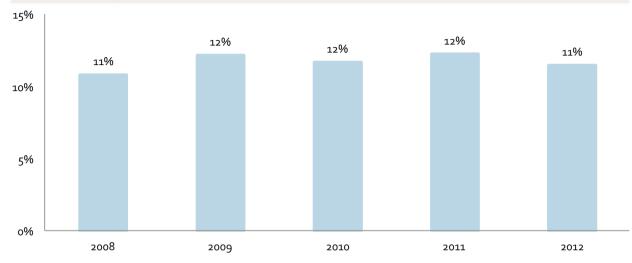
Journeyman Pictures	Online independent documentary maker	www.journeyman.tv
CGP Grey	Educational YouTube channel focused on history	www.youtube.com/user/ CGPGrey
Life on Terra	Science and natural history website	lifeonterra.com
Periodic Videos	Video based website on periodic table	www.periodicvideos.com
The Girl Effect	Website of campaign for women's education in third world countries	www.girleffect.org

[Source: websites]

PSO₅ Factual | market context

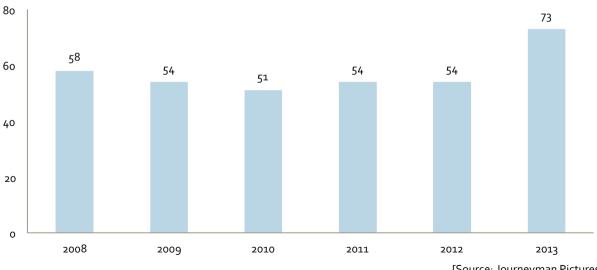
- Documentaries have had a commercial renaissance in the last decade, with high profile feature-length titles such as Fahrenheit 9/11 and March of the Penguins having successful runs in cinema and attracting significant audiences when broadcast on television
- This is reflected in TV viewing: according to BARB data, on average we spend almost half an hour every day watching TV documentary channels, up significantly from a decade ago
- There is also increasing investment in documentaries produced for online distribution, with sites such as Joumeyman Pictures covering a growing range subjects and making videos available on their website as well as licensing them to broadcasters, educational institutions and commercial entities

Documentary channels' share of TV broadcast minutes (% of total)



Base: all platforms [Source: BARB/Infosys+]

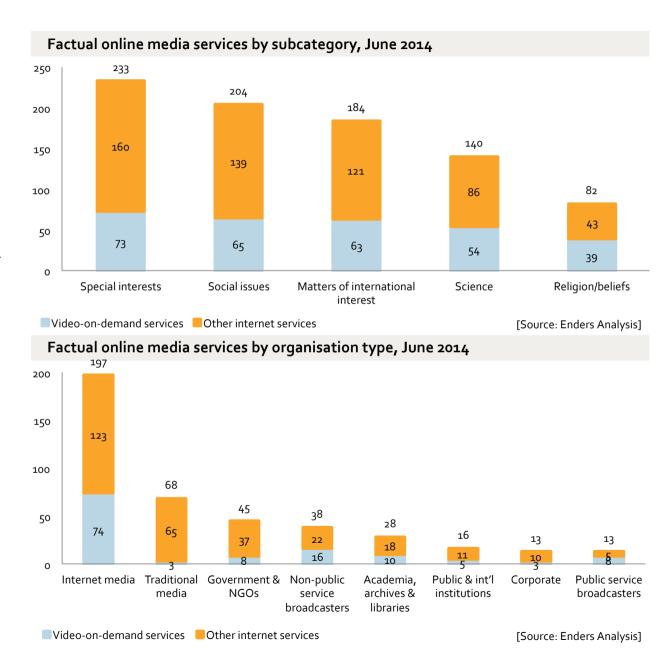
Journeyman Pictures: number of documentaries produced each year



[Source: Journeyman Pictures]

PSO₅ Factual | online media services

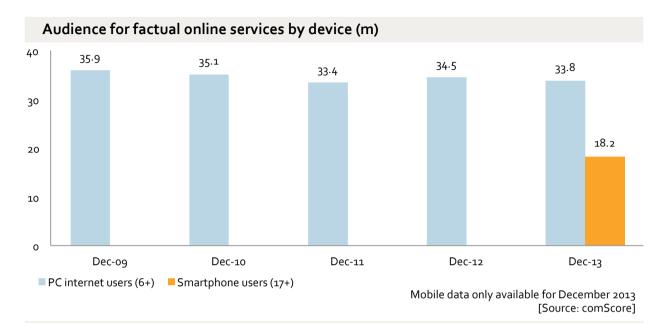
- We identified 418 entities featuring material dealing with science, religion, social issues, matters of international significance or matters of specialist interest, around 70 of which fulfilled this objective alone
- The distribution of these services across the types of organisation and funding models we identify matches the distribution of all online media services in the database
 - This is likely down to the breadth of the objective –
 there is some variation when broken down further.
 Government and NGOs are highly represented in
 services dealing with social issues, for example
- Much of the content in this category is of a lower quality than equivalent broadcast content.
 Nevertheless, users undoubtedly value the ability to access information content on demand on any topic, e.g. Yad Vashem for holocaust research, Hope Stories for accounts of recovery from drug addiction, or Climate Conference for information on climate change
- In line with one of our key findings, highly specific interests are well catered for, with special interests being the best represented subcategory here



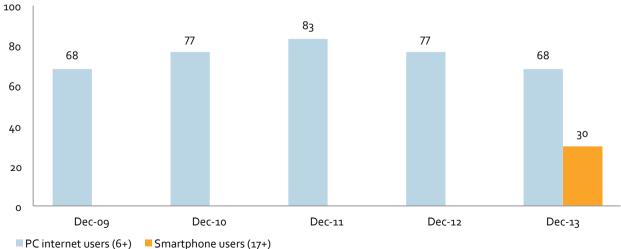
PSO₅ Factual | online usage

- Many of the largest traditional and internet media companies offer content which falls into this category

 extracting an audience for factual content specifically is difficult
- Online services are bound to be taking a large share of people who want to find a specific piece of information on, say, a scientific topic
- Much of the content which more directly substitutes for broadcast media is delivered by YouTube channels: millions of people subscribe to entities producing short videos dealing with factual content, such as CGP Grey (1.5 million subscribers) and Vsauce (7.7 million)
- Per-day usage is high in this category, as users can take in many services which offer such content in a single browsing session



Average time per user on factual online services by device (minutes)



Mobile data only available for December 2013, mobile browser only [Source: comScore]

PSO6 Religion & beliefs | overview

Public Service Objective

"the material included in those services that deal with religion and other beliefs include programmes providing news and other information about different religions and other beliefs; material about the history of different religions and other beliefs; and material showing acts of worship and other ceremonies and practices (including some showing acts of worship and other ceremonies in their entirety)"*

Key findings

- As on broadcast television, religion is underserved online, with few high quality websites catering to the need for objective content and informed discussion
- Most of the religious sites on the internet are not for profit, with much of the content repackaged from other media such as print or television
- Some educational websites such as Faithology, Quran Explore and Bibledex offer insight and information to those that are seeking it, but such services attract small audiences

Faithology, Beliefnet and Bibledex screenshots



Descriptions and links for selected services

Fathology	Online encyclopaedia of religions and beliefs	www.faithology.com
Quran Explorer	Web application providing English and Arabic Quran and interactive features	www.quranexplorer.com
Bibledex	Educational website offering videos on all books of the bible	www.bibledex.com
Religion & Ethics NewsWeekly	Video website covering range of religious topics	www.pbs.org/wnet/ religionandethics/
Beliefnet	General religion/spirituality resources	www.beliefnet.com

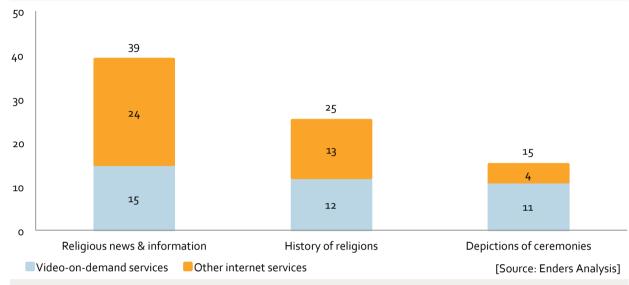
*www.legislation.gov.uk/ukpga/2003/21/section/264, clause (6)(g)

[Source: organisation websites]

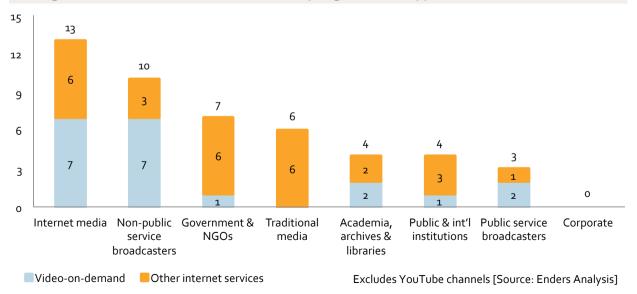
PSO6 Religion & beliefs | market context

- In total, we found just 47 services offering religious material, making it by far the most underserved category
- Of these, about a quarter relate primarily to religion and beliefs. Compared to other objectives, therefore, there is a real lack of dedicated services providing religious content
- Many of the organisations in this category are not for profit, and much of the content is imported from another medium (e.g. from broadcasters such as the BBC or Islam Channel, or the radio show On Being) – this suggests that there is not much commercial opportunity in a dedicated online religious service
- This is possibly due to the fact that religious media content has more limited appeal than other categories: even practising members of a religion are not necessarily interested in media content about religions
- Depictions of ceremonies (264(6)(g)(iii)) are particularly poorly catered for – small media organisations with low levels of funding can report on religious news and information, but may lack the resources and access required for recording ceremonies in their entirety

Religion & beliefs online media services by subcategory, June 2014

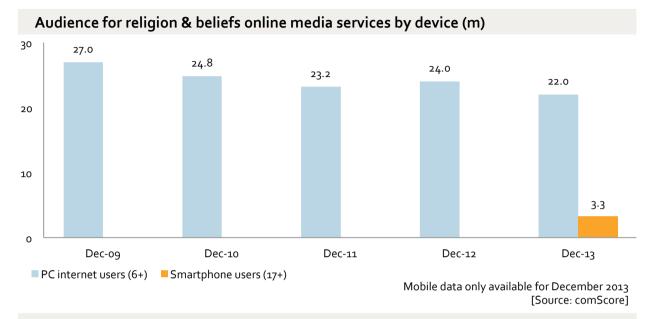


Religion & beliefs online media services by organisation type, June 2014

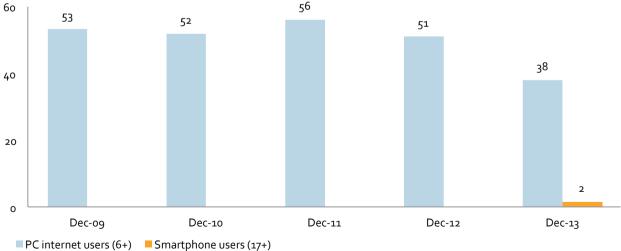


PSO6 Religion & beliefs | online media usage

- This category has the smallest aggregate audience, and one which is propped up by large, generalpurpose media companies such as the Telegraph or the BBC, only some of whose content is dedicated to religion and beliefs
- It has gained little traction on mobile, possibly due to the audience demographics, and the fact that few of the services have mobile apps
- Time spent is variable over the review period, but declined significantly from 2012 to 2013, with total mobile minutes not enough to make up the 25% drop in PC time per user
- Given that broadcasters supply a good deal of highquality and well-established material in this category, usage is likely to be remaining with traditional media







Mobile data only available for December 2013, mobile browser only
[Source: comScore]

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PSO7 Children & young people | overview

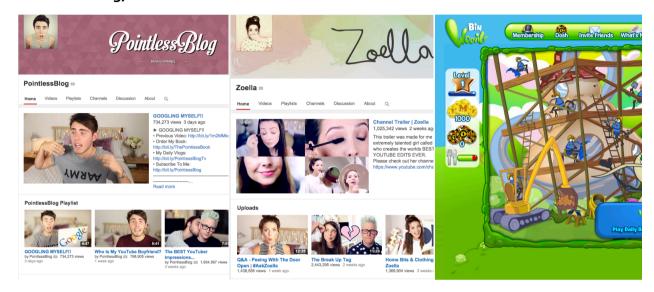
Public Service Objective

"those services (taken together) include what appears to OFCOM to be a suitable quantity and range of high quality and original material for children and young people"*

Key findings

- Whilst young children's access to the internet is restricted by many parents, increasing availability of mobile devices especially tablets in many homes provides a growing opportunity to deliver content and interactive services
- Outside the BBC and games, there is little high quality original programming online – what there is mainly comes from television broadcasters
- As the next slide shows, the internet is almost ubiquitous amongst teenagers and young people, who spend an increasing amount of time online, whether at home or via mobile devices, notably smartphones
- The success of YouTube has turned video loggers (vloggers), often just talking to camera in their own bedrooms into virtual superstars

PointlessBlog, Zoella and Bin Weevils screenshots



Descriptions and links for selected services

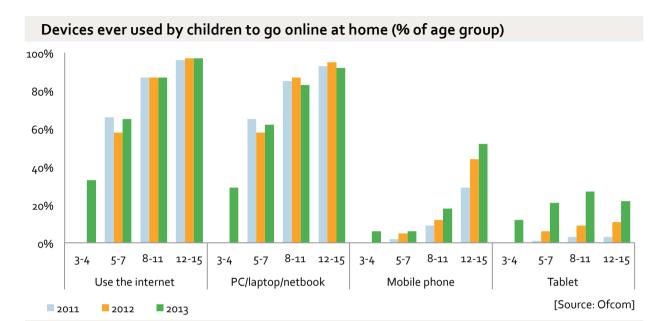
PointlessBlog	YouTube channel featuring comedy and advice for teens	www.youtube.com/user/ PointlessBlog
Zoella	YouTube channel with beauty and fashion advice for teens	www.youtube.com/user/ zoella280390
Marcus Butler TV	YouTube channel featuring comedy and advice aimed at teens	www.youtube.com/user/ MarcusButlerTV
Bin Weevils	Games website for children	www.binweevils.com/
Moshi Monsters	Games website for children	www.moshimonsters.com

*www.legislation.gov.uk/ukpga/2003/21/section/264, clause (6)(h)

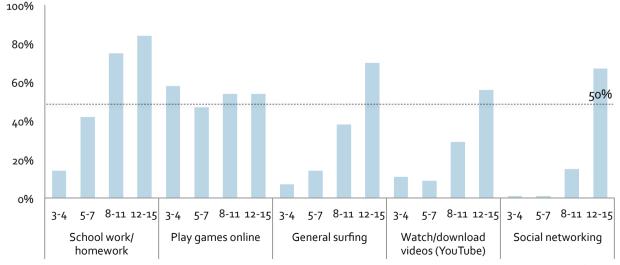
[Source: organisation websites]

PSO7 Children & young people | market context

- Television remains the dominant medium for children, but the internet is becoming increasingly ubiquitous, even amongst the youngest age groups
- Almost all children watch television every day; more than participate at least daily in any other media activity, averaging 2.4 hours a day
- According to comScore, 6-14s that have PC internet access average 15 minutes per day online, a fraction of the average spent watching TV, though this excludes time online via smartphones or tablets
- The PC is still the commonly used device for children to go online, though access to internet-enabled mobile phones and tablets is rising fast
- Younger children are more likely to have tablets, whilst older children prefer smartphones
- School work/home work is the most commonly undertaken activity on the internet, but many other media are common
- Over half of all children with access to the internet play games online every week, and the majority of 12-15s surf the internet, watch videos on sites like YouTube and use social networking services



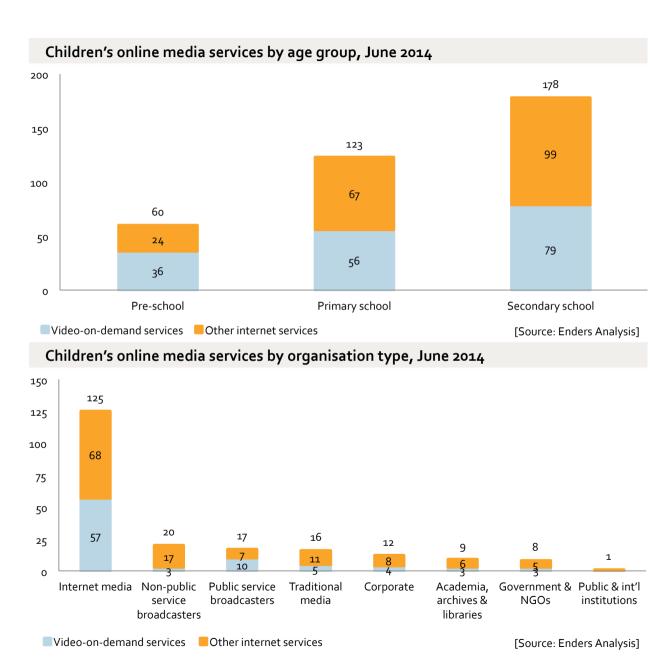
Top 5 internet activities carried out once a week by children, June 2013 (% of age group)



Children with internet access in the home [Source: Ofcom]

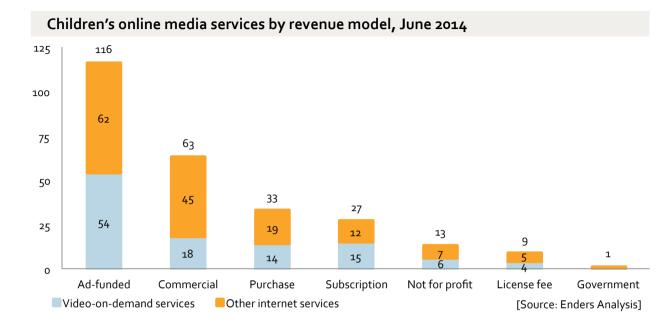
PSO7 Children & young people | online media services

- Of the services we researched, 216 included highquality, original material for children and young people. The majority of these are original to the online space, and the dominant business model is adfunded, suggesting that the audience for such services is large enough to support such approaches
- Secondary school-age children are better served than younger children, as they are likely to spend more time online and use social media as a leisure activity, making the internet an ideal place to serve them content
- 43% of these services primarily offer video content, compared with 34% for the database as a whole, which makes children and youth television the best context for the online content
- Some young people's content online falls into genres not really found in traditional media. Twitch is a service that allows visitors to watch other people play videogames live, and there are several young people making popular videos of themselves talking to camera from their bedrooms
- The presence of services not available on television, as well as the fact that many TV shows for young people are available online anyway, means that we are likely to see even more consumption of children and young people's content move online



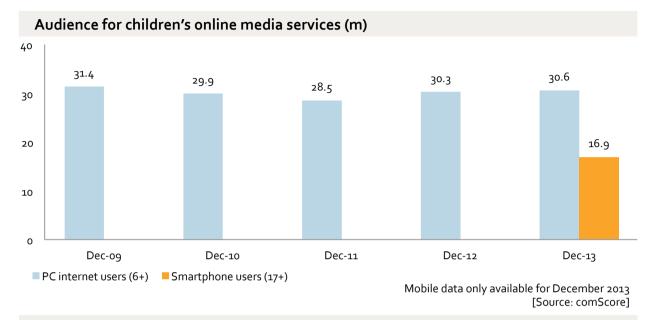
PSO7 Children and young people | online media services

- Advertising is the most common funding model for children's and young people's content
- For children this perhaps reflects many parents'
 unwillingness to pay for online media when there are
 free alternatives at the point of use such as the BBC's
 cbeebies and CBBC, by far the most popular online
 services for children (ironically one of the reasons
 parents prefer the BBC services is that they do not
 feature ads)
- In contrast, for teens, the internet provides an attractive route for advertisers to reach this otherwise hard-to-target audience

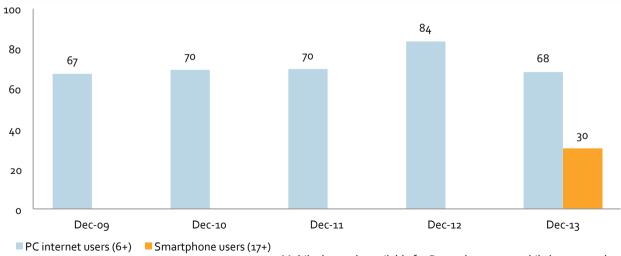


PSO7 Children and young people | online usage

- Unlike many categories, the PC-only audience and consumption for the children and young people's services we identified has increased over the past 3 years. Adding in mobile growth means this is an area where more consumption is going online
- Much of this is likely to be incremental to usage of traditional media, as children increasingly go online for services which cannot be replicated by other media, such as virtual worlds like Neopets or Bin Weevils
- As noted earlier, the prevalence of video content in this category means that the internet will increasingly substitute young people's media consumption, especially as children and young people are almost universally conversant with connected technology
- The mobile picture is mixed secondary school students are likely to concentrate their usage on smartphones, and many services for them deliver content through YouTube and social media networks, which are increasingly mobile-optimised. Some YouTube vloggers (see case study) deliver content over Snapchat, which is only available on mobile
- On the other hand pre-school age children do not own phones, although many services have tablet apps, as the tablet is less of a single-user device



Average time per user on children's online media services by device (minutes)



Mobile data only available for December 2013, mobile browser only
[Source: comScore]

PSO8 UK communities | introduction

Public Service Objective

"sufficient quantity of material that reflect the lives and concerns of different communities and cultural interests and traditions within the UK, and locally in different parts of the UK"

Key findings

- There are thousands of niche sites and services on the internet catering to different communities, though many are small, semi-professional operations, run for love rather than money
- At the next level, there are a more limited number of commercially-operated websites, often focused around larger towns and cities, such as The Edinburgh Reporter and the Lincolnite
- Aggregate audiences for niche and community-based content are material, but the market remains highly fragmented, making significant investment in content problematic

The Edinburgh Reporter, The Lincolnite, It Gets Better and Farmer's Weekly screenshots



Descriptions and links for selected services

The Edinburgh Reporter	Local news and features for people living in Edinburgh	www.theedinburghreporter.c o.uk
The Lincolnite	Local news and articles for people living in Lincoln	thelincolnite.co.uk
1,000 Londoners	Online project offering profiles of Londoners	www.1000londoners.com
It Gets Better	Website for LGBT community	www.itgetsbetter.org
Farmer's Weekly	Online magazine for farming community	www.fwi.co.uk

*www.legislation.gov.uk/ukpga/2003/21/section/264, clause (6)(i)

[Source: organisation websites]

PSO8 UK communities | market context

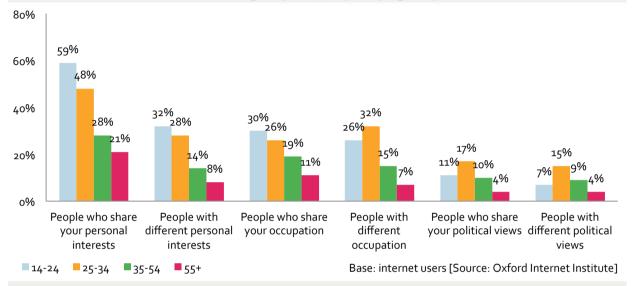
UK communities

- Whilst the internet fosters interaction, as in the offline world, all age groups interact online more with people who have shared interests than with those with different personal interests
- As with many online activities, there is
 a sharp difference between age groups: younger
 internet users are far more likely to interact with
 other internet users, there is far less interaction
 among older cohorts

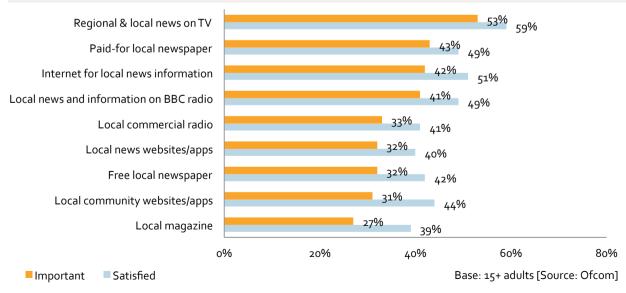
Local/regional interests

- According to Ofcom's local media survey, television remains the most-used source for regional/local news: 77% of all adults watch at least weekly, compared to half who use newspapers and radio, and 39% using online sources
- Most local media users consider television to be the most important source of regional and local news and are most satisfied with regional and local news on television, however the internet is now considered as important as local newspapers and more important than local radio

Online interaction with different groups of people by age, April 2013 (% of total)

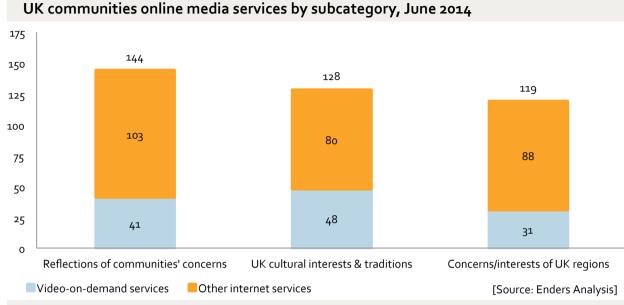


Importance and satisfaction of local media, March/April 2014 (% of adults)

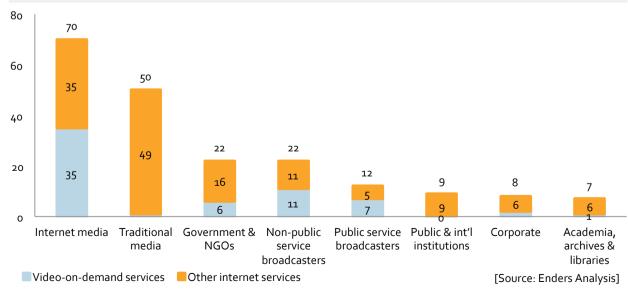


PSO8 UK communities | online media services

- We recorded 200 services containing content relevant to the concerns of communities and regions. A large proportion of these are provided by traditional media companies and broadcasters, due in large part to the number of local news organisations which post material online, as well as the tendency of national news organisations to include relevant material
- Online entities can serve minority concerns due to the low cost of entry and by building geographically disparate audiences. As a result, relatively small communities in the UK can find services dedicated to their interests
 - Examples looked at include iRokoTV, providing Nigerian films and music, and BSLZone, which offers videos for the deaf
- While communities such as these are sizeable, they often do not represent a large enough domestic audience to justify dedicated broadcast or print services, but are well-served online
- The private nature of browsing on a personal device makes it an ideal space to find material for LGBT communities for those who may not want that consumption known – It Gets Better is a good example of this

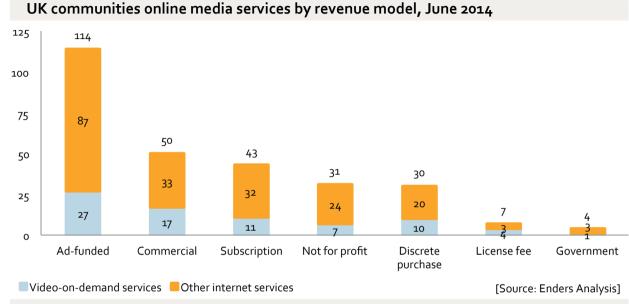


UK communities online media services by organisation type, June 2014

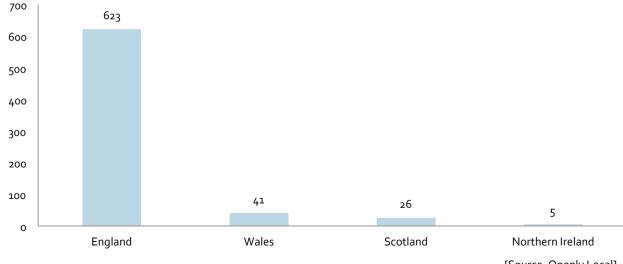


PSO8 UK communities | funding and the long tail

- Due to our methodology which focused on the most popular services, there is relatively little coverage of smaller entities
- This is brought into focus in the case of local and hyperlocal services: where the potential audience is limited. Services can be highly successful while only reaching a few thousand people
- For example, in order to be one of the top 400 entities by users according to comScore, a site needs about 1 million monthly unique users, greater than the population of Liverpool
- For this reason our database lists about 120 services which contain material dealing with the concerns or interests of UK nations or regions, whereas Openly Local's hyperlocal website database lists 695 dedicated local websites
- Although some of these services may be inactive,
 Openly Local's database highlights the size of the long tail for smaller communities across the UK
- The chart opposite shows the number of local and hyperlocal sites listed by Openly Local by nation – one surprise perhaps is that there are not more sites listed for Scotland, though there may be others
- The wider point is that there are many more services than we have recorded across all the PSOs



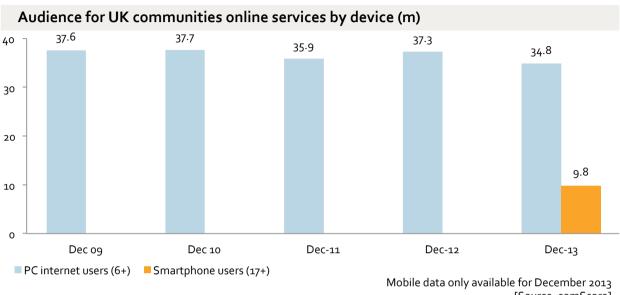
Hyperlocal sites by nation from Openly Local, September 2014



[Source: Openly Local]

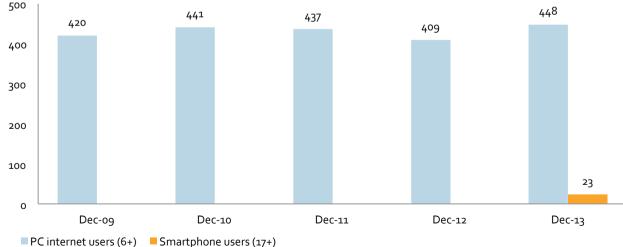
PSO8 UK communities | online media usage

- The audience for services which deliver material relating to the interests of communities is very large, comparable to that of sport and leisure interests
- Also like leisure interests, there is a long tail of small services catering to interest groups
- There are also big media companies providing content in this space: the PSBs, national newspapers, and large internet companies such as Vice
- Mobile users and usage are underrepresented in this category – many local news organisations only offer websites, which often have not been optimised for mobile browsing
- Newspapers, which are the traditional source of local and regional information, are also already 'mobile', perhaps reducing the need for mobile access



[Source: comScore]

Average time per user on UK communities online services by device (minutes 500



Mobile data only available for December 2013, mobile browser only [Source: comScore]

- 1. Executive Summary
- 2. Methodology
- 3. Internet trends
- 4. Key themes
- 5. Public Service Objectives

6. Appendix

Appendix | Public Service Objectives

- The Public Service Objectives (PSOs), as set out the 2003
 Communications Act, are defined in terms of the wider purposes for public service television broadcasting*
- These include that:
 - "cultural activity in the United Kingdom, and its diversity, are reflected, supported and stimulated by the representation in those services (taken together) of drama, comedy and music, by the inclusion of feature films in those services and by the treatment of other visual and performing arts;
 - those services (taken together) provide, to the extent that is appropriate
 for facilitating civic understanding and fair and well- informed debate
 on news and current affairs, a comprehensive and authoritative
 coverage of news and current affairs in, and in the different parts of, the
 United Kingdom and from around the world;
 - those services (taken together) satisfy a wide range of different sporting and other leisure interests;
 - those services (taken together) include what appears to OFCOM to be a suitable quantity and range of programmes on educational matters, of programmes of an educational nature and of other programmes of educative value;
 - those services (taken together) include what appears to OFCOM to be a suitable quantity and range of programmes dealing with each of the following, science, religion and other beliefs, social issues, matters of international significance or interest and matters of specialist interest;

- the programmes included in those services that deal with religion and other beliefs include —
 - programmes providing news and other information about different religions and other beliefs;
 - programmes about the history of different religions and other beliefs;
 and
 - programmes showing acts of worship and other ceremonies and practices (including some showing acts of worship and other ceremonies in their entirety);
- those services (taken together) include what appears to OFCOM to be a suitable quantity and range of high quality and original programmes for children and young people;
- those services (taken together) include what appears to OFCOM to be a sufficient quantity of programmes that reflect the lives and concerns of different communities and cultural interests and traditions within the United Kingdom, and locally in different parts of the United Kingdom;
- those services (taken together), so far as they include programmes made in the United Kingdom, include what appears to OFCOM to be an appropriate range and proportion of programmes made outside the M25 area."

Appendix | Video-on-demand and other internet services

- For this project, we have delineated online media services as:
 - Video-on-demand (VOD) services: as per "on-demand programme services", as defined in the 2003 Communications Act, expanded to include services offering other forms of video content and services provided by a person not under UK jurisdiction for the purposes of the Audiovisual Media Services Directive
 - Other internet services: typically providing text, pictures, video clips, audio clips, or other interactive content, excluding any service which could be defined as a VOD service
- On-demand programme services (ODPS) are defined in section 368A of the 2003 Act* as follows:
 - "a service is an "on-demand programme service" if-
 - a) its principal purpose is the provision of programmes the form and content of which are comparable to the form and content of programmes normally included in television programme services;
 - b) access to it is on-demand;
 - c) there is a person who has editorial responsibility for it;
 - d) it is made available by that person for use by members of the public; and
 - e) that person is under the jurisdiction of the United Kingdom for the purposes of the Audiovisual Media Services Directive

- Access to a service is on-demand if
 - a) the service enables the user to view, at a time chosen by the user, programmes selected by the user from among the programmes included in the service; and
 - b) the programmes viewed by the user are received by the user by means of an electronic communications network (whether before or after the user has selected which programmes to view)
- Other internet services included all services where:
 - there is a person who exercises editorial control over the material included in the service;
 - it did not fall within the scope of video-on-demand services

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