



Communications Market Report

Research Document

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Introduction

This is Ofcom's seventh annual *Communications Market* report. Its objective is to act as a reference source covering the UK communications sectors, aimed at industry, policy makers, analysts and consumers. The report also provides context for the work that Ofcom conducts in furthering the interests of consumers and citizens in the markets we regulate.

The report contains data and analysis on broadcast television and radio, broadband and fixed/mobile telephony. It also offers insights into how people are using the internet and converged devices to access audio-visual and audio content.

Take-up of several digital devices and services passed new thresholds in 2009/10. Over seven in ten people (71%) now have access to a broadband connection at home; over nine in ten (92%) have digital television installed on their main set in the home. And more than a quarter (26%) of mobile users now have a smartphone, offering consumers access to much more than just voice telephony.

Growing levels of device take-up are reflected in the new ways in which people relate to communications services and media content. Broadcast television viewing and radio listening have remained comparatively stable year on year. But people are also using the internet to access audio and audio-visual content. Nearly four in ten people claim to watch television services online, while 14% listen to radio over the web. Moreover, a fifth (23%) of mobile handset owners now use it to access data-related services such as the internet.

This is just a snapshot of the findings emerging from this year's report. The first section (page 15) provides a fuller summary. This is followed by an examination of how people consume media content and communications services across a variety of digital devices – with a particular focus on concurrent use (Section 1.3). The report goes on to examine the bundling of communication services (page 55), followed by an assessment of the impact of the economic cycle on communications markets in the UK (page 69). It concludes by comparing communications markets across the four nations of the UK (page 83).

The remainder of the report sets out a range of data from the television/audio-visual content industries (page 96) and the radio/audio sector (page 188). It continues with an analysis of internet take-up and the use of web-based content (page 234) and concludes with an assessment of telecoms and networks (page 278). Each section now also includes analysis of converged media, devices and consumption.

Finally, to make this report and its resources more useable to stakeholders we are, for the first time, publishing all the data and charts in a searchable resource. This can be found at www.ofcom.org.uk/cmruk. Companion reports for each of the UK's nations are once again being launched alongside this report; these can be found at www.ofcom.org.uk/cmr10.

We publish this report to support Ofcom's regulatory goal to research markets constantly and to remain at the forefront of technological understanding; it also fulfils the requirements on Ofcom under Section 358 of the Communications Act 2003 (the Act) to publish an annual factual and statistical report. And it addresses the requirement to undertake and make public our consumer research (as set out in Sections 14 and 15 of the Act)

The information set out in this report does not represent any proposal or conclusion by Ofcom in respect of the current or future definition of markets. Nor does it represent any proposal or conclusion about the assessment of significant market power for the purpose of the Communications Act 2003, the Competition Act 1998 or any other relevant legislation.

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Key points: the market in context

Key market trends (page 15)

- The availability of most broadcast and telephony services remained largely unchanged during 2009. Digital terrestrial television availability rose (to 81%) during the year, while the coverage of local loop unbundling (LLU) rose by one percentage point, to 85% of households.
- Communications industry revenue (based on elements monitored by Ofcom) declined by 2.3% during 2009 to £52.8bn. It fell across all industry sectors; telecoms revenues contracted by 2.7%, television revenue fell by 0.4% and radio revenue was down by 4%.
- Consumer satisfaction levels for most communications services remained unchanged during the year. Mobile telephony and broadband satisfaction remained stable year-on-year at 94% and 90% respectively; multichannel TV satisfaction rose by six percentage points to 91%.
- Household spending on communication services fell again in 2009, down by £2.41 to £91.24, driven largely by falling spend on mobile and fixed voice services. Spend on communications services accounted for 4.4% of total household expenditure in 2009, down from 4.6% in 2008.

Consumer's digital day (page 24)

- On average, nearly half of people's waking hours are spent using media content and communications services – on average 45% of the total. People spend on average seven hours a day consuming different media, but they squeeze in 8 hours and 40 minutes' worth using more than one medium at a time.
- Older consumers spend most of their media and communications time using TV and radio sets, while younger people spend half of their time with computers, mobile phones and handheld devices.
- Compared to people over 55, 16-24s are more likely to use the TV set or mobile phone for a wider range of activities. Phone calls represent 57% of all mobile phone use by over-55s, compared with less than 25% for those in the 16-24 age group. Text messaging and social networking together make up 63% of all mobile phone use among 16-24s.
- Two-fifths of the time consumers spend on a computer is on communicating with other people. But computer use varies by age. People aged over 55 spend just under 40% of their time using a computer to communicate with others, and they are more likely to use email, not social networking. For 16-24s, over half their time on computers is spent communicating with other people, and they are more likely to use social networking.
- UK adults are most likely to watch scheduled TV on its own (83% of all viewing time), whereas mobile and computer activities attract the most simultaneous media use. Using a mobile phone or a computer is most likely to be undertaken at the same time as other media (57% of mobile phone use takes place concurrently with other media activity and 62% for computer use).
- Media multi-tasking is popular across the day but scheduled television emerges as a 'solus' activity for many people in the evening.

The market for bundled communication services (page 55)

- Around half of all UK households now buy two or more of their communications services from one supplier in a bundle, up from less than a third five years ago.
- Triple-play voice, broadband and TV bundles account for a third of the total. Seventeen per cent of households took triple-play services in Q1 2010, compared to just 3% five years ago.
- But many people buy still services on a stand-alone basis. Only half of all households (53%) that have a landline, fixed broadband service and pay-TV currently purchase these services as a triple-play bundle.
- Seventy per cent of people with a communications service bundle said that the main reason for taking a bundle was because it was cheaper. Almost half (49%) of those with a bundle also said that it was more convenient to deal with one supplier.
- Bundling often provides a route for users to take up a new service. Forty-five per cent of households with pay-TV in a bundle did not previously purchase pay-TV services, and 40% of households with broadband in a bundle did not previously have broadband.
- Those who buy bundles are, on average, more satisfied than those who buy single services. In particular, bundlers have higher satisfaction with value for money and customer service.
- There are some indications that consumers with bundles are less likely to switch provider than those with single services. Just 3% of those with a bundle switched their whole package in the year to Q1 2010, compared to 11% of those with stand-alone fixed broadband, 6% with stand-alone fixed voice and 3% with stand-alone pay-TV.

Communication markets and the economy (page 69)

- Consumers remain concerned about the economic downturn with 29% of respondents worried about its personal impact. Overall spending on communications services still appears robust in the face of competing claims on disposable income such as holidays and nights out. When forced to choose between communications services, mobile phone users were less inclined in 2010 to choose their mobile as the item on which they would cut back spending.
- Eighty-seven per cent of consumers believed that at least one communications provider was offering better deals now compared to a year ago. Only a minority (13%) thought that no communications providers were now offering improved deals, in comparison with a quarter of people in 2009.
- Consumers are more likely to use online shopping as an opportunity to save money. Just over half of respondents (52%) with broadband access agreed they were more likely to use the internet to shop than 12 months ago, while 61% agreed that they use price comparison websites more frequently than this time last year. Conversely, the popularity of making calls over the internet, instead of using a home phone remains limited to a minority of consumers.
- Despite the economic downturn, nearly a quarter of respondents (22%) claimed to have bought an HD-ready TV set in the last 12 months – this may have been driven partly by the digital switchover initiatives that have been completed or are currently under way.

The nations' communications markets (page 83)

- Fixed-line broadband is available to the vast majority of the UK population though available speeds differ. Cable broadband (offering bandwidths up to 50 Mbit/s) is available to 48% of UK homes – as high as 51% in England but only 23% in Wales. Freeview coverage is rising with digital switchover – 98% in Wales and 81% across the UK.
- Digital television was the most widely-adopted digital communications technology in 2009; take-up ranges from 97% of TV homes in Wales (probably higher now, as switchover has been completed) to 87% in Northern Ireland. Nine in ten people have mobile phones in England, Wales and Northern Ireland, falling to 85% in Scotland. Broadband was present in 71% of homes nation-wide in Q1 2010 (73% in England; 61% in Scotland).
- Take-up of bundled communications services was high in England (52%) and low in Wales (43%), probably influenced by the presence of alternative providers. Take-up of bundled services grew fastest in Wales (up by 8 percentage points (pp) in a year), closing the gap with the UK average by 4pp.
- Spend per head on new PSB content (TV and radio) stood at £38.74 in 2009. Programme production spending for television content broadcast to UK-wide audiences was substantial in England. It was also a large component of spend in Wales and Scotland; where spending on programme production specifically for viewers in each nation was particularly high. Spend on content for S4C in Wales was highest of all.
- Viewing share among PSBs averaged 58% in 2009; the variances were greatest in England (ranging from 54% in London to 61% in the East of England). BBC radio services attracted a 55% listening share in 2009, ranging from 61% in Wales to 45% in Scotland. Nearly four in ten people claimed they had watched TV content over the internet in 2009 (up by four percentage points year on year). Fourteen per cent had listened to the radio online, while a fifth of the population had used their mobile handsets to access data services (including surfing the internet).

Key points: TV and audio-visual

- **UK television broadcasters generated revenue of £11.1bn in 2009, a fall of £49m (-0.4%).** Growing subscription revenues – up 7.5% to £4.6bn – failed to offset declining net advertising revenue (NAR), which fell by 9.6% to £3.1bn. The BBC's estimated spending on TV services grew by 1.5% to £2.7bn (pages 98 and 123).
- **The commercial public service broadcasters (PSBs) – ITV1 and the Channel 3 licensees, GMTV1, Channel 4, Five and S4C – jointly saw the steepest decline in advertising revenue** during 2009, down 14% to £1.9bn (pages 99 and 122).
- **Since 2004, the BBC's share of total TV revenue has remained broadly flat**, at around 24%, while subscriptions' share grew by seven percentage points to 41%. Since 2004, advertising's share fell by six percentage points to 28% (page 124).
- **Spend on first-run originated programming for the five main PSB channels fell in 2009, down by 7.4% to £2.41bn.** Over the last five years the decline has been 20.9% (page 129).
- **The number of television channels broadcasting in the UK declined for the first time**, from 495 at the end of 2008 to 490 in 2009 (page 98).
- **The average number of hours of television watched by individuals in the UK has increased slightly over the past five years**, up by 3% from 3.7 hours a day in 2004 to 3.8 hours a day in 2009. In 2009, the growth in combined share of the PSBs and their portfolios began to plateau, falling from 71.8% in 2008 to 71.6% (page 113).
- **The viewing share of multichannel broadcasters continued to increase in 2009**, passing the 40% mark for the first time to reach 41% of TV viewing (page 174).
- **Since 2006, the proportion of all TV viewing done via time-shifting devices has more than tripled**, from 1.7% to 5.9%, according to BARB. A major factor behind this increase was the growth in popularity of digital video recorders (DVR). In homes that had a DVR, on average 15.1% of total viewing was recorded (page 100).
- **The growth in online catch-up TV services continued in 2009, as consumers increasingly watched internet-based content via their PC.** Ofcom research in Q1 2010 found that 31% of adults with the internet had watched catch-up TV, up from 23% in Q1 2009, but this still constitutes a small amount of overall viewing (page 100).
- **The average person spends 252 minutes per week watching non-linear (also known as on-demand) audio-visual content** across a variety of platforms and devices, Ofcom research has found. On-demand content accounts for 17% of the average consumer's 1,461 total minutes of weekly audio-visual viewing (page 106).
- **Around 5.1 million homes had access to high-definition TV channels by the end of Q2 2010**, up from 1.9 million in Q1 2009. HDTV is now showing mass-market appeal, as sales of HD-ready TV sets exceeded 24 million (page 106).
- **Independent UK producers commanded a growing share of the PSB origination spend total.** The independents' share of available production spending grew from 40% in 2005 to 46% in 2009 (page 141).

Key points: radio and audio

- **Total UK radio industry funding stood at £1.1bn in 2009, down by 4.0% on 2008.** This came as a result of a fall in commercial radio revenues of 11.5% to £432m, while we estimate that BBC radio spend rose by 1.6% to £660m (page 198).
- **BBC expenditure on radio services rose by 26% over the five years to 2009, while commercial revenues fell by 22% over the same period.** Taken together, radio industry income increased 1.5% in nominal terms over five years (page 197).
- **The number of radio listeners reached a new high of 90.6%** (46.8 million adults) listening weekly in Q2 2010 - the highest recorded figure since a new RAJAR research methodology was introduced in 1999. It was up by almost half a million in a year and was also up by 300,000 listeners on Q1 2010. The combined reach of BBC stations was 67.0% in Q2 2010 and 63.7% for commercial radio (page 214).
- Despite there being more radio listeners, **the time each spent listening has fallen over the past five years.** Listening hours were down by 5.3% in the five years to 2009, and by 0.4% on 2008. Total listening hours to all the BBC's stations were down by 2.2% over five years and by 1.2% during 2009. By contrast, all commercial radio listener hours were stable over the year, but down 10.1% over five years (page 216).
- Within this overall pattern of reductions, **listening to national radio stations has risen, while local radio hours have fallen.** BBC network radio listening hours have risen by 3.7% in five years; national commercial hours were up 1.3%. By comparison, local BBC station weekly hours fell by 25% and local commercial by 13% (page 216).
- **By Q2 2010, digital radio platforms accounted for almost a quarter (24.6%) of all radio listening hours,** according to RAJAR. This was up by 3.5 percentage points from 21.1% in Q2 2009. The majority (64%) of digital listening was through a DAB digital radio set, which accounted for 15.8% of all radio listening. Digital television accounted for a further 4.1% and the internet 2.9% (page 190).
- **Cumulative sales of DAB digital radio sets reached 11 million by June 2010,** up from 9 million a year before. RAJAR estimates that over a third (35.3%) of UK adults owned a DAB set by the end of Q2 2010, up by 2.3 percentage points in a year. Active radio sets in cars and homes were estimated to be well over 100 million, of which 10%-11% included a DAB digital radio tuner (page 191).
- **Younger adults (16-24s) spend twice as much time as older age groups listening to audio content through hand-held devices.** Among 16-24s, almost a quarter (24%) of all audio consumption time was undertaken using a hand held-device, compared to 11% on average across all adults (page 192).
- **Downloading audio was also most popular among the younger 16-24 age group,** accounting for 15% of all the time they spent listening to audio or radio, (4% on average for all adults). Downloading audio via a mobile phone accounted for 7% of their audio consumption compared to 1% on average (page 192).
- **In the music industry, 19% of all recorded music revenues were generated by digital products in 2009.** The decline in overall recorded music revenues slowed to just 0.8% in 2009. The slowing rate of reduction was aided by a 27% increase in singles sales alongside the growing contribution of digital sales (Page 201).

Key points: internet and web-based content

- **Internet take-up is almost at three-quarters of UK households.** Internet take-up has now reached 73%, just below penetration of PCs (76%). Total broadband take-up is now 71%, with fixed broadband at 65% and mobile broadband at 15% (Page 246).
- **Mobile broadband is driving broadband growth.** Broadband take-up grew by three percentage points to 71% in Q1 2010, but this was driven by mobile broadband, as fixed remained flat at 65% (Page 246).
- **Internet take-up is increasing among older age-groups.** Take-up also grew rapidly among 55-64s (by 6pp) and 65-74s (by 7pp). Eight per cent of the male online universe is aged 65+, compared to just 3% for females. In contrast, 45% of the female online unique audience is under 35, but the corresponding figure among males is only 38% (Pages 251 and 255).
- **Two-thirds of internet households (66%) use a wireless router.** Take-up increased by 14 percentage points on Q1 2009, and since Q1 2007 has nearly doubled, enabling users to connect multiple devices to the internet (Page 247).
- **Social networking now accounts for nearly a quarter (23%) of all time spent online.** This has been driven by the growth of Facebook, whose reach rose by 31% to reach a unique monthly audience of nearly 25 million in the year to May 2010 (Page 237).
- **Nearly a quarter of adults (23%) access content online on their mobile phones.** The growth in smartphone adoption and fast data networks has driven increases in the number of consumers using mobile networks to access content. In Q1 2010 23% of adults used mobile data services in Q1 2010, up from 20% in Q1 2009. Among 15-24s, use of mobile data services rose to 45% (Page 249).
- **Surfing the web is the most popular mobile internet activity**
Our research shows that 18% of mobile phone users access the internet using their handsets, a five percentage point increase since Q2 2007 (Page 270).
- **Over half 15-24s have played games or downloaded music or film online**
Thirty-nine per cent of internet users reported playing games online, compared to 38% who downloaded music or film online. Among 15-24 year-olds the figure for both activities rises to 55% (Page 263).
- **Most internet users have limited interest in user-generated content**
Aside from uploading photos and social networking, most people appear uninterested in user-generated content. Sixty-four per cent of internet users said they had no interest in the main forms of UGC (which include blogging and uploading videos) (Page 272).
- **Online advertising grew through the downturn to reach £3.5bn in 2009.**
The 6% increase on 2008 was driven by growth in search (8%) and display (11%), but other classified fell (-5%) as the recession hit the property, automotive and recruitment sectors (Page 241).

Key points: telecoms and networks

- **Use of telecoms services continued to grow in 2009.** Total mobile call volumes increased by 7% in 2009 (page 319), while the number of text messages increased by 25% (page 325). There was also a massive increase in data use: we estimate that total data volumes over the UK's internet infrastructure increased by 68% during 2009, and data volumes over mobile networks increased by 240% (page 282).
- **But total retail revenues fell.** Operator-reported retail telecoms revenue declined by 2.6% in 2009 to £30.4bn (the lowest annual figure since 2006), the first time since Ofcom began collecting data on the telecoms industry in the 1990s. This was driven by the first year-on-year fall in mobile voice revenues (down 3.5%) combined with a small fall in fixed-line internet access revenues and an acceleration in the decline in fixed-voice revenues (page 280).
- **Average household spend on telecoms services fell by 3.7% to £62.10 in 2009.** This represented 3.0% of average household spend, down from 3.2% in 2008, with most of this drop being due to falling mobile prices. Overall, household spend on telecoms services has fallen by over 13% in real terms in the past five years (page 335), despite a 10% increase in call volumes (fixed and mobile) (page 311) and 50% growth in the number of internet connections (page 325) over the same period.
- **Broadband speeds increased – but so did the gap between advertised and actual speeds.** Average actual speeds increased from 4.1Mbit/s in April 2009 to 5.2Mbit/s in May 2010; however, this was just 46% of the average 'up to' advertised speed (page 288). Nearly half the population could have access to superfast broadband, but fewer than 0.5% of households did by the end of 2009 (page 290).
- **The average cost of a residential fixed-line broadband connection fell by a third between 2005 and 2009.** Despite increasing speeds, average broadband costs have fallen year on year. The average monthly cost was £13.31 in 2009 (page 354).
- **Mobile broadband is driving increases in internet take-up.** The proportion of households having mobile broadband as their only broadband connection increased from 3% of all households in Q1 2009 to 6% in Q1 2010. Fixed-line broadband take-up plateaued at 65%, households taking both fixed and mobile broadband was stable at 9% and the proportion of households with dial-up internet fell to 2% (page 291).
- **Adoption of 3G mobiles accelerates.** Nearly one in three mobile connections were using 3G at the end of 2009, as total 3G connections increased by 39% during the year to 25.5 million (page 328).
- **Two-year mobile contracts are becoming standard.** In Q2 2010, 63% of new mobile contracts were for 24 months, compared to 26% a year previously and just 3% in Q2 2008 (page 303).
- **Use of text messaging continues to increase.** The number of text messages sent increased by 25% in 2009 when over 100 billion texts were sent - equivalent to 1,700 for every person in the UK, and up 25% on 2008 and 290% on 2004 (page 325).



The Communications Market 2010

1 The market in context

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1.1 Introduction and structure

This introductory section of the Communications Market Report 2009 is divided into five sections:

- **Key market trends (Section 1.2, page 15)**

The section summarises developments in the UK's communication sectors during 2009/10. It focuses service availability and take-up, industry revenues and consumers' use and spending on communications services. It also examines the media that people claim they would miss most were they to lose it.

- **The consumers' digital day (Section 1.3, page 24)**

The growing availability of converged technologies and services offers consumers a growing number of ways in which consumers can access media and communications services. This section provides a snapshot of people's media and communications behaviour over a seven-day period. It explores patterns of use through the day, where it happens, which media and devices are used concurrently and what attention people pay to the media they use.

- **Bundling of communications services (Section 1.4, page 55)**

For many years people have bought voice calls and text messages together as part of a mobile phone service bundle. Increasingly, different communications services are being bundled together as a single package from one supplier. This section examines the context of bundling in the communications sector, how take-up has grown in the last five years and how it varies across different consumer groups.

- **Communications markets and the economy (Section 1.5, page 69)**

Since the last Communications Market Report was published in August 2009, the UK's GDP has begun once again to grow. Last year, this report explored the impact of the recession on consumer attitudes towards communications services. We repeated this research in June 2010 to understand how spending and attitudes have changed in the past year.

- **The nations' communications markets (Section 1.6, page 83)**

This section sets out a selection of headline findings for communications markets across the UK's nations, putting them into context. It draws on the detailed reports that Ofcom publishes on communications services in each of the UK's nations (which can be found at www.ofcom.org.uk/cmr10).

1.2 Key market trends

1.2.1 Introduction, structure and findings

Introduction and structure

The following section provides an overview of the key trends in the UK communications markets during 2009. It begins by considering the availability of communications services in the UK before turning to the take-up of the communication devices and services available to consumers. It then examines the latest trends in industry revenue and consumer spending before concluding with satisfaction levels among key communication services, along with consumers' views on which media activity they would miss the most.

Key findings

- The **availability** of most broadcast and telephony services remained largely unchanged during the year. There were two exceptions: the digital terrestrial TV signal is now estimated to be available to 81% of households, up by eight percentage points year on year, while availability of local loop unbundling rose slightly (+1 percentage point) to 85% (page 16).
- **Communications industry revenue** declined in 2009 by 2.3% to £52.8bn. It fell across all industry sectors; telecoms revenues contracted by 2.7%, television income declined by 0.4% and radio revenue was down by 4% (Page 18).
- **UK consumers spent** more time in 2009 watching TV, using their mobile to make calls and text, and surfing the internet than in 2008, but less time listening to the radio (page 19).
- **Satisfaction levels** for most communications services remained unchanged during the year. Mobile telephony and broadband satisfaction remained flat, while multichannel TV satisfaction rose by six percentage points (page 20).
- Half of adult consumers claim that watching TV would be their **most-missed media activity**; consumers' attachment to television rises with age (page 21).
- Despite people using communication services more, **real household monthly spend on communication services** fell 1.7% to £91.24, driven largely by falling spend on mobile and fixed voice services. Communications spend accounted for a lower proportion of total household expenditure in 2009: 4.4% compared to 4.6% in 2008 (Page 22).

1.2.2 Availability: DTT signal extended to over 80% of households

The availability of most key communication services remained largely unchanged during 2009, reflecting near-universal levels of coverage of most services. The largest rise in availability came from the digital terrestrial television signal (DTT) which rose to 81% as the country's switchover to digital gathered pace. Nearly a quarter (24%) of homes no longer receive an analogue signal and over the next 12 months a further 4.5 million homes will complete the switch, bringing the programme to 40% completion.

Local loop unbundling (LLU) availability rose during 2009, albeit at a lower rate than in the previous year, rising by one percentage point to 84% (compared to a four percentage point increase in 2008). Cable coverage declined slightly, reflecting a rise in the number of households (rather than a decline in homes passed); Virgin Media is currently exploring

different ways of extending its cable coverage including aerial deployment of broadband cable over telegraph and electricity poles¹.

The strategic focus of telecoms service providers is shifting towards driving up the availability of higher-speed networks; mobile operators are continuing to expand their 3G coverage footprint and to offer higher data speeds. Moves to increase the coverage of super-fast broadband began to accelerate during 2009 and into 2010:

- Following the launch of Virgin Media's 'up to 50Mbit/s' at the end of 2009, the cable operator announced plans to roll-out 'up to 100Mbit/s' broadband services before the end of 2010.
- By July 2010 BT's 'up to 40Mbit/s' Infinity network covered 1.5 million households and was passing 100,000 additional premises each week. By 2012 BT plans to provide fibre-based broadband coverage to 40% of the UK population, and to 66% by 2015.
- A number of local fibre deployments were completed during 2009, and there are further plans to provide coverage in more local areas during 2010 and beyond.

Figure 1.1 Digital communications service availability, 2008 and 2009

Platform	UK 2009	UK 2008	UK change	England	Scotland	Wales	N Ireland
Fixed line	100%	100%	0%	100%	100%	100%	100%
2G mobile ¹	97%	n/a	n/a	99%	87%	89%	89%
3G mobile ²	87%	n/a	n/a	91%	66%	69%	40%
DSL ³	99.6%	99.6%	0.0%	-	-	-	n/a
Cable broadband ⁴	48%	49%	-1%	51%	37%	23%	30%
LLU ⁵	85%	84%	1%	87%	71%	77%	69%
Digital satellite TV	98%	98%	0%	-	-	-	-
Digital terrestrial TV ⁶	73%	73%	0%	82%	82%	98%	66%

Sources: Ofcom and:

1. Based on Q2 2010. Proportion of population living in postal districts where at least one operator reports at least 90% 2G area coverage. Sourced from GSM Association / Europa Technologies
2. Based on Q2 2010. Proportion of population living in postal districts where at least one operator reports at least 90% 3G area coverage. Sourced from GSM Association / Europa Technologies. Data is not comparable with previous report due to changes made by the mobile operators in the methodology used to calculate coverage
3. Proportion of premises able to receive DSL services based on data reported by BT
4. Proportion of households passed by Virgin Media's broadband-enabled network. Decline is due to overall increase in number of households.
5. Proportion of households connected to an LLU-enabled exchange
6. Calculations based on the estimated proportion of homes that can now receive at least 17 channels, versus the coverage of the DTT signal prior to digital switch-over.

1.2.3 Mobile broadband drives increase in broadband take-up

Take-up of digital television grew by three percentage points during 2009 to reach 92% of all TV homes. The digital switch-over programme, which gathered pace during 2009 across the

¹ <http://pressoffice.virginmedia.com/phoenix.zhtml?c=205406&p=irol-newsArticle&ID=1395257&highlight=100m>

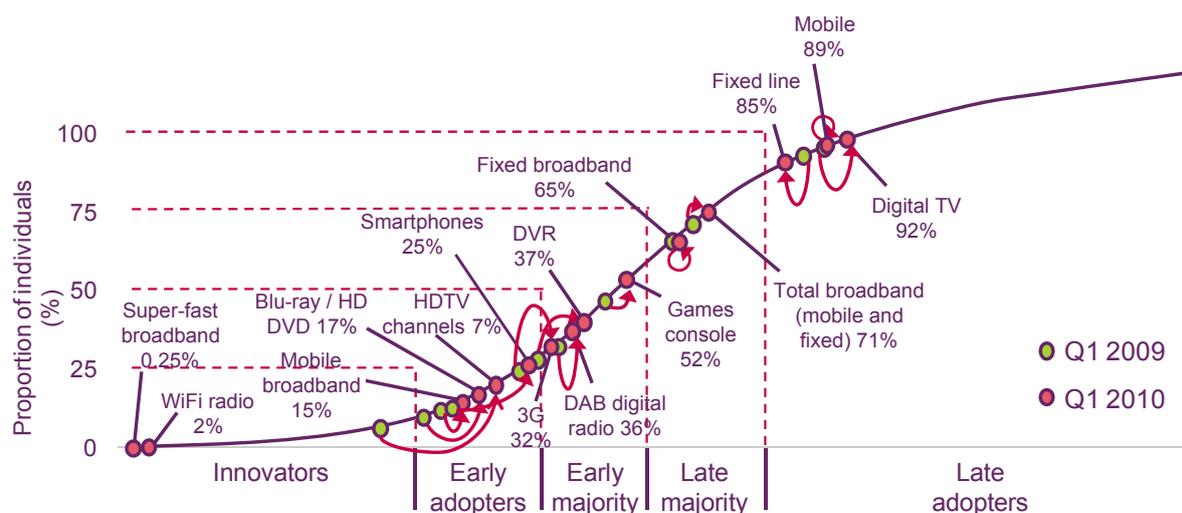
UK, may well have been the trigger for some homes switching to digital. Ofcom research shows that DTV take-up is high, at 99% or above, in many parts of Wales and in the North West of England, where switch-over has already occurred; it is lowest in London and Northern Ireland, at 87%, which will be among the last regions to switch in 2012.

While fixed-broadband take-up remained flat during 2009, the proportion of people claiming access to mobile broadband increased by three percentage points to 15%. This resulted in overall broadband penetration (fixed or mobile) rising by three percentage points to 71%. Much of the growth in mobile broadband (dongles/PC datacards) is being driven by households which have it as their only broadband connection.

There was also a significant rise in the take-up of 3G mobile connections and increasingly sophisticated smartphones that offer broadband-like connectivity in a handset. Nearly one-third of consumers are now using the 3G network's higher-bandwidth capabilities and with one in four claiming to own a smartphone in Q1 2010. This compares to one in five and one in seven respectively in Q1 2009. In contrast, the proportion of homes using fixed-line telephony fell during 2009, down two percentage points to 85%, reflecting an increase in the number of mobile-only households.

The number of homes with digital video recorders (DVRs) continued to increase sharply during 2009, rising from 27% to 37%, while the proportion of homes with Blu-ray/high-definition DVD players increased by six percentage points to 17%.

Figure 1.2 Digital technology adoption, Q1 2009 and Q1 2010



Source: Ofcom research and operator data

Notes: All figures relate to Q1 2010; all figures are measured as a proportion of individuals except for 3G, which represents the proportion of mobile subscribers and DTV, which represents the proportion of TV homes with a digital television reception device on the main set.

1.2.4 Total communications industry revenue fell for the first time

Overall communications revenues fell by 2% year on year to £52.8 billion as income in each of the three communications industries contracted during 2009. Telecoms revenue fell by 2.7% to £40.6bn, the first year-on-year fall in recent history; the reduction was driven largely by the first-ever reduction in retail revenues from mobile services (-3.5%). Despite growing revenue from subscription television services, TV revenues declined by 0.4% to £11.1bn, reflecting a 9.6% contraction in net advertising revenue to £3.1bn. Radio industry income also fell over the year, by 4%, to £1.09bn, driven largely by commercial radio revenues falling by 11.5% to £432m.

Figure 1.3 Communications industry revenue



Source: Ofcom/operators

Note: Includes licence fee allocations for radio and TV

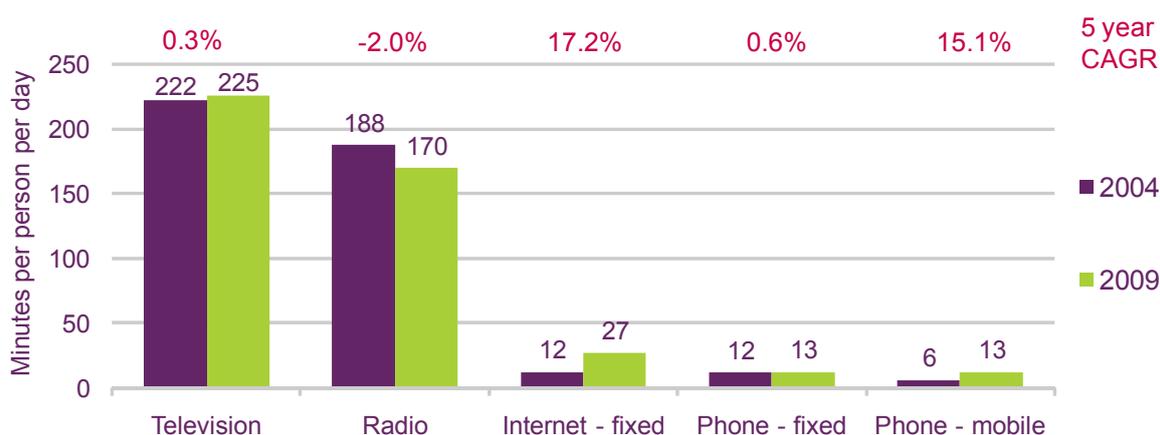
1.2.5 Time spent on internet and mobile telephony continues to grow

Figure 1.4 examines how people consume different forms of media content and communications services.

Consumption of television and radio services continued to play a large role in the total time consumers spend on communication services each day during 2009. Figure 1.4 shows that adults in the UK spent 225 minutes daily watching television on a TV set, up by three minutes since 2004, while radio accounted for 170 minutes per day, down by 18 minutes over the same period. Fixed line calls accounted for 27 minutes per person per day, while an equal amount of time (13 minutes) were spent on mobile phone calls and texting on a mobile. Internet activities undertaken on a fixed internet connection (using web and applications) experienced the largest increase in average daily use, rising from 12 minutes in 2004 to 27 minutes in 2009.

Note that this analysis does not take account of concurrent use of media content and communications services; that is the subject of Section 1.3.

Figure 1.4 Average time per day spent using communications services



Source: Ofcom / BARB / RAJAR / Nielsen Netratings (home use only)

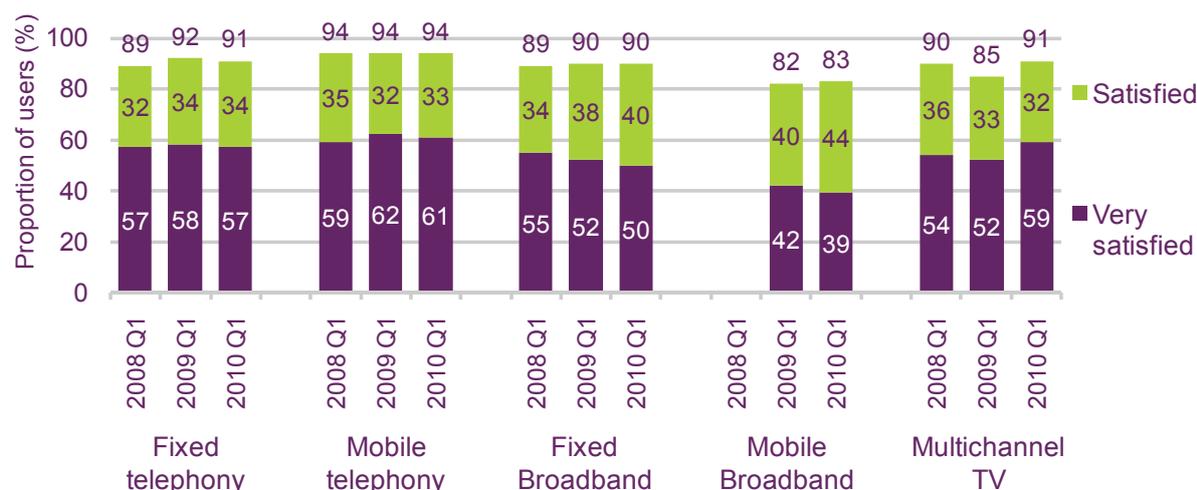
Note: Includes estimates where Ofcom does not receive data from operators; fixed voice call figures include NTS voice calls; mobile messaging figures assume an average of 35 seconds per message; Ofcom estimate of fixed internet use per person is based on Nielsen's data on the average monthly time spent online at home including the use of applications across the online population only; Nielsen's methodology changed in October 2006 so comparisons before this period should be treated with caution; fixed internet use figures are for May of the following year.

Overall satisfaction with communication services remained largely unchanged for most services. Fixed and mobile telephony, and broadband satisfaction remained at 90% or above, although there were slight declines in the proportion 'very satisfied' with their service, as opposed to just 'satisfied'.

Consumers of multichannel TV reported the largest increases in satisfaction during the year, rising by six percentage points to 91%, with 59% of viewers very satisfied with their service, compared to 52% in Q1 2009. Among the different viewing platforms the greatest increase in satisfaction was among Freeview viewers, up by eight percentage points to 89%, followed by cable; rising from 87% to 92%; the comparable figure for satellite TV increased by three percentage points to 93%.

Consumers' satisfaction with mobile broadband increased slightly; by one percentage point to 83%, perhaps reflecting improvements in customer expectations as well as service quality, with those satisfied with the speed of their mobile broadband service rising from 70% to 73% during 2009.

Figure 1.5 Overall satisfaction with communication services



Source: Ofcom research

Note: Shows the proportion of users with each service, includes only those who expressed an opinion. Base: those with multichannel TV 2010 n=8121; 2009 n=5318

1.2.6 Growing importance of television among younger and older users

Watching television is the media activity most adults claim they would miss the most were they to be deprived of it, with half of the population citing it as their most-missed medium. Among younger adults (16-24 year olds) the figure drops to 36%, although this is up on 2007 and 2005. The upward trend is also mirrored among adults aged 55-64, with nearly three in five adults (57%) in this age group citing television as their most-missed activity, compared to two in five in 2005 (47%).

Overall, access to the internet continued to consolidate its position as the second most-missed activity among adults (supplanting mobiles for the first time in 2009), up three percentage points to 15%. This is largely driven by older age groups (up four percentage points among 55-64 year olds to 12%). Among 16-24 year-olds the mobile phone remained the second most-missed medium, with one-third citing it compared to one in ten adults overall. In contrast, listening to the radio is the second most-missed activity among older users (16% of 55-64 year olds), far higher than younger adults and the adult population overall; by contrast only 4% of 55-64 year olds would miss using their mobile phone.

The number of people citing media activities other than television, internet and mobile phone has declined since 2005. The fall is most pronounced among 16-24 year olds, from 39% in 2005 to 14% in 2009. Listening to music on a hi-fi/CD or tape player has fallen substantially in this age group, and has not been replaced by portable music device/MP3 player use. Watching television appears to be the main substitute (up eight percentage points), although the growing functionality of mobile handsets, which include MP3 players and support streamed music services, may be substituting both traditional and separate digital audio devices among younger users.

Figure 1.6 Which media activity consumers would miss the most



A2 – Which one of these would you miss doing the most?

Base: All adults aged 16+ (3244 in 2005, 2905 in 2007, 1824 in 2009), adults aged 16-24 (530 in 2005, 413 in 2007, 253 in 2009), adults aged 25-34 (604 in 2005, 473 in 2007, 274 in 2009). Circles show statistically significant change between 2008 and 2009.

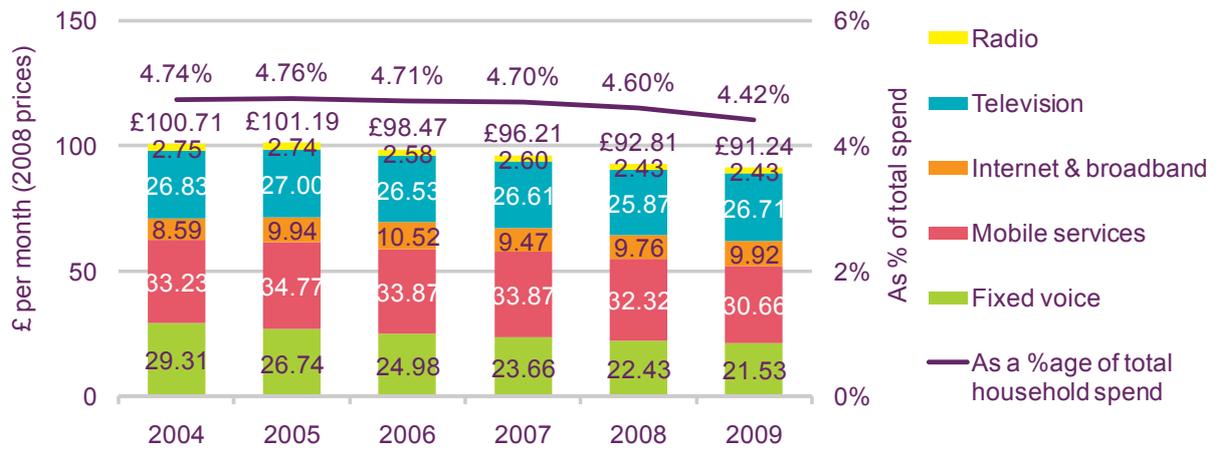
Source: Ofcom research, fieldwork carried out by Saville Rossiter-Base in April to May 2009 and September to October 2009

1.2.7 Household spend on communications services continues to fall

In the context of increasing use of most communications services, and their widening availability, real monthly household spend on communications services fell again in 2009. It was down by 1.7% on 2008 to £91.24 and down 9.4% since 2004. Increased spending came about as a result of rising television subscriber spend (+3.2%), and higher spend on internet and broadband (1.6%); these were offset by the largest decline in mobile voice and text spend since 2004, down 5.3% year on year to £30.66. Spend on radio (licence fee funding) remained flat at £2.43 per month.

Spend on communications services accounted for 4.4% of total household expenditure in 2009, compared to 4.7% in 2004.

Figure 1.7 Average monthly household spend on communications services



Source: Ofcom/operators

Note: Television spending includes subscription payments and BBC income allocated to television services. Radio spending is comprised of BBC income allocated to radio services.

1.3 The consumer's digital day

1.3.1 Introduction, structure and findings

Introduction

People have more flexibility and more choice than ever before when it comes to what, how and when they access media content and use communications services (for example, making voice calls). This comes thanks to the expansion in the range of devices that are now capable of supporting a wide variety of media content and service types. It has also been influenced by the speed of take-up of different technologies, together with the increased convergence between media.

Ofcom subscribes to a wide range of industry research such as BARB (television), RAJAR (radio), and Nielsen NetRatings (internet). This allows us to understand how people consume broadcast media and how they use web sites. However, there is little in the way of insight into how people use media and communications devices together and the relationship between them.

Ofcom commissioned an in-depth quantitative study on UK adults' total media and communications activities to provide an overview of the role of electronic media in people's lives. The study is part of Ofcom's media literacy programme of work that is undertaken as part of Ofcom's duty under section 11 of the Communications Act 2003 to promote media literacy.

The research presented in this chapter provides a snapshot of people's media and communications behaviour over a seven-day period. It has been designed to explore how people use media and communications devices throughout the day, which media and devices are used concurrently, where, and what attention people pay to the media they use.

Note that in this analysis 'media consumption' refers not only to viewing and listening but also to text and voice communications, alongside the use of other communications services, as described in the methodology (page 5).

Structure

Section 1.3.2 (page 26) sets out the methodology used in this study, and the specific meanings of the terms used. This is followed by an examination of Consumer take-up of digital communications devices (Section 1.3.3, page 28). Section 1.3.4 (page 29) turns to Consumer behaviour across the day and provides an outline of their use of media and their other lifestyle activities.

Section 1.3.5 (page 31) goes on to consider patterns of Overall media and communications consumption and Section 1.3.6 (page 33) takes this further by segmenting these patterns by device. Section 1.3.7 (page 37) compliments this analysis with an analysis of Patterns of media and communication service consumption, by activity before considering what proportion of media consumption is *concurrent*, and how this varies by age, activity category, and time of day (Section 1.3.8 page 41). Section 1.3.9 (page 47) concludes by examining the Attention and importance paid to media and considers how this relates to the perceived importance they give to each one.

Key Findings

- **Nearly half of people's waking hours are spent engaging in media and communications activities.** The average person spends 15 hours 45 minutes awake per day, and seven hours and 5 minutes of this time is spent engaging in media and communications activities, amounting to 45% of waking hours (page 30).
- **People spend about seven hours a day consuming different media, but they squeeze more into this time by media multi-tasking.** A fifth of the seven hours and five minutes of media activity is spent using more than one form of media at the same time. This allows people to squeeze in more media and communications activity into the time – on average 8 hours 48 minutes. The amount of time that 16-24s spend consuming media is lower than older age groups (6 hours 35 minutes). But 29% of their time with media is concurrent; the result is that they use more media and communications than any other age group, fitting 9 hours 32 minutes' worth of activity into this time (page 31).
- **Older consumers spend most of their media and communications time using TV and radio sets, while younger people spend half of their time with computers, mobile phones and handheld devices.** Device use varies by age. Two-thirds (67%) of media and communications activity conducted by people over 55 is carried out through a TV set or radio set. By contrast, among 16-24s, well over half (58%) their media and communications time is undertaken on a computer, mobile phone, or other handheld device (page 35).
- **Compared to people over 55, 16-24s are more likely to use the TV set or mobile phone for a wider range of activities.** Scheduled television accounts for less than three-quarters (71%) of media consumed on a TV set by 16-24s, compared with nearly 90% for over 55s. This difference is driven by younger adults' greater tendency to use their TV sets to watch DVDs and play video games. Phone calls represent 58% of all mobile phone use by over-55s, compared with 22% for those in the 16-24 age group. Text messaging and social networking together make up 64% of all mobile phone use among 16-24s (pages 35 and 37).
- **Two-fifths of the time consumers spend on a computer is on communicating with other people.** Computer use varies by age. People aged 55+ spend just under 40% of their time using a computer to communicate with others, and they are more likely to use email (28% of their computer time is spent on emails, 8% on social networking, and 1% on instant messaging). For 16-24s, over half their time on computers is spent communicating with other people, and they are more likely to use social networking (22% on social networking, 14% instant messaging and 14% emailing) (page 36).
- **UK adults are most likely to watch scheduled TV on its own, whereas mobile and computer activities attract the most simultaneous media use.** Eighty three per cent of television viewed on a TV set occurs without any other concurrent media consumption. Other activities that tend to be undertaken on their own include listening to the radio on a radio set (81%), and reading newspapers, magazines or books (71%). By contrast, activities on a mobile phone and a computer are most likely to be undertaken at the same time as other media activities (55% of mobile phone use takes place concurrently with other media activity, as does 62% of computer use) (page 42).
- **While media multi-tasking is popular across the day, scheduled television emerges as a 'solus' activity for many people in the evening.** The proportion of people consuming more than one form of media simultaneously is broadly constant for most of the day (averaging at 24% of all consumers between 09:00 and 18:00). However, in the evenings, the proportion of people using media increases rapidly as

more people focus on ‘solus’ media consumption – using just one form of media at a time – and this is primarily watching scheduled television (pages 45 and 46).

- **The attention given to different activities varies, with more paid to those that require active involvement, such as playing games on a games console or phone calls.** Activities such as games, computer-based activities, text and voice communications (landline and mobile phone), and on-demand television attract higher attention scores from consumers than live TV or live radio. Playing games through a TV set using a games console attracts the most attention, with an average score of 4.2 out of 5, while listening to the radio on a radio set and watching scheduled TV attract some of the lowest attention scores, with an average score of 2.9 and 3.0 respectively (page 48).
- **There is some relationship between the attention people pay to activities and the importance they attach to them;** but traditional TV, radio and print are still highly valued despite commanding less attention from consumers. Communications activities such as emailing, texting and social networking all command high attention and high importance scores from consumers. However, traditional forms of media consumption, such as watching scheduled television on a TV set, listening to live radio on a radio set, and reading print media attract high importance scores from people, along with lower average attention scores (page 51 and 53).

Figure 1.8 Key data among all adults and a selection of audience segments

	All 16+	16-24s	25-44s	45-54s	55+	Men	Women	Working	Not Working
Time Awake (minutes per day)	945	913	945	961	951	951	939	953	935
Time spent with media and communications (minutes per day)	425	395	438	442	416	453	398	437	410
Proportion of media and communications time that is solus	80%	71%	77%	81%	88%	80%	81%	78%	84%
Proportion of media and communications time that is simultaneous	20%	29%	23%	19%	12%	20%	19%	22%	16%
Amount of media and communications activity (minutes per day)	528	572	564	537	467	576	482	553	495
Watching video (% of all activity)	40%	32%	36%	37%	52%	38%	42%	35%	48%
Listening to audio (% of all activity)	17%	14%	17%	22%	17%	18%	17%	18%	16%
Voice communication (% of all activity)	5%	6%	5%	6%	5%	5%	6%	6%	5%
Text communication (% of all activity)	15%	30%	18%	11%	6%	16%	15%	16%	14%
Print Media (% of all activity)	6%	3%	4%	5%	10%	5%	7%	5%	8%
Games (% of all activity)	3%	5%	3%	2%	1%	3%	2%	3%	3%
Other internet (% of all activity)	7%	5%	8%	9%	4%	8%	5%	8%	4%
Other media (% of all activity)	7%	5%	9%	9%	4%	8%	5%	10%	3%

XX Percentage figure is significantly higher than the population average
 XX Percentage figure is significantly lower than the population average

Source: Ofcom research, base = All respondent days: 16+ = 7966; 16-24s = 1106; 25-44s = 3003; 45-54s = 1484; 55+ = 2373; men = 3815; women = 4151; working = 4417; not working = 3549

1.3.2 Methodology

Ofcom commissioned a quantitative research study into consumers' media and communications activities. A nationally-representative sample of 1,138 adults aged 16+ participated in the survey in April and May 2010.

This was a mixed-mode online and telephone survey. Respondents recorded all their media behaviour in a diary for seven days, and these data were captured on a daily basis online or by telephone. People recorded when they were watching or listening to video or audio or playing games on any device, reading a newspaper, magazine or book, making phone calls (on any device) or using a computer or mobile phone for any reason. The survey included personal and business use, in-home and out-of-home use. The dataset analysed in this report is based includes only those participants who completed all seven days.

The study collected information on volume, concurrent media use and levels of attention to media. A questionnaire on the last survey day captured further information on the perceived importance of different activities.

Comparisons with industry data from for television (BARB), radio (RAJAR) and the internet (Nielsen NetRatings) show comparable weekly reach levels with this study. However, this study recorded lower volumes than industry data, particularly for radio. A range of factors may have contributed to this difference. These include:

- The broad nature of the survey; it covers a wide range of media, rather than focusing on one specific medium.
- The sample covers all adults aged 16+, rather than consumers of a specific medium.
- The use of a diary method relies on consumer recall rather than tracking actual behaviour. This could introduce a recall bias, which is common in diary studies. For example, respondents may remember less actual behaviour because they do not record activity often enough. For this study, information was recorded daily. Respondents were encouraged to update their diary at least four times a day and to carry it with them to record behaviour both in and outside the home.
- Activities that receive lower consumer attention or are undertaken passively may be less likely to be recalled.

These factors may have influenced the results and need to be considered when assessing the findings. For example, it is likely that this research under-estimates radio listening volume relative to RAJAR results. However, the study still provides an overview of radio listening within the context of people's other media activities.

The survey measured people's use of 43 different media and communications activities using a range of devices, on a half hour basis, across seven days. In this report, we have aggregated 43 activities into the categories and subcategories which are shown in Figure 1.9; in other places, we have reported on them individually. The categories are designed to reflect the broad purposes of media and communications activities across a range of devices.

For more in-depth analysis of television, radio and internet consumption using industry data, please see the relevant section (TV and audio-visual, radio and audio, internet and web-based content).

Figure 1.9 defines the aggregated media categories used throughout the report. In addition to the main activity categories (e.g. video, audio, voice communications), some categories have also been divided into subcategories (e.g. video is comprised of television on a TV set, television on another device and other video).

Figure 1.9 Media consumption activities

Activity category	Activity subcategories	Activities
Video	Television – TV	Television set: TV live; Television set: recorded TV on PVR; Television set: recorded TV on DVD/VHS; Television set: TV on-demand
	Television - other	TV or films on-demand or live on a computer; TV or films on-demand on a mobile phone
	Other video	DVDs or videos (rented or bought); Video clips on a computer; Downloaded TV, films or video clips on a computer; Downloaded TV, films or video on a mobile phone; Downloaded TV, films or video on hand-held device.
Audio	Radio – radio set	Live radio on a fixed or portable set
	Radio – other device	Radio on a TV set; Radio live or on-demand on a computer, mobile phone or hand-held device
	Other audio	Streamed music, streamed podcasts, downloaded music or other audio, music or other audio on a stereo or music centre or portable devices.
Voice communications		Making or receiving phone calls on a landline; Making or receiving phone calls on a mobile phone; Making or receiving phone calls or video calls on a computer.
Text communications		E-mailing, social networking or instant messaging on a computer or mobile phone and texting or video messaging on a mobile phone; newspapers, magazines or books.
Games		Playing games on a TV set, computer or portable device (e.g. hand-held games console or MP3 player).
Other	Other internet	Internet activity on a computer or mobile phone that is not covered by the previous categories.
	Other media	All other media and communications activity on a hand-held device, and all other non-internet activity on a computer or mobile phone.

The analysis examines a range of media behaviours. These include when people undertake media activities at the same time ('simultaneous' media consumption) and when they do them separately ('solus' media consumption). In presenting the findings it uses the terms laid out in Figure 1.10.

Figure 1.10 Terminology used in this section

Definition	Description
Simultaneous media consumption	Media consumed while doing another media activity at the same time, e.g. texting and watching television.
Solus media consumption	Media consumed while doing no other media activity.
Weekly reach	The proportion of individuals consuming each media within the week.
Daily reach	The proportion of individuals consuming media on a typical day.
Volume	Average minutes consumed per day.
Attention	The average score or the claimed attention by activity for all activities recorded in the diary (on a scale of 1 to 5).
Importance	The average score of claimed importance overall for each activity (on a scale of 1 to 10).

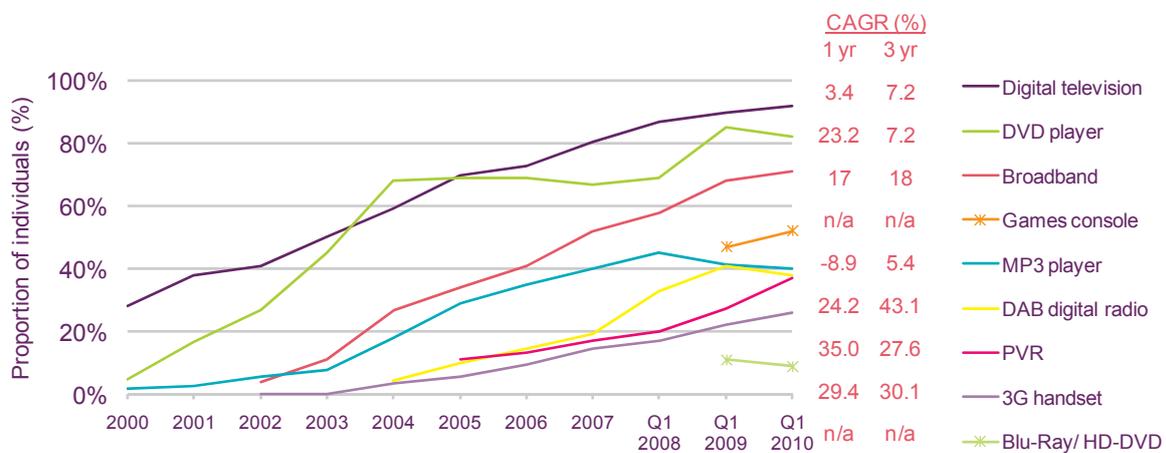
1.3.3 Consumer take-up of digital communications devices

Consumer take-up of digital technology is growing

People face a great deal of flexibility and choice when deciding how, when and where to access content and communications services. This has been driven by the introduction of a range of converged devices and by their widespread adoption. Some of the more popular digital technologies and services now embraced by many consumers are (see Figure 1.11):

- digital television decoders, which are connected to over nine in ten (92%) main television sets in the home;
- broadband connections, which are now available to seven in ten (71%) people; and
- games consoles, which are installed in five in ten homes.

Figure 1.11 Take-up of a range of communications devices and services

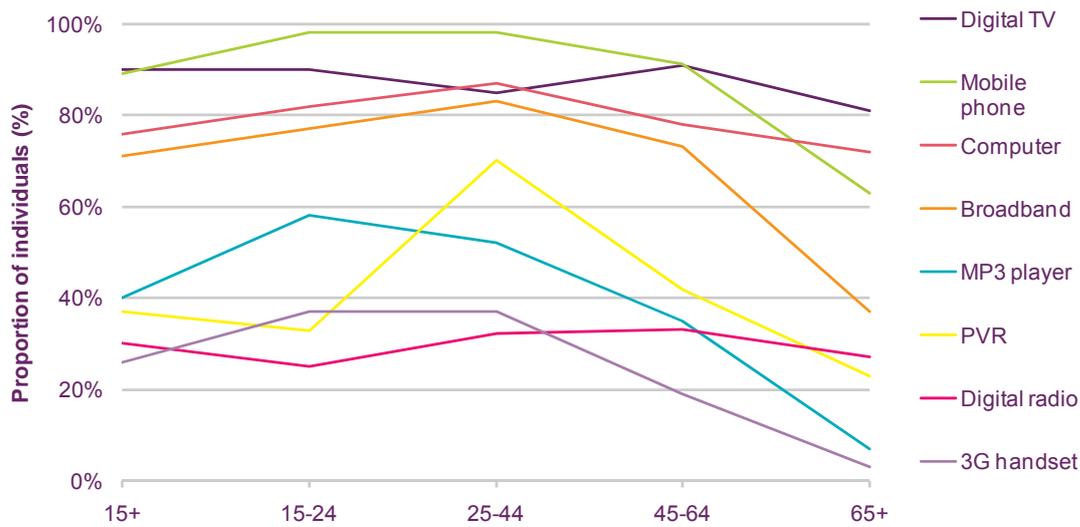


Source: Ofcom research Q1 2010, based on claimed ownership of devices

Younger people are more likely to adopt new technology

These technologies have not been uniformly adopted up across all audience groups. Younger people have a greater tendency to exhibit 'early adopter' characteristics, which means that they are more likely to have access to a wide range of new communication technologies (Figure 1.12).

Figure 1.12 Adoption of new technologies, by age



Source: Ofcom research Q1 2010, based on claimed ownership of devices

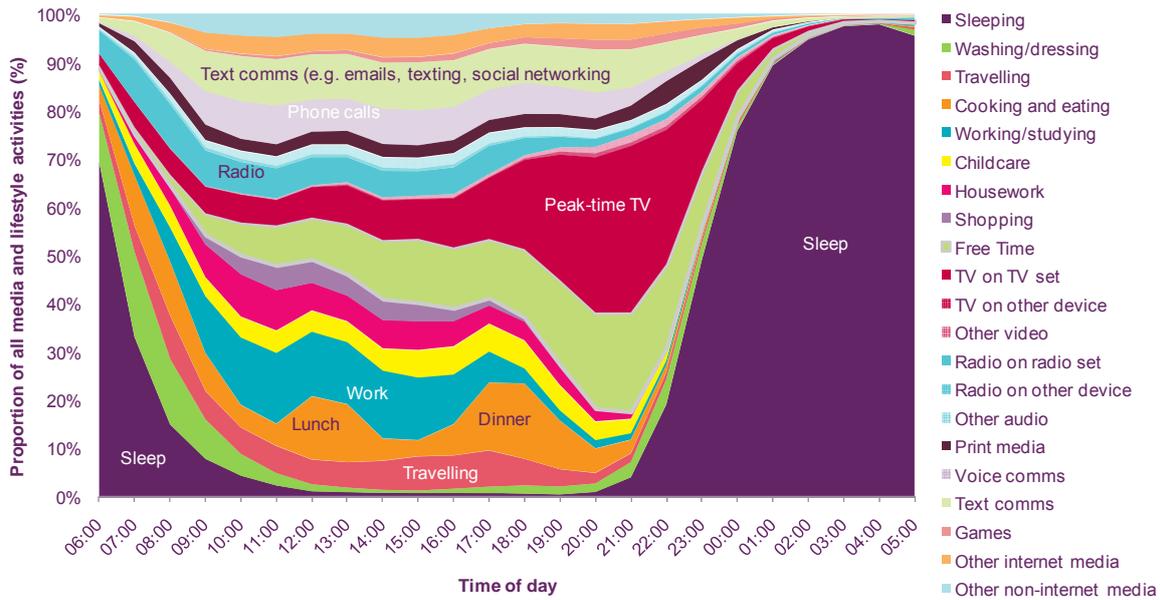
1.3.4 Consumer behaviour across the day

Consumers spend almost half of their waking hours engaging in media and communications activities

The research explored how people’s lifestyle activities (such as sleeping, eating, working and shopping) interact with their use of media. The study showed that the average adult spent 15 hours 45 minutes awake every day, with most people up by 09:00 and asleep by 00:00. As the study also found that the average adult spent just over seven hours a day with media, it follows that the average adult spends 45% of their waking hours undertaking some form of media or communications activity.

Figure 1.13 shows people’s daily activities and media consumption throughout an average day. Overall people’s media use was highest in the evening, peaking at 21:00 and driven by television viewing. Later on, the proportion of people sleeping increased rapidly, reaching almost 80% by 23:00. Prior to the TV peak, non-media activity was mainly made up of eating, working, childcare and housework, all of which had declined substantially by 21:00. This suggests that that TV in the evening peak time is predominately an activity undertaken exclusive of not only other media and communications consumption but also exclusive of other lifestyle activities.

Figure 1.13 Proportion of all lifestyle and media activity throughout the day

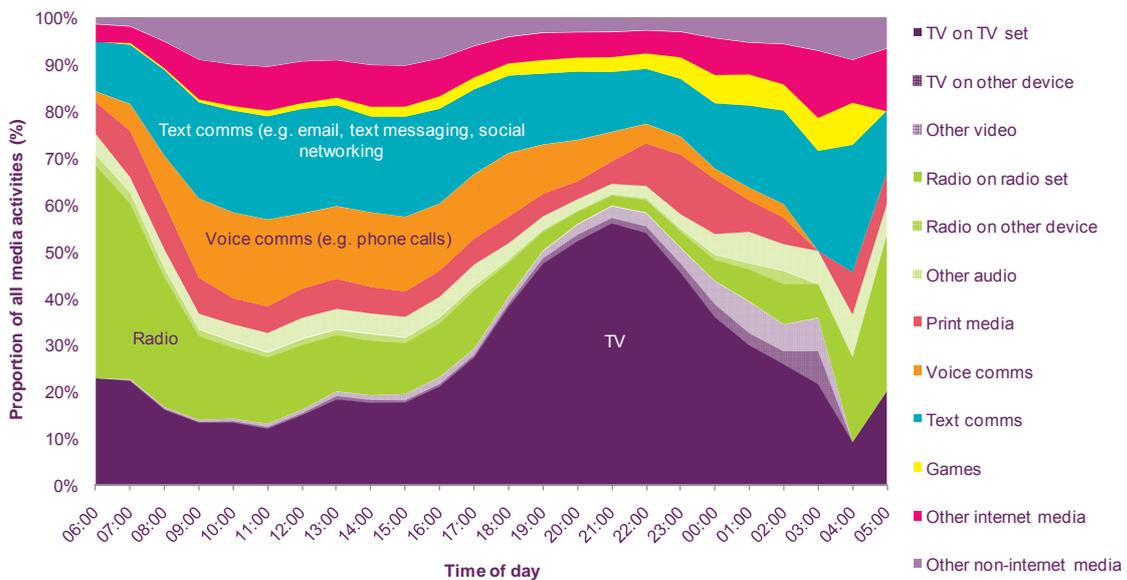


Source: Ofcom research, base = all respondent days: 7966

Television is the dominant form of media consumption in the evening

Figure 1.14 focuses on the proportion of media and communications activity undertaken each hour of the day. The data illustrates the popularity of television in the evening, when over half (52%) of all media activities undertaken involved watching television on a TV set. In the morning, radio was more popular, but declined by the evening when TV was at its peak. Text communications and voice communications both made up a fair proportion of media activity during the daytime, but both were less popular in the evenings. However, after the end of television peak time, text communications accounted for a similar proportion of media activity as in daytime. Print media made up an average of 6% of all media activity between 10:00 and 22:00, before peaking at 12% of all media activity at 23:00.

Figure 1.14 Proportion of all media activity throughout the day



Source: Ofcom research, base = all respondent days: 7966

1.3.5 Overall media and communications consumption

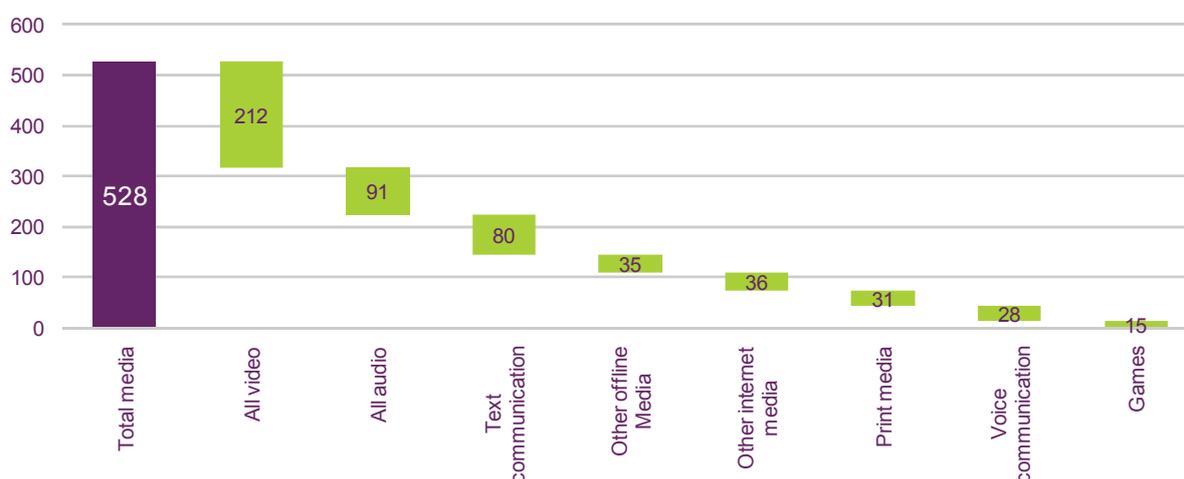
People spend more time watching video and listening to audio than any other media or communications activity

Our research found that the time spent by people using media content and communications services would take 8 hours and 48 minutes in total if it were all consumed on its own, although simultaneous media consumption allows them to fit this into seven hours and 5 minutes a day.

Video, and in particular television viewing, dominated people's total media consumption time. This was followed by audio and then text communications. On average, an adult watched 212 minutes of video content a day across all devices (e.g. watching TV on a TV set, on-demand, online or other video clips) – this amounted to 40% of all media and communications. A further 91 minutes were spent listening to any audio² (such as radio on a radio set, or music online). Eighty minutes per day were spent on text communications (which included text messaging, social networking, instant messaging and emailing).

Figure 1.15 Average amount of media used per day^{3,4}

Minutes of media consumption per day



Source: Ofcom research, base = All respondent days: 7966

Younger people undertake more media and communications activities in total...

Figure 1.16 shows that average daily media use differs substantially by age group, perhaps reflecting the varying levels of technology access set out in Figure 1.11. People aged 16-24 used media and communications most heavily, at just over nine and a half hours a day in total; this was one fifth (22%) more than adults aged 55 and over, who consumed the lowest volume of communications activity every day - just 7 hours 47 minutes.

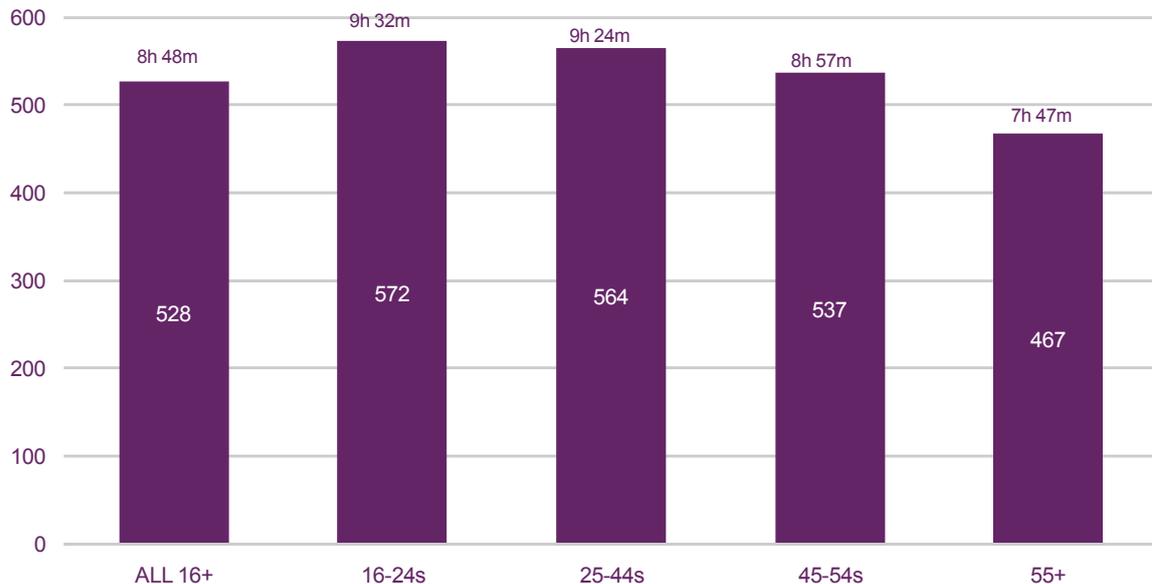
² The research study underestimates the amount of time spent listening to radio on a radio set in comparison to RAJAR. See methodology for further details.

³ This volume is gross: i.e. it includes all minutes of simultaneous media use.

⁴ Other offline media includes activities on a computer, such as using word processing, spreadsheet software, etc.

Figure 1.16 Average amount of media used per day, by age

Minutes of media consumption per day



Source: Ofcom research, base = All respondent days: 16+ = 7966; 16-24s = 1106; 25-44s = 3003; 45-54s = 1484; 55+ = 2373

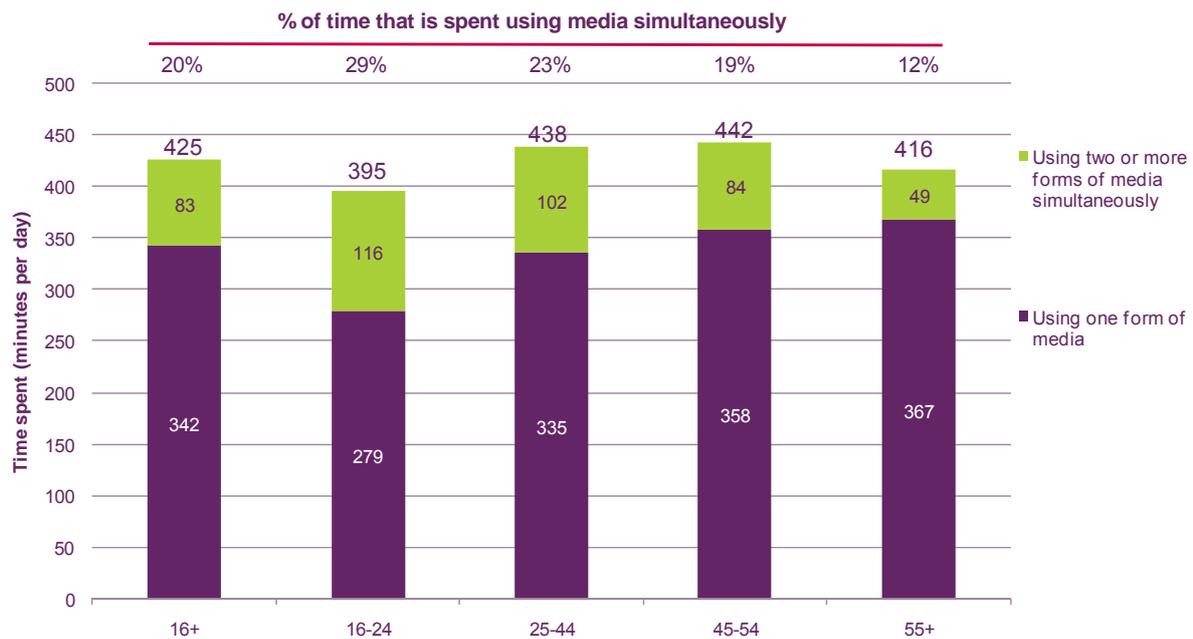
... but spend less time doing so

The research found that the total amount of media consumed - 8 hours and 48 minutes per day - was compressed into just over 7 hours of *actual time* (see Figure 1.17). Five hours and 42 minutes (342 minutes) was spent using media or communications services on their own ('solus' activity). The remaining 3 hours 6 minutes comprised media that were being used simultaneously, and was squeezed into just 1 hour 23 minutes (83 minutes) of actual time.

16-24 year olds managed to fit just over nine and a half hours' worth of media into a little over six and a half hours of *actual time*. To achieve this, they consumed around five hours of simultaneous media per day (over half of their total daily media activity) in less than two hours of actual time (29% of the time they spend with media).

In terms of *actual time* spent consuming media, 45-54 year olds spent the most time on an average day (at 7 hours 22 minutes), and 16-24 year olds the least time (6 hours 35 minutes).

Figure 1.17 Actual time spent using media, split by solus and simultaneous use



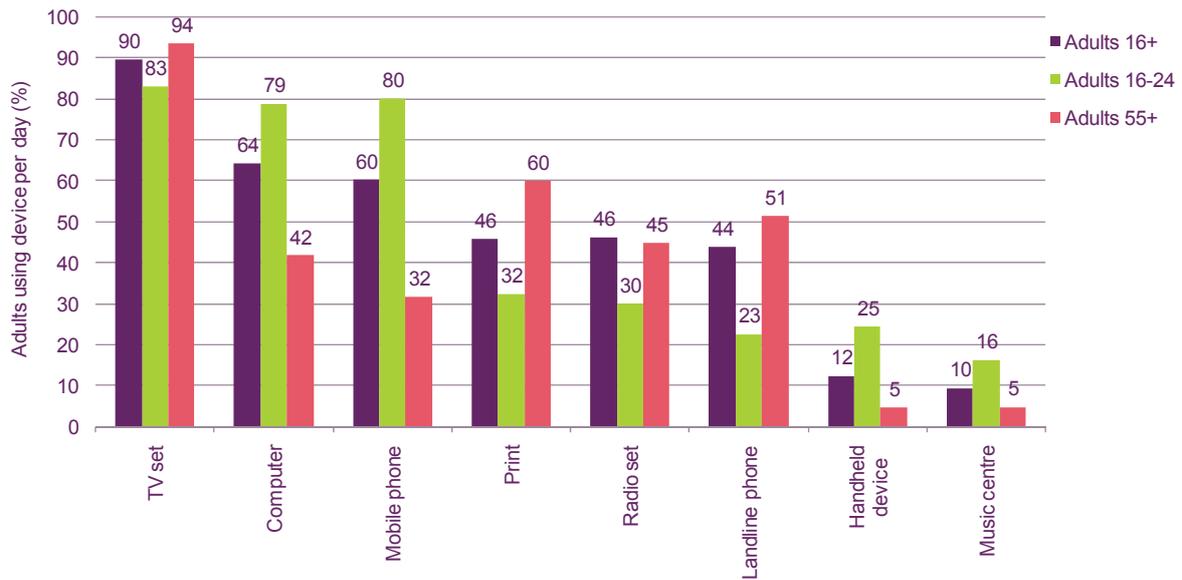
Source: Ofcom research, base = All respondent days: 16+ = 7966; 16-24s = 1106; 25-44s = 3003; 45-54s = 1484; 55+ = 2373

1.3.6 Patterns of media and communications consumption, by device

TV is popular with all age groups, but other traditional forms of media are less frequently used by younger people

As for the type of device that people use to consume media, the television set was the most-used device, with 90% of consumers saying they use it each day. Computers and mobile phones were both used by more than half of all adults every day, but daily use rose to over three-quarters among adults 16-24. Print media, radio sets, and landline telephones were all used by over 40% of adults every day, but were less likely to be used by 16-24s – 60% of adults over 55 read print media every day, but half as many 16-24 year olds did (32%). There was an even greater disparity between daily reach of landline telephones, with 51% of adults over 55 using a landline, but less than half as many 16-24 year olds (23%). By contrast, computers and mobile phones were more likely to be used on a daily basis by younger people (see Figure 1.18).

Figure 1.18 Daily reach of devices – adults 16+, 16-24, and 55+



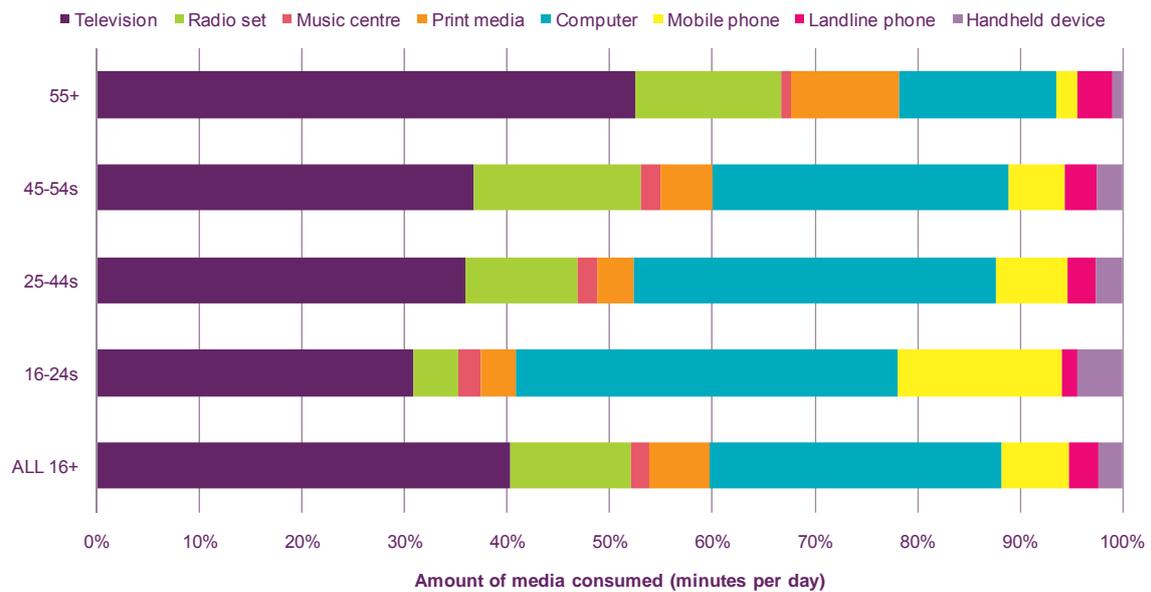
Source: Ofcom research, base=all respondent days: 16+=7966, 16-24s=1106, 55+=2373

Over half the time people spend on media and communications activity makes use of a TV or radio set

Among all adults aged 16+, media consumption through a TV set or radio set represented over half of people’s media and communications activity in a typical day. The pattern varied, however, by age. Section 1.3.3 illustrated the disproportionately high access that younger people have to a range of digital communications devices and technologies. Our research confirms that use is influenced by access and has a bearing on the way that younger groups use a wide range of communications services.

For example, computer, mobile phone and hand-held devices all had higher levels of use among younger age groups. Almost three-fifths (58%) of all 16-24 year old media engagement was through one of these devices, compared to 18% for people aged over 55. By contrast, use of the more established devices and media, such as TV sets, radio sets, and print, generally increased with age.

Figure 1.19 Proportion of all media use through each device, by age group



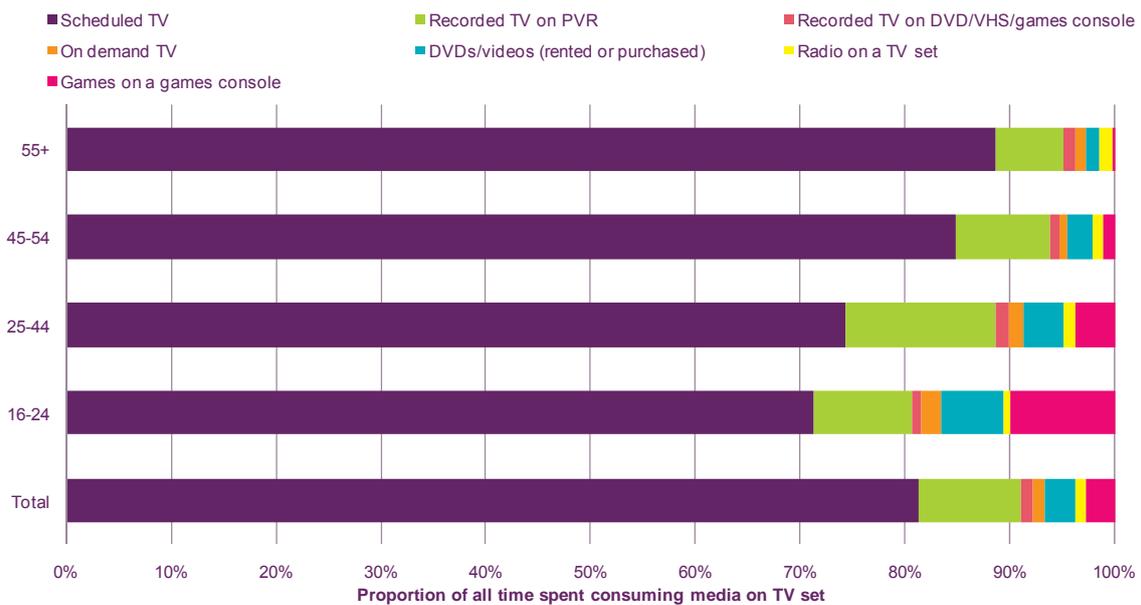
Source: Ofcom research, base = All respondent days: 16+ = 7966; 16-24s = 1106; 25-44s = 3003; 45-54s = 1484; 55+ = 2373

Younger people are most likely to use the TV set for gaming or watching DVDs

As new functionalities have been introduced into digital communications devices, so the range of purposes the devices can be used for has diversified. The study found there was variation by age in terms of what people were doing on different devices, as outlined below.

The TV set was predominantly used for watching scheduled television or recorded television, especially among older age groups. 16-24 year olds were most likely to use the TV set for playing video games and watching DVDs (see Figure 1.20).

Figure 1.20 Proportion of TV set use by activity, by age group

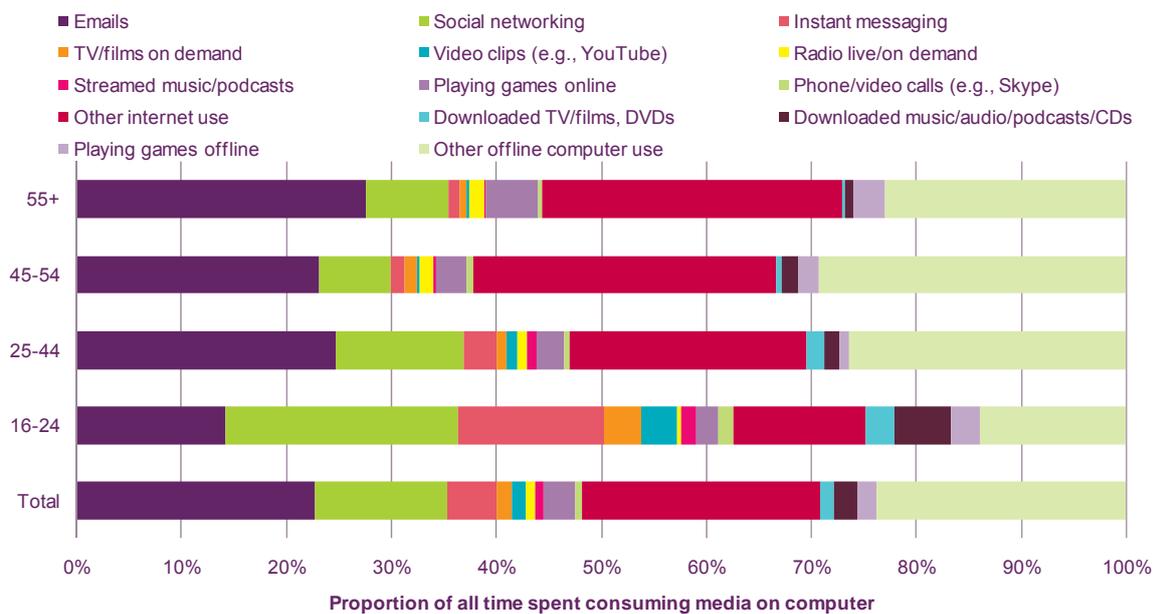


Source: Ofcom research, base = All respondent days: 16+ = 7966; 16-24s = 1106; 25-44s = 3003; 45-54s = 1484; 55+ = 2373

Two-fifths of people's time on a computer is spent communicating with other people

The study found that the computer is used for a wide variety of activities, but the pattern of use differs by age. For all age groups, communication makes up a large proportion of activity done on a computer. Thirty-seven per cent of activity done on a computer by over-55s is communication-based. Most of this is emailing, which makes up 28% of all computer activity among this age group. An additional 8% of their computer activity is social networking, and 1% is instant messaging. For 16-24s, over half their computer time is spent communicating with other people. They are more likely to use social networking (23% of all computer activity) and instant messaging (14%). Emailing is a smaller activity among this age group, making up 14% of their computer activity. Audio and video activities on the computer is also highest among this group. See Figure 1.21.

Figure 1.21 Proportion of computer use, by activity

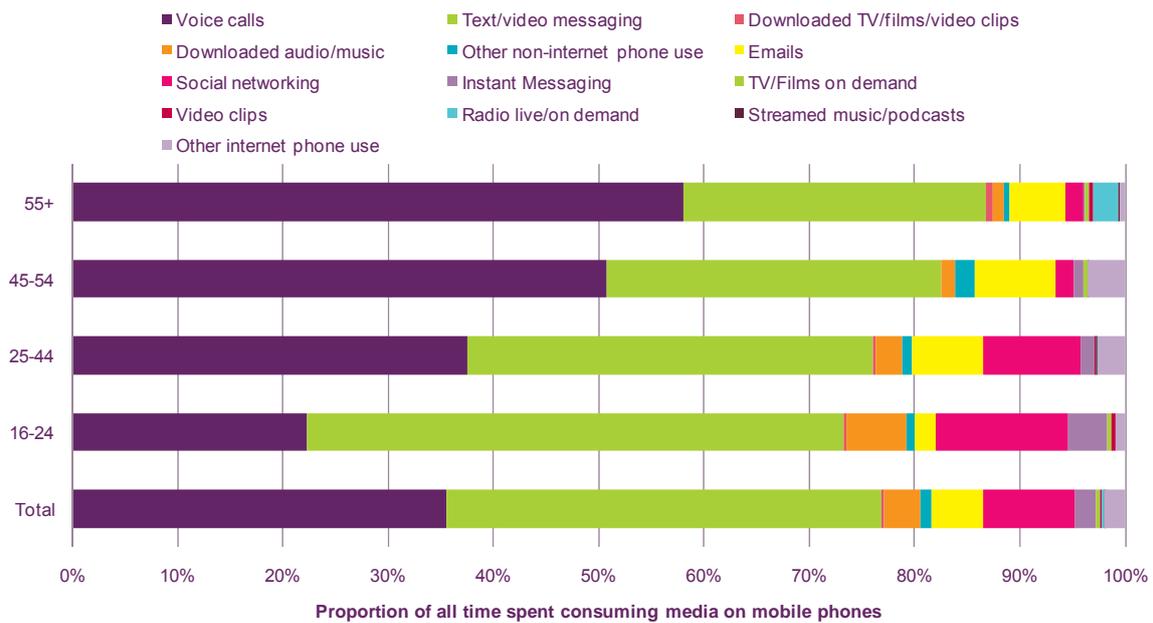


Source: Ofcom research, base = All respondent days: 16+ = 7966; 16-24s = 1106; 25-44s = 3003; 45-54s = 1484; 55+ = 2373

For many people, voice calls account for a minority of mobile phone use

People use their mobile phone predominantly for communicating by voice or text. Other uses such as listening to downloaded audio or accessing the internet or other features are minimal, accounting for 7% of total phone time. Patterns differ by age group; only 22% of the total time that 16-24 year olds spend on the phone is on voice calls, compared with 58% for people aged 55. Text messaging accounts for half of 16-24 year olds' mobile phone use, and social networking for a further 13%. Emailing by mobile phone is more common among those aged 25-54 than it is among 16-24s, suggesting that it is likely to be associated with work. See Figure 1.22.

Figure 1.22 Proportion of mobile phone use, by activity



Source: Ofcom research, base = All respondent days: 16+ = 7966; 16-24s = 1106; 25-44s = 3003; 45-54s = 1484; 55+ = 2373

1.3.7 Patterns of media and communication service consumption, by activity

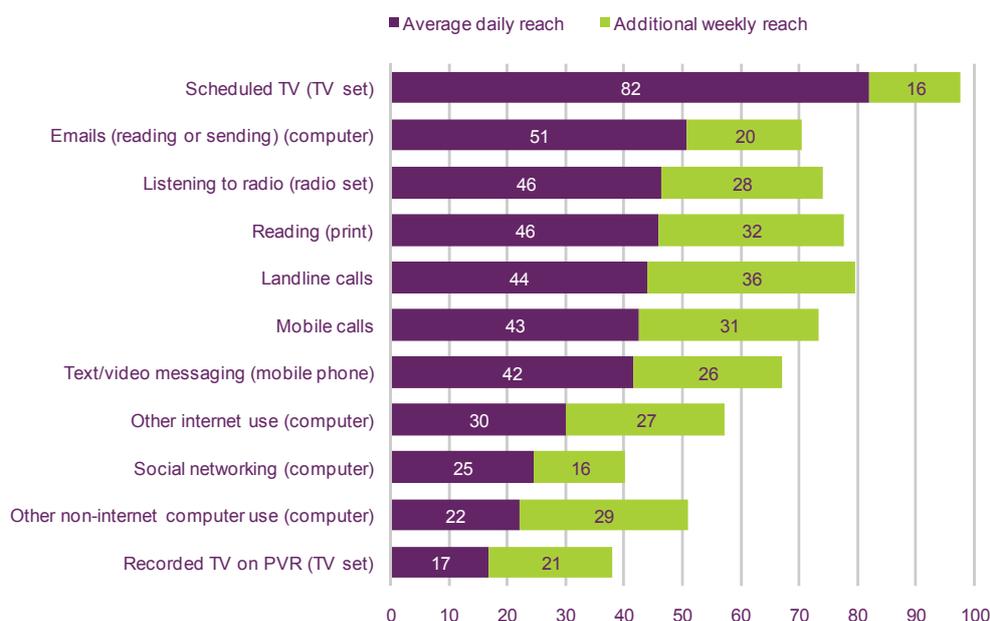
Watching scheduled TV is the most popular daily activity

Analysis of activities within these broad categories showed that scheduled TV was the most popular daily activity, with 82% of people watching on an average day. Emails, reading print media, making landline or mobile phone calls, listening to the radio and texting on a mobile phone were undertaken by 40% or more of adults on a daily basis. Social networking on a computer was carried out by one quarter (24%) of adults daily (see Figure 1.23). Other activities were undertaken less frequently, but were still embraced weekly by a sizeable proportion of people. Examples included watching TV or films on demand or live on a computer, where 2% undertook these activities on a daily basis, rising to 10% weekly; among 16-24s the figure was 25% weekly. Watching video clips online rose from 4% a day to 13% a week for all adults, and to 37% on a weekly basis among 16-24s.

16-24s undertook a wider range of activities on a daily basis than older people: there were 18 recorded activities with greater than 10% daily reach among this age group, compared to just 10 for adults over 55.

Figure 1.23 Media activities with the highest daily reach

Daily and weekly reach (% of total population)



Source: Ofcom research, base = All respondent days: 7966, activities with >10% daily reach

Watching television is most popular among people over 55, text communications is most popular among 16-24s

Video viewing was the most popular communications activity among consumers. It accounted for 212 minutes, or 40%, of all media and communications use in the day, with television viewed on a TV set (whether live, recorded or on-demand) representing 38 percentage points of that total (94% of all video viewing). Listening to audio (radio, podcasts, etc) accounted for a further 17%, of which 12 percentage points (or 71% of all audio listening) was listening to radio through a radio set. Text communications (texting, email, social networking, etc) accounted for 15% of the total and voice communications (e.g. mobile, landline calls, VoIP) for a further 5%.

People aged 16-24 had a different media consumption profile. Only 26% of 16-24s' media time was spent watching television on a TV set, compared to the average of 38%. While watching video on devices other than TV sets remains a niche activity overall, it was more widespread among 16-24 year olds. Nineteen per cent of their video viewing (or 6% of their total media time) was through a device other than a TV set, compared with 7% among adults as a whole. Moreover, text communications accounted for 30% of all activity among 16-24s; this was double the level for all adults.

Other significant differences by age included over-45s spending more time on radio, and over-55s spending the most amount of time on print media.

Figure 1.24 Proportion of media used, by age



Source: Ofcom research, base = All respondent days: 16+ = 7966; 16-24s = 1106; 25-44s = 3003; 45-54s = 1484; 55+ = 2373

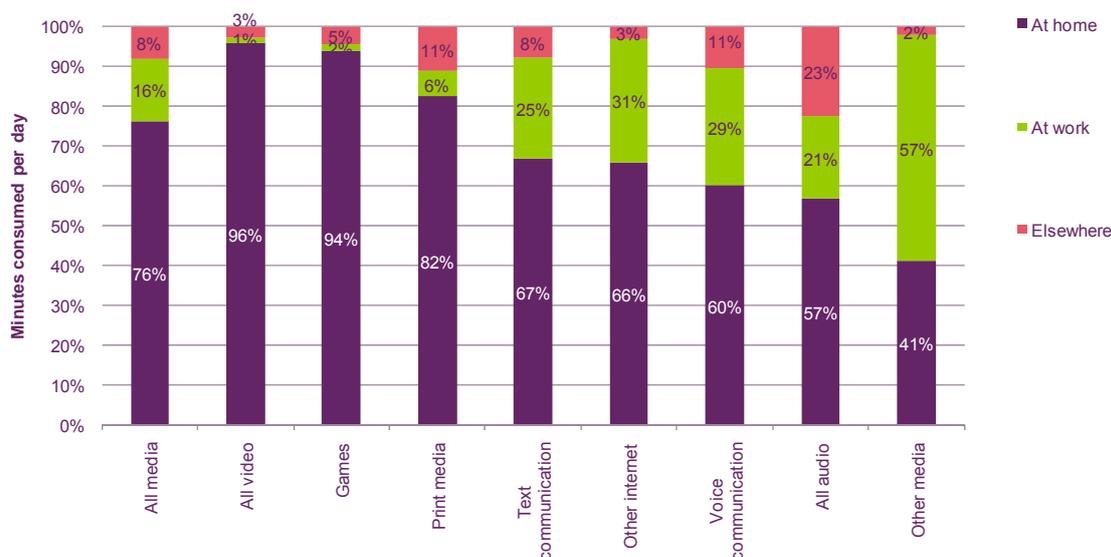
Watching video content occurs mostly in the home, while listening to audio is often done elsewhere

Figure 1.25 shows that location has a bearing on the types of activities that UK adults undertake. Overall, 76% of all media consumption occurred at home; a further 16% was at work and a final 8% somewhere else (such as travelling, or at someone else's house). The location of consumption varied substantially between video and audio content. Only 4% of video content was watched out of the home; by contrast, 43% of audio content was listened to outside the home, whether at work (21%) or elsewhere (23%) - this includes car-radio listening as well as listening on portable devices.

Two-thirds (67%) of text communications was undertaken at home. The 'other media' category contains all other computer use (beyond emailing, listening to audio and watching video) which explains the high volume consumed at work.

Eighty-two per cent of print media was consumed at home, and 94% of games. By contrast, only 60% of voice communications was at home, with 29% at work and 11% elsewhere.

Figure 1.25 Proportion of media use, by location



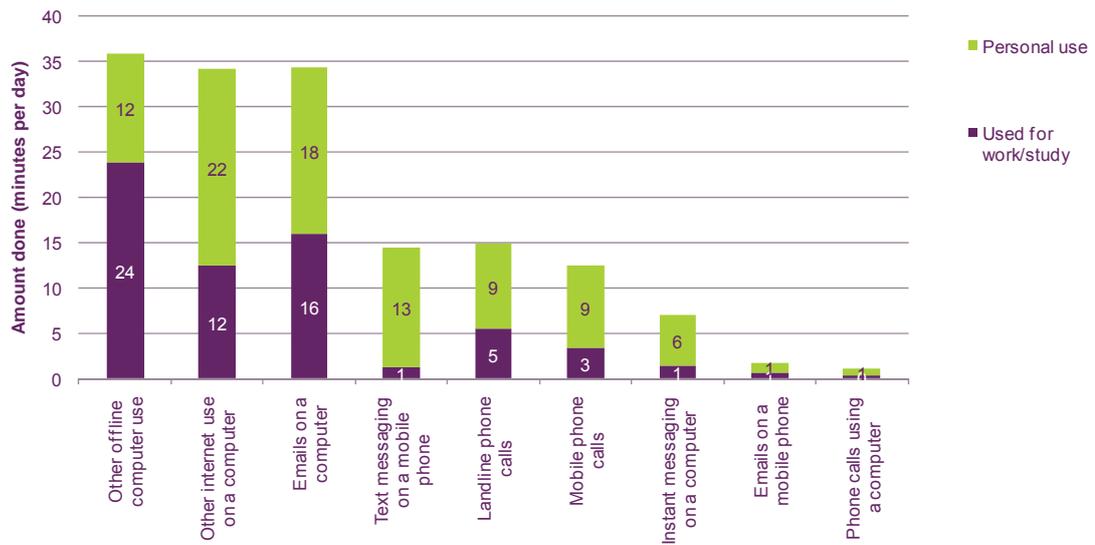
Source: Ofcom research, base = all respondent days: 7966

Landline phone calls are more likely to be used for work than mobile phones, particularly among younger people

Respondents were asked to indicate whether some activities had been undertaken for personal or work and study use. Emailing was used for both purposes, with work/study purposes accounting for 47% of emailing on a computer and 39% with a mobile phone. By contrast, other forms of text communication, such as text messaging and instant messaging, were used almost exclusively for personal reasons.

Landline telephone calls were more likely than mobile telephone calls to be used for work purposes, though they were used for similar amounts of personal call time. Thirty-six per cent of landline call use was for work purposes, but among 16-24 year olds, this figure rose to 49%. By contrast, 27% of mobile phone calls were for work purposes, but this declined to 18% for 16-24 year olds. There were also differences between men and women. Forty-four per cent of emailing by women was for work purposes, compared to 49% for men, while 29% of landline phone calls and 15% of mobile phone calls by women were for work reasons, compared with 46% and 37% for men.

Figure 1.26 Personal and work use



Source: Ofcom research, base = All respondent days: 7966

1.3.8 The role of multi-tasking in media and communications consumption

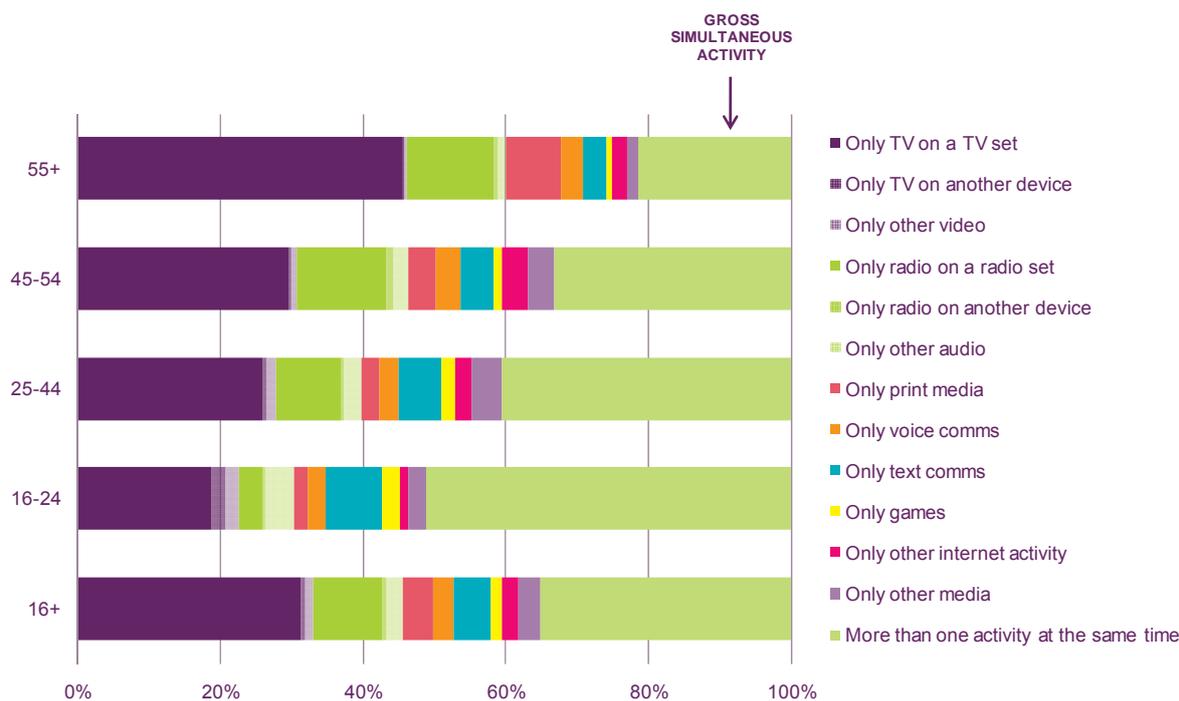
Over half of all media activity undertaken by 16-24s is simultaneous

This section considers what proportion of media consumption is concurrent, and how this varies by age, activity category, and time of day.

Figure 1.27 shows the proportion of media use split by different types of activity, depending on whether they were carried out on their own or concurrently with other media activities. 16-24s were far more likely to use media simultaneously than older people. Over half (52%) of all media activity undertaken by 16-24 year olds was simultaneous, compared to 22% for those in the over-55 age group.

Over-55s were more likely to watch video content on its own, particularly television on a TV set. Watching television through a TV set on its own made up 45% of all media activity among over-55s. This compared to 19% for 16-24s.

Figure 1.27 Proportion of all media used, split by individual solus activities and all simultaneous activity



Source: Ofcom research, base = All respondent days: 16+ = 7966; 16-24s = 1106; 25-44s = 3003; 45-54s = 1484; 55+ = 2373

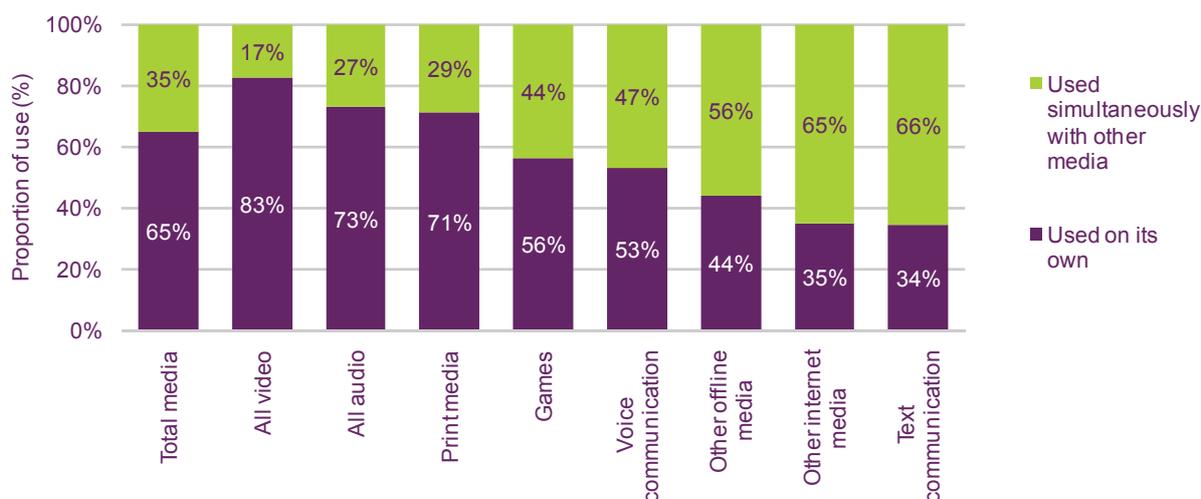
People are more likely to consume video, audio, and print media on their own, while text-based communications tend to be undertaken concurrently

The research study showed that UK adults aged 16+ tended to watch video content, listen to audio and read newspapers/magazines or books on their own. Text-based communications tend to be undertaken at the same time as other media activities measured in the study.

Video content was most likely to be consumed on its own, with only 17% of video viewing occurring alongside another consumption activity. Audio and print media were also more likely to be used on their own (73% and 71% respectively of the total time people spend listening and reading). By contrast, text-based communication was most likely to be undertaken concurrently for two-thirds of the time that people are doing it (see Figure 1.28).

Analysis of the total volume consumed by category (see Figure 1.15) shows that text communications attracted the highest average volume of daily concurrent use (53 minutes). Video came second, with 37 minutes a day.

Figure 1.28 Proportion of media used per category, split by solus and simultaneous use

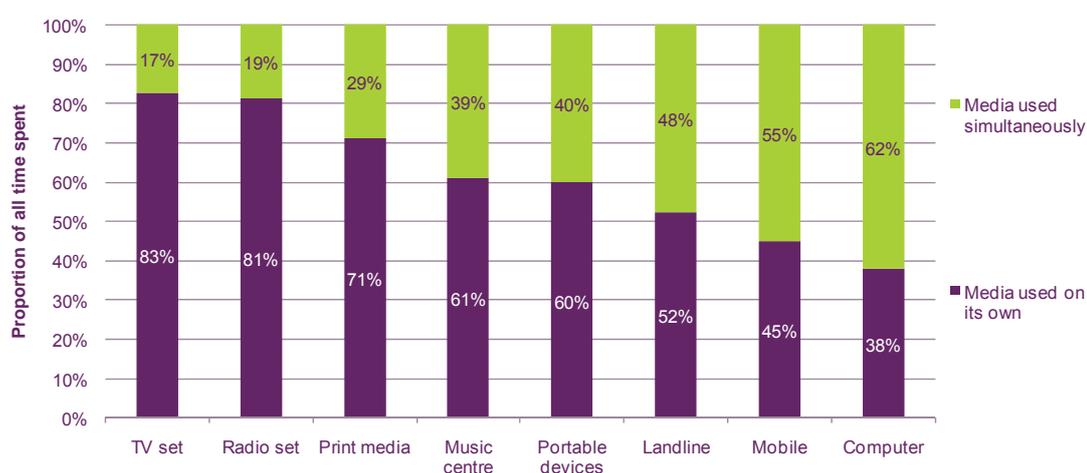


Source: Ofcom research, base = All respondent days: 7966

The majority of activity on mobile phones and computers occurs concurrently with other media consumption

The TV set, radio set, print, music centres and portable devices (other than mobile phones) tended to be used for activities undertaken on their own. By contrast, computers and mobile phones, the two devices which are most likely to be used for a variety of different communication activities, were also the devices on which activity is most likely to be simultaneous (see Figure 1.29).

Figure 1.29 Proportion of solus and simultaneous media used, by device⁵



Source: Ofcom research, base = All respondent days: 7966

⁵ Media used by device includes all media and communications activity undertaken on the device (e.g. figure for TV set includes video games and radio on a TV set).

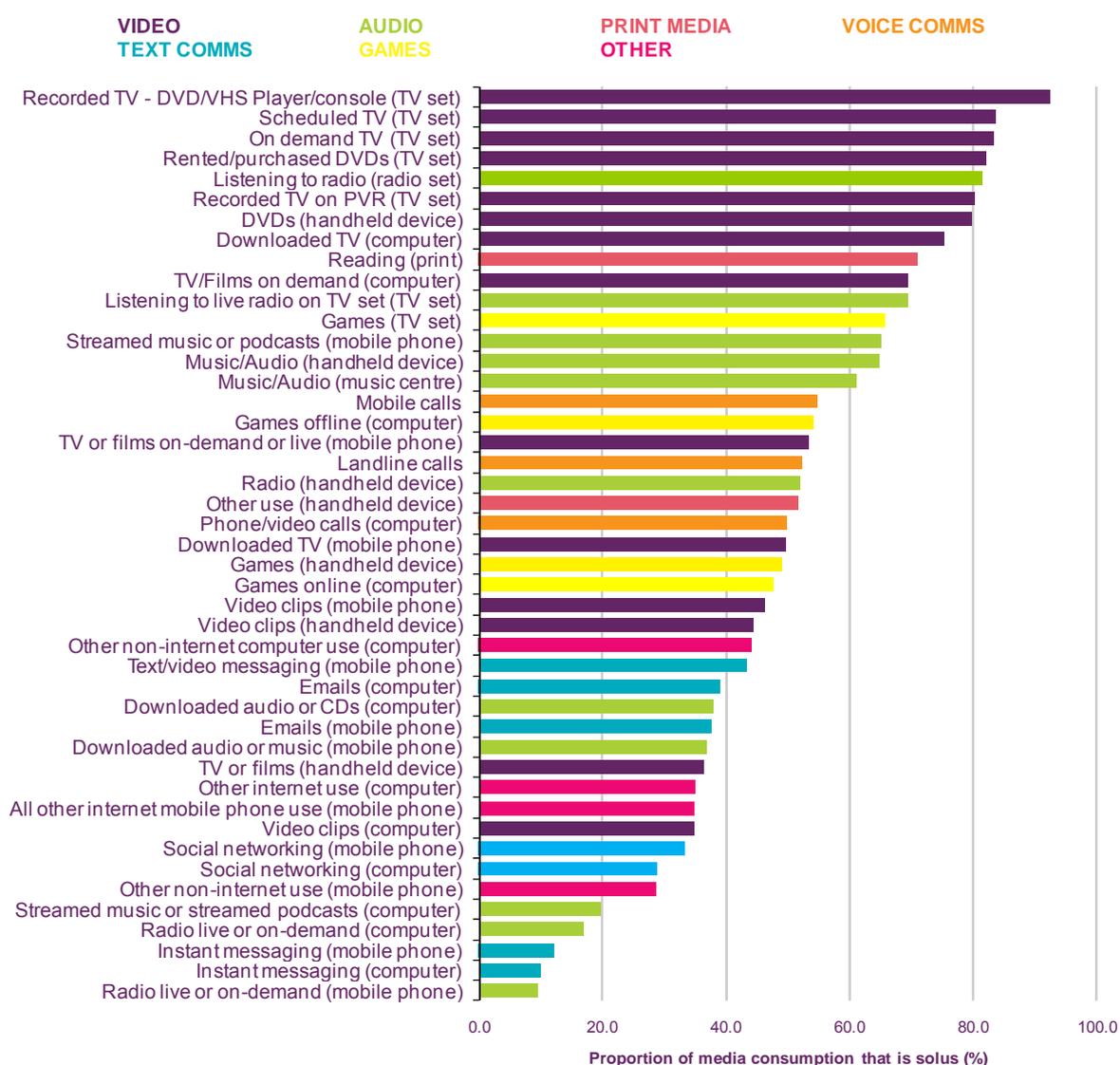
Watching video on a TV set and listening to the radio on a radio set are most likely to be undertaken without other media

Figure 1.30 shows the proportion of each individual type of media activity that was undertaken on its own. Most video activities were typically watched without other media. Eighty-four per cent of scheduled television is watched on its own, as is 83% of video on-demand on a TV set and 80% of recorded viewing through a PVR. The exceptions were viewing video clips on a computer, mobile phone or other handheld device, and TV or films viewed on handheld devices. This may reflect the functionalities of these devices, and the occasions when they are used. Only 35% of viewing to video clips on a computer is solus.

The proportion of people listening to the radio in tandem with other media varied by activity – listening through a radio set tended to be on its own (81%), but listening through a mobile phone or computer were more likely to be accompanied by other media consumption.

Text communications tended to be primarily concurrent activities. In particular, 90% of all time spent on instant messaging on a computer was concurrent with other media activities. Voice communication was more of a mixed picture; about half the time spent on each type of voice activity (such as making or receiving landline or mobile or VoIP calls) was concurrent.

Figure 1.30 Proportion of specific media activities that is solus



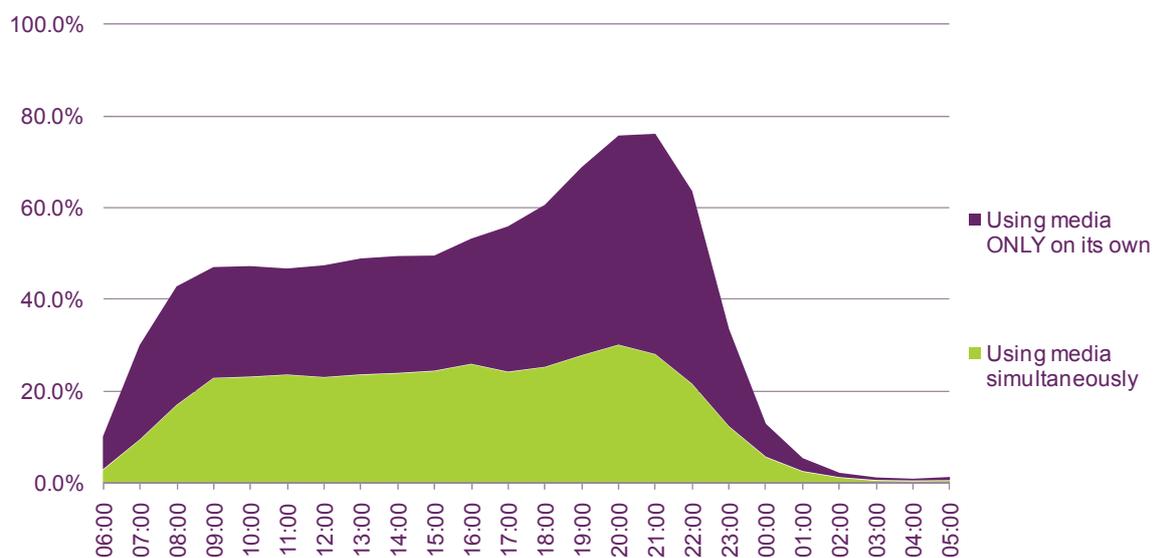
Source: Ofcom research, base = all respondent days: 7966

Media multi-tasking is common throughout the day

By time of day, patterns of solus and simultaneous media consumption varied substantially, although there were also points of consistency. Across most of the day, about one-fifth of respondents were consuming two or more forms of media simultaneously, rising in the early evening to just under one-third of the sample (30%).

By contrast, the proportion of people consuming only one type of media peaked in the evening, rising from around 25% of all people between 8:00 and 18:00 to almost 50% at 21:00. Most of this peak is explained by people watching scheduled television on their TV set, an activity predominantly undertaken on its own rather than alongside other media (see Figure 1.31).

Figure 1.31 Hourly reach of media use throughout the day, profiled by solus and simultaneous activity

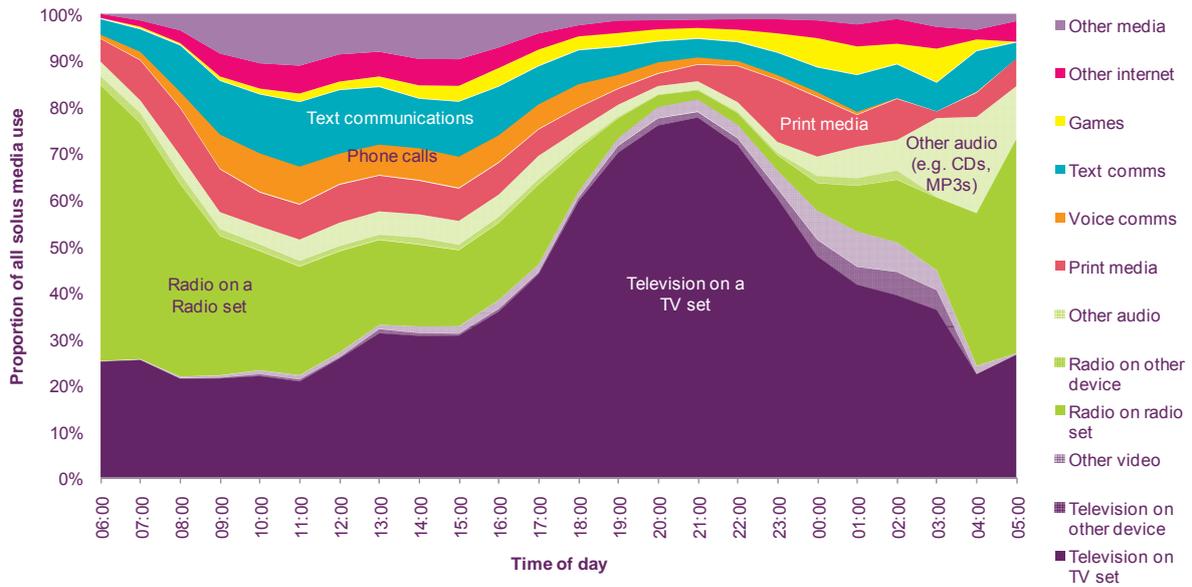


Source: Ofcom research, base = All respondent days: 7966

Watching scheduled TV on a TV set is most likely to be done on its own in the evening, without consuming other media

As to the types of activity that were undertaken on their own, Figure 1.32 shows that viewing television on a TV set on its own remains popular during the evening. Dissecting the 'solus' consumption patterns by time of day reveals that video and audio media use accounts for the majority of that consumption. In particular, the increase in solus media use that occurs at around 21:00 is driven by television viewing, which accounts for around 70% of all solus media use at this time. Listening to radio through a set accounted for a substantial proportion of all solus consumption early in the morning and later at night, while listening to other audio (eg. downloaded music or CDs) was also a popular late-night activity for some. The proportion of solus activity taken by text communications grows in popularity from early morning until around 15:00 in the afternoon, before tailing off in the late afternoon and evening.

Figure 1.32 Proportion of solus media use throughout the day

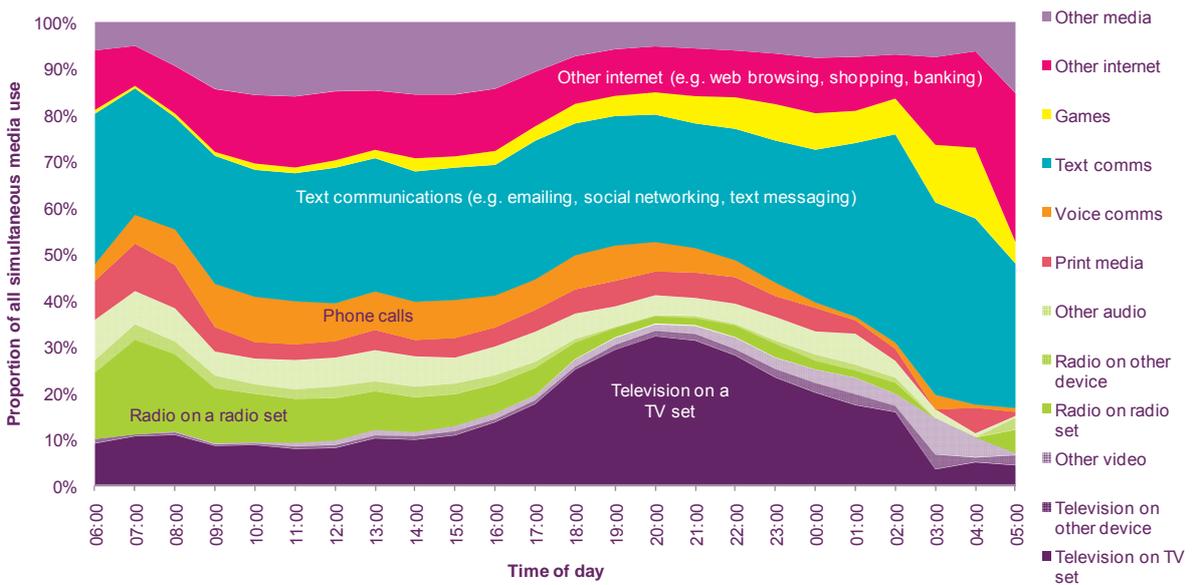


Source: Ofcom research, base = all respondent days: 7966

Text-based communications is the most popular concurrent media activity throughout the day

Patterns of simultaneous media use are quite different over the day. Video and audio were not big drivers, while communications activity (particularly text communications) made a more substantial contribution throughout most of the day. In the evening, as the television audience increased, video became a bigger factor in the overall amount of media being used simultaneously. Using the internet for purposes other than viewing video/listening to audio was also a consistent concurrent pursuit for around 10% of people throughout the day.

Figure 1.33 Proportion of simultaneous media use throughout the day



Source: Ofcom research, base = All respondent days: 7966

1.3.9 Attention and importance paid to media

Alongside analysing patterns of media consumption use, we have explored the levels of attention that people paid to each media activity, to understand what influence, if any, concurrent use might have. Each time someone in the study reported that they had undertaken an activity they were also asked, on a scale of 1 to 5, to rate the attention they paid to it.

At the end of the survey respondents were also asked to rate on a scale of 1 to 10 the importance of each of the activities. This section examines the relationship between attention and importance, by media consumption activity.

Video on-demand and gaming attract the highest levels of attention

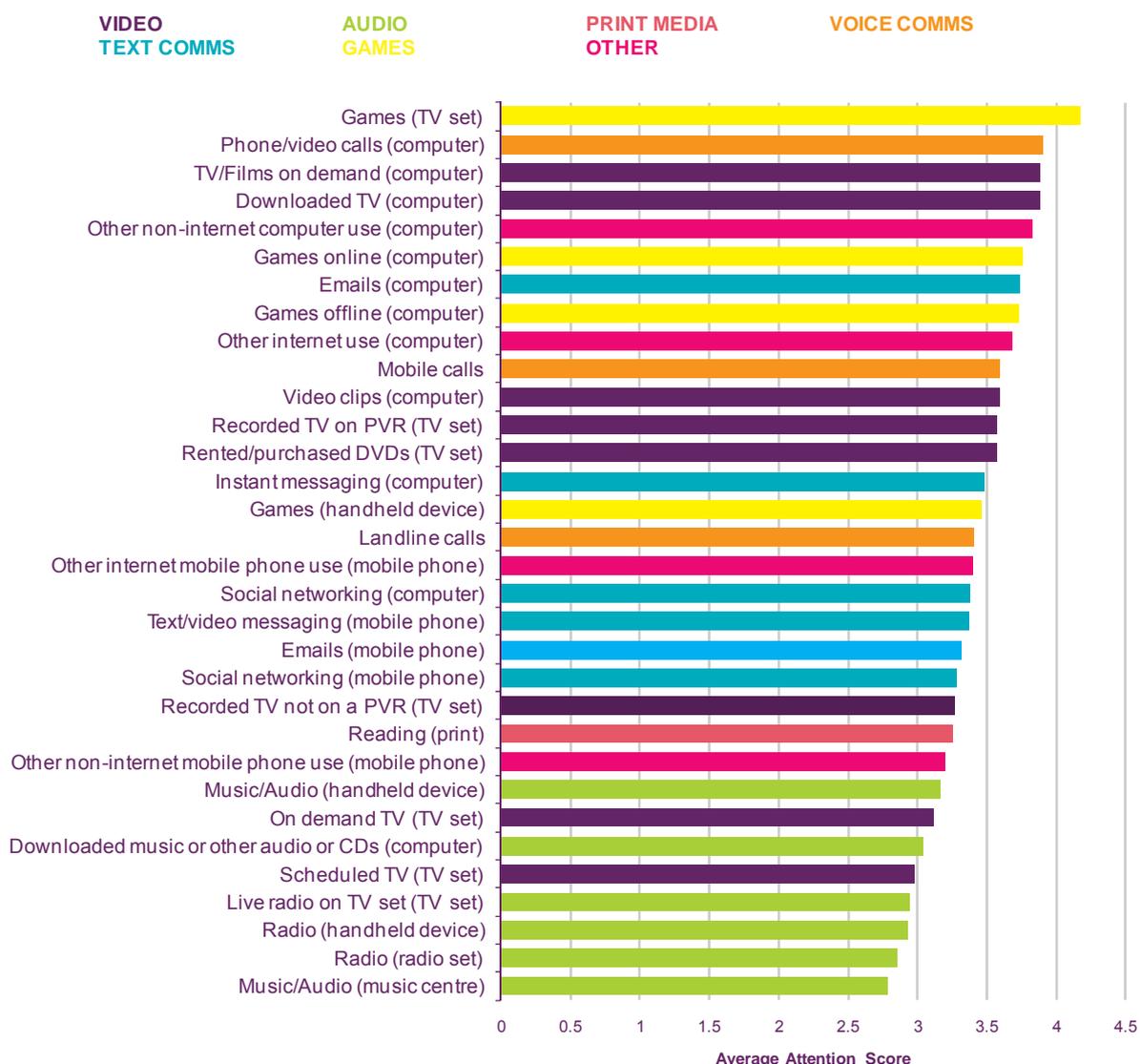
Three of the top ten activities ranked on attention were games (either offline or online on a computer, and through a TV set using a games console). Two of the top ten activities involve video – namely downloaded TV and TV on-demand delivered via a computer.

Audio activities generally featured lower down the list, with radio via a radio set, and music or other audio listened to via a music system, commanding the least attention of any activities. Of all audio activities recorded in the survey, music or other audio listened to on a handheld device (such as an MP3 player) attracted the most attention.

The attention paid to video activities varied according by activity. Watching scheduled television attracted a lower average attention score than most activities; TV recorded via a PVR was relatively high up the attention ranking. Even more attention was commanded by video on-demand and downloaded video content viewed on a computer.

Voice communications tended to attract a higher level of attention than text communication, although within text there was some variation – through a computer it tended to score higher on the attention scale than comparable activities through a mobile handset (see Figure 1.34).

Figure 1.34 Attention level by activity, based on mean scores⁶



Source: Ofcom research, activities with base > 50 respondent days

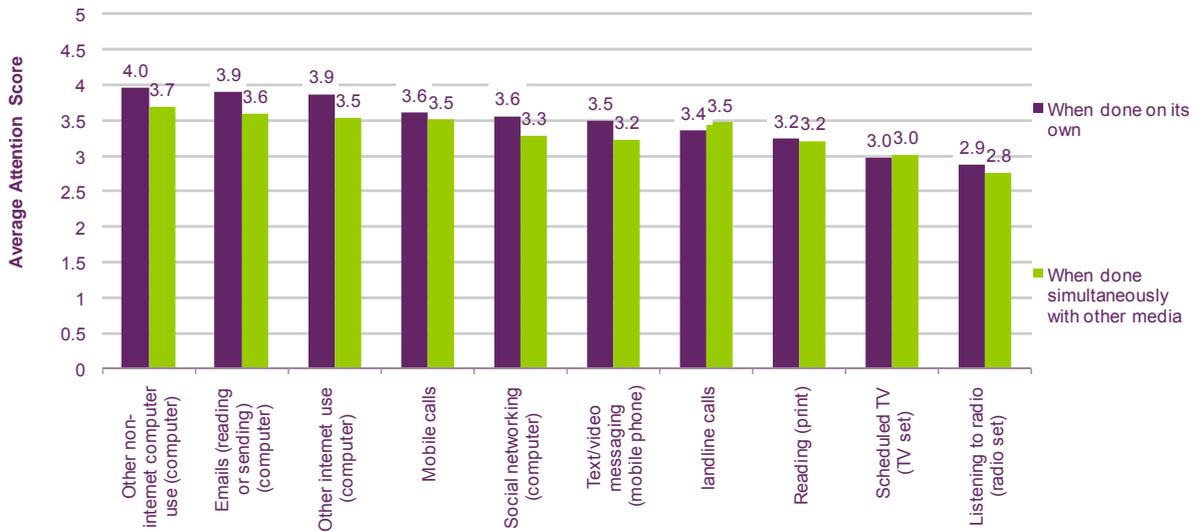
Traditional media holds people’s attention even when it is undertaken with other media

Figure 1.35 illustrates the ten activities that attracted the highest daily reach, and contrasts the attention scores respondents gave to each when they were conducted on their own and when combined with another activity. When activities are conducted simultaneously the attention people pay to either activity generally falls, though this does not hold true for more traditional forms of media, such as watching scheduled TV, listening to the radio on a radio set, reading print media, and making landline phone calls.

By contrast, emailing on a computer and social networking on a computer show a greater drop in attention when combined with other activities.

⁶ Attention is measured for each instance of an activity undertaken during the seven-day period. Respondents were asked to rank the attention they gave the activity on a scale of 1 to 5, where 1 was ‘none of my attention’ and 5 was ‘all of my attention’.

Figure 1.35 Simultaneous versus solus attention scores, by activity



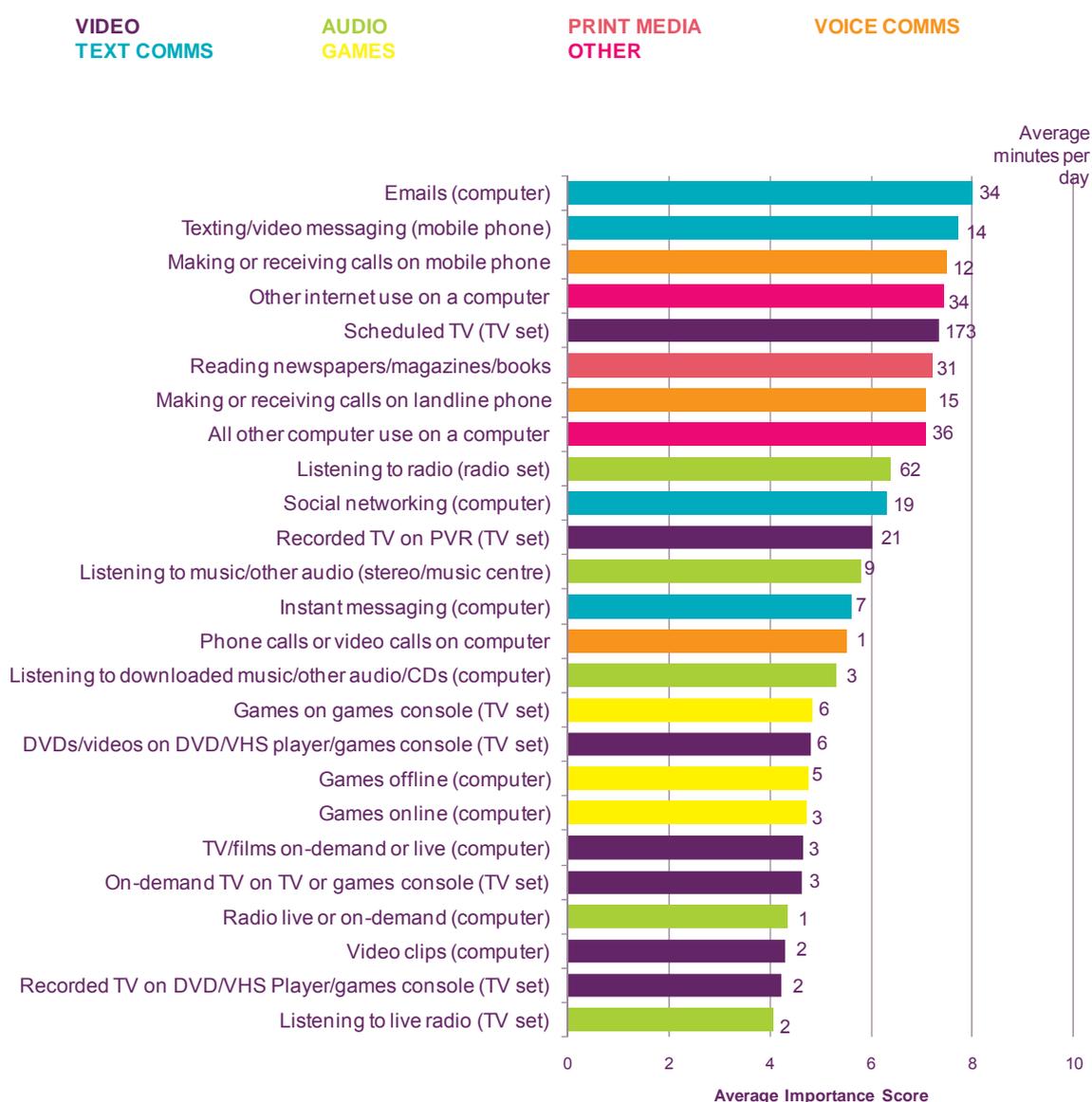
Source: Ofcom research, base = all respondent days: 7966

Communications activities are given the highest importance, particularly email and text messaging

Figure 1.36 shows the average importance score (based on a scale of 1 to 10) given by people to the different media activities. Text communication activities top the list, with email considered the most important activity, followed by text messaging. Phone calls on a mobile phone are considered more important than calls on a landline, but both appear near the top of the list. Video and audio activities such as watching television on a TV set or listening to the radio on a radio set are considered important, although newer alternatives such as on-demand video or radio are not considered as important.

Within text communication, there were differences between men and women. While men and women gave similar importance scores to e-mailing on a computer, women gave higher scores to text messaging and to social networking through a computer, despite not undertaking these activities any more than men.

Figure 1.36 Importance of activities, based on mean scores



Source: Ofcom attitudinal research, activities with base > 50 respondents, base: all who ever do activity

Traditional media is seen as important, even when attention scores are lower

Figure 1.37 sets out the relationship between importance scores and the average levels of attention respondents gave to each activity during the week. Voice and text communication activities tended to show high levels of both attention and importance. By contrast, some audio activities, particularly listening to the radio on a TV set, were considered less important and garnered less attention.

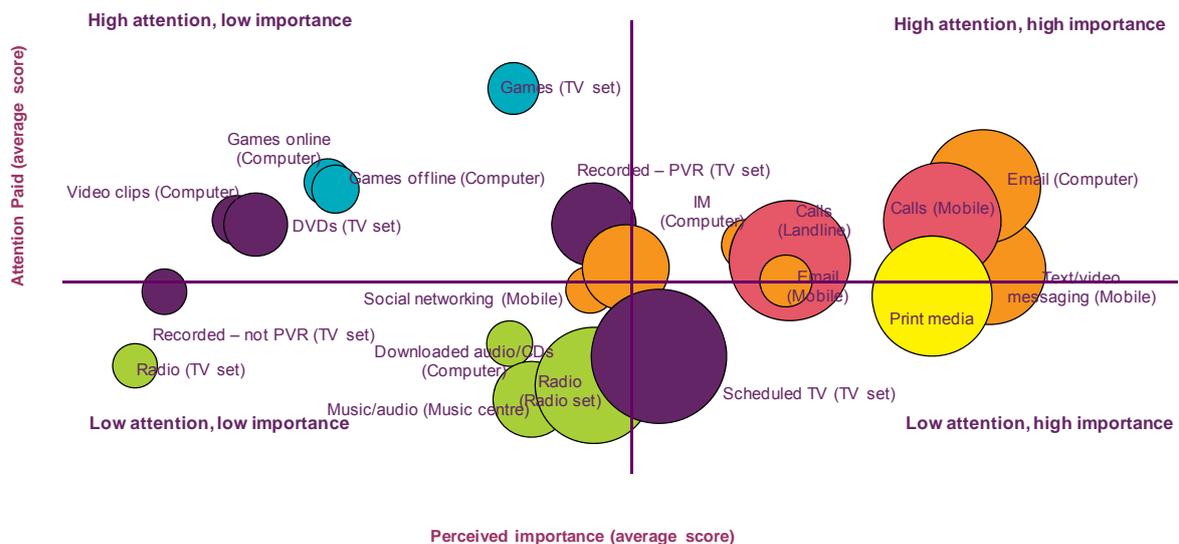
However, there were some activities that, while not receiving high attention, were still considered important by consumers. These were predominantly traditional media activities such as watching scheduled television through a TV set and reading print media. This relationship between lower attention yet higher importance may be explained by the main reasons people gave for watching TV through a TV set: ‘to relax’ (33%) - whereas for radio through a radio set it was ‘for background’ (30%).

By contrast, there some activities received higher than average attention but were not considered as important, such as playing computer games, or watching video content on a computer or through a DVD player.

The size of the bubbles in Figure 1.37 is proportional to the number of people undertaking each activity within the week. There is a correlation between the average importance of an activity and the number of people undertaking the activity in a week. Activities with a high weekly reach, such as emailing, text messaging, phone calls, print media and watching scheduled TV, tend to have high importance scores, while more niche activities tend to have lower importance scores.

Figure 1.37 Importance and attention of activities – based on mean scores

Area of bubble proportional to weekly reach of activity



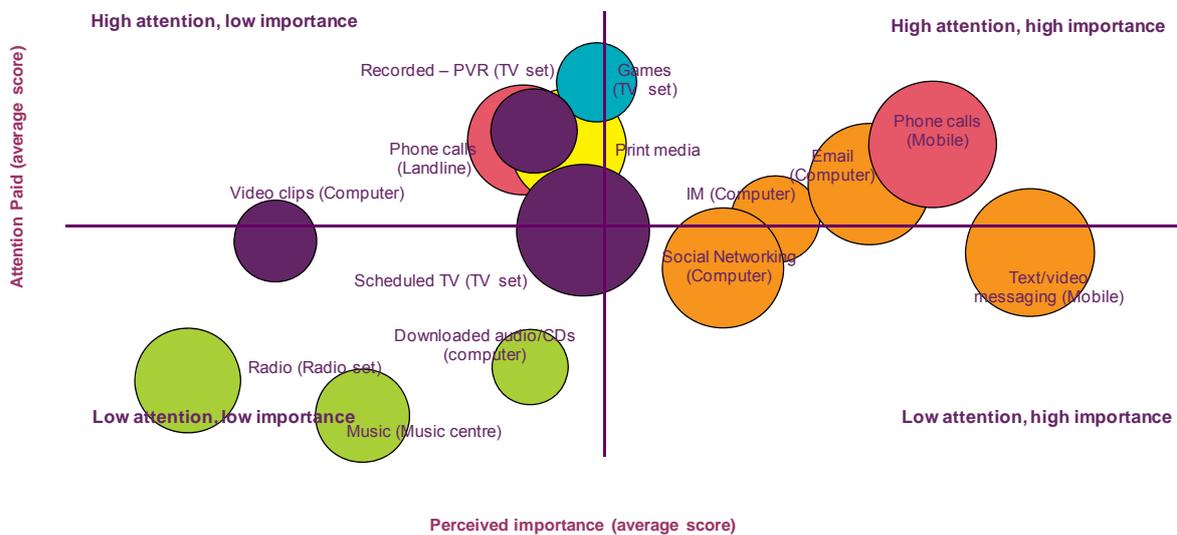
Source: Ofcom research, base = all respondent days: 7966, all activities with base>50 respondent days for attention and base>50 respondents for importance; base: all who ever do activity and have undertaken it in week of research, size of bubble proportional to weekly reach.

Younger people place greater value on texting than emailing

Figure 1.38 shows that some attention and importance scores varied substantially for younger people compared to UK adults overall. Print media were considered less important by 16-24s than by all adults, while games played through a TV set were considered more important. In terms of text communications, text messaging was the most important, while emailing, social networking and instant messaging each had above-average importance. This contrasts with the results for all adults aged 16+, for whom email was the most important method of text communication, followed by text messaging. Social networking and instant messaging were considered less important for all 16+.

Figure 1.38 Importance and attention of activities for adults 16-24, based on mean scores

Area of bubble proportional to weekly reach of activity



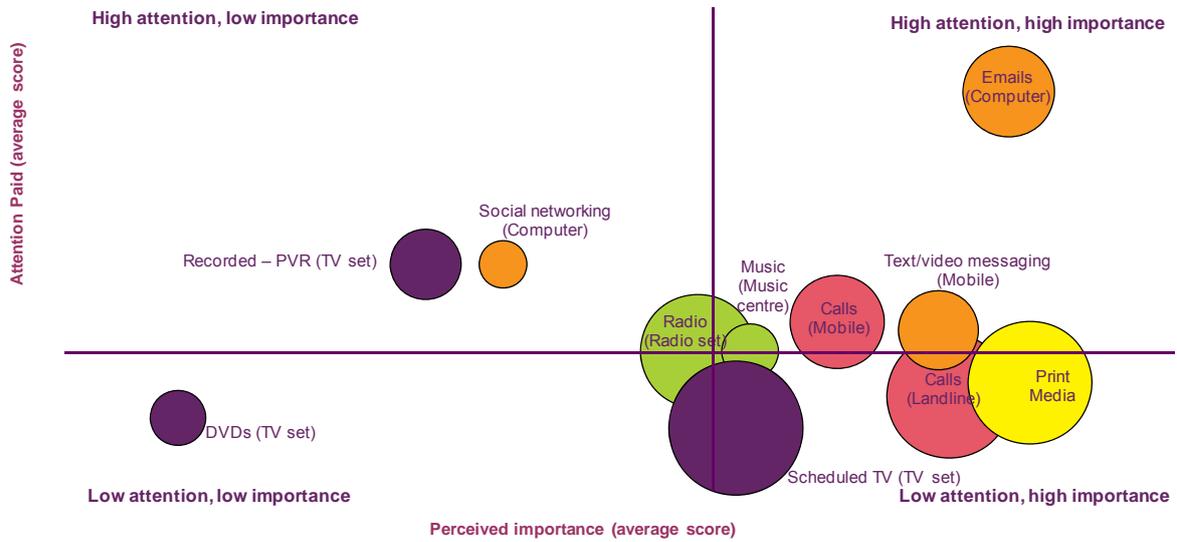
Source: Ofcom research, base = all 16-24 respondent days: 1106, all activities with base>50 respondent days for attention and base>50 respondents for importance; base: all who ever do activity, and have undertaken it in week of research, size of bubble proportional to weekly reach.

Email is the most important activity for older people, and commands the most attention

Figure 1.39 shows the relationship between attention and importance for media activities among over-55s. Email using a computer and reading print media were considered the most important activities; email was also the activity to which highest attention was paid. However, in general there was a tendency for older consumers to rate as important activities which did not command as much attention – print media, scheduled television, and landline phone calls. Activities attracting greater attention, such as social networking and watching recorded TV through a PVR, were considered less important. Radio and listening to music on a music centre were considered more important activities among over-55s than average.

Figure 1.39 Importance and attention of activities for over-55s, based on mean scores

Area of bubble proportional to weekly reach of activity



Source: Ofcom research, base = all 55+ respondent days: 2373, all activities with base>50 respondent days for attention and base>50 respondents for importance; base: all who ever do activity and have undertaken it in week of research, size of bubble proportional to weekly reach.

1.4 Bundling of communications services

1.4.1 Introduction, structure and key findings

Introduction

For many years people have bought voice calls and text messages together as part of a mobile phone service bundle. Increasingly, different communications services are being bundled together as a single package from one supplier. The most commonly purchased types of service bundles in communications are 'dual-play' fixed voice and fixed broadband bundles, and 'triple-play' fixed voice, fixed broadband and pay-TV bundles.

Structure

This section of the report examines the context of bundling in the communications sector, and then how take-up has grown in the last five years and how it varies by different consumer groups. We then examine the main reasons why people choose to buy communications services in bundles. Finally, this section looks at the consumer experience of bundling, including their levels of satisfaction with the services they receive and what impact bundling might have on switching behaviour.

Key findings

- **The popularity of bundling has grown significantly in the past five years.** Around half of all UK households now buy two or more communications services from a single supplier in a bundle, up from less than a third five years ago (page 57).
- **Triple-play voice, broadband and TV bundles account for a third of all bundles.** Seventeen per cent of households took triple-play services in Q1 2010, compared to just 3% five years ago (page 57).
- **But still many people buy services on a stand-alone basis.** Only half of all households (53%) that have a landline, fixed broadband service and pay-TV currently purchase these services as a triple-play bundle (page 58).
- **The main consumer benefits of bundling are value for money and convenience.** 70% of people with a communications service bundle said that the main reason for taking a bundle was because it was cheaper. Almost half (49%) of those with a bundle said that it was more convenient to deal with one supplier (page 60).
- **Bundling often provides a route for users to take-up a new service.** Forty five per cent of households with pay-TV in a bundle did not previously purchase pay-TV services and 40% of households with broadband in a bundle did not previously have broadband (page 63).
- **Those who buy bundles are on average more satisfied than those who buy single services.** In particular, bundlers have higher satisfaction with value for money and customer service (page 64).
- **There are some indications that consumers with bundles are less likely to switch provider than those with single services.** A relatively small proportion of consumers switched their whole bundle in the past year. This may be due to a combination of high levels of satisfaction, a large proportion still being within a contract lock-in period, and the hassle of navigating multiple switching processes simultaneously (page 65).

1.4.2 Context

Communications service providers are increasingly packaging their services and products in bundles, whereby two or more services are sold together as a combined offering.

Products of this type have been a feature of the communications market for some time. For example, for many years mobile phone operators have bundled voice calls and text messages, and pay TV operators have bundled together channels within a TV package. This is known as 'pure bundling' - when the individual components cannot be purchased separately.

Increasingly, communications service providers have begun to bundle different communications services together as part of a package. The first mainstream communications service bundle in the UK was launched in 1995 when NTL (now Virgin Media) began to sell its fixed-voice telephony service together with its cable TV service.

More recently, service bundling has become commonplace, with most operators offering services in combinations of two or more. The majority of residential broadband connections are now sold in a bundle that includes fixed voice telephony, while triple-play services, including fixed voice, broadband and pay-TV, are becoming increasingly popular.

Bundles: what are they?

In economic theory, there are three main types of bundles:

'Pure bundling' occurs when products or services are sold as a fixed package and cannot be bought separately (e.g. a car is an example of a pure bundle because it is unlikely that you would buy it in individual parts to build the car yourself).

'Mixed bundling' is when products are available as a part of a bundle or individually, but the package of items together is sold at a discounted price (e.g. Home contents and building insurance is often sold as a discounted package but each can be bought individually).

'Tied bundling' is when one product can only be purchased with another, but that other product is available to buy separately (e.g. shoes and shoelaces).

All three types can be found in the communications sector, although the most common are mixed bundles and tied bundles.

1.4.3 The market for bundled communications services

One in two households buy their communications services in a bundle – up from less than a third five years ago

In 2005, 29% of all homes bought their communications services in a bundle. By Q1 2010, this had risen to approximately half of all UK households.

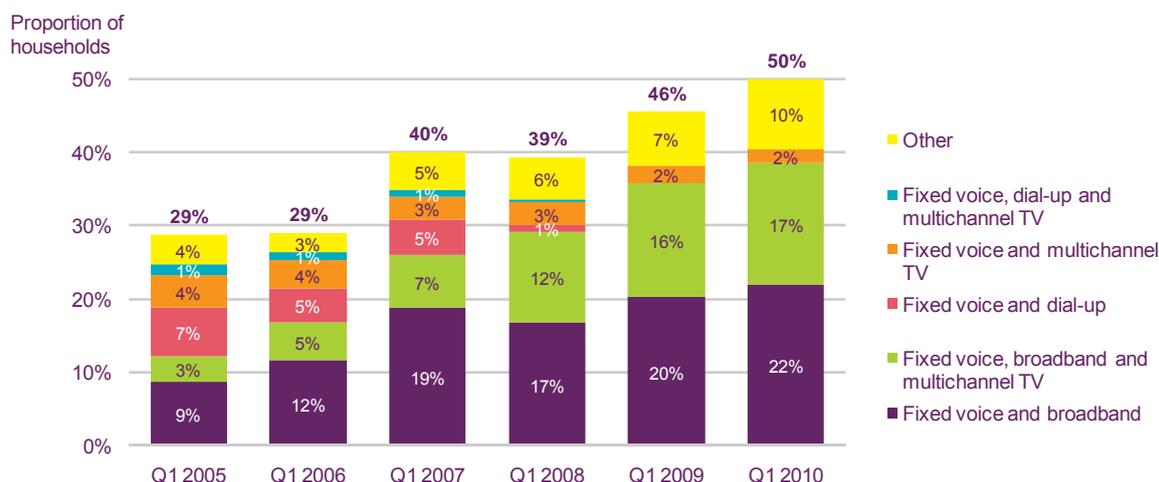
Methodology

Our bundling research was carried out from February to March 2010 on behalf of a number of regulatory projects, particularly the *Strategic Review of Consumer Switching*⁷. It was based on a combination of 2,008 in-home interviews, and 863 online survey responses.

We also commissioned qualitative research to gain an insight into consumer attitudes about bundling. This research was run using a mixed methodology which included four workshops in different locations across the UK, comprising both bundlers and non-bundlers, and a series of in-home depth interviews.

Most bundles include fixed-line broadband as one of the components, with the most popular bundled product being a 'dual-play' package of broadband and fixed voice (22% of households). However, the greatest growth has been in the take-up of triple-play services including fixed voice, broadband and pay-TV, particularly since Sky launched its triple-play service in the summer of 2006. In Q1 2010, 17% of all households took a triple-play bundle of fixed voice, fixed broadband and pay-TV, compared to just 3% five years ago (Figure 1.40).

Figure 1.40 Take-up of bundled services over time



QG1. Do you receive more than one of these services as part of an overall deal or package from the same supplier? Base: those aware of how many packages they have' n=416. Note that data in Figure 1.40 is not directly comparable with that in Figure 1.42, Figure 1.48 and Figure 1.49 due to the different time period and methodology of data collection

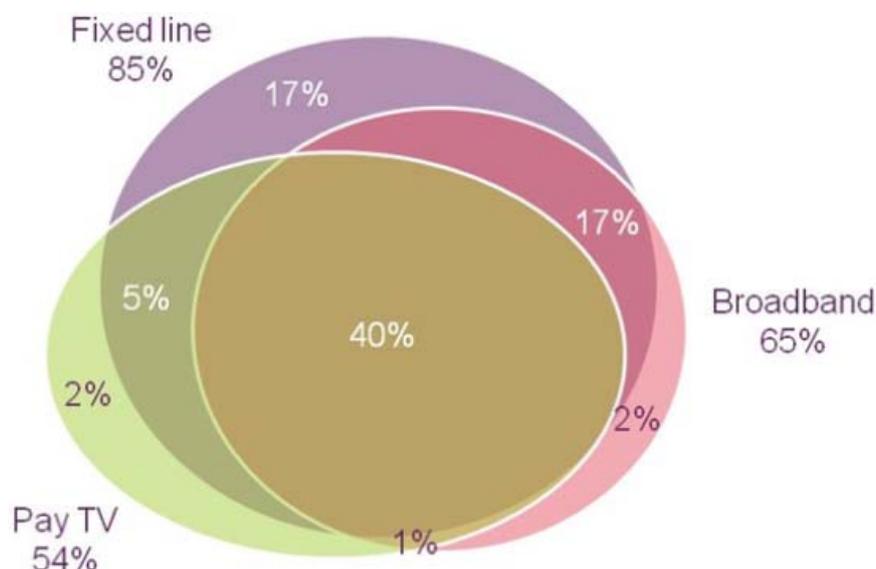
Source: Ofcom technology tracker research, Q1 2010.

But less than half of all households with a broadband, fixed voice and pay-TV service currently buy these together in a triple-play bundle

Over ten million UK homes (40% of all households) take all three of fixed-line, fixed broadband and pay-TV services, while 63% take two or more of these services. However, less than six million UK households purchase them within a triple-play bundle (21% of all UK households; 53% of those households that take all three services) (Figure 1.41).

⁷ Ensuring that consumers can switch communications provider, by removing unnecessary barriers, is one of Ofcom's nine priorities in its *Annual Plan* for 2010/11, <http://www.ofcom.org.uk/files/2010/06/annplan1011.pdf>, pp13-14

Figure 1.41 Proportion of all UK households taking communications services



Source: Ofcom industry analysis, Q1 2010.

Younger and older bill payers are less likely to take communications services in bundles – for different reasons

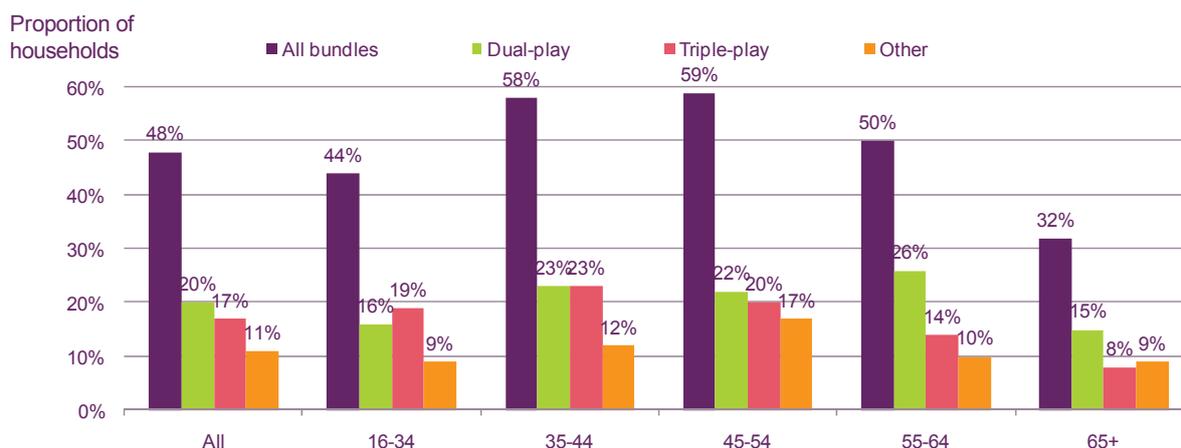
Households where the bill payer is under 34, or over 65, are less likely than the UK average to take a bundle of communications services. The figures stood at 44% for 16–34 year olds and less than a third (32%) of over-65s in Q1 2010, compared to the UK average of 48%.

Our qualitative research suggests that younger and older consumers may be less likely to take bundles for different reasons. On average, younger consumers are more likely than other age groups to actively choose not to buy a communications service bundle. This is because younger people tend to be more confident users and earlier adopters of new technologies. They claim to value services such as super-fast broadband or high-definition TV packages, which are not always available as part of a bundle.

On the other hand, some of the older consumers were more likely to say that they were puzzled by new technology and that they might not be aware of the bundled offers that are available. Older consumers were also more likely to consider their landline to be the most valued communications service; this suggests they may be less willing to change their landline supplier to build a bundle around a broadband or pay-TV service.

People aged 35 – 54 are the most likely to buy their communications services in a bundle. In particular, respondents with young families claimed that bundling was good value for money, convenient, and a way of helping to fulfil everyone's needs.

Figure 1.42 Take-up of bundled services, by age



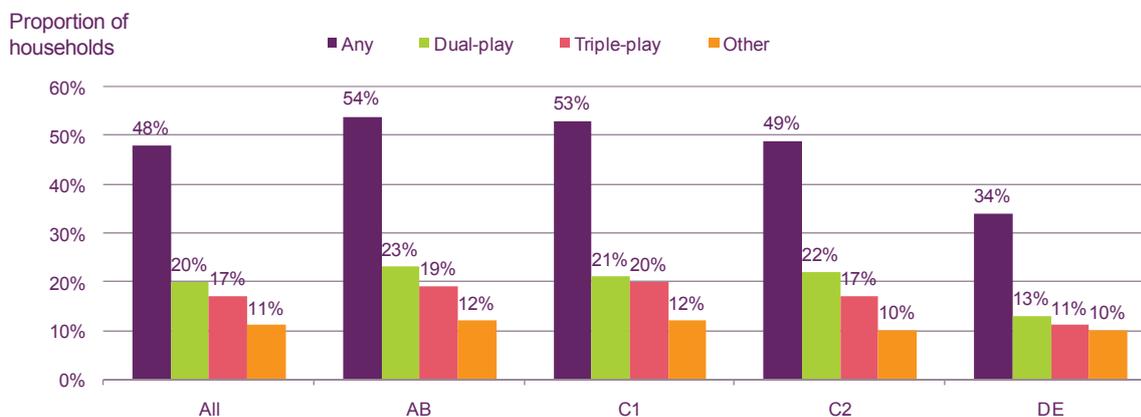
QA1/ QA6/ QA7/ QA7A/ QA8 – Which of these services are in your household?/ Which supplier do you use for [SERVICE]?/ Do you receive one bill or separate bills for your [SERVICES]?/ To confirm, which services do you receive covered by a single bill from that supplier?/ Do you get these services as a package or as separate services?

Base: All respondents (2871 aged 16+, 826 aged 16-34, 536 aged 35-44, 496 aged 45-54, 466 aged 55-64, 547 aged 65+).

Source: Ofcom research, fieldwork carried out by Saville Rossiter-Base in February to March 2010

Figure 1.43 indicates that people in higher socio-economic groups are generally the most likely to take bundles. This is consistent with other research that shows that ABC1 households are more likely to have a broadband connection, and DE households are more likely to do without a fixed telephony connection of any kind and rely solely on mobile services.⁸

Figure 1.43 Bundling take-up, by socio-economic group



QA1/ QA6/ QA7/ QA7A/ QA8 – Which of these services are in your household?/ Which supplier do you use for [SERVICE]?/ Do you receive one bill or separate bills for your [SERVICES]?/ To confirm, which services do you receive covered by a single bill from that supplier?/ Do you get these services as a package or as separate services?

Base: All respondents (2871 aged 16+, 772 AB, 832 C1, 534 C2, 732 DE).

Source: Ofcom research, fieldwork carried out by Saville Rossiter-Base in February to March 2010

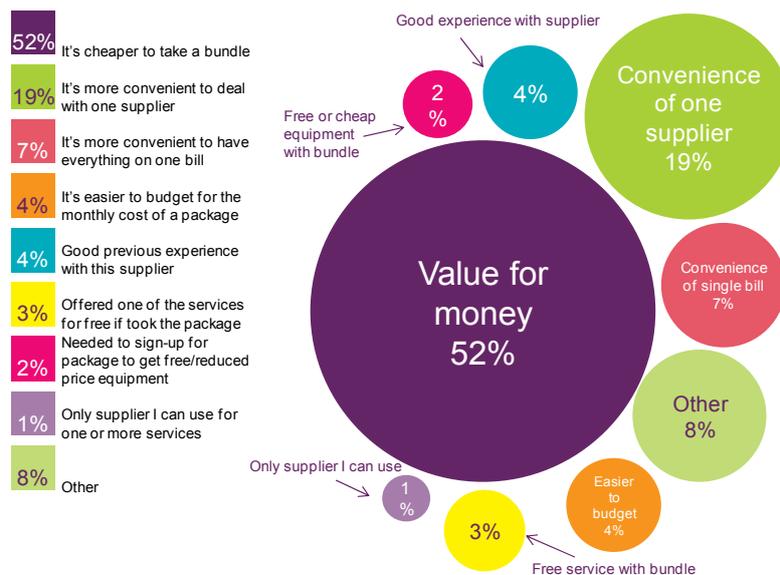
⁸ See the Telecoms User section of this report for details on the take-up of services by age and socio-economic group.

1.4.4 The reasons for buying a bundle

Cost savings are the main reason for taking a bundle; but customers also appreciate the convenience

Figure 1.44 shows that more than half of those who take a bundle (52%) stated that the main reason they took one was because they thought they offered good value for money. Convenience was the second most commonly-stated reason (19%), while 7% were primarily motivated by the convenience of receiving one bill.

Figure 1.44 Main reason for taking a communications service bundle



Source: Ofcom research, fieldwork carried out by Saville Rossiter-Base in February to March 2010
 Which one was most important in your decision to take a package of services?
 Base: Those who receive a package of services for which they receive one bill (1424 any bundle, 299 BT dual-play, 361 Other dual-play, 150 Sky triple-play, 308 Virgin triple-play)

Qualitative research we further explored the benefits that consumers gained from purchasing bundles, and found that convenience was valued by many consumers, and in particular younger age groups and families.

As shown in Figure 1.44, 19% of consumers who took a bundle did so because they valued the convenience of dealing with a single supplier. This opinion was highlighted in the qualitative research, where respondents' views included:

"I like having all my services together on one bill – it helps me to manage my money every month." (Family, England)

"There is one phone number to call if anything goes wrong and one bill so all the money comes out of the same place at the same time." (Older family, England)

The qualitative research also supported the finding that price is a major factor for many people in taking a bundle. For many, the price of having a bundle was perceived to be cheaper than taking the individual services separately, and some respondents thought that they received one service for free.

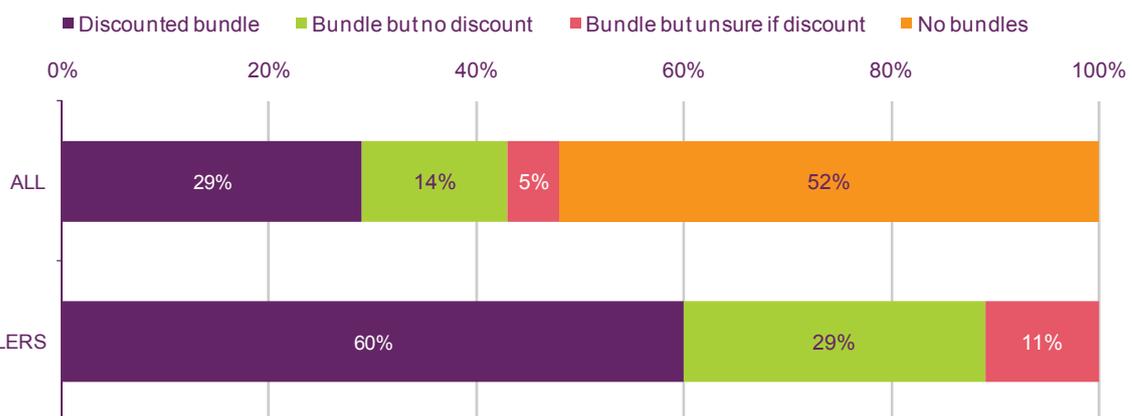
Three in five people who buy their communications services in a bundle claim that they receive a discount for buying these services together

Ofcom analysis of tariff data shows that UK households can typically save 10%-30% on communications spend by taking the lowest-price bundled deals rather than the lowest-price stand-alone services.⁹

However, our research finds that just 60% of those who take a bundle claim to receive a discount for purchasing two or more services together from the same supplier. Of the remainder, 29% say they do not receive a discount and over one in ten (11%) of all people who live in a household with a communications service bundle are unsure whether or not they receive a discount for doing so.

These findings point to a degree of consumer confusion about bundling. In our research, consumers stated that the vast array of different bundle combinations offered by different suppliers made it difficult to compare prices for individual services within a bundle. Others claimed that differences in monthly direct debit charges made it difficult to identify exactly how much a bundle costs.

Figure 1.45 Whether customers receive a discount for buying a bundle



QA1/ QA6/ QA7/ QA13/ QA14 – Which of these services are in your household? Which supplier do you use for [SERVICE]? Do you receive one bill or separate bills for your [SERVICES]? Do you receive a discount or special deal for having this package of services? Do you think you pay less of having these services from the same supplier than you would if you had shopped around and bought the services separately from different suppliers?

Base: All respondents (2871). Those who receive a package of services for which they receive one bill (1424)

Source: Ofcom research, fieldwork carried out by Saville Rossiter-Base in February to March 2010.

Consumers tend to build bundles around a particular communications product

To explore the ways in which bundles were purchased, and the relative importance of different components within a service bundle, we asked consumers if there was a service which most attracted them to their current supplier.

We found that most of those taking a bundle had what could be considered a core or 'anchor' product. The most important product in a dual-play bundle tends to be fixed broadband (for over 50% of all dual-play bundlers). In triple-play, the core product is more likely to be pay-TV, although fixed broadband is also seen as being important, particularly for Virgin Media customers (Figure 1.46).

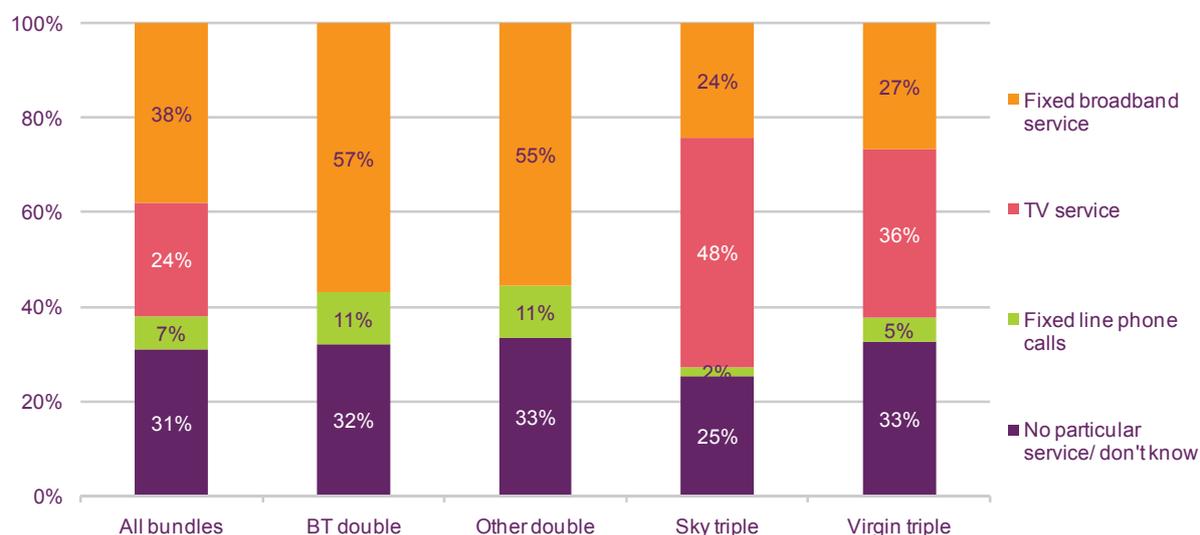
⁹ <http://www.ofcom.org.uk/research/cm/icmr09/cip09.pdf>

This finding was supported by qualitative research, which shows that bundling is driven by the service the consumer perceives to be most important to them and their household. The typical focus was either a pay-TV or broadband-oriented bundle.

Pay-TV-focused bundles tended to be taken by families, or young couples with no children who watch a lot of TV. Pay-TV was most commonly taken as part of a triple-play bundle along with fixed voice and broadband. Content – especially movies and sport – is the key factor that people consider when taking this type of bundle.

In contrast, the qualitative research shows that broadband-focused bundles tend to be favoured by more sophisticated internet users, particularly younger men. The main considerations that emerged from our research among people searching for a broadband bundle were speed and data capacity. Factors such as the inclusion of a WiFi router were also important.

Figure 1.46 Anchor products in dual- and triple-play bundles



QA18 – Is there one service in your package which you particularly wanted to use [SUPPLIER] for? Which service?

Base: Those who receive a package of services for which they receive one bill (1424 any bundle, 299 BT double play, 361 Other double-play, 150 Sky triple-play, 308 Virgin triple-play)

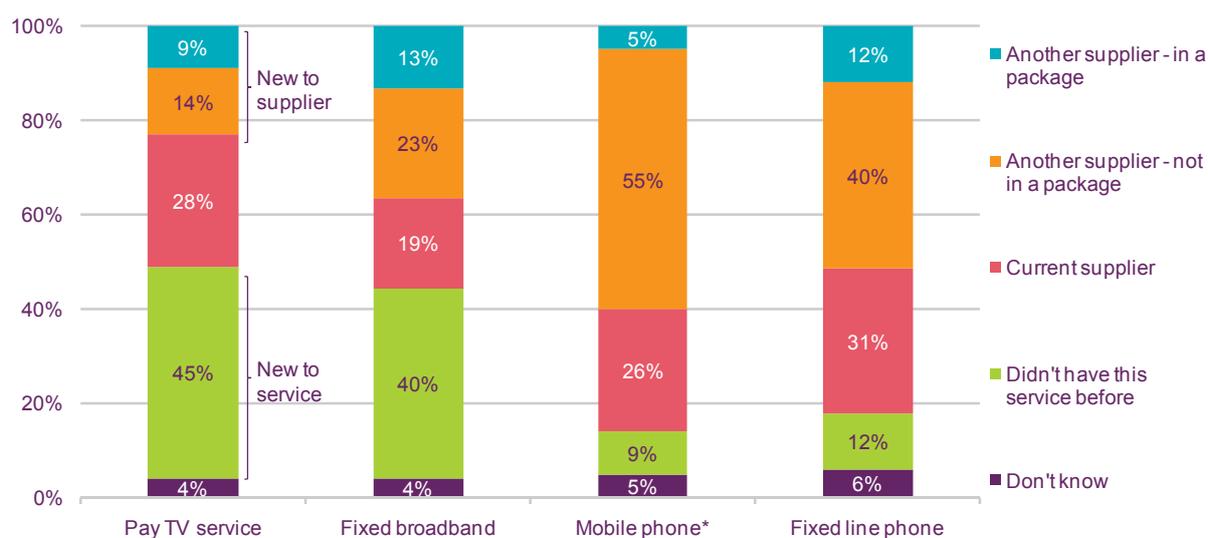
Source: Ofcom research, fieldwork carried out by Saville Rossiter-Base in February to March 2010.

Many consumers see buying a bundle as a good way of trying out a new service

Our research suggests that for many consumers, buying a bundle was a good route to trying out a new service for the first time. This indicates that bundling may well be a driver of take-up of broadband and pay-TV services,

Figure 1.47 shows that 45% of people with pay-TV did not have this service before subscribing to it within a bundle. Similarly, 40% of people with fixed broadband in a bundle did not have this service before.

Figure 1.47 Consumers who did not have a service before taking it in a bundle



QA17B/C/E – Who did you use for your [SERVICE] before you had your package of services with [SUPPLIER]?

Base: Those who receive a package of services for which they receive one bill (725 with pay-TV in package, 1338 with fixed broadband in package, 74 with mobile phone in package, 1295 with fixed-line phone in a bundle)

NB: *Low base for mobile phone in a package; treat as indicative only

Source: Ofcom research, fieldwork carried out by Saville Rossiter-Base in February to March 2010

1.4.5 The consumer experience of bundling

Consumers who buy bundles claim to be more satisfied with their communications services than those who do not

Over 80% of consumers who buy services in a bundle claim to be satisfied with the services they receive. This pattern applies to all combinations of bundles except those that include mobile services (which is the service least frequently purchased in a bundle, and arguably the least appropriate for purchasing in a bundle – a mobile contract is typically a personal purchase whereas broadband, pay-TV and fixed voice are typically household purchases).

In particular, customers who buy fixed broadband in a bundle are, at 79%, more likely to be very satisfied or satisfied with the service they receive than those who purchase it as a separate service (69%)¹⁰.

¹⁰ It should be noted that because of the way the question was framed in this one-off research, the data is not comparable with research into satisfaction which is published elsewhere in this report, and in other Ofcom publications, which is collected from our quarterly consumer tracker surveys.

Figure 1.48 Satisfaction with bundled and stand-alone communications services



Source: Ofcom research, fieldwork carried out by Saville Rossiter-Base in February to March 2010
 How satisfied are you with the overall service provided from your [SERVICE]?

Base: All respondents with each service (725 TV in a bundle, 996 TV stand-alone, 1338 fixed broadband in bundle, 714 fixed broadband stand-alone, 74 mobile in bundle, 2256 mobile stand alone, 1295 fixed line in bundle, 1214 fixed line stand-alone)

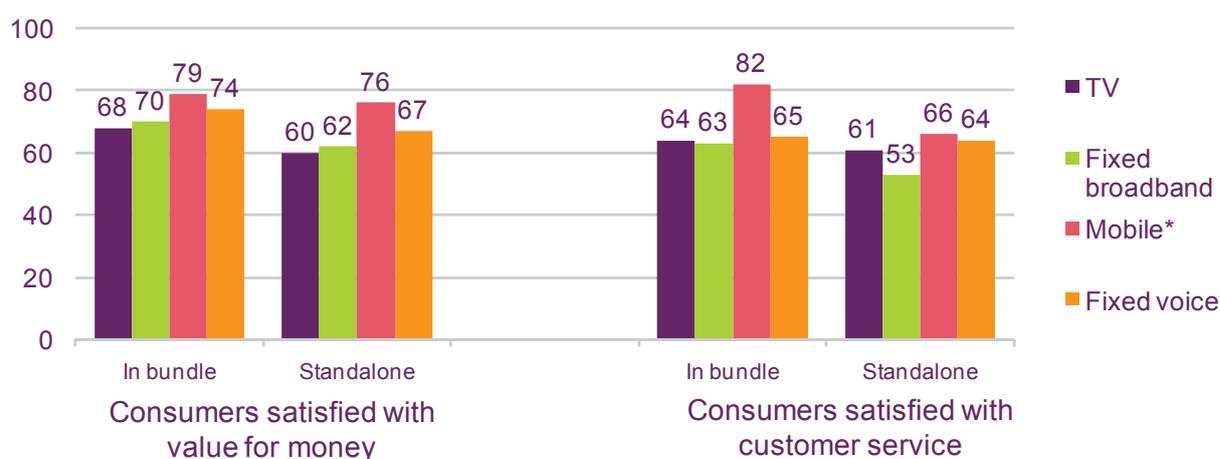
*Low base for mobile phone in a bundle; treat as indicative only

The two key drivers of satisfaction with bundled services appear to be the perceived value for money, and satisfaction with customer service, which is perhaps driven by the convenience of having one point of contact and a single bill for all services.

Figure 1.49 indicates that consumers taking services within a bundle are more likely to be satisfied with both value for money and customer service, for all services taken, than those who buy services on a stand-alone basis.

Figure 1.49 Satisfaction with bundled and stand-alone communications services

Proportion of all adults with service who claim to be 'very satisfied' or 'satisfied' (per cent)



Source: Ofcom research, fieldwork carried out by Saville Rossiter-Base in February to March 2010
 How satisfied are you with your experience of dealing with the customer services for your [SERVICE]? Indicates all those who are satisfied or very satisfied, includes 'don't knows'
 Base: All respondents with each service (725 TV in a bundle, 996 TV stand-alone, 1338 fixed broadband in bundle, 714 fixed broadband stand-alone, 74 mobile in bundle, 2256 mobile stand-alone, 1295 fixed line in bundle, 1214 fixed line stand-alone)
 *Low base for mobile phone in a bundle; treat as indicative only

1.4.6 Bundling and switching

15% of those with bundles have switched supplier for at least one service in the last year

Our research found that consumers with bundles were more likely to have switched provider for at least one of their services in the past 12 months, with 15% of bundlers having switched one or more of their communications services into a bundle in the last year. The majority of switching in this area was by consumers switching single services to form a bundle or a service within their bundle (13%). Only a small proportion of consumers switch their complete bundle of services (3%).

By comparison, 11% of adults who took broadband as a stand-alone service changed supplier in the last year; 6% who took a mobile phone as a stand-alone service changed supplier; 6% who took fixed-line voice as a stand-alone service changed supplier; and just 3% who took pay-TV as a stand-alone service changed supplier (Figure 1.50).

Over the past year 14% of people who currently have a bundle thought about switching one or more of their services, but decided not to.

Figure 1.50 Consumers who have switched or considered switching communications services in the last 12 months

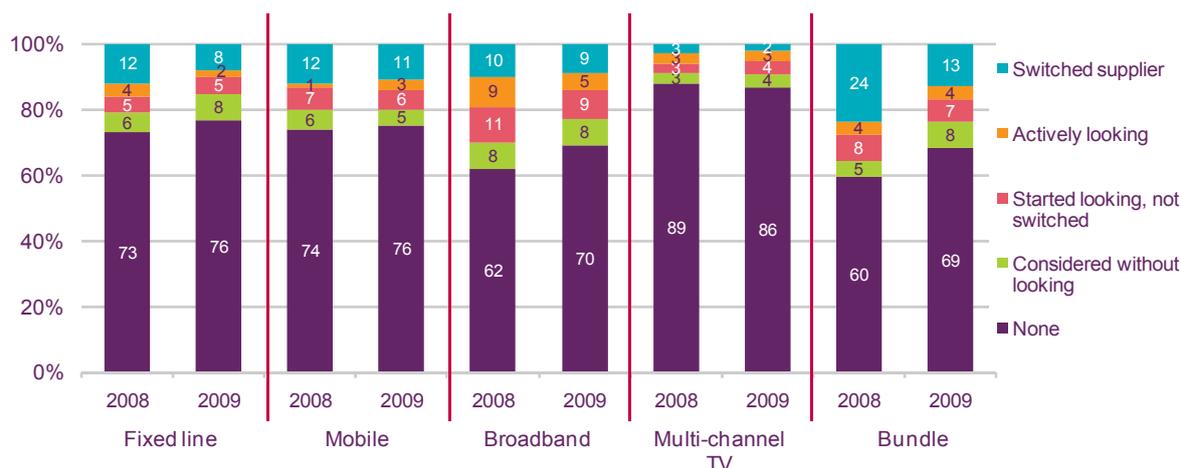


QA26/ QA29 – Which of the following applies to your household/ [SERVICE] in the last year?
 Base: Those with a package of services for which they receive one bill (1424), Those with each service as a stand-alone service (996 TV, 714 fixed broadband, 2556 mobile phone, 1214 fixed line)
 Source: Ofcom research, fieldwork carried out by Saville Rossiter-Base in February to March 2010.

Figure 1.51¹¹ shows that there was a significant drop in actual levels of switching between 2008 and 2009, despite the fact that the proportion of those actively looking or considering switching has stayed relatively steady. This may be explained by the fact that there were high levels of change in the market in 2008, when broadband take-up was growing quickly, and when LLU operators such as TalkTalk and Sky were building market share. 2009 was a more settled period, and a number of recent bundlers were still in their contract period.

¹¹ Note that data in Figure 1.51 is not directly comparable with that in Figure 1.48 and Figure 1.49 above due to the different time period and methodology of data collection, and that the data for fixed-line, mobile, broadband and multi-channel TV refers to all households who take the services, not just those who take stand-alone services.

Figure 1.51 Switching in communications market in the past 12 months



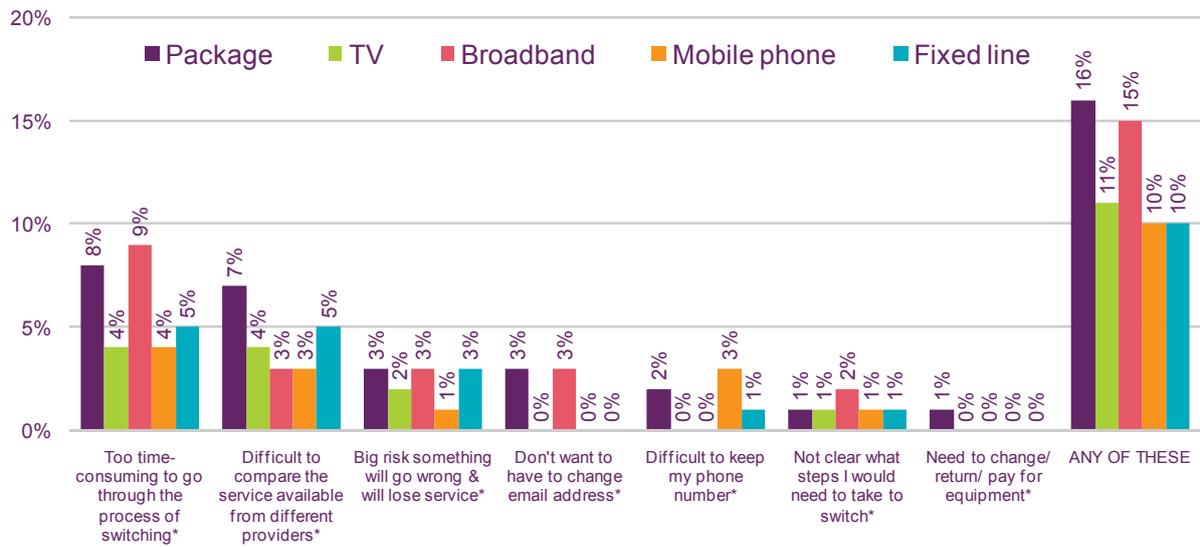
Source: Ofcom decision-making survey July 2007, July 2008 and July 2009

Base: All who are the decision-maker for each service; fixed line (2008, 941), (2009, 781), mobile (2008, 1270), (2009, 1231), broadband (2008, 460), (2009, 388), multichannel TV (2008, 896), (2009, 837), bundled services (2008, 534), (2009, 631)

Given the relatively small proportion of consumers who switch their whole bundle, it seems likely that the fall in those with a bundle of services who have switched supplier in the last 12 months is partly because consumers who take a bundle are less likely to switch than they were when they took stand-alone services.

This may be driven by the fact that consumers with bundles will still be within their contractual 'lock-in' period, and due to high levels of satisfaction among those who take bundles. A further factor may be the 'hassle' of handling multiple switching processes concurrently when switching a complete bundle. Figure 1.52 indicates that hassle is more likely to be a barrier to considering switching services for bundled services and for broadband, with those taking bundles more likely to think that it is difficult to compare providers.

Figure 1.52 Hassle-related barriers to considering switching communications provider



Source: Ofcom research, fieldwork carried out by Saville Rossiter-Base in February to March 2010
 Which, if any, of these are reasons why you have not considered switching to another supplier for your (SERVICE) in the last year? (Prompted responses, multi-coded)

*Denotes hassle obstacles related to the switching process

Base: Decision makers who have not switched or considered switching in the last 12 months (667 package of services, 551 pay TV, 243 fixed broadband, 1519 mobile phone, 686 fixed line voice)

1.5 Communications markets and the economy

1.5.1 Introduction, structure and key findings

Introduction

Since the last *Communications Market Report* was published in August 2009, the UK's GDP has begun once again to grow, and the economy is now officially out of recession. Last year, this report explored the impact of the recession on consumer attitudes towards communications services. We repeated this specifically commissioned research in June 2010 to assess how consumer spending and attitudes have changed in the past year.

Structure

- Section 1.5.2 (page 70) sets out the UK's macro-economic trends during 2009-10, including quarterly GDP growth, Bank of England base rates and levels of unemployment. Against this backdrop it examines consumer attitudes towards the economic downturn.
- Section 1.5.3 (page 73) details the findings of the omnibus survey we have re-commissioned into how consumers' attitudes towards communications services have changed as the UK moves out of recession.

Key findings

- **Consumers remain concerned about the economic downturn.** There has been no change in overall UK consumer attitudes towards the downturn year on year, as 29% of people were still worried about its personal impact. But 40% of consumers in Northern Ireland still felt worried about the recession, a rise of ten percentage points from 2009. (page 71)
- **Overall spending on communications services still appears robust** compared to other competing claims on disposable income, such as holidays and nights out. When forced to choose between communications services, there was a decrease (of eight percentage points) in those selecting their mobile phone as the item they would cut back on. (page 73)
- **Consumers believe that communications providers have responded to the recession with better deals:** 87% of consumers believed *at least one* communications provider was offering better deals than 12 months ago. Only a minority (13%) of respondents thought *no* communications providers were offering improved deals, in comparison with a quarter of respondents in 2009. (page 75)
- **Bundled products remain popular, but this may not be driven solely by the economic climate.** The majority of respondents, even among those unconcerned about the recession, claimed to be more likely to purchase their communications services from the same provider. (page 76)
- **Consumers are more likely to use online shopping as an opportunity to save money.** Just over half of respondents (52%) with broadband access agreed that they were more likely to use the internet to shop than 12 months ago, while 61% agreed

that they use price comparison websites more frequently than a year ago. Conversely, the majority of consumers with internet access still prefer to use their home telephone, instead of making calls over the internet. (page 78)

- **Consumers embrace HDTV in spite of the economic downturn.** Despite consumers appearing reluctant to purchase some communications devices, nearly a quarter of respondents (22%) claimed to have bought a HD-ready TV set in the last 12 months. (page 81)

1.5.2 Economic trends and consumer attitudes towards the economy

Towards the end of 2009 the UK officially moved out of its longest period of recession since the 1930s. The economy expanded by 0.4% in the final quarter of 2009, ending six consecutive quarters of contraction¹². Bank of England interest rates remain at an all-time low of 0.5%, while unemployment has remained flat over the past nine months at around 2.5 million, a rise of 14% from 2.2 million in Q1 2009.

Figure 1.53 UK GDP quarterly growth, Bank of England base rates and unemployment



Source: Office for National Statistics and the Bank of England

Despite the official end of recession in the UK, consumer attitudes towards the economic downturn appear to have remained unchanged from 12 months ago. Our 2010 research suggests that consumer attitudes towards the downturn are still uniformly distributed between those who have concerns about its impact, and those who have few personal worries.

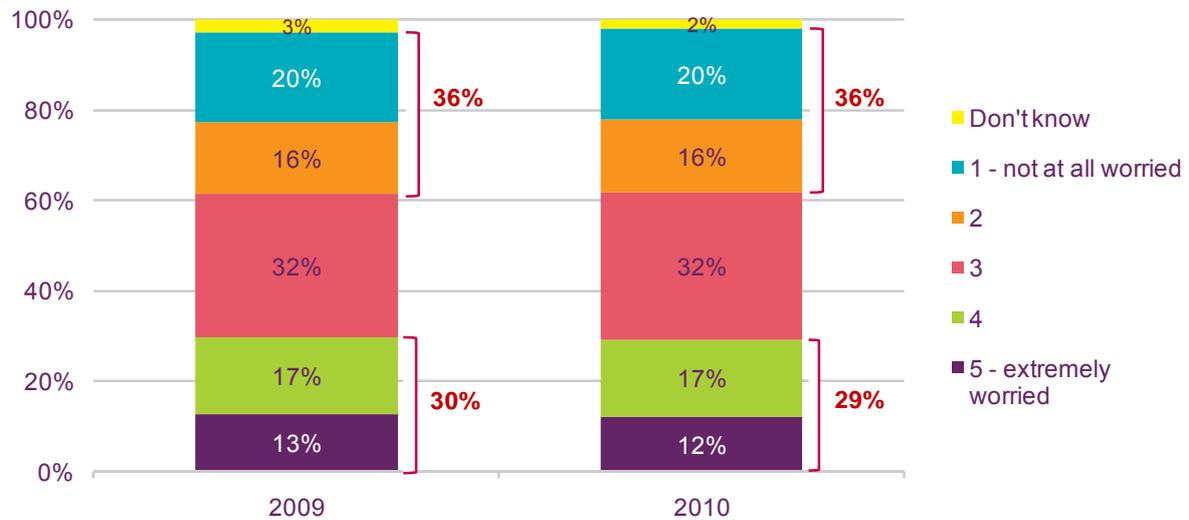
Nearly one-third of respondents (29%) continue to be worried about the current economic situation, with 12% claiming they were 'extremely worried' about its impact personally¹³. Conversely, Figure 1.54 also reveals that a slightly larger proportion of consumers (36%) were not worried by the downturn and a fifth of all consumers (20%) claimed they were 'not at all worried'.

¹² <http://news.bbc.co.uk/1/hi/business/8479639.stm>

¹³ 'Worried' is taken as the net of responses 4 and 5. 'Not worried' is taken as the net of responses 1 and 2.

Figure 1.54 Consumer attitudes towards the recession

Proportion of respondents (%)



Source: Ofcom-commissioned research

Base: Total sample (n=2444)

Question: On a scale of 1 to 5, where 5 is extremely worried and 1 is not at all worried, how worried are you about being personally affected by the recession?

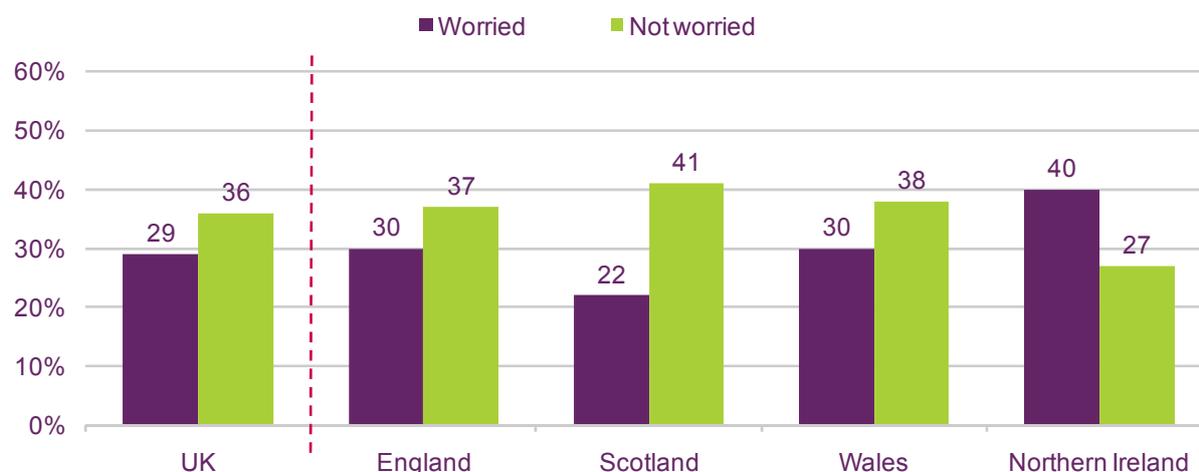
In contrast to the year-on-year uniformity in UK-wide attitudes, there is variation among the UK's nations, as consumers in Scotland claimed to be relatively unconcerned about the recession, with 41% of respondents stating that they were not worried.

People in Northern Ireland expressed the highest levels of concern, as nearly half of respondents (40%) claimed to still be worried about the personal impact of the downturn, a rise of ten percentage points from 2009. This comes in the context of economic austerity in the neighbouring Republic of Ireland and the relatively high proportion of public sector workers within Northern Ireland itself.

Apart from England, the other nation with attitudes closest to the UK average was Wales, where 38% of respondents were not worried, only two percentage points above the proportion of consumers worried across the UK (36%).

Figure 1.55 Consumer attitudes towards the recession, by nation

Proportion of respondents (%)



Source: Ofcom-commissioned research

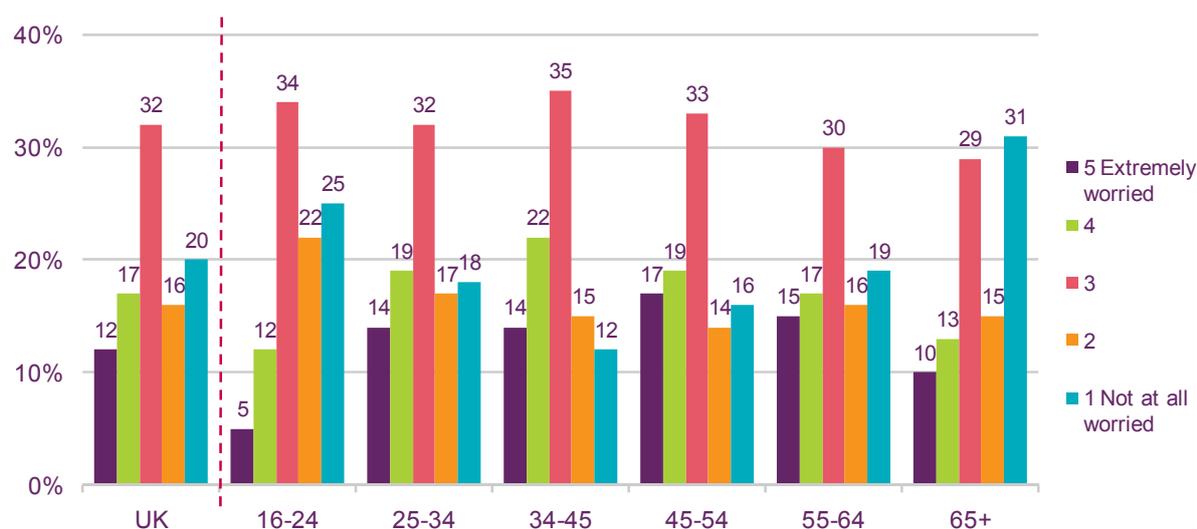
Base: Total sample (n=2444 for UK, 1727 for England, 285 for Scotland, 203 for Wales, 229 for Northern Ireland)

Question: On a scale of 1 to 5, where 5 is extremely worried and 1 is not at all worried, how worried are you about being personally affected by the recession?

Figure 1.56 shows how consumer attitudes towards the economy also varied by age, with nearly a third of respondents (31%) in the 65+ age group claiming to be “not at all worried”, compared to the UK-wide figure of 20%. Similarly, younger respondents (those in the 16-24 age group) also appear to be relatively unconcerned, as only 5% claimed they were “extremely worried”.

Figure 1.56 Consumer attitude towards the economic downturn, by age

Proportion of respondents (%)



Source: Ofcom-commissioned research

Base: (n=2444 for UK, 327 for 16-24, 375 for 25-34, 418 for 35-44, 382 for 45-54, 361 for 55-64, 581 for 65+)

Question: On a scale of 1 to 5, where 5 is extremely worried and 1 is not at all worried, how worried are you about being personally affected by the recession?

1.5.3 Consumers' response to the economic downturn

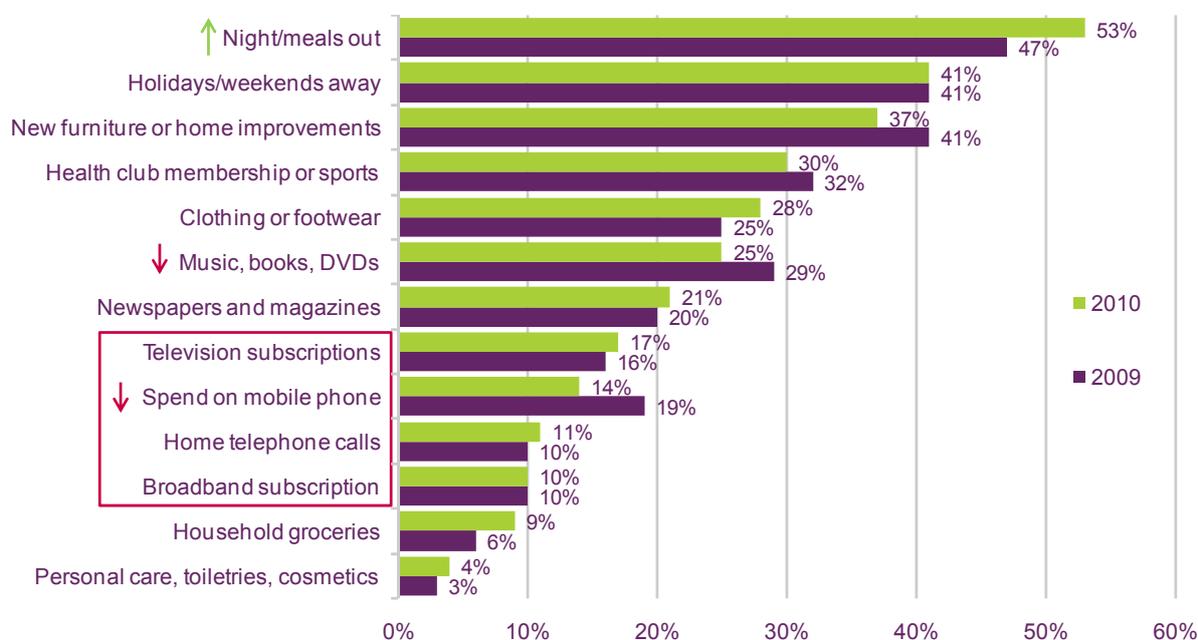
Consumers continued to value their communications services as the UK moved out of recession

Our updated research suggests that the value consumers place on communications services relative to other items has endured, as overall economic conditions have begun to improve. As Figure 1.57 below highlights, if forced to reduce spending, consumers continued to be more likely to cut back on items such as holidays/weekends away (41%) or nights/meals out (53%) than communication services.

Only 10% of respondents placed their broadband subscription in their top three items most likely to be cut, while less than a fifth of consumers selected their mobile phone or pay-TV subscription. As in 2009, the only items less likely to be cut than these four communications services were household groceries (9%) and toiletries/cosmetics (4%).

Figure 1.57 Items where consumers are most likely to cut back their spending

Items mentioned as first, second or third choice to be cut (%)



Source: Ofcom-commissioned research

Base: Those with all four services 2010 (n=823), 2009 (n=862)

Question: If you were forced to cut back on spending, which of the following items would you be most likely to spend less on?

Consumers are still most likely to cut spend on their mobile phone, although the proportion has decreased in comparison to 2009

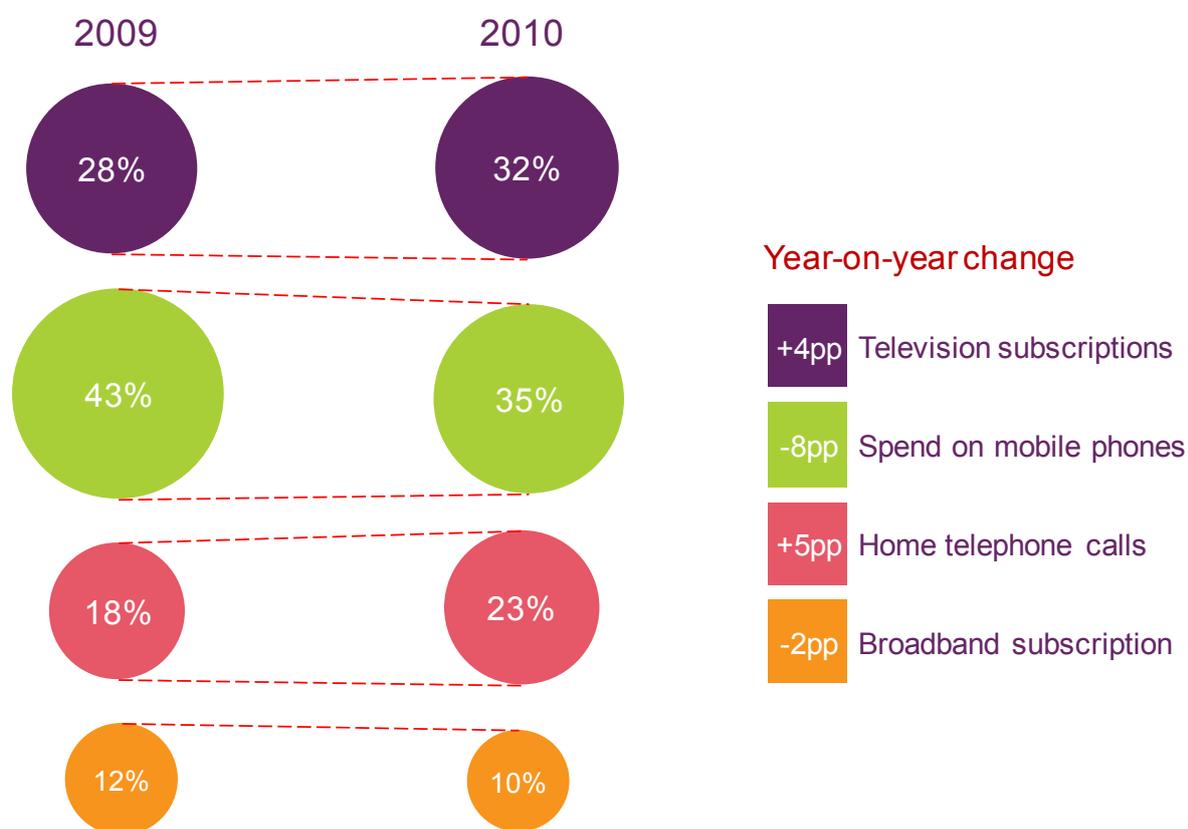
If forced to choose, consumers who had all four communication services were most likely to cut back spending on their mobile phone, although the proportion of respondents choosing mobile fell by eight percentage points compared to 2009. In contrast, the number of consumers choosing to cut their pay-TV subscription (32%) or home telephone calls (23%) rose slightly in comparison to last year's figures, by four and five percentage points respectively.

Similarly to 2009, only one in ten respondents (10%) selected their broadband subscription. This could be indicative of the significance of broadband access for consumers; that it is no

longer considered a luxury but an essential item, or that this service is perceived as having limited scope for spending reductions.

Figure 1.58 The communication services on which consumers would be most likely to cut spending

Proportion of respondents agreeing/disagreeing (%)



Source: Ofcom-commissioned research

Base: Those with all four communications services (n=823)

Question: Which ONE of the following would you be most likely to cut back spending on?

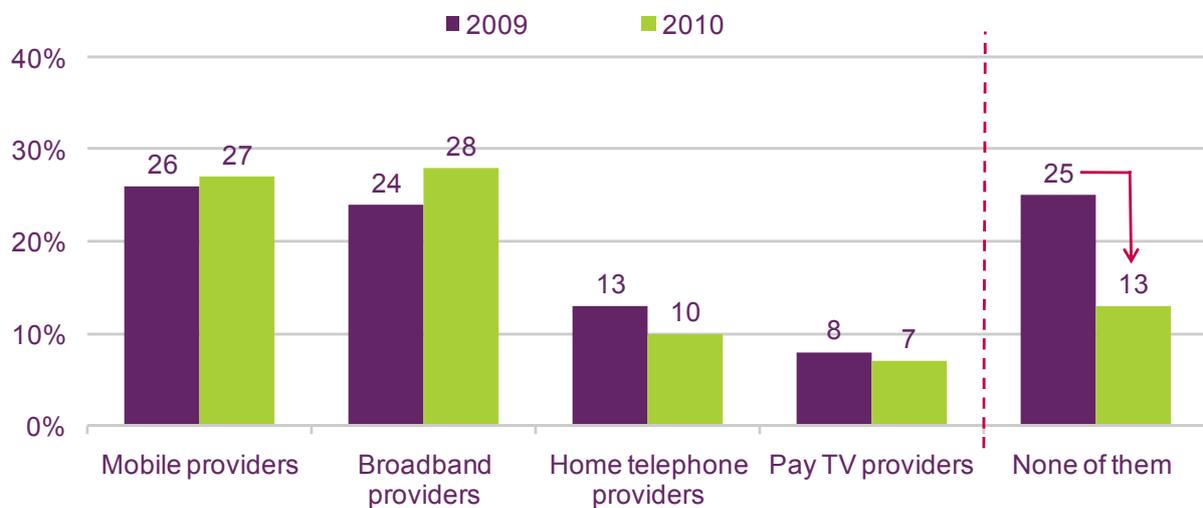
Consumers perceive that communications providers have responded to the recession with better deals

In comparison with 12 months ago, a greater proportion of consumers believe that communications providers are offering improved deals, with 87% believing that *at least one* provider was offering better value for their services (Figure 1.59). Last year a quarter of respondents believed that *no* communications providers were offering better deals, while in 2010 this figure dropped to just 13%. This decrease may suggest that consumers now have more confidence that providers have responded to the recession, by offering better value packages for communication services.

Our research indicated that some communications services are perceived to be offering better deals than others, as just over a quarter of respondents (27% and 28% respectively) agreed that mobile and broadband providers were offering better packages. Following a similar pattern to last year, only a minority of our sample agreed with this statement for home telephone providers (10%) and pay TV services (7%).

Figure 1.59 Proportion of consumers agreeing that communications providers offer better deals now than a year ago

Proportion of respondents agreeing (%)



Source: Ofcom-commissioned research

Base: Total sample (n=2444)

Question: Which of the following providers, if any, do you think are offering better deals than they were 12 months ago?

Consumers continue to see a wider value in buying communications services in bundles

Purchasing multiple communications services from the same provider continues to be popular among consumers. Just over half of all respondents (51%) agreed that they are more likely to take communications services in a bundle now, compared with 12 months ago (Figure 1.60). This finding is also supported by the latest Ofcom research, which shows that by Q1 2010, approximately half of households in the UK (50%) took a bundle of communications services (see Section 1.3 for a more detailed consideration of bundling).

Figure 1.60 Consumers' agreement/disagreement that they were more likely to take communications services in a bundle

Proportion of respondents (%)



Source: Ofcom-commissioned research

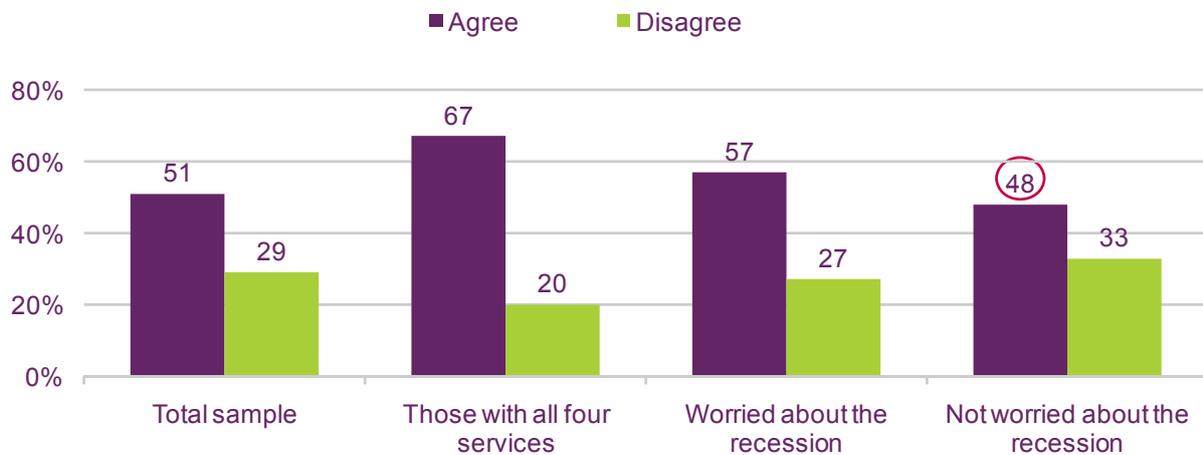
Base: Total sample 2009 (n= 2321) 2010 (n=2444)

Question: How much do you agree or disagree... I'm more likely to consider purchasing TV, broadband and phone services in a package from the same supplier as it offers better value for money

Despite the cost savings associated with bundling, the increased propensity for consumers to buy bundled communications services does not appear to be solely driven by concern about the economy. Figure 1.61 shows that while the proportion of respondents more likely to take communication services in a bundle rises slightly to 57% among those worried about the recession, nearly half of those (48% - circled below) unconcerned by the recession also agree with this statement. As highlighted in Section 1.-1757150342, page 60), this may imply that a broader set of values associated with bundling, such as convenience, are also driving its popularity among consumers.

Figure 1.61 Consumers' agreement/disagreement that they were more likely to take communications services in a bundle

Proportion of respondents agreeing/disagreeing (%)



Source: Ofcom-commissioned research

Base: Total sample (n=2444), those with all 4 services (823), worried about being personally affected by recession (722), not worried about being personally affected by recession (907)

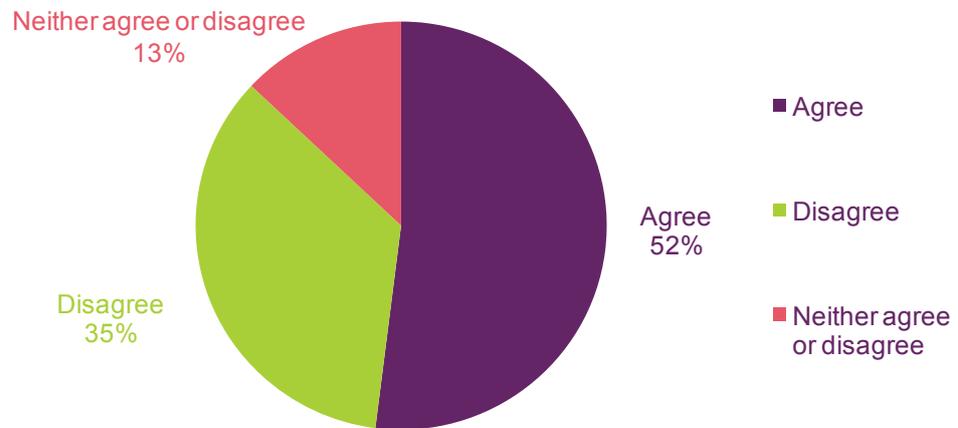
Question: How much do you agree or disagree... I'm more likely to consider purchasing TV, broadband and phone services in a package from the same supplier as it offers better value for money

Shopping online is viewed as an opportunity to save money, but consumers continue to prefer to make calls using their home telephone instead of over the internet

Our research highlights that bundles are not the only opportunity for consumers to reduce their communications spending. The majority of respondents agreed that they were now more likely to shop online in order to save money. Just over half (52%) of those with broadband access claimed that they were more likely to purchase goods over the internet to cut back on costs, while only 35% disagreed with this statement.

Figure 1.62 Consumers' agreement/disagreement that they were more likely to purchase goods over the internet in order to save money

Proportion of respondents agreeing/disagreeing (%)



Source: Ofcom-commissioned research

Base: All those with broadband access (n=1554)

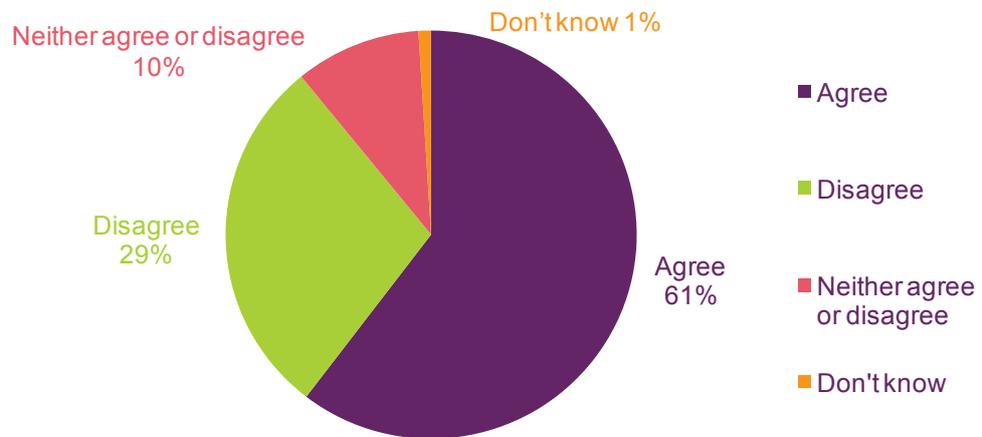
Question: How much do you agree... I am more likely to purchase goods and services over the internet than in shops in order to save money

When shopping over the internet, it appears that the majority of consumers are also more likely to use price comparison websites such as *uswitch.com* and *pricerunner.co.uk* to find the best deal. Figure 1.63 below reveals that around one in six respondents (61%) agreed that they were more likely to compare prices on the internet now than 12 months ago, with only 29% disagreeing with this statement¹⁴.

¹⁴ It is important to note this is 'claimed data', as Nielsen data on the actual usage of price comparison websites over the last year appear to show no significant increase in either their unique audience or average time spent.

Figure 1.63 Consumers' agreement/disagreement that they were more likely to use price comparison websites in order to find the best deal

Proportion of respondents agreeing/disagreeing (%)



Source: Ofcom-commissioned research

Note: Figures may not add up to 100% owing to rounding

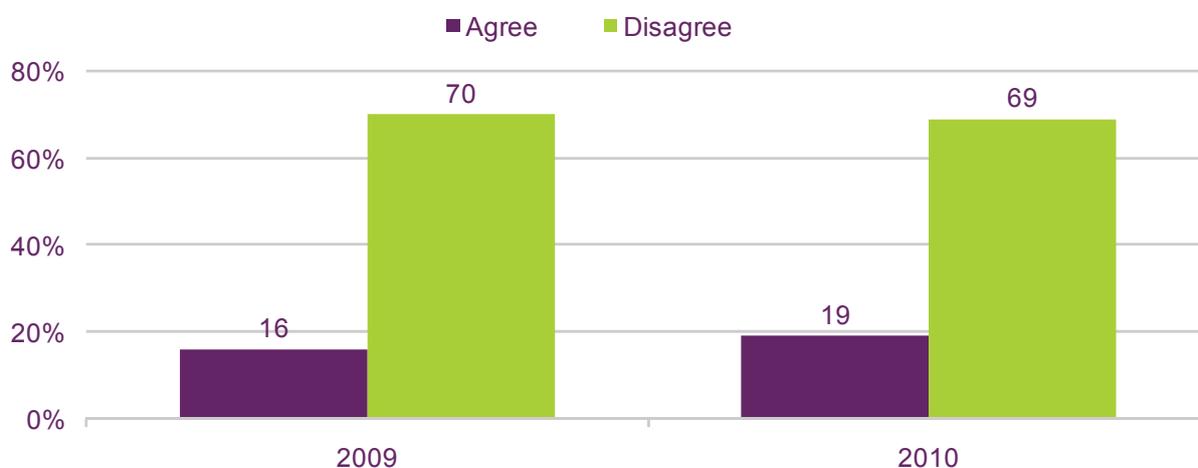
Base: All those with broadband access (n=1554)

Question: How much do you agree... I am more likely to use price comparison websites (such as uswitch.com or pricerunner.co.uk) in order to find the best deal

In contrast to the apparent appeal of shopping online, the majority of consumers still appear less inclined to use the internet to make phone calls. As in 2010, nearly seven in ten respondents (69%) disagreed that they make more calls over the internet using services such as Skype instead of their home phone in comparison to 12 months ago. Despite many VoIP (Voice over Internet Protocol) services offering discounted call rates in comparison to fixed telephony providers, the majority of consumers with internet access still prefer to use their home telephone to make calls.

Figure 1.64 Consumers' agreement/disagreement that they make more telephone calls over the internet rather than using a home landline

Proportion of respondents agreeing/disagreeing (%)



Source: Ofcom-commissioned research

Base: All those with broadband access (n=1554)

Question: How much do you agree... I make more telephone calls over the internet, using services like Skype, rather than using my home phone

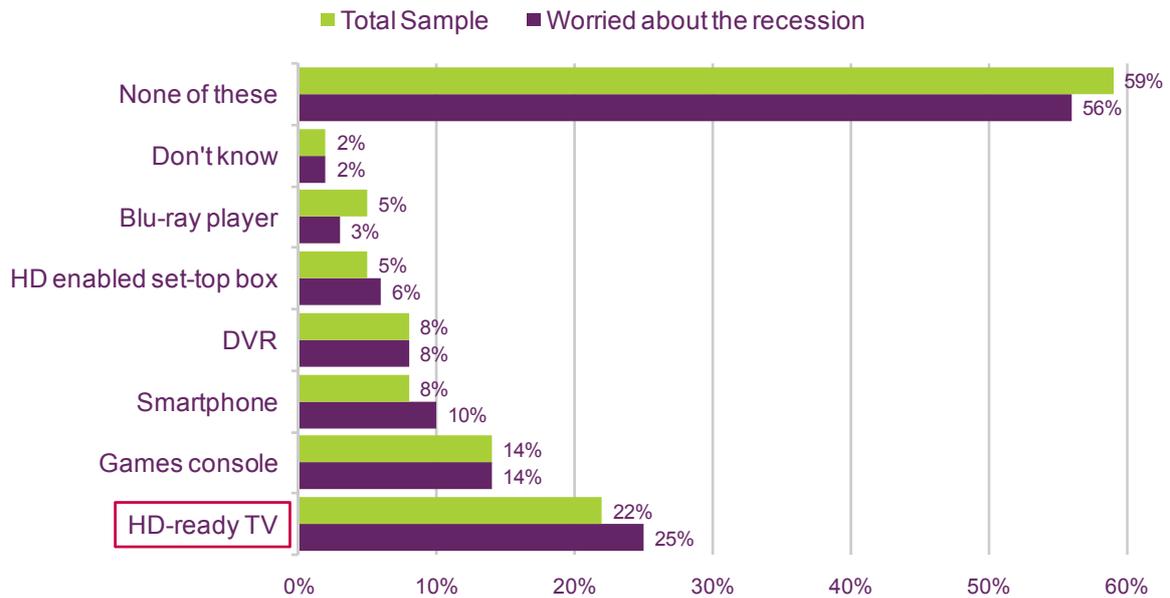
Consumers embrace HDTV in spite of the economic downturn

Although the majority of respondents (59%) claimed not to have purchased any of the selected communication devices listed in Figure 1.65, just over a fifth (22%) of our sample claimed to have bought a HD-ready TV during the last year. This was even reflected among those consumers worried about the personal impact of the recession, as 25% of these respondents also agreed with this statement.

This finding may reflect the growing impact of digital switchover. It may also point to the entrance of HDTV into the mainstream over the last 12 months, with nearly 10 million HD-ready TV sets sold during 2009 and over 24 million sold by March 2010 (see page 109). However, the relatively smaller proportion of consumers who have purchased a HD-enabled set-top box (5%) indicates a considerable gap between those with HD-ready TV sets and those actually viewing HD content.

Figure 1.65 Selected communications devices bought in the last 12 months

Proportion of respondents (%)



Source: Ofcom-commissioned research

Base: Total sample (n=2444), worried about being personally affected by recession (722)

Question: Which, if any, of these products or services have you or your household bought in the last 12 months?

1.6 The nations' communications markets

1.6.1 Introduction, structure and findings

Introduction

This section sets out a selection of headline findings for communications markets across the UK's nations, putting them into context. It draws on the detailed reports that Ofcom publishes on communications services in each of the UK's nations (which can be found at www.ofcom.org.uk/cmr10).

Structure

The section begins by highlighting a range of 'fast facts' for England, Scotland, Wales and Northern Ireland, which draw on Ofcom's quantitative research (Section 1.6.2, page 84). It then turns to communications service availability, before examining levels of service and device take-up by nation (Section 1.6.3 and 1.6.4, pages 85 and 88).

Bundling across the UK nations is the subject of Section 1.6.5 (page 90). Section 1.6.6 examines levels of spending on public service broadcasting content across the four nations, before setting out the market shares that the PSBs command in each (Section 1.6.7, page 92). Finally, we look at how people use converged services to access audio and video content (Section 1.6.8, page 93).

Findings

- **Communications service availability** – Fixed-line telephony is available to all premises in the UK (along with dial-up internet access). Fixed-line broadband is available to a large proportion of the UK population (although individuals' experience of broadband and the speed they receive will be heavily influenced by factors including the length of the line between the customer premises and the exchange). Cable broadband offering bandwidths of up to 50 Mbit/s is available to 48% of UK homes – with coverage highest (51%) in England and lowest (23%) in Wales. Freeview coverage is rising as digital switchover takes effect – 98% of homes in Wales can now receive the signal and nationwide coverage of the DTT signal has risen to 81% over the year (Section 1.6.3, page 85).
- **Service and device take-up** – digital television was the most widely-adopted digital communications technology in 2009 – with take-up ranging from 97% of TV homes in Q1 2010 in Wales (likely to be higher since switchover has now been completed) to 87% in Northern Ireland. Around nine in ten people claimed to have access to a mobile phone in England, Wales and Northern Ireland, falling to eight and a half in ten in Scotland. Landline take-up was lower than mobile ownership in every nation during 2009. Broadband was present in an average of 71% of homes in Q1 2010, ranging from 73% in England to 61% in Scotland (Section 1.6.4, page 88).
- **Bundling** – for the first time, one in two homes claimed to take a bundle of communications services (two or more services from the same provider) in Q1 2010. Take-up was highest in England at 52% and lowest in Wales at 43%, probably influenced by the availability of competing service providers. Take-up of bundled services was fastest in Wales (up by eight percentage points over the year), closing the gap with the UK average by four percentage points (Section 1.6.5, page 90).

- **Spending on content production** – spend per head on PSB content (TV and radio) stood at £38.74 in 2009. Expenditure on programme production for UK audiences was a big component of spend in England. It was also a substantial part of spending in Wales and in Scotland, although spending on programme production specifically for Scottish and Welsh audiences was also significant. In Wales, the largest component of expenditure was on Welsh-language productions (Section 1.6.6, page 91).
- **Consumption of audio/audio-visual content** – viewing share among the PSBs averaged 58% in 2009, ranging from 54% in parts of England to 59% in Northern Ireland. BBC radio services attracted a 55% listening share in 2009, ranging from 61% in Wales to 45% in Scotland (where commercial local radio is popular). Access to broadband is providing consumers with new ways to access audio and video content; nearly four in ten people claimed they had watched TV content over the internet in 2009 (up by four percentage points year on year). Fourteen per cent had done the same with radio content, while a fifth of the population had used their mobile handsets to access data (including surfing the internet) (Section 1.6.7, page 92 and Section 1.6.8, page 93).

1.6.2 UK communications market fast facts

Figure 1.66 illustrates how take-up and use of a variety of communications services across the UK has risen over the past year.

Figure 1.66 UK communication markets fast facts

	UK	England	Scotland	Wales	NI	UK urban	UK rural	England urban	England rural	Scotland urban	Scotland rural	Wales urban	Wales rural	N Ireland urban	N Ireland rural
Digital TV take-up among TV homes ¹	92 ↑+2	92 ↑+2	91	97* ↑+8	87	92 ↑+2	92	92 ↑+3	92	91	89	97* ↑+8	99* ↑+8	87	87
Broadband take-up ²	71 ↑+3	73 ↑+3	61	64 ↑+6	70 ↑+6	70	75	72	78 ↑+10	61	60	62	69	69	72
Mobile broadband ²	15 ↑+3	15 ↑+2	12 ↑+5	16 ↑+5	14 ↑+6	16	11	16 ↑+3	10	13	10	15	17	16	10
Mobile phone take-up ³	89	90	85	89 ↑+4	88	89	90	90	91	93 ↑+3	80	87	93	87	90
Use mobile to access data, inc. internet ⁴	23 ↑+3	24 ↑+3	15	23 ↑+5	21	26 ↑+6	19	24 ↑+3	20	15	15	24	19	21	23
3G handset take-up ⁵	26 ↑+4	26 ↑+3	26 ↑+6	28	18 ↑+4	26	25	26 ↑+3	26	27	17	26	10	18	17
Fixed landline take-up ⁶	85 ↓-2	86	79	79	81	84	91	85	93	77	88	79	81	79	87
Households taking bundles ⁷	51 ↑+5	52 ↑+4	44	44 ↑+9	44	51	48	52	50 ↑+13	46	37	45	39	45	41
Watching video online ⁸	38 ↑+4	40 ↑+4	28 ↑+7	28	38	38	41	39 ↑+3	44 ↑+11	29	30	28	30	39	36
Use of social networking ⁸	40 ↑+10	42 ↑+11	27 ↑+7	37 ↑+12	37 ↑+9	40	42	42 ↑+10	45 ↑+19	26	24	37	36	37	36
Current use of VoIP ⁹	15 ↑+3	16 ↑+3	10	15	15 ↑+6	15 ↑+3	18 ↑+5	15	20 ↑+7	10	12	16	12	15	15

XX Figure is higher than the UK average

XX Figure is lower than the UK average

XX
↑+xx

XX
↓-xx

Figure has risen by xx percentage points since 2009

Figure has fallen by xx percentage points since 2009

Ofcom research Q1 2010

Base: All adults aged 15+ (n = 9013 UK, 1468 Scotland, 5709 England, 1075 Wales, 761 Northern Ireland, 1172 Scotland urban, 296 Scotland rural). Questions:

¹ Which, if any, of these types of television does your household receive at the moment?

² Which of these methods does your household use to connect to the Internet at home?

³ Do you personally use a mobile phone?

⁴ Which if any, of the following activities, other than making and receiving voice calls, do you use your mobile for?

⁵ Do you personally use a 3G mobile handset?

⁶ Is there a landline phone in your home that can be used to make and receive calls?

⁷ Do you receive any of these services as part of an overall deal or package from the same supplier?

⁸ Which, if any, of these do you or members of your household use the Internet for whilst at home?

⁹ Have you or anyone in your household ever used one of these services to make voice calls using the Internet at home?

*Digital television take-up figures in Wales are now likely to be higher, since the research set out in this table was conducted while digital switchover was underway.

1.6.3 Availability of communications platforms and services

Availability of communications services varies across the UK's nations

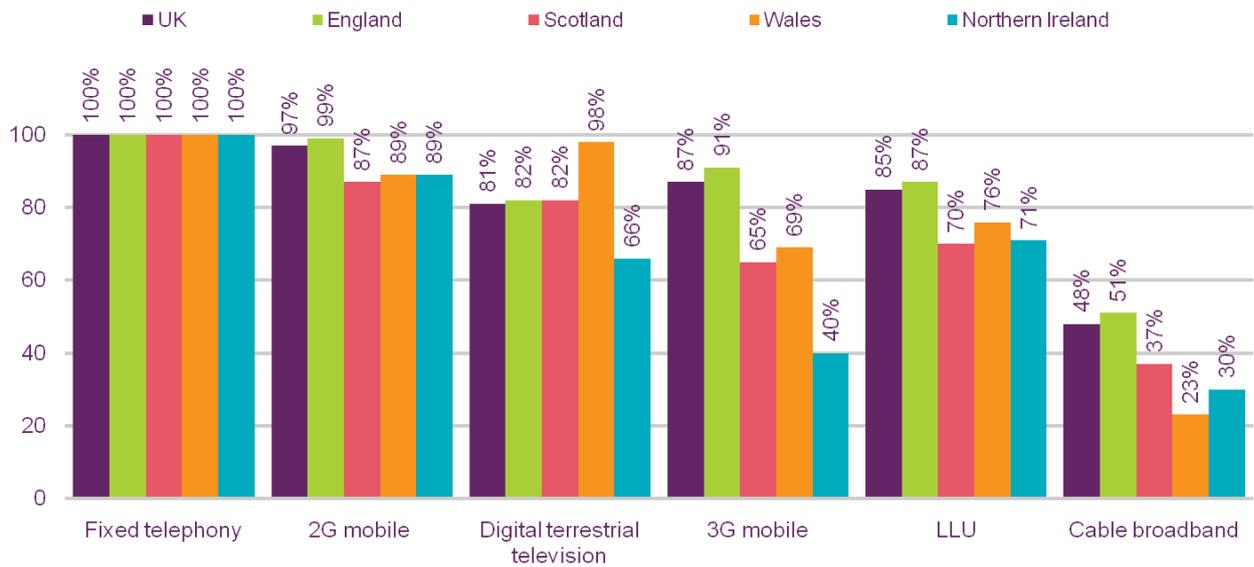
Figure 1.67 illustrates the availability of communications services across the UK and in each of the UK's nations. With many now well-established, the coverage of the more popular digital communications technologies changed little across the UK between 2009 and 2010;

DTT was an exception, having risen (substantially in Wales) as a result of the completion of digital switchover across Wales and in the South West, North West and West regions of England.

Population coverage for communications services across the UK varied from universality for some, to more limited availability for others:

- Fixed-line telephony services and dial-up internet access are available to 100% of homes in the UK, as a result of the statutory universal service obligation.
- Broadband delivered over a standard fixed telephony line is available to almost all UK homes and commercial properties (99.98%) across the UK's four nations – and coverage across the four nations varies from 99.86% to 100%. However, factors such as line length and contention influence the actual broadband speed at customer premises. The roll-out of super-fast broadband services is set out on page 286.
- Local loop unbundling, providing consumers with a choice between fixed-line telephony and fixed broadband providers, stood at 85% of UK homes in Q1 2010. The figure was up by one percentage point year on year. Homes in England were the most likely to be connected to an unbundled exchange (87% of the total). In Wales the figure stood at 76%, in Northern Ireland 71% and in Scotland 70%.
- Cable broadband, offering access to high-speed internet and pay-TV services, is available to 49% of homes in the UK. Coverage, which is typically concentrated in areas of high population density, ranged from 52% of homes in England to 24% in Wales. Broadband speeds of up to 50 Mbit/s are available over cable infrastructure. Virgin Media has indicated that an up to 100 Mbit/s product will start to be rolled out in the fourth quarter of 2010.
- 2G mobile telephony services covered 97% of the UK population in Q1 2010. Levels of coverage are influenced by population densities and by topography. As a result, 99% of the population of England was covered, in contrast to 89% in Wales, 87% in Scotland and 89% in Northern Ireland. The comparable figures for 3G coverage were lower – 87% of the UK population; 91% in England and 40% in Northern Ireland
- Digital terrestrial television availability, offering at least a 17-channel line-up, was available to 81% of the UK population (up from 73% a year ago). The increase is explained by the completion of switchover in Wales, and the South West, West and North West areas of England. Coverage was highest in Wales, at 98% of homes (probably higher now since our research was conducted during digital switchover); in Scotland and England the comparable figure was 82%; it was lowest in Northern Ireland at 66%.

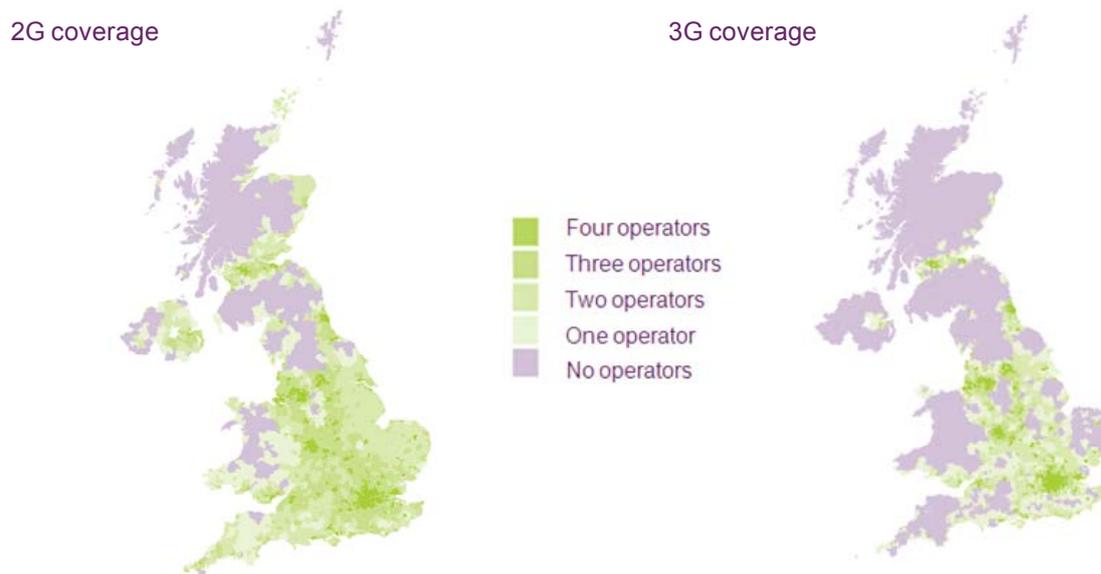
Figure 1.67 Communications infrastructure availability across the UK's nations, 2010



Sources: Ofcom and: 1. Proportion of population living in postal districts where at least one operator reports at least 90% 2G area coverage. Sourced from GSM Association / Europa Technologies (Q1 2010). 2. Proportion of population living in postal districts where at least one operator reports at least 90% 3G area coverage. Sourced from GSM Association / Europa Technologies (Q1 2008). Note we have raised this threshold from 75% in 2008; as a result we do not have time series data. Note that coverage data have been restated; this means that year-on-year comparisons are not possible. 3. Proportion of premises able to receive DSL services based on data reported by BT 4. Proportion of households passed by Virgin Media's broadband-enabled network 5. Proportion of households connected to an LLU-enabled exchange 6. Availability of 17 services. Ofcom estimates.

Figure 1.68 illustrates the geographic coverage of 2G and 3G mobile services. It highlights postcodes only where there is mobile coverage of at least 90%. Those parts of the country where choice between mobile phone operators is greatest tend to coincide with areas of high population density, or with a major road network. The result is that geographic mobile phone coverage in the UK tends to be lower than population coverage.

Figure 1.68 Coverage of 2G and 3G mobile services



Source: Ofcom / GSM Association / Europa Technologies; Q2 2010

Note: Map shows the number of 3G operators with at least 90% area coverage; not directly comparable to that published in the 2009 report.

1.6.4 Take-up of communications platforms and services across the UK

High digital TV and mobile take-up; lower for broadband (though still substantial) and lower still for DAB digital radio

Take-up of communications services across the UK rose progressively during 2009; but with many of the services now experiencing high levels of take-up, year-on-year increases in penetration are beginning to slow (Figure 1.69):

- Over eight in ten (85%) of people in UK claimed to have a fixed telephone line at home, down by two percentage points over the year. The slow but progressive reduction in landline take-up has been a consistent pattern across the UK's nations over the last few years, as a small but growing proportion of homes rely solely on their mobile phone. Take-up was highest in England (at 86%); it stood at 81% in Northern Ireland and 79% in Scotland and Wales; by locations within each nation, take-up was highest (92%) in the South East and East of England. It was lowest in Glasgow, Clyde and Lanarkshire (80%).
- Broadband take-up (whether fixed or mobile) across the UK stood at 71% in Q1 2010, up by three percentage points year on year. It was highest in England, at 73% of homes, followed by Northern Ireland at 70%, Wales at 64% and Scotland at 61%. Take-up was highest in the South East of England (80%) and lowest in rural Scotland (60%).
- Mobile phone take-up was comparatively consistent across the four nations. The UK-wide average stood at 89% of individuals in 2010. It was highest in England at 90%, closely followed by Wales (89%) and Northern Ireland (88%). Take-up was a little lower in Scotland, at 85%. Within nations, take-up was highest in urban Scotland (93%) and lowest in Glasgow, Clyde and Lanarkshire (84%).

Figure 1.69 Patterns of communications service adoption across the nations of the UK, 2010



Source: Ofcom research, Q1 2010

Fixed line base: All adults aged 15+ (n = 9013 UK, 5709 England, 1468 Scotland, 1075 Wales, 761 Northern Ireland)

Fixed line question: Is there a landline phone in your home that can be used to make and receive calls?

DTV base: Adults aged 15+ (n = 9013 UK, 5709 England, 1468 Scotland, 970 Wales, 640 Northern Ireland)

DTV question: Which, if any, of these types of television does your household use at the moment?

Broadband base: All adults aged 15+ (n = 9013 UK, 5709 England, 1468 Scotland, 970 Wales, 640 Northern Ireland)

Broadband question: Which of these methods does your household use to connect to the internet at home?

DAB base: Adults aged 15+ who listen to radio (n = 7017 UK, 4476 England, 1034 Scotland, 854 Wales, 653 Northern Ireland)

DAB question: How many DAB sets do you have in your household? Response represents those with one or more sets.

Note: Remaining percentages are 'Don't know' responses

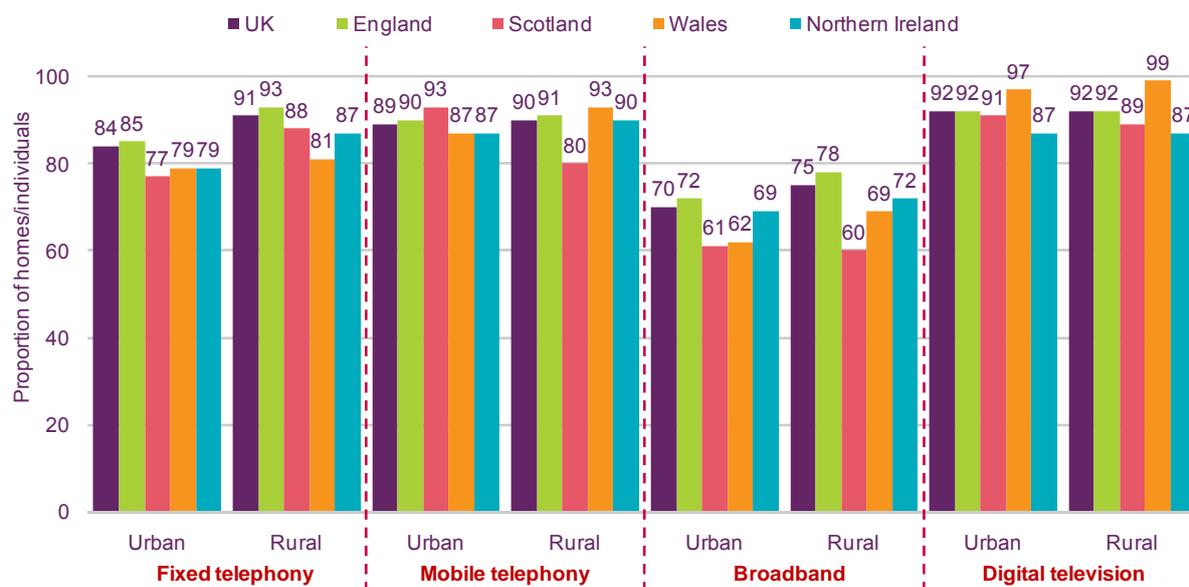
Mobile base: All adults aged 15+ (n = 9013 UK, 5709 England, 1468 Scotland, 970 Wales, 640 Northern Ireland)

Mobile question: Do you personally use a mobile phone?

Note: The DTV take-up figures in this chart will differ from those presented in the 'Fast facts' table. The difference is explained by the base of households over which the two figures are calculated. In this chart, it is all homes with television; in the fast facts, it is all homes (including those that do not have a television).

Figure 1.70 sets out patterns of communications technology / service adoption, by nation and by location (urban/rural). Broadly speaking, higher levels of take-up in rural locations tend to run alongside higher levels in urban areas. Fixed-line services are the only deviation from this pattern, where take-up is higher – sometimes substantially – in rural locations. That said, there are some variations in take-up by location – broadband take-up among homes in rural areas is a little higher than in urban areas in England and Wales.

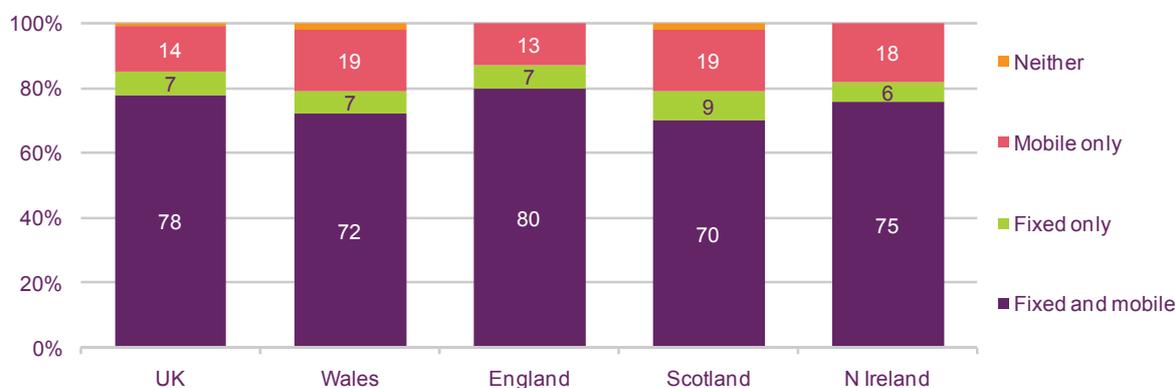
Figure 1.70 Adoption of communications technology/service in urban and rural locations



Source: Ofcom research, Q1 2010. For questions see notes beneath.

The proportion of the population that relies solely on a mobile handset for voice telephony is illustrated in Figure 1.71. There is a greater proportion of mobile-only households in Wales and Scotland than anywhere else in the UK (19% of the total), closely followed by Northern Ireland (18%). The figure is lower in England, at 13% of the total.

Figure 1.71 Mobile-only households in the UK



Source: Ofcom research
Base: All adults aged 15+

1.6.5 Consumer take-up of bundled services in the UK

One in two homes across the UK took a bundle of communications services in Q1 2010, up by four percentage points year on year.

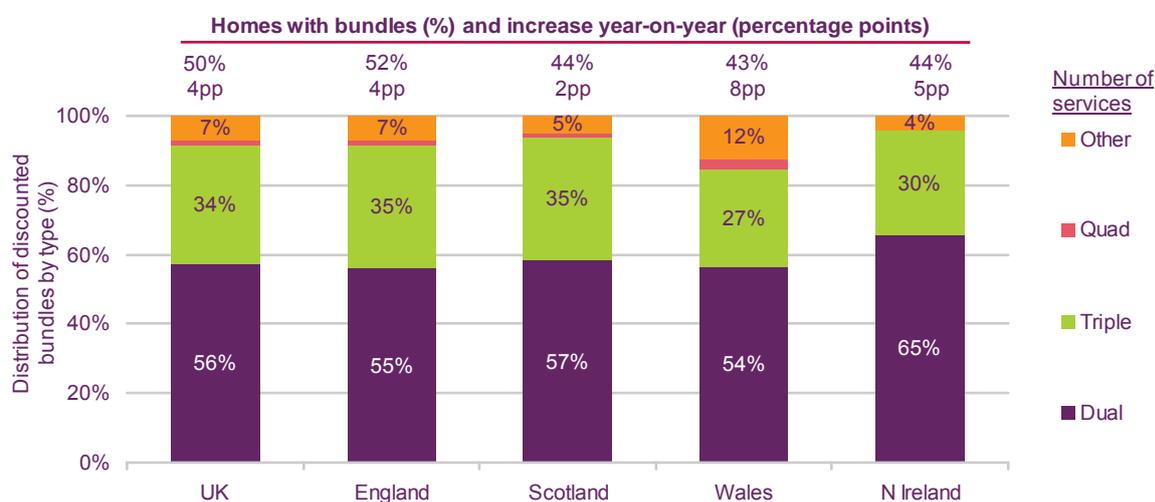
Across the UK, 50% of homes took a bundle of communications services in Q1 2010. This was up by four percentage points year on year. The most popular type of bundle – taken by more than half (56%) of those who chose a bundle – was a ‘dual’ package of services such as fixed-line telephony and broadband.

Take-up was highest in England, at 52% of homes, where the popularity of bundling grew by four percentage points over the year. Take-up across the other nations varied from 43% in Wales to 44% in Scotland and Northern Ireland. The annual growth in adoption of bundles was highest in Wales (where it grew by eight percentage points) and lowest in Scotland, where it rose by two percentage points.

The distribution of bundles in England and Scotland was broadly consistent with the UK-wide average – just under six in ten of those taking bundles chose dual-play packages, with around 35% choosing triple-play. By contrast, triple-play was less popular among consumers in Wales (which might be influenced by lower levels of cable coverage), while dual-play packages were more popular in Northern Ireland.

Within nations, take-up of bundles was highest in the East of England (at 59% of households) and lowest in those parts of Scotland outside Glasgow, Clyde and Lanarkshire, Lothian and Forth and Grampian, Tayside and Fife (30%).

Figure 1.72 Take-up of bundles, by nation



Source: Ofcom research, Q1 2010

Base: All adults aged 15+ with a package of services regardless of whether or not these include a discount (n = 4167 UK, 2793 England, 605 Scotland, 437 Wales, 332 Northern Ireland)

Notes: 1. Remaining percentages are 'Don't know' responses. 2. Bundling is also considered in the UK report; that analysis is based on bespoke research, with a headline bundling figure of 48% (not 50%). The difference arises from different definitions of bundles used in the two pieces of research. In this report a bundle is defined as one where all services are on a single bill, with or without discount. In the UK report research, the definition was of two or more services from one supplier on a single bill and receiving a discount.

1.6.6 Spending by public service broadcasters on television and radio content across the UK's nations

Figure 1.73 illustrates patterns of expenditure in England on broadcasting output. It adjusts for population size by expressing spend on a per-head basis. The chart sets out four types of expenditure:

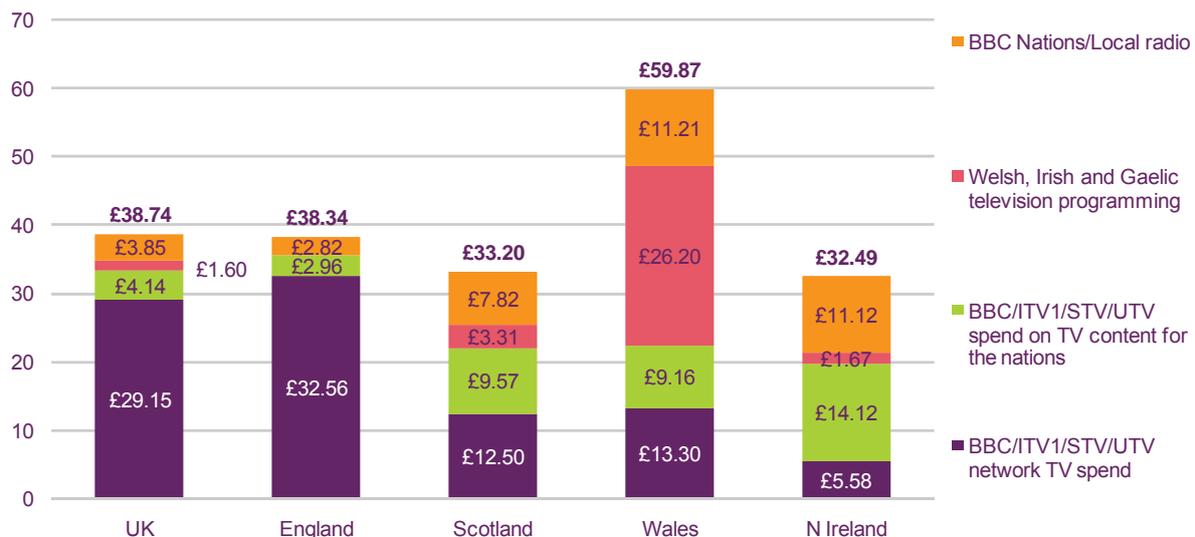
- the value of networked television spending in each nation – programmes that are produced in a nation and then broadcast to all UK viewers;
- BBC spending on radio services for listeners in a particular nation (e.g. BBC local radio, BBC Radio Scotland, BBC Radio Wales, BBC Radio Ulster);

- spend by the BBC and ITV1 on television programmes specifically for viewers in the nations; and
- spending on television output in Welsh, Gaelic and the Irish language.

Total spending per head on broadcast output across the UK stood at £38.74 in 2009. The most substantial component of this expenditure was on programme production for a UK-wide audience, which reached £29.15 in 2009, accounting for 25% of total spend per head.

Patterns of spending vary substantially between the nations. In England, the spend per head of £38.34 was driven principally by networked programme production spend (85% of the total). In Scotland, the total figure stood at £33.20 in 2009, with comparatively equal contributions made by networked programme production, local programme production and BBC nations' radio. In Wales, the figure per head was highest among the four nations, at £59.87; this comparatively high figure is primarily due to the production of programmes in the Welsh language. In Northern Ireland, spend of £32.49 per head comprised equal proportions of programme production spend specifically for viewers in Northern Ireland, and BBC Radio Ulster and Foyle.

Figure 1.73 Spend per head on UK-originated content broadcast by PSBs on TV and radio, 2010



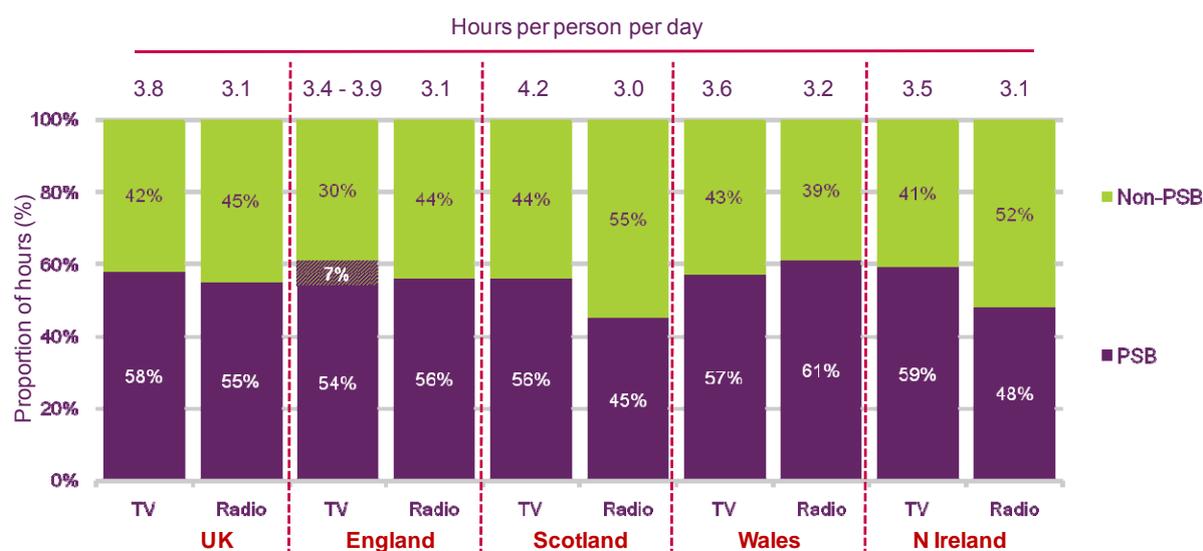
Source: Ofcom analysis, broadcasters

1.6.7 Consumption of television and radio services by people in England

Television viewing across the UK amounted to 3.8 hours/day in 2009; for radio it reached an additional 3.1 hours/day

People across the UK spend an average of between 3.3 and 4.2 hours every day watching television. The figure is highest in Scotland and lowest in the West of England. The comparable figure for radio is less variable across the nations – it ranges from 3.0 hours/day in Scotland to 3.2 hours/day in Wales. On television, the public service broadcasters commanded a viewing share of 58% in 2009, down by two percentage points year on year. They were most popular in the South West of England (with a share of 61%) and least popular in Scotland (56%). On radio, the BBC attracted a listening share of 55% (down by one percentage point year on year). It was most popular in Wales, with a share of 61%, and least popular in Scotland (45%), where local commercial radio attracts a large listening share.

Figure 1.74 Hours of daily viewing of television and radio, by nation, 2010



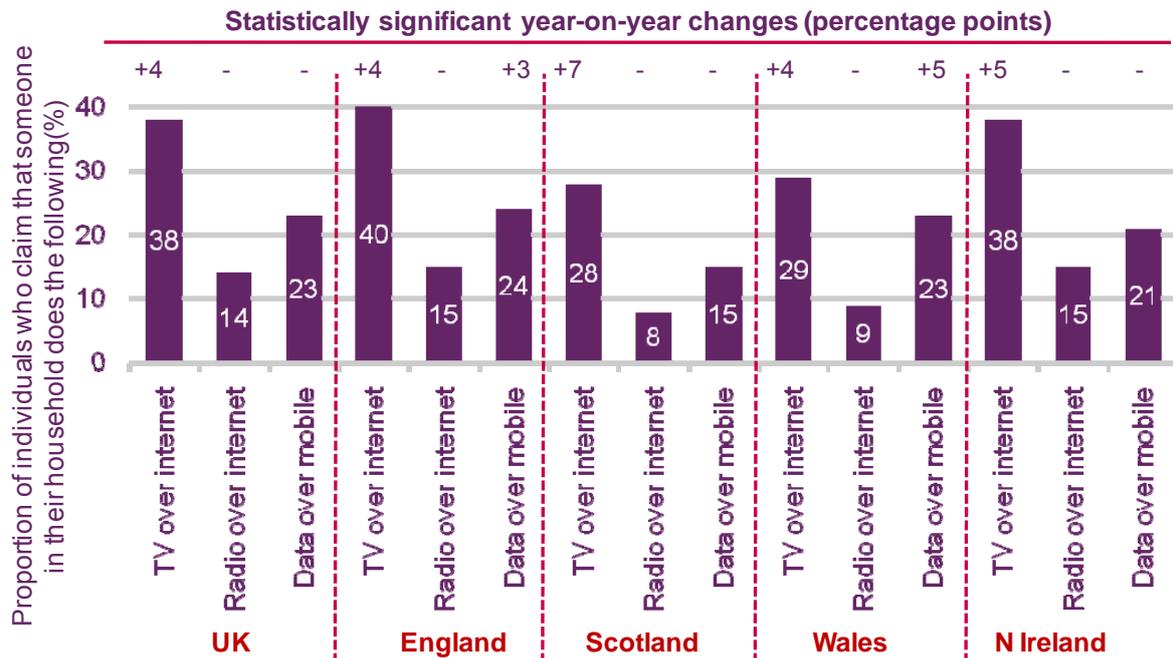
Source: BARB and RAJAR analysis

1.6.8 Use of converged platforms and devices by people across the UK

Four in ten internet users use the web to watch television content; one in five use their mobile phone for data services such as the internet

Four in ten people in the UK (38%) claimed to be using their internet connection to watch television services. The figure ranged from 40% in England to 28% in Scotland, and is probably influenced by levels of broadband take-up in each nation (ranging from 21% in Glasgow, Clyde and Lanarkshire to 52% in the south West of England). Around 14% claimed that they used the internet to listen to radio, with similar patterns of listening across the nations to those for watching television over the web. Around one-fifth of people in the UK use their mobile handsets to access data services, including the internet. Nearly a quarter (24%) made this claim in England, 23% in Wales, 21% in Northern Ireland and 15% in Scotland (from 31% in London to 12% in Glasgow, Clyde and Lanarkshire).

Figure 1.75 Consumers' use of converging platforms



Source: Ofcom research, Q1 2010

Base: All adults aged 15+ (n = 9013 UK, 5709 England, 1468 Scotland, 1075 Wales, 761 Northern Ireland)

Q: For the TV and radio question - Which, if any, of these do you or members of your household use the internet for while at home?

For the data question - Which if any, of the following activities, other than making and receiving voice calls, do you use your mobile for? Figure represents the of responses to the following: download free applications, download paid for applications, send/ receive emails, accessing the internet, connecting to the internet using WiFi,, using VoIP service, download a new video clip, video streaming, TV streaming, accessing/ receiving, sports/ team news/ scores, accessing/ receiving news, use IM/ Instant messaging



The Communications Market 2010

2 TV and audio-visual

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2.1 Key market developments in TV and audio-visual

2.1.1 Industry metrics and summary

Figure 2.1 Industry metrics

UK television industry	2004	2005	2006	2007	2008	2009
Total TV industry revenue (£bn)	10.0	10.5	10.6	11.1	11.2	11.1
Proportion of revenue generated by public funds	24%	25%	25%	25%	24%	25%
Proportion of revenue generated by advertising	35%	35%	33%	32%	31%	28%
Proportion of revenue generated by subscriptions	34%	35%	36%	37%	39%	41%
TV as a proportion of total advertising spend	29.6%	29.6%	27.9%	26.9%	26.5%	27.5%
Spend on originated output by 5 main networks (£bn)	3.1	3.0	2.8	2.7	2.6	2.4
Digital TV take-up	53.0%	61.9%	69.7%	86.3%	87.1%	91.4%
Proportion of DTV homes paying for TV (Q1)	71.7%	64.3%	60.0%	55.0%	53.1%	54.6%
Viewing per head, per day (hours) in all homes	3.70	3.65	3.60	3.63	3.74	3.75
Share of the five main networks in all homes	73.8%	70.4%	66.7%	63.5%	60.8%	57.8%
Number of channels broadcasting in the UK	379	416	433	470	495	490

Source: Ofcom/broadcasters/Advertising Association/Warc/BARB/GfK. Note: Public funds include the DCMS grant to S4C and BBC funding that is allocated to TV; TV as a proportion of total advertising spend excludes direct mail and is based on © Advertising Association/Warc Expenditure Report (www.warc.com/expenditurereport); spend on originations includes spend on nations and regions programming (not Welsh and Gaelic language programmes but some Irish language). Note that digital television take-up in Q1 2010 had reached 92%.

The section looks at key developments and trends seen in the UK television market during the past year. These include:

- TV industry revenues contracted by 0.4% in 2009 to £1.1bn as continued growth in pay-TV subscriptions failed to offset reductions in TV advertising.** UK television broadcasters experienced a 9.6% decline in net advertising revenue in 2009, to reach £3.1bn. The commercial PSB services – ITV1 and the other Channel 3 licensees, GMTV1, Channel 4, Five and S4C - saw the steepest decline, down 14.0% year on year to £1.9bn (page 99).
- Time-shifted television viewing accounted for 5.9% of all viewing, more than three times the amount in 2006.** A major factor behind this increase was the growing popularity of digital video recorders (DVR) (page 100).
- Catch-up TV services continued to grow in popularity in 2009** as increasing numbers of consumers watched internet-based content via their PC and other devices. Ofcom research in Q1 2010 found that 31% of adults with the internet had watched catch-up TV, up from 23% a year earlier, but this still constitutes a small amount of overall viewing (page 103).

- **The average person spends 252 minutes per week watching non-linear (on-demand) audio-visual content across a variety of platforms and devices (17% of all viewing)**, according to Ofcom research. Average non-linear viewing is highest among 25-44s and 16-24s. It is lowest among those aged 55+ (page 106)¹⁵.
- **Around 5.1 million homes had access to high-definition television channels by the end of Q1 2010**, up from 1.9 million in Q1 2009. A niche product for some years, HD is now being embraced by a growing number of homes. Sales of HD-ready TV sets passed 24 million at the end of Q1 2010, Sky began to invest more in marketing HD, and Freesat HD device sales exceeded 800,000 in 2010. The choice of HD services was further expanded when Freeview HD launched in March 2010 (page 106).
- **3DTV became a reality as content and 3D-capable equipment began to appear in the UK market.** In April 2010, BSkyB launched Europe's first dedicated 3D channel to selected pubs and clubs around the UK. A growing number of televisions are incorporating broadband connectivity to offer a range of web content and applications (page 111).
- **Viewing of the PSB channels and their portfolios began to plateau in 2009, falling slightly from 71.8% to 71.6%.** In the past, the increase in share of the PSB portfolio channels has outweighed declining share of the main PSB channels (page 113).
- **During 2009 and early 2010 the TV switchover programme gathered pace across the UK.** By the end of June 2010, analogue television signals had been switched off at 21 transmitter groups, covering five ITV regions (Wales, South West, West, Border and Granada); and 92% of UK homes had upgraded their main set to digital by the end of Q1 2010 (page 117).

2.1.2 TV industry revenue down 0.4% to £11.1bn in 2009, as advertising is hit

Growth in pay-TV subscription revenue failed to offset falling television advertising revenue in 2009, which led to a £49m (0.4%) year-on-year fall in TV industry revenues, to £11.1bn. This marked the first time that the TV industry has contracted since Ofcom began reporting on the size of the television market, as broadcasters contended with the impact of an economic downturn.

Net advertising revenue (NAR) was the worst hit of all revenue streams, down by £335m (9.6%) in 2009 to £3.1bn. TV was not the only industry to experience a more challenging advertising market in 2009; the total UK advertising market was worth £14.5bn across all sectors in 2009, 12.5% lower than the £16.6bn spent in 2008 (although this relates to advertising spend rather than revenue)¹⁶.

Pay-TV operator revenues appeared comparatively unaffected throughout the recession and this was reflected in the continued growth in the sector, with revenues up by £319m (7.5%) in 2009 to £4.6bn. This was in spite of the closure of Setanta Sports in June 2009, which paved the way for ESPN to launch a new premium sports subscription channel two months later.

¹⁵ Note: our research was a diary-based survey, and respondents were more likely to remember higher-attention activities, such as watching recorded programmes, than lower-attention activities such as scheduled television. It is also important to note that our data are for adults (16+), while BARB data are for all individuals (4+).

¹⁶ © Advertising Association/Warc Expenditure Report (www.warc.com/expenditurereport)

The number of TV channels decreased in 2009

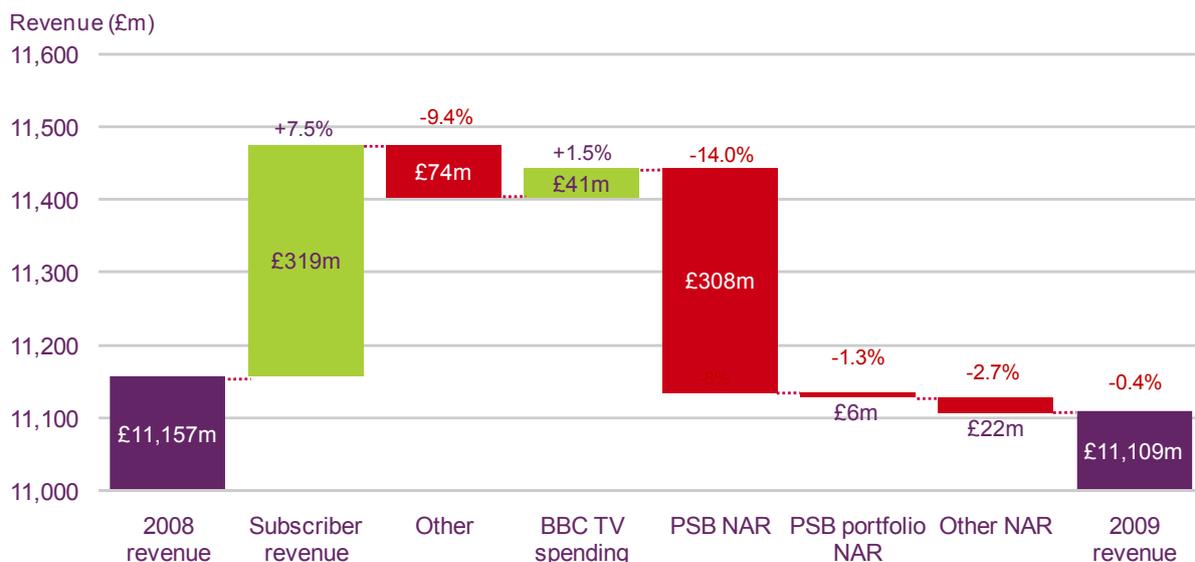
The closure of Setanta Sports and its UK channels contributed towards the first ever annual fall in the number of UK television channels, down from 495 at the end of 2008 to 490 in 2009. Following years of consistent growth, the contraction in the number of channels could suggest that the multichannel market is reaching saturation point.

The closure, in October 2007, of the launch queue for channels on the Sky Digital satellite platform was another contributing factor towards the slowdown. The move, taken to maintain the technical integrity of Sky Digital set-top boxes, meant that the number of standard definition channels on Sky Digital could not increase further. However, broadcasters wishing to launch new channels are able to 'trade' slots with existing channels on the Sky electronic programme guide (EPG).

The launch queue was subsequently reopened for high-definition channels, as the Sky+HD set-top boxes are not limited by the same memory constraints as the standard definition receivers.

Ofcom estimates that the amount of the BBC's revenue allocated to TV, the third biggest component of TV industry revenue, grew marginally in 2009, up by £41m (1.5%) to £2.7bn.

Figure 2.2 Changes in TV industry revenue, 2008 - 2009



Source: Ofcom/broadcasters

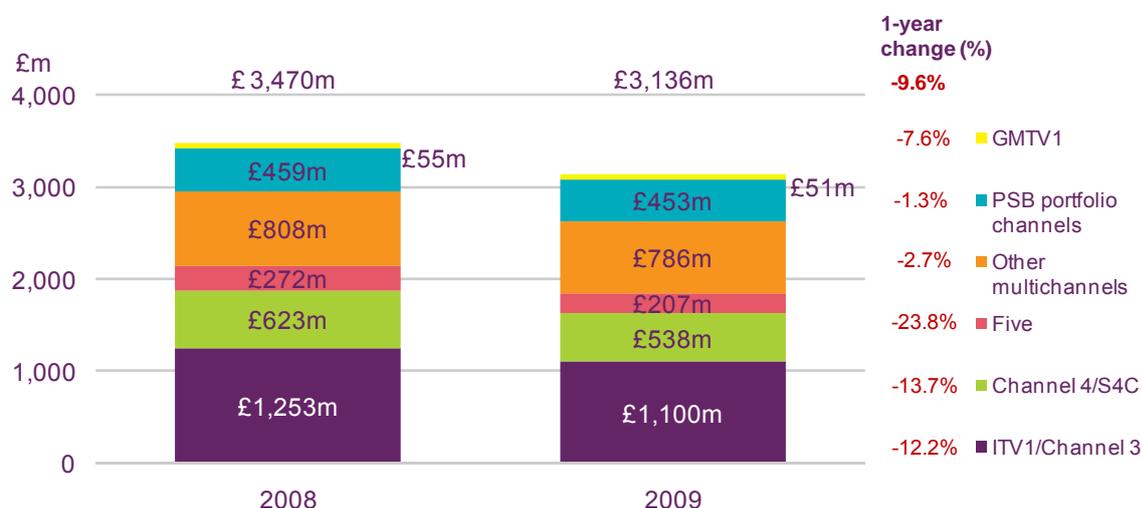
Note: Figures expressed in nominal terms. PSB NAR comprises Channel 3 licensees (including GMTV1), Channel 4, Five and S4C. PSB portfolio NAR includes the commercial channels owned by the PSBs. 'Other NAR' comprises the rest of the multichannel market. Platform operator revenues do not include any installation costs, equipment sales or subsidies. BBC TV spending represents the amount of BBC revenue that is allocated to TV.

Advertising revenue across all commercial television channels fell in 2009 - including commercial PSBs, PSB portfolio channels and other multichannel services. The main commercial PSB channels – ITV1, STV, UTV, Channel Television, GMTV1, Channel 4/S4C and Five - felt the brunt of the declining advertising market, with NAR generated by these channels down 14.0% in the year to £1.9bn. Five experienced the largest reduction in NAR during 2009, down by 23.8% to £207m. The Channel 3 licensees collectively saw NAR fall by 12.2% in the 12 months, to £1.1bn, while Channel 4/S4C generated £538m in advertising,

a 13.7% drop. All of these channels together generated £333m in non-advertising-related revenue in 2009, a 1.4% increase year on year (excluding S4C's grant from the DCMS).

The PSB portfolio channels' NAR declined for the first time in 2009, down by 1.3% to £453m. The rest of the multichannel market saw a 2.7% reduction, down £22m to £786m.

Figure 2.3 TV net advertising revenues



Source: Ofcom/broadcasters. Note: Totals may not equal the sum of the components due to rounding. ITV1/Channel 3 includes ITV1, STV, UTV and Channel Television.

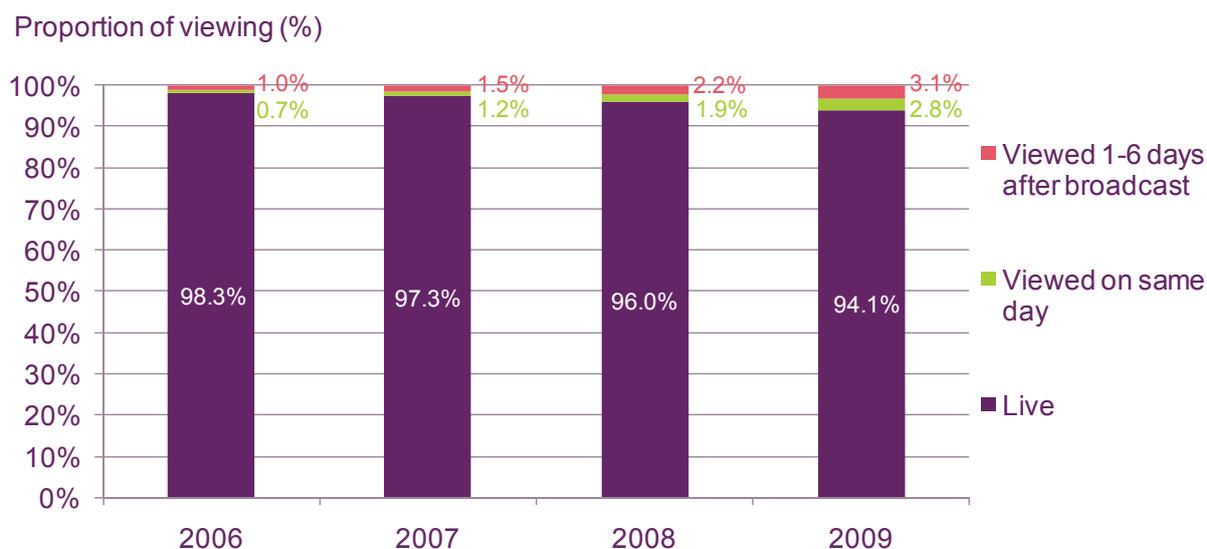
2.1.3 The dynamics of DVR-based TV viewing

DVR adoption has risen steadily over the past five years, rising more than threefold from 11% in 2005 to 37% of homes in 2010¹⁷. And DVRs are already exerting a substantial influence over consumers' viewing habits. According to BARB, the percentage of all TV viewing that was time-shifted through a recording device more than tripled between 2006 and 2009, from 1.7% to 5.9% (the proportion of recorded viewing among people with access to a DVR in their home is 15.1%).

Moreover, the proportion of all time-shifted viewing of content recorded and watched on the day of broadcast has risen fourfold over the last three years. When we refer to time-shifted viewing this does not include live viewing of '+1' channels, which are sometimes described as time-shift channels.

¹⁷ Ofcom Technology Tracker, Q1 2010

Figure 2.4 Live versus time-shifted TV viewing, all individuals, all homes

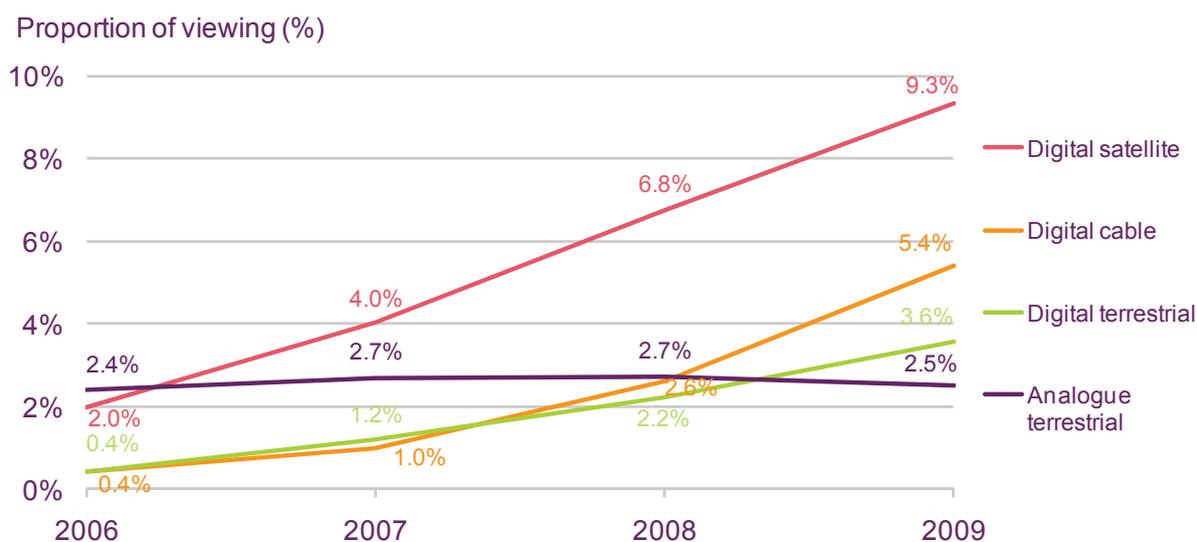


Source: BARB, all individuals, all homes

Across all digital television platforms, the growing popularity of DVRs has resulted in a marked shift in recorded viewing during 2009. The prevalence of recorded viewing in digital TV homes has risen on each platform during 2009. By contrast, in analogue television homes, the proportion of recorded viewing using video cassette recorders (VCRs) has remained fairly steady since 2006, at around 2.5% of all viewing.

On digital satellite, recorded viewing accounted for 2% of all viewing on the platform; by 2009, the figure had increased to 9.3%. On the digital cable and digital terrestrial platforms, the shift towards recorded viewing has been even more pronounced. In 2006, recorded viewing accounted for just 0.4% of viewing, on both platforms, but by 2009 this had increased to 3.6% of DTT viewing (more than eight times higher than in 2006) and 5.4% on cable (over twelve times higher).

Figure 2.5 Proportion of viewing that is time-shifted, by platform



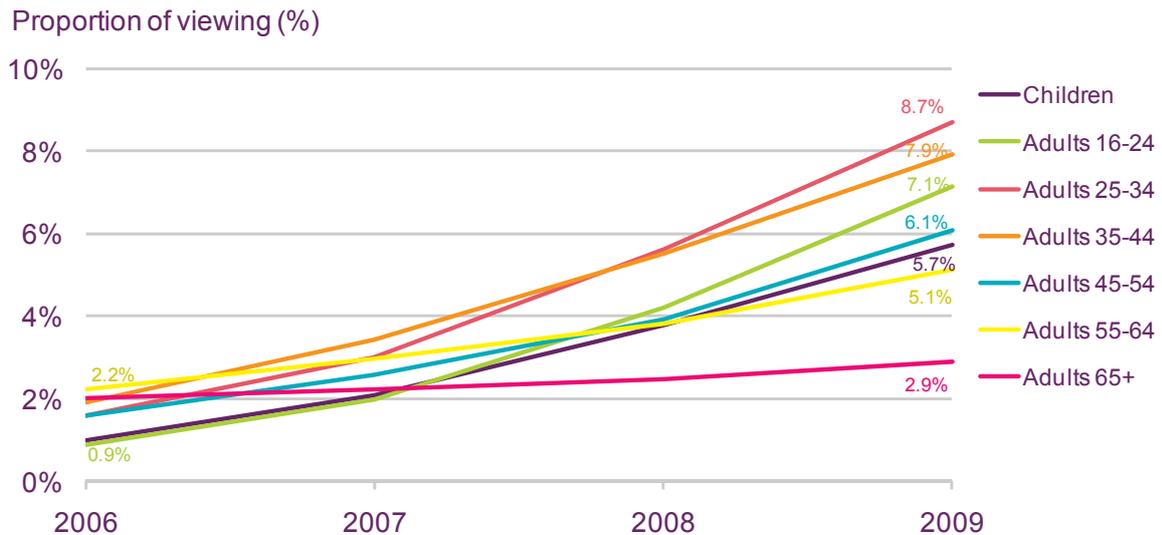
Source: BARB, all individuals, all homes

Adoption of DVR technologies is growing fast among younger people in particular, and this has given rise to changing patterns of time-shifted viewing among viewers by age. In 2006,

recorded viewing was more common among the older demographics, representing 2.2% of viewing of adults aged 55-64 and 2% of viewing of those aged 65+. In contrast, just 0.9% of viewing among 16-24 year olds was time-shifted.

By 2009, the situation was quite different. The proportion of recorded viewing among viewers aged 65+ had grown to 2.9%. For those aged 55-64, the figure had increased to 5.1% of all viewing, a little over double the amount in 2006. Among viewers aged 16-24, recorded TV viewing increased eight-fold, to 7.1%, but the group with the highest relative consumption of recorded TV in 2009 were 25-34 year olds, at 8.7% of all viewing.

Figure 2.6 Proportion of viewing that is time-shifted, by age



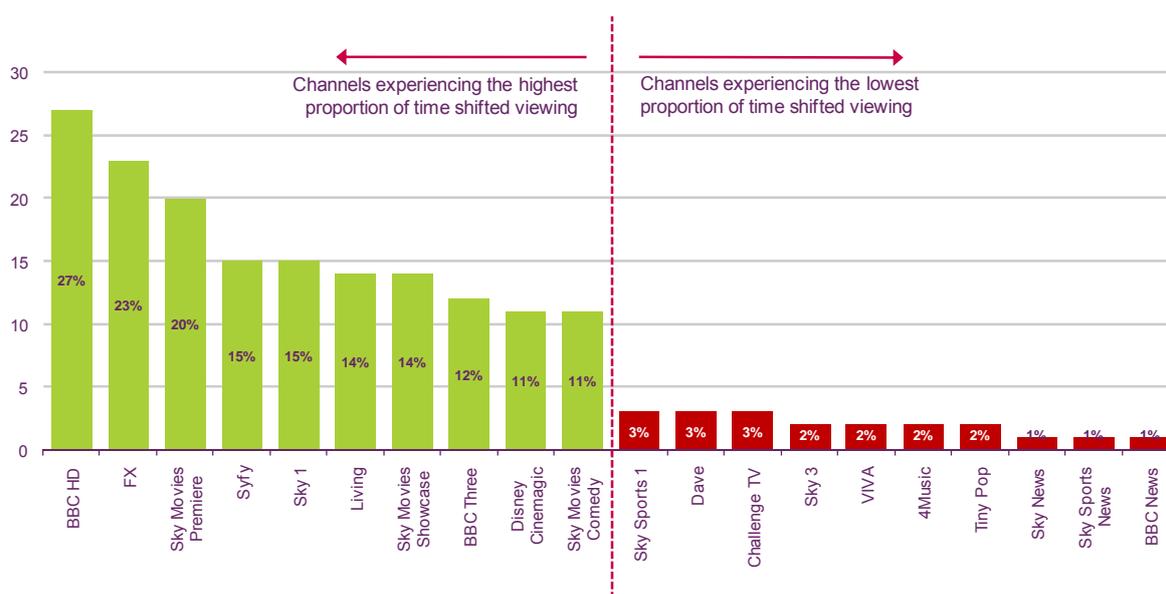
Source: BARB, all homes

Figure 2.7 shows the ten most and least time-shifted channels during 2009 (excluding those with a less than 0.1% share in multichannel homes). BBC HD tops the list of the most time-shifted channels with over a quarter of all viewing (27%) being recorded in 2009, compared with just under 6% for all television. There are four film channels among the top ten, and four of the channels – FX, Sky1, Syfy, and Living – rely relatively heavily on acquired content, particularly US drama series.

The three channels with the highest proportion of live viewing are all news channels, as would be expected from channels whose *raison d'être* is their topicality. Similarly, Sky Sports 1 is also in the bottom ten as its appeal is live sports coverage. Two music channels, 4Music and VIVA, are in the bottom ten, as are three channels (Dave, Sky3 and Challenge TV) which have a tendency to rely on repeat programming.

Figure 2.7 Channels with highest and lowest proportion of recorded viewing, 2009

Proportion of viewing that is recorded (%)



Source: BARB. Includes +1 channels, viewing in multichannel homes, excluding channels with <0.1% share

2.1.4 The rise of catch-up TV

Although watching audio-visual content stored on a DVR accounts for much of non-linear viewing (Figure 2.13), online catch-up services delivered over the internet offer another way for consumers to view recently-broadcast content. These services commonly allow consumers to view content on demand on a computer or other internet-connected device up to a month after it was first broadcast. Since the launch of early services by Sky, Five and Channel 4 in 2006, all major broadcasters now offer catch-up services, but it was the launch of BBC's iPlayer in December 2007 that seemed to drive awareness in these services, and their popularity grew throughout 2008.

The 2009 *Communications Market Report* highlighted that online catch-up TV services showed signs of becoming a mainstream form of audio-visual content consumption. Monthly iPlayer streams had trebled in a year, innovation was continuing, and access was widening to more platforms – with content increasingly delivered to the TV as well as the computer screen. The rapid growth in online catch-up TV continues, and is spreading to a broader range of devices.

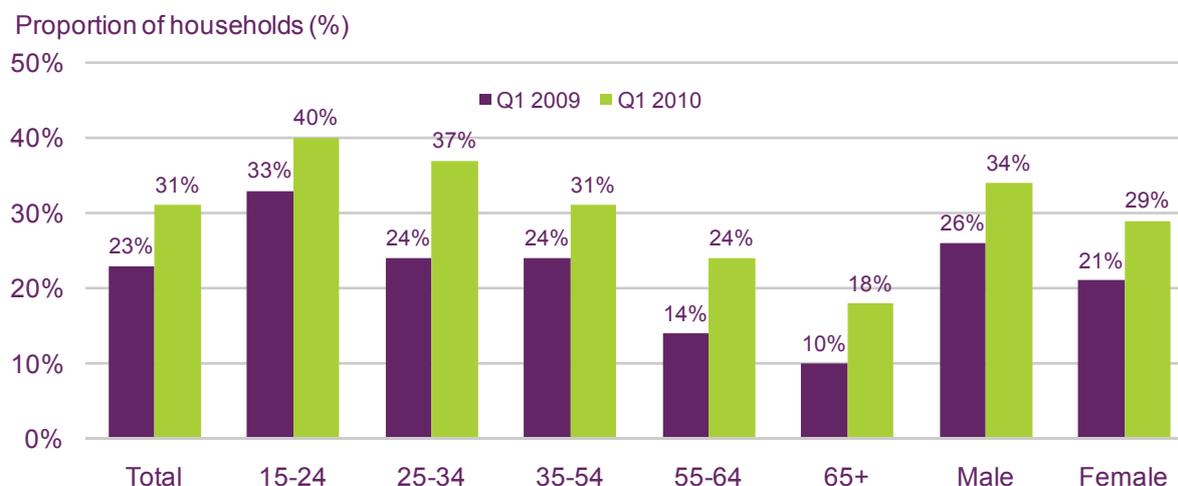
Take-up of catch-up TV grew by a third, to 31% of internet users in Q1 2010

Our consumer research from the first quarter of 2010 (Figure 2.8), shows that 31% of households with internet access used it to watch online catch-up TV. This is up eight percentage points over the year and represents growth of more than a third. Among 15-24 year-olds, take-up rises to 40%, reflecting greater interest in, and familiarity with, technology among this group. It may also reflect the larger numbers of the transient population such as students in this age group, for whom catch-up TV may be the primary way they consume audio-visual content. Overall, men reported greater use of the internet to watch catch-up TV than women, by 34% to 29%.

Growing numbers of people in older age groups also claim to live in households that watch catch-up TV. The number of 55-64 year olds with the internet who claim that they or

someone in their household watches catch-up TV rose by 10 percentage points to reach 24% in Q1 2010. The figure for people aged 65+ rose by eight percentage points, to 18%.

Figure 2.8 Proportion of adults with home internet who watch online catch-up TV



Source: Ofcom research Q1 2010.

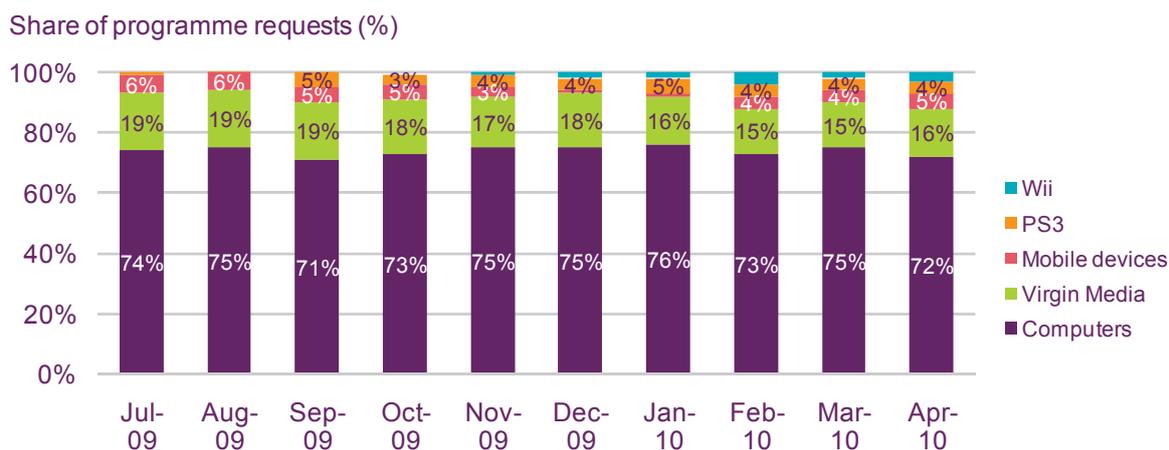
QE12. Which, if any, of these do you or your household use the internet for whilst at home?

Base: All adults who have the internet at home (n=6163 UK, 1048 15-24, 1100 25-34, 2464 35-54, 860 55-64, 691 65+, 3015 Male, 3148 Female).

Consumers are watching catch-up TV on a growing range of platforms

While the number of people watching catch-up TV is growing, the platforms on which they view this type of content are also increasing in number. Data from the BBC show that in July 2009, 99% of iPlayer consumption (including audio content) was accounted for by just three platforms: computers, Virgin Media's cable TV service and mobile devices. But by April 2010, the mix was much richer, with the Nintendo Wii (3%) and the Sony Playstation 3 (4%) accounting for similar levels of viewing as mobile devices (5%).

Figure 2.9 BBC iPlayer share of programme requests, by device type



Source: BBC iStats.

Note: Includes requests for radio programmes. Data from iPhones not available from 10 November to 2 February and data from Wii not available from 22 to 31 March, due to technical problems.

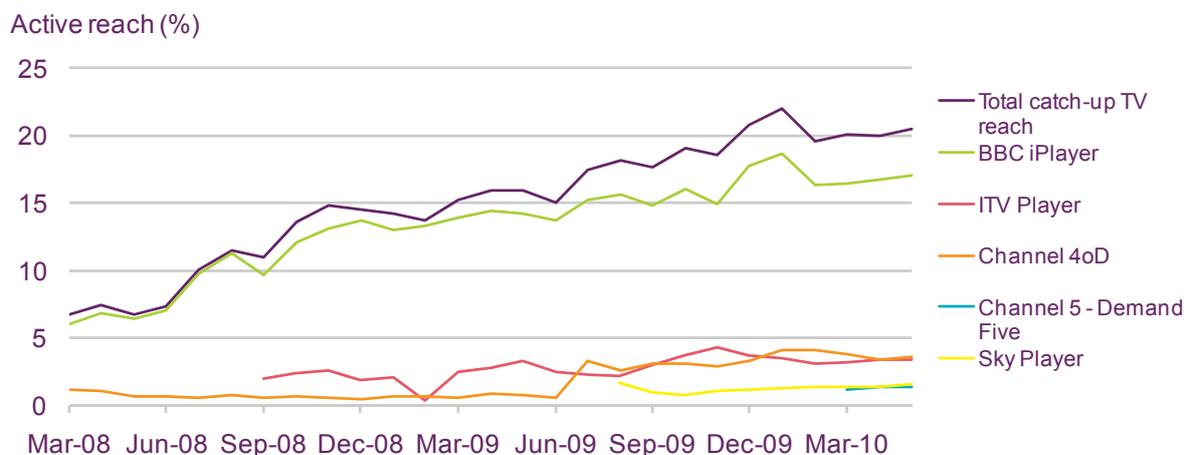
The number of platforms over which consumers can view catch-up TV is continuing to grow.

- The BBC publicly launched the iPlayer on Freesat set-top boxes in January 2010. Freesat has also announced that it is planning to make ITV Player available on the platform.
- Both iPlayer and Sky Player are now available via Fetch TV, a service provided by IP Vision that combines a Freeview tuner with 'over-the-top' content (delivered via the open internet to PCs and other devices rather than over a managed IPTV network).
- In the fourth quarter of 2009, Channel 4 and Five announced deals with YouTube to make their catch-up and archive content available via the video-sharing site (although the deal allowed both broadcasters to retain control of their advertising spots). By July 2010, nearly 1.5 million people had viewed the 4OD channel on YouTube, and more than 500,000 had viewed Demand Five's YouTube channel.

BBC iPlayer remains the most popular online service, but others are increasing share

UKOM/Nielsen data provide an indication of the reach of the various services from the major broadcasters¹⁸. The BBC iPlayer has by far the highest reach of the main catch-up TV services, used by 17% of active internet users in May 2010 (Figure 2.10). 4OD's reach stood at 3.6%, closely followed by ITV Player with 3.4%. Despite the iPlayer's lead, the data in Figure 2.10 suggest that other broadcasters are managing to increase their share of total catch-up TV reach. The gap between iPlayer reach and total catch-up TV reach has widened over the past year, although this may partly reflect the fact that iPlayer reach includes those using the platform to consume catch-up radio content.

Figure 2.10 Active reach of major online catch-up TV services



Source: UKOM/Nielsen, home and work panel.

Note: 'Active reach' is the percentage of all active persons aged 2+ who visited the site or used the application. 'Active' is defined as anyone who used an internet-enabled computer within the time period. 'Demand Five trend data not available prior to March 2010 due to change in UKOM/Nielsen definitions. Total catch-up TV reach is the unduplicated reach of all five services.

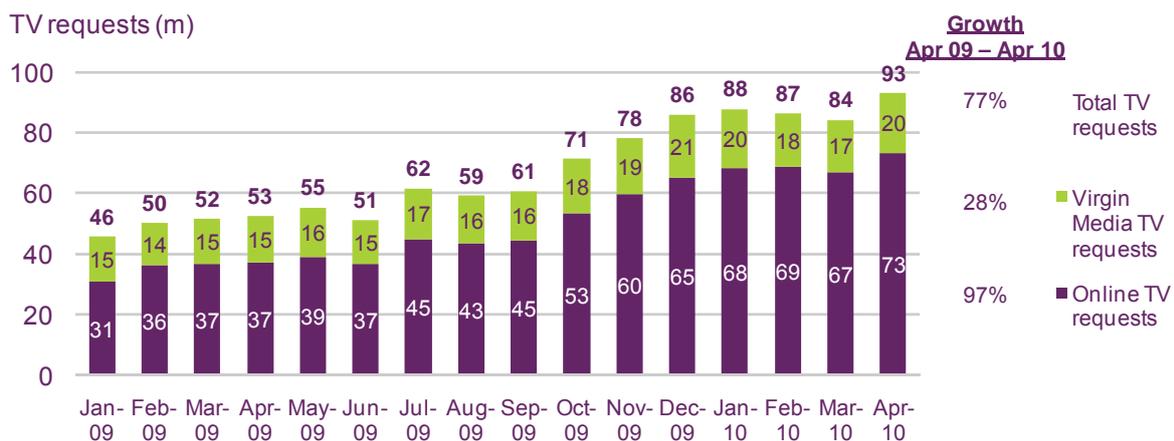
¹⁸ Audience data from UK Online Measurement (UKOM) show a lower overall reach than our consumer research for catch-up TV (just over 20%, and 31%). This is likely to be due to methodological differences, given that our research looks at reported behaviour while UKOM records audiences. And while UKOM focuses on individuals, our data reports on households. It is also possible that some respondents to our survey misreport their behaviour, perhaps thinking that catch-up TV includes content hosted on sites that infringe copyright.

iPlayer use almost doubled during the past year

Data from the BBC show that the total number of requests to view TV streams on iPlayer almost doubled from 53 million to 93 million in the 12 months to April 2010, a growth rate of 77% (Figure 2.11). While a small proportion of TV streams (8% in April 2010) consist of 'live' streams of programmes, the great majority (92% in April 2010) are on-demand streams.

Most of the growth in iPlayer use was driven by iPlayer delivered online, where requests increased by 97% year on year. The iPlayer's requests delivered over Virgin Media's platform also rose, but at a slower rate of 28%.

Figure 2.11 Total monthly iPlayer TV requests across all platforms



Source: BBC iStats.

Note: Does not include radio. Includes both simulcast and on-demand.

2.1.5 Non-linear viewing of audio-visual content is a small but growing component of all viewing

Alongside existing industry data on DVR and online TV viewing (see pages 100 and 103), Ofcom research offers insights into how consumers use a range of communications devices for media consumption (see Consumer's digital day). Our research was a diary-based survey, and respondents were more likely to remember higher-attention activities such as watching recorded programmes than lower-attention activities such as scheduled television. It is also important to note that our data relate to adults (16+), while BARB data relates to all individuals (4+).

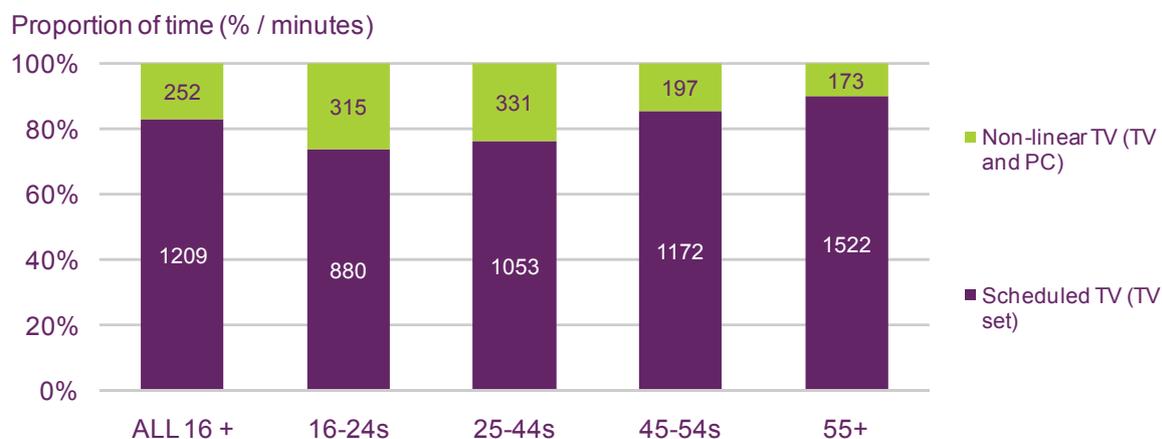
Before the year 2000, non-linear television viewing was made possible through the use of VHS video recorders and DVD players. But the growing adoption of digital video recorders (DVRs) and rising broadband take-up have opened up new ways in which consumers can watch audio-visual content at their convenience. These two technologies allow them to watch television on demand through a TV set or PC and download content from the internet. Non-linear viewing is now a small but growing part of consumers' viewing habits, and many people watch content on demand on a variety of devices.

Consumers watch an average of more than four hours of non-linear content per week

Ofcom research shows that adults aged 16+ spend an average of more than four hours (252 minutes) a week watching non-linear TV content via a television set or PC. This accounts for 17% of the 1,461 minutes of average weekly viewing of TV-like content on a TV or PC (Figure 2.12).

The proportion of time spent viewing non-linear TV content decreases with age. It accounts for 26% of average weekly viewing among 16-24s, but falls to 10% for those aged over 55.

Figure 2.12 Linear/non-linear split of weekly time spent consuming audio-visual content on TV and computers



Source: Ofcom research

Base: All respondent days - 16+ = 7966; 16-24s = 1106; 25-44s = 3003; 45-54s = 1484; 55+ = 2373

Note: Scheduled TV does not include live online TV streaming; content consumed via mobile devices is also not included. Non-linear TV includes content consumed on DVRs, rented/purchased DVDs/VHS, recorded TV on DVDs/VHS/games consoles/on demand TV through a TV set or PC, and content downloaded from the internet.

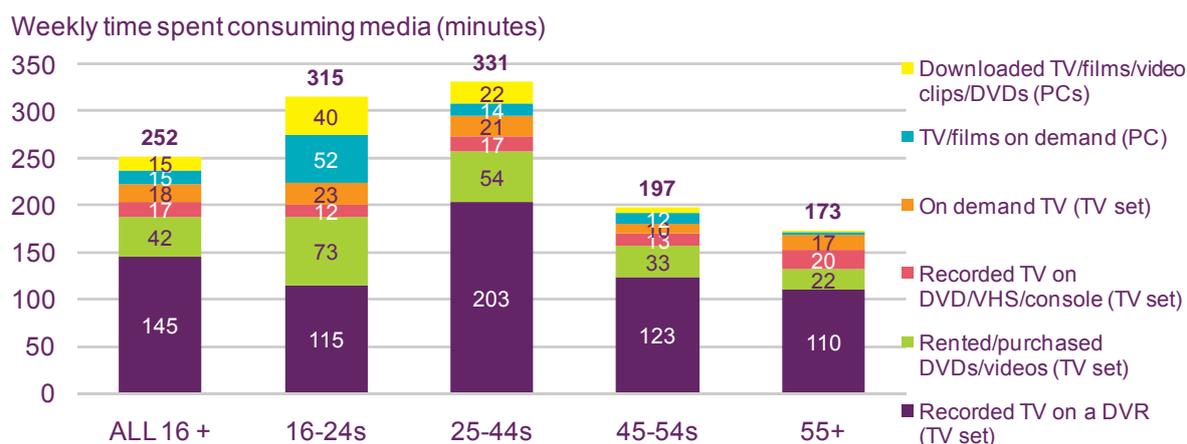
DVR viewing is driving consumption of on-demand content, and is the most popular way for consumers to view non-linear broadcast content. The average time per week spent viewing content on a DVR is nearly 2.5 hours (145 minutes), more than half (57%) of total average non-linear viewing. On-demand viewing (on the TV or via the internet on a PC) accounts for an average of 33 minutes each week, with this split fairly evenly between TV-based (18%) and PC-based (15%) on-demand content.

Across most age groups, DVR viewing accounts for more than half of total non-linear viewing time. The exception is among 16-24s; within this group, while it remains the largest component of non-linear viewing, at 115 minutes per week, DVR viewing accounts for only just over a third (36%) of the total. Instead, viewers in this age group spend larger amounts of time watching DVDs/VHSs (73 minutes), on-demand content on PCs (52 minutes) and downloading content to a PC (40 minutes).

All in all, DVR viewing accounts for 57% of total non-linear viewing time, and this varies from 63% among 45-54s to just 36% among 16-24s.

Across all age groups, on-demand delivered to a PC or TV set comprises 13% of weekly non-linear viewing time. On-demand as a proportion of total non-linear viewing is highest among 16-24s (24% of weekly viewing) and lowest among 25-44s (11% of weekly viewing). PC-based on-demand is highest among 16-24s (17%), but, perhaps surprisingly, TV-based on-demand is highest among the over-55s, accounting for 10% of time spent viewing non-linear content by this group.

Figure 2.13 Weekly time spent consuming selected non-linear audio-visual content



Source: Ofcom research

Base: All respondent days - 16+ = 7966; 16-24s = 1106; 25-44s = 3003; 45-54s = 1484; 55+ = 2373

2.1.6 HDTV begins to enter the mainstream

HDTV now available on all digital television platforms, with HD-ready set sales passing 24 million during 2009

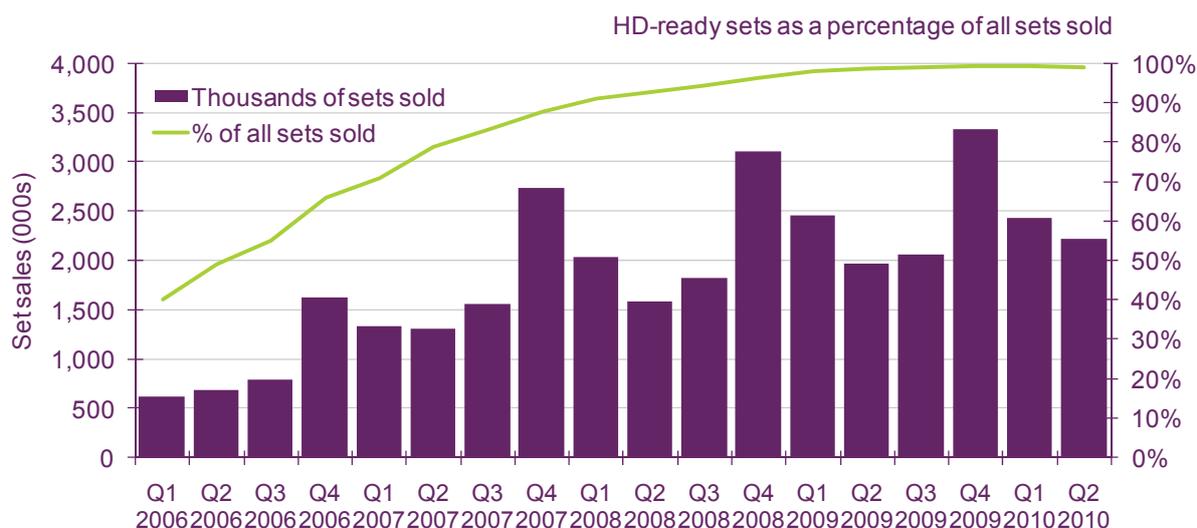
High-definition TV services launched at the end of 2005 but began to show signs of broader appeal during 2009 as sales of HD-ready TV sets passed 24 million and BSkyB reduced the price of its Sky+ HD receivers. In 2010, Sky started to give away HD set-top boxes, sales of Freesat HD devices passed the 800,000 mark and the availability of HD services was further extended with the arrival of HD on Freeview in March.

Another catalyst was the 2010 FIFA World Cup, with research company GfK reporting 71,000 Freeview HDTV sets sold in May 2010, the month before the tournament started¹⁹. These developments have been accompanied by a marked increase in the availability of HD content, as more broadcasters have released HD versions of their channels.

As Figure 2.14 illustrates, the addressable market for HD-ready television sets is now substantial; nearly ten million sets were sold in 2009 and now HD-ready sets account for nearly 100% of all TV sets sold.

¹⁹ http://www.gfkr.com/uk/news_events/gfk_rt_uk_news/technology_newsletter/single_sites/006093/index.en.html

Figure 2.14 HD-ready sets: sales



Source: GfK sales data

The number of homes with access to HDTV channels passes five million

Around 5.1 million UK homes had access to HDTV channels across satellite, cable and digital terrestrial television at Q2 2010, up from around 1.9 million at the end of Q1 2009.

Telewest (now part of Virgin Media) was the first UK platform to launch HDTV at the end of 2005. BSkyB followed in April 2006, with a £10 per month HD subscription package. BSkyB has consolidated its position as the largest HD platform in the country with 2.9 million HD subscribers by Q2 2010, announcing in March that it expected to take its HD channel line-up to 50 channels by the end of 2010²⁰.

In contrast to BSkyB’s subscription-based approach, Virgin Media offers HD content to its M+ pack and above TV subscribers without a monthly fee, for a one-off £49 payment to rent a HD set-top box. The cable operator offers 18 HD channels (as of August 2010) and reached 1.2 million HD subscribers at Q2 2010²¹.

Freesat, the digital satellite joint venture between the BBC and ITV, launched in May 2008 and offers BBC and ITV HD channels. HD-enabled receivers have accounted for 80% of Freesat sales so far, equivalent to more than 800,000 cumulative sales by Q1 2010.

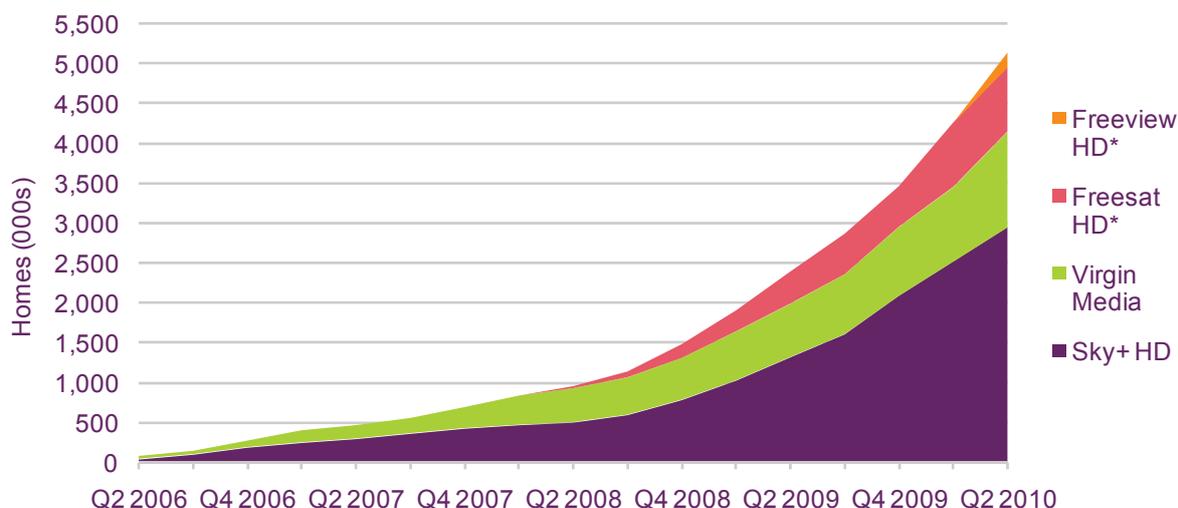
After a technical launch in December 2009, HD arrived on the free-to-air digital TV service Freeview, with the first Freeview HD set-top boxes going on sale in March. The service currently has four HD channels: BBC, ITV1, Channel 4 and S4C. Five HD is expected to launch in 2012. Coverage of Freeview HD is currently limited to 50% of the population, although this is set to rise to 98.5% by 2012, in line with plans for analogue switch-off²². By Q2 2010 there were just over 188,000 sales of Freeview HD set-top boxes and TV sets. Several other pay-TV operators offer HD content on demand, including BT Vision, Virgin Media, TalkTalk TV and Fetch TV. The BBC also offers a selection of HD content online via its iPlayer service, which can be streamed, depending on the speed of internet connection, or downloaded to computers.

²⁰ http://corporate.sky.com/media/press_releases/2010/Five_HD.htm

²¹ <http://pressoffice.virginmedia.com/phoenix.zhtml?c=205406&p=irol-newsArticle&ID=1434556&highlight>

²² <http://www.freeview.co.uk/freeview/HD-launch>

Figure 2.15 Number of HD broadcast homes: BSkyB, Virgin Media, Freesat and Freeview



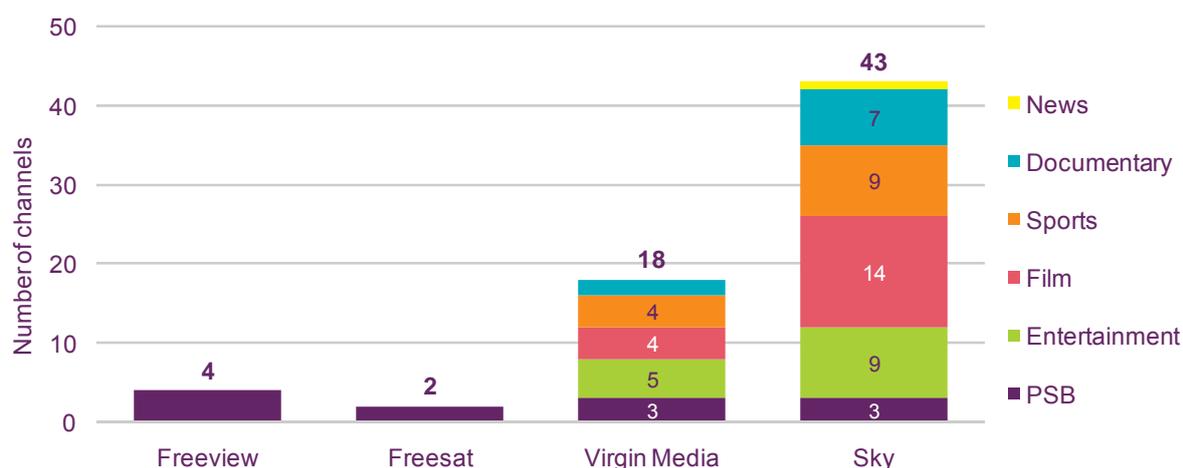
Source: Operators/GfK

Note: Figures represent latest available data. Freesat HD and Freeview HD figures are based on HD device sales, therefore the cumulative number of HD homes is indicative only.

The availability of HD content continues to grow

The continuing appeal of HD is further illustrated by the growing availability of HD channels. ITV HD launched in April on Sky, Virgin Media, Freeview and Freesat. Looking ahead, BBC One HD is expected to launch in autumn 2010 as a simulcast channel available on all digital platforms, with plans to make the majority of programmes available by 2012²³. Figure 2.16 details each of the main UK TV platforms and their HD channels by genre.

Figure 2.16 HD channel availability by platform and genre, 2010



Sources: Ofcom, Operators

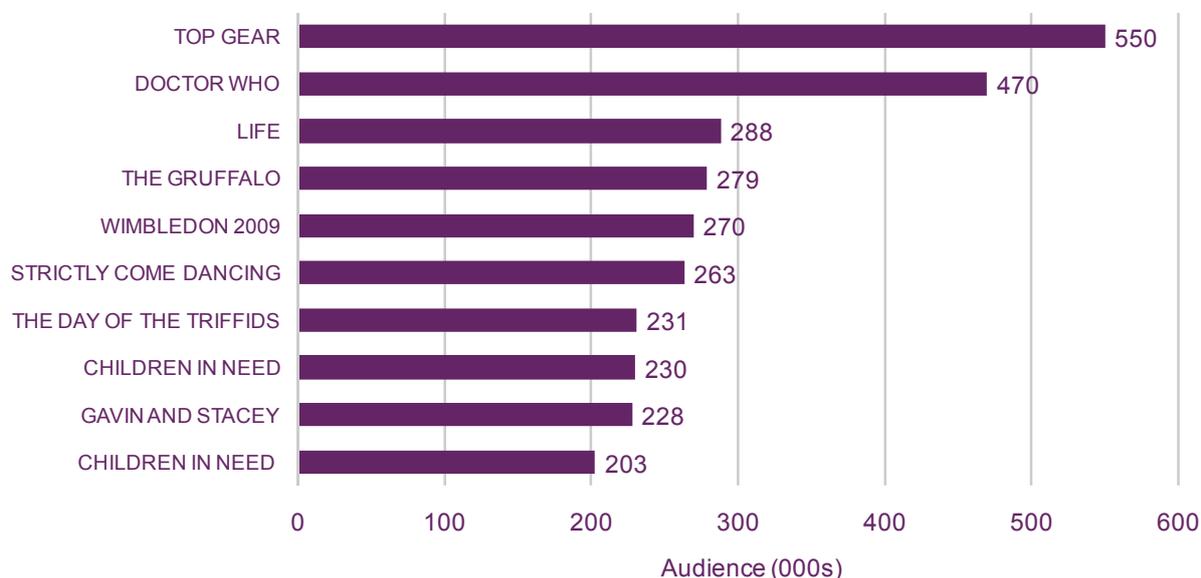
Notes: Sky includes two PPV HD channels. Does not include HD VoD available from Virgin Media, BT Vision, TalkTalk TV, Fetch TV and iPlayer on Freesat. Data correct as of August 2010.

Figure 2.17 lists the top ten most-viewed programmes on BBC's HD channel, which at the time was available on satellite and cable. The top-rated show was an episode of *Top Gear*,

²³ http://www.bbc.co.uk/pressoffice/pressreleases/stories/2010/05_may/28/hd.shtml

which attracted an audience of 550,000 viewers, followed by *Doctor Who* with 470,000. Programmes that are popular in standard-definition format are also among the most viewed on BBC HD²⁴.

Figure 2.17 Top 10 most-viewed programmes on BBC HD in 2009



Source: BARB, all individuals 4+, highest occurrence per title

2.1.7 3DTV becomes a reality

BSkyB launches the UK's first 3DTV channel

The release of 3D films such as *Avatar* has fuelled interest in three-dimensional viewing, and broadcasters and manufacturers are looking to expand the distribution of 3D viewing to the home. Pay-TV operators have played a significant role in this, with a number of 3D channels launching around the world. Recent figures from GfK suggest that 25,000 3DTV sets had been sold in Europe by May 2010²⁵.

On 3 April, BSkyB launched Europe's first dedicated 3D channel with a live transmission of the Premier League match between Manchester United and Chelsea, shown in selected pubs and clubs around the UK. Sky 3D will become available to residential customers (Sky+ HD subscribers) on 1 October, offering live sports content and movies²⁶. In late 2009, Virgin Media conducted trial broadcasts in 3D, over VoD rather than linear TV, while V+ set-top boxes are already compatible with 3D transmissions.

As Figure 2.18 illustrates, some international platform operators are also making early moves into 3D programming, with the recent FIFA World Cup providing a showcase. In France, broadcaster TF1 signed deals with five platform operators for its 3D event channel, which featured five World Cup matches in 3D. US sports network ESPN also launched a 3D channel in time for the tournament, available to 40 million Comcast and DirecTV homes.

²⁴ BARB measured BBC HD for the duration of 2009.

²⁵ http://www.gfkr.com/news_events/market_news/single_sites/006056/index.en.html

²⁶ [http://corporate.sky.com/media/press_releases/2010/Sky_3D\(3\).htm](http://corporate.sky.com/media/press_releases/2010/Sky_3D(3).htm)

Figure 2.18 Selected international 3DTV services

Operator	Platform	Product	Launch date	Content	Business model
BSkyB (UK)	Satellite	Sky 3D channel	April 2010 (commercial) Autumn 2010 (residential)	Launched with Premier League football; intends to add movies, documentaries and arts programmes by late 2010	Residential: Free with a premium subscription to Sky + HD Commercial: appointment to view sports events
Canal + (France)	Satellite	3D events channel	By end of 2010	Sports events, including the World Cup and French Open	Linear programmes and VoD
DirecTV (US)	Satellite	3 DirecTV 3D channels and ESPN 3D channel	June 2010	Movies, sports, special events, arts, music and documentaries	Channels 1 & 3 based on PPV model, Channel 2 showing linear broadcasts available to all subscribers
Numericable (France)	Cable	3D VoD channel	Autumn 2010	Mixed content	Available to subscribers, pricing and packaging to be confirmed in 2010
J:Com (Japan)	Cable	3D linear and VoD channels	April 2010	Content provided by existing channel providers, as well as outside production companies,	Linear programmes and VoD, via existing set-top boxes.

Source: Operators, Informa Telecoms & Media

3D technology in focus

3D viewing works by capturing and broadcasting two separate images from slightly different angles, thus replicating human vision as the brain thinks it is seeing a single, three-dimensional image. Although a variety of technologies can be used to deliver 3D, these can be split into two broad types: with glasses (stereoscopic) or without glasses (auto-stereoscopic). Currently, there are three main technologies used for viewing 3D content:

Polarisation 3D uses low-cost glasses and is a well-established technique in cinema. Left- and right-eye images are projected simultaneously onto the screen and the glasses are used to separate the two images. The 3D effect is generated because the lenses filter the image and allow only one direction of polarised light to reach each eye.

Active shutter requires advanced, more expensive glasses and works via the refresh rate of new TV displays. This technique relies on displaying separate full frames for each eye, alternating between them at a very fast pace. The viewer's glasses block the view of each eye at the same frequency, synchronised with the screen, and this produces a 3D image.

Auto-stereoscopic has been described as the most desirable form of 3D as it does not require glasses. Instead, filters are applied to the screen, which direct light coming from each pixel at a slightly different angle, producing a 3D image without glasses. A disadvantage of this technology is that there are viewing angles where the 3D effect breaks up, meaning that viewers must sit at a defined angle and distance from the TV.

However, despite the emergence of new ways of watching 3D, viewers with poor binocular vision may still experience inconsistencies, or even visual discomfort and headaches²⁷.

Rather like the experience of HD service providers, an installed base of 3D-ready sets will play an important role in the development of this market. Samsung was the first manufacturer to launch 3D-enabled TVs in the UK, with a range of sets launching in April

²⁷ http://www.eyecaretrust.org.uk/view.php?item_id=566

2010, priced between £1,200 and £3,000. As Figure 2.19 shows, other manufacturers have followed suit; Panasonic launched a range of 3DTVs in April, before LG (in May) and Sony (in June). In July, commercial requirements for the broadcast of 3DTV were established by the Digital Video Broadcasting (DVB) project²⁸.

Figure 2.19 Comparison of 3D television sets

Manufacturer	Launch date	Price	Panel type	3D viewing technology
Sony	June 2010	£1,799	LCD	Active shutter glasses
LG	May 2010	£2,799	LCD	Polarised glasses
Toshiba	Q4 2010	TBC	LCD	Active shutter glasses
Panasonic	May 2010	£2,295	Plasma	Active shutter glasses
Samsung	April 2010	£2,300	Plasma, LCD	Active shutter glasses

Source: Manufacturers, prices at launch

2.1.8 TVs get connected

A number of manufacturers are now incorporating broadband connections into their television sets, which allow viewers to access web-based content and applications. These 'connected' TVs are already available from a growing list of manufacturers including LG, Panasonic, Philips, Samsung, Philips and Cello.

As TVs incorporate more advanced features, consumers are upgrading their sets at a faster rate: nearly ten million TVs were sold in 2009, compared to four million 15 years ago, according to research firm GfK. While internet connectivity may still be behind HD-ready, built-in HD or even 3D-ready sets as the most popular functionality, it is already emerging as a common feature among high-end TV sets.

TV manufacturers are already signing deals with internet companies and content providers to offer viewers a suite of applications and services on the TV, sometimes called widgets. These pre-loaded applications are typically focused on popular internet destinations such as social networking sites, news and weather information and video content services such as BBC iPlayer, YouTube and LOVEFiLM.

The recent rise in consumers' use of catch-up TV services on the internet, such as the BBC iPlayer, may well have encouraged a range of device manufacturers to bring these services to the TV. The proposed Project Canvas video-on-demand (VoD) initiative plans to bring catch-up TV to the television via the internet. A range of set-top boxes already support similar services, with Humax, 3View and Fetch TV devices offering access to content such as Sky Player and iPlayer. Most HD set-top boxes for the BBC/ITV Freesat service also offer access to the BBC iPlayer.

Internet connectivity is not just the domain for the TV device market: Sky plans to launch its Sky Anytime + VoD service to Sky+ HD receivers later this year²⁹. This will rely on the

²⁸ http://www.dvb.org/technology/standards/a151_CR_for_DVB-3DTV.pdf

²⁹ http://corporate.sky.com/documents/pdf/latest_results/Q3_Press_Release_0910

internet (rather than a satellite broadcast) to deliver on-demand content to set-top boxes. Virgin Media, BT Vision and TalkTalkTV already offer VoD over their closed TV networks.

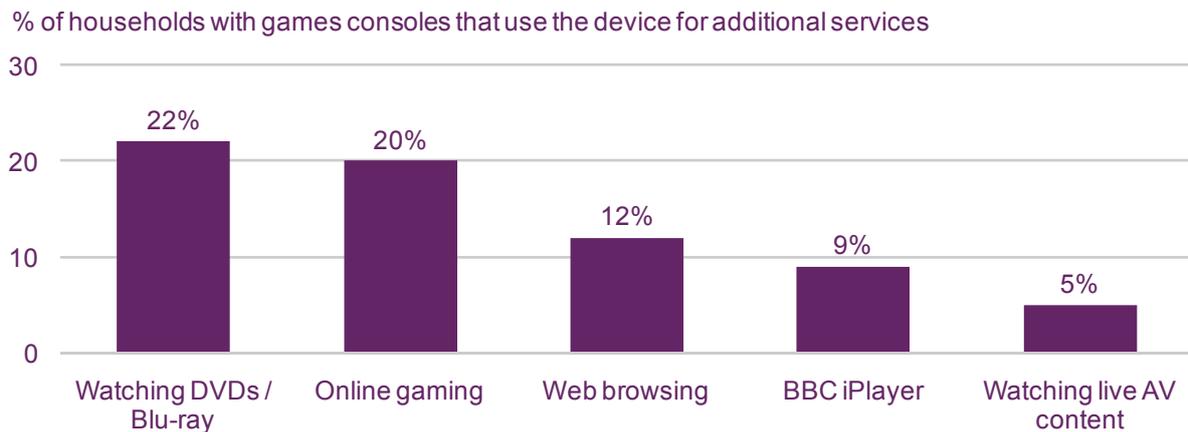
Games consoles as media hubs

Video games consoles are also emerging as important platforms for delivering video to the television. Devices such as the Nintendo Wii, Microsoft's Xbox 360 and Sony's Playstation 3 include internet connectivity and allow access to varying amounts of audio-visual content.

Ofcom research in Q1 2010 found that nearly one in ten households with a games console used it to access the BBC's iPlayer on their television. BBC iPlayer usage data found that the Wii and PS3 consoles jointly accounted for 10% of all iPlayer requests for TV programmes in February 2010, higher than its use on Macs (7%). Split by console, the Playstation 3 accounted for 6% (4.9 million requests) while the Wii accounted for 4% (3.2 million requests), according to BBC iStats³⁰.

Figure 2.20 also shows that one in twenty homes are watching live audio-visual material via their games consoles. Xbox Live customers, for instance, can access live premium and basic channels from the Sky Player service.

Figure 2.20 Additional use of games consoles



Source: Ofcom research, Q1 2010; Base: UK adults 15+ who have access to a games console at home (n=4374); QB4 Which, if any, of these do you use your games console for?

2.1.9 Viewing to PSB channels and their multichannel portfolios began to plateau in 2009

The main PSB channels³¹ and their multichannel portfolio services³² combined built audience share every year between 2003 and 2008. But in 2009, for the first time in six years, this combined share began to plateau, falling slightly from 71.8% to 71.6%. This was because movements in PSB portfolio channels' share failed to outweigh falling share among the main PSB services.

In 2003, their combined share stood at 63.5%, and this rose to 71.8% by 2008. The increase in share occurred even as the share of the main PSB channels began to fall – in 2005 the five largest channels commanded 57.7% of all viewing in multichannel homes, but this had

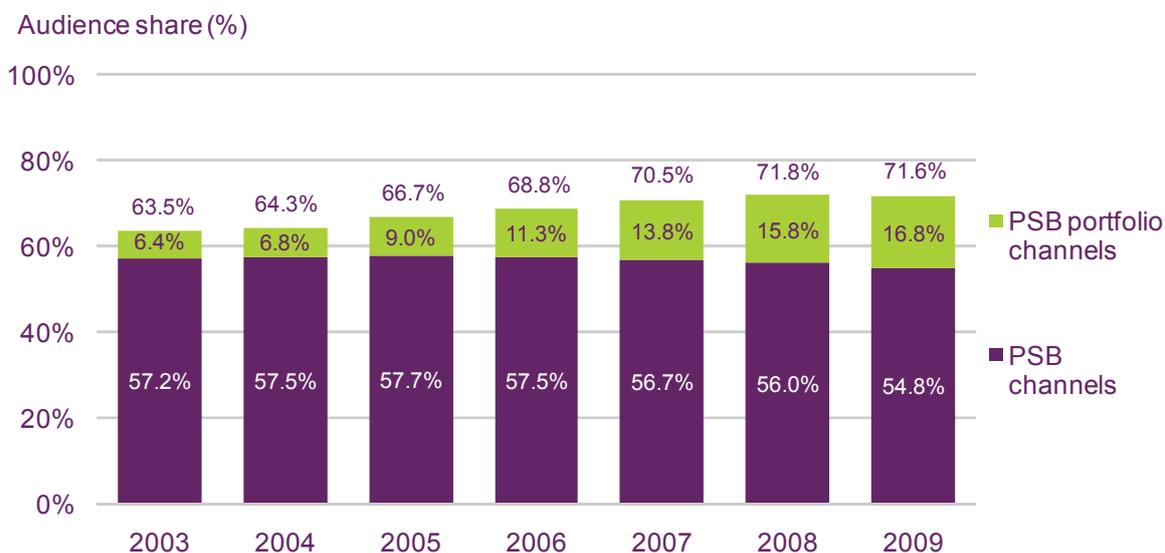
³⁰ http://www.bbc.co.uk/blogs/bbcinternet/img/Publicity_pack_February_2010.pdf

³¹ The main PSB channels are defined as BBC One, BBC Two, ITV1, Channel 4 and Five.

³² The PSB portfolio channels are defined as BBC Three, BBC Four, CBBC, CBeebies, BBC News, BBC HD, BBC Parliament, ITV2, ITV3, ITV4, CITV, Men & Motors, ITV News, Channel 4 +1, E4, More4, Film4, 4Music, Fiver and Five USA.

dropped by 1.7 percentage points to 56.0% by 2008. This reduction was more than made up for by the strong increase in share for the PSB portfolio channels, whose share rose by 6.7 percentage points between 2005 and 2008 (Figure 2.21).

Figure 2.21 PSB portfolios' share in multichannel homes

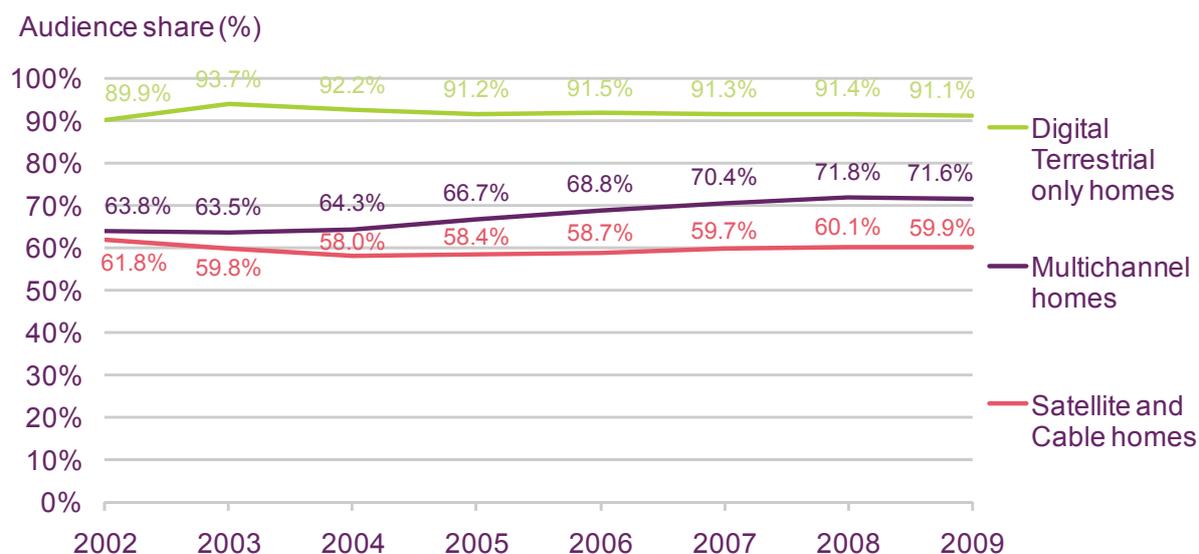


Source: BARB, all individuals

The trends set out in Figure 2.22 suggest that the pattern of increase and the subsequent decline in multichannel homes had two causes:

- Within satellite and cable homes, there was a modest increase in the viewing share of the PSB portfolio channels between 2004 and 2008. This was caused by the growing share among those channels already on air, and the launch of new channels by various PSBs, which attracted further share. In 2009, there were no new channel launches within the PSB portfolios, and at the same time non-PSB multichannel services began to build audience share.
- The PSB portfolios of multichannel services have always attracted a higher share in Freeview-only homes relative to satellite or cable homes. As the take-up of the digital terrestrial (DTT) platform rose, the PSB portfolio channels' average weighted share also rose. And as the rate of Freeview adoption has slowed, so has the average weighted growth in viewing of the PSB portfolio channels.

Figure 2.22 PSB portfolios' combined share



Source: BARB, all individuals

Figure 2.23 illustrates the combined share in multichannel homes of the main PSB channels, and the share added by their multichannel services. The former has fallen every year since 2006, but in 2009 the reduction was greater than at any point in the last six years (share fell by 1.2 percentage points).

Meanwhile, the PSB portfolio channels' share has increased in multichannel homes since 2003. Between 2005 and 2008, this increase was greater than two percentage points a year, but in 2009 the rate of growth slowed to 1.1 percentage points.

Figure 2.23 Annual growth in share of the main PSBs and their portfolio channels



Source: BARB, all individuals in multichannel homes

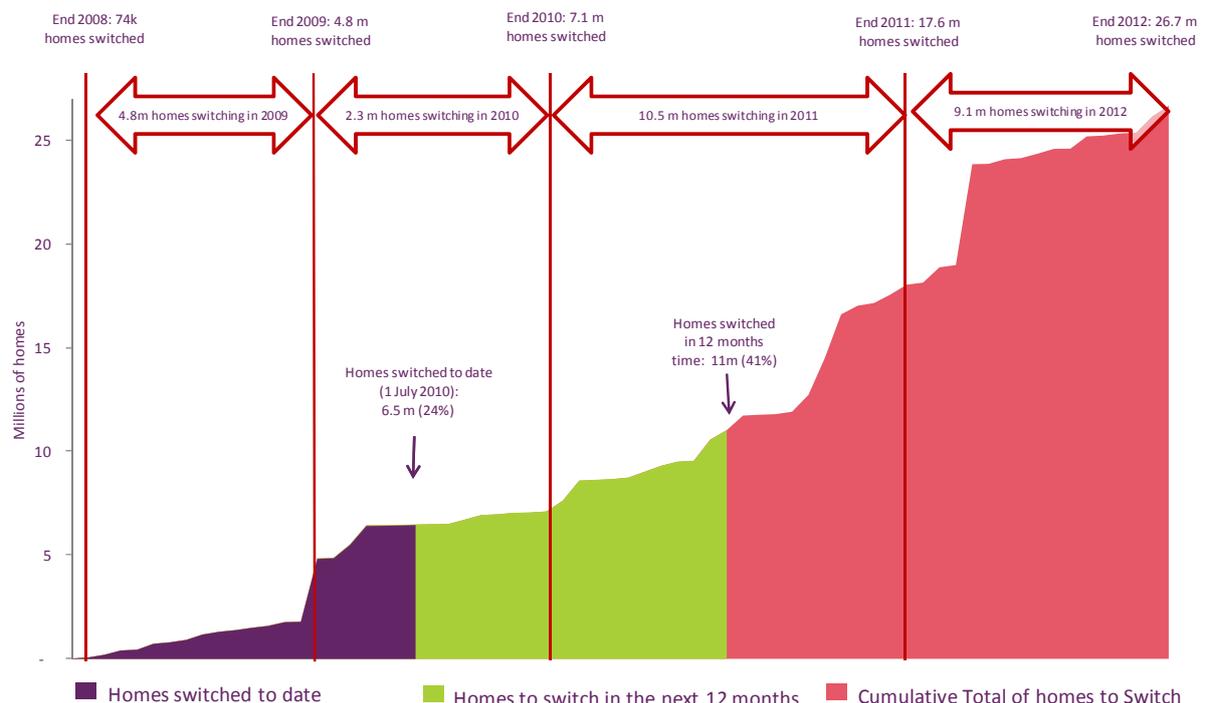
2.1.10 Roll-out of digital switchover drives digital TV take-up

During 2009 and early 2010, the TV switchover programme gathered pace across the UK. At the end of June 2010, analogue terrestrial television signals were switched off at 21 transmitter groups, creating the first all-digital TV regions.

With digital switchover (DSO) complete in the Border, Wales, West Country, Granada and West TV regions, and switchover well under way in the north of Scotland by June 2010, the programme had been completed for nearly a quarter (24%) of homes.

Over the next 12 months a further 4.5 million homes will be switching to digital, which will bring the programme to over 40% completion. The two largest remaining parts of the programme are the Central and Yorkshire switchovers, early in 2011, and London in 2012.

Figure 2.24 Digital switchover programme status to end of June 2010



Source: Digital UK programme office

Digital TV take-up is being driven in part by TV switchover

By the end of March 2010, 92% of UK homes had digital TV on at least the main TV set. Research in the ITV regions that have switched to digital suggests that the TV switchover process was a trigger for homes to convert to digital television. In those regions, 60% said that they converted at least one TV set in their home to get ready for switchover. In most cases secondary TV sets were upgraded in the run-up to DSO (primary sets having already been converted). But on average 5%, of homes in each switchover region took digital TV for the first time in preparation for switchover.

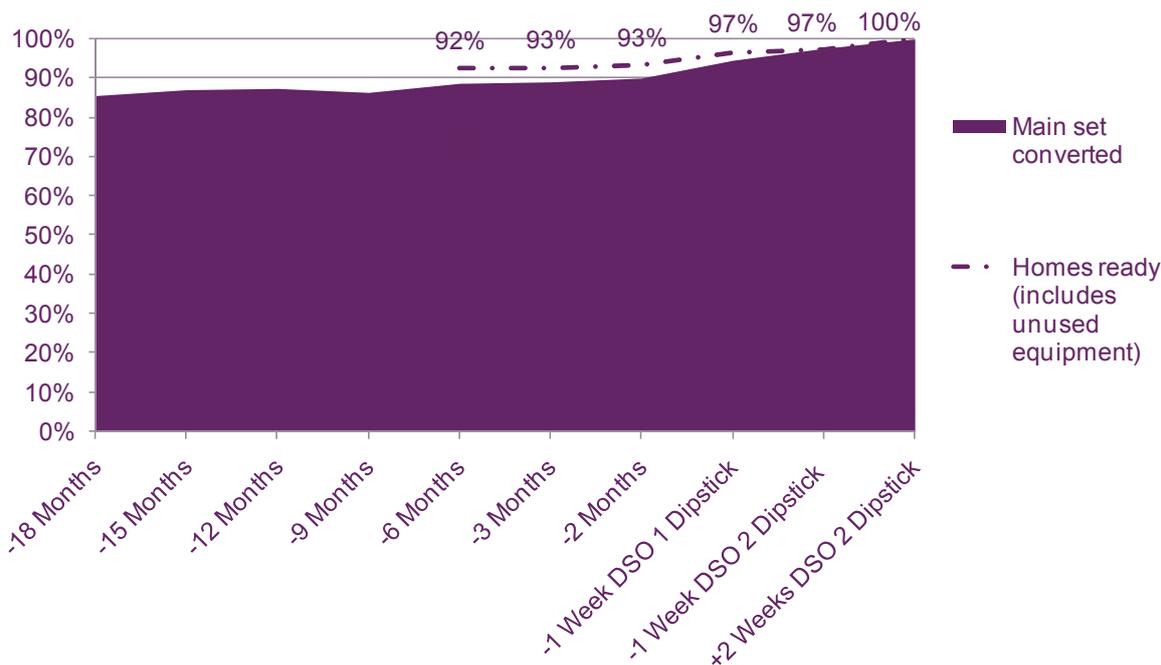
The 8% of analogue-only homes in the UK have different demographic characteristics to those that have switched to digital. Analogue TV viewers are more likely to be female, living on their own and older (i.e. 75+). This makes large parts of the remaining analogue population in the UK eligible for the BBC-run Digital Switchover Help Scheme, which provides additional help with the TV switchover to vulnerable groups. Although digital TV

take-up is high across all income groups, analogue-only homes are slightly more likely to rely on low incomes (27% analogue compared to 19% digital).

High digital TV take-up on main and secondary sets in switched regions

With switchover complete in Border, West Country, Wales, Granada and West TV regions, research conducted after DSO showed that all households in the switchover region had access to digital TV two weeks after the switch.

Figure 2.25 Average main TV set take-up across regions switched (Border, Wales, West Country, Granada and West)



Source: 2008 to 2010 Digital UK Switchover Tracker Survey, pre- and post-switchover dipstick surveys in Border, Wales, West Country Granada and West. Sample sizes n>150 respondents for all data points. *Owning equipment in preparation for switchover was only tracked from 6 months out point. Q Which, if any, of these types of television does your household receive at the moment?

The high levels of main-set conversion at, or shortly after, switchover disproved the predictions that 5% of homes would not be ready to switch to digital at the point of switchover³³.

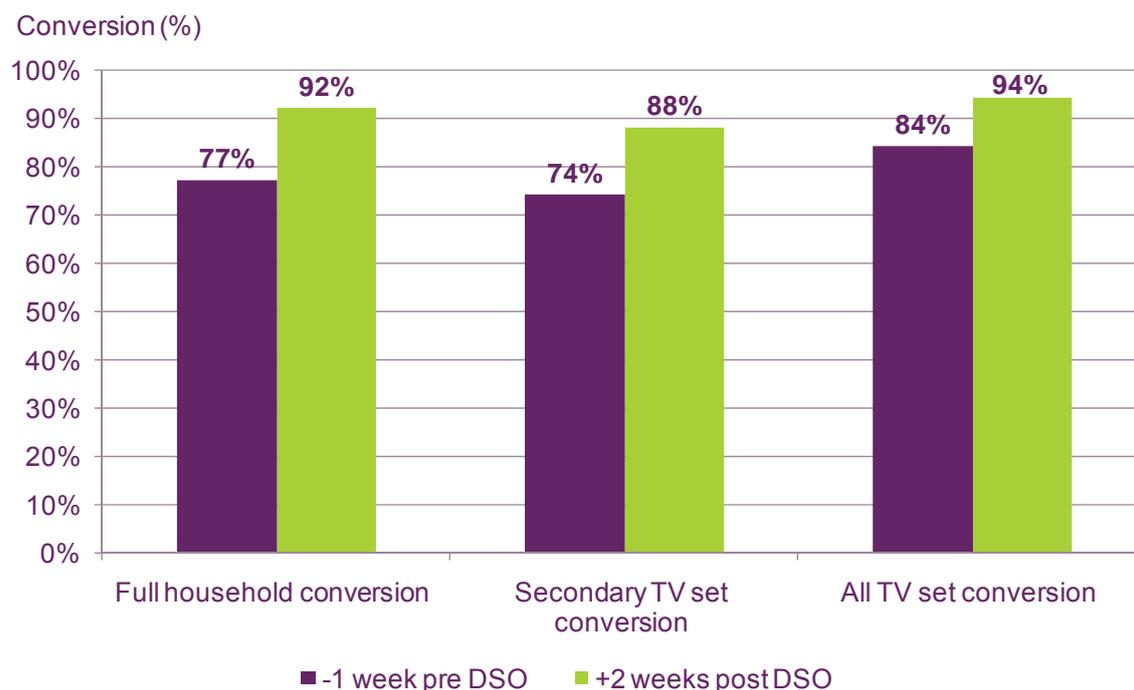
Digital UK's Switchover Tracker, monitoring the number of 'resisters', showed that the proportion of people planning to go without TV after switchover had dropped to around 2% by 2007. When questioned more closely, 0.2% said they intended to go without digital TV after switchover.

High conversion rates of main TV sets for switchover have been matched by higher than expected take-up on secondary TV sets in the regions that have switched. On average, 92% of homes switched their sets to digital, up 15 percentage points from the 77% average conversion before switchover. The proportion of fully-converted homes was highest in the Granada TV region (97%), the largest TV region switched to date, with more than three

³³ Generics report, 'Attitudes to Digital Switchover', March 2004

million homes. On average, 88% of secondary sets were upgraded and, overall, 94% of all TVs in the areas switched are now receiving digital.

Figure 2.26 Digital TV growth on secondary sets, before and after switchover



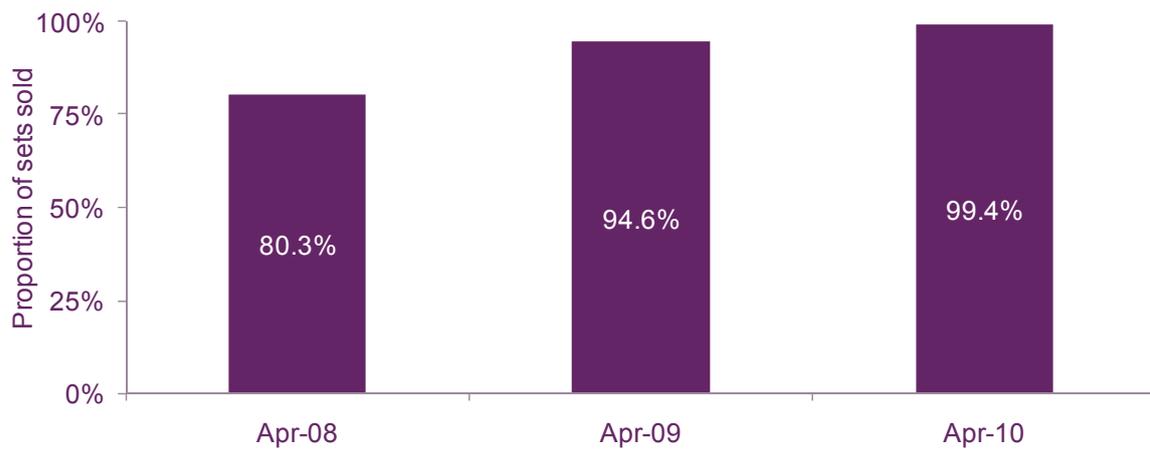
Source: Digital UK programme office, pre- and post-switchover dipstick surveys in Border, Wales, West Country Granada and West, sample size n>150 respondents on each survey
 Q Which, if any, of these types of television does your household receive at the moment?

Conversion results by TV platform indicate that the market shares on all major TV platforms - satellite, cable and DTT - increased following switchover. The majority of main set conversions in regions switched were through satellite and Freeview, the most widely-used digital TV platforms on main sets.

More than 99% of TVs sold last year had DTT built in

In April 2010, 99.4% of all TV sets sold had an integrated DTT tuner to receive Freeview services, a significant increase since 2005, when less than 50% of televisions sold had a digital tuner built in. Even in 2008, after the switchover pilot in Copeland, West Cumbria, had been completed, just 80% of TV sales were digital.

Figure 2.27 Sales of integrated digital TV sets as a proportion of all TV sets sold



Source: GfK Retail and Technology equipment sales data

2.2 The TV and audio-visual industries

2.2.1 Introduction

This section examines some of the key characteristics of the UK's audio-visual sector during 2009. It focuses on a range of metrics from the broadcast television industry and from those companies delivering audio-visual content over the internet.

Key points in this section include:

- **UK television broadcasters generated £11.1bn of revenue in 2009, a fall of £49m (-0.4%) on 2008 as growing subscription revenue was more than offset by a declining advertising market.** Of all revenue streams analysed by Ofcom, net advertising revenue (NAR) saw the sharpest decline, down 9.6% to £3.1bn. Pay-TV providers recorded revenue of £4.6bn, a 7.5% increase on 2008 (page 123).
- **Revenue in the multichannel broadcasting sector grew by 6% (£186m) in 2009 to reach £3.2bn,** with income to all the main channel genres included in our analysis growing during 2009. Revenue among channels in the Sport and Entertainment genres both increased by 5%, to £1.6bn and £1.0bn respectively (page 127).
- **UK television channels invested marginally less on programming (originated, acquired, repeated) in 2009 in the face of challenging market conditions.** They spent £5.1bn on programmes, a 0.3% decline on 2008 (page 128).
- **Spend on first-run originated programming for the five main PSB channels fell in 2009, down by 7.4% to £2.41bn.** The five main PSBs invested £3.05bn on first-run originations in 2004, representing a decline of 20.9% over the last five years. All of the five main PSB channels – BBC One, BBC 2, Channels 3 (plus GMTV1), 4, 5 – invested less in all network programming – including commissions, acquisitions and repeats – during the year (page 129).
- **In line with reduced spending on originations by the PSBs, total broadcast hours of originated programming fell in 2009,** down 8.1% (2,680 hours) to 30,484 hours, the lowest for more than five years. The sharpest decline was in programming for nations and regions, down by 13.2% (1,593 hours) to 10,439 (page 131).
- **Independent producers are commanding a growing share of the PSB origination spend.** Despite a drop in spending across the production sector of 3% in real terms during 2009, the in-house sector experienced a reduction of 25%. The result was that the independents' share of available production expenditure grew from 40% in 2005 to 46% in 2009 (page 143).
- **Independent producers attract a large and growing share of both funding and hours among the largest genres in peak time.** Their share of funding in Drama, Entertainment and Factual has grown over the last decade from 49.8% to 61.4% (page 146).
- **For the first time, in 2009 advertising made up more than half of online TV revenue.** Advertising revenues from free-to-view streams now account for £54.3m out of total online TV revenue of £94m. This accounted for more than pay-per-view, downloads and subscription revenue combined (page 177).

2.2.2 Television industry revenue

UK television industry generated revenue of £11.1bn in 2009

The UK television industry generated £11.1bn of revenue in 2009, a fall of £49m (-0.4%) on 2008, as growing subscription revenues were offset by a declining advertising market (Figure 2.28).

TV broadcasters experienced a 9.6% fall in net advertising revenues (NAR), down by £335m year on year, as the effects of the recession took hold. This was against a backdrop of a shrinking UK advertising market overall. Advertising spend (which includes the costs of advertisement production and agency fees) across all sectors was £14.5bn in 2009, 12.5% lower than the £16.6bn spent in 2008³⁴.

Pay-TV subscriber revenue reached £4.6bn, a 7.5% increase on 2008. The gap between subscription and net advertising revenue nearly doubled (up by 81%) in 2009, reaching £1.5bn, up from £807m in 2008. Subscription revenue's share of total TV industry revenue was up by three percentage points, from 38% to 41%. This came at the expense of television NAR, which saw its share of the market fall from 31% to 28%.

Ofcom estimates that the amount of the BBC's annual revenue allocated to TV stood at £2.7bn in 2009, a slight (1.5%) increase year on year, representing a 24% share of the total market. Other revenue (including sponsorship and teleshopping) declined by 9% in 2009 to £713m, taking a 6% share of the market, down marginally on 2008.

³⁴ © Advertising Association/Warc Expenditure Report (www.warc.com/expenditurereport)

Figure 2.28 Total TV industry revenue, by source



Source: Ofcom/broadcasters

Note: Figures expressed in nominal terms and replace previous Ofcom revenue data for TV industry, owing to restatements and improvements in methodologies. 'Subscription revenue' includes Ofcom's estimates of BSkyB, Virgin Media, BT Vision, TalkTalkTV, Setanta Sports (until its closure), ESPN and Top Up TV television subscriber revenue in the UK (Republic of Ireland revenue is excluded). It also excludes revenue generated by broadband and telephony. 'Other' includes TV shopping, sponsorship, interactive (including premium-rate telephony services), programme sales and S4C's grant from the DCMS. The BBC restated licence fee revenue in 2008. Totals may not equal the sum of the components due to rounding.

When focusing on the four main revenue sources by share, the key trends of declining net advertising revenue and rising subscription revenue are clear. NAR experienced a fall in share of revenues of six percentage points between 2004 and 2009 to 28.2%, while subscriptions have increased share by 7.4 percentage points to 41.4%.

The amount the BBC spends on television services has been broadly stable over the five-year period, falling slightly (-0.4%) to 24.0% in 2009. Other revenue, explored in detail in Section 2.2.3, constituted 6.4% of the 2009 total, down by 1.4 percentage points since 2004.

Figure 2.29 Total TV industry revenue sources, by share



Source: Ofcom/broadcasters

Note: Figures expressed in nominal terms and replace previous Ofcom revenue data for TV industry, owing to restatements and improvements in methodologies. 'Subscription revenue' includes Ofcom's estimates of BSkyB, Virgin Media, BT Vision, TalkTalkTV, Setanta Sports (until its closure), ESPN and Top Up TV television subscriber revenue in the UK (Republic of Ireland revenue is excluded). It also excludes revenue generated by broadband and telephony. 'Other' includes TV shopping, sponsorship, interactive (including premium-rate telephony services), programme sales and S4C's grant from the DCMS. The BBC restated licence fee revenue in 2008. Totals may not equal the sum of the components due to rounding.

The TV channel sector's revenues fell in 2009

Figure 2.30 highlights the declining revenues of the main commercial PSB channels and multichannel broadcasters. The former (Channels 3 (plus GMTV1), 4, 5 and S4C) saw revenues fall by £297m (12.3%) in 2009 to £2.12bn, down from a high of £2.9bn in 2005. The commercial PSBs attracted a 19% share of TV revenue, down three percentage points over the 12-month period.

The multichannel sector (which includes the digital portfolio channels of the PSBs) also saw revenues fall, down £107m (6.2%) year on year to £1.6bn. This marks the first year of decline in revenues for multichannel broadcasters since Ofcom started analysis of revenues by sector, although the sector held its share of total TV industry revenues last year at 15%.

Publicly-funded channels, which include Ofcom's estimate of BBC revenue allocated to TV and S4C's grant from the Department for Culture, Media and Sport, accounted for £2.8bn of revenue (a stable 25% share).

Figure 2.30 Total TV industry revenue, by sector



Source: Ofcom/broadcasters

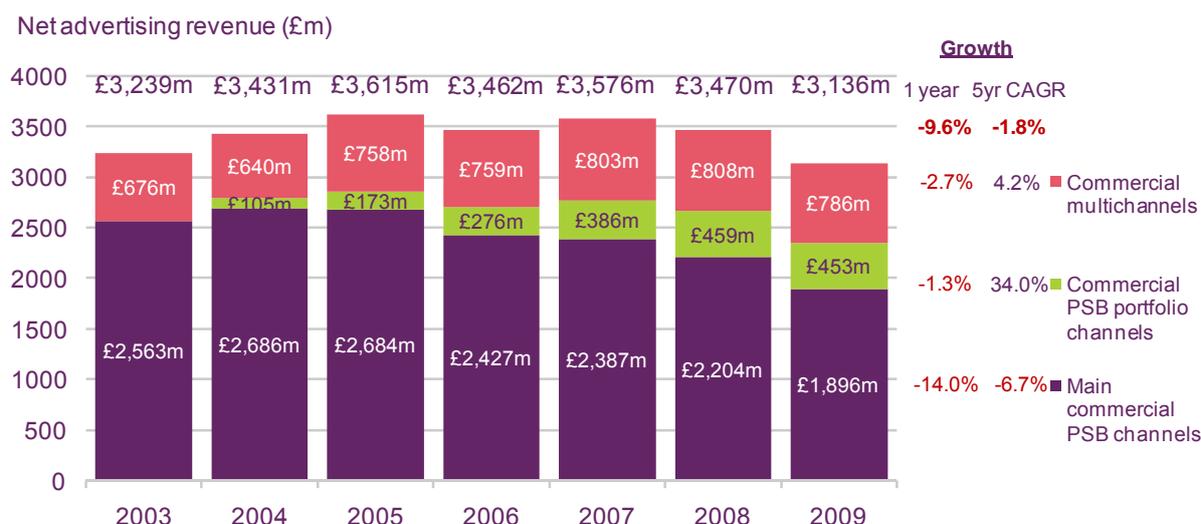
Note: Figures expressed in nominal terms. Main commercial PSB channels comprise ITV1, STV, UTV, Channel Television, GMTV1, Channel 4, Five and S4C. Commercial multichannels comprise all multichannels other than those owned by ITV1, Channel 4 and Five. Publicly-funded channels comprise BBC One, BBC Two, the BBC's portfolio of digital-only television channels and S4C. S4C is listed under publicly-funded and commercial analogue channels because it has a mixed advertising and public funding model. The BBC restated licence fee revenue in 2008. Totals may not equal the sum of the components due to rounding.

PSB portfolio channels experienced their first decline in advertising revenues during 2009

Growing advertising revenue among the PSBs' portfolio channels – such as ITV2, E4 and Fiver – has historically helped to offset reductions in revenue across the main PSB channels. Figure 2.31 shows that the PSB portfolio channels have been the fastest-growing component of the market in recent years, with a compound annual growth rate of 34% per year since 2004. This can be explained by factors such as the growing adoption of Freeview, on which viewing share of the PSBs is highest; a move to free-to-air business models to maximise viewership, and an increasing number of channels from the PSBs.

However, Figure 2.31 also shows that revenue generated by the portfolio channels fell for the first time in 2009, down by £6m (1.3%) – consistent with our analysis of their share of viewing, which is set out in Section 2.1.9.

Figure 2.31 TV net advertising revenues, by source



Source: Ofcom/broadcasters. Note: Figures expressed are in nominal terms and replace previous data published by Ofcom. Main commercial PSB channels comprise ITV1, STV, UTV, Channel Television, GMTV1, Channel 4, Five and S4C; Commercial PSB portfolio channels include ITV2, 3, 4, Men & Motors, CiTV, E4, More 4, Film 4, 4Music, Five USA and Fiver (plus their '+1' channels). For previous years closed channels have also been included. Sponsorship revenues are not included. Totals may not equal the sum of the components due to rounding.

Along with their absolute levels of advertising revenue falling, the commercial PSBs also saw their share of TV advertising fall, to the benefit of multichannel broadcasters. Five had the sharpest fall, down 1.2 percentage points from 7.8% in 2008 to 6.6% in 2009. ITV1/Channel 3 licensees and Channel 4/S4C also experienced reductions in shares (by one percentage point and 0.9 of a percentage point respectively) while GMTV1 managed to maintain its NAR share between 2008 and 2009.

While the portfolio channels of the PSBs experienced declining NAR in 2009, their share of the market rose by 1.2 percentage points to 14.4%. The share of the remaining multichannel players (excluding the PSB portfolio channels) rose year on year, accounting for just over a quarter (25.1%) of NAR in 2009. This represented an increase of 1.8 percentage points.

Figure 2.32 TV net advertising revenue market shares, 2008 - 2009



Source: Ofcom/broadcasters. ITV1/Channel 3 includes ITV1, STV, UTV and Channel Television.

2.2.3 Other TV revenue

Broadcasters raised less revenue from other/non-broadcast sources in 2009

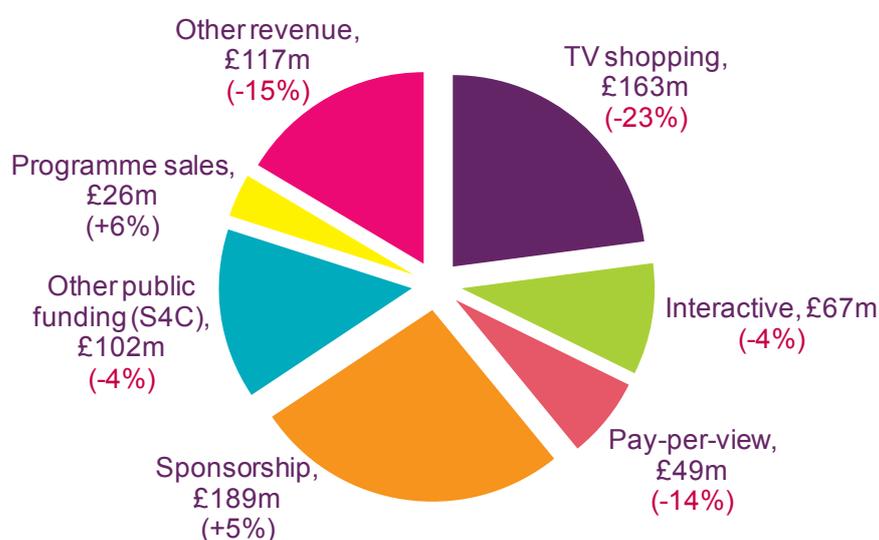
Other revenue, which includes all income other than spot advertising, has become increasingly important for broadcasters. It allows them to diversify their income and reduce reliance on advertising and pay-TV carriage fees. In 2009, both PSB and multichannel broadcasters generated £713m in other revenue, down 9% from 2008 (Figure 2.33).

Most of the category's revenue components fell in 2009, with transactional services in particular reporting decreased revenues. Interactive revenue accounted for £67m in revenues in 2009, down 4% year on year, and little more than half of the £122m earned in 2006 when premium-rate telephony-based 'quiz-TV' services were at their most popular.

Pay-per-view revenue stood at £49m last year, down 14%, while TV shopping revenues dropped by nearly a quarter (23%) to £163m. TV shopping includes all retail-related activities and represents the aggregate operating margin on products and services sold via the channel (excluding the operational costs of the business). Of the categories that did see growth in 2009, programme sales were up by 6% to £26m, while sponsorship, which we identify separately from 'spot' advertising revenue in our analysis, increased by 5% to £189m. We also include S4C's grant from the Department for Culture, Media and Sport in 'other' revenue, which fell in 2009 by 4% to £102m. Revenue that does not fit into the categories outlined ('other') fell by 15% to £117m.

Figure 2.33 Breakdown of other/non-broadcast revenue, 2009

Total non-broadcast revenue = £713m (-9%)



Source: Ofcom/broadcasters. Note: Percentage figures in brackets represent year-on-year change. TV shopping represents aggregate operating margin of products sold via television. Percent figures represent year-on-year change. Totals may not equal the sum of the components due to rounding.

2.2.4 Revenue among multichannel genres

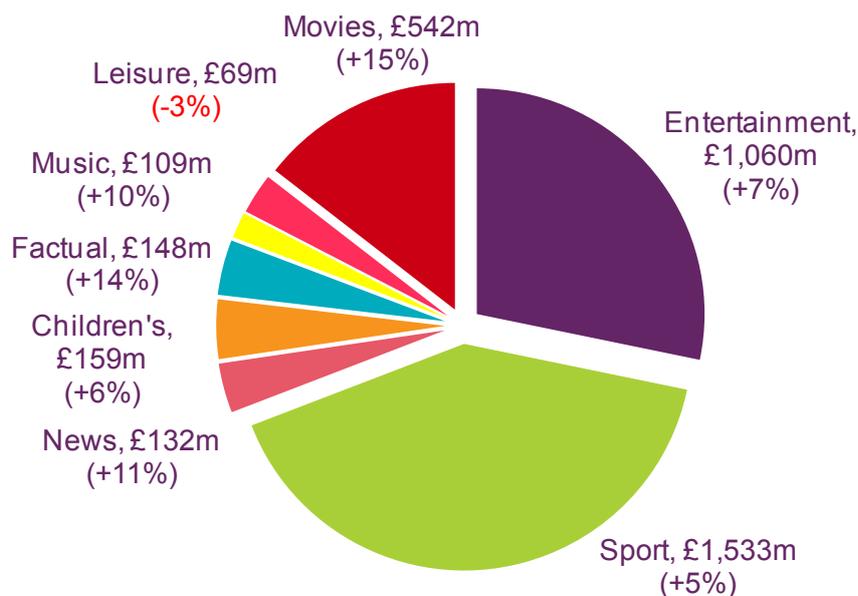
Revenue among key multichannel genres continued to grow in 2009

Figure 2.34 sets out the revenue generated by multichannel services in key genres, most of which experienced growth in 2009, to reach £3.8bn, an increase of £254m (7%). Total multichannel revenue exceeds that of platform operator revenue because this includes wholesale subscriber payments from platform operators to channels (this is not included in the preceding analysis, to avoid double-counting subscription revenue).

Sports remained the channel genre that generated most revenue in 2009, up 5% over 12 months to £1.6bn. Entertainment, the second largest genre by revenue but the largest by number of channels, also saw a 7% uplift in revenues, passing the £1bn mark to reach £1.1bn. Film channels' revenue rose by 15% to reach £542m. Of the eight categories analysed, Leisure was the only genre to experience falling revenues in 2009, down 3% to £69m. The analysis includes all multichannel services in the key genre analysed, including the portfolio channels of the PSBs (but not BBC-owned services).

Figure 2.34 Revenue generated by multichannel broadcasters, by genre, 2009

Total revenue = £ 3,751m across the eight genres included (+7%)



Source: Ofcom/broadcasters

Note: Percentage figures in brackets represent year-on-year change. The figures in this chart include all sources of revenue accruing to multichannels and are expressed in nominal terms. This includes those set out in Figure 2.28 plus wholesale subscriber payments from platform operators.

2.2.5 Spend on UK television programmes

Broadcasters spent marginally less on programmes in 2009

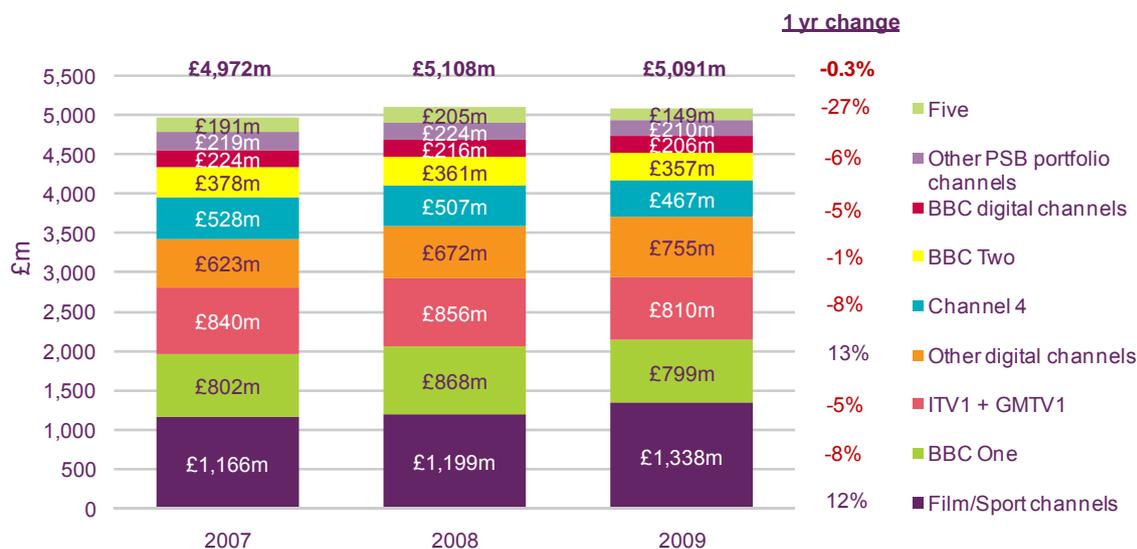
UK broadcasters' expenditure on networked content – including commissions, acquisitions and repeats - fell marginally in 2009 in challenging market conditions; it totalled £5.1bn, a 0.3% decline on 2008.

The PSBs in particular spent less on programmes for their core channels in 2009. Five reduced spend by the highest margin, down by 27% to £149m. It was not alone among PSBs in reducing spend, with BBC One down 8% to £799m, BBC Two down 1% to £357m, ITV1/Channel 3 licensees and GMTV1 down 5% to £810m and Channel 4 down 8% to £467m.

Sports and Film channels increased their programme spend, largely due to the investment made in broadcast rights. The two genres accounted for a combined £1.3bn of spend in 2009, up 12% year on year (accounting for 26% of the total). The biggest increase in content spending was made by digital channels (excluding the PSB portfolio channels as well as Film and Sports), which invested £755m in 2009, up by 13%. Given the dynamic nature of the UK multichannel market, with channels regularly closing and launching, the number and

type of channels included in our analysis changes from year to year and does not therefore allow an exact comparison.

Figure 2.35 Spend on network TV programmes, 2007 - 2009



Source: Ofcom/broadcasters.

Note: Figures expressed in nominal terms. Figures do not include spend on nations and regions output. BBC digital channels includes BBC Three, BBC Four, BBC News Channel, BBC Parliament, CBBC and CBeebies (but not BBC HD). 'Other digital channels' include all genres (excluding Sports and Films). Programme spend comprises in-house commissions, productions, commissions from independents, spend on acquired programmes, spend on rights and repeats.

2.2.6 Spend on first-run originations on the five main PSB channels

Spending on originations continued to decline in 2009

Spend on first-run originated programming for the five main PSB channels fell in 2009 in nominal terms, down by 7.4% to £2.41bn, compared to the £3.05bn spent in 2004 (a decline of 20.9%). Output produced for viewers in the nations and English regions saw the largest decline, down 15.2% to £256m. Peak time and late-night parts of the schedule saw similar proportional falls in spend, down 6.8% and 6.6% to £1.32bn and £230m respectively.

While spend on programming is often seen as a key indicator of the quality of television, Ofcom research, published in the *Public Service Broadcasting Annual Report 2010*, found that despite the reductions in spending among the PSBs, perceived value of PSB programming remained high³⁵.

Reductions in content spending are driven by a variety of dynamics, not all of which suggest that the reductions have an on-screen impact. For example:

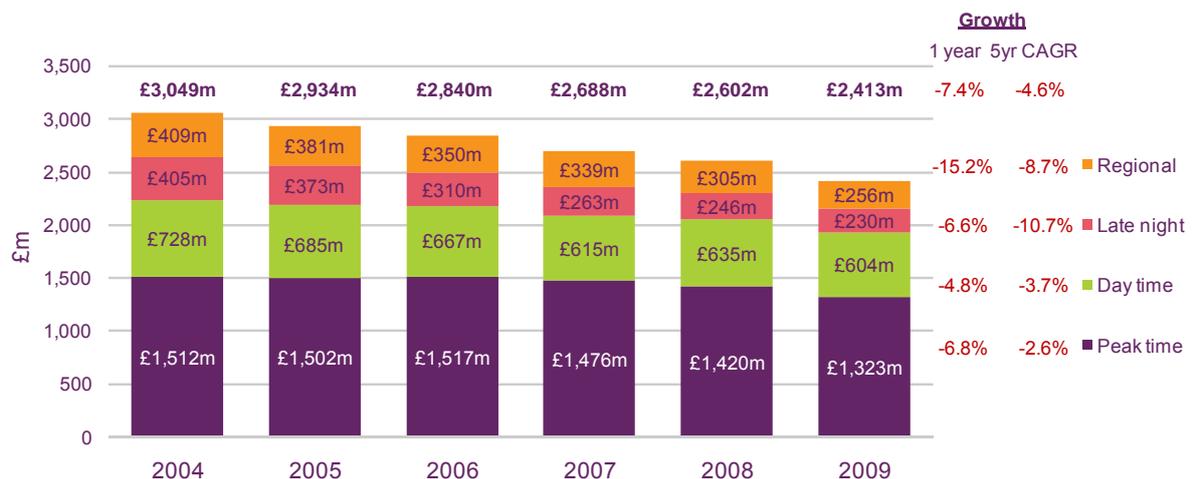
- broadcasters can save money at the point of programme commissioning due to efficiencies in the production value chain across the television industry;
- some broadcasters have taken steps to limit the amount they spend on on-screen talent (presenters);

³⁵ <http://stakeholders.ofcom.org.uk/binaries/broadcast/reviews-investigations/psb-review/psb2010/psbreport.pdf>

- there have also been changes to programmes, scheduling and commissioning strategies, e.g. the BBC Children’s strategy to produce fewer new programmes, but aiming to make these ‘bigger and better’; and
- some broadcasters are also putting the onus on production companies to generate extra finance to contribute towards programme making from other sources (‘gap funding’). For example, a recent report from producers’ industry body PACT estimated that independent producers were responsible for an increasing contribution to productions, estimated to be in the region of £200m in 2009³⁶.

At the same time, some broadcasters are increasing their content spend as part of a strategy to attract and retain viewers, and in some cases, to recruit subscribers to pay-TV platforms. In July 2010, Sky signed an output deal with US producer HBO, which gives the pay-TV broadcaster rights to broadcast all new HBO-commissioned programmes³⁷. Meanwhile, Channel 4 committed an extra £50m to programming for 2010 – an increase of 10% to around £550m – at the end of July 2010. Other effects that have a tendency to drive up costs include the value of rights increasing, for example on sports and US series, and the inclusion of ancillary rights, such as video on demand, in contracts.

Figure 2.36 Spend on first-run originated output on the five main PSB channels



Source: Ofcom/broadcasters. Note: Figures are expressed in 2009 prices. They include GMTV1, spending in the nations and regions on English-language programming (and a small amount of Irish-language programmes) but do not include the BBC’s digital channels.

As published in Ofcom’s *Public Service Broadcasting Annual Report 2010*³⁸, our analysis indicates that the commercial PSB channels’ content spending as a proportion of revenue rose from 37% in 1998 to 56% in 2009. The ratio has declined for the BBC from 65% in 1998 to 56% in 2009. A variety of factors may have influenced this, including rising expenditure on infrastructure, and higher distribution costs, reflecting new distribution platforms. It is also possible that the ratio has increased for commercial PSBs because content spending strategies have not yet caught up with declining revenue from advertising.

³⁶ PACT policy survey and financial census 2010

³⁷ http://corporate.sky.com/investors/press_releases/2010/HBO.htm

³⁸ <http://stakeholders.ofcom.org.uk/binaries/broadcast/reviews-investigations/psb-review/psb2010/psbreport.pdf>

2.2.7 TV industry output

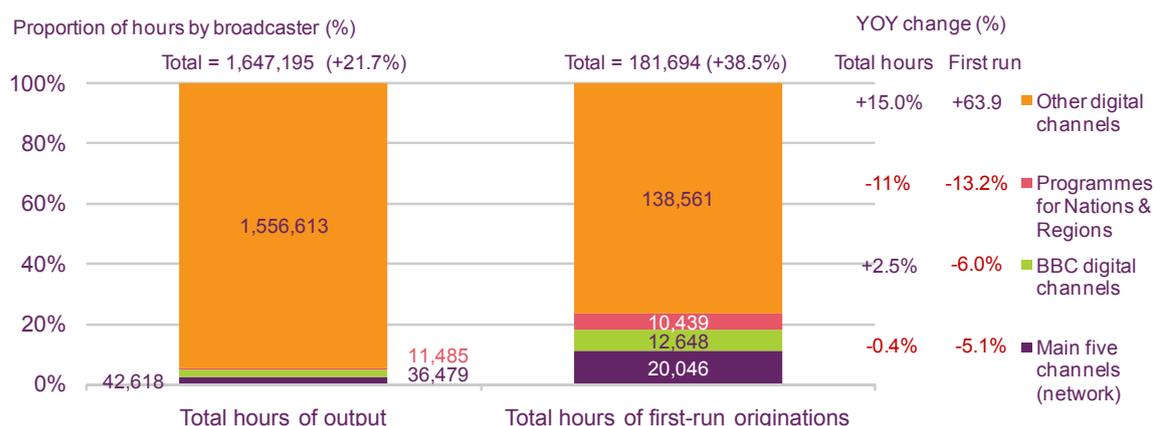
Over 2.9 million hours of television broadcast in 2009, up 14% year on year

UK broadcasters transmitted 2,902,649 hours of programming across all TV channels in 2009, an increase of 14% year on year. Figure 2.37 analyses the broadcast hours of all PSB channels and digital channels included in the key genres of Entertainment, Sports, Films, Factual, Children's, News, Leisure and Music.

Those channels broadcast 1,647,195 hours in 2009, of which 181,694 (11%) were first-run originations produced in-house or made by an external producer. The largest single component of first-run originations was for other digital channels, which includes the commercial multichannel broadcasters. They broadcast 138,561 hours of first-run output in 2009, an increase of 64% year on year. However, this includes a high proportion of live news content: 61,314 hours (44%) of total multichannel first-run originations were shown on the various news channels that broadcast to UK viewers.

Among the five main PSB channels, just under half (47%) of the 42,618 total hours were first-run originations, compared to originated hours on the BBC's digital channels of just over a third (12,648). The majority of programmes made by the BBC and Channel 3 licensees for the nations and regions (91% of the 11,485 hours) were first-run originations.

Figure 2.37 Total and first-run originated hours of output, all day, 2009



Source: Ofcom/broadcasters

Note: Percentage figures in brackets represent year-on-year change. The first-run figures include in-house productions and external commissions, not first-run acquisitions. GMTV1 is included within the figures for the five main channels. 'Other digital channels' includes Entertainment, Sports, Film, Factual, Children's, News, Leisure and Music genres. Regional hours exclude Welsh and Gaelic-language programming but do include a small proportion of Irish-language programmes.

2.2.8 Television output on the five main PSB channels

Hours of first-run originated output on the five main channels fell by 8% in 2009

In line with reduced spending on originations by the PSBs, total broadcast hours of originated programming fell in 2009, down by 7.7% (2,560 hours) to 30,485 hours, the lowest level for more than five years.

The sharpest decline was seen in programming for the nations and regions, down by 13.2% (1,593 hours) to 10,439, as broadcasters took advantage of relaxed quotas introduced during 2009. In particular, as part of the *Second Public Service Broadcasting Review*:

*Putting Viewers First*³⁹, Ofcom reduced some of the quotas for the production of regional programming by the Channel 3 licensees, with effect from the beginning of 2009⁴⁰. This was necessary to keep the cost of programme obligations to ITV in balance with the benefits to the broadcaster of continuing to hold the licences.

Meanwhile, network hours of first-run originations in peak time (18:00 – 22:30) declined by 3.3% in 2009 to 5,414 hours, while first-run originations throughout the rest of the schedules of the main PSBs fell by 5.8% (904 hours) to 14,632.

Figure 2.38 Hours of first-run originated output on the five main PSB channels



Source: Ofcom/broadcasters. Note: Figures include GMTV1 but do not include the BBC's digital channels. Regional hours exclude Welsh and Gaelic-language programming but do include a small proportion of Irish-language programmes.

Costs per hour of programming by broadcaster type

Figure 2.39 looks at the average cost per hour (CpH) of all programming - originations, acquisitions and repeats - produced by different types of broadcasters in 2005 and 2009. The CpH for the five main PSB networks⁴¹ was £60,600 in 2009, a 13.8% decline from the £70,300 recorded in 2005. This CpH spend far outweighs that of the multichannel broadcasters. The BBC's digital channels accounted for an average spend per hour of £5,800, down by just over a quarter (26.2%) from £7,900 in 2005.

While investment in multichannel programming has increased in recent years (see Figure 2.35), the number of channels, and therefore broadcast hours, have increased at a faster rate. This has in turn led to a decrease in CPH over the four-year period. The CpH for programming produced by the UK's commercial multichannel broadcasters⁴² fell by 38.9% between 2005 and 2009, from £2,200 to £1,300. This figure includes spending on broadcast rights, which in the case of Sports and Film channels, accounts for the greatest cost of producing output. Most multichannel services rely more heavily on acquired and repeat

³⁹ http://stakeholders.ofcom.org.uk/binaries/consultations/psb2_phase2/statement/psb2statement.pdf

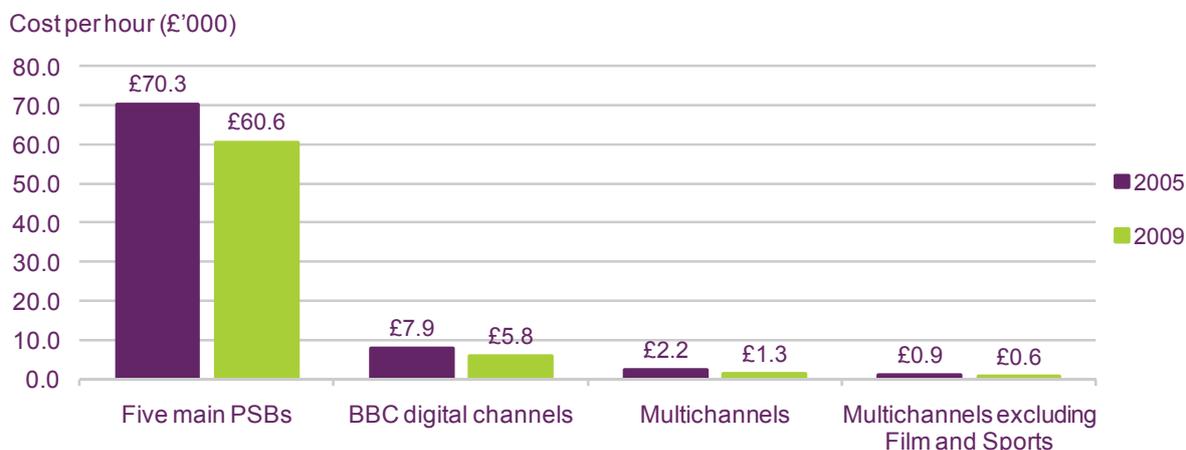
⁴⁰ For more information, read the statement on short-term regulatory decisions: http://www.ofcom.org.uk/consult/condocs/psb2_phase2/shortterm/

⁴¹ The five main PSBs excludes hours produced specifically for viewers in the nations and regions.

⁴² Multichannels include commercial channels in the eight key genre categories of Entertainment, Children's, Factual, Sports, News, Leisure, Music and Film.

programming compared to the PSB channels, which produce a higher proportion of more expensive originated programming (Figure 2.40). When excluding Sports and Film channels from the CpH for commercial multichannel broadcasters, the average cost is lower, at £600 CpH in 2009, which was down by a third (33.7%) on £900 in 2005.

Figure 2.39 Cost per hour for the five main PSB networks and multichannel broadcasters



Source: Ofcom/broadcasters. Note: Figures are expressed in real terms. Data for five main PSBs include GMTV1 and are for network channels. BBC digital channels include BBC Three, BBC Four, BBC News 24, BBC Parliament, CBBC, CBeebies and BBC HD. Multichannels include commercial channels in the eight key genre categories of Entertainment, Children's, Factual, Sports, News, Leisure, Music and Film.

Figure 2.40 illustrates how much, on average, the five main PSBs have spent per hour on first-run originated programming. Peak-time programming, by far the most expensive to produce, saw the average cost per hour reduce in 2009 by £10,000 (3.7%) to £244,000, as broadcasters spent less on their shows. Average costs per hour for first-run originations for regional and daytime programmes remained stable at £25,000 and £65,000 respectively in 2009, while spending on programmes in the late-night schedules increased by 2% to £43,000 per hour. This is in part due to the relatively low cost of production for 'quiz TV' that features less on the late-night schedules of the commercial PSBs.

Figure 2.40 Cost per hour for first-run originated content on five main PSB networks



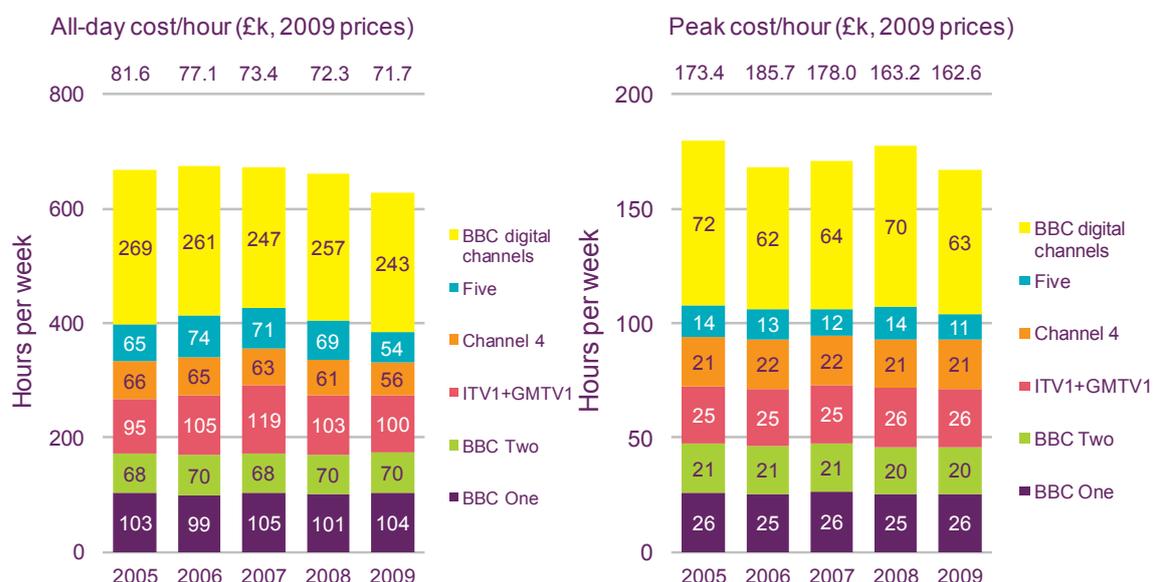
Source: Ofcom/broadcasters. Note: Figures are expressed in 2009 prices. They include GMTV1 but do not include the BBC's digital channels.

Figure 2.41 illustrates how many hours of first-run originations the PSB channels (including the five main PSB channels and the BBC's digital channels) broadcast on average per week. In 2009, the figure stood at an average of 627 first-run originated hours per week across the entire day (24 hours), down from 661 in 2008. The equivalent figure for peak-time hours was 167 in 2009, down from 177 in 2008.

First-run originated hours on BBC One, both all day and in peak time, increased in 2009 by three hours to 104 across the entire schedule and by one hour to 26 in peak. BBC Two managed to maintain its hours of first-run originations in 2009, both all day and in peak time, at 70 and 20 per week respectively.

Similar trends were seen at ITV1/GMTV1 and Channel 4, which maintained levels of average weekly first-run original hours in peak time but declined slightly in all day (by 3% and 8% respectively). The steepest proportional declines were seen at Five, where all day and peak-time first-run originations fell by 15 hours (22%) and three hours (22%) respectively to 54 and 11 hours per week. The BBC's digital channels also reduced first-run originations in all day and peak time by 6% and 10% respectively, to 243 and 63 hours.

Figure 2.41 First-run originated output by the PSBs, all day and peak time

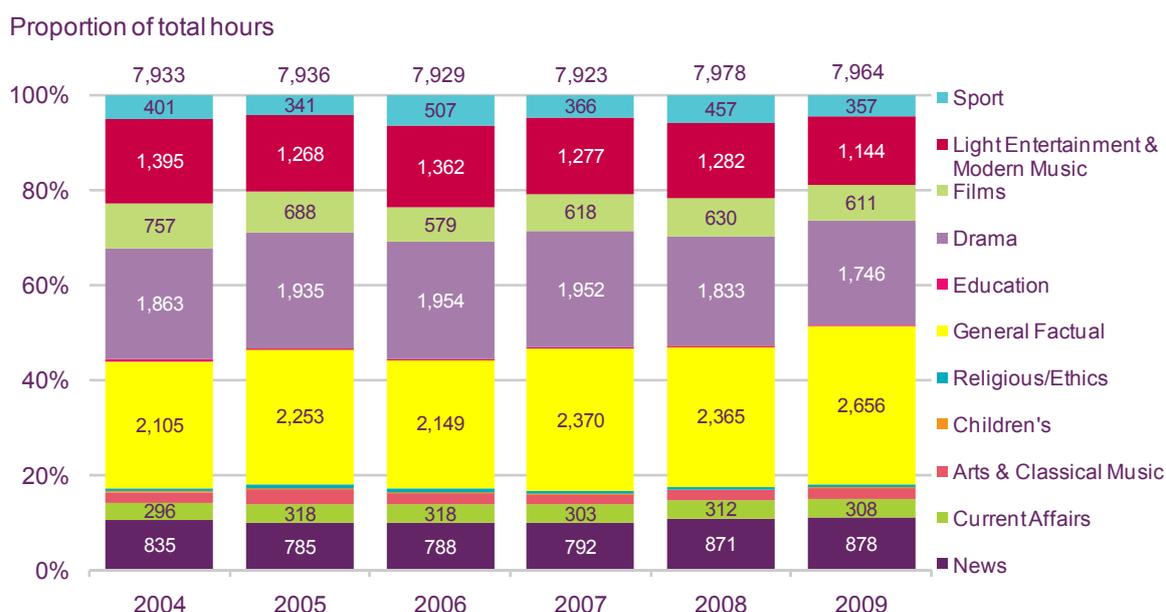


Source: Ofcom/broadcasters. Note: Figures do not include spend on nations and regions output.

At the level of individual programme genres among the five main PSB channels in peak time, there was a marked increase in hours of General Factual programmes during 2009, up by 291 hours (12%) to 2,656. Arts & Classical Music was up by 22% to 197 hours, due to increased hours of Factual Arts programming.

Among the genres that saw decreased hours in peak time, Drama fell by 5% to 1,746 hours, Light Entertainment and Modern Music decreased by 11% to 1,144 hours, and Sports dropped by 22% to 357 hours (the 2008 spike was in large part due to the Olympics and European football championships). News and Current Affairs genres were relatively stable between 2008 and 2009.

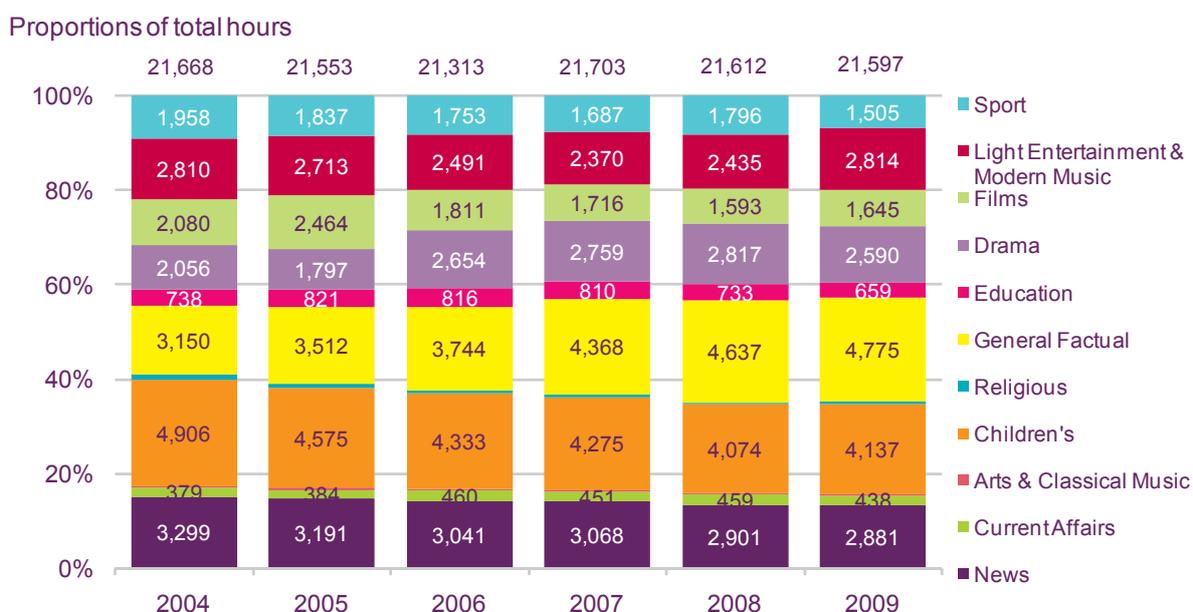
Figure 2.42 Genre mix on five main PSB channels in peak time, by hours



Source: Ofcom/broadcasters. Note: Includes five main channels including GMTV1, figures do not include hours of nations and regions output.

In daytime (6:00 – 18:00) during 2009, there was a similar story for Drama, which declined by 8% to 2,590 hours and Sports, down 16% to 1,505 hours. Light Entertainment and Modern Music increased their hours by 6% to reach 2,814 hours, while Arts & Classical Music was down 12% to 51 hours. Hours of Children's programming in daytime increased year on year by 63 hours (2%) to 4,137, while News hours reduced by 20 hours (0.6%) to 2,881.

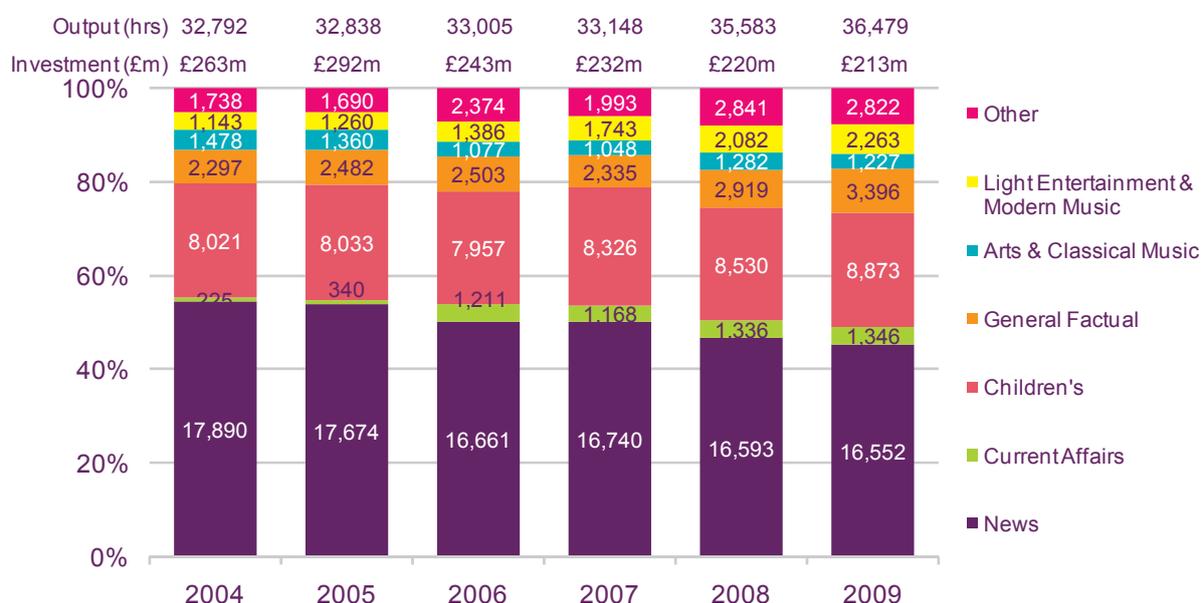
Figure 2.43 Genre mix on five main PSB channels in daytime



Source: Ofcom/broadcasters. Note: Includes five main channels plus GMTV1. Figures do not include hours of nations and regions output.

Figure 2.44 sets out the genre mix of the BBC's digital channels, which dedicated more hours to children's programming in 2009 than they did in 2008, up by 343 hours (4%) to 8,873. Other key genres that saw increased hours in 2009 were General Factual, up 16% to 3,396 hours, and Light Entertainment & Modern Music, up 9% to 2,263 hours. Overall, the BBC reduced the amount it spent on programming for its digital channels by 3% to £213m.

Figure 2.44 The BBC's digital channels genre mix by hours (all day)



Source: Ofcom/broadcasters. Note: BBC digital channels include BBC Three, BBC Four, BBC News 24, BBC Parliament, CBBC, CBeebies and BBC HD. Investment figures are in 2009 prices. Other includes: Education, Drama, Film, Religion and Sports. The BBC allocated Parliamentary coverage to the Current Affairs genre in the data for 1998 to 2003. From 2004, it has been allocated to either News or Current Affairs.

2.2.9 Multichannel output and spend

Entertainment channels accounted for more than a quarter of multichannel hours in key genres

Figure 2.45 focuses on the composition of broadcast hours in the multichannel sector. Channels in the Entertainment genre broadcast 422,053 hours of programming in 2009, more than a quarter of the total hours of output among the eight key genres included in our analysis⁴³; total hours in these genres increased by 16% in 2009 to 1,571,420 hours.

The Entertainment section has become a sought-after area of electronic programme guides (EPGs) because this genre category appears first in EPG listings. The high positioning on the EPG can also create a 'halo effect' for channels situated near bigger channel brands. In recent years, some genre-based multichannel broadcasters, including MTV (music) and Discovery (lifestyle and factual) have launched general entertainment channels, not only to attract viewers but also to cross-promote their channels in other sections of the EPG.

Total first-run multichannel hours increased in 2009, up by 46% year on year to 265,626 hours. This was driven in part by growth in the number of channels in the News category, where hours expanded by 73% in 2009 to reach 89,617 hours. News channels represent a disproportionately high number of first-run hours because the majority of their output is live,

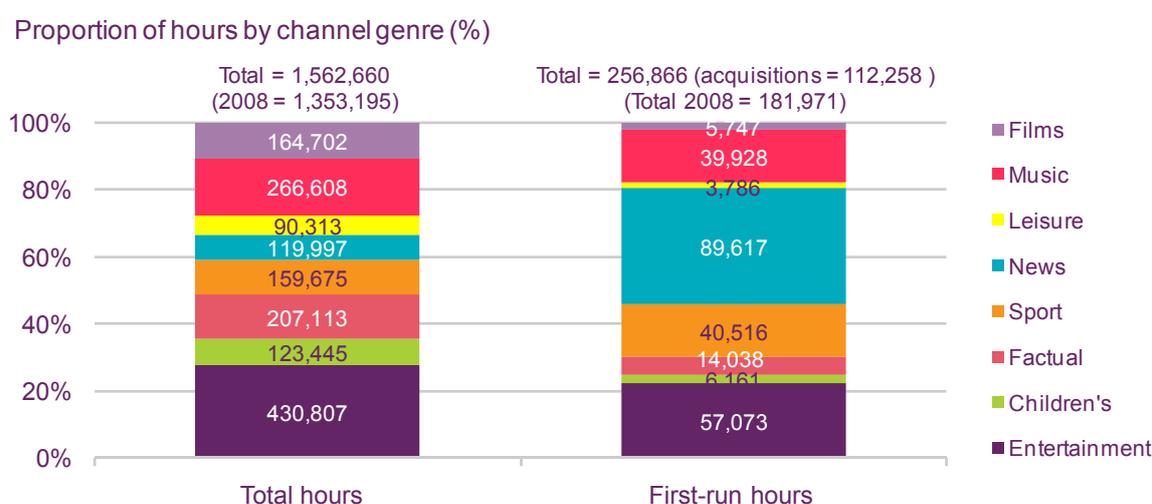
⁴³ These comprise Entertainment, Children's, Factual, Sport, News, Leisure, Music and Film.

studio-based content. The number of news channels broadcasting in the UK has increased in recent years.

First-run hours in other key multichannel genres increased during 2009: Entertainment was up by 113% to 56,388 hours and Factual increased by 250% to 14,038. Possible explanations as to why first-run hours have risen significantly in 2009 include:

- A greater number of channels have been included in the 2009 analysis than in previous years, due to new channel launches.
- A higher volume of data returns had been received from broadcasters at the time of writing, compared to 2008 (the data in the analysis are supplied directly from television licensees and are collected on an annual basis).

Figure 2.45 Total multichannel hours and first-run originations/acquisitions, 2009



Source: Ofcom/broadcasters

Note: Broadcast hours exclude Sky Box Office and 'barker' channels, which promote TV content. First-run hours include first-run in-house, commissioned and acquired content.

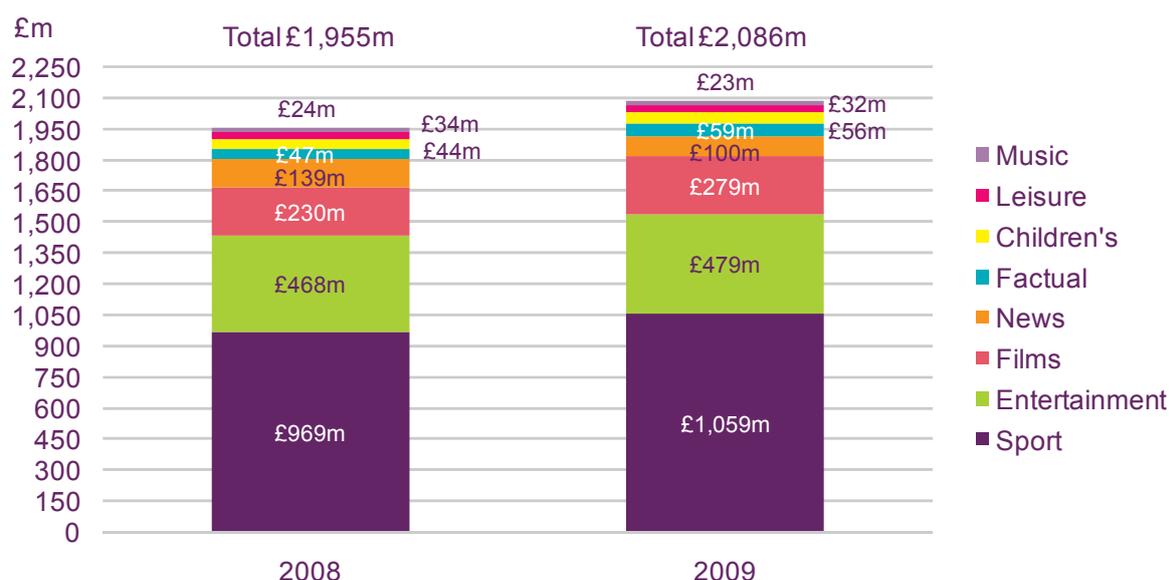
Multichannel content spend up 7% in 2009 to pass £2bn

Commercial multichannel broadcasters in the eight key genres spent £2.1bn on programming in 2009, a 6.7% increase on the £2bn 2008 figure.

Figure 2.46 shows that Sports programming represented more than half of the total multichannel spend, crossing the £1bn mark in 2009 and up 9.2% year on year. The vast majority of spend on Sports programming is for broadcast rights. The next largest category by spend was Entertainment, where channels spent £479m (up 2.3%), followed by the Film channels, which invested 21.3% more in 2009 at £279m. The analysis includes all multichannel services in key genres⁴⁴ except those owned by the BBC.

⁴⁴ The eight key genres are Sports, Entertainment, Film, News, Factual, Children's, Leisure and Music.

Figure 2.46 Content spend by commercial multichannels in key genres, 2008 – 2009



Source: Ofcom/broadcasters. Note: Excludes BBC digital channels.

2.2.10 Other audio-visual revenue

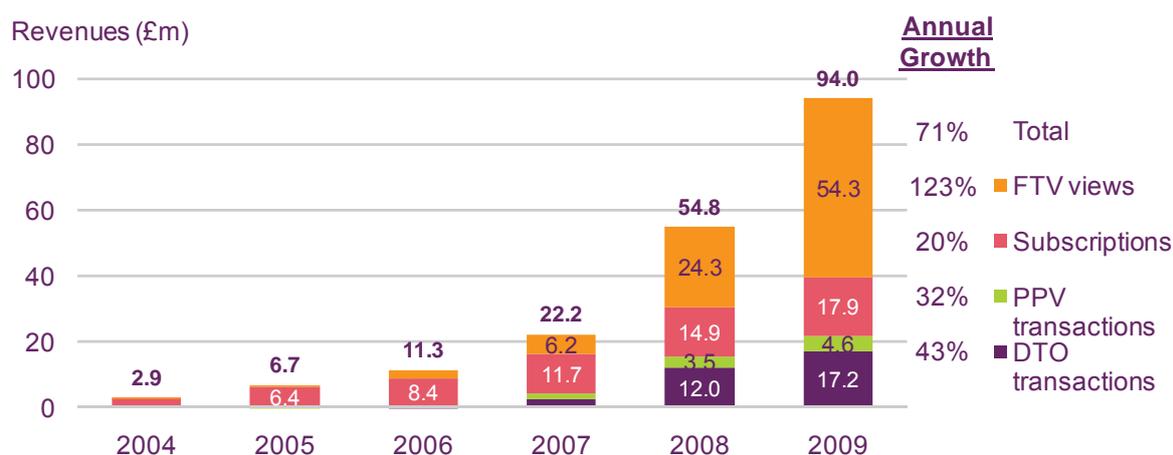
Advertising now the main source of online television revenue

Online TV is still an emerging market and content providers use a number of business models to support the delivery of TV content in this way. The main business models include:

- download-to-own (DTO) – consumers pay a fee to download a permanent copy of a programme. This model is used by services such as Apple's iTunes;
- pay-per-view (PPV) – consumers pay a fee to watch a single stream of content. This model is used by LOVEFiLM. A variant on this model is 'download to rent' (DTR) whereby consumers download content that they must watch within a defined period, often 48 hours. After watching, or after the time period is up, the content expires. DTR services include iTunes, blinkbox and CinemaNow.
- subscription – consumers pay a monthly fee to allow them to download or stream content. Examples include Movie Europe and Sky Player.
- free-to-view (FTV) – advertising-supported free-to-view content, such as provided on ITV Player or services like MSN Video Player.

Data from Screen Digest show that revenues from free-to-view streams have grown rapidly over the past two years to reach £54.3m, well over half the total revenue raised in 2009 by online TV providers in 2009 (£94m). This has been driven by the success of catch-up services like ITV Player, 4OD and Demand Five, and also by the launch of new non-broadcaster advertising-supported services such as MSN Video Player and SeeSaw (a VoD service owned by transmission company Arqiva and based on the platform assets of the BBC Worldwide, ITV and Channel 4 joint venture, Project Kangaroo).

Figure 2.47 Online TV revenues



Source: Screen Digest.

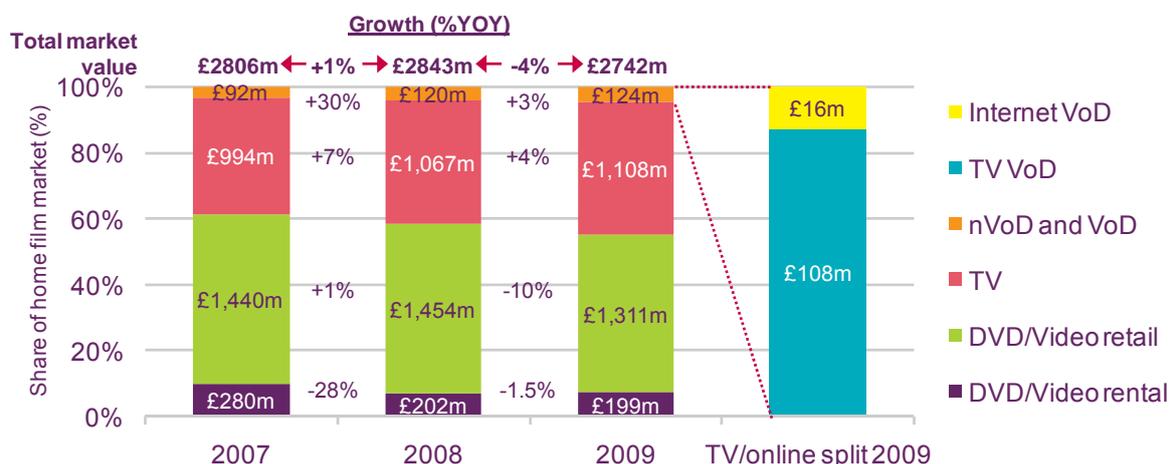
Note: FTV = free to view; PPV = pay per view; DTO = download to own.

On-demand film revenues remain a small part of the overall film market

Alongside TV, on-demand film is another source of revenue for audio-visual content delivered online. Most of the £2.7bn home film revenue in 2009 still accrued to traditional formats such as DVD retail and broadcast film. But film delivered in other ways is growing, albeit slowly. According to the UK Film Council data, revenues both from established pay-per-view (or ‘near-video on demand’) services and newer (‘true’) on-demand grew by 3% in 2009 to reach £124m (Figure 2.48).

Within this category, £16m (13%) of total nVoD/VoD revenues came from online on-demand services, while £108m came from TV-based VoD and nVoD services.

Figure 2.48 Value of UK home film market, and online revenue split



Source: UK Film Council/Ofcom based on Nielsen EDI, MRIB, BVA, Official Charts Company, Attentional, Screen Digest, RSU Analysis.

Notes: Excludes theatrical revenue. ‘TV’ is the market value of film content shown on pay-TV, terrestrial TV and free-multichannel TV. Pay-per-view is included in ‘nVoD’.

2.3 The UK television production sector

2.3.1 Introduction

Until the 1980s, television production in the UK was almost exclusively the domain of the two largest public service broadcasters – the BBC and ITV. The launch of Channel 4 in 1982, based on a publisher-broadcaster model, marked an end to the production duopoly; it signalled the birth of an independent production sector, with a large number of mainly small companies being set up and winning commissions from the new channel. Channel 5, also a publisher-broadcaster, launched in 1997.

Since then, the independent sector has grown in size, bolstered by the 25% quota (introduced under the 1990 Broadcasting Act) which applies to all PSBs, and more recently by the introduction of the BBC's Window of Creative Competition (WOCC), which has increased the BBC's commissions from independents.

Despite the PSBs achieving their quotas, there has been a reduction of 16% in their expenditure on UK-originated productions over the past five years. Given that originated content can be the most costly element of a broadcaster's schedule, and that the sector is now in a state of maturity, it is timely to examine the sector in more detail. This section considers the trends in UK production, by type of producer, in terms of programme volume and spend. It also examines production outside London and by programme genre to illustrate changes in the market over the last five to ten years.

2.3.2 PSBs in context

Total broadcast TV hours almost doubled since 2005 but PSB first-run originations declined

The total number of hours broadcast in the UK almost doubled in the four years to 2009. The increase from 0.78 million hours in 2005 to 1.35 million hours in 2009 can be mainly be attributed to the increase in the number of commercial multichannels, which rose from 180 to 239 in the Entertainment, Factual, Children's, News, Leisure and Music genres. There was also a significant rise in the number of hours of output by commercial PSBs' portfolio channels. ITV4 and More 4 both launched at the end of 2005 and were joined by CITV, Five Life (now Fiver) and Five US (now Five USA) in 2006.

However, for PSBs, this rise in the volume of hours broadcast and the launch of new portfolio channels was not matched by an increase in the volume of first-run original programming produced. Hours of originations across PSB portfolio channels declined by more than half over the period - from just under 14,000 to 6,000. The majority (6,047 hours) of this can be attributed to the closure of the ITV News Channel in late 2005; but discounting this, PSB portfolio channel originations dropped by 7%. First-run originations fared better on the broadcasters' main networks, although this figure was also down slightly from 21,000 to 20,000 hours between 2005 and 2009.

By contrast, the increase in the hours of first-run originations by multichannel broadcasters has been significant, largely due to an increase in the number of channels. There was a rise of 484% or 96,000 hours from 25,000 in 2005 to 121,000 in 2009⁴⁵. Measured in hours, the level of originations on commercial multichannels in 2009 was more than double the main PSB networks and their portfolio channels combined.

⁴⁵ This figure excludes Sport and Film channels.

Original production quotas

Original productions are programmes commissioned by broadcasters from in-house production resources or independent producers with a view to being shown on the broadcaster's channel in the first instance.

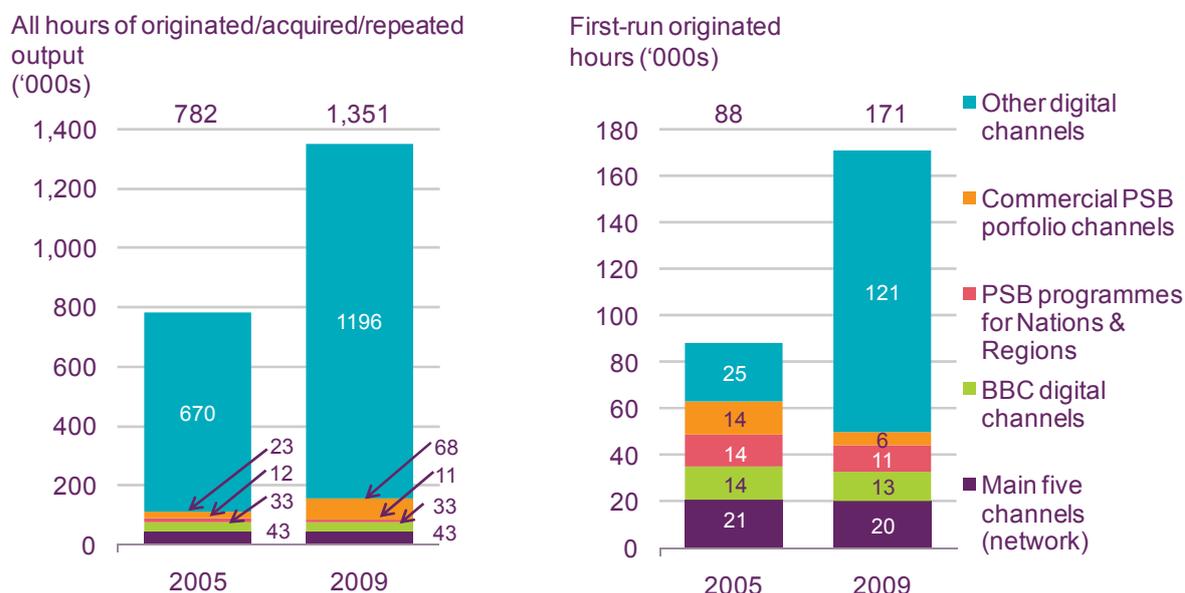
Quotas vary by broadcaster and apply to volume in hours only.

Quotas apply to both the full broadcasting day and to peak- time viewing hours.

For full details of compliance with programme and output quotas, please refer to Ofcom's PSB Annual Report, Section G: PSB Compliance Reporting at:

<http://stakeholders.ofcom.org.uk/binaries/broadcast/reviews-investigations/psb-review/psb2010/psbcomp.pdf>

Figure 2.49 Total broadcast hours and first-run originated hours on all channels, 2005 – 2009



Source: Ofcom/broadcasters

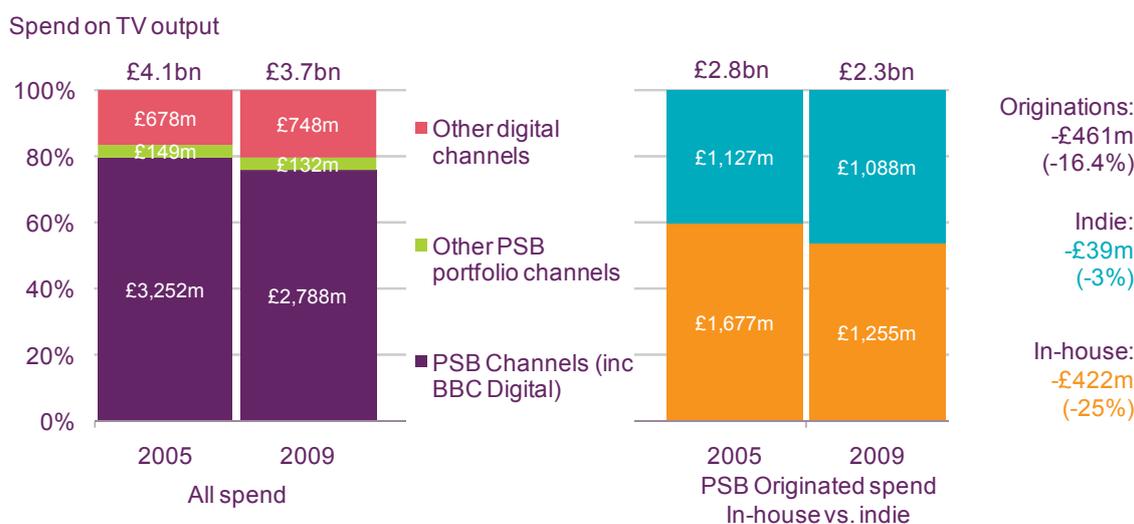
Note: The first-run figures include in-house productions and external commissions, not first-run acquisitions. 'Other digital channels' includes Entertainment, Factual, Children's, News, Leisure and Music genres.

Independents commanding a growing share of spending on originated content

Just over £3.7bn was spent on TV programmes broadcast in 2009 (excluding Film and Sports channels). This represents a decrease in real terms of 10% since 2005. Of that, PSB channels accounted for £2.78bn (down 14.3%). While multichannel broadcasters are responsible for the lion's share of originated hours, the PSBs still account for a large proportion of origination expenditure. In 2009 PSBs spent £2.3bn on originations, compared with £2.8bn in 2005; down by 16.4% over the period.

Within this total, the independent sector's market share grew by 5% to 46%. Despite a 3% reduction in spend on independent output, this growth in share came about as a result of a much larger reduction in in-house commissioning, which was down some £422m to £1.3bn over the four years to 2009.

Figure 2.50 Total broadcast spend on all channels, 2005 – 2009



Source: Ofcom/broadcasters.

Note: Figures do not include nations & regions. BBC digital channels include BBC Three, BBC Four, BBC News, BBC Parliament, CBBC and CBeebies. GMTV included. 'Digital-only commercial channels' include all genres (excluding Sports and Film). Programme spend comprises in-house commissions, independent commissions, acquired programmes, rights and repeats. Figures expressed in 2009 prices.

2.3.3 PSB independent and in-house productions

Independents' share of peak and daytime PSB hours increased over the past decade

Independent production quotas

Independent productions are programmes made by companies that are independent of broadcasters.

Quota applies to volume in hours only.

Quota is fixed at 25% of 'qualifying' hours for all PSBs. Qualifying hours essentially includes all first run originations excluding news and acquisitions.

For full details of compliance with programme and output quotas, please refer to Ofcom's PSB Annual Report, Section G: PSB Compliance Reporting at:

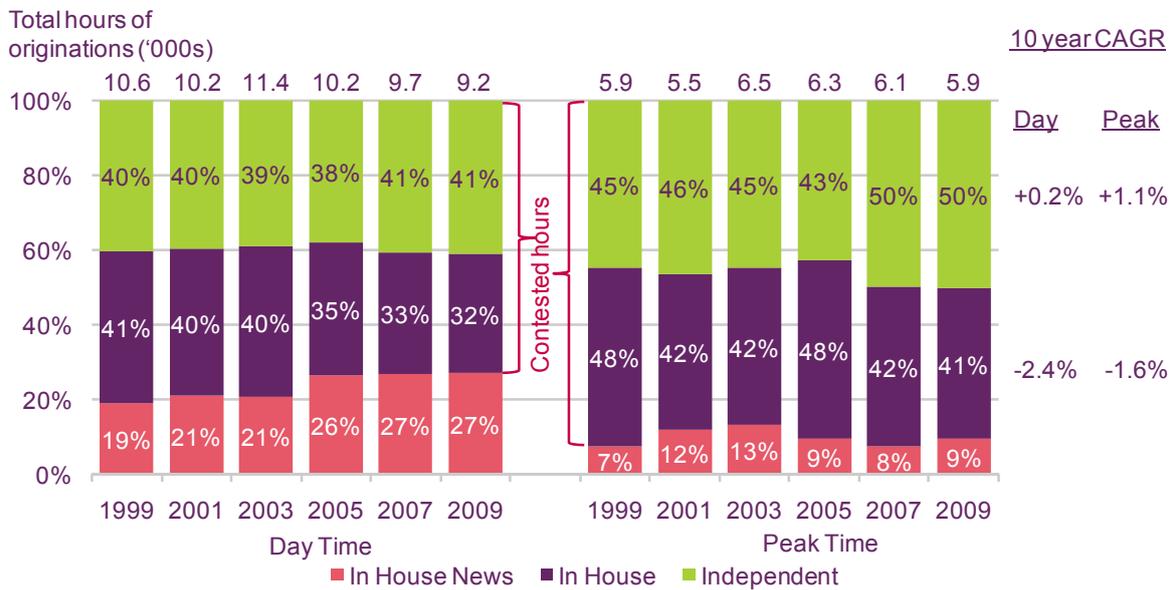
<http://stakeholders.ofcom.org.uk/binaries/broadcast/reviews-investigations/psb-review/psb2010/psbcomp.pdf>

In peak time, the independents' share of origination hours on PSB channels fluctuated at around 45% before stabilising at a consistent 50% share from 2007 to 2009. In contrast, the proportion of in-house production in peak-time during 2009 was at a ten year low; volumes fell by an average of 1.6% per year over the ten-year period.

As a proportion of all originations in daytime, News rose significantly in the latter half of the decade. This does not represent a rise in real terms but can be explained by a decrease in total originations, which fell from 10,974 hours to 9,601 hours. The effect was an increase in News as a proportion of this lower total. It should be noted that the 'contested hours' figure shown in Figure 2.51 represents the hours for which independent producers can compete. News programmes are excluded from 'qualifying hours' for the independent quota and, being

produced entirely in-house, are therefore not 'available' to be commissioned from independents.

Figure 2.51 PSB originations volume by hours – daytime and peak time, 1999 – 2009

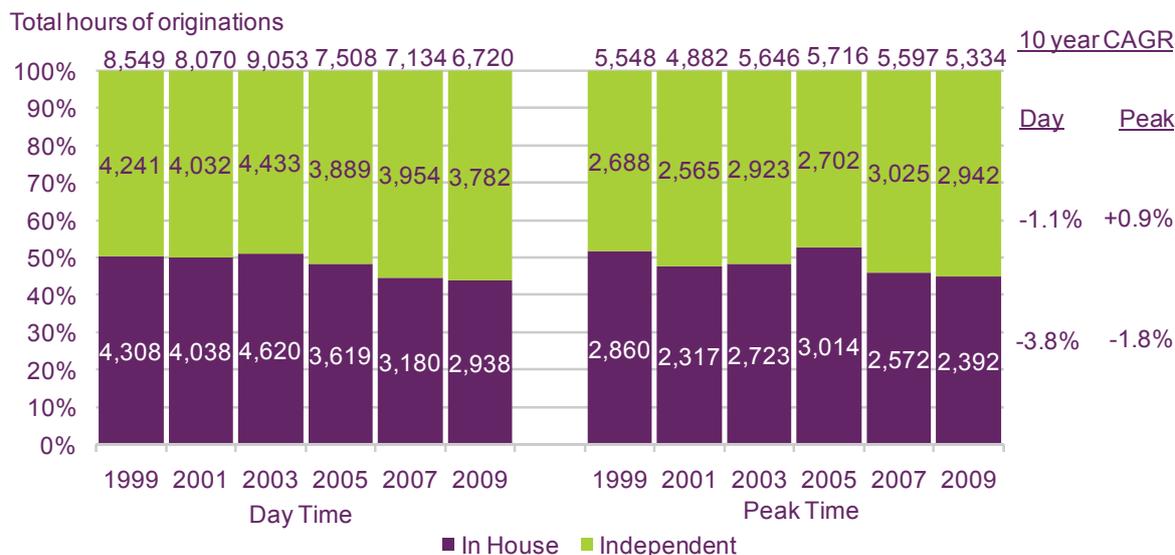


Source: Ofcom/broadcasters.

Chart includes five main networks, BBC Three, BBC Four, CBBC and CBeebies only. News is shown separately as its hours are not included when calculating the independent quota.

Figure 2.52 illustrates the rise in independents' share of originated output over the past ten years, taking account of and excluding content for which independent producers cannot compete. This reveals an increase in their share of 'eligible' peak-time hours from 48% in 1999 to 55% in 2009. The same pattern is true of daytime originated hours, where the independents' proportion of commissioned hours rose from 50% to 56% over the same period.

Figure 2.52 PSB originations volume, excluding News: daytime and peak time, 1999–2009



Source: Ofcom/broadcasters.

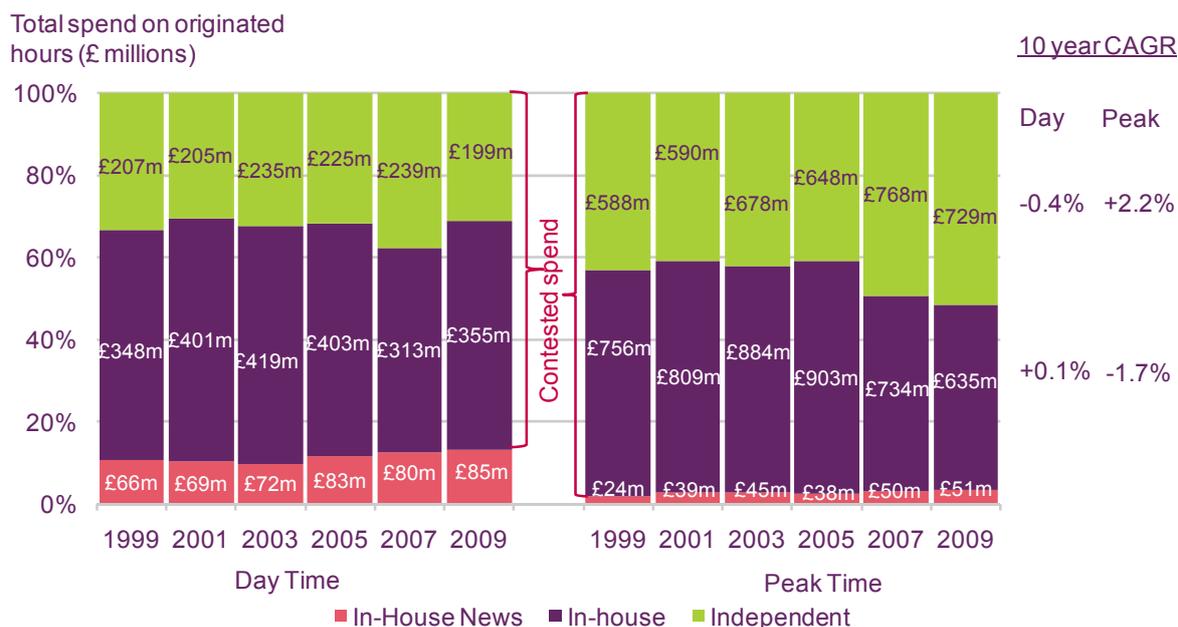
Chart includes five main networks, BBC Three, BBC Four, CBBC and CBeebies only. News is excluded in order to show contested hours only.

The independent sector’s share of PSB spend has grown at a faster rate than its share of hours

The rise in the independents’ share of hours was reflected in a rise in the amount of PSB spend they attracted. In 2009, it amounted to £729m, or 53%, of all PSB spend on originations in peak time, an average rise of 2.2% per year over the period from £588m in 1999, compared with a 0.9% average annual rise in peak hour originations overall. Spend by the PSBs on in-house productions fell by £121m from £756m in 1999 to £635m in 2009, or an average of 1.7% per year.

In the context of the less lucrative daytime hours, the independents’ share of contested spend (excluding News) has fluctuated between 32% and 45% over the past ten years, consistently lower than in-house spend. Expenditure has fallen by an average of 0.4% a year, from £207m in 1999 to £199m in 2009, while in-house spend increased slightly over this period, from £348m in 1999 to £355m in 2009.

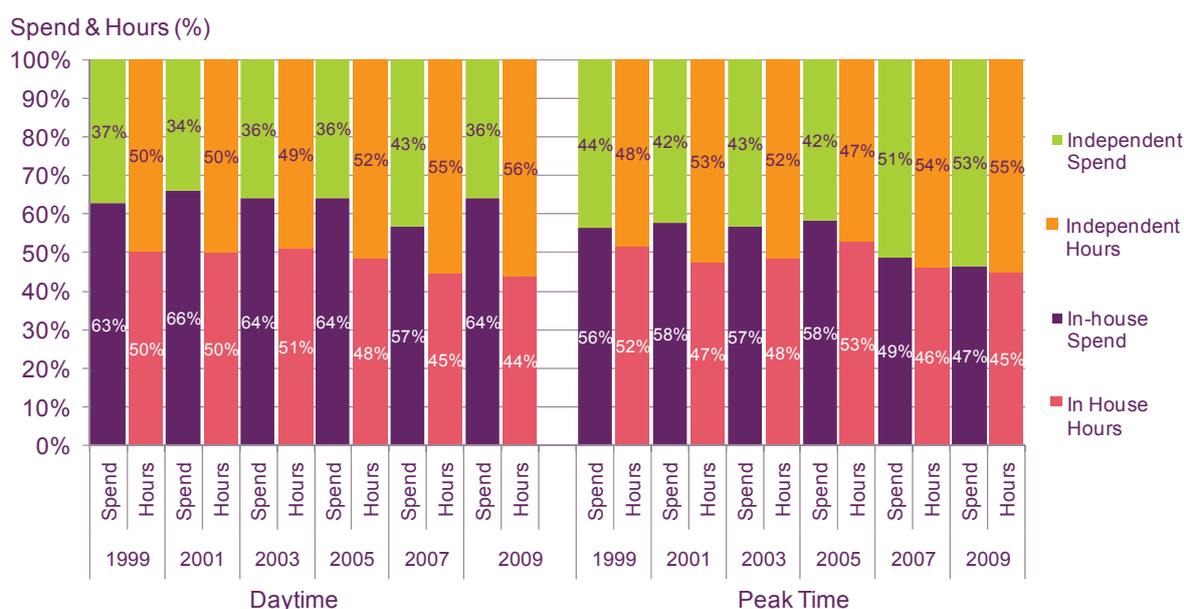
Figure 2.53 PSB originations – daytime and peak time, 1999 - 2009



Source: Ofcom/broadcasters. Note: Chart includes five main networks and BBC Three, BBC Four, CBBC and CBeebies only. News is shown separately as its hours are not included when calculating the independent quota. Figures expressed in 2009 prices.

Taking hours and spend together, in 2009, independents provided 56% of eligible daytime hours in return for 36% of PSB expenditure. In-house originations accounted for 44% of hours in return for 64% of expenditure. There may be a number of explanations for this difference in spend on in-house and independent content in the daytime schedule. It may indicate that independents are delivering higher volumes of programmes in lower-cost genres, or it might be a reflection of the size and nature of those independent companies competing in the daytime arena. Smaller companies may be more successful in competing for daytime slots and, with lower overheads than larger producers or in house teams, may be capable of delivering programmes more cost-effectively.

Figure 2.54 PSB originations spend and hours – daytime and peak time, 1999 – 2009



Source: Ofcom/broadcasters.

Chart Includes five main networks and BBC Three, BBC Four, CBBC and CBeebies only. News is excluded in order to show contested hours only. Figures expressed in 2009 prices

Independent costs per hour rose 13% in peak time over the last decade – converging with in-house levels

Figure 2.55 demonstrates the average value of productions in cost per hour (CpH) terms over the past ten years. Within peak time, independents’ costs rose steadily from £219k per hour in 1999 to a high of £254k per hour in 2007, before experiencing a small drop in 2008 followed by a modest rise to stand at £248k per hour in 2009.

The hourly cost of in-house productions has always been higher than independently-produced programmes, but the gap between the two has steadily narrowed since 2001. In-house cost per hour (CpH) dropped by 24% from a peak of £349k per hour in 2001, to £266k in 2009, almost equal to the 1999 rate of £264k. The rise in peak-time in-house costs in earlier years foreshadowed the re-launch of the BBC’s Choice and Knowledge channels as BBC Three and BBC Four in 2003 and 2002 respectively. Both channels more than doubled their peak-time origination CpH in 2001 and at the same time there was a greater investment per hour on BBC One. Since then the CpH ‘gap’ between independent and in-house productions in peak has narrowed as a result of reductions in the in-house CpH on BBC One and ITV1 in some of the most expensive genres.

Production efficiencies have the potential to deliver programmes of comparable quality and length at a reduced cost and a range of new production techniques and technologies have been adopted to reduce the cost of programme production. Examples include using the same set for the production of a programme format for several different countries. The genres that have suffered the greatest drop in peak time in-house CpH since 2001 are Current Affairs (45%), Sports (20%) and Drama (19%). While the gap between in-house and independent CpH in 2009 continued to narrow, in-house productions remained 7% more expensive to deliver.

In daytime, the gap between independent and in-house CpH remained relatively wide, despite some signs of convergence in 2006 and 2007. The difference in 2009 was

exaggerated by the switching of the Formula1 motor racing contract from ITV1 where it had been an independent commission, to production in-house by the BBC in 2009.

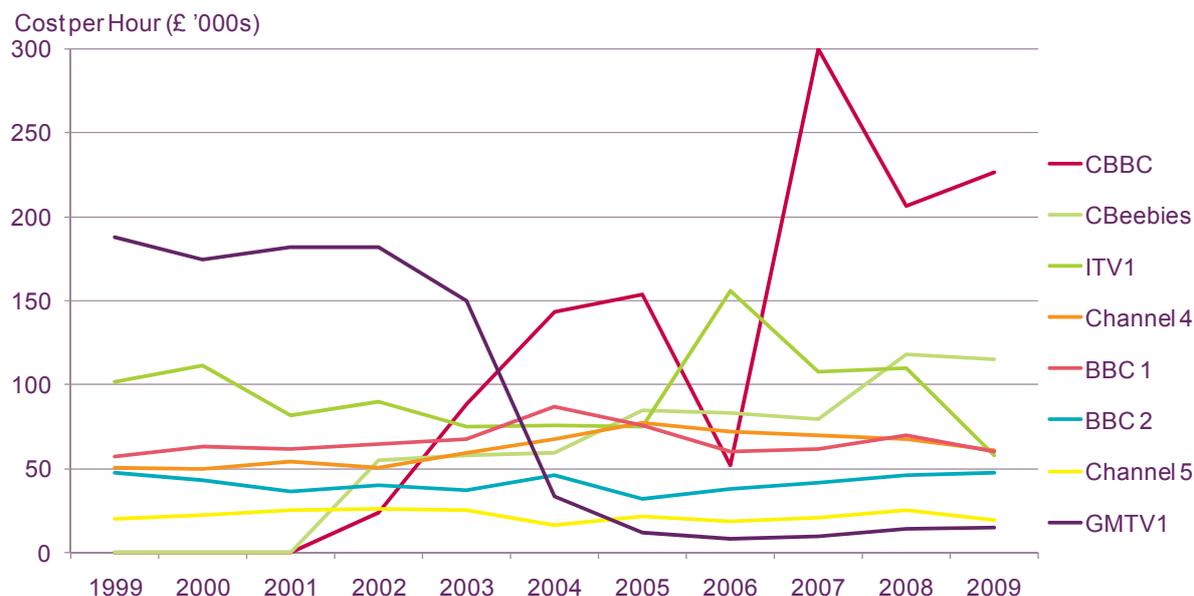
Figure 2.55 PSB cost per hour for first-run origination content – daytime and peak time, ten-year comparison



Source: Ofcom/broadcasters. Note: Chart Includes five main networks and BBC Three, BBC Four, CBBC and CBeebies only. Figures exclude News. Figures expressed in 2009 prices.

Significant changes have taken place in the last ten years in the commissioning of independents in the daytime. Figure 2.56 shows how revenue sources for independents have altered over the period. Commissions by ITV1 and GMTV1 have dropped in value - the sudden drop on ITV1 in 2009 was partly due to the termination of Formula1 racing coverage. For the independent sector as a whole, reductions have been partly offset by the increased value of Children's programming on the BBC. Traditionally, Children's programmes have a stronger secondary rights value than daytime programmes, which may go further in redressing the balance than it is possible to demonstrate here.

Figure 2.56 PSB cost per hour for first-run origination content - daytime independent commissions by channel, ten-year comparison



Source: Ofcom/broadcasters.

Chart Includes five main networks, GMTV, CBBC and CBeebies only. Figures exclude News. Figures expressed in 2009 price.

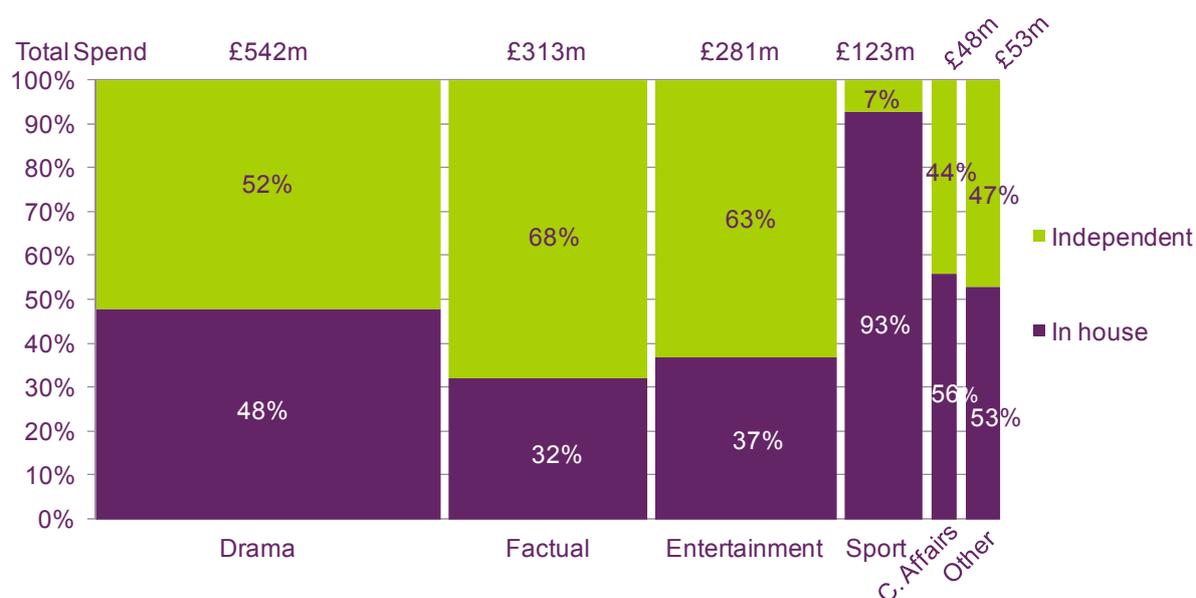
Independent productions command a majority share of main genres in peak time

The majority of expenditure in peak time in 2009 was accounted for by just three programme genres: Drama, Factual and Entertainment. Independents won the largest share of these three genres in terms of spend. They accounted for over half (52%), or £282m, of the largest genre, Drama (including Soaps), over two-thirds of Factual (£211m) and almost two-thirds of Entertainment (£179m) by value.

Independents were strong in Drama but their share of originated expenditure was even higher when Soaps were taken out of the equation. Soaps accounted for 37% of peak-time Drama spend, of which 84% was made in-house. Excluding these from the figures, independent producers accounted for 73% of remaining Drama spend, and produced 364 of the 475 hours, or 77% of peak-time Drama screened in 2009.

The in-house skew in Sports is due to the cost of football rights on ITV1. Of the £123m of Sports spend in peak, a high proportion is accounted for by ITV1's FA Cup, Champions' League and International football coverage.

Figure 2.57 PSB originations spend, by genre – peak time, 2009

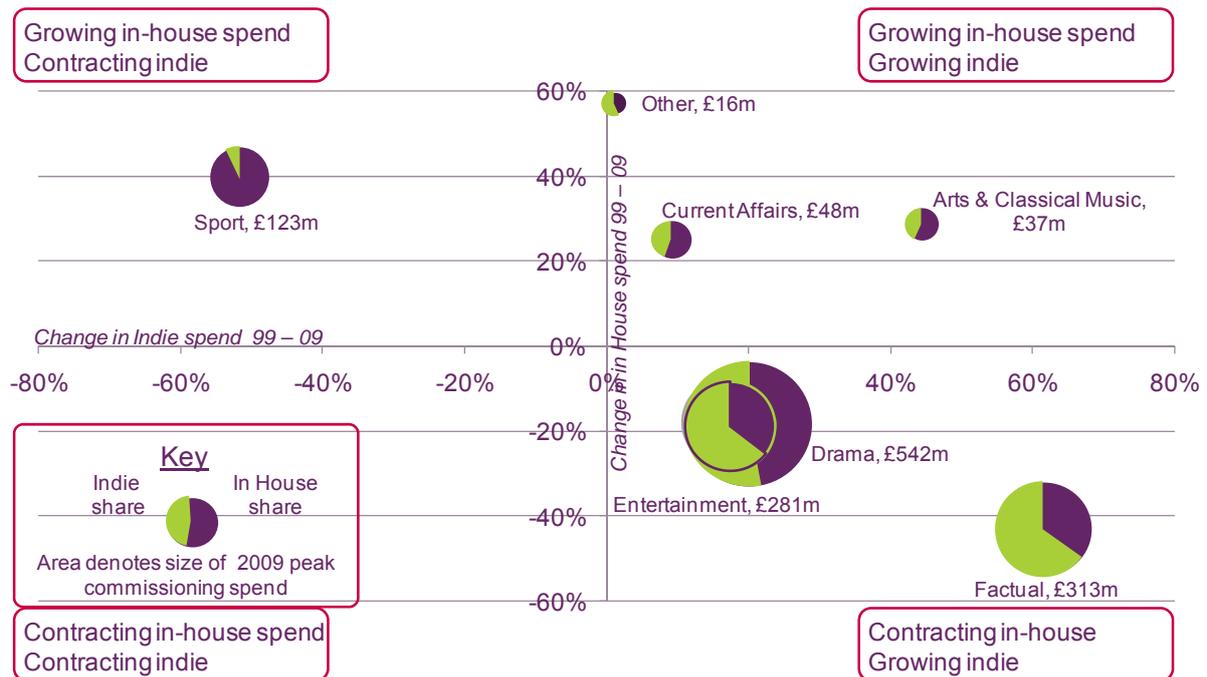


Source: Ofcom/broadcasters.

Chart includes five main networks and BBC Three, BBC Four, CBBC and CBeebies only.

The substantial market shares commanded by independent producers have not always been so pronounced. Figure 2.58 shows the change in distribution of peak-time expenditure, by genre, between in-house and independents. Over the ten-year period, the share won by independent producers has grown in the three major genres, while in-house share has contracted. Independents have gained in all genres, with the exception of Sport. The most substantial increase in independents' share of spend was in the second largest genre, Factual, where spending on independent productions rose by 61% since 1999.

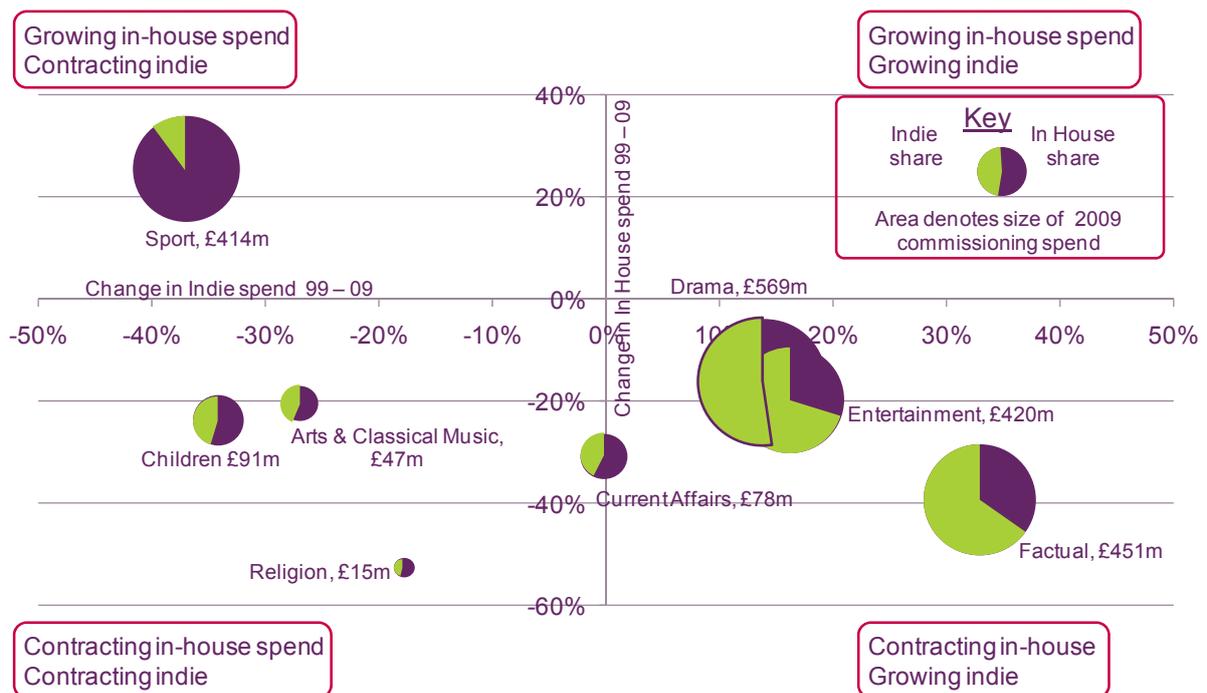
Figure 2.58 2009 distribution of PSB peak-time originations spend, and change over ten-year period, by genre: 1999 – 2009



Source: Ofcom/broadcasters

A similar, but less marked pattern in the larger genres has emerged across the whole day (Figure 2.59). The independents' share of the smaller, and perhaps less profitable genres, such as Arts and Religion decreased over the period, possibly indicating where their priorities have changed. The greater resources of the emerging 'super-indies' may be a reason why they feel better placed to take on the challenges of the higher production values required in the peak-time schedule.

Figure 2.59 2009 distribution of PSB all-day originations' spend and change over 10-year period, by genre: 1999 – 2009



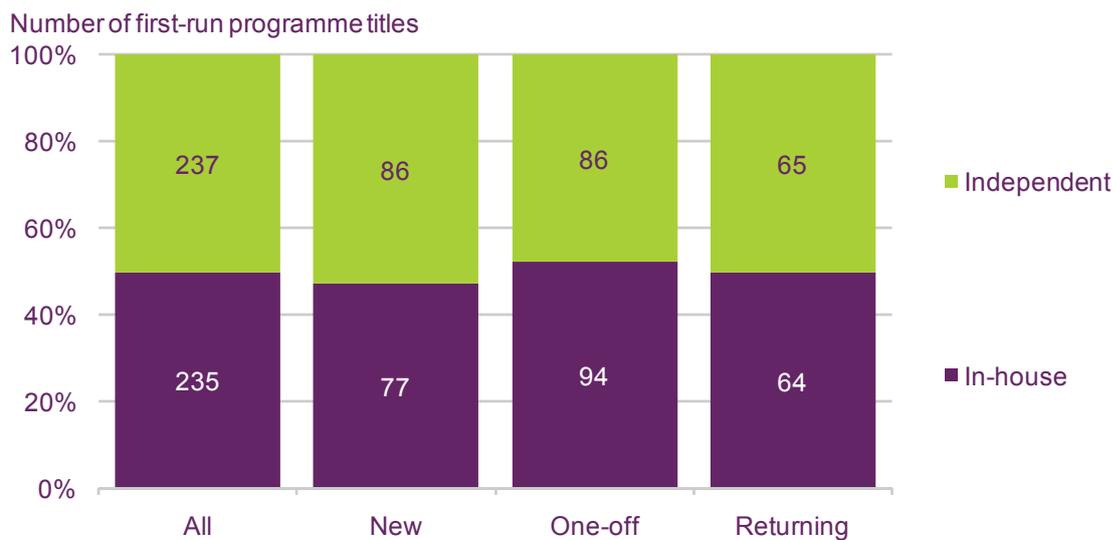
Source: Ofcom/broadcasters

Independents more successful at delivering new series

Figure 2.60 illustrates the number of originated programme titles shown in peak on BBC One and Two and ITV1, split by independent and in-house productions. Output on Channel 4 and Five is excluded because these channels do not produce programmes in-house and therefore there is no competition between independent and in-house titles.

In total, the split in peak time was almost even, with 235 titles produced in-house and 237 by independents. In 2009, independents won more commissions for new series than in-house producers (86 titles, compared with 77) – possibly pointing to a greater degree of innovation. The number of returning series were split evenly, which means that in the 2009 commissioning round there was parity in the number of shows deemed to be suitable for re-commissioning. However, the independent share of one-off programme titles was somewhat lower, with independents delivering 86 titles compared to the in-house total of 94. This may indicate that independents prefer longer running and returning series in order to create a steadier cashflow and more sustainable business, rather than relying on higher-risk, one-off programmes. Alternatively, it may be an indication of the greater ease of access to resources that in-house producers have, allowing them to assemble a production crew for a shorter period of work more readily.

Figure 2.60 BBC One and Two and ITV1 new, one-off and returning series, peak time: 2009



Source: Broadcasters

'New series' includes brand-new series and mini-series. 'One-off' includes one-off programmes and one-offs within series such as *Panorama* and *Dispatches* programmes. Programmes which form part of the core schedule, such as *Eastenders*, *Coronation Street* and *News* have been excluded. Sports programmes and feature films have also been excluded.

The diversification of independents' revenue streams

Despite a decline in TV revenue streams for the first time since 2004, the total revenues of the independent production sector remained static year on year in 2009 at £2.2bn, as reported in PACT's annual Census⁴⁶. Independents managed to maintain total income levels by generating income from other sources beyond traditional TV production, by increasing revenue from international operations and by cutting costs.

Figures from the 2010 PACT Census show that while primary UK commissions fell by 7.5% year on year, from £1,508m in 2008 to £1,395m, revenue from international activities rose by 28%, from £342m to £439m, and UK rights income was also up, from £107m to £115m. Primary UK commissions still accounted for 69.8% of independents' revenue in 2009, although this was down from 74.8% in 2008.

While primary licence fees remain the dominant source of income, other digital media and secondary rights use are increasing as a proportion of overall revenue. According to *Broadcast* magazine's annual *Indies Survey 2010*, 28% of independents who responded were making online content for broadcasters and 23% were creating online content for non-broadcasters. In the same survey, 41% reported revenues from on-demand and 40% cited international sales as areas of growing importance as they sought to maximise the overseas exploitation of intellectual property, formats and finished programmes.

Independents are increasingly looking towards the commercial sector and generating revenue from the supply of online and VoD content. Advertiser-funded programming is also showing signs of growth. In 2009, Five screened *Britain's Best Brain*, produced by Tiger Aspect and funded in part by Nintendo. RDF Contact, part of the RDF Media Group, is currently producing *Carpool* for UKTV commercial channel Dave, a programme entirely funded by Toyota Prius.

In the same PACT-commissioned survey of independent producers, 81% of respondents believed that primary commission prices will decline over the next three years, and 75% predicted a rise in the contribution of ancillary rights to the sector's revenues.

2.3.4 Television production outside London

The south of England is strong in Factual production while the North is the powerhouse for Drama

Regional production quotas

Out-of-London productions are network programmes made in the UK outside the M25. They are broadcast across the UK (i.e. they are not regional opt-outs).

Quotas apply to both value (spend) and volume (hours).

Quotas vary by broadcaster.

For full details of compliance with programme and output quotas, please refer to Ofcom's PSB Annual Report, Section G: PSB Compliance Reporting at:

<http://stakeholders.ofcom.org.uk/binaries/broadcast/reviews-investigations/psb-review/psb2010/psbcomp.pdf>

The proportion of television production being made outside London has increased every year since 2006, when Ofcom introduced an industry standard definition. Figure 2.61 shows

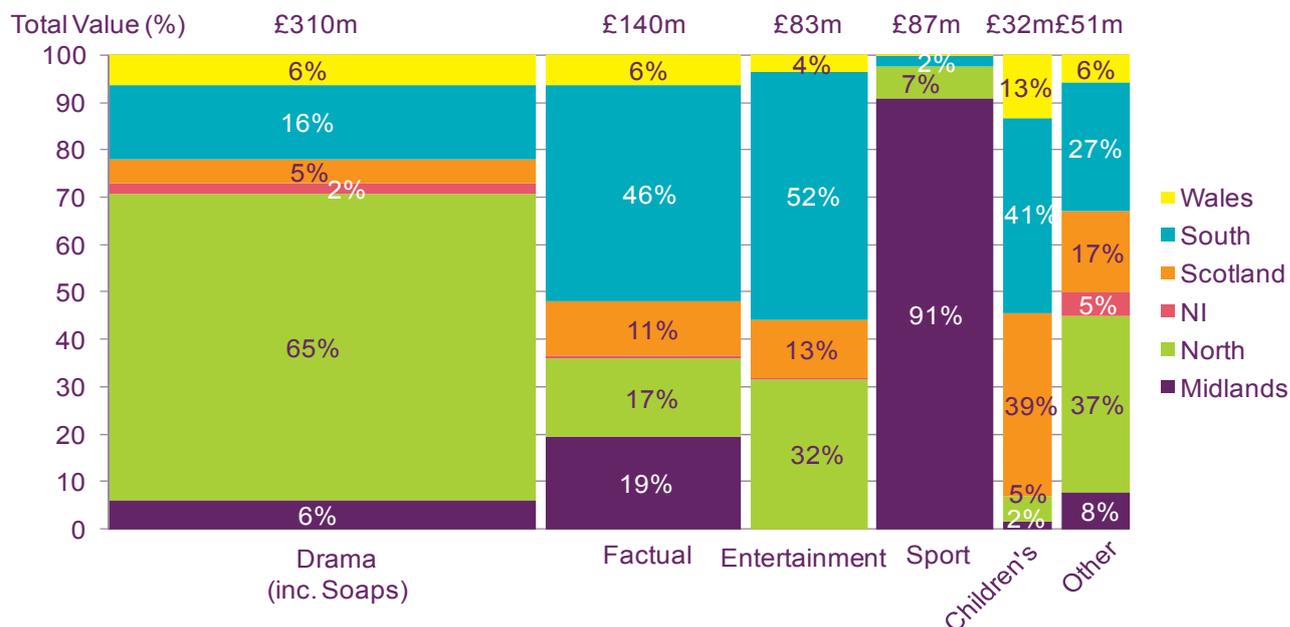
⁴⁶ Source: PACT financial census and survey 2010

that in 2009 there was more spend in Sport than Entertainment outside London. Drama and Factual accounted for the greatest levels of spending overall, in line with overall spend across the genres.

Drama alone accounted for 46% (or £310m) of spend outside the M25 in 2009, £201m or 65% of this was spent in the North of England. The main peak-time Soaps – *Coronation Street*, *Emmerdale* and *Hollyoaks* - accounted for the majority of this spend, *Hollyoaks* being produced by independent production company Lime Pictures. Of the £50m spent in the South, BBC One’s *Casualty* plays a significant role with the remainder spent on one-off and short-run high-end drama across the BBC, ITV1 and Channel 4.

There was more spend outside London in Sports (£87m) than Entertainment (£83m) despite it being a smaller genre in terms of overall spend (£414m in total, compared with £420m). Factual spend outside London is dominated by the BBC, which contributed 66% of the £140m spent by PSBs in 2009. Overall, £64m worth of Factual output was produced by PSBs in the South of England. Nature programmes such as *Life* and *Wildest Dreams* make up a significant contribution to the genre. The high volume of inserts made for *The One Show* also contributed significantly to these figures - work for the programme was commissioned from six different independent producers outside London. Within the Entertainment genre, 52% of total spending went on productions from the South of England and a high proportion of this was accounted for by Bristol-based *Deal or No Deal*.

Figure 2.61 In-house and independent PSB production spend outside London by genre, 2009



Source: Ofcom/broadcasters
 'Other' includes Arts, Current Affairs, Education and Religion

Independents command a lower share than in-house of out-of-London productions

The level of absolute funding associated with the two largest production centres, London and the North, fell between 2006 and 2009, with in-house productions losing the larger proportion of commissions in both cases. The in-house downturn in the North was particularly significant, with a drop of 31% in spending from 2006 to 2009. With the North relying heavily

on Drama, the 19% cut across all PSB Drama origination spend accounts for a large proportion of this.

The dominance of in-house production in the Midlands & East of England is due to the cost of Sports coverage by ITV in the region, although there was positive growth (of 18%) for independents in this area between 2006 and 2009.

Overall, independents secured fewer commissions by value outside London compared to their in-house competitors⁴⁷. This is perhaps reflected in the degree to which larger independent producers have a presence outside London. Of the top ten by revenue, only one has its headquarters outside London; Tinopolis in Wales, with turnover of £70m in 2009. Only four regional independents had turnover above £20m (Lime in Liverpool, Twofour in Plymouth, Boomerang in Cardiff and Aardman in Bristol)⁴⁸.

In London, where independents command a larger proportion of expenditure, in-house spend has been contracting at a faster rate than spend on independent commissions, dropping 23% since 2006, compared with the independents' 9% reduction in spend.

Figure 2.62 2009 distribution of PSB production spend, by region, and change in spend: 2006 - 2009



Source: Ofcom/broadcasters.

⁴⁷ Note that Ofcom only holds data for a four-year period, so the trends highlighted here are for a comparatively short period of time.

⁴⁸ Source: *Broadcast Indie Survey 2010* – Total turnover including television and other sources of revenue

The move from London - MediaCityUK

As part of its commitment to producing more than 50% of network output outside London by 2016, the BBC is relocating many of its TV departments. Breakfast, Sports, Children's and Formal Learning will all relocate to Salford Quays in Greater Manchester when it opens in 2011. About 2,300 jobs will move from London to the new facility. BBC Sport will be leaving London the year before the Olympics, although a dedicated team will remain behind to cover the event.

Like Pacific Quay in Glasgow, home to STV and BBC Scotland, MediaCityUK at Salford Quays has been designed to be a hub of creativity. The presence of the BBC from 2011 (and possibly ITV, although reports are unconfirmed) is seen as a means of attracting in-house and independent production talent and jobs to the area.

The North of England is already the UK's second largest production base after London, partly due to its high output of both in-house and independently-produced Drama and Soaps.

2.4 The TV and audio-visual viewer

2.4.1 Summary

This section examines the availability and take up-of digital TV platforms, and key trends in television viewing, including some categories of non-linear viewing, during 2009. It also analyses viewers' attitudes to television. Highlights include:

- **By Q1 2010, 92% of main TV sets in UK homes were connected to a digital television tuner**, either a set-top box or integrated digital TV, an increase of 2.5 percentage points year on year (page 6).
- **The average number of hours of television watched by each viewer increased modestly over five years**, from 3.7 hours a day in 2004 to 3.8 hours in 2009 (up by 3%). This increase was driven largely by viewers aged 55+. But viewing among adults aged 16-24 has fallen over the same period (page 6).
- **The viewing share of multichannel broadcasters continued to increase in 2009, exceeding 40% for the first time, at 41% of all television viewer hours.** As in previous years, the share of the five main PSB channels fell in 2009 (page 6).
- **Virgin Media VoD continues to grow in both reach and intensity of use.** VoD now reaches 58% of Virgin Media TV subscribers, up six percentage points on Q4 2008. The average VoD user watched 35 separate instances of on-demand content (including catch-up TV) per month in Q4 2009, up from 30 in Q4 2008 (page 6).
- **Audiences for video-sharing sites began to level out in 2009.** The total unique audience to the category of sites that UKOM/Nielsen classifies as 'Video and Movies' reached 23.6 million in May 2010, up 9% since May 2009. But growth in the total audience to these sites has slowed over the past two years, and has been flat since Christmas 2009 (page 6).

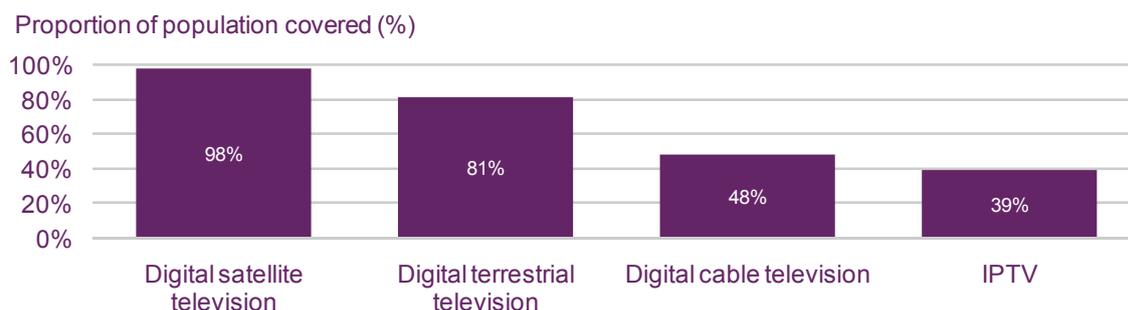
2.4.2 Availability of multichannel TV platforms

UK viewers can choose from four main digital platforms to receive broadcast-quality television - digital terrestrial, cable, satellite and IPTV - which have varying levels of availability.

Digital TV services that are delivered over the airwaves have the highest availability, with digital satellite having near-universal coverage at 98% (Figure 2.63). Digital terrestrial was available to 81% of the population by June 2010, a figure that is rising as digital switchover progresses (conversely, analogue terrestrial decreases). A year ago, DTT coverage was around 73%.

Digital cable (mostly Virgin Media) remained at 49%. IPTV penetration (at 39%) includes TalkTalk TV availability but not BT Vision, as the latter does not currently offer live TV channels over its IPTV network.

Figure 2.63 Availability of digital television platforms



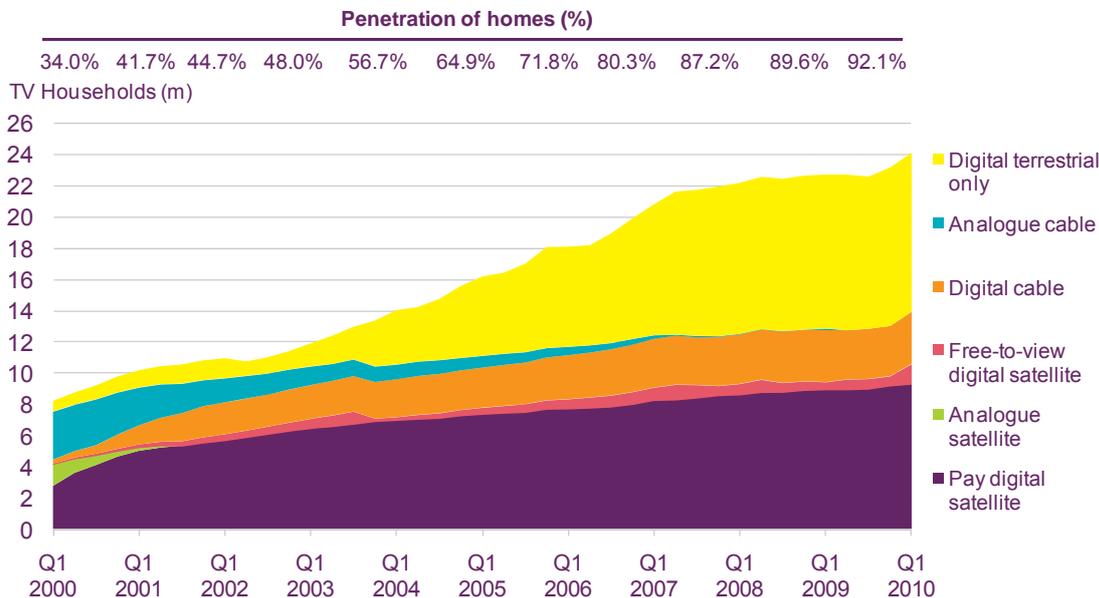
Source: Ofcom research/operators. Note that the DTT coverage figures represent the availability of a service of 17 television channels. DTT coverage levels represent Ofcom estimates. Data correct as of June 2010.

2.4.3 Multichannel television take-up

Digital TV passed the 90% threshold in 2009

Digital TV penetration continued to edge forward throughout 2009 and reached 92.1% of UK homes at Q1 2010, up by 2.5 percentage points year on year. The vast majority of multichannel TV homes are now digital; a small proportion are analogue cable. Digital terrestrial television (Freeview) and pay digital satellite (Sky) continue to be the most common ways that viewers access multichannel television services.

Figure 2.64 Take-up of multichannel TV on main sets

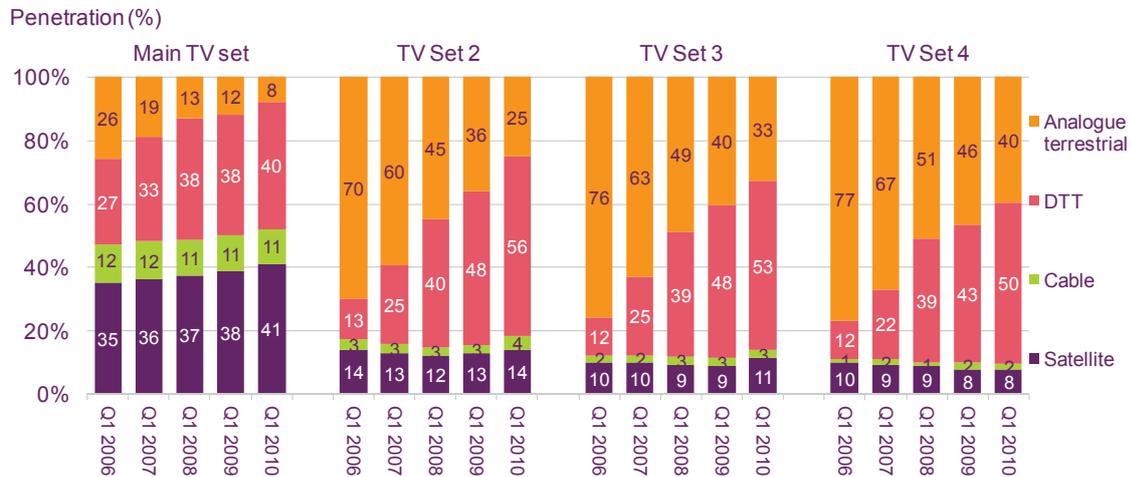


Source: Ofcom, GfK, Sky, Virgin Media. Data from Q1 2007 are based on consumer research, previous quarters use platform operator data, research and Ofcom estimates. Note: Digital terrestrial relates to DTT-only homes.

Figure 2.65 illustrates how platform adoption varies on different television sets in the home. The second to fourth sets in the home follow broadly similar patterns, with digital terrestrial television being the most common service, followed by analogue terrestrial television and satellite. DTT has significantly increased its share on non-main sets. One reason for this is that manufacturers are phasing out the production of analogue tuners as the default means

of reception in TV sets; these are being replaced by digital tuners (integrated digital televisions or IDTVs). In April 99.4% of all TV sets sold had an integrated DTT tuner (see 2.1.10).

Figure 2.65 Platform shares, by TV set



Source: GfK consumer research

Free-to-air satellite service Freesat added the largest number of homes in the year to the end of Q1 2010, with 658,000 net additions, compared to 311,000 in the same period 12 months earlier (although Freesat launched in May 2008). Figure 2.66 shows that pay satellite (Sky) net additions also increased year on year by 22,000 to 380,000. DTT-only additions increased, up by 138,000 to 338,000, while cable additions were down by 10,000 to 127,000.

Figure 2.66 DTT, satellite and cable net additions, year to Q1 2010



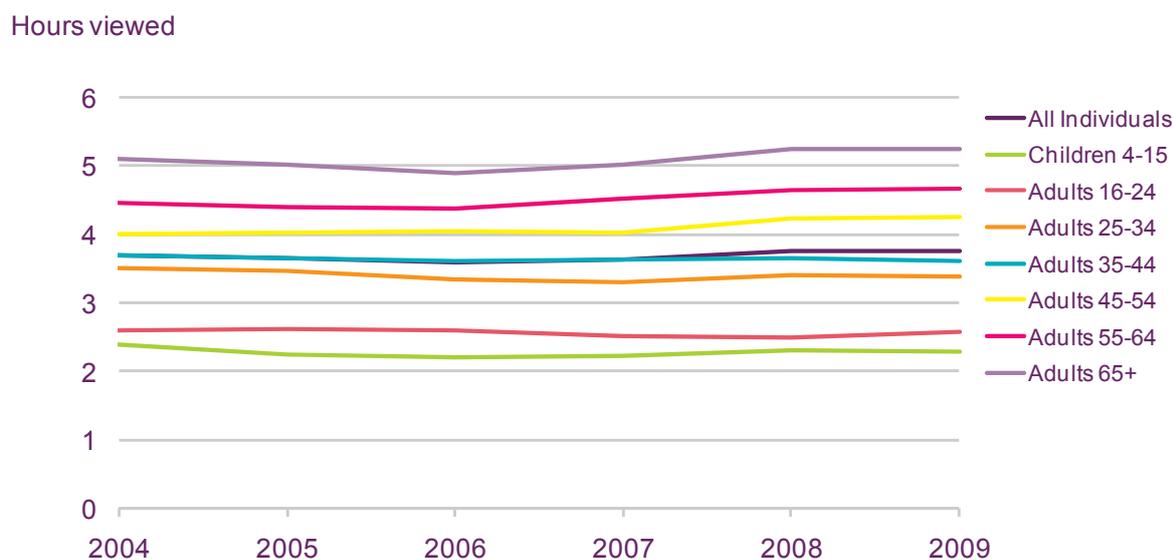
Source: Pay platform additions based on Virgin Media reported results and Ofcom estimates based on BSkyB results. Free satellite additions based on BBC/ITV Freesat sales figures. DTT additions based on Q1 2010 and Q4 2009 consumer survey results. Note: Chart uses multiple sources and is therefore intended to be considered only as a general indication of performance.

2.4.4 Consumption of television

Hours of TV consumption increased among older viewers but fell among younger viewers in 2009

The average number of hours of television watched by individuals in the UK has risen modestly over the past five years, from 3.7 hours a day in 2004 to 3.8 hours a day in 2009, an increase of 3% (Figure 2.67). The increase is more pronounced if measured from the recent low of 2006, when hours of viewing averaged 3.6 hours per person per day. Since 2006, the increase in TV viewing has been largely driven by rising viewing by the over-55s, whose consumption has risen by 0.3 hours per person per day. By contrast, viewing among adults aged 16-24 fell over the same period.

Figure 2.67 Average hours of television viewing per day, by age, all homes



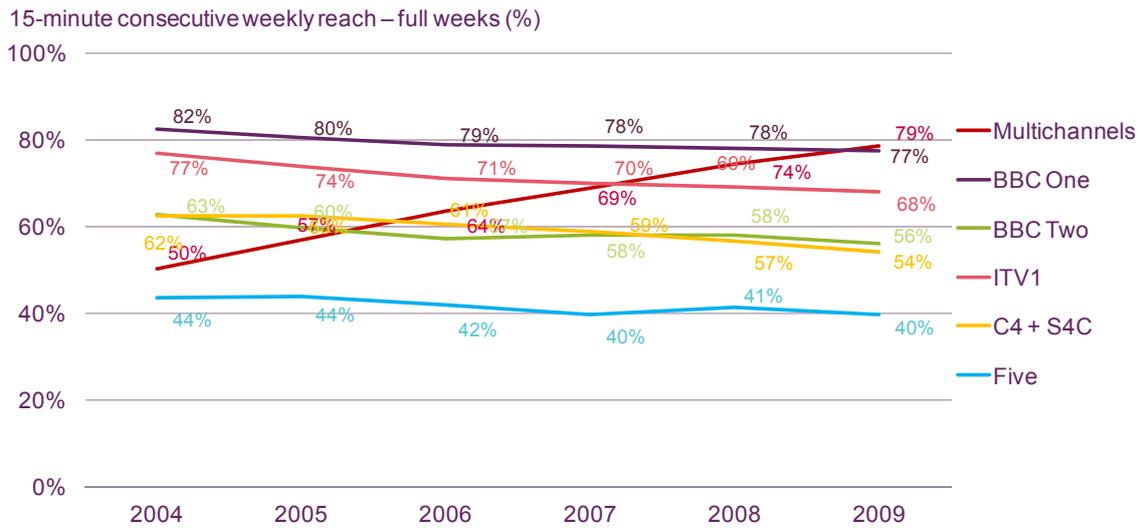
Source: BARB

2.4.5 Channel reach

Reach of multichannels exceeds individual main PSB channels for the first time

Figure 2.68 illustrates the collective average weekly reach of multichannel services, which rose by 29 percentage points to 79% between 2004 and 2009. This growth, together with the falling reach of the main PSB networks, means that for the first time in 2009 the combined reach of the multichannels exceeded that of any of the individual PSB channels. ITV1's reach fell furthest, by nine percentage points, to 68% in 2009. Channel 4's fell by eight percentage points and BBC Two by seven points. The reductions were lower on Five and BBC One, where reach fell by four and five percentage points respectively.

Figure 2.68 Average weekly TV reach in all homes, by channel



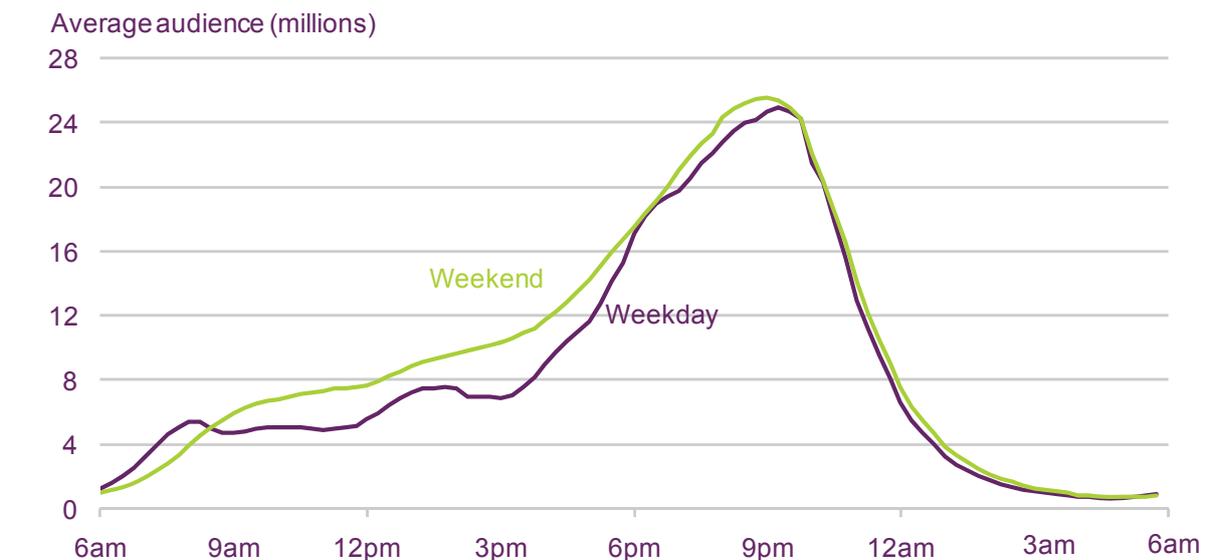
Source: BARB

The TV audience is generally higher at weekends

The average audience for all television on weekdays peaked at just under 25 million viewers in 2009 (between 21:15 and 21:30). At weekends, the peak in average viewing levels was both higher and earlier in the day, topping out at 25.5 million just before the 21:00 watershed (Figure 2.69). Viewing levels at the weekend were higher throughout most of the day, apart from the early morning (between 05:00 and 08:30).

While weekend audiences tend to increase continually from the morning until peak at 20:45, the weekday audience has two smaller, but distinct, peaks earlier in the day: one at 08:00, and another at 13:30. Viewing levels across the day on both weekdays and weekends in 2009 were in line with viewing patterns in 2008.

Figure 2.69 Average 2009 audiences, weekdays/weekends: by day part, all homes



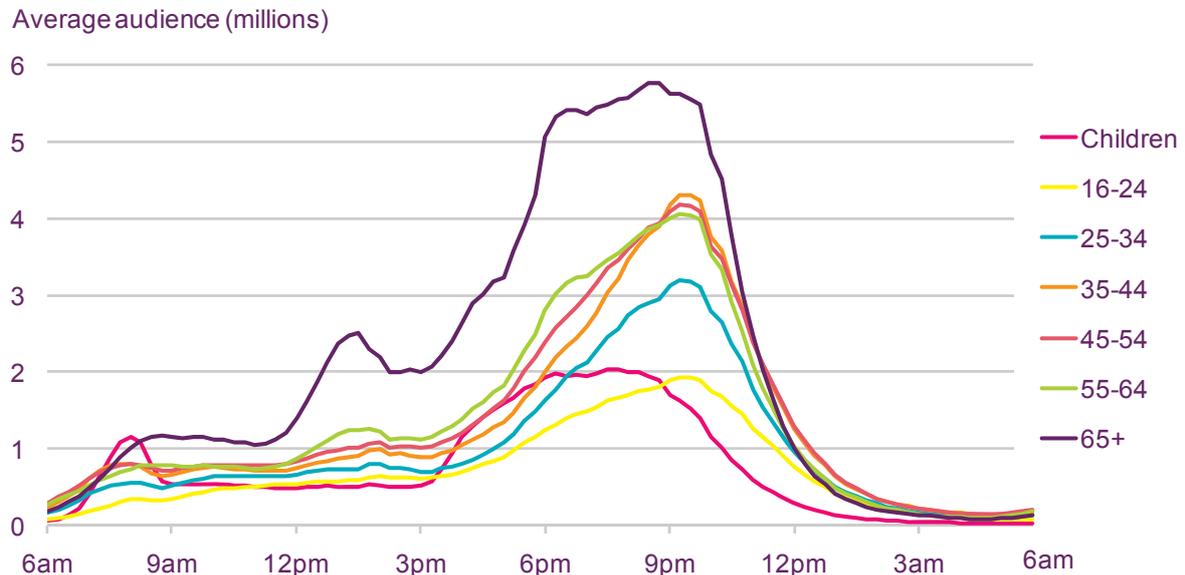
Source: BARB

Patterns of viewing, by time of day and age

The average weekday audience by day part and age is illustrated in Figure 2.70. Key points include:

- Audiences in the over-65 age group were by far the most prolific television viewers throughout most of the day. This age group had a long, flat peak in viewing from across the evening schedule, and a pronounced spike in viewing at lunchtime between 13:15 and 13:45.
- Children's viewing patterns were different from all other age groups. Their viewing peaked at 19:30 on weekdays, much earlier than the overall viewing peak. There was also a sharp spike in viewing at 08:00, which made a major contribution to the overall spike in viewing at this time.
- The size of the 16-24 audience is significantly lower at all times of the day when compared to other adult age groups. Peak viewing for this audience, like most other groups, took place between 21:15 and 21:30, but the peak was low and flat when compared to audiences aged 25-44.
- Levels and patterns of viewing across the day for adults aged between 35 and 64 showed little variation.
- Weekday viewing levels in 2009 did not differ significantly to levels in 2008 for any of the age demographics.

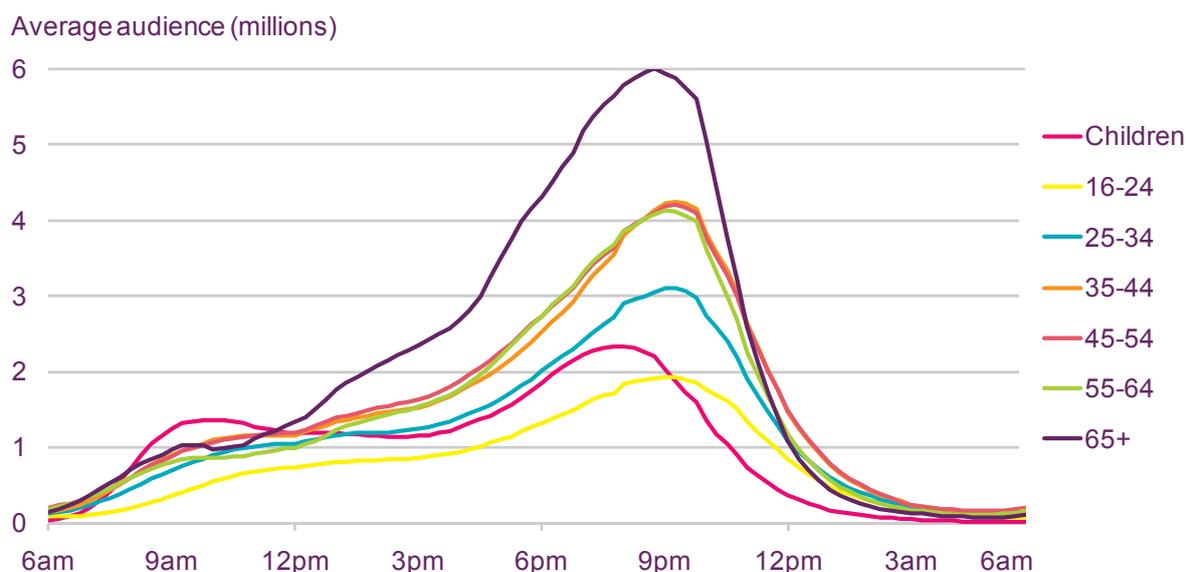
Figure 2.70 Average 2009 weekday audiences, by day part and age, all homes



Source: BARB

Viewing patterns for weekdays also hold true at the weekends (Figure 2.71). Audiences were higher among adults aged 65+; children watched more in the morning, and the evening peak in their viewing was earlier than for older groups. Those aged 16-24 watched less than other adults; there was little difference in viewing among age bands between 35 and 64. Viewing patterns at the weekends in 2009 were in line with those in 2008.

Figure 2.71 Average 2009 weekend audiences, by day part and age, all homes

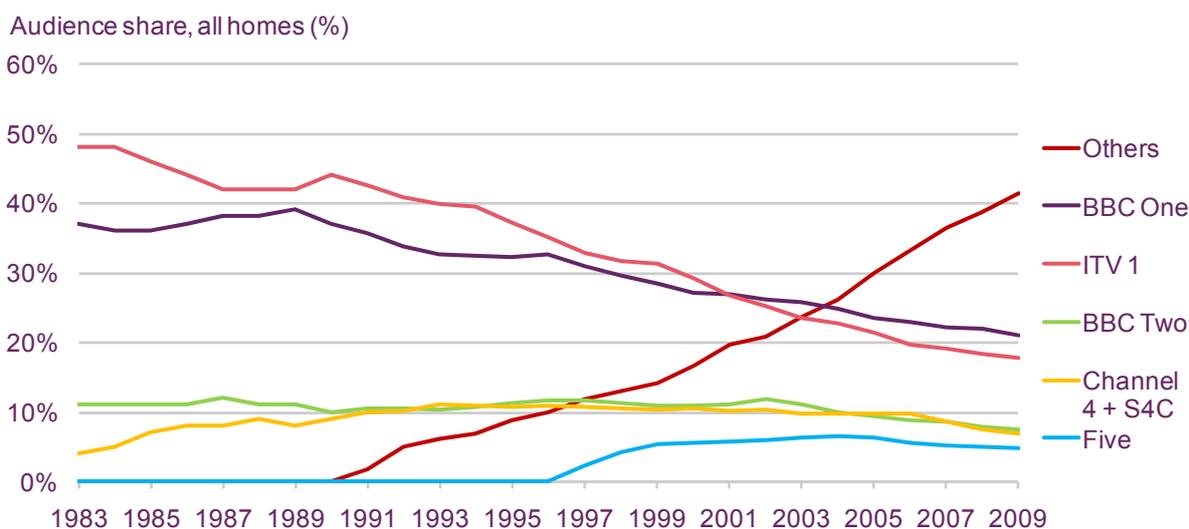


Source: BARB

2.4.6 Viewing shares of the five main PSB channels

Multichannel broadcasters continued to experience increases in viewing share. In 2009, they collectively accounted for a 41% share of all viewing (nearly double that of BBC One, at 21%, which attracted the biggest individual channel share). Year on year, multichannel share increased by two percentage points and since 2004, it has risen by 15 percentage points from 26%. Consequently, each of the five main PSB channels (BBC One, BBC Two, ITV1, Channel 4/S4C and Five) experienced varying degrees of reduction in viewing share over the same period.

Figure 2.72 Channel shares in all homes, 1982 to 2009



Source: BARB, TAM JICTAR and Ofcom estimates

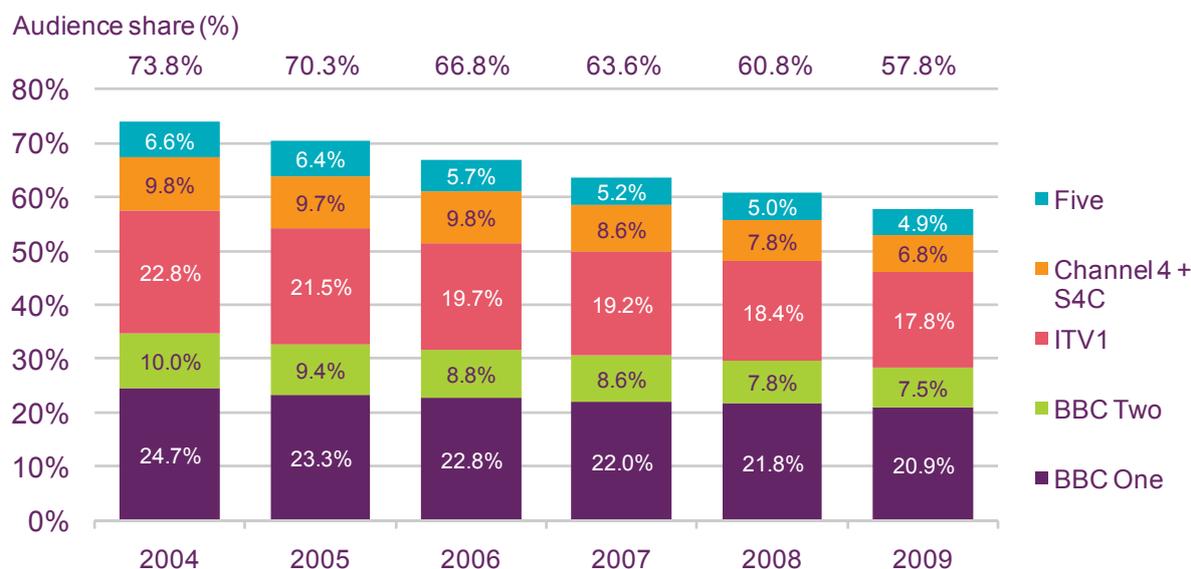
PSB channels' share decline continued in 2009

The combined share of viewing of the five main PSB channels in all homes declined by three percentage points to 57.8% in 2009. Share has fallen by 18.7 percentage points since 2004 as a result of competitive pressures from multichannel services (Figure 2.73).

ITV1's falling share has been the most pronounced among PSBs since 2004 – down by five percentage points to 17.8% by 2009. Although BBC One's share decreased by 3.8 percentage points over the same period, it retained the highest share of any channel, at 20.9%, in 2009. Channel 4/S4C lost three percentage points over the period, falling to 6.8% in 2009, while BBC Two and Five lost 2.5 and 1.7 percentage points respectively, falling to 7.5% and 4.9% in 2009.

Year on year, Channel 4/S4C lost the most share; 13% (or one percentage point) between 2008 and 2009. BBC Two and Channel 4/S4C shares were on a par with 2008 figures, but BBC Two edged ahead in 2009, experiencing a smaller loss of 0.3 percentage points. BBC One share fell by 0.9 percentage points and ITV1 by 0.6 percentage points year on year. Five, with the smallest share of the main PSB channels, lost just 0.1 percentage points.

Figure 2.73 Five main PSB channels' audience share, all homes



Source: BARB

While the combined share of the five main PSB channels stood at just less than 58% of viewer hours in all television homes during 2009, there were significant variations by platform (Figure 2.74). The PSB channels enjoy a collective monopoly over viewing in homes that receive only analogue TV services, but face competition for audiences in digital terrestrial (DTT) and cable and satellite homes, where there is greater channel choice.

By December 2009, the share of the main PSB channels in DTT homes was 60%, compared with the 58% share they attracted across all homes. While viewing share in DTT homes has fallen consistently since December 2005 (when it stood at 74%) there are signs that the rate of decline has slowed. In December 2006, share was down five percentage points from 2005, but by December 2009 the fall was just two percentage points on the previous year.

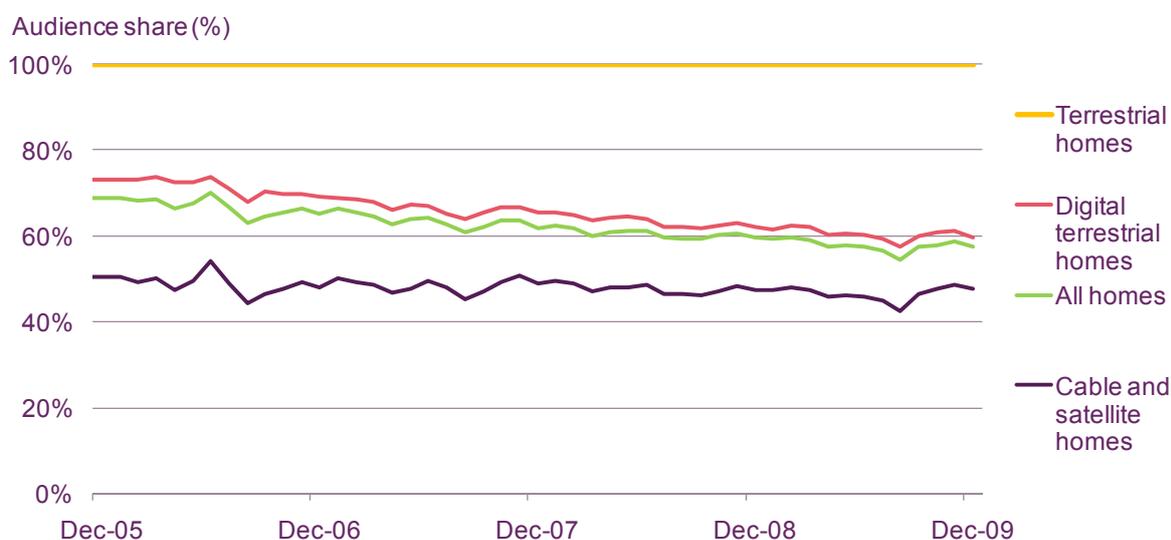
In cable and satellite homes the position was different. The five main PSB channels attracted a significantly lower share than in DTT homes – 48% in December 2009 compared with 60%

for DTT. However, their share remained relatively stable over the previous five years, at around 48% or 49% at each year-end.

The most likely explanation the share of the main PSB channels in DTT homes have declined at a relatively greater rate than in cable and satellite homes is because in recent years there has been a proportionately greater increase in the number of channels available on DTT. This has resulted in increased competition for the main PSB channels on the DTT platform, which in earlier years was less intense.

The combined share of the main PSB channels has remained constant in both analogue terrestrial, and cable and satellite homes since 2005. As a result, the decrease in share across all homes (from 69% in December 2005 to 58% in December 2009) can be explained by loss of share in DTT homes alone.

Figure 2.74 Five main PSB channels' audience shares, by platform



Source: BARB

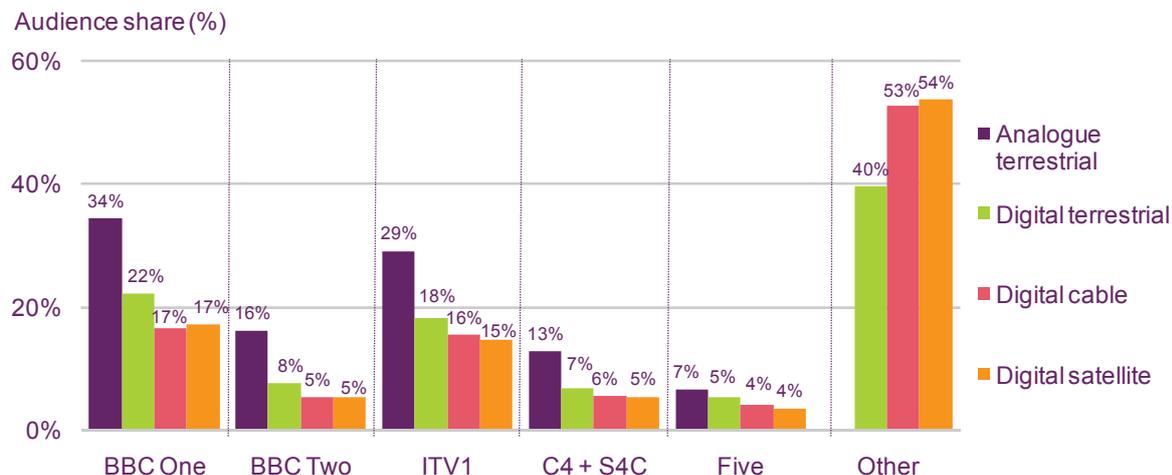
Audience shares for individual PSB channels varied by platform (Figure 2.75). During 2009 BBC One and ITV1 were the two most popular channels on all platforms. In analogue terrestrial homes, they attracted a combined viewing share of 63%, greater than the shares they attracted on any other platform. This might be explained by the demography of the analogue viewing universe, which has an over-representation of older people; historically, BBC One and ITV1 attract a higher proportion of viewing share among older age groups.

The margin between BBC One and ITV1 was most significant in analogue terrestrial homes at 34% and 29% respectively. In DTT homes, BBC One attracted a 22% share, some four percentage points higher than ITV1's share of 18%. In digital cable homes the difference between BBC One and ITV1 shares was even less pronounced (17% and 16% respectively) while in digital satellite homes BBC One attracted a 17% share of viewing and ITV1 15%.

BBC Two was the third most-viewed channel in analogue terrestrial homes in 2009, attracting a 16% share, compared with Channel 4/S4C and Five's 13% and 7% respectively. In DTT homes, BBC Two's share was 8%, compared with Channel 4/S4C at 7% and Five with 5%. In digital cable homes, Channel 4/S4C achieved a higher share than BBC Two – 6% and 5% respectively with Five at 4%. In digital satellite homes, BBC Two and Channel 4/S4C both attracted a 5% viewing share, while Five's stood at 4%.

Relative to Channel 4/S4C and Five, BBC Two historically attracts a proportionately higher share of viewing among older people. This may help explain why the margins between these channels' shares were least pronounced on the digital platforms, where there is an over-representation of older viewers.

Figure 2.75 Channel share, by platform, 2009



Source: BARB

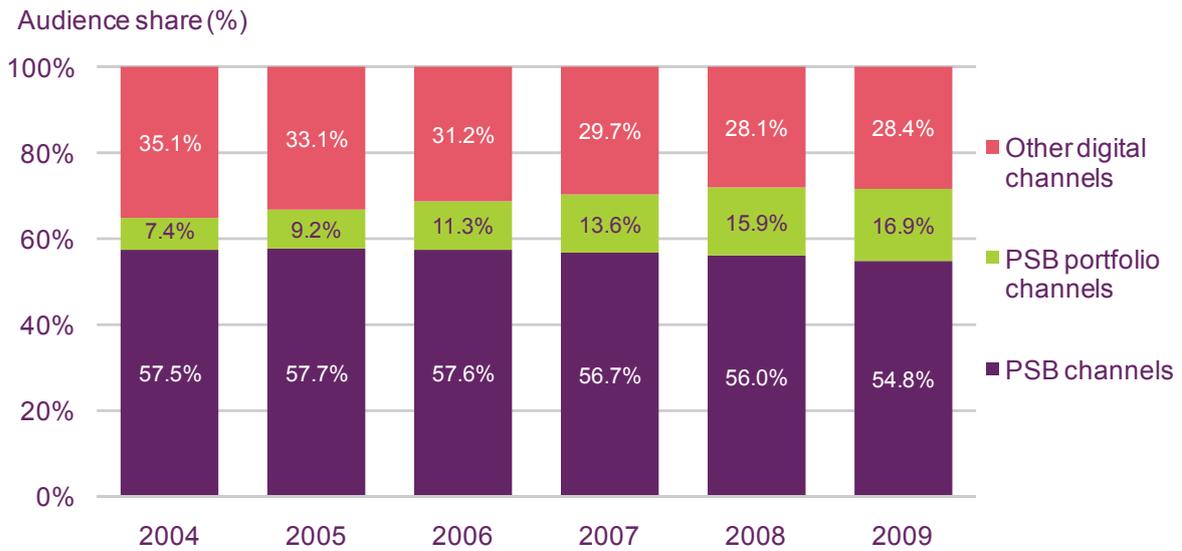
2.4.7 Multichannel broadcaster shares

The rise in PSB portfolio channel share fails to offset the decline in the main PSB share

Between 2005 and 2008, the five main PSBs saw their viewing share in multichannel homes decline steadily, but these reductions were offset each year by increasing share among their portfolio channels (BBC Three, BBC Four, CBeebies, CBBC, BBC News, BBC Parliament, BBC HD, ITV2, ITV3, ITV4, CITV, Men & Motors, GMTV2, E4, More4, Film4, 4Music, Fiver and Five USA) (Figure 2.76).

In 2005, the combined share of the main PSBs and their portfolio services was 66.9% and by 2008 this had risen to 71.9%. In 2009 the combined share of the PSB portfolio channels did rise, by one percentage point, but this was not enough to offset a 1.2 percentage point decline in share for the five main PSBs.

Figure 2.76 PSB and portfolio channel shares in multichannel homes

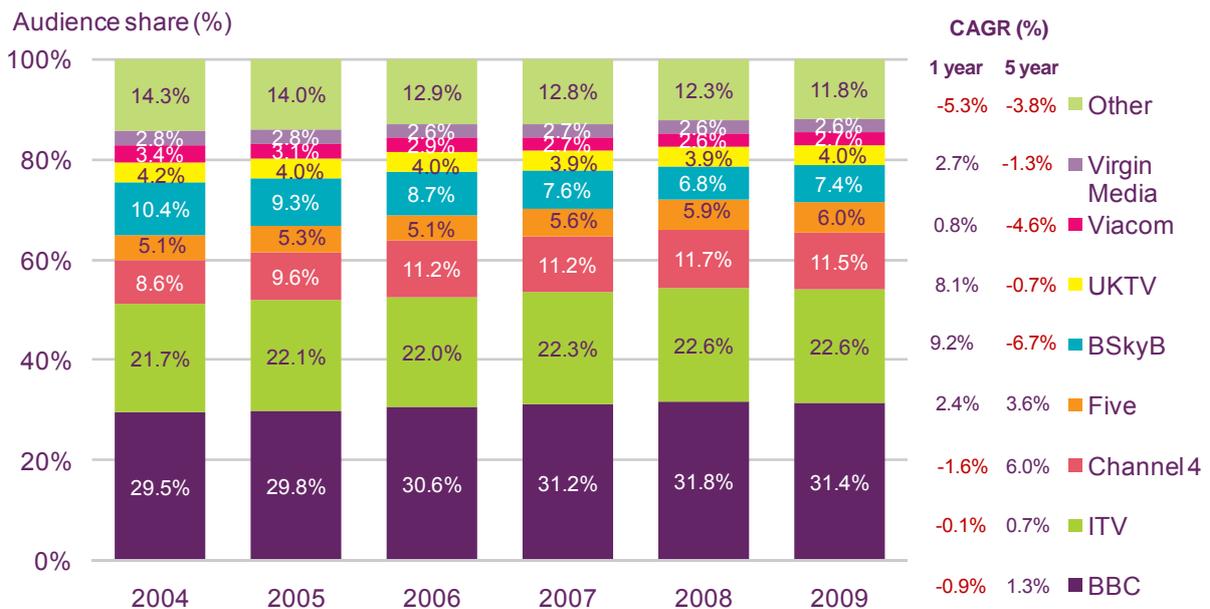


Source: BARB

The combined share in multichannel homes of all BBC channels dropped for the first time in five years, falling from 31.8% to 31.4% between 2008 and 2009 (Figure 2.78). The combined share of Channel 4's portfolio also slipped from its 2008 level, by 0.2 percentage points (to 11.5%), while ITV's portfolio held steady at 22.6%. Of the terrestrial channels, only Five's portfolio share grew year on year, rising from 5.9% to 6.0% (Figure 2.77).

The PSBs' falling portfolio share contrasts with a resurgence in Sky's collective channel share. Between 2004 and 2008, it fell steadily each year; from 10.4% to 6.8% in 2008. But in 2009, the share rose by 0.6 percentage points to 7.4%. Both Viacom and UKTV's share of viewing picked up modestly on the year, while Virgin Media Television's (now owned by Sky and called Living TV) remained flat.

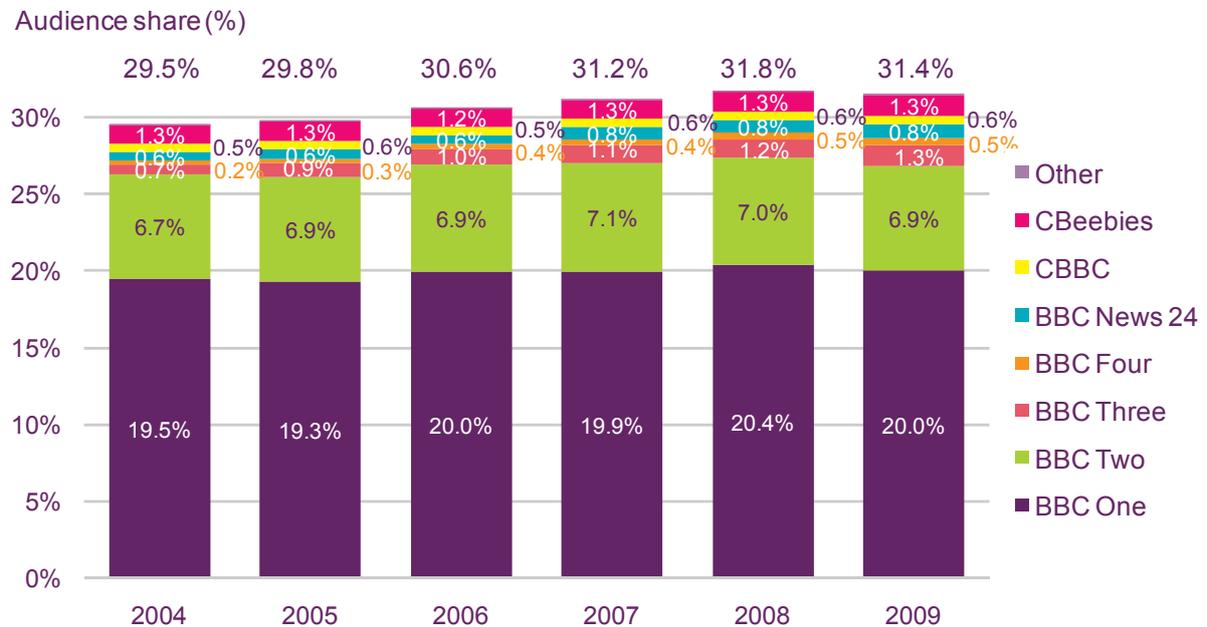
Figure 2.77 Broadcaster portfolio shares in multichannel homes



Source: BARB

In 2008, BBC One's share in multichannel homes grew by 0.5 percentage points, but then fell back by 0.4 percentage points in 2009. BBC Two's share dropped by 0.1 percentage points in 2009, as it had in 2008. The combined share of the BBC's digital channels grew by 0.3 percentage points (to 4.7%).

Figure 2.78 BBC portfolio share in multichannel homes



Source: BARB

ITV1's share in multichannel homes fell for the second year in succession to 16.9%, its lowest ever figure (Figure 2.79). Since 2004, the UK's largest commercial channel has seen its share in multichannel homes drop by two percentage points, while BBC One's share has risen by 0.5% over the same period.

However, ITV1's year-on-year decrease in share was counterbalanced by continued growth for ITV2 and ITV3, each recording increases in viewing share of 0.2 percentage points. Both channels achieved their highest-ever shares of multichannel viewing in 2009, while ITV4's share remained static, following three years of growth.

Figure 2.79 ITV portfolio shares in multichannel homes



Source: BARB

Channel 4's portfolio also saw its combined share in multichannel homes recede year on year (Figure 2.80), and – as with the BBC – this was caused by a decline in share for the main PSB channel, whose share fell by 0.4 of a percentage point to 6.4% during 2009. However, the rate at which the main channel lost share in 2009 was slower than it had been in the two preceding years (0.7 points and 0.8 points respectively).

In earlier years, Channel 4's digital channels had gained share at a far greater rate than they did in 2009. In 2008 for example, Channel 4+1 alone supplied an increase of 0.6 percentage points to the portfolio's overall share, while the launch of 4Music was responsible for a further uplift of 0.3 points. In 2007 and 2008, the launches of Channel 4+1 and More4, and the movement of Film4 to Freeview, supplied similar increases. There were no comparable increases in viewing in 2009, as the shares for E4, Film4, and 4Music all remained flat and More4's share rose by just 0.2 percentage points.

Figure 2.80 Channel 4 portfolio shares in multichannel homes



Source: BARB

Bucking the trend of the other PSBs, only Five saw its portfolio share in multichannel homes rise in 2009 (Figure 2.81). The main channel held its share at 4.7% in 2009; this was just 0.6 percentage points lower than its 2005 peak share of 5.3%. The digital channel Fiver's share also held its share in 2009, at 0.6%, after a rise of 0.2 percentage points in 2008, when it was re-branded from Five Life.

The slight growth in Five's portfolio share during 2009 was driven by Five USA, which was re-branded from Five US in February. Its share of viewing in multichannel homes subsequently rose by 0.1 percentage points.

Figure 2.81 Five portfolio shares in multichannel homes



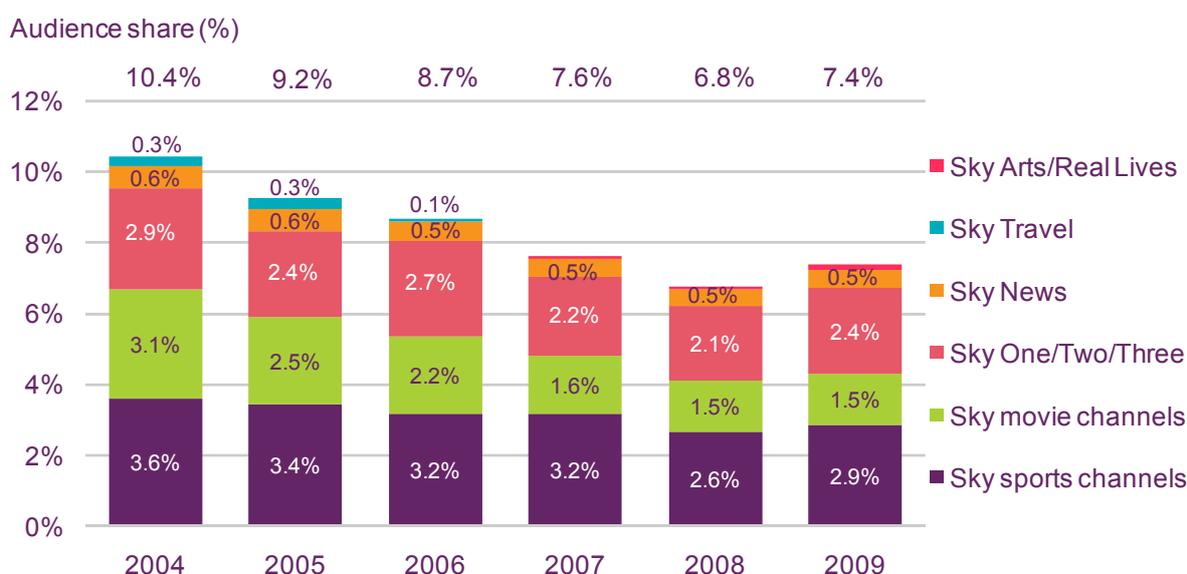
Source: BARB

For four years in succession, Sky's portfolio share of viewing in multichannel homes declined, falling from 10.4% in 2004 to 6.8% in 2008 (Figure 2.82). This decline was driven by reductions in share for its sports channels (down one percentage point) and film channels (down 1.6 percentage points).

The trend reversed in 2009, with growing audience share for Sky's sports and general entertainment channels, while the film channels' share remained flat year on year, at 1.5%. The combined share of BSkyB's three entertainment channels (Sky 1, Sky 2, and Sky 3) rose by 0.3 percentage points to 2.4%, their highest combined share since 2006. Sports channels increased by 0.3 percentage points year on year; a third of this came from Sky Sports News.

The growth can be attributed in part to the reappearance of Sky 1, 2 and 3, Sky News and Sky Sports News on the Virgin Media platform (from which they had been missing between March 2007 and November 2008). It can also be explained by the increased take-up of Freeview, where Sky 3 and Sky Sports News were both available during 2009 (In June 2010, Sky said that Sky Sports News would be replaced on Freeview with a '+1' version of Sky 3⁴⁹).

Figure 2.82 BSkyB portfolio shares in multichannel homes



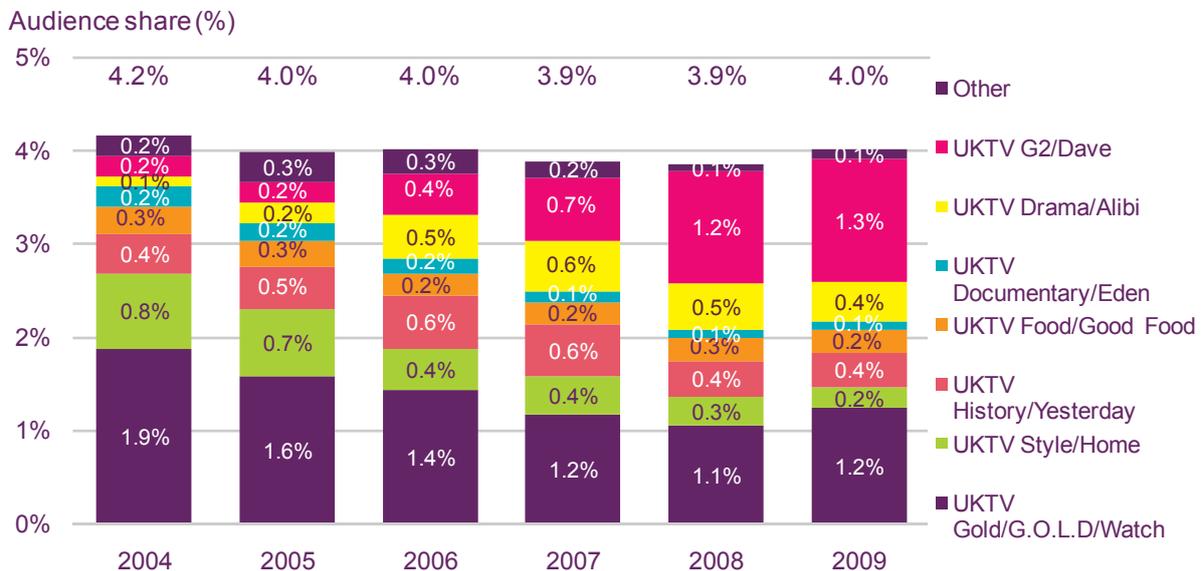
Source: BARB

Between 2007 and 2009, UKTV rebranded all its channels, removing the UKTV prefix from channel names. Not all of the new channels in the current portfolio have direct equivalents in the old portfolio. But among those that do, Dave, formerly UKTV G2, experienced the greatest growth in share, having gone free-to-air at the point of the rebrand (Figure 2.83). In 2006, the last full year in which UKTV G2 aired, the channel had a 0.4% share in multichannel homes, but by 2009, Dave's share had increased to 1.3%. Despite this, the combined share in multichannel homes of the UKTV portfolio channels varied only marginally over the past five years, maintaining share consistently between 3.9% and 4.0%. UKTV Gold's share of 1.4% in 2006 has not been matched by its replacement channels, G.O.L.D and the new channel Watch, which together commanded a combined share of 1.2% in 2009.

⁴⁹ <http://corporate.sky.com/page.aspx?pointerid=31fb93be272445fc96f0d9a59fb39145>

Yesterday, which replaced UKTV History in March 2009, did not boost its predecessor's share, while Alibi, replacing UKTV Drama in October 2008, saw its share slip by 0.1 percentage points in 2009. Eden and Good Food maintained the shares held by their forerunners UKTV Documentary and UKTV Food.

Figure 2.83 UKTV portfolio shares in multichannel homes



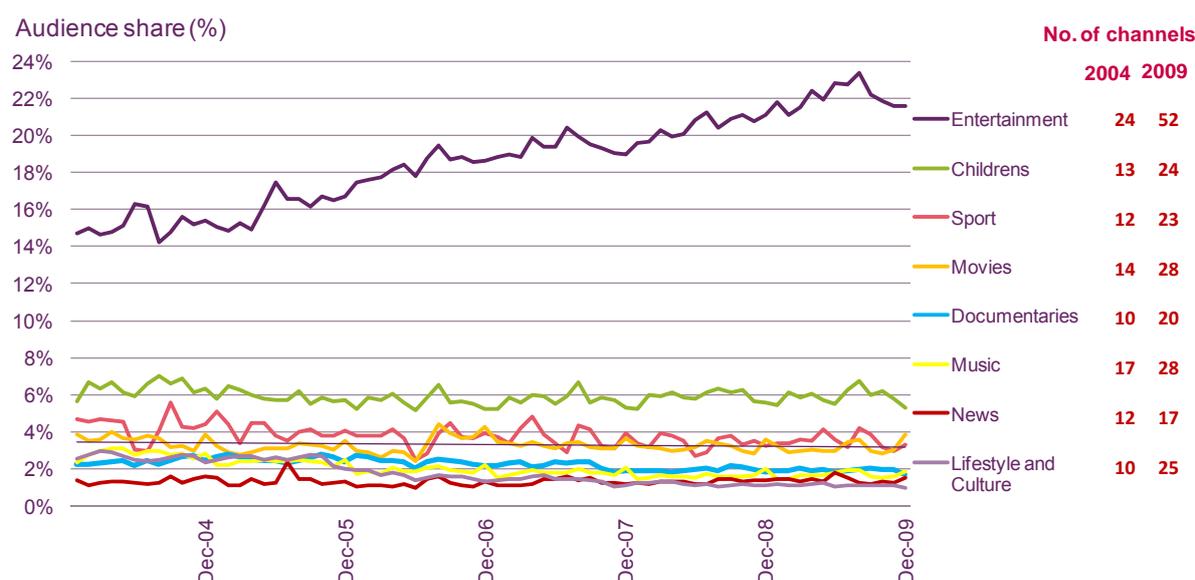
Source: BARB

Figure 2.84 illustrates the aggregate share of channels by genre (as defined by Sky's electronic programme guide, excluding the five main PSB channels). The Entertainment channel genre category dominated, with an average audience share of 22% during 2009, up from 15% in 2004. No other channel genre has attracted such a high share or experienced similar growth in total share over this five-year period.

The rise is partly due to the increase in the number of channels monitored by BARB in the Entertainment category, which more than doubled from 24 in December 2004 to 52 in December 2009. Despite the expansion in the number of channels available, this did not lead to significant fragmentation of channel shares in this genre. The top ten Entertainment channels accounted for 63% of the genre share, down from 79% in December 2004.

The number of channels in all of the other genre categories has also risen, but their combined shares of total viewing have remained fairly constant since 2004, suggesting that viewing in these categories has fragmented relatively more between the incumbent and new entrant channels.

Figure 2.84 Aggregate shares of channel genres in multichannel homes



Source: BARB. Note: Number of channels does not include '+1' services

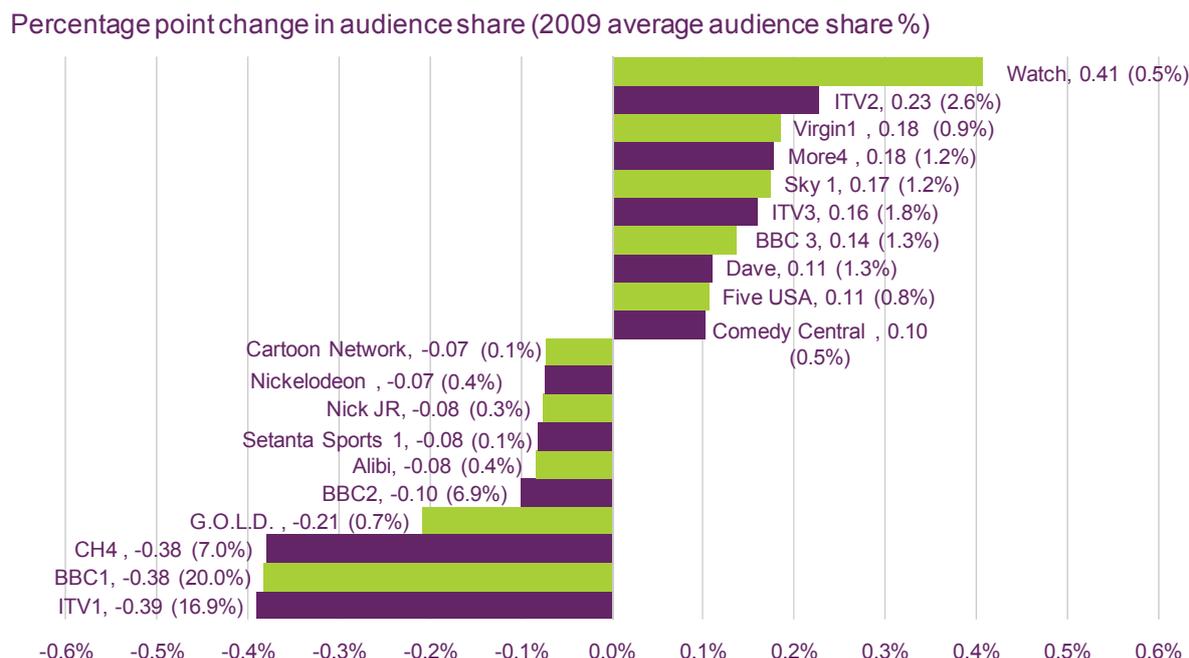
Multichannel audience winners and losers, 2008 to 2009

The ten channels in multichannel homes that gained the most audience share in percentage point terms during 2009 are illustrated in Figure 2.85, together with the ten whose share fell furthest.

Watch's share increased the most in 2009, a rise of 0.41 percentage points, although, as the channel did not launch until October 2008, the yearly comparison is not like-for-like. ITV2 was the second biggest gainer overall, increasing its audience share by 0.23 percentage points to maintain its position as the most-viewed multichannel in 2009. Sky 1 gained an increase of 0.17 percentage points, a marked increase in share after its return to the Virgin Media cable platform in November 2008 following a 20-month absence. Virgin1, Comedy Central and Five USA all experienced increases in audience share after rebranding of the channels in February, April and June 2009 respectively. Five of the top ten gainers (ITV2, More4, ITV3, BBC Three and Five USA) were part of PSB portfolio groups.

Four of the five channels that lost the most share in 2009 were main PSBs. ITV1's fell the most between 2008 and 2009, shedding 0.39 percentage share points in multichannel homes. Close behind were BBC One and Channel 4/S4C - both losing 0.38 percentage points. BBC Two followed, with share falling 0.1 of a percentage point. Of the multichannel services, G.O.L.D and then Alibi lost the most audience share, dropping by 0.21 and 0.08 percentage points respectively. In October 2008 both of these channels, as part of a wider change by parent company UKTV, experienced some form of re-branding, following which their audience shares marginally decreased in the earlier parts of 2009. Setanta Sports 1 ceased broadcasting in June 2009, helping to explain its presence in the list. Three of the ten channels to lose most share were dedicated children's services (Nick Jr, Nickelodeon and Cartoon Network).

Figure 2.85 Multichannel audience winners and losers, 2008 to 2009



Source: BARB. Note: Includes channels' +1 services

The most-viewed channels in multichannel homes remain the same year on year

Despite losing the most audience share in absolute terms, the main PSB channels still attracted more share than any other TV channels in 2009. The top 13 most-watched channels have remained completely unchanged year on year (Figure 2.86). In addition to the five main PSB channels, the other top ten slots were occupied by ITV2, E4, ITV3, Sky Sports 1 and CBeebies. Sky Sports 1 was the only non-PSB portfolio channel in the top ten.

Across the top-20 channels, there was also little change year on year. Virgin1 was the only new entry, moving up four places (the biggest shift in the top twenty) from 22 in 2008 to 18 in 2009. Sky 1, ITV4 and Living were the other top-20 channels to move up, all rising one place from their 2008 positions. Film4 was the one channel still in the top twenty channels to fall, moving down one place from fourteenth to fifteenth (swapping places with Sky 1) while Sky 3 dropped out (twenty-first in 2009 with a share of 0.71%).

Figure 2.86 The top channels by share in multichannel homes, 2008 to 2009

Channel	Share	Rank		Channel	Share	Rank	
	2009	2009	2008		2009	2009	2008
BBC One	20.0%	1	1	Dave	1.3%	11	11
ITV1	16.9%	2	2	BBC Three	1.3%	12	12
Channel 4	7.0%	3	3	More 4	1.2%	13	13
BBC Two	6.9%	4	4	Sky One	1.2%	14	15
Five	4.7%	5	5	Film4	1.0%	15	14
ITV2	2.6%	6	6	ITV4	0.9%	16	17
E4	1.8%	7	7	Living	0.9%	17	18
ITV3	1.8%	8	8	Virgin1	0.9%	18	22
Sky Sports 1	1.4%	9	9	BBC News	0.8%	19	19
CBeebies	1.3%	10	10	Disney Channel	0.8%	20	20

Source: BARB. Note: Includes channels' +1 services

The 20 most-viewed programmes in 2009 were all on either BBC One or ITV1

Figure 2.87 lists the top 20 most-viewed television programmes, based on average audience, in multichannel homes during 2009. The most-viewed programme in 2009 was the final of *Britain's Got Talent* on ITV1 – attracting an average audience of 16.5 million people (aged 4+). All of the top-20 programmes were broadcast on BBC One or ITV1, with the top four all ITV1 weekend broadcasts falling into the family entertainment category (as defined by BARB). Of the top 20 programmes, 18 were broadcast during late peak hours (20:00-22:30) and 15 were on Friday, Saturday or Sunday. Four of the broadcasts were on 25 December (Christmas Day) – making this day the date with the most top-20 entries.

Figure 2.87 Top 20 TV programmes in 2009, based on average audience

No.	Title	Channel	Date	Day	Start time	End time	Aud' (m)
1	BRITAIN'S GOT TALENT FINAL RESULT	ITV1	30/05/2009	Saturday	21:31	22:00	16.5
2	THE X FACTOR RESULTS	ITV1	13/12/2009	Sunday	19:29	21:26	15.6
3	BRITAIN'S GOT TALENT	ITV1	30/05/2009	Saturday	18:45	20:23	14.8
4	THE X FACTOR	ITV1	21/11/2009	Saturday	20:03	21:17	13.5
5	THE ROYLE FAMILY	BBC1	25/12/2009	Friday	21:01	21:59	11.4
6	EASTENDERS	BBC1	25/12/2009	Friday	20:00	20:59	11.3
7	DOCTOR WHO	BBC1	25/12/2009	Friday	17:59	18:58	11.1
8	STRICTLY COME DANCING	BBC1	19/12/2009	Saturday	20:41	21:45	10.7
9	I'M A CELEBRITY - GET ME OUT OF HERE!	ITV1	21/11/2009	Saturday	21:21	22:21	10.4
10	CORONATION STREET	ITV1	16/11/2009	Monday	20:29	20:55	10.3
11	DANCING ON ICE	ITV1	22/03/2009	Sunday	18:55	20:58	10.2
12	I DREAMED A DREAM - THE SUSAN BOYLE STORY	ITV1	13/12/2009	Sunday	21:34	22:33	10.0
13	COMIC RELIEF	BBC1	13/03/2009	Friday	19:00	21:59	10.0
14	DOC MARTIN	ITV1	08/11/2009	Sunday	21:02	22:00	9.7
15	GAVIN AND STACEY	BBC1	25/12/2009	Friday	22:00	22:29	9.6
16	CHILDREN IN NEED	BBC1	20/11/2009	Friday	19:00	21:59	9.5
17	THE GRUFFALO	BBC1	25/12/2009	Friday	17:31	17:57	9.5
18	THE ROYAL VARIETY PERFORMANCE	ITV1	16/12/2009	Wednesday	19:29	21:58	9.1
19	THE APPRENTICE	BBC1	03/06/2009	Wednesday	21:00	21:59	9.1
20	JONATHAN CREEK	BBC1	01/01/2009	Thursday	20:59	22:58	9.0

Source: BARB. All individuals (aged 4+). Highest occurrence of programme only.

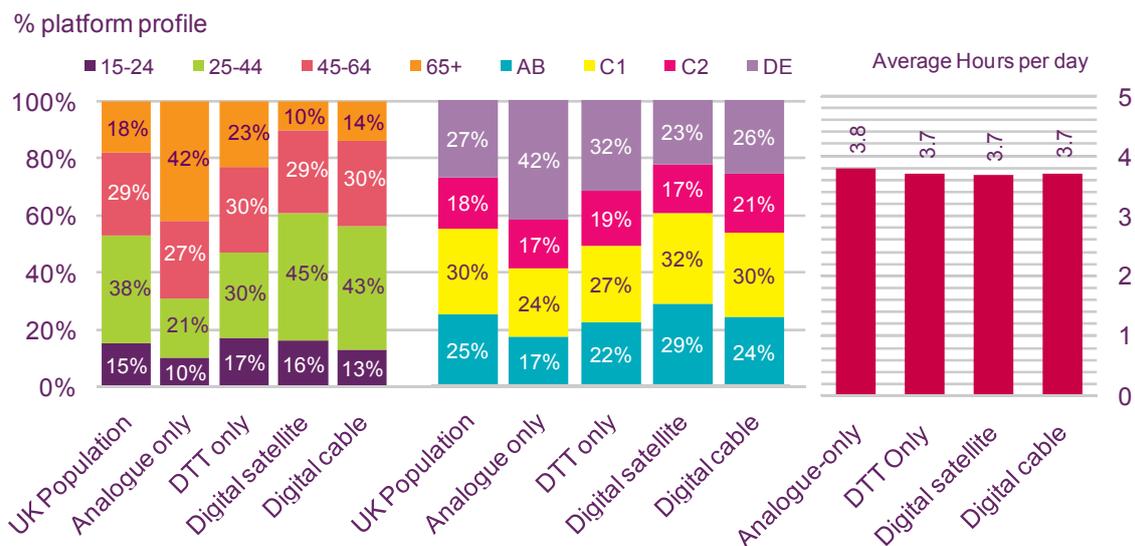
Platform and channel demographics

The proportion of adult viewers aged 44 or under with access to analogue-only television continues to fall, as illustrated in Figure 2.88. Fifty-three per cent of the UK population are in this age group, compared with just 31% of analogue-only adult viewers. The analogue television viewing universe is older, possibly because younger viewers have migrated to digital television platforms more rapidly than older groups. Freeview is the more popular digital television platform among older viewers, with over-65s accounting for 23% of the Freeview audience in 2009, but 18% of the population as a whole.

The demographic profiles of satellite and cable viewers remain largely stable, with a slightly younger and more ABC1-biased demographic than the UK population averages. The profile of the analogue-only viewing audience is skewed towards the DE demographic, which accounted for 42% of the platform's total audience (up from 41% in 2008) but made up only 27% of the population. Freeview's demographic profile shows that DTT is popular among viewers in the DE category who have migrated to digital; they accounted for 32% of the platform's viewers in 2009, an increase of two percentage points year on year, but made up just 27% of the general population.

The higher average hours of viewing by analogue terrestrial viewers (3.8 hours/day in 2009), compared to viewers on other platforms might be explained by the progressively ageing population of analogue terrestrial viewers as, on average, older people watch more TV.

Figure 2.88 Platform demographics by age, socio-economic group and viewing hours, 2009



Source: Ofcom and BARB

Figure 2.89 shows the age and gender profiles of the 30 most-viewed channels, relative to the overall television audience in multichannel homes, which is found at the intersection of the two axes.

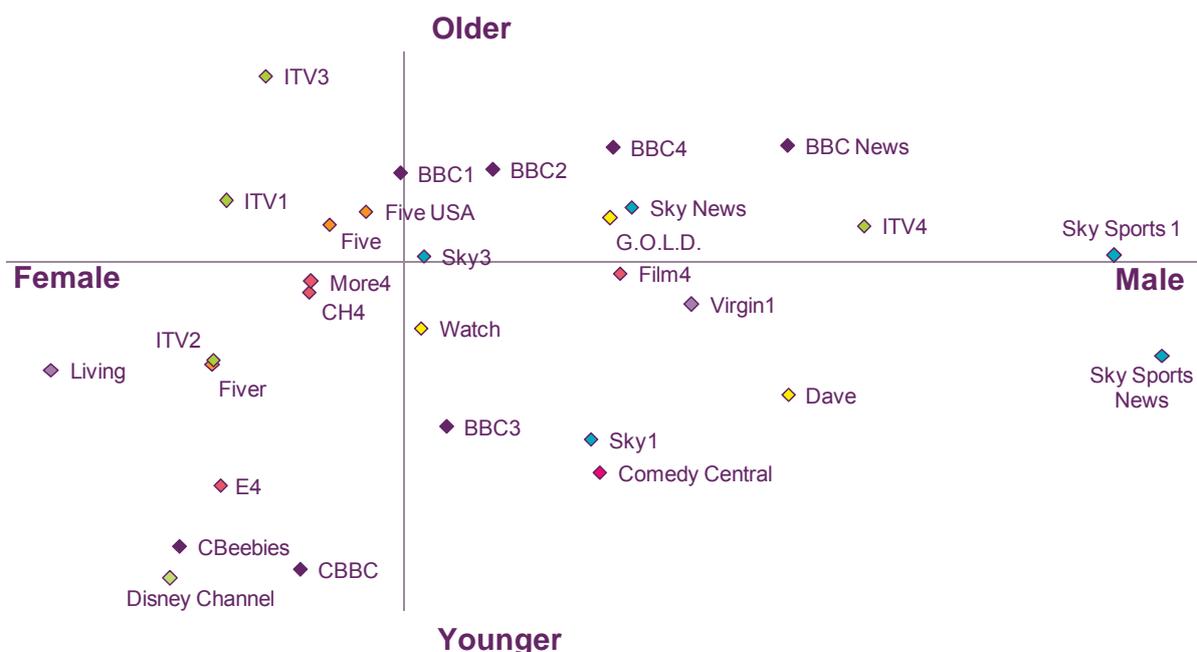
The five main PSB channels all congregate near the multichannel average; all but Channel 4 skew a little older. The top-left quadrant of the graph – channels whose audiences are older and predominantly more female than average – contains three of the five terrestrial PSB channels, but only two digital channels, in stark contrast to the other three quadrants.

Four of the BBC's channels – BBC One, BBC Two, BBC Four, and BBC News – attract a significantly older audience than average, while their other major non-children's channel, BBC Three, draws a younger audience. In a similar vein, audiences to ITV's three largest channels – ITV1, ITV2, and ITV3 – are all more female than average, while its fourth largest channel, ITV4, is skewed heavily male. Channel 4 and Five, by contrast, have channels with a demographic profile comparable to the 'main' PSB service: More4 and Five USA. Of all the PSB portfolios, Five's channel profiles exhibited the least amount of variation.

BSkyB had five channels in the top 30, and four of them – Sky News, Sky 1, Sky Sports 1 and Sky Sports News – profiled significantly more male than the average, but Sky 3 – their only entertainment service available on Freeview – attracted an audience profile close to the multichannel average.

Most of the channels in the top 30 which were not either part of a PSB portfolio, or owned by BSkyB, were skewed to younger and more male audiences, the exceptions being Living and Disney Channel – both more female – and G.O.L.D. – slightly older than the average.

Figure 2.89 Age and gender profile of the 30 most-viewed channels in multichannel homes



Source: BARB. Channels plotted according to the percentage of all viewing coming from male and 45+ viewers compared to total TV in multichannel homes.

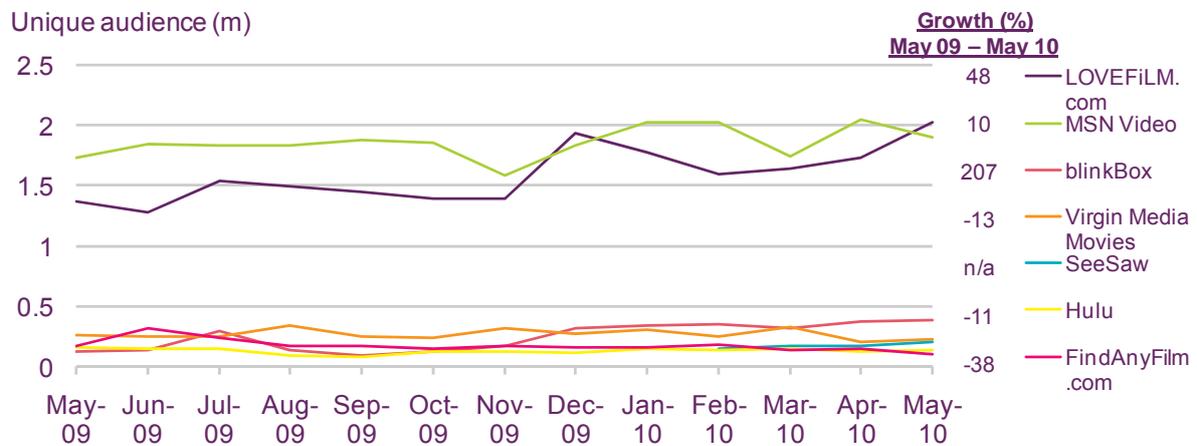
2.4.8 Online TV reach and audience

Online TV and film sites continue to jostle for position

Two of the most popular sites offering consumers access to online film and TV were LOVEFiLM and MSN Video, with unique audiences of around two million each in May 2010. LOVEFiLM is an online DVD rental service, which also offers some films available to stream for paying subscribers. MSN Video added a catch-up and on-demand service (with content from BBC Worldwide, All3Media, Endemol and others) to its existing video clips and user-generated content in March 2010. Other video-on-demand services typically have much lower audiences. Four months after launch, SeeSaw had a unique audience of 200,000, while Virgin Media Movies attracted 231,000 unique users. Blinkbox was the fastest-growing

service, tripling its unique audience to 384,000 users in the year to May 2010. Despite not being officially available in the UK, Hulu managed to sustain a unique audience of over 100,000 people in the UK across the past year.

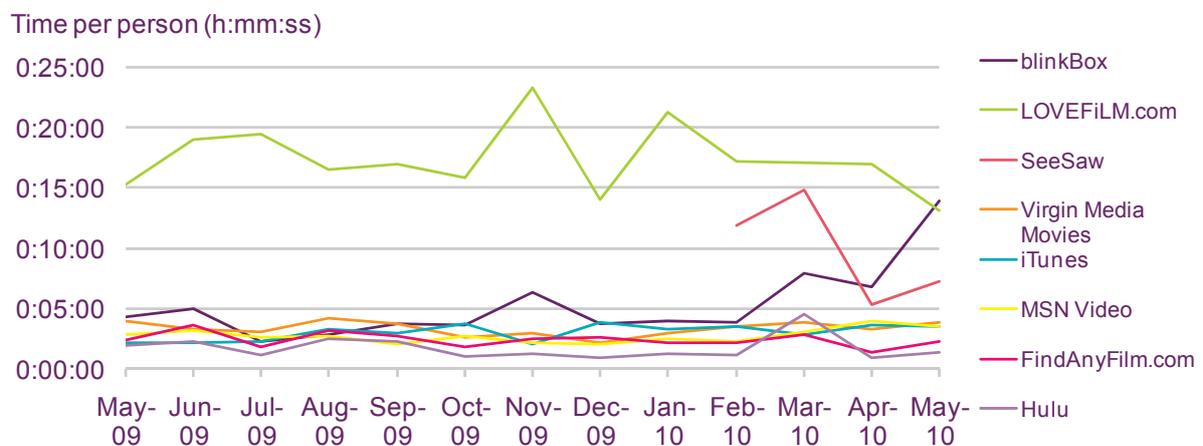
Figure 2.90 Unique audiences to selected online film and TV sites



Source: UKOM/Nielsen, home and work panel.

Blinkbox's monthly growth in unique audience is mirrored in growth in time per person spent on the site. Monthly time per person tripled to just under 15 minutes in the year to May 2010, and is now the highest among the sites listed in the chart. LOVEFiLM users spent a similar amount of time online, although this may relate to users managing their accounts.

Figure 2.91 Monthly time spent per person on selected online film and TV sites



Source: UKOM/Nielsen, home and work panel.

2.4.9 VoD use in Virgin Media homes

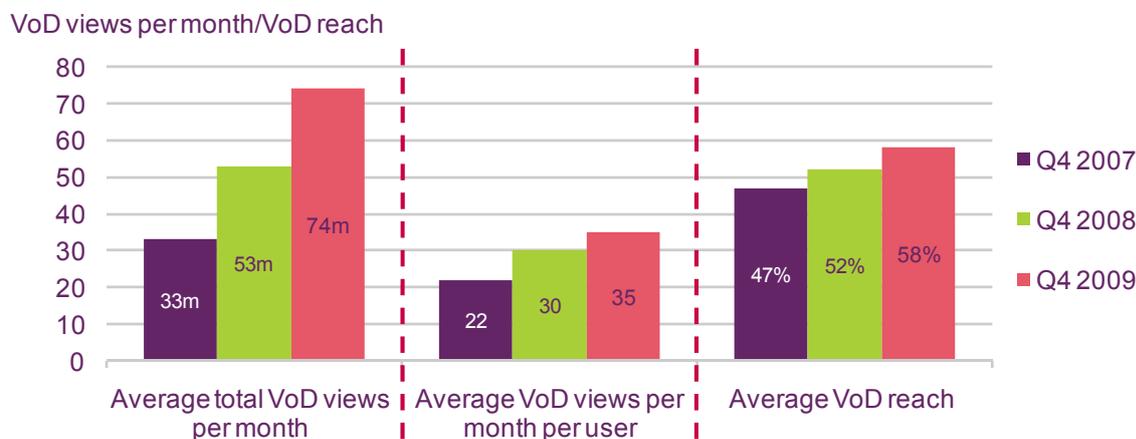
Virgin Media VoD continues to grow in both reach and frequency of use

TV and film content on demand is also available through Virgin Media's cable-TV service, and this service is currently available in the 13% of UK households where cable is connected to the main television set. The content available is a mixture of free, pay-per-view and subscription, with some prices depending on the TV package taken from the cable operator.

Virgin Media company data show that average monthly VoD views reached 74 million in Q4 2009, an increase of 40% on the previous year (Figure 2.92). VoD now reaches 58% of

Virgin Media TV subscribers, an increase of six percentage points on Q4 2008. And it seems that these VoD users are using the service more intensively. The average user watched 35 instances of VoD content per month in Q4 2009, compared to 30 in Q4 2008. This may reflect their increasing familiarity with VoD content and the Virgin VoD service.

Figure 2.92 Video on-demand use in Virgin Media homes



Source: Virgin Media.

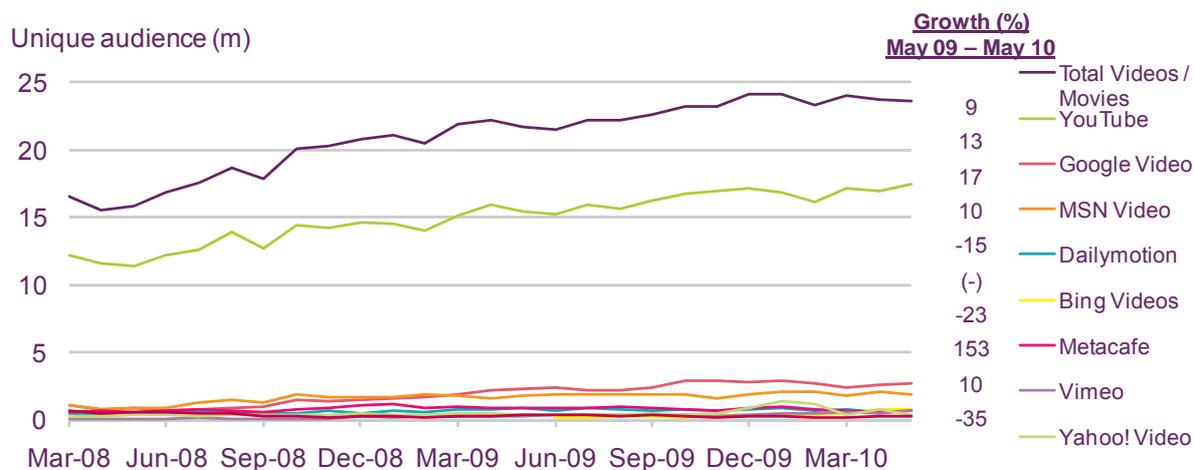
2.4.10 Video-sharing sites

Video-sharing sites' audience growth begins to slow

Data from UKOM/Nielsen show that the total unique audience of sites in its 'videos and movies' category reached 23.6 million in May 2010, a 9% increase since May 2009. Figure 2.93 below shows that growth in the total audience to these sites has slowed over the past two years.

YouTube was the most popular video-sharing website, with a unique audience of 17.4 million. None of the other major video-sharing sites that we looked at had a unique audience above three million.

Figure 2.93 Unique audiences to selected video-sharing sites

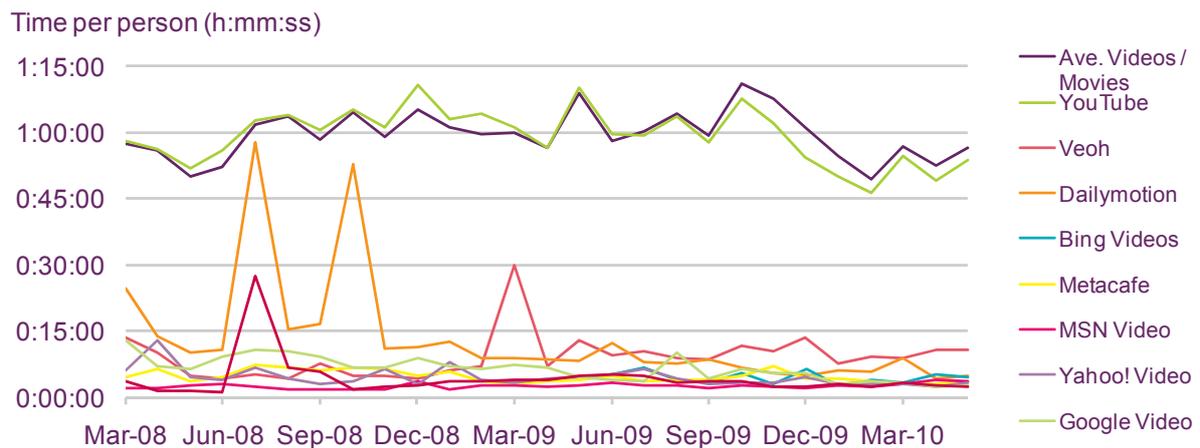


Source: UKOM/Nielsen, home and work panel.

The amount of time spent on video-sharing sites has remained relatively constant over the past two years (Figure 2.94). Average monthly time per person spent on UKOM's 'videos and movies' category remains at around an hour, a similar level to the trend of the past two years.

Changes in time spent per person on 'videos and movies' sites largely reflect the impact of the large number of YouTube users. Other sites, such as Dailymotion and Vimeo, have shown significant fluctuations in the past, but over the past year most of the video-sharing sites in our analysis fluctuated between five and 15 minutes monthly average time spent per person.

Figure 2.94 Monthly time spent per person on selected video-sharing sites

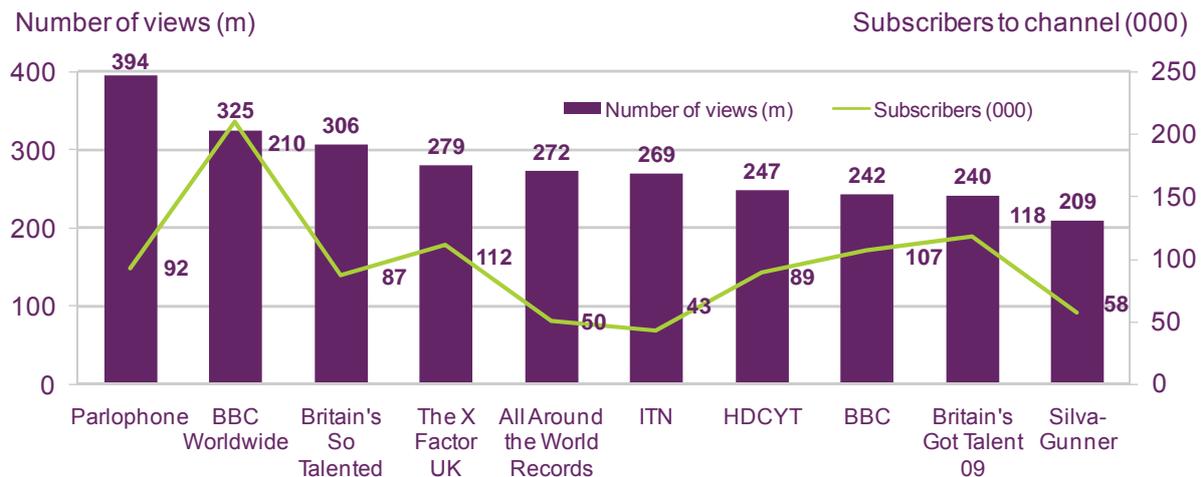


Source: Source: UKOM/Nielsen, home and work panel.

Video-sharing sites have in the past been seen mainly as user-generated content sites. But for some this is an unduly narrow description. They often include professionally-produced content such as music videos, trailers, clips for TV programmes, and increasingly, full-length films and TV programmes (see Section 2.1.4, including details on deals between YouTube and Channel 4 and Five). This content is often uploaded by rights holders themselves, either for promotional purposes or to generate revenue through advertising.

YouTube statistics show that the majority of the all-time most popular channels are run by well-established content providers. Most consist either of music videos or video clips. YouTube users can elect to subscribe to channels on the site (i.e. to receive notifications of new videos). Figure 2.95 shows that having the highest number of views does not necessarily correspond to having the highest number of subscribers. For example, the Britain's Got Talent 09 channel has 29,000 fewer total views than ITN, but over twice as many subscribers (118,000 compared to 43,000).

Figure 2.95 Popularity of top 10 UK YouTube channels



Source: YouTube statistics June 2010.

Tablets, e-readers and iPads

The market for portable media devices such as e-readers and tablets continued to develop during 2009 and into 2010. In July 2010 Amazon announced that it would launch its new third-generation Kindle device to UK customers of Amazon.co.uk alongside a UK Kindle Store (selling digital version of books – ‘e-books’) in August 2010. Since October 2009, UK consumers had previously only been able to buy an international version of the Kindle through the US Amazon.com store.

The Kindle is a large-screened portable device that can store and ‘play’ e-books. Users can download books over the Kindle’s WiFi or cellular connections. Amazon announced that the UK version of the Kindle will use Vodafone’s 3G wireless network for data transfer. The international version of the Kindle that has hitherto been available to UK consumers uses a different approach. Rather than strike agreements with UK network operators, Amazon launched its international download service in partnership with American operator AT&T, meaning that UK users are effectively roaming when they download books using Kindle’s cellular connection (although data charges are covered by the price of the e-book).

But even before the launch of the Kindle to UK consumers a number of existing e-reader devices were available to the UK market. These included devices such as the Sony Reader, the iRiver reader and the Elonex e-book reader.

Despite the growing availability of these devices, Ofcom consumer research shows that only a minority of households have access to an e-reader device. In Q1 2010, 2% of adults reported that they, or someone in their household, had access to such a device. Younger people were more likely than older people to have access to an e-reader, and take-up was also slightly higher among men than women.

Take-up of e-reader devices



Source: Ofcom research.

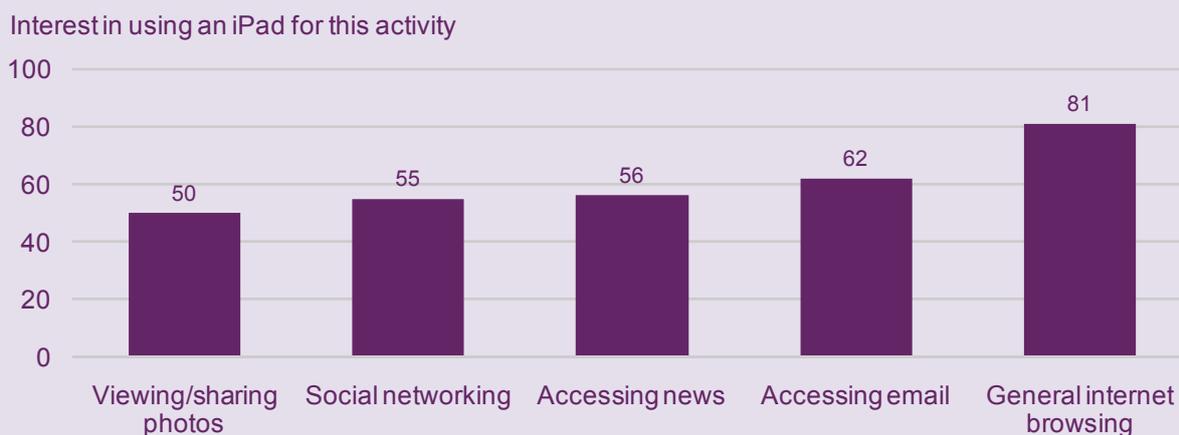
Base: All adults (6682); males (3204); females (3478); 15-24 (996); 25-34 (1183); 35-54 (2313); 55-64 (991); 65+ (1200); ABC1 (3633); C2DE (3008). QB1: Which of the following do you, or does anyone in your household, have in your home at the moment?

Other devices are emerging to challenge the stand-alone e-reader. E-book applications are available on most smartphones, including a Kindle application from Amazon. Multi-function devices, sometimes known as 'tablets', are also emerging which may compete directly with e-readers. The Apple iPad launched in January 2010 and within 28 days had sold one million units worldwide. By way of comparison, the original iPhone took 74 days to sell the same number of units.

The iPad was followed in April by a dedicated iBookstore, along the lines of iTunes, to sell e-books in direct competition with Amazon's Kindle store. In June, Apple announced that it had sold five million books through the iBookstore, and claimed that it had 22% of the e-book market. Other manufacturers including Dell and Asus have also launched tablet devices.

Early evidence may suggest that consumers see tablet devices, and iPads in particular, as having a variety of functions beyond e-books. Data from IPSOS MediaCT show that consumers who are considering buying an iPad do not cite e-books as one of the top five activities they would be interested in using one of these devices for, although this may reflect some consumers' lack of familiarity with e-books.

Anticipated interest in selected iPad activities (top five)



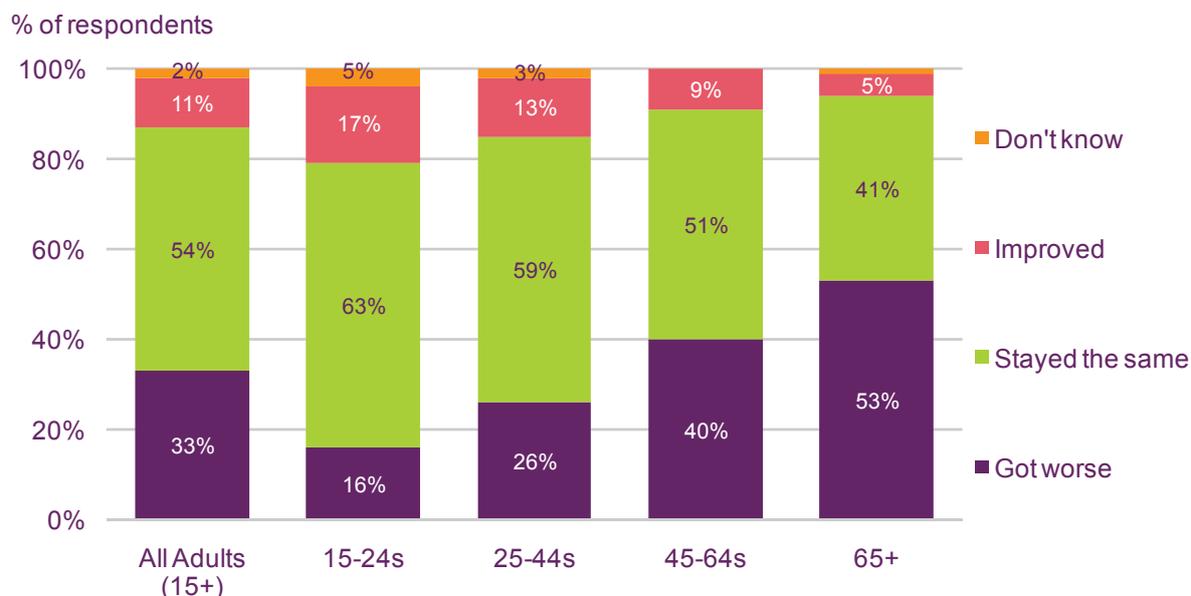
Source: IPSOS MediaCT

Base: all GB adults 15+ interested in owning an iPad (n=521)

2.4.11 Consumer attitudes towards television

Ofcom research, carried out in April and October 2009, found that the majority (54%) of adults felt that TV programmes had neither improved nor worsened in quality in the past year. A third of respondents (33%) felt that standards had 'got worse', and 11% said that standards had 'improved' during the course of the year (Figure 2.96). The proportion who felt that content had worsened rose with age, with the majority of viewers (53%) in the 65+ group more than three times more likely than those aged 15-24 to state that programming had deteriorated (53% versus 16%). The reverse was true for those believing that programming standards had improved, with 17% of 15-24 year olds expressing this view, against just 5% of over-65s.

Figure 2.96 Consumer attitudes towards television programme standards, by age, 2009

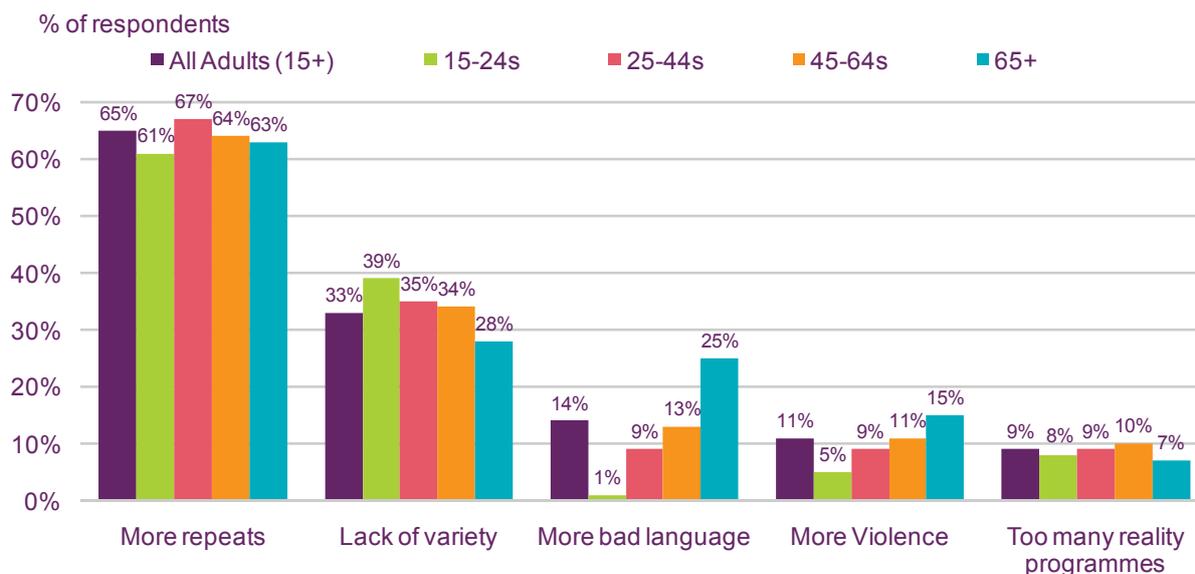


Source: Ofcom 2009 Media Tracker survey. Fieldwork carried out by Continental Research, April and October 2009. T50 – Do you feel that over the past year, television programmes have improved, got worse or stayed about the same? Base: All adults aged 15+ (2044) (344 aged 15-24, 749 aged 25-44, 626 aged 45-64, 325 aged 65+)

Of those surveyed who felt that programme standards had worsened, 65% cited an increase in the number of repeats as their reason, with only minor variations across the age groups. 'Lack of variety' ranked second, a view held by a third (33%) of respondents.

The third most-cited reason was 'more bad language' (14%), although this response was much more common among respondents aged 65+ (mentioned by 25% of this group). Similarly, the consumers in the oldest group were more likely to mention 'more violence', at 15% compared to 11% overall.

Figure 2.97 Reasons why viewers thought TV programme quality deteriorated, 2009

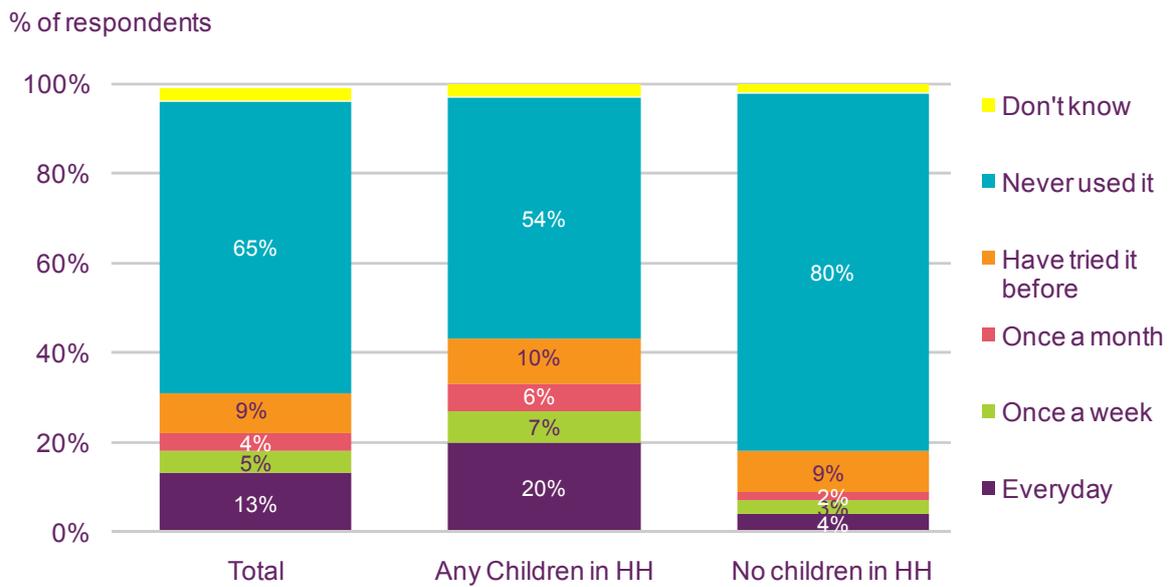


Source: Ofcom 2009 Media Tracker survey. Fieldwork carried out by Continental Research, April and October 2009. T52 – In what ways do you think the television programmes have got worse over the past year? Base: All adults 15+ saying programmes got worse over past year (676) (56 aged 15-24, 197 aged 25-44, 249 aged 45-64, 174 aged 65+).

*NOTE: Sample size for 15-24s extremely small – results to be used only for indicative purposes.

Figure 2.98 shows that of those TV viewers who are able to block access to certain television channels, 65% claimed they had never done so. Those without children in their households were more likely to say that they had never used this functionality than parents/guardians with children in the household (80% against 54%). One-fifth (20%) of those with children in the household claimed to use the device every day, compared to just 4% of those without.

Figure 2.98 PIN/password-protected TV, 2009



Source: Ofcom 2009 Media Tracker survey. Fieldwork carried out by Continental Research, April and October 2009. T71 – How often, if at all, do you use this system?



The Communications Market 2010

3 Radio and audio

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3.1 Key market developments in radio and audio

3.1.1 Industry metrics and summary

Figure 3.1 UK radio industry key metrics

UK radio industry	2004	2005	2006	2007	2008	2009
Weekly reach of radio (% of population)	90.3%	90.0%	89.8%	89.8%	89.5%	89.8%
Average weekly hours per head	21.9	21.6	21.2	20.6	20.1	19.8
BBC share of listening	55.5%	54.5%	54.7%	55.0%	55.7%	55.3%
Total industry revenue (£m)	1,158	1,156	1,126	1,175	1,131	1,092
Commercial revenue (£m)	551	530	512	522	488	432
BBC expenditure (£m)	607	626	614	653	643	660
Radio share of advertising spend	3.5%	3.3%	3.0%	2.9%	2.7%	2.8%
DAB digital radio take-up (households)	5%	10%	16%	22%	30%	33%

Source: Ofcom, RAJAR (all individuals age 15+), BBC, WARC, radio operators 2009

This section explores developments and trends in the UK radio market. Some of the key findings are:

- BBC expenditure on radio increased by 26% over the five years to 2009, while commercial revenues fell by 22%** over the same period. Total radio industry income increased slightly in nominal terms as a result, up 1.5% (page 193).
- By Q2 2010, digital radio platforms accounted for almost a quarter (24.6%) of all radio listening hours** according to RAJAR. This was up by 3.5 percentage points from 21.1% in Q2 2009. The majority (64%) of digital listening was through a DAB digital radio set, which accounted for 15.8% of all radio listening. Digital television accounted for a further 4.1% and the internet 2.9% (page 190).
- The number of radio listeners reached a new high of 90.6%** (46.8 million adults) in Q2 2010 - the highest weekly reach recorded since the new RAJAR research methodology was introduced in January 1999. This figure was up by almost half a million in the year (90.3% of adults in Q2 2009) and was also up by 300,000 listeners on the previous quarter. The combined BBC stations reach was 67.0% in Q2 2010, compared to 63.7% for commercial radio (page 214).
- Despite more people listening, **the time spent listening to the radio has fallen over the past five years**. Listening hours were down by 5.3% in the five years to 2009, and by 0.4% on 2008. Total listening hours to all the BBC's radio stations were down by down 2.2% over five years and by 1.2% during 2009. By contrast, all commercial radio listener hours were stable over the year, but down 10.1% over five years (page 216).

3.1.2 Patterns of listening over digital platforms

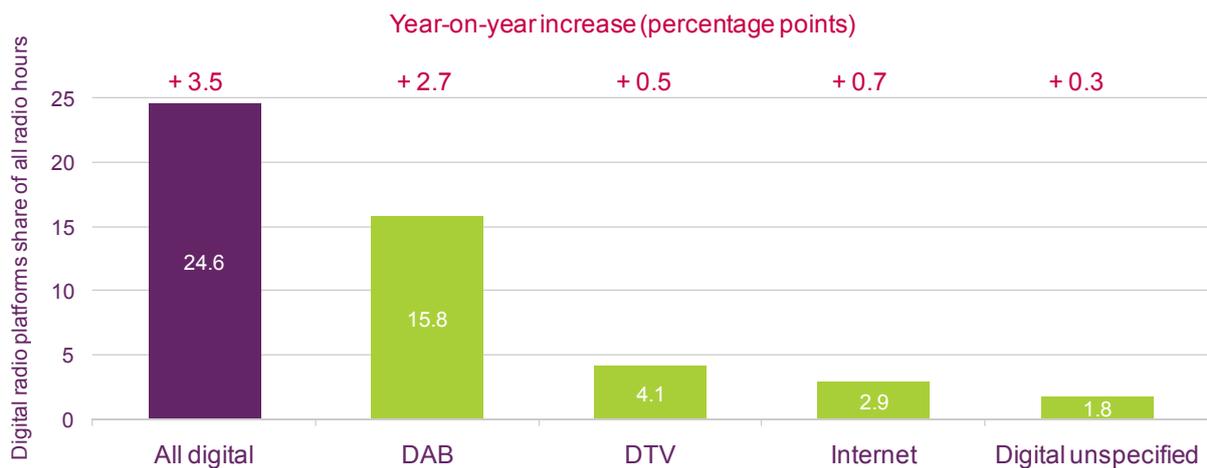
Almost a quarter of all radio hours are now through a digital platform

A growing number of households have access to the digital media platforms that support digital radio services. Digital television (DTV) take-up had reached 92% by Q1 2010 (up by three percentage points (pp) in a year), while DAB ownership stood at 35.3% by June 2010 (up by 2.3 pp in a year. Furthermore, 73% of homes now have access to the internet at home (broadband connections now account for the vast majority of these at 71%, up by 3pp).

This may have helped to drive up digital's share of listening hours. It reached almost a quarter of all hours (24.6%) by Q2 2010 and was up by 3.5pp from around a fifth of hours (21.1%) in Q2 2009.

DAB digital radio accounted for almost two-thirds of all digital listening, up by 2.7pp on Q2 2009 to 15.8%. Digital television was the second most commonly-used digital platform, making up a further 4.1% of all listener hours, up by 0.5pp in the year. Listening online took a further 2.9% share, up 0.7pp, with an element of 'non-defined' digital listening making up the remaining 1.8% of the digital share (Figure 3.2).

Figure 3.2 Digital radio's share of total radio audience, Q2 2010



Source: RAJAR (adult listeners 15+), Q2 2010

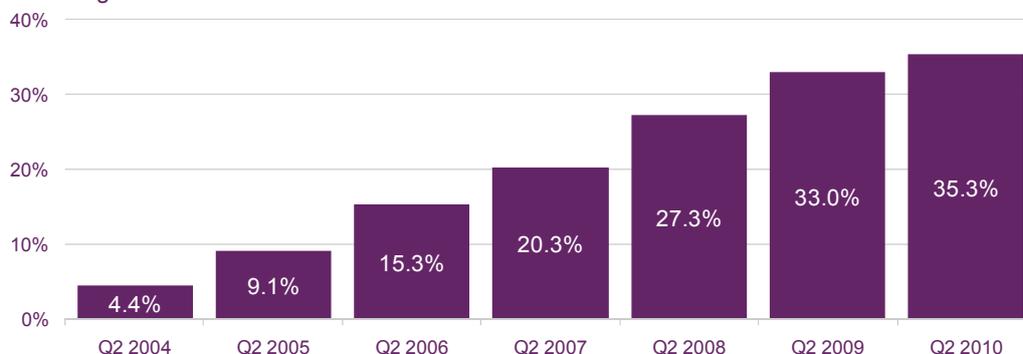
Over a third of adults now have access to DAB radio at home

Cumulative sales of DAB digital radio sets passed the 11 million mark in June 2010, with RAJAR estimating that over a third of UK households (35.3%) owned a DAB radio set by Q2 2010 (Figure 3.3). This grew from only 4.4% of homes six years ago and was up by 2.3 pp over the past year. DAB sales accounted for over a fifth (21%) of radio sets sold, and 65% of all portable radios sold in the past year. Seventeen per cent of adults said they were likely to purchase a DAB set over the coming year, according to Ofcom research carried out in Q1 2010; 50% said they did not intend to acquire a DAB radio in the year.

There are over 100 million radio sets in the UK (both in-home and in vehicles). This estimate is based on figures from Ofcom research and retail sales data. Between 10% and 11% of these sets are estimated to be digital⁵⁰.

Figure 3.3 Ownership of DAB sets

Percentage of adults who claim to own a DAB set / have a DAB set in the home



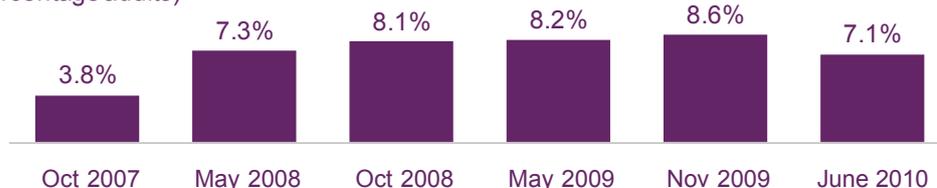
Source: RAJAR / Ipsos MORI / RSMB Q2 2010

Seven percent of adults listen to podcasts every week

Podcasting was a weekly activity for 7.1% of adults in June 2010, down from 8.6% in 2009, but up from 3.8% under three years ago in October 2007 (Figure 3.4). The RAJAR survey also found that, on average, listeners subscribed to around five podcasts per week, and spent around one hour a week listening to them. Comedy and music remain the most-downloaded genres. Almost three-quarters (74%) of respondents claimed that listening to podcasts had not reduced their listening to live radio stations, and over a third (36%) said they now listened to more radio programmes as a result of podcasting. Over three-quarters (77%) of users said they listened at home, with almost half (45%) said they listened to podcasts while on the move.

Figure 3.4 Listening to podcasts

Weekly podcasting
(percentage adults)



Source: RAJAR / Ipsos MORI, 'Measurement of Internet Delivered Audio Services (MIDAS 6)', June 2010 survey based on interviews with 1,083 respondents from the RAJAR survey, previous surveys 2007-2009.

Radio apps becoming more widely-used by mobile phone listeners

There are a wide range of devices through which consumers can access radio services and other audio content such as digital music files, including mobile handsets and MP3 players.

Around one in eight adults (13%) had at some time used their mobile handset to listen to radio, by June 2010. This was stable year on year, but more than double the figure five years ago (6%). Of those listening via mobile, 54% selected a station by using a specific FM

⁵⁰ See Ofcom's recently-published report *The Communications Market: Digital Radio Report*, which can be found at: <http://stakeholders.ofcom.org.uk/market-data-research/radio-research/digital-radio-reports/digital-radio-report01/>

preset, while 14% ran an app for a specific radio station. Of smartphone owners, 20%, said they had downloaded a radio app, with over half (53%) using radio apps at least once a week. Separately, commercial radio group Global Radio announced that mobile phone listeners had downloaded one million of its radio station apps by January 2010, following the launch of these services in November 2008.

Younger adults (aged 16-24) more likely to download audio content and use hand-held devices

The amount of time spent consuming audio content (radio and music) varies by age group, depending on the type of content and by the device being used, according to Ofcom research carried out in June 2010.

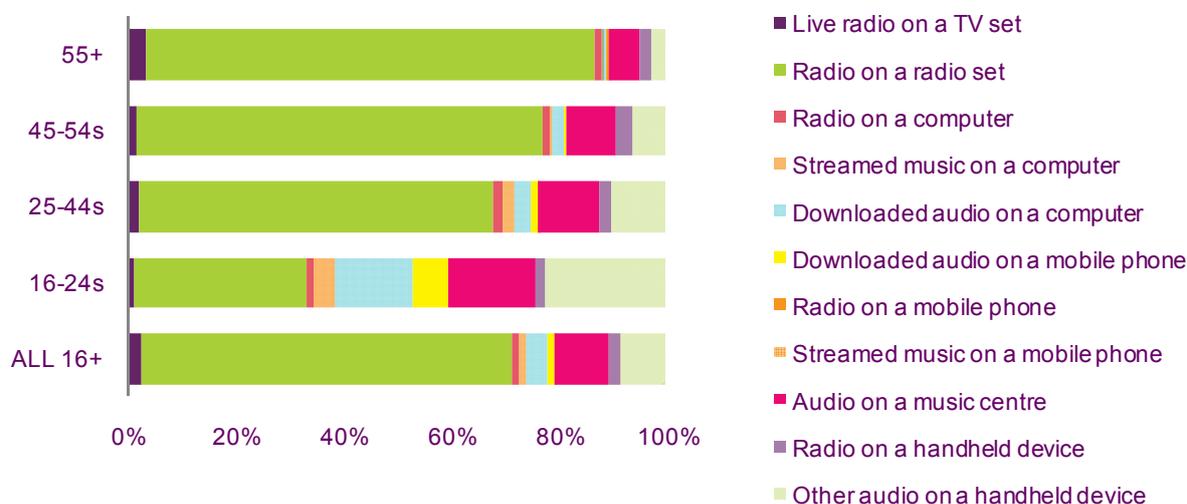
Among all age groups, listening to live radio on a radio set accounted for a substantial proportion of all audio consumption. But younger listeners (16-24) were also much more likely to use hand-held devices to listen to audio. It accounted for almost a quarter (24%) of all time spent listening to audio for this group. Of this time a vast majority (22%) was to other audio (such as MP3 tracks) with 2% was to radio services. By comparison 25-44s spent only half as much of their audio listening time (12%) using hand held devices. The figure fell further by age; among over-55s, hand held listening to audio content fell to just 5% of all audio consumption.

Downloading audio through a computer was also most prevalent among the 16-24 age group, at 15%, compared to the 4% average across all age groups. Downloading audio through a mobile accounted for 7% of audio consumption among 16-24s, compared to 1% on average. Similarly, listening to audio on a music centre was most popular among younger adults (16-24) at 16% compared to 10% across all age ranges.

Listening through a radio set was still the most widely used form of audio listening for all age groups. However this was much lower among 16-24s, where it accounted for almost a third (32%) of audio consumption. For the older age groups radio sets accounted for a majority of their listening time; for the over 55s, the ratio was 83%; for those aged 45 to 54, it was three-quarters of audio time and for 25-44s the figure was two-thirds of all listening time (Figure 3.5). For further analysis on media usage patterns see Section 1.3, The Consumer's Digital Day.

Figure 3.5 Proportion of listening time, by age and activity

Time spent listening to audio /radio by device / activity



Source: Ofcom research June 2010

3.1.3 The listening share of BBC and commercial radio services

BBC Radio's share of listening down but share of income up

The BBC's share of total radio listening was down slightly in 2009, while its share of total industry income rose. This came about as a result of higher BBC spending on radio services during 2009, and a corresponding fall in commercial revenues over the same period.

The BBC's total share of listening was down by 0.4 percentage points (pp) to 55.3% in 2009, while commercial radio accounted for 42.3% (up 0.1pp). The remainder was made up by 'other' listening (including; community radio, RSLs, and other categories such as un-metered listening), which was up by 0.3pp to a 2.4% share. The BBC's share of hours was also up over a five-year period, by 1.8pp from 53.5% in 2004. Over the same period, commercial radio's listening share fell by 2.3pp to 42.3% (Figure 3.6).

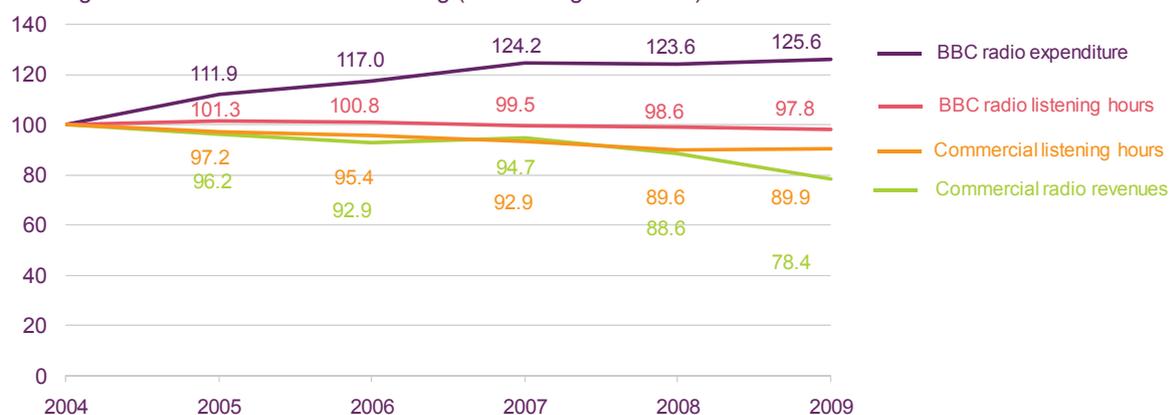
Commercial radio revenues fell by around 11.5% (£56m) to £432m during 2009. The BBC's expenditure on radio increased in the year; we estimate it spent £660m in 2009, up by 1.6% (£11m) on the previous year.

As a result of these annual changes in revenue and income, the BBC's share of industry income rose by 3.4pp to 60.4% (above its audience share of 55.3%) in the same year. The commercial sector's share of income was down to 39.6%, lower than its share of listening at 42.3%.

Indexing revenue data against the 2004 figures illustrates that BBC expenditure on its radio services has risen by more than 25% in five years; commercial radio revenues fell by just under 22% over the same period. At the same time, BBC listening hours fell slightly (by 2.2%), while commercial hours were down by 11.1% (Figure 3.6).

Figure 3.6 BBC and commercial listening / income, indexed against 2004 figures

Listening hours and radio income / funding (indexed against 2004)

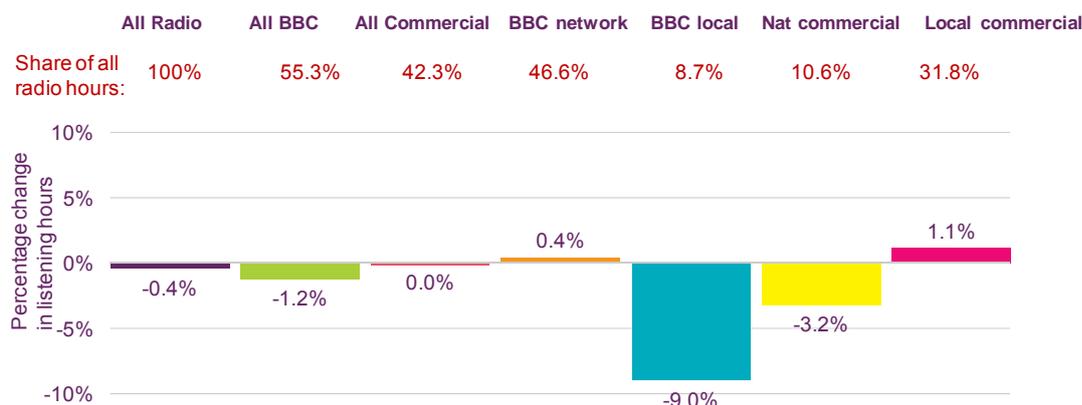


Source: Listening data based on RAJAR (Adults 15+). Funding share data based on commercial radio revenues and estimated BBC expenditure on radio for 2004-2009.

Local commercial sector listener hours up in 2009, as many other sectors fall

Total radio listening fell by 0.4% over the calendar year 2009, with BBC stations losing 1.2% of listener hours year on year. Over the same period commercial radio maintained its hours. Local commercial showed the best performance over the year, with listening hours up by 1.1%, while the BBC network hours were also up (by 0.4%). The BBC local / nations' services experienced the largest reduction in 2009, down by 9%. The national commercial stations' listening hours were down by 3.2%.

Figure 3.7 Change in listening hours 2008-2009, by sector



Source: RAJAR, (all listeners aged 15+). Data based on calendar year 2009 against 2008

3.1.4 Listening patterns, by age group

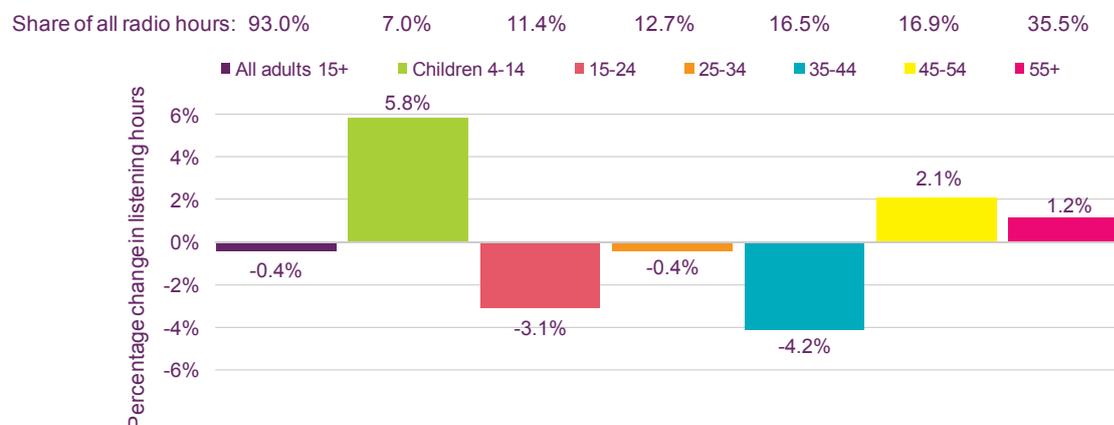
Listener hours among youngest and oldest age groups rose in 2009, while 15-44s' hours fell

During 2009, listening trends across age groups were mixed, as children aged 4-14 and listeners over 45 increased their time spent listening to radio services, while adults aged 15-44 spent less time listening to radio.

Overall listening among adults was down 0.4% year on year to 19.8 hours/week in 2009 and down by 2.1 hours in five years. By comparison, television viewing rose during 2009, with average viewing at 26.3 hours per week, up by over two hours from 24.2 in 2008 and up from 23.9 hours five years before in 2004 (see page 97 for TV metrics).

The largest increase in radio listener hours was among children, up by 5.8% in the year. Hours among 45-54s also increased, by 2.1% with over-55s up by 1.2%. The largest falls in listener hours were among adults aged 35-44 (down 4.2%) and 15-24s (down 3.1%).

Figure 3.8 Changes in listening hours, 2008 - 2009, by age group



Source: RAJAR, data based on calendar years 2008 – 2009. Note: 4-15 age group data based on smaller sample size.

3.1.5 Key policy developments during 2009/10

In 2009/10 a number of radio-related initiatives were announced.

Department for Culture Media and Sport announces Digital Radio Action Plan, July 2010

In July 2010, the Department for Culture, Media and Sport (DCMS) announced its Digital Radio Action Plan. It sets out a process to assess the potential for switching the majority of radio services in the UK to digital formats. The report emphasised that a digital switchover process should be primarily consumer-led. It also included milestones which would need to be achieved before the government could begin to implement a transition from analogue to digital radio:

- 50% of all radio listening is via digital platforms; and
- national DAB coverage comparable to FM, and local DAB reaching 90% of the population and all major roads.

The Action Plan supported a target switchover date of 2015 for the industry to work towards, but emphasised that the criteria outlined above would need to be met before a migration process could begin.

The Digital Economy Act and its implications for radio services, June 2010

The Digital Economy Act 2010 received Royal Assent on 8 June 2010, and contains several provisions relevant to the radio sector.

It includes clauses to enable digital switchover of national and local stations, under which they would stop broadcasting on the analogue platforms of FM and AM and broadcast only on digital platforms. These clauses give Ofcom the power to terminate analogue licences, if switchover is triggered by the Secretary of State.

The Act also increased Ofcom's discretion with respect to commercial radio regulation, allowing it to reduce the constraints on analogue stations, following a consultation and statement (described below).

Developments in radio regulation, 2010:

Ofcom concluded a consultation relating to commercial radio localness during the year, with a consultation on commercial referencing in radio programming still open until September 2010.

1. Ofcom statement on commercial radio localness regulation (published 15 April 2010)

This statement set out Ofcom's policy decisions on regulating for localness, following the proposals made in the July 2009 consultation, the responses we received to that consultation and the changes introduced by the Digital Economy Act 2010.

The changes in regulation included:

- Regional FM stations may ask to stop local programming, allowing them to share their programming across a number of regions if they broadcast a national version of the service on DAB.

- Local stations may ask to co-locate and share programmes within approved areas, this effectively allows larger stations in order to aid in commercial viability. Ofcom will need to be satisfied that the stations involved will continue to provide local material relevant to the listeners in the licensed areas.
- Local stations may reduce local programming hours in return for more local news.
- Local AM stations may ask to drop all local programming - but must broadcast at least ten hours a day of daytime programming (including breakfast) on weekdays from within their home nation.
- The local multiplex map may be redrawn - Local and regional multiplexes may ask to carry the same set of stations as adjacent multiplexes within each approved area.

2. Broadcasting Code consultation: commercial references in radio programming⁵¹

In 2010, Ofcom consulted on four options in relation to commercial communications on radio. These ranged from retaining the regulatory status quo to providing much greater liberalisation, including allowing commercial communications to be integrated within editorial content.

Commercial communications on radio are, generally, paid-for broadcast references to products and services. They currently comprise:

1. spot advertisements, which are broadcast in commercial breaks; and
2. sponsorship credits, which identify programming (or station) sponsorship and are broadcast around (and sometimes in the course of) the sponsored programming.

Currently, spot advertisements must be kept separate from radio programming (sometimes referred to as 'editorial') and feature only in commercial breaks. The only paid-for commercial communications in the course of radio programming that are currently permitted are therefore sponsorship credits.

This consultation closes on 17 September 2010.

⁵¹ <http://stakeholders.ofcom.org.uk/consultations/bcrradio2010/>

3.2 The radio and audio industries

This section examines the characteristics of the UK radio industry, focusing on financial data (including commercial revenue and BBC expenditure) and the audience shares of the main players by sector. It includes a review of the main market developments during 2009/10 and a round-up of the licences awarded by Ofcom during 2009/10.

Key points in this section include:

- **Total UK radio industry income stood at £1.1bn in 2009, down by 4.0% on 2008.** This compares to £11.1bn of revenue in the TV industry for 2009, down 0.4% on the year (page 198).
- **Total commercial radio revenue was down by 11.5% (£56m) to £432m in 2009** (a fifth (22%) smaller in 2004). This means that the commercial share of industry income (40%) is now lower than its listening share (42%). We estimate that the BBC spend on radio rose by £11m (1.6%) to £660m (accounting for a 60% share of all radio income/spend) (page 198).
- **Expenditure on radio advertising was up by 5.3% year on year in Q1 2010.** Latest figures from WARC show that expenditure on radio advertising had reached almost £114m in Q1 2010; this was up by 5.3% in real terms year on year, following a decline in spend in previous quarters. (page 199).
- **The commercial radio stations' share of all radio listening stood at 43.2% by Q2 2010** (42.7% in Q2 2009), of which local commercial licensees accounted for just under a third of listening (32.2%) and national commercial stations for 11.0%. Of the commercial groups, Global Radio attracted a share of 16.6% of all radio hours by Q2 2010 (17.2% in Q2 2009); Bauer Radio group's market share stood at 10.7% (10.7% Q2 2009). Among the shares of other leading groups were GMG (4.3%), UTV (2.7%), Absolute (1.1%), and Orion (1.0%) (page 203).
- In the music industry, 19% of all recorded music revenues were generated by digital products in 2009. The decline in overall recorded music revenues slowed to just 0.8% in 2009. The declining rate of reduction was helped by a 27% increase in singles sales alongside the growing contribution of digital sales (Page 201).

3.2.1 Radio industry revenues and expenditure

UK radio income down 4% to £1.1bn in 2009

Ofcom estimates that total radio income in 2009 stood at almost £1.1bn, down by 4.0% (£45m) on 2008. This compares to 2009 TV industry income of £11.1bn, down 0.4% in the year (see page 98 for further information on TV revenues). The radio revenue figure comprises all reported commercial radio revenue, together with our estimate of the BBC's spend on radio services.

We estimate that BBC spend on radio in the calendar year 2009 increased by almost £11m (1.6%) year on year to £660m. By comparison, BBC expenditure on TV increased by 1.5% (£40.6m) to almost £2.7bn while BBC spend on online services was up by 8.1% (£15.6m) to £209.3m.

Total commercial radio revenues were down in 2009, with income of £432m, falling by £56m (-11.5%) on 2008. Revenues in 2009 were also lower than five years ago; down by a fifth

(22% or £119m). However, the latest quarterly results for Q1 2010 show signs of stabilisation, with revenues up 5% on the corresponding quarter in 2009, but still down 11% on two years ago.

Of the £432m generated in 2009, national advertising sales accounted for £201m, down by almost £45m (-18.1%) on the year. Local commercial sales reached £136m, down by £6m (-4.4%) on 2008. Sponsorship revenue was down by almost £6m (5.7%) to £94m in 2009. Sponsorship has become a growing component of commercial revenues in recent years and accounted for over a fifth (22%) of all commercial revenues in 2009. This has been partly as a result of newer digital revenues from station websites and other areas such as competition sponsorship (Figure 3.9).

Figure 3.9 UK commercial radio revenue and BBC radio spending



Source: Ofcom / operator data / BBC

Notes: BBC expenditure figures are estimated by Ofcom based on figures in the BBC's annual report; figures in the chart are rounded

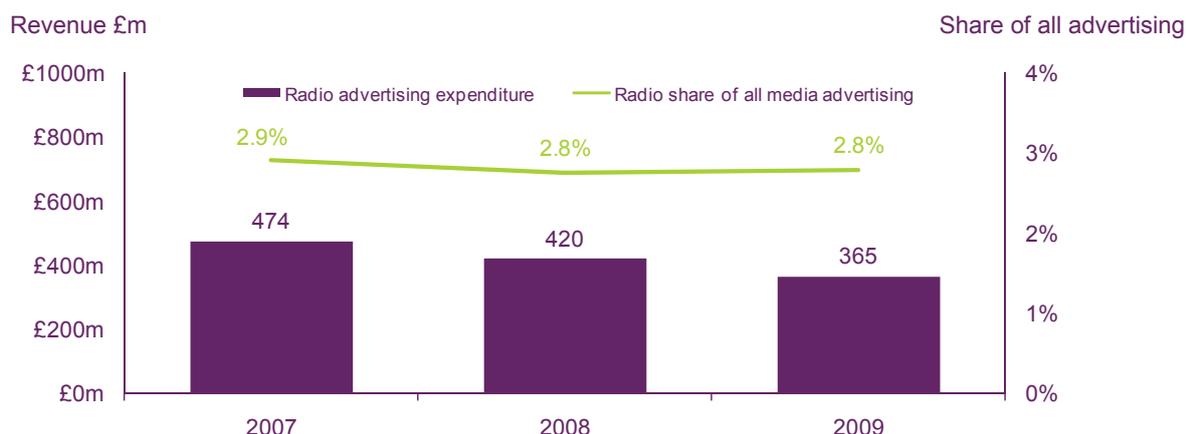
Expenditure on radio advertising down in 2009, but share of display market increases

The total UK advertising market was worth £14.5bn across all sectors in 2009, this represented a 14.4% fall in real terms on 2008 (though this relates to advertising spend – including production costs and agency fees - rather than revenues).

Expenditure on radio advertising fell by 13.1% in real terms in 2009, according to the World Advertising Research Council (WARC), but despite this fall, radio's share of the advertising spend increased to 2.8%, up by 0.1 percentage points in the year. By comparison, Ofcom's own industry revenue data suggests that that TV net advertising revenues were down by 29.6% in 2009 to £3.1bn.

For the first quarter of 2010, WARC data showed that expenditure on radio advertising had reached almost £114m and was up by 5.3% in real terms over the year, as the market showed some possible signs of stabilising.

Figure 3.10 UK radio advertising spend and share of display advertising, 2007 – 2009, (based on 2005 prices)



Source: *The Advertising Forecast, WARC*
 Note: Chart data based on constant 2005 prices.

Commercial radio revenue per listener fell by 12.7% in 2009

By dividing the total net broadcasting revenues generated by the commercial radio sector by the average weekly listener reach, it is possible to derive estimates of revenue per listener. This stood at £13.71 in 2009, down by £1.99 (12.7%) on the previous year's figure (£15.70). It was down by £3.90 (22.1%) in five years, as a result of falling radio advertising expenditure over the period. The reduction in 2009 was proportionally much higher than it had been for each of the last five years, at 13%, compared to an annualised average over the period of 5%.

Figure 3.11 Commercial radio revenue per listener



Source: *Operator data and RAJAR*

3.2.2 Audio content: popularity of digital formats growing as recorded music revenues begin to stabilise

Audio content was one of the first content types to feel the effects of the new opportunities for content distribution and consumption that arrived with the internet. Ofcom regulates the networks over which digital audio content flows in the UK, and as part of our online copyright infringement duties we take an interest in the markets for content delivered in this way. As part of these duties we will have to produce regular reports which will include data on developments in the UK's content industries, including the music industry.

In recent years the music industry (including the recorded music industry, the collecting and licensing societies, and music venues and promoters) has experienced a number of potentially disruptive trends, partly as a result of the emergence of the internet as a major distribution channel. These trends include:

- **disaggregation** – a-la-carte download services such as iTunes, 7Digital and the Amazon MP3 store allow consumers to buy individual music tracks for under £1, rather than having to buy an album 'bundle' of around 10 tracks;
- **falling prices** – data published by the British Phonographic Industry (BPI), a recorded music industry trade body, in May 2010 revealed that the average price of a CD album has now fallen to £7.99. This is a drop of around £3 or 26% over the past decade. During the same period prices rose by 28% as a result of inflation (as measured by the retail price index (RPI));
- **the growth of live music revenues** – PRS for Music (which collects royalties for artists when their music is played in public) data suggest that revenues from live music revenues grew to £1.5bn in 2009, up from £1.2bn in 2007;
- **the entrance of new players into the value chain** – the success of new entrants and retailers like Apple, with little previous involvement in the music value chain, has changed the market structure, with the net effect remaining uncertain. iTunes now accounts for 66% of singles expenditure by value, and 72% by volume, and takes a cut on every sale;
- **online copyright infringement** – it has been argued that the emergence of widespread online copyright infringement over peer-to-peer and other file-sharing networks can have an impact on music industry revenues; and
- **falling average music spend** – BPI data show that the average amount of music spent per person fell from £63 in 2008 to under £60 in 2009.

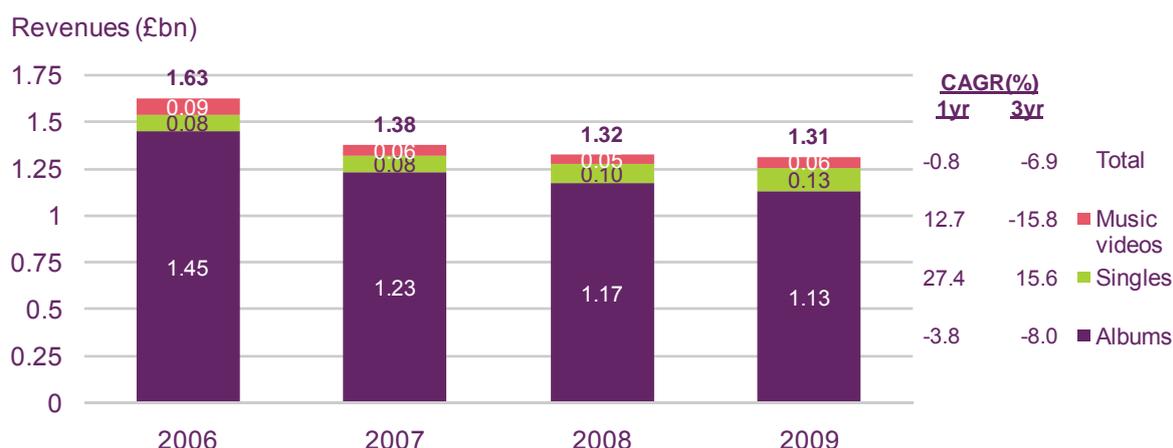
The rest of this section considers recent trends relating to the market for recorded music, as it forms an adjacent market to broadcast radio and is illustrative of the changing patterns of consumer behaviour as a result of digital distribution techniques.

The decline in recorded music retail revenues levelled off in 2009...

Despite these pressures, the decline in retail recorded music revenues slowed almost to a halt in 2009, according to data from the Entertainment Retailers' Association (Figure 3.12). Total revenues declined by just 0.8% in 2009, compared to a compound annual decline of 6.9% over the past three years. It is worth noting that this relative improvement in performance took place during a recession, when disposable incomes may well be squeezed. Total revenues stood at £1.31bn in 2009, compared to £1.32bn in 2008 and £1.63bn in 2006.

While album revenues continued to decline (albeit more slowly than in previous years), revenues from singles and music videos actually grew in 2009, by 27.4% and 12.7% respectively. The growth in singles revenue is likely to reflect the disaggregating effect of online download stores.

Figure 3.12 Recorded music retail revenues, 2006-2009

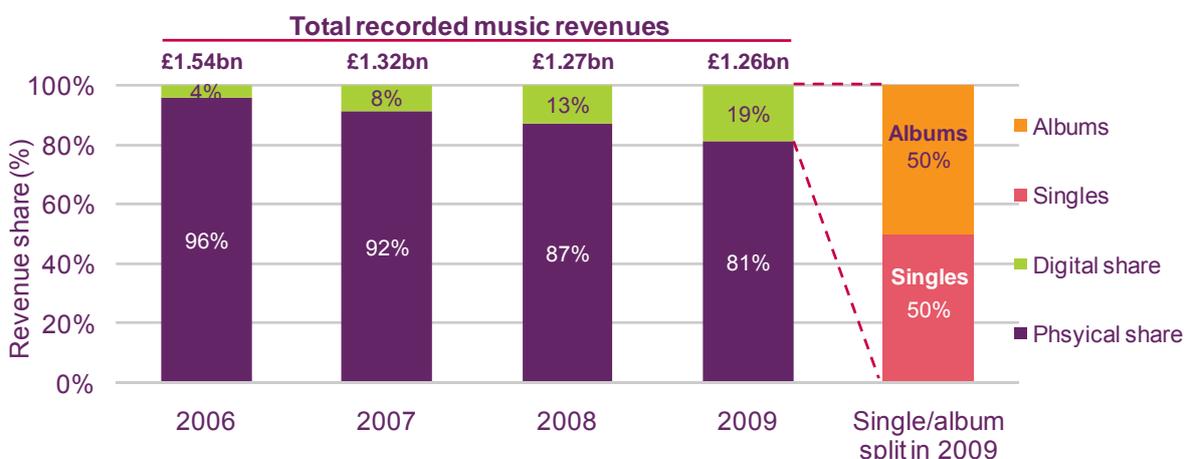


Source: Entertainment Retailers' Association yearbook, 2010.

...as digital continued to increase its overall share of revenues...

Digital music's share of overall recorded music revenues continued to rise in 2009. The Entertainment Retailers Association's data show that digital now accounts for just under a fifth (19%) of total recorded music revenue, and this is split evenly between album and singles formats (Figure 3.13). This figure has grown steadily from just 4% of total revenues in 2006.

Figure 3.13 Distribution of recorded music retail revenues, 2006-2009



Source: Entertainment Retailers' Association yearbook, 2010.

Note: This chart does not include data for music videos.

...and the decline in volumes of album sales slows

Consumers display contrasting habits in terms of the format of the music they purchase (Figure 3.14). Almost all singles tracks (98%) are now purchased via digital means. And overall singles volumes have grown rapidly: in 2006 consumers purchased a combined 66.9 million physical and digital singles, but by 2009 this figure had more than doubled to 152.8 million. It is likely that a large part of this is due to the increased availability of tracks to download as singles on music download services, and the removal of the need to buy tracks 'bundled' as albums.

For albums, by contrast, the digital and physical proportions are nearly reversed. In 2009, digital albums comprised only 12% of total album volumes, or 16.1 million units. But digital

album growth is accelerating. In 2009, digital album volumes increased by 5.8 million units, compared to an increase of 4.1 million units in 2008. This growth in digital album sales went some way towards replacing the decline in physical albums, whose volume sales fell by 7.2% in 2008 and 8.5% in 2009 to reach 118.5 million units.

Figure 3.14 Recorded music sales by volume, 2006-2009



Source: Entertainment Retailers' Association yearbook, 2010.

Download-to-own is driving much of the increase in digital music revenues...

Data from Screen Digest show that the download-to-own (DTO) business model (i.e. sales of digital album and single downloads) is responsible for the majority of digital music revenues and is contributing much of the growth (Figure 3.15). Since 2006 DTO revenue has been responsible for more than half of all digital music revenue, and in 2009 this figure reached 80%. DTO has grown at a compound annual growth rate of 104% over the past five years, while total revenue has grown at a rate of 78%. According to Screen Digest, mobile digital music revenue (whether derived from DTO or subscription services) has experienced no significant growth since 2006, despite relatively high-profile launches of services.

Figure 3.15 Digital music revenues, by business model, 2004-2009



Source: Screen Digest.

Note: excludes revenue from ad-supported services. Due to different data sources this chart is not directly comparable with previous charts.

...and new business models continue to emerge

There has been increasing discussion in recent months about what impact new technological developments and business models might have on recorded music revenues,

and whether they will add to, or alternatively, cannibalise existing digital revenues. Examples include:

- Advertising-supported streaming services such as We7, and hybrid services such as Spotify, which have sought to focus on ‘access’ rather than ‘ownership’ models of music consumption.
- Apple, the leading DTO provider, acquired music streaming service Lala in December 2009. Lala’s cloud-based streaming model contrasts with Apple’s DTO model, iTunes.

We consider music streaming services further in Section 3.3.12, page 226.

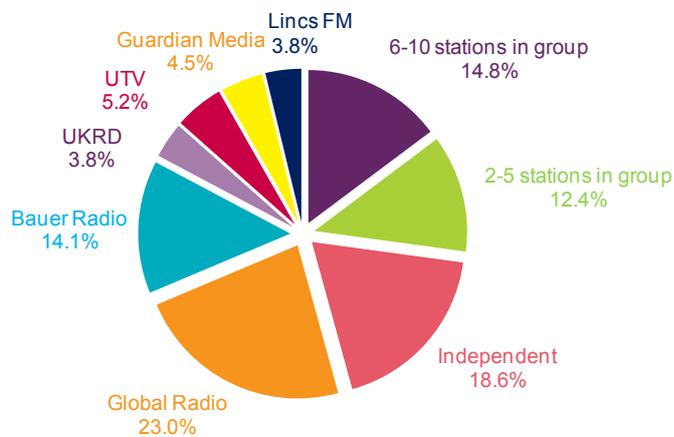
3.2.3 Radio sector market shares in 2009/10 - commercial radio groups

Five commercial groups own half of all the UK’s commercial radio licences

Global Radio is the largest group in the commercial radio sector in terms of licences held, owning 66 analogue licences (a 23.0% share). It is followed by the Bauer Radio group with 41 analogue licences (14.1%). Other groups include UTV with 5.2%, GMG (4.5%), UKRD (3.8%), and Lincs FM (3.8%). Together these six radio groups account for over half (54%) of all UK commercial radio licences, while almost a fifth of UK stations (19%) are held by independent owners (Figure 3.16).

Figure 3.16 Number of commercial analogue stations owned, by group

Percentage share of analogue licences



Source: Ofcom, July 2010

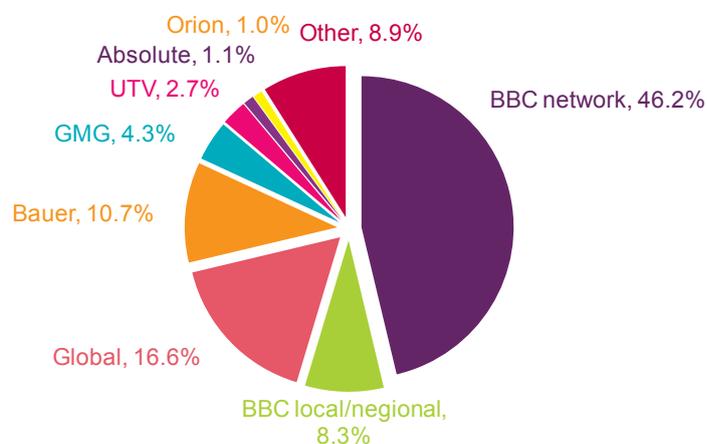
Commercial groups and BBC share of listening

The commercial radio stations’ share of all radio listening stood at 43.2% by Q2 2010 (42.7% in Q2 2009), of which local commercial licensees accounted for just under a third of listening (32.2%) and national commercial stations for 11.0%. Of the commercial groups, Global Radio attracted a share of 16.6% of all radio hours by Q2 2010 (17.2% in Q2 2009), while Bauer Radio group’s market share stood at 10.7% (10.7% Q2 2009). The shares of other leading groups included GMG at 4.3% (4.4% Q2 2009), UTV 2.7% (2.9% Q2 2009), Absolute 1.1% (1.1% Q2 2009), and Orion with a 1.0% share of hours in Q2 2010.

The BBC's radio share reached 54.6% by Q2 2010 this was stable on a year ago in Q2 2009. BBC network radio accounted for 46.2%, with BBC local/nations radio generating the remaining 8.3%.

Figure 3.17 Share of all radio listening hours, Q2 2010

Percentage of listening hours



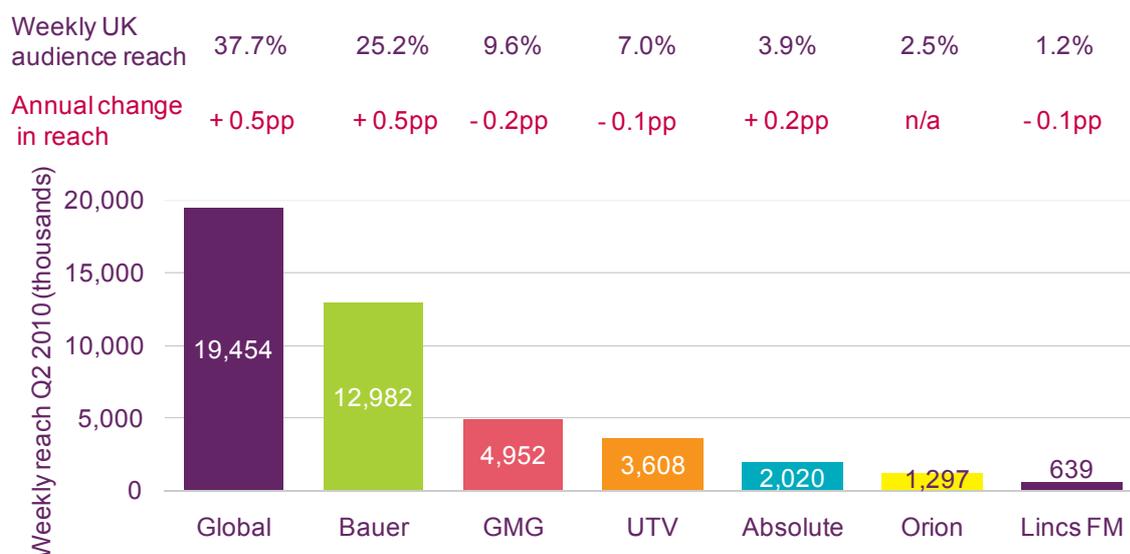
Source: RAJAR, (adults 15+), Q2 2010

Commercial groups' weekly audience reach

Just under two-thirds (64%) of the UK adult population listened to commercial radio on a weekly basis in Q2 2010. The largest commercial group, Global Radio, attracted a weekly audience of over a third of all adults (almost 38% or 19.5 million) to its network. Reach was up year on year (+0.5 percentage points).

The second largest group, Bauer Radio, attracted a weekly audience of just over a quarter (25%) of adults (13.0 million) during Q2 2010. Of the other commercial groups, GMG's stations drew an audience of almost 5 million a week (almost 10% of adults) in Q2, while the UTV group reached 3.6 million (7% of adults) and Absolute Radio just over 2.0 million, while Orion secured almost 1.3 million adult listeners a week in Q2 2010.

Figure 3.18 Commercial radio: weekly audience reach, Q2 2010



Source: RAJAR Q2 2010, (adults 15+)
 Note: PP = percentage points increase

3.2.4 The BBC's radio services in 2009/10

The BBC radio stations were listened to by over two-thirds (67%) of UK adults every week in Q2 2010. The share of all BBC station listening hours equated to well over half (54.6%) of all radio listening in Q2 2010; stable on Q2 2009. The network stations' share accounted for 46.2% of all radio hours in Q2 2010 (45.9% in Q2 2009), while BBC local / nations radio attracted 8.3% of listening (8.7% in Q2 2009).

Weekly percentage reach of BBC stations

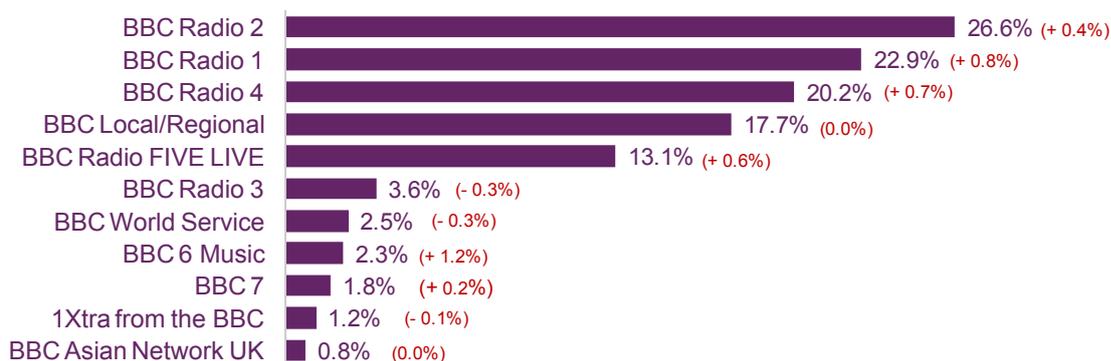
Of the individual stations in the BBC portfolio, BBC Radio 2 still enjoys the highest reach, with over a quarter (26.6%) of adult listeners tuning in every week in Q2 2010. This was equivalent to 13.7 million adult listeners in Q2 2010, up from 13.4 million in Q2 2009. Radio 2's share of listening hours equated to 15.9% of all radio hours in Q2 2010. The second largest station, Radio 1, reached 11.8 million of adults (up from 11.3 million in Q2 2009), equivalent to more than a fifth (22.9%) of adults per week. In terms of share, Radio 1 secured almost a tenth of all radio hours (9.3%) in Q2 2010.

In Q1 2010, the new host of the Radio 2 breakfast show, Chris Evans, attracted a new high of 9.5 million weekly listeners, compared to an audience of 8.1 million a year before when Terry Wogan had hosted the show. This was also the largest average audience for any radio show over the past ten years. By Q2 2010 the show's audience had fallen back to 8.5 million but was still up on 8.3 million a year before. The Chris Moyles morning show on Radio 1 reached 7.7 million listeners a week in Q2 2010, stable year on year.

Radio 4 reached just over one in five adults (20.2%) or 10.4 million weekly, with almost 7.0 million listeners tuning into the breakfast time *Today* programme, up from 6.5 million a year before. Just over nine million listeners tuned in to the BBC local/nations' services in Q2 2010, the average reach of 17.7% was stable year on year. BBC 6 Music's weekly audience doubled year on year up to 1.2 million in Q2 2010, up by 600,000 year on year. The BBC Asian Network was listened to by 437,000 people in Q2 2010 up from 421,000 in Q2 2009.

Figure 3.19 Weekly reach of BBC stations, Q2 2010

Average weekly listening audience (% UK adults), and year on year change



Source: RAJAR Q2 2010, (adults 15+)

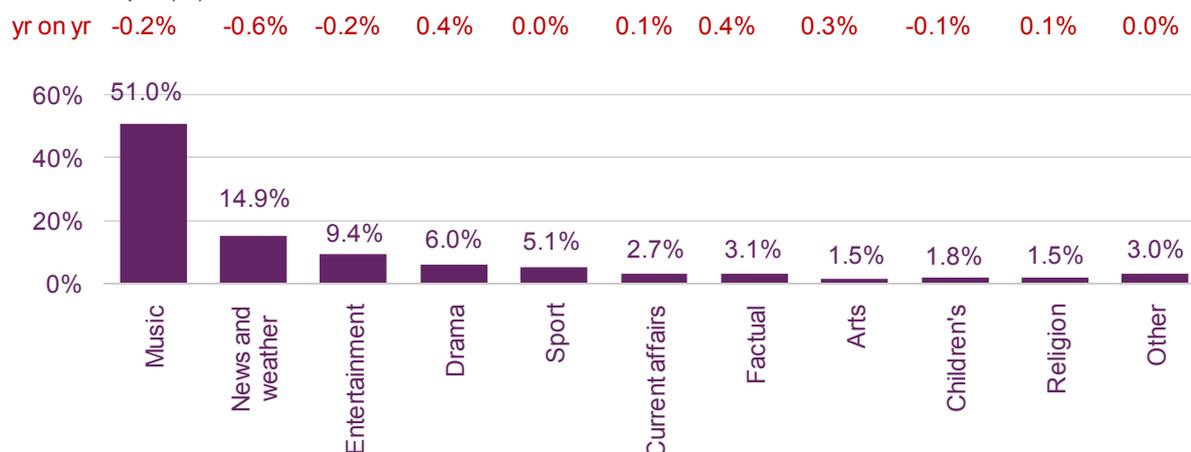
BBC network radio hours by genre

Music accounted for over half (51.0%) of all hours broadcast by BBC network radio in 2009/10; this ratio was down slightly on the year before (51.2% in 2008/09). The next-largest category was News and Weather, which accounted for 14.9% of broadcast hours (down 0.6% on the year). Entertainment had a 9.4% share of hours (9.6% in 2008/09), followed by Drama (6.0% up from 5.7%), Sports (5.1% down from 5.2%), and Current Affairs (2.7% up from 2.6%). Factual programme hours were up to 3.1% from 2.7% the year before, with Arts programming up 0.3pp to 1.5% of all hours.

The BBC has made a voluntary pledge that at least 10% of eligible hours on its national services will be made by independent producers. In 2009/10 just over 14% of BBC network eligible radio hours were independently produced; up from 12% the year before.

Figure 3.20 BBC network radio broadcast hours, by genre: 2009/10

Share of output (%)



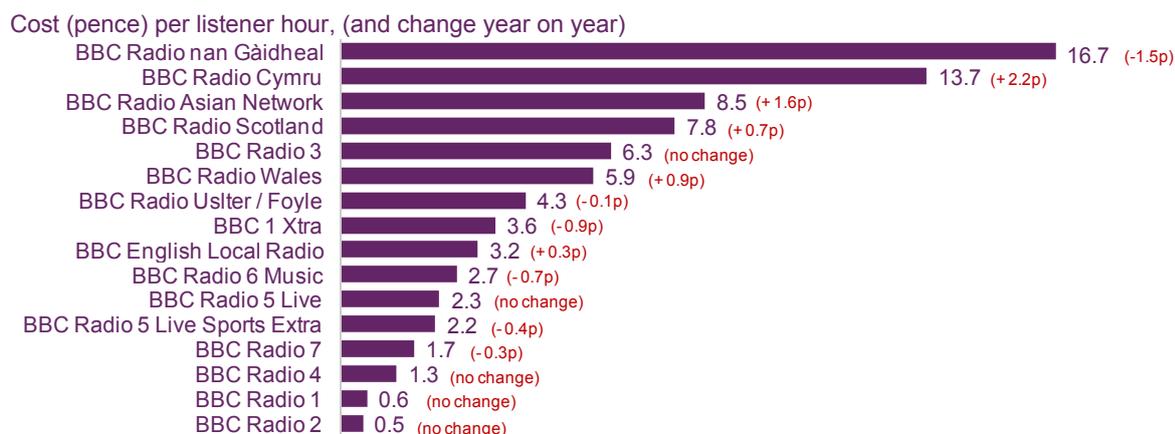
Source: BBC Annual Report and Accounts 2009/2010

BBC expenditure by station: BBC nations services have highest cost per listener hour in 2009/10

In 2009/10 national stations in Scotland and Wales incurred the highest cost per listener hour. BBC Radio nan Gàidheal cost around 16.7 pence per listener hour in 2009/10, although this was down by 1.5p on the previous year. BBC Radio Cymru cost 13.7 pence per listener hour, up 2.2p in the year. The third most expensive station was the BBC Radio Asian Network, at 8.5p per listener hour, higher by 1.6p than the year before.

In July 2010 the BBC Trust said it would consider a formal proposal for the closure of the Asian Network, although this must include a proposition for meeting the needs of the station's audience in different ways; for example, through providing regional services.

Figure 3.21 BBC radio stations: cost per listener hour of programmes, 2009/10



Source: BBC Annual Report and Accounts 2009/2010

3.2.5 Radio licences

By July 2010, 334 radio stations were broadcasting on AM, FM or digital audio broadcasting (DAB) platforms (including local, regional and national services). There were 510 stations broadcasting across the UK when including community radio. Several new national stations also launched in 2010, with four added to the national commercial multiplex, including; Absolute 80s, UCB UK, Premier Christian Radio, and more recently Smooth Radio, launching in August 2010.

Figure 3.22 UK radio stations broadcasting on analogue, DAB digital radio, and community radio, July 2010

Type of station	AM	FM	AM/FM total	DAB	Total
Local commercial	31	203	234	139	267
UK-wide commercial	2	1	3	10*	10
BBC UK-wide networks	1	4	5	11	11
BBC local and nations	36	46	46	32	46
Community radio	4	172	176	0	176
TOTAL	74	426	464	192	510

Note 1: In total there are 288 individual analogue services on AM/FM as 36 simulcast over both AM/FM wavebands. Of the 288 analogue stations and 191 DAB stations, there are 334 unique stations, as 46 stations are digital-only brands.

**The existing Digital One national DAB radio multiplex does not offer coverage of Northern Ireland.*

Note 2: A single radio brand may broadcast to many different parts of the country, using different technologies. For each area/technology combination, Ofcom issues a distinct broadcast licence (where it is licensable). The conditions of each licence will determine the amount of programming that may be shared between these licensed services. Here we have taken the view that a service providing at least four hours a day of separate programming (even if the same brand has other services) equals one service.

In addition to the services on AM, FM and DAB, over 75 stations were broadcasting on digital satellite in July 2010; 24 on Freeview and 35 on cable. Many of these are simulcasts of AM/FM/DAB services.

Community stations increasing, with 176 now on air

Community radio licences are awarded to small-scale operators working on a not-for-profit basis to serve local areas or particular communities.

By July 2010, 228 community radio licences had been awarded across the UK, with 176 of these already broadcasting, up from 141 a year ago. Ofcom estimates that approaching 10 million people, or almost 17% of the total population, can now receive a community radio station.

Of the 176 station currently on-air, 138 were in England, 18 in Scotland, 11 in Northern Ireland and nine in Wales. The majority of community stations serve a general audience, either in an urban area (17%) or a town / rural location (44%). However, many others serve defined communities of interest including those aimed at minority ethnic groups (14%), young people (9%) and religious groups (7%).

Based on information received from operators' annual returns, the average community radio station broadcasts live for around 77 hours a week, and typically transmits a further ten hours per week of original pre-recorded material. Almost a third (32%) of stations' daytime output is speech, featuring a diverse range of local organisations and community members. Music output is also varied: some stations focus on particular genres that are not commonly

heard on the radio, while others take a more mainstream approach during the daytime but branch out into specialist genres in the evening.

The average station has around 75 volunteers, although there is a wide variation in volunteer staffing, ranging from one to 287. On average, a community radio station will attract about 222 volunteer-hours per week.

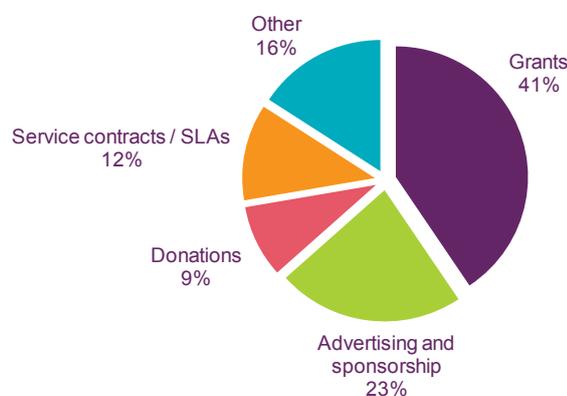
Financial information provided by almost 100 community stations reveals that the average station's income in 2008/09 was around £79,000, although actual incomes ranged from £3,000 to over £415,000. This was down by around 20% on the previous year's reported figures (the average for 2007-2008 was £101,000). Many community stations reported that they believed the recession had impacted not just on advertising but also on grant income.

The main source of income in 2008/09 came from grants, accounting for 41% of all funds, (although down from 45% in the previous year). These included awards from the community radio fund (administered by Ofcom on behalf of the DCMS) and from other central government bodies such as the Arts Council and the Ministry of Defence (in the case of some military-based stations).

Local authorities were also an important source of funding, as were the funding bodies supported by the National Lottery. On-air advertising and sponsorship accounted for almost a quarter (23%) of funding, (up from 20% a year ago). While service level agreements (SLAs) or service contracts (12%, similar to 11% a year previously), and donations (9% down from 12% in a year), and other sources (16%) made up the rest, SLAs involve the stations broadcasting output of social benefit on behalf of other organisations, in return for funding.

Figure 3.23 Community radio income, by source

Community radio stations' income 2008/09



Source: Ofcom, community radio station revenues 2008/09, based on 99 station annual returns

Community radio licences awarded for South East of England

In 2010, licences were awarded for stations which will serve communities in the following areas of South East England (Figure 3.24).

Licences are awarded for a five-year period and demand for them continues to be strong. Since community radio licensing started in September 2004, a total of 228 licences have been awarded, although 17 of these have been handed back to Ofcom.

Figure 3.24 Community radio licence awards in 2009/10

Community station	Location	Award date
Betar Bangla	Stratford, east London	June 2010
Generation Radio	Clapham Park, south London	June 2010
Greenwich Kasapah	Greenwich, south east London	June 2010
Reprezent FM	South London	June 2010
Rinse FM	Inner London	June 2010
Streetlife Radio	Waltham Forest, north east London	June 2010
Susy Radio	Redhill and Reigate, Surrey	June 2010
SAFE Radio	Grays, Essex	March 2010
SFM	Sittingbourne, Kent	February 2010
Gateway FM	Basildon, Essex	February 2010
Insanity	Egham, Surrey	February 2010
Kane FM	Guildford, Surrey	February 2010
The Vibe	Watford	February 2010
Ox FM	Oxford	December 2009
Ummah FM	Reading	October 2009
Marlow FM	Marlow, Bucks	September 2009
Bradio BGWS	Farnborough, Aldershot, Camberley and Fleet	September 2009
Seahaven FM	Newhaven, Seaford and Peacehaven, East Sussex	September 2009
The Park	Brockenhurst, Hampshire	September 2009
Voice FM	Southampton	September 2009

Source: Ofcom

3.2.6 DAB station choice

There are currently 21 national DAB services available; 11 from the BBC and 10 from Digital One, in addition to local services. The BBC multiplex carries all the BBC's UK-based radio services, Radio 1, 2, 3, 4, 5 Live, 6 Music, BBC Radio 7, BBC World Service, BBC Asian Network, 1Xtra and 5 Live Sports Extra. The Digital One network currently provides ten national stations across Wales, Scotland, and England, including Classic FM, talkSPORT, Absolute Radio, Planet Rock, BFBS, UCB UK, Absolute 80s, Amazing Radio, Premier and Smooth Radio.

Figure 3.25 illustrates the availability of national DAB services by nation/region, along with the typical number of local stations.

- Listeners in Northern Ireland can access up to 20 DAB stations, including the 11 national BBC stations plus BBC Radio Ulster / Foyle, and three of the UK's national

commercial stations (Classic FM, talkSPORT and UCB). An additional six stations are available through the local DAB multiplex in Northern Ireland, including simulcasts of local commercial stations: Downtown Radio, Cool FM, Q102.9 FM, and City Beat 96.7, as well as two music-based stations, Magic and Heat.

- In Scotland, digital radio listeners in the Glasgow area have the greatest DAB choice with 38 stations, including the 21 national services, plus BBC Radio Scotland / BBC nan Gàidheal, and 15 commercial stations available through local or regional multiplexes. Listeners in Edinburgh and Central Scotland have access to a similar number, with 37 DAB stations available. Station choice was lowest in Inverness at 26, with three local commercial stations available on DAB.
- In Wales, people living in the larger conurbations of Cardiff, Swansea, and Newport can access up to 36 DAB stations, including the 21 UK-wide BBC and commercial stations, along with BBC Radio Wales / BBC Radio Cymru, with an additional 12-13 local services available through the local and regional multiplexes in each area. The areas in North and Mid / West Wales are currently served only by the national stations from the BBC and Digital One; a local commercial DAB multiplex for North Wales is due to launch in autumn 2010.
- In England, the choice of DAB stations across the English regions ranges from over 60 in the London area to 29 in areas such as Plymouth and Cornwall. Larger cities including Birmingham, Liverpool and Manchester have access to up to 42 DAB services, including the 21 national stations. Medium-sized cities such as Leicester, Nottingham, and Stoke have access to 30-31 DAB stations.

Figure 3.25 Availability of DAB stations, by area



Source: Ofcom. Note: This chart shows the maximum number of stations available in each area; local variations along with reception issues mean that listeners may not be able to access all of these.

3.3 The radio and audio listener

The following section examines how patterns of radio listening have changed in the UK over the past five years. It uses audience data to analyse listening by sector and by age group and draws on consumer research.

Key points in this section include:

- **The number of radio listeners reached a new high of 90.6%** (46.8 million adults) by Q2 2010 - the highest weekly reach recorded since the new RAJAR research methodology was introduced in January 1999. This figure was up by almost half a million on Q2 2009 (90.3% of adults) and was also up by 300,000 listeners since Q1 2010. The combined BBC stations' reach was 67.0% in Q2 2010, compared to 63.7% for commercial radio (page 214).
- Despite more people listening, the **time spent listening to radio services was down by 5.3% in five years**, and by 0.4% year on year. BBC Radio hours were down by 1.2% during 2009 and down 2.2% since 2004. By contrast, all commercial radio listener hours were stable over the year, but down 10.1% over five years (page 216).
- **Radio hours were down, particularly among younger listeners**, with the fall generally reducing in line with age. Among younger adults (15-24), hours fell by 13%; while among 25-34s they were down 11%. Listening among older age groups was more stable; down by 2% among listeners aged 65+, while among 45-54 year olds, hours were up by more than 1% (page 216).
- **Listening to national stations has increased, while local radio hours have continued to fall.** BBC network radio hours have risen by 3.7% in five years and national commercial hours are up by 1.3%. By comparison, local BBC station listening fell by 25.1% and local commercial by 13.4% (page 216).
- **By Q2 2010, digital radio platforms accounted for almost a quarter (24.6%) of all radio listening hours**, according to RAJAR. This was up by 3.5 percentage points from 21.1% in Q2 2009. The majority (64%) of digital listening was through a DAB digital radio set, which accounted for 15.8% of all radio listening. Digital television listening accounted for a further 4.1% and the internet 2.9% (page 217).
- **Cumulative sales of DAB digital radio sets reached 11 million by June 2010** (up from almost 9 million a year ago). RAJAR estimates that over a third (35.3%) of UK adults owned a DAB set by the end of Q2 2010, up by 2.3 percentage points on the previous year (page 222).
- **Four digital-only stations drew in over a million listeners per week in Q2 2010.** 'The Hits' was the most popular digital-only station, with a weekly audience of 1.4 million listeners over the quarter, although down by 25% year on year. BBC 6 Music's reach grew fastest over the past 12 months, reaching almost 1.3 million listeners in Q2 2010 (up by 87% year on year) (page 220).

3.3.1 Radio reach

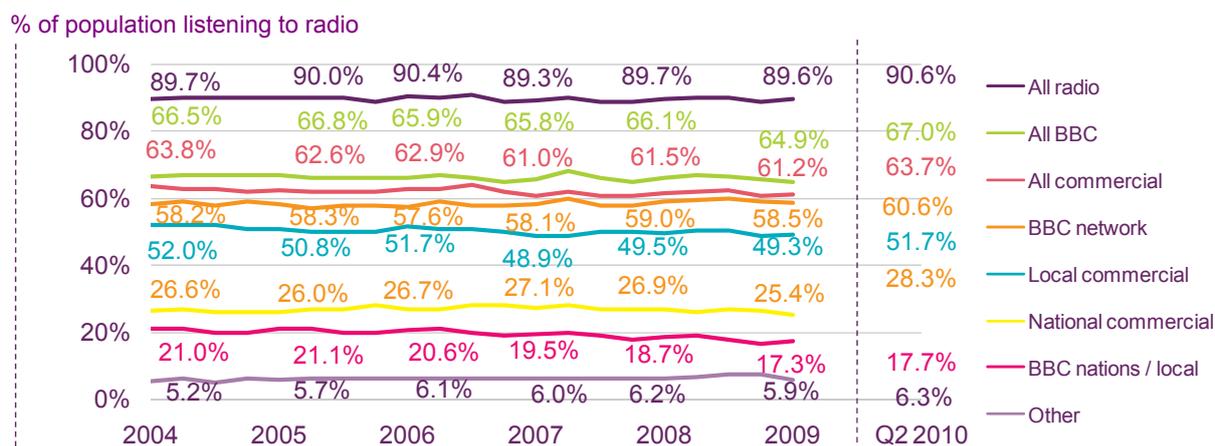
Radio audience reaches new high in Q2 2010

By Q2 2010 radio listening had reached a new high of 90.6% (46.8 million adults) listening on a weekly basis. This figure was up by almost half a million listeners on Q2 2009 (90.3% of adults). This was the highest weekly reach recorded since the new RAJAR research methodology was introduced in January 1999.

Compared to five years ago, the BBC's radio audience was up by 0.4 percentage points to 67.0% in Q2 2010. Commercial radio reach was also up by a similar amount (0.5pp) over the same period to 63.7% in Q2 2010.

BBC network radio reach rose the most, up by 2.3pp over five years to 60.6% in Q2 2010. BBC nations'/local audiences, however, were down by 2.7pp over the same period to 17.7%. Among commercial radio stations, the audience for the national services was up by 2.1% in five years to 28.3% in Q2 2010, while local commercial was stable at 51.7% in Q2 2010 (Figure 3.26).

Figure 3.26 Reach of radio, by sector



Source: RAJAR, (adult listeners 15+).

Note: Other listening includes listening to alternative radio categories such as; community radio, RSL stations, overseas radio, or other un-metered radio listening.

Q2 2010 reach figures have been included in this chart to provide the latest pattern of radio listening figures. The annual figures included here relate to the end of the calendar year in each case.

3.3.2 Listening hours

BBC stations attracted over half of all listener hours (54.6%) in Q2 2010 but commercial radio share was up on the year.

The BBC stations' combined share was well over half (54.6%) of all radio listening hours in Q2 2010. This was up by 0.6 percentage points in five years, but stable year on year.

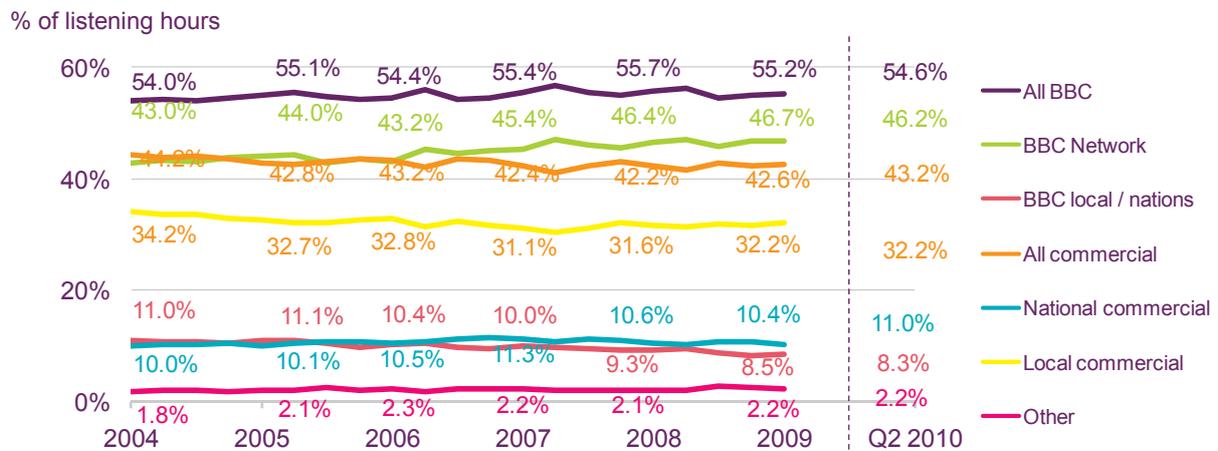
Commercial radio accounted for a 43.2% share in Q2 2010; this was down by 0.8pp in five years, but up by 0.5pp year on year.

BBC network radio share, at 46.2%, was 3.0pp higher than all commercial radio share of 43.2% in Q2 2010. BBC network share was up 3.1pp in five years. The local / nations BBC services attracted a 8.3% share of listening hours, down by 2.6pp in five years.

Local commercial radio share accounted for just under a third of all radio hours (at 32.2%) in Q2 2010, down 1.6 percentage points in five years but up 0.3pp in a year. National

commercial stations held over a tenth of radio hours (11.0%) in Q2 2010; up 0.8pp over five years (Figure 3.27).

Figure 3.27 Share of listening hours, by sector



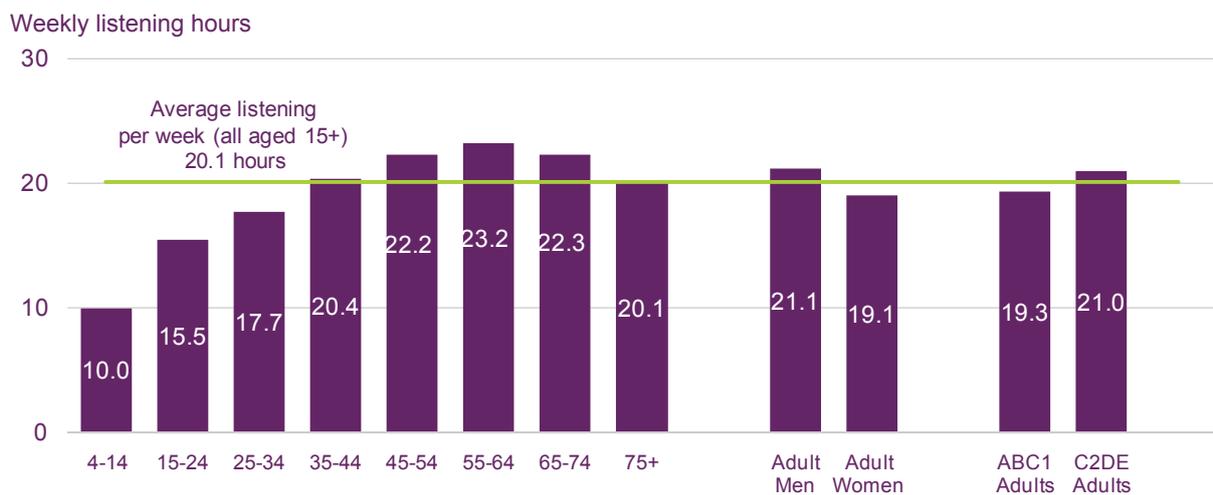
Source: RAJAR, (adult listeners 15+).

Note: Q2 2010 share figures have been included in this chart to provide the latest pattern of radio listening ; the annual figures included here relate to the end of the calendar year in each case.

Average time spent listening to radio increases with age

The average time spent listening to the radio was 20.1 hours per week in Q2 2010, stable on a year before but down by an hour and a half from five years ago. Listening times generally increases with age; for 15-24s it averaged 15.5 hours per week, compared to 23.2 hours for those aged 55-64. On average, men listened for 2.0 hours more than women, and people in the C2DE socio-economic group listened for almost three-quarters of an hour more per week than ABC1s (Figure 3.28).

Figure 3.28 Demographic profile of overall listening



Source: RAJAR Q2 2010, (average weekly listening hours per head of population)

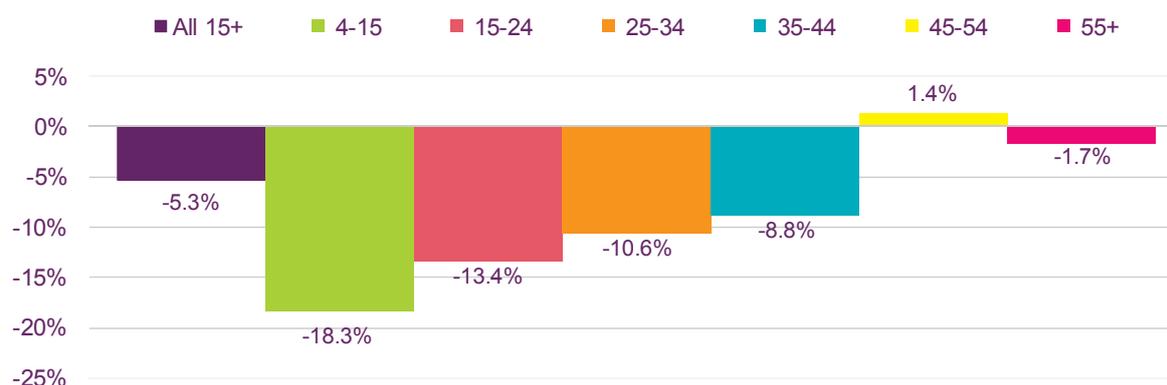
Younger age groups (under-45s) spending less time on radio

Over the past five years, levels of radio listening have fallen among most age groups, with all adults' (15+) listening down by 5.3% between 2004 and 2009. The fall was more pronounced among younger listeners, generally reducing by age group.

For young adults aged 15-24 and 25-34, listening hours were down (by 13.4% and 10.6% respectively). They fell less among 35-44s and over-55s (by 8.8% and 1.7% respectively), while listening time among 45 to 55 year-olds actually increased over the five years, by 1.4%.

Figure 3.29 Changes in listening hours by age, 2004 - 2009

Percentage change in listening hours



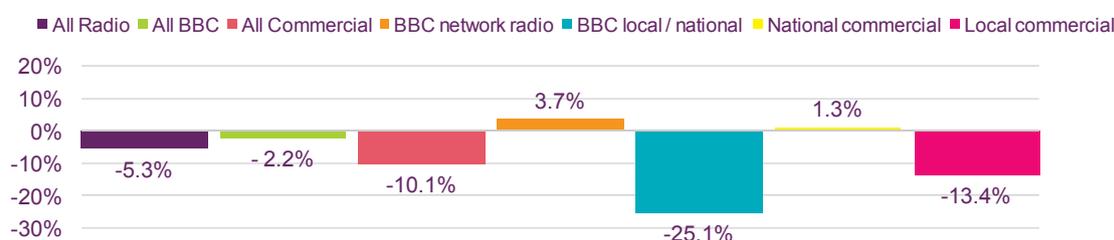
Source: RAJAR, data based on calendar years 2004 versus 2009. Please note 4-15 age group data is based on a smaller sample size.

National radio stations' hours rose in the last five years while local stations' fall

Total hours of radio listening fell by over 5% in the five years to 2009. Total BBC hours were down 2%, and the combined hours of listening to commercial radio fell by 10% between 2004 and 2009. This was driven by reductions in listening to local radio stations, with BBC nations/local radio hours down by 25%, and local commercial down by 13%. However, the national radio stations (BBC and commercial radio) attracted a larger number of listener hours over the period (up by 3.7% and 1.3% respectively).

Figure 3.30 Change in listening hours 2004-2009, by sector

Percentage change in listening hours



Source: RAJAR: data based on calendar years 2004 versus 2009.

3.3.3 Most listened-to radio stations

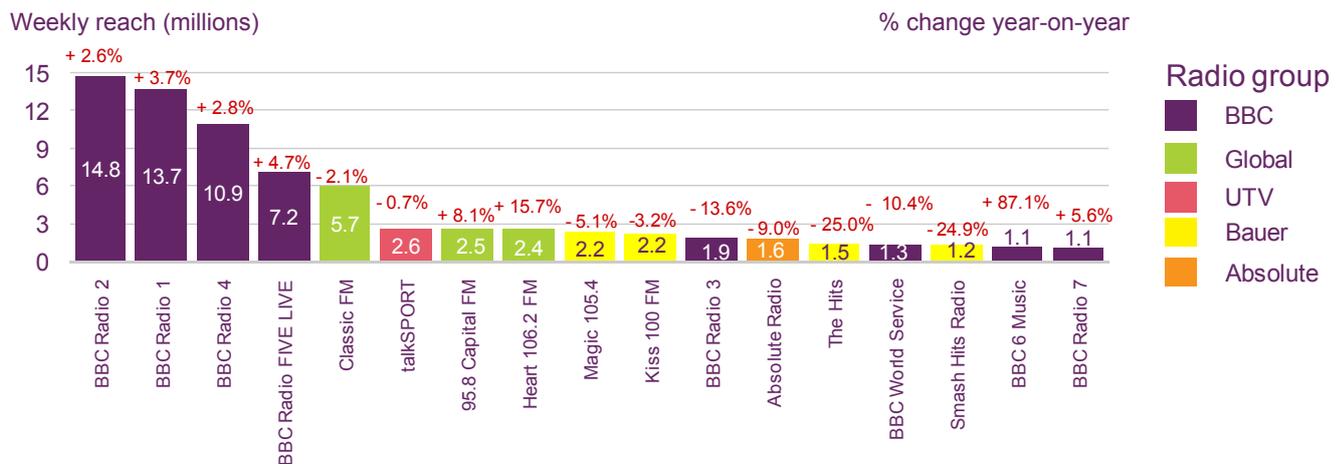
BBC Radio 1, 2, 4 and Five Live increase weekly audiences in Q2 2010

The number of people accessing radio services reached a new high according to Q2 2010 RAJAR results, with 90.0% of all individuals aged 4+ (equivalent to almost 53.5 million) listening every week. Audiences for the four most listened-to stations; BBC Radio 1,2,4 and Five Live, all increased year on year. Radio 2 reached a weekly audience of 14.8 million listeners (24.9%); this was up 375,000 on Q2 2009. This overall increase was aided by additional listeners to the Chris Evans breakfast show on Radio 2. BBC Radio 1 reach was up by 485,000 listeners in the year, to 13.7 million listeners in Q2 2010.

Altogether the BBC accounted for almost half of the top 17 stations. BBC 6 Music's audience grew fastest, by 87% (580,000), to 1.25 million listeners a week. This followed earlier proposals to close the station, sparking a campaign to save it by supporters.

Of the commercial radio services in London, 95.8 Capital FM's had the highest reach in Q2 2010 at 2.5 million, (up 8.1% year on year), making it the seventh largest station in the UK. This was just ahead of the audience for Heart 106.2, whose audience grew fastest of the London stations, up 15.7% to reach 2.5 million in Q2 2010. BBC Radio 3 saw its audience fall by 14% (300,000) to 1.9 million listeners. Bauer-owned digital music stations Smash Hits and The Hits also saw their weekly audiences fall by around a quarter year on year, down by 422,000 (24.9%) and 461,000 (25.0%) respectively.

Figure 3.31 Most listened-to radio stations, Q2 2010



Source: RAJAR, Q2 2010 (all listeners 4+), figures are rounded.

3.3.4 Digital radio listening trends

Take-up of devices offering digital radio has continued to increase. Over nine in ten homes (92%) had access to digital radio services on their main set by Q1 2010 (up from 89% on the year). Households with the internet had increased to 73% (broadband or dial-up), providing access to live digital radio, as well as listen-again and downloadable radio content. This was up from 70% in Q1 2009. DAB radio ownership rose to over a third of adults (35.3%) by Q2 2010, up 2.3 percentage points in the year.

Digital listening has nearly doubled in three years to 24.6% by Q2 2010

In July 2010, Ofcom published its first *Digital Radio Report*, detailing consumers' access to, and use of, digital radio services. This report was published in accordance with the

government's Digital Radio Action Plan. This section provides a summary of some of the report's main findings, updated where applicable for Q2 RAJAR listening figures⁵².

Listening through a digital platform accounted for almost a quarter of all radio listening hours in Q2 2010. The combined listening share of radio services through DAB, DTV and online reached 24.6% in Q2 2010. This was up by 3.5 percentage points in a year and by 11.8 percentage points from a 12.8% share in Q2 2007.

Figure 3.32 Share of listening hours across analogue and digital platforms

Radio listening share by digital and analogue listening



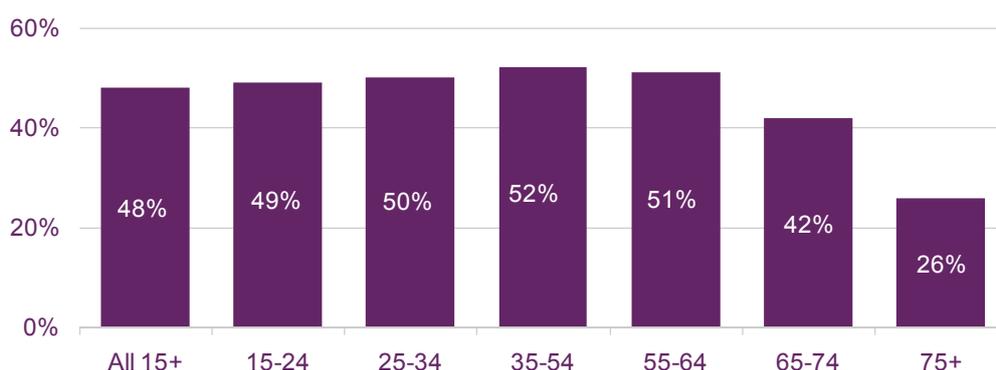
Source: RAJAR Ipsos MORI/ RSMB, Q2 2010

Note: Unspecified relates to listening where the radio platform was not confirmed by the listener.

Almost half (48%) of radio listeners claimed to be using one of the digital radio platforms (DAB, internet, or DTV), on a monthly basis by Q1 2010. The 35-54 age group was the most likely to listen monthly at 52% of the total. A smaller proportion of people in older age groups were digital radio listeners; the figure fell to less than half (42%) of the over-65s. The fall was most pronounced for the over-75s, where just over a quarter (26%) used a digital platform on a monthly basis.

Figure 3.33 Listening to digital radio, by age group

Digital radio listening by age group (at least monthly)



Source: Ofcom research, Q1 2010

Base: All who listen to the radio (n=7017)

Q: Use digital radio at least monthly

Of the individual digital radio platforms, 27% of respondents said that they listened via a DAB digital radio set on a monthly basis, of which 25% listened every week via DAB.

⁵² The full Ofcom 'Digital Radio' report can be found here: <http://stakeholders.ofcom.org.uk/market-data-research/radio-research/digital-radio-reports/digital-radio-report01/>

Listening to radio via the internet was a monthly activity for 15% of respondents with 9% listening online on a weekly basis. Listening via digital TV was undertaken monthly by 25% of radio listeners with 15% listening to radio channels through a TV set every week.

3.3.5 Digital radio share, by sector

National stations benefit from increased exposure on digital formats

The UK-wide services from the BBC and the national commercial stations attracted proportionally more share from digital platforms than local services (possibly connected to the availability of additional nation-wide services in both of these categories).

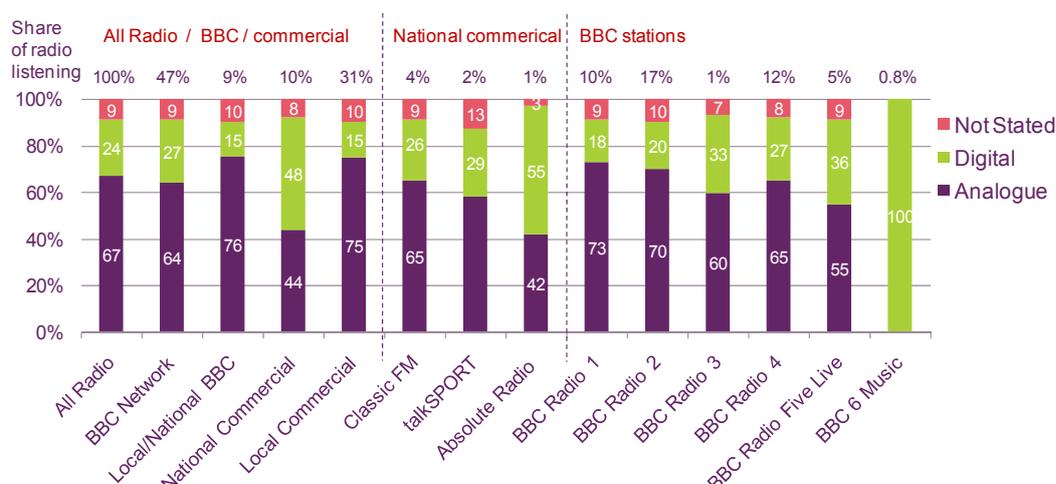
Of the 24 percentage points of digital listening, over half (54%) were to BBC network services; this was higher than the comparative BBC network share of all radio hours (47%) in Q1 2010. By comparison, BBC nations / local radio attracted a 4% share of digital hours, compared to a 9% share across all radio platforms.

National commercial services accounted for just over a fifth (21%) of digital listening hours. Again, this was higher than the overall 10% share of national commercial listening overall. This might be explained by the wider number of national stations available on digital formats. Local commercial drew a 21% share of digital listening, but this was lower than its 31% share of all radio hours in Q1 2010.

Stations which have lower availability on analogue frequencies, or are carried on AM, may attract new audiences as a result of being distributed over digital radio platforms. Examples include Absolute Radio, which is available nationally only on AM on analogue radio, and on FM in the London area. Over half (55%) of the station's listener hours came from through digital platforms in Q1 2010. This compares with FM national music station Classic FM, whose digital audience generated a quarter of listener hours. The other national AM commercial station, talkSPORT, attracted a similar proportion of digital hours, at just over a quarter (26%).

Of the national BBC stations available on analogue frequencies, the AM station BBC Five Live drew the largest ratio of digital listening, at over a third (36%) of all hours; the pattern for BBC Radio 3 was similar.

Figure 3.34 Audience profiles and platform split, by sector and station, Q1 2010



Source: RAJAR Octagon (adult listeners 15+), Q1 2010

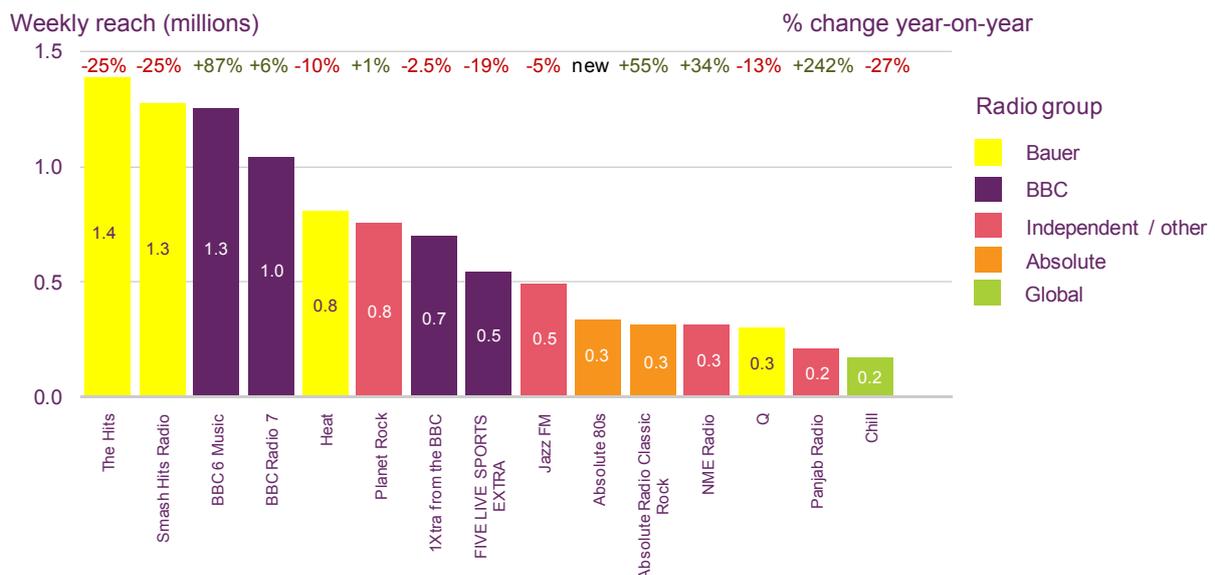
BBC 6 Music leads increases in listening to digital-only stations

The audiences to several digital-only stations have continued to grow over the past 12 months. Four of the most listened-to digital-only stations drew weekly audiences (aged 4+) of over a million by Q1 2010.

Among the ten most popular digital-only stations, four belonged to the BBC; with a further three being owned by the Bauer Radio group, with three of the top five being Bauer stations (The Hits, Smash Hits and Heat). While four of the top fifteen digital stations are independently owned, (Planet Rock, Jazz FM, NME, and Panjab).

BBC 6 Music's reach grew fastest in the year to Q2 2010, gaining almost 600,000 weekly listeners in 12 months, an increase of 87% to reach an audience of 1.25 million in Q2 2010. This increase followed earlier proposals by the BBC to close the station, which attracted a campaign by supporters to save it. The BBC Trust subsequently announced in the 2009/10 BBC Annual Report that the case for closure had not been proved. Among the newer stations, Jazz FM gained a weekly audience of around half a million (493,000) by Q2 2010. While another new station, Absolute 80s, built an audience of well over a quarter of a million (334,000) by Q2 2010, in May 2010 the station launched nationally on the Digital One multiplex. Audiences to another Absolute station, Classic Rock, were up 55% in the year to 312,000 by Q2 2010. Independent station Panjab Radio saw its audience rise by 242% to reach over 212,000 people.

Figure 3.35 Most listened-to digital-only stations, Q2 2010



Source: RAJAR, Q2 2010, (all listeners 4+), figures are rounded.

3.3.6 Listening patterns across the UK nations

Listening patterns vary across the UK's nations

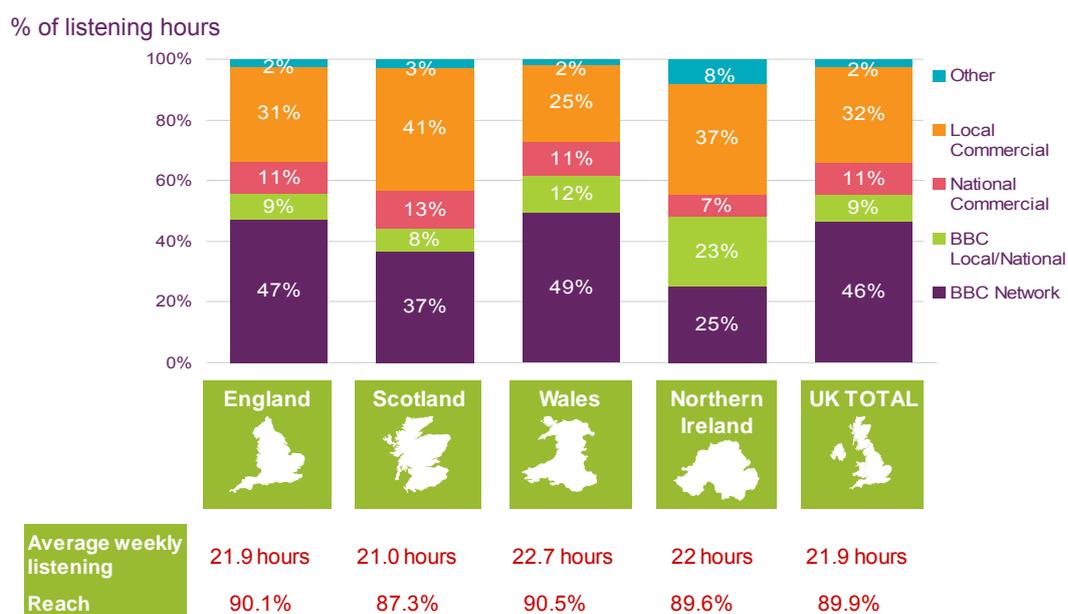
Listeners show greater preference for local radio content in Scotland and Northern Ireland, while BBC network services are more popular in Wales and England.

- In **Scotland** the most popular category is local commercial radio, which attracted a 41% share of all radio listening in the year to Q1 2010. This was nine percentage points higher than the UK average of 32%. National commercial share stood at 13%

(above the UK average). The share of BBC network listening in Scotland was nine percentage points lower than the UK average, at 35%.

- In **Northern Ireland**, the BBC networks' share of listening is lower than the UK average. It accounted for a quarter of radio hours in the year to Q1 2010, 21 percentage points below the UK average of 46%. However, listening share for BBC local and nations' services (Radio Ulster and Radio Foyle) was 14 percentage points higher than the UK average, at 23%. Overall, combined BBC share in Northern Ireland was 48%, 7pp below the UK average of 55%. Local commercial listening increased by 5pp in the year to reach 37%; 5pp higher than the UK average.
- Listening patterns in **Wales** show some variations from the UK average. The main differences include higher levels of listening to the national BBC services for Wales (BBC Radio Wales / BBC Radio Cymru), which attracted a share of 12%, three percentage points higher than the UK average. Local commercial listening was seven percentage points lower than the UK average, at 25%. Overall, BBC stations accounted for 61% of listening in Wales, compared to 55% for the whole of the UK.
- In **England**, the BBC network stations are the most popular station category, with a 47% share of all listening in the year to Q1 2010, similar to share in Wales but higher than in Scotland and Northern Ireland. BBC local services attracted a 9% share, while local commercial radio secured almost a third (31%) of all listener hours.

Figure 3.36 Share of listening hours, by nation

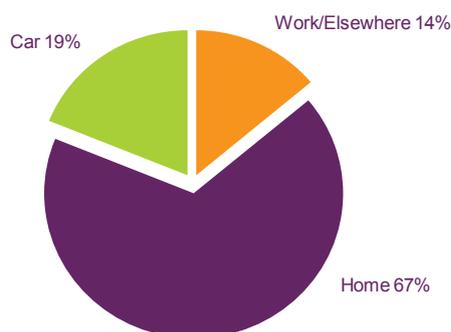


Source: RAJAR / Octagon, year to Q1 2010, (all listeners 15+).

3.3.7 Location of radio listening

Around two-thirds (67%) of radio listening still takes place in the home, slightly lower than five years ago (69%). Car listening was up to almost a fifth of all radio listening (19%) in the year to Q1 2010, up from 16% five years ago. Listening at work / elsewhere (including outdoors) accounted for around a seventh (14%) of all radio listening up slightly from 13% in five years. Access to outdoor listening may have been influenced by the growth in listening to podcasts or to radio services on mobile phones while on the move.

Figure 3.37 Location of listening



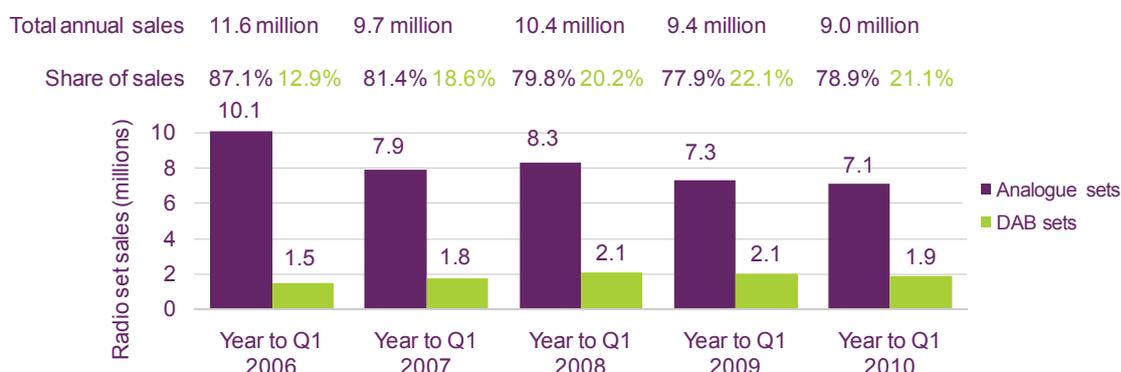
Source: RAJAR / Octagon, all listeners, year to Q1 2010

3.3.8 Retail sales of radio sets

DAB sets account for a fifth of all radio sales

DAB digital radio sets made up over a fifth (21%) of all radio hardware sales by volume, with around 1.9 million units sold in the year to Q1 2010 (Figure 3.38). This was up from a 13% share four years ago. In the portable market, DAB sets accounted for 65% of sales. Total radio set sales (analogue and digital) were down by 400,000 to 9.0 million in the year and down by 1.4 million on the year before.

Figure 3.38 Number of analogue and digital radio sets sold



Source: GfK sales data, Q1 2010

Well over 100 million active radio devices in UK homes and cars

Cumulative sales of DAB digital radio sets were 11 million by June 2010 (up from almost 9 million a year before). Separately, RAJAR estimated that over a third (35.3%) of UK adults owned a DAB set by the end of Q2 2010, up by 2.3 percentage points on the previous year.

Ofcom consumer research and retail sales data suggest that for the three main types of radio device in the home (portable radios, hi-fi, and clock radios) there are at least 70-80 million devices in active use. Of these, we estimate that around 14-16% were able to receive digital radio services in Q1 2010. There are also 34 million radios in vehicles on the road, of which only around 1% are able to receive digital radio services. Consumer research also indicated that there may be an additional 30 million radio receivers in the home built into other media and communications devices such as mobile handsets and MP3 players.

The average price paid for DAB sets followed a generally downward trend between 2003 and 2008. Over the past two years, however, the average price has risen, from £75 in 2008 to £91 in 2010 (Figure 3.39). The portable category followed a similar pattern, with average prices up from £53 to £61 over two years. Similarly, the in-home category (including DAB sets incorporated as part of hi-fi units), saw average prices increase from £149 to £202 over the same period. But the average price paid for a car DAB digital radio set fell from almost £200 in 2006 to £74 by Q1 2010, as cheaper models have become available.

Figure 3.39 Average price of DAB digital radio receivers

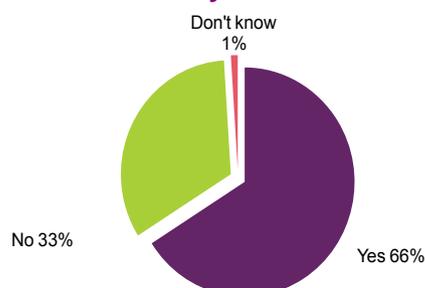


Source: GfK sales data Q1 2010

Attitudes towards, and awareness of, DAB digital radio services

The term 'DAB digital radio' now commands relatively high levels of awareness, with around two-thirds of consumers recognising the term or the DAB branding.

Figure 3.40 Have you heard of the term 'DAB digital radio'?



Source: Ofcom research May 2010

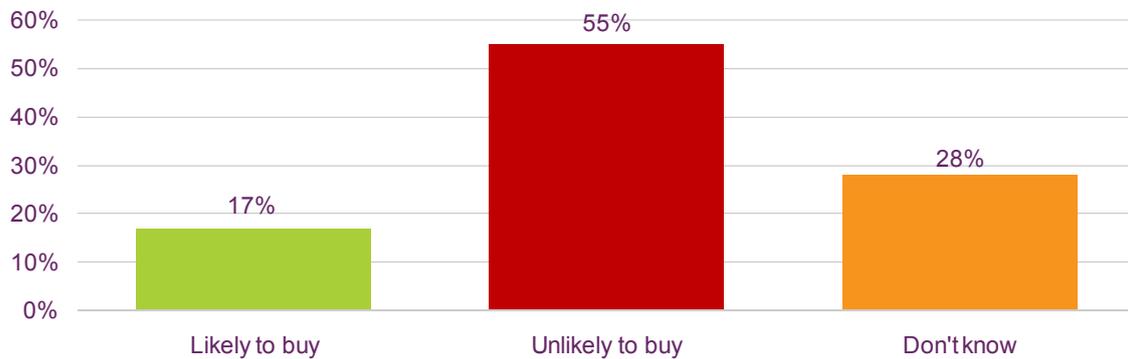
Have you ever heard of the term 'DAB. digital radio' or seen this logo before today?

Base: 1075 UK adults

By Q1 2010 around 17% of those respondents without a DAB set said that they intended to buy one within the next 12 months (up by 1pp on 2009). Of this 17%, 2% claimed they were certain to buy, while 5% said they were 'very likely' to buy. However, 55% of radio listeners without DAB said they did not plan to purchase a set over the next year.

Figure 3.41 Likelihood to purchase a DAB set

Percentage of respondents who listen to the radio but have no DAB set in the home



Source: Ofcom research, Q1 2010

Base: Those who listen to the radio but have no DAB sets in the home (4445 UK adults)

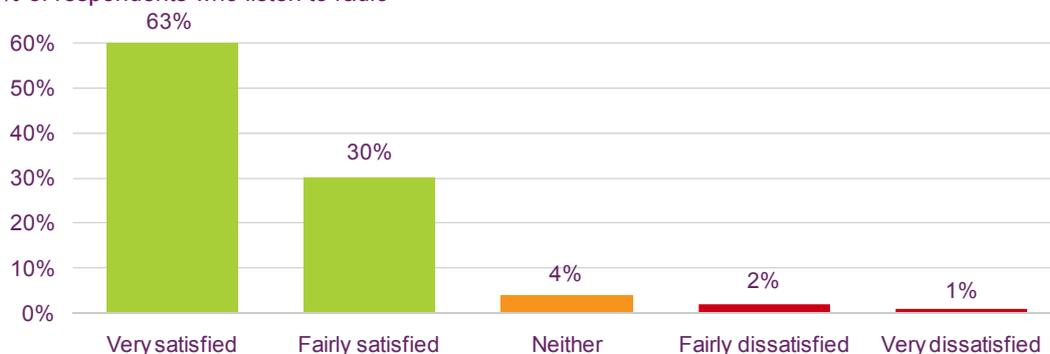
Q: How likely is it that your household will get a DAB radio in the next 12 months?

3.3.9 Satisfaction with radio services

Consumer satisfaction with radio choice is high and growing; 93% of respondents said they were 'very' or 'fairly' satisfied with the choice and range of radio stations, up from 91% last year and up from 89% four years ago. The number of people who were 'very satisfied' was 63%, up from 40% from four years ago, while 3% said they were dissatisfied with station choice (4% a year ago).

Figure 3.42 Satisfaction with choice of radio stations

% of respondents who listen to radio



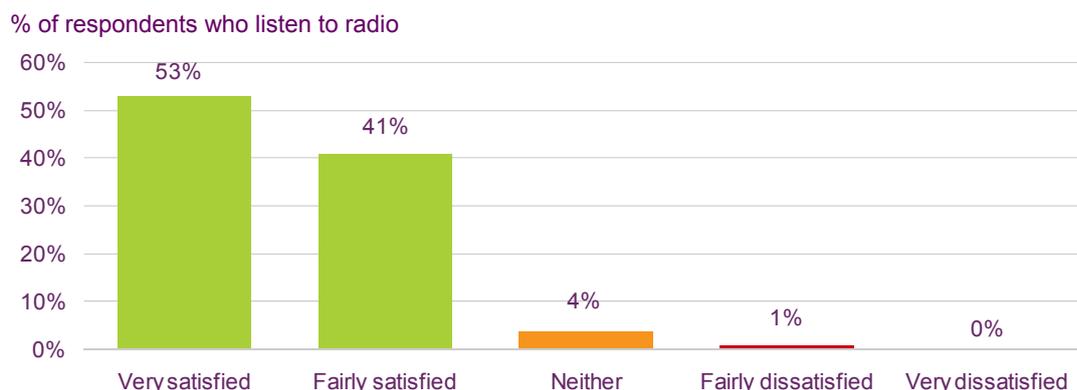
Source: Ofcom research, Q1 2009 Base: All who listen to the radio (n=2483)

Q: How satisfied are you with the choice of radio stations available in your area?

Satisfaction with radio content is also high, with 94% claiming to be very, or fairly, satisfied with the overall quality of radio programming. By contrast, only 1% were 'fairly dissatisfied' and almost none 'very dissatisfied'. These results were stable on last year, and similar to the comparable figures from four years ago (93%), although the proportion of radio listeners 'very satisfied' with content has risen from 45% to 53% over four years.

Figure 3.43 Satisfaction with radio content

How satisfied are you with the content of what you listen to on the radio?



Source: Ofcom research, Q1 2010

Base: All who listen to the radio (n=900)

Q: How satisfied are you with the content of what you listen to on the radio?

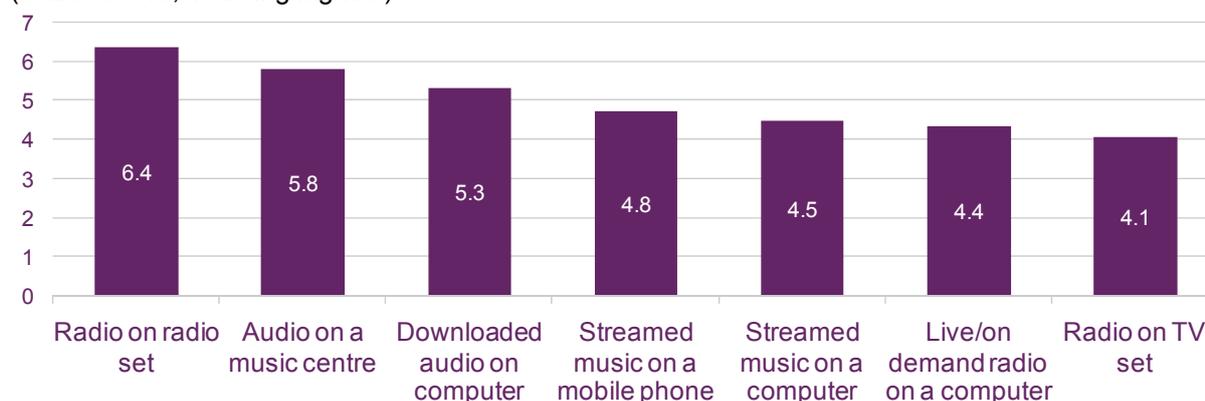
3.3.10 Audio and radio: importance of audio / radio activities to user

With audio content now available on a wide range of devices, the importance that the user attaches to each method of audio access varies. The most-valued activity was listening to radio via a traditional radio set, whose importance was rated by consumers as 6.4 out of 10. Listening to audio via a music centre was also valued more highly, at 5.8 out of 10. Other activities attracted lower scores; listening to radio via TV at 4.1 out of 10, and streamed (4.4) or live radio (4.5) via a PC.

Figure 3.44 Importance of audio activities to users

Importance of service

(scale of 1-10; 10 being highest)



Source: Ofcom research, June 2010

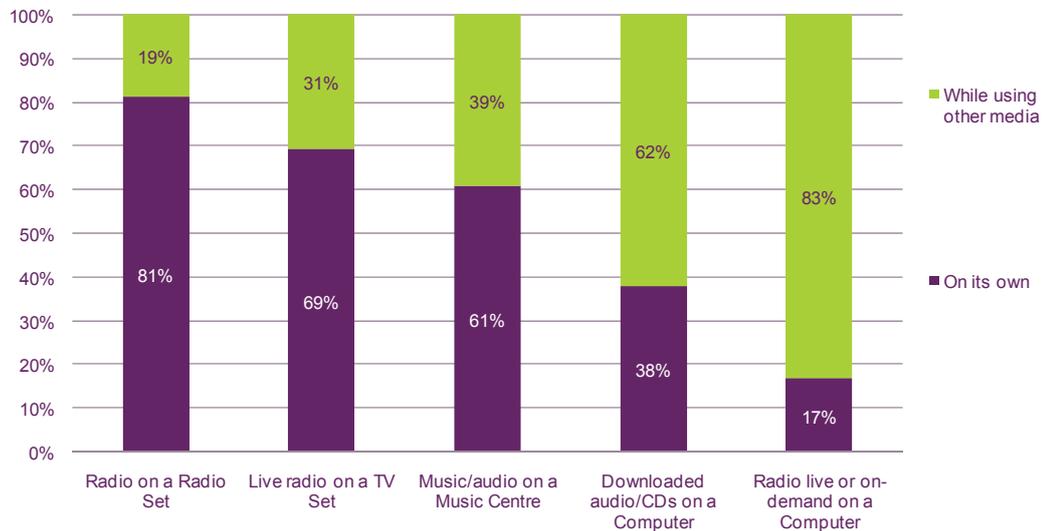
3.3.11 Listening to audio on its own versus listening concurrent with other activities

The vast majority (81%) of time spent listening via a radio set was done as a 'solus' media activity, while just under a fifth (19%) was concurrent with other communications activity, such as talking on the phone or surfing the internet.

By contrast, listening to radio (either live or on demand) via a computer was usually done while accessing other media (83%) such as accessing web pages. Similarly, around two-thirds of time spent downloading audio was conducted while accessing other media (62%).

Figure 3.45 Proportion of time spent listening to audio, solus vs. simultaneous

Proportion of time spent listening



Source: Ofcom research, June 2010

3.3.12 Online streaming services

The number of people using online streaming services is small, though audiences to some are growing

Online streaming applications have continued to grow in popularity during 2009. Ofcom analysis, based on Nielsen audience data, reveals that Spotify's user base has risen over the year and has overtaken the more established service Last.fm as the most popular free-to-listen music streaming service in the UK.

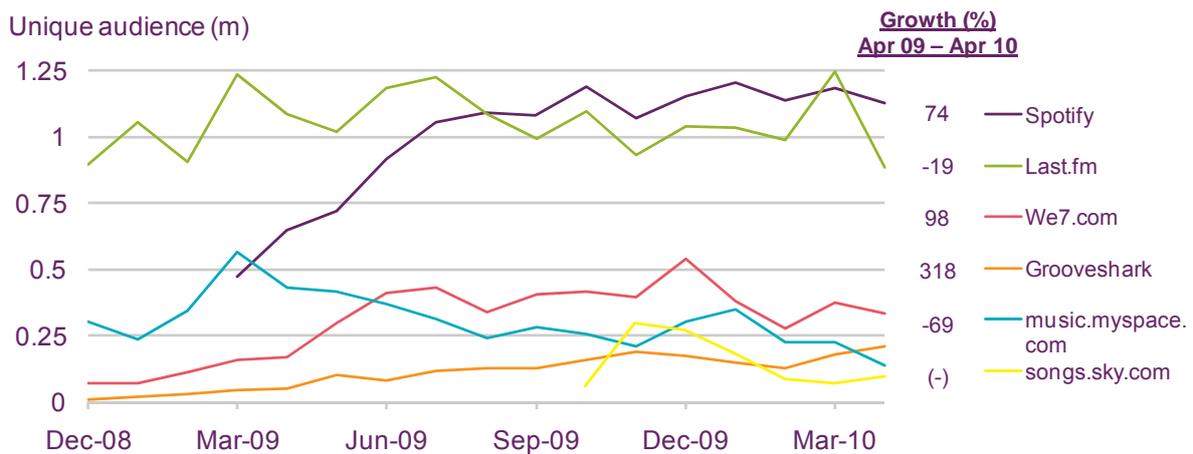
While Spotify has seen its unique audience rise by 78% in the last 12 months, browser-based service Last.fm experienced a decrease of 19%, after moving away from streaming songs on its own site⁵³. We7, despite strong growth, attracts only a quarter of the unique audience attributed to Spotify and Last.fm⁵⁴. US-based streaming service Grooveshark has also experienced a swift increase in users, expanding its unique audience by over 300% in the past 12 months to surpass that of MySpace Music.

⁵³ In April 2010, Last.fm announced that it is aborting on-demand streaming and instead directing listeners to new music partners MOG, Spotify, The Hype Machine, We7 and VEVO.

⁵⁴ We7 have publicly stated they have 3 million monthly unique users in the UK:

<http://www.guardian.co.uk/media/2010/apr/28/we7-online-music-service>

Figure 3.46 Unique audience to selected streaming sites



Source: UKOM / Nielsen. Month of April 2010, home and work panel. Applications included.

The number of users engaging with music streaming services is still relatively small in comparison to offline digital music platforms. Windows Media Player remains the default application for PC users, attracting a unique audience of 12.9 million in May 2009, while Apple's iTunes software, required for iPod and iPhone users, had 7.4 million users in the same period. These figures show the number of people who opened and ran these applications on their computers, and do not necessarily represent a connection to the internet.

A year of online streaming services

Since the free, advertising-supported version of Spotify was launched in February 2009, the Swedish start-up has placed itself in the centre of the online streaming market. In September 2009 Spotify launched iPhone and Android mobile apps, enabling its users to stream music over a 3G or WiFi connection in return for a premium monthly subscription of £9.99. In October 2010, an 'offline' mode was also introduced as part of this premium service, allowing users to store a limited amount of songs as a playlist on their computer, to facilitate access when not connected to the internet. A further update was added in April 2010, which integrated social networking sites such as Facebook and Twitter, allowing users to share tracks through these websites. More recently, Spotify has amended its pricing structure, removing the 99p 'day pass' and introducing two tiers of premium subscription⁵⁵.

The advent of premium services such as Spotify and We7 demonstrate that a range of business models are being deployed to exploit online music delivery. Another recent example is the entry of pay-TV operator BSkyB into the online streaming market, with the launch of access-based music service Sky Songs in October 2009. Monthly subscriptions to Sky Songs start from £4.99, which includes unlimited streaming and access to a set number of downloads, depending on the package taken. Cable operator Virgin Media has also announced plans to launch a similar subscription-based service later in 2010, in partnership with Universal Music⁵⁶.

More recently, other business models have also begun to emerge, such as UK-based streaming and download service mflow, which launched in April 2010. Described as a cross between iTunes and Twitter, mflow is a downloadable application that allows users to search a catalogue of music, stream song previews and buy downloads. Twenty per cent of the download fee goes to the user who recommended or 'flowed' the track, and as with Twitter, users can 'follow' (or be followed by) other users.

In April 2010 UK-based streaming service We7 announced that for the first time all of its monthly on-demand music costs had been covered by display or broadcast advertising. The service estimated that 1 million plays of a song using We7 could generate payments to the music industry of between £2,000 and £4,000⁵⁷.

⁵⁵ <http://www.spotify.com/uk/get-spotify/overview/>

⁵⁶ <http://pressoffice.virginmedia.com/phoenix.zhtml?c=205406&p=irol-newsArticle&ID=1298879>

⁵⁷ <http://www.we7.com/#/about/press/stories/we7-shows-ad-funded-music>

Figure 3.47 Selected online streaming services

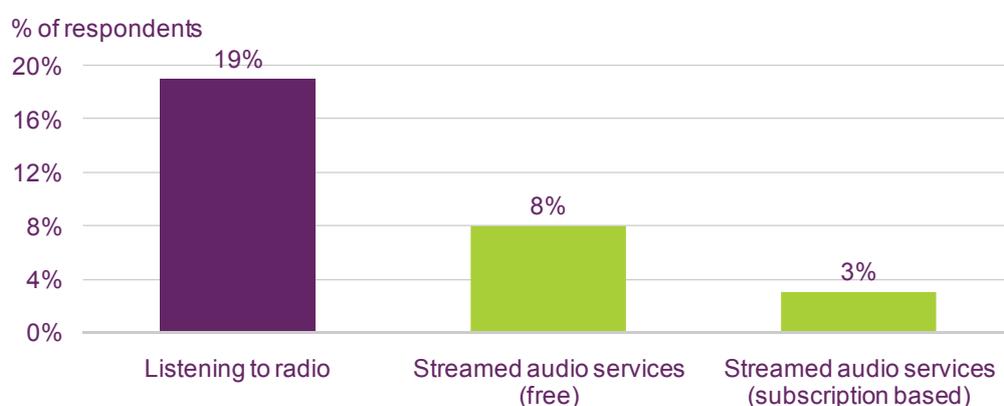
Service	Business Model	Catalogue	Launch date
Spotify	Free ad-supported streaming application Premium monthly subscription for extra features, also available via mobile apps	8 million tracks	February 2009
Last.fm	Free ad-supported 'radio-based' streaming service Premium monthly subscription for extra features	6.5 million tracks	2002
Sky Songs	Subscription based only, paid each month for access to unlimited streaming and 5 downloads	5 million tracks	October 2009
Grooveshark	Ad-funded music streaming and recommendation service	7 million tracks	2007
We7	Ad-funded online streaming service, browser based and available via iPhone app	4 million tracks	October 2008
mflow	Free limited online streaming and pay per download	2 million tracks	April 2010

Source: Operators, June 2010

Online radio still accounts for the majority of audio internet use in the UK

Ofcom's research indicates that one in five people listen to the radio online (19%) – a high proportion of all audio-online listening activity and similar to the corresponding figure in 2009 (17%). One in ten people claimed to listen to streamed music online (8%) using free applications. Only 3% of respondents claimed that they subscribed to an internet-based audio service.

Figure 3.48 Audio internet use



Source: Ofcom research, Q1 2010

Base: Those with access to the internet at home (n= 6163)

QE10A. Which, if any, of these do you or members of your household use the internet for while at home?

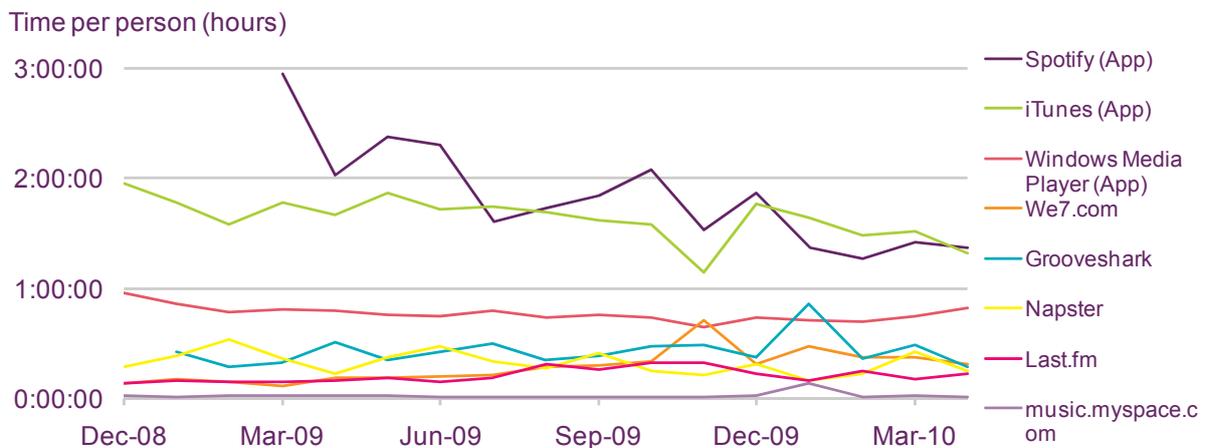
3.3.13 Use of digital music services and devices

UK listeners now spend the same amount time using Spotify as iTunes

As Figure 3.49 illustrates, the average time spent by users on Spotify now resembles that of iTunes, whose average usage time has stabilised at around 1.5 hours per month. This may mean that Spotify's audience is using the service more like iTunes, as users can now manage their music via Spotify as well as listen to streamed songs. Users of both iTunes

and Spotify continue to use these applications for longer than users of Windows Media Player (WMP), who spend less than one hour per month using the application.

Figure 3.49 Time spent using selected music services and media players



Source: UKOM / Nielsen. April 2010, home and work panel. Applications included.

It is important to note that Nielsen Online's methodology only counts time spent on an application when it is 'in focus'. This refers to the application to which keyboard and mouse activity is directed; only one application can be in focus at any time. Furthermore, if the user remains inactive for 30 minutes or more the time accrued to the application 'in focus' is discounted to one minute after the last-recorded activity.

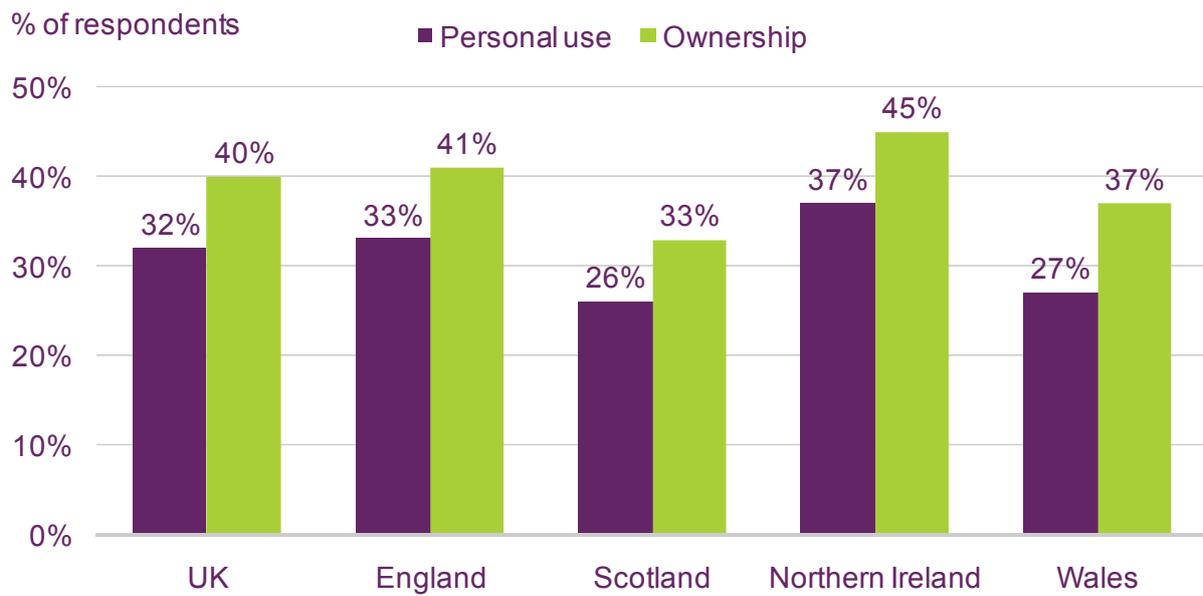
As listening can occur while an application is 'out of focus' and because prolonged periods of inactive 'in-focus' activity are discounted, the time spent on the media applications and music streaming websites, shown in Figure 3.50, does not represent actual time spent listening to music; it is likely to underestimate it. However, these data do show the time spent browsing, searching and compiling music playlists.

A third of UK consumers now use an MP3 player/iPod, with personal use highest in Northern Ireland

In Q1 2010, almost a third (32%) of consumers across the UK claimed to use an MP3 player or iPod themselves, similar to the proportion in 2009 (34%). However, there appears to be variation between the UK's nations, with the highest take-up of these devices found in Northern Ireland (37%) and the lowest in Scotland and Wales (26% and 27% respectively).

There appears to be a distinction between those who claim to own an MP3 player/iPod and those who actively use these devices to listen to music. Across the UK, a higher proportion of respondents (40%) claimed to own an MP3 player/iPod than those who claimed to be an active user (32%). This gap was largest in Wales (37% vs 27%). Overall, ownership across the UK remained steady year on year, as 41% claimed to own an MP3 player/iPod in 2009.

Figure 3.50 MP3 player/iPod ownership and personal use



Source: Ofcom research, Q1 2010

Base: All adults aged 15+ (n = 9013 UK, 1075 Wales, 5709 England, 1468 Scotland, 761 Northern Ireland) Those who have access to a MP3 player at home (n=1898)

QB1: Which of the following do you, or does anyone in your household, have in your home at the moment?

QB2. Do you personally use: Mp3 player / iPod?



The Communications Market

2010

4 Internet and web-based content

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4.1 Key market developments in internet and web-based content

4.1.1 Industry metrics and summary

Figure 4.1 UK internet and web-based content market: key statistics

UK internet & web-based content market	2005	2006	2007	2008	2009	2010
PC / laptop take-up (%)	68	67	71	72	74	76
Internet take-up (%)	60	60	64	67	70	73
Total broadband take-up (%)	31	41	52	58	68	71
Fixed broadband take-up (%)	n/a	n/a	n/a	n/a	65	65
Mobile broadband take-up (%)	n/a	n/a	n/a	n/a	12	15
Social networking site take-up (%)	n/a	n/a	n/a	20	30	40
Use of mobile phone for web/data access (%)	n/a	n/a	n/a	20	20	23
Internet advertising expenditure	£1.4bn	£2.0bn	£2.8bn	£3.4bn	£3.5bn	n/a
Mobile media advertising revenue	£0.02m	£0.12m	£0.38m	£1.04m	£1.03m	n/a

Source: Ofcom research / IABUK/PwC / Screen Digest.

Note: Mobile media includes mobile TV, mobile VoD and mobile games and excludes display and search advertising.

The growth in the availability and take-up of the internet has provided another platform over which a variety of content types can be delivered to consumers. Rapid take-up of broadband by consumers means that the majority (71%) of households now have instant access to this content (though by no means all choose to). In recent years the internet has had a significant impact on how people can consume content:

- it allows **existing forms of content** such as TV-like programming and radio to be consumed in new ways (for example, on demand, or interactively); and
- it has allowed **new, internet-only content types** to emerge (such as social networking sites, blogs and other user-generated content).

Technological change – brought about by increases in broadband speeds and by advances in wireless technology – influenced consumer use of internet services. In particular, different sections of the population use the internet to varying degrees to consume different types of content through a variety of platforms. In the light of this, section 4.1 examines internet take-up and use in the UK, considering in particular:

- the **platforms** (including fixed, mobile and WiFi) that consumers use to access the internet; and
- the **demographic breakdown** of internet users (including splits by age, gender, socio-economic group and region).

Section 4.1 goes on to consider the ways in which people actually use the internet to consume web-based content. It looks at claimed behaviour and engagement, the most

popular online sites, how consumers navigate to content online and their involvement with user-generated content.

But first, Section 4.1.2 considers two important themes in the area of internet and web-based content.

- **Social networking now accounts for nearly a quarter (23%) of all time spent online.** This has been driven by the growth of Facebook, whose reach rose by 31% to reach a unique monthly audience of nearly 25 million in the year to May 2010. (Page 236)
- **Online advertising grew through the downturn to reach £3.5bn in 2009.** The 6% increase on 2008 was driven by growth in search (8%) and display (11%), but other classified fell (-5%) as the recession hit the property, automotive and recruitment sectors. (Page 240)

4.1.2 Social networking

Social networking sites continued to mature and diversify during 2009

In recent *Communications Market* reports we have highlighted the emergence and rapid growth of social networking sites in the UK. These sites allow consumers to create personal profiles, post content such as videos and photos, send messages, and interact with other users. Each year the capabilities of these sites have developed and changed as they have sought to attract and retain users, take advantage of network improvements and build sustainable business models.

Some examples of developments among the major sites include:

- The launch in December 2009 of **MySpace Music**, a comprehensive advertiser-funded, free web-based music streaming service. The service allows users to download tracks through Apple's iTunes, and incorporate other music sharing and discovery capabilities.
- In late 2009 **Twitter announced partnerships with Microsoft's Bing and Google** to index and provide real-time search of Twitter status updates through these search engines.⁵⁸
- Facebook announced in August 2009 that it would **acquire FriendFeed**, a service that aims to allow users to share updates with their friends more easily.⁵⁹

Over 60% of 15-34 year olds access social networking sites on the internet at home

Figure 4.2 shows that use of social networking has continued to grow rapidly among all age groups. Younger people are more likely to access social networking sites, with 61% of 15-34s claiming to do so, compared to 40% of all adults aged 16+. But it is by no means exclusively a young person's activity. Nearly half (48%) of 35-54s claim to use social networking sites, as do 20% of 55-64s – the latter showing a seven percentage point rise over the past year. However, usage patterns vary substantially between age groups. Our research shows that 89% of 15-24s who access social networking sites do so weekly, but just 50% of 55-64s with a profile do so.

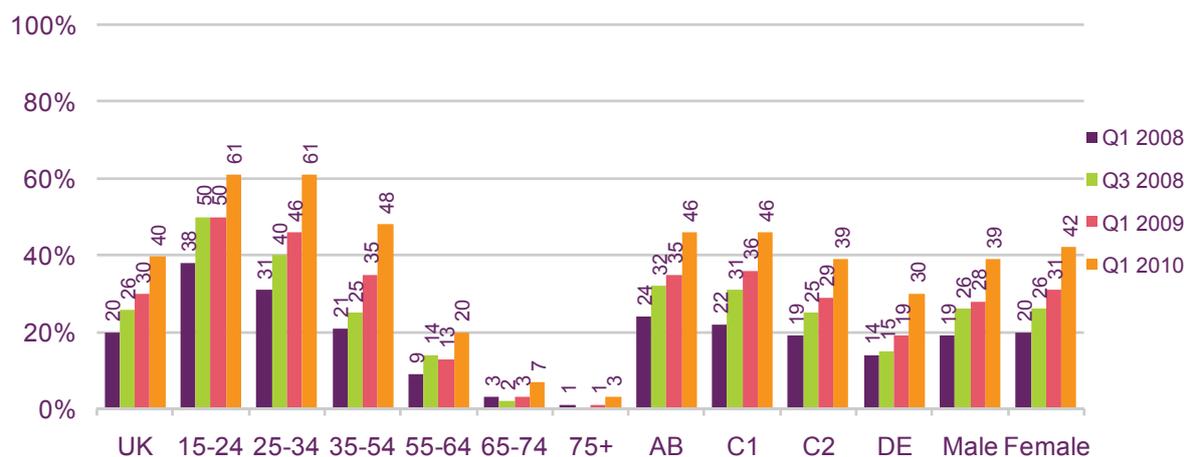
⁵⁸ <http://googleblog.blogspot.com/2009/12/relevance-meets-real-time-web.html>

⁵⁹ <http://www.facebook.com/press/releases.php?p=116581>

All demographics have seen an annual rise of at least ten percentage points in the number of people claiming to have social networking profiles. Take-up is higher among ABC1s (46%, up from 35%) relative to C2s (39% up from 29%) and DEs (30%, up from 19%). Women (42%) were slightly more likely than men (39%) to claim to access these sites.

Despite the growth of social networking among older age groups, and the high penetration among younger age groups, its take-up still lags behind total internet take-up, with around 45% of those who have internet access at home saying that no one in their household accesses social networking sites.

Figure 4.2 Proportion of adults who access social networking sites on the internet at home



QE12: Which, if any, of these do you or members of your household use the internet for while at home?

Source: Ofcom technology tracker, Q1 2010

Base: All adults aged 15+ (n = 5812 Q1 2008, 1581 Q3 2008, 6090 Q1 2009, 9013 Q1 2010).

Note: Q1 2008 data in this chart are not directly comparable to data published in the 2009 Communications Market Report due to updated data provided to Ofcom.

Facebook makes the largest contribution to the growing popularity of social networking

During 2009 Facebook consolidated its position as the largest social network in the UK (Figure 4.3). In April 2010 24.8 million unique individuals visited the site, compared to 4.1 million for Twitter and 3.1 million for MySpace. Despite starting from a high base, Facebook's user base grew by 31% over the past year. This was faster than the average of 12% achieved by the 'member communities' category overall (the UKOM/Nielsen category that includes sites like Facebook and MySpace).

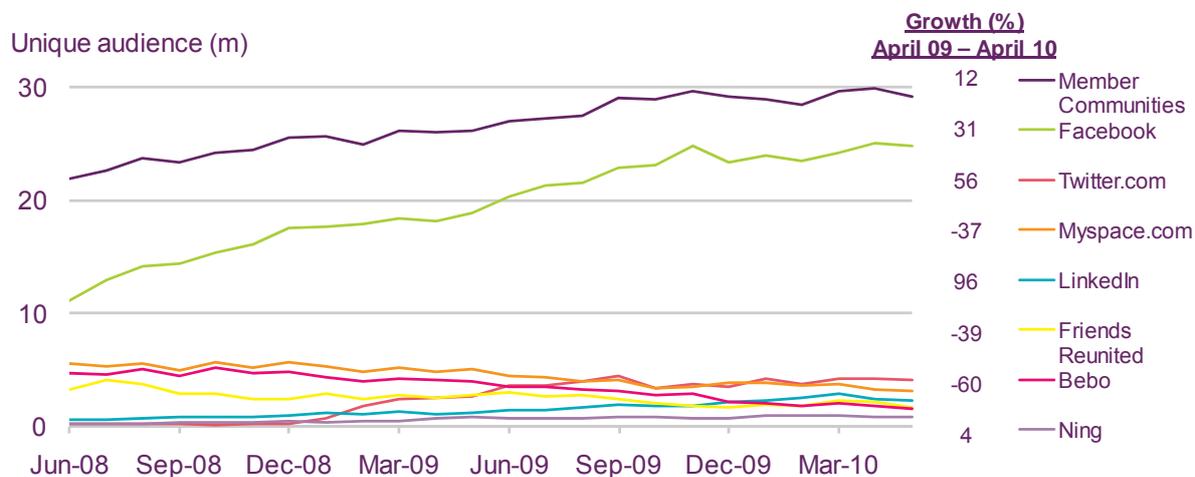
Facebook wasn't the only site to see rapid growth in take-up over the past year. Business social networking site LinkedIn's user base grew 96%, and Twitter's rose by 56% (although this does not include traffic from third-party applications). Growth on both of these sites was from a much lower base than that of Facebook.

MySpace and Bebo both experienced annual declines of 37% and 60% respectively in their unique audiences. A pioneer of social networking, Friends Reunited, saw its audience fall by 39%.

The ownership of both Bebo and Friends Reunited changed recently. Following clearance from the Competition Commission, DC Thomson subsidiary Brightsolid announced in March

2010 that it had completed the acquisition of Friends Reunited from ITV for £25m.⁶⁰ ITV had originally purchased the site for £175m in 2005. Meanwhile, in June 2010 Criterion Capital Partners announced that it had acquired Bebo from AOL.

Figure 4.3 Unique audience of selected social networking sites



Source: UKOM/Nielsen.

Note: Home and work panel, applications included. 'Member communities' is the UKOM category that primarily consists of social networking sites. "Unique audience" = the total number of unique persons that have visited a website or used an application at least once in the specified reporting period. Persons visiting the same website or using the same application more than one time in the reporting period are only counted once.

Social networking now accounts for a quarter of all time spent online

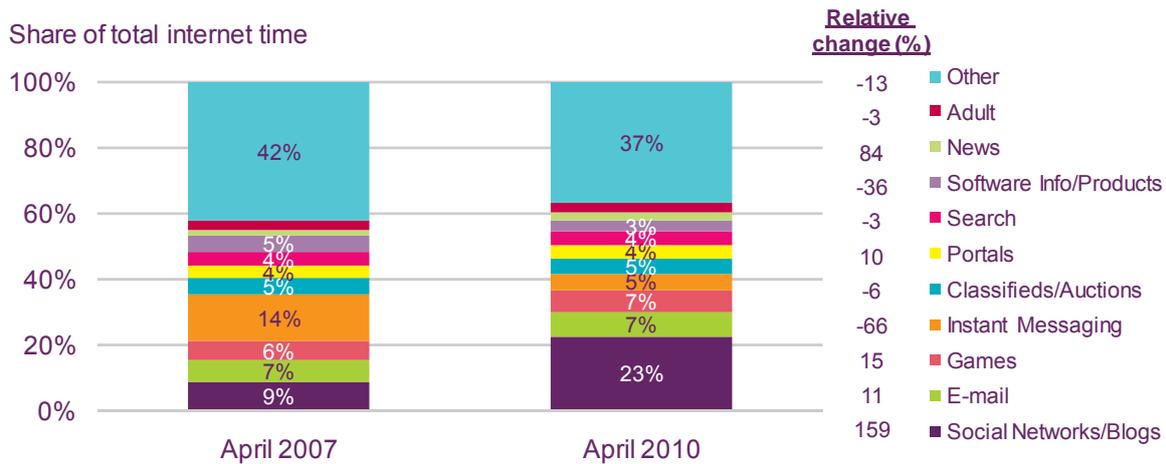
Perhaps an even more significant indicator of the growth of social networking is the increase in the proportion of total internet time that it accounts for. Figure 4.4 shows that in April 2007 social networking and blogs accounted for 9% of UK users' total internet time, according to audience data from UKOM/Nielsen. By April 2010, this had risen to 23%. This figure is broadly comparable to our *consumer's digital day* research (see Section 1.3), which put the proportion of total online computer time spent using social networking sites at 18%. The small difference between these two figures is likely to relate to methodological differences between consumer research and audience analysis.

This increase has come in tandem with the declining popularity of instant messaging, which during the same period saw its share fall from 14% to 5%; the popularity of most other categories remained flat over the period. Most sites now have instant messaging or chat features integrated into the site, in addition to email-like messaging services. For instance, Facebook introduced Facebook chat in April 2008.

Email use does not appear to have experienced a comparable decline in popularity over the past three years. Users spent the same proportion of time on email sites in 2010 as they did in 2007 (7%), despite some social networking sites offering almost the equivalent functionality to email. This may be because there is more overlap between the more casual communication of instant messaging than the sometimes more formal email. It may also be because instant messaging is more popular among young people than email, and younger people are more likely to use social networking sites (see Figure 4.2 above).

⁶⁰ <http://www.brightsolid.com/news/recent-news/brightsolid-acquires-friends-reunited>

Figure 4.4 UK internet sectors' share of total internet time



Source: UKOM/Nielsen.

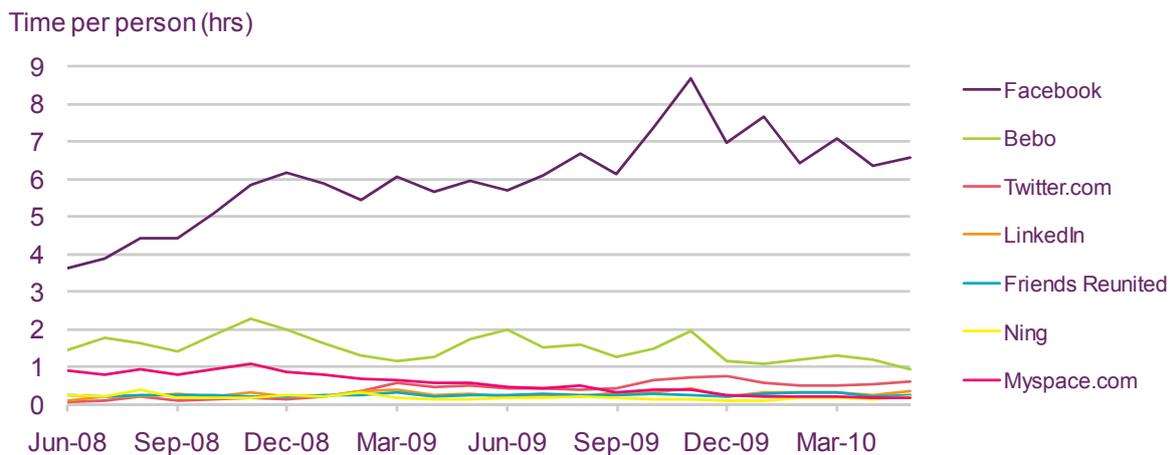
Note: Home and work panel, applications included. Email excludes work-related email.

Facebook users spend more time social networking than users of other sites

Facebook users spend substantially more time on the site than users of other social networking sites. Figure 4.5 shows that the average Facebook user spent 6 hours 30 minutes on the site in April 2010 (an average of 13 minutes a day). This has declined since a peak in November 2009 of 8 hours 39 minutes (17 minutes a day). Bebo was the next most intensively-used site, with users spending an average of just under an hour on the site in April 2010. For most other sites the figure was around half an hour or less. Since Facebook is also the most popular site in terms of unique audience (see Figure 4.3), Facebook accounts for the majority of the time spent using social networking sites.

Sites other than Facebook saw reductions in the time people spent on their sites. Large audiences and significant time spent online are not necessarily prerequisites for successful business models in the area of social networking, particularly for sites focusing on niche audiences, and thereby commanding higher fees for their advertising inventory.

Figure 4.5 Time per user per month spent on selected social networking sites



Source: UKOM/Nielsen.

Note: Home and work panel, applications included.

A fifth of 16-24s' time spent social networking is on mobile devices

Social networking sites have also taken advantage of the growing popularity of the mobile internet and the increasing take-up of smartphones (see section 5.1.6). Most sites now have mobile-friendly versions and specific applications (apps) for smartphones. The importance of mobile social networking is highlighted by Facebook, which claims that more than 100 million users access its site through mobile devices, and that such users are twice as active on Facebook as non-mobile users.

Data from Ofcom's *consumer's digital day* research (see Section 1.3) show that using mobile devices to access social networking sites is particularly popular among younger adults (Figure 4.6). A fifth (20%) of the time they spend social networking is via a mobile device. This compares to the average of 15% for all adults who use social networking sites. The proportion of time spent social networking on mobile devices drops off rapidly among over-45s, at under 4%.

Figure 4.6 Proportion of time spent social networking, by device



Source: Ofcom research.

Base = All respondent days: 16+ = 7966; 16-24s = 1106; 25-44s = 3003; 45-54s = 1484; 55+ = 2373

4.1.3 Online and web-based advertising

Advertising plays an important role in funding online content. The internet has opened up new sources of advertising inventory and new ways of delivering ads to consumers; for instance, via targeted or behavioural advertising. Many sites use online advertising as the basis of their business models - social networking sites are an example of this. Subscription-based or so-called 'freemium' business models (which offer free access to a limited service and subscriber-based access to a wider range of content/functionality, e.g. LinkedIn or Evernote) are the exceptions rather than the rule.

For some types of online content there has been ongoing debate recently about the sustainability of free, advertising-funded business models online. Operators who appear to have adjusted their services to reduce their reliance on advertising revenue include:

- **News International**, which in August 2009 announced that it would be moving its *Times* and *Sunday Times* web presence to a subscription model. The new-look sites launched in May 2010; and
- Music-streaming service **Spotify**, which in September 2009 restricted access to its unlimited free streaming service, and subsequently heavily promoted its subscription service. In May 2010 it launched several further differentiated subscription options.

But despite these signs of moves away from pure ad-funded online business models, the market for online advertising has continued to grow, particularly compared to other advertising sectors (see sections 2.1.2 and □).

Online advertising expenditure continued to grow through the economic downturn

Online advertising continued to grow through the downturn (Figure 4.7), albeit at a decreasing rate. Total online ad spend rose 6% during 2009 to reach £3.5bn. There were large variations between categories of online advertising. Display grew by 11% to reach £709m while non-search classified advertising fell by 5%. This may be because the recession has reduced spend more generally in classified sectors such as property, automotive and recruitment. Spending on search advertising increased by 8% in 2009, and now represents 61% of total internet advertising expenditure, up from 56% in 2005.

Figure 4.7 Internet advertising expenditure, by category



Source: IABUK/PwC.

Note: CAGR = compound annual growth rate. Solus email is an opt-in form of advertising where the body of the email is determined by the advertiser, and is sent on their behalf by an email list manager/owner.

Paid-for search now accounts for £6 of every £10 of online ad spend

Internet advertising expenditure has continued to rise despite the economic downturn. But despite this, funding online content through advertising alone may continue to be perceived by some as challenging. This is because online advertising revenue is distributed unevenly, with the majority accruing from paid-for search. This is advertising that appears alongside search results on sites such as Google, Bing and Yahoo! Search; these search engines take much of the revenue.

Paid-for search now accounts for 61% of total internet advertising expenditure (Figure 4.8), and its proportion of the total has risen almost every year since 2005. During the same period the share of other classified revenue has stayed relatively constant, while display's share has declined by five percentage points to 20%.

Figure 4.8 Distribution of internet advertising expenditure, by category



Source: IABUK/PwC.

Note: Solus email is an opt-in form of advertising where the body of the email is determined by the advertiser, and is sent on their behalf by an email list manager/owner.

Although paid-for search is currently the most popular form of online advertising, new approaches to web-based advertising are beginning to emerge. These offer potential new sources of revenue. Examples include targeted and behavioural advertising, in-application advertising, augmented reality, and the various forms of mobile advertising (including mobile display, mobile search and newer formats such as location-based advertising). Although these forms of web-based advertising are still nascent, there are signs that they are becoming more significant.

Mobile advertising shows signs of growth...

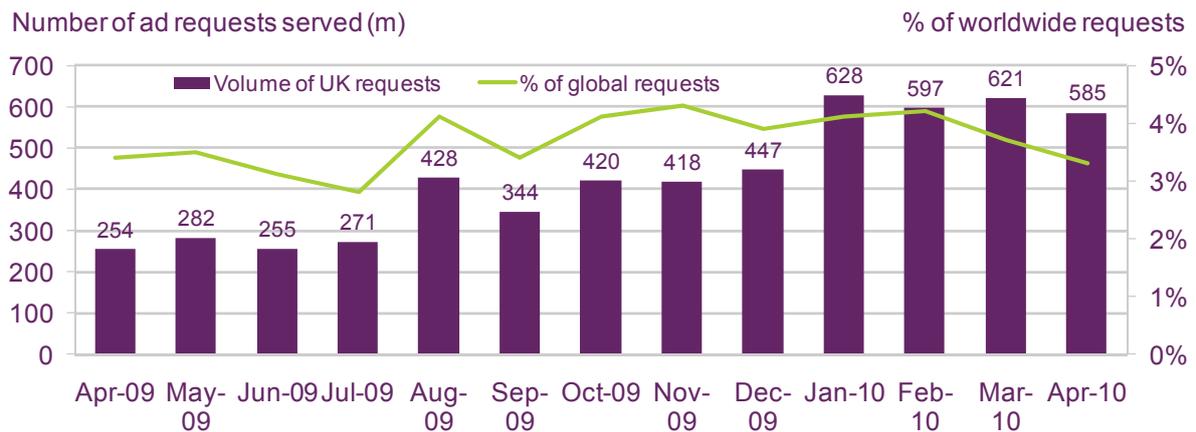
Mobile devices offer a variety of new opportunities for advertisers, ranging from SMS/MMS adverts to mobile games, mobile VoD, mobile TV and mobile internet advertising more generally. Conditions in the mobile market now appear potentially well-suited to mobile advertising:

- the widespread availability of **fast HSPA mobile data networks** allows increased complexity, interactivity and richness of advertising;
- the increasing adoption of **smartphones**; and
- the emergence of new connected portable devices such as tablets and e-readers.

Figure 4.9 shows the number of ad requests served by Admob, a mobile advertising network that links publishers and advertisers. Admob is owned by Google and does not account for the entire market of mobile advertising inventory, but as the largest mobile advertising network, it nevertheless provides an indication of the growth in mobile advertising. Mobile advertising requests served by Admob have more than doubled over the past year from 254 million to 585 million. At the same time the UK's share of total Admob ad requests has fluctuated between 3% and 4% during the past year.

The number of ad requests surged in January 2010, perhaps as a result of smartphones received as Christmas presents. The trend is for ad requests to grow in steps, and this largely ties in with the seasonality of new phone launches (Christmas/Easter/August).

Figure 4.9 Ad requests served by Admob



Source: Admob metrics.

...although mobile media advertising revenues remain small

While the number of ads served to mobile platforms is growing rapidly, the revenues generated by mobile media are small. Screen Digest (Figure 4.10) suggests that total mobile media advertising revenue was only £1.03m in the UK in 2009; this equates to 0.03% of total UK internet advertising expenditure in the year.

The bulk of mobile media advertising revenue (£0.78m) derives from mobile TV, which appears to have suffered during the economic downturn, and as a result total revenues have stagnated compared to 2008. But 2009 saw significant growth in two other categories: mobile VoD and mobile games, which grew by 88% and 214% respectively.

Figure 4.10 Mobile media advertising revenues



Source: Screen Digest / Ofcom / IABUK.

Note: Total mobile media advertising revenues include revenues from mobile TV, mobile VoD and mobile games and exclude display and search advertising.

4.2 Internet use in the UK

4.2.1 Introduction

Engagement with web-based content is limited by internet take-up. It has grown rapidly in recent years, but it still lags behind other major communications services such as broadcast networks and fixed-line and mobile telephony. This section examines internet take-up and use in the UK:

- section 4.2.2 considers the platforms that consumers use to access the internet, including mobile platforms; and
- section 4.2.3 examines who has access to the internet, and how access varies by age, gender, socio-economic group and region.

Key findings

The key findings from this section of the report are:

- **Internet take-up on PCs is edging towards three-quarters of UK households.** Household internet take-up now stands at 73%; nearly all homes with computers (76%) are connected to the internet. Broadband take-up is 71% (page 246).
- **Consumers are using a variety of devices to access the internet.** Taking advantage of the growth in connected devices, 67% of adults have used a PC to access the internet, 28% a mobile device, 10% a games console and 6% a portable media player (page 248).
- **The majority of people are *not* confident using their mobile phone to access the internet.** Just 23% of mobile users are confident accessing the internet on their mobile phone. A further 12 % are interested in doing so (page 250).
- **Home internet access varies significantly by age and socio-economic group.** Internet take-up drops off sharply among older age groups and DE socio-economic groups. While 73% of adults overall can access the internet at home, just 23% of people aged 75+ and 54% of DEs can do this (page 251).
- **Most users feel confident accessing the internet.** Nearly nine in ten (88%) internet users feel confident using the internet (at home or elsewhere). This varies by age from 95% of 16-24s to 74% of people aged 65+ (page 253).

4.2.2 Internet take-up, by platform

Internet take-up is edging towards three-quarters of UK households

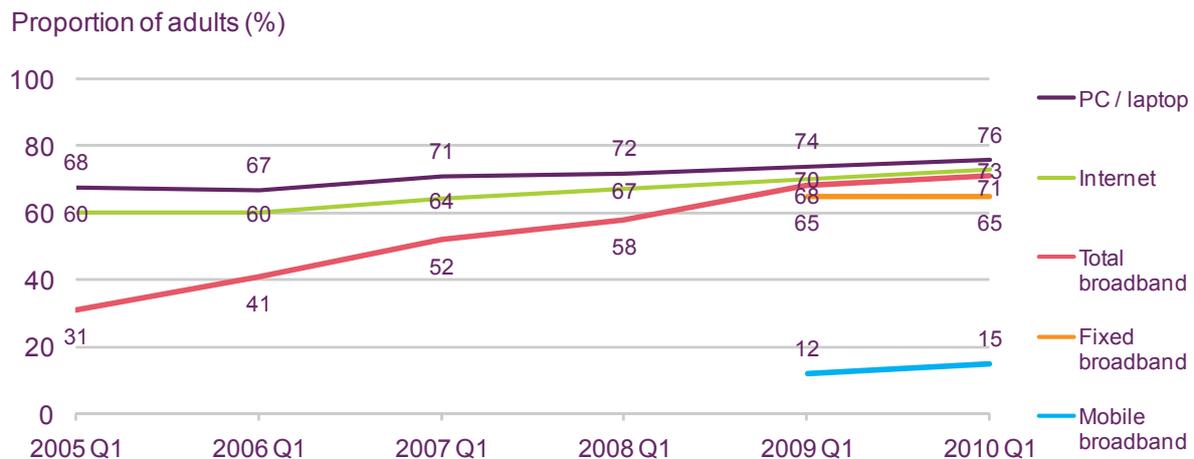
Growth in household internet take-up on PCs continued to grow during 2009, rising to 73% in Q1 2010 from 68% a year earlier (Figure 4.11). Almost all homes with computers are now connected to the internet, and PC ownership is likely to be the biggest constraint on increases in household internet take-up in the immediate future. However, it should be noted that increasingly people are using other devices to access the internet, notably mobile phones (see Figure 4.13 below).

The type of internet connection that a consumer has determines the type of content they can consume. Many forms of content require a broadband connection. Differences between fixed and mobile broadband connections, particularly with regard to bandwidth-intensive activities

like video streaming, are also relevant, since mobile broadband connections are more susceptible to capacity constraints.

Most internet connections are now broadband, with many consumers enjoying a rich variety of content online. Total broadband (fixed and mobile) take-up stood at 71% in Q1 2010 (up from 68% in Q1 2009), with 2% of UK households accessing the internet using a dial-up connection. Take-up of fixed broadband (which can often provide a faster connection) remained the same as in 2009, at 65%. This suggests that broadband growth in 2009 was driven by consumers taking mobile broadband (where users connect to the internet using a cellular network via a USB modem or dongle connected to a laptop), which grew from 12% to 15% (we consider this development further in section 5.1.5).

Figure 4.11 Household PC and internet take-up, 2005-2010



QE1: Does your household have a PC or laptop computer? / QE2: Do you or does anyone in your household have access to the Internet/Worldwide Web at HOME (via any device, e.g. PC, mobile phone etc)? / QE6: Which of these methods does your household use to connect to the Internet at home?

Source: Ofcom technology tracker, Q1 2010.

Base: All adults aged 15+ (n=9013).

Note: mobile broadband does not include internet access using a smartphone.

Two-thirds of households with fixed connections use a WiFi network

While most broadband connections come through a fixed-line network, more and more people are taking advantage of the flexibility offered by home WiFi networks. Since 2008 (see Figure 4.12 below) the majority of fixed broadband subscribers have been able to connect to the internet through a WiFi connection using a wireless router (often provided by an internet service provider), allowing consumers to consume content over any WiFi-connected device anywhere within their homes.

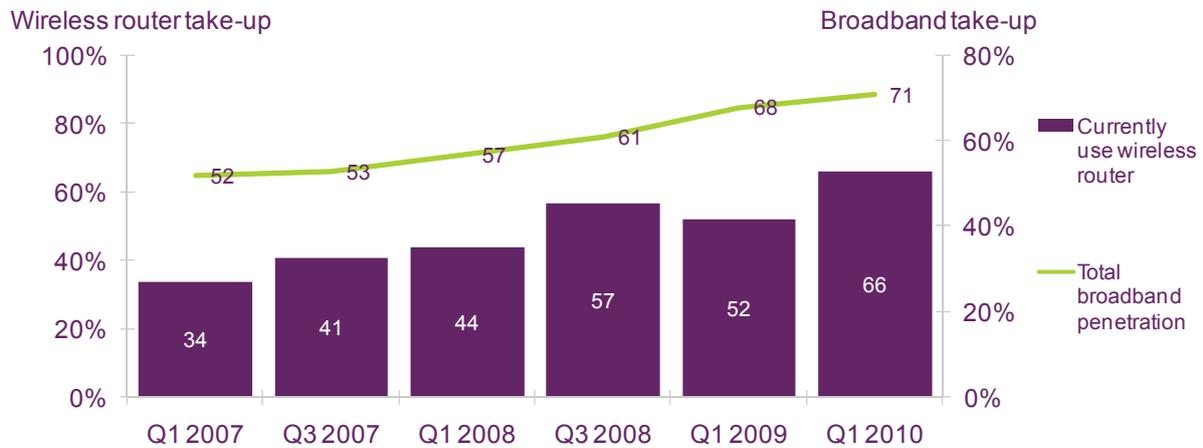
Home WiFi networks operate in the 2.4GHz or 5GHz spectrum bands and conform to a technical standard (IEEE 802.11). A home WiFi network typically includes one or more network access points (often a wireless router) and one or more connected devices.

Figure 4.12 shows how the take-up of wireless routers has risen since 2007. It has almost doubled since Q1 2007, to reach 66% of all fixed broadband connections in Q1 2010. This may have been driven by a variety of factors including:

- increases in the number of internet-capable devices in the home;
- a desire to consume content on screens other than the family PC;

- the falling price of wireless routers and the ISP practice of offering new customers free or subsidised routers.

Figure 4.12 Use of wireless router vs. broadband take-up, 2007-2010



Source: Ofcom research, Q1 2010.

Base: Adults aged 15+ with a broadband connection at home (from 2009 this is based on fixed broadband connections only).

Note: Total broadband penetration (fixed and mobile) based on all adults aged 15+.

Other technologies are also emerging that allow consumers to access web-based content throughout their homes on a variety of devices. These may blur the boundaries between the roles that computer, television and mobile devices play, and between broadcast and other video-like content. Examples include:

- **‘powerline’ technology** – that uses the mains wiring in homes to transmit data to other devices (as power sockets tend to be closer to televisions than phone sockets); and
- **‘femtocells’** – small in-home cellular base stations. These allow consumers to use 3G/HSPA devices in their homes and route the data over their fixed broadband connections rather than the cellular network.

Consumers are accessing the internet across more and more devices

Alongside the growth in internet connections, the range of internet-connected devices available to consumers has grown rapidly in recent years. This means that many consumers now have a number of different ways to access web-based content in ways that are convenient to them. Apart from PCs and laptops, examples include:

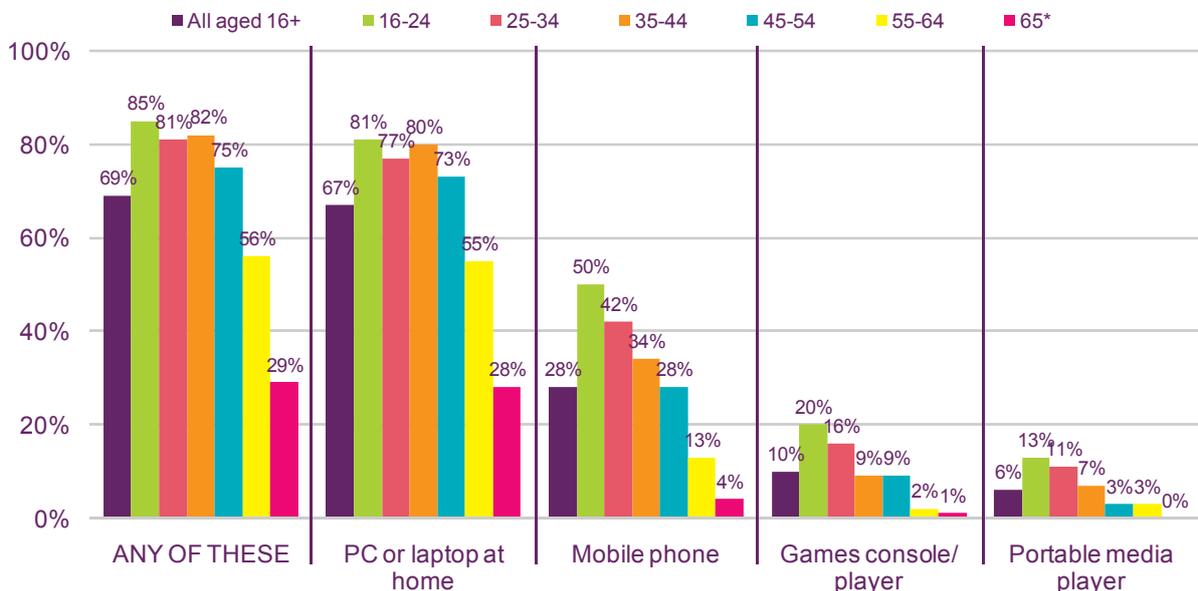
- **mobile phones** – such as smartphones (like the iPhone, Android, Blackberry and Symbian devices), or ‘feature phones’ which offer a more limited internet browsing experience;
- **games consoles** – advanced games consoles such as the Sony Playstation 3, Microsoft Xbox 360 and Nintendo Wii allow users to browse the internet and consume web-delivered video content as well as playing games online;
- **portable media players** – devices such as the Apple iPod Touch and Archos 5 Internet Tablet have been joined by newer devices such as the Apple iPad, Dell Streak and various e-reader devices which all enable users to access internet content; and

- **other devices** – such as internet TVs (for example, certain Sony Bravia and Samsung 6 Series models – see section 2.1.8 for more information on web-enabled TVs), and internet radios combine online content with broadcast content.

Ofcom media literacy research shows that accessing websites through a computer or laptop is widespread, with 67% of adults claiming that they do this (Figure 4.13). This compares to 28% of adults who claim to use a mobile phone to access websites, 10% who claim to use a games console, and 6% a portable media device.

There are some significant differences in behaviour between age groups, with 16-34 year-olds significantly more likely than the general population to access websites through non-PC devices. Half (50%) of all 16-24 year olds claimed to access websites through mobile phones, with this figure falling to 42% for 25-34 year olds. Significant numbers of young people are now visiting websites through their games consoles: 20% of 16-24s claim to access the internet in this way, compared to 10% of the general population.

Figure 4.13 Devices used to visit internet websites in 2009, by age



IN1/ IN2 – Do you or does anyone in your household have access to the internet at home through a laptop or computer? And do you personally use the internet at home? / Do you own and use any of the items shown on this card to visit internet websites? (Prompted responses, single coded).

Base: All adults aged 16+ (1824 aged 16+, 253 aged 16-24, 274 aged 25-34, 374 aged 35-44, 274 aged 45-54, 276 aged 55-64, 373 aged 65+).

Source: Ofcom research, fieldwork carried out by Saville Rossiter-Base in April to May and September to October 2009.

Nearly a quarter of adults use their mobile phones to access data services...

Although WiFi can play an important part in accessing the internet over phones and other mobile devices in some areas (e.g. in-home and in some city centres), the growth in internet access over mobile phones has also been driven by the widespread availability of 3G (see section 5.2.5), HSPA network upgrades and growing smartphone take-up (see section 5.1.6). Accessing the internet in this way can be either as a complement to, or a substitute for, fixed-line internet access.

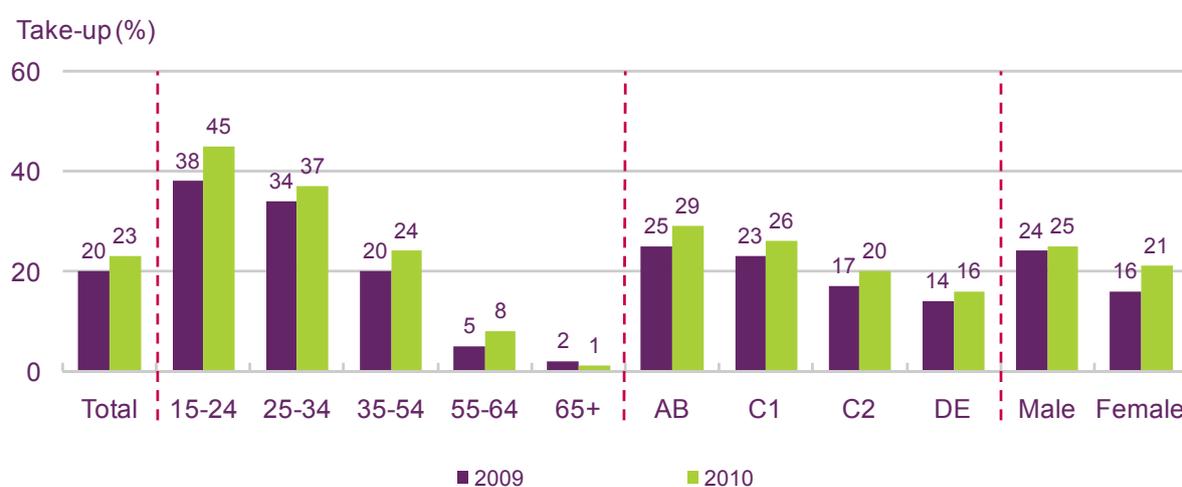
Ofcom research from a separate survey to the chart above (our technology tracking study) (Figure 4.14) shows that growing numbers of people now use their mobile phones to access web and data services, including internet browsing, VoIP, downloading applications, downloading and streaming content and sending emails. By Q1 2010 nearly a quarter (23%)

of people claimed to do one or more of these activities on their handset, up from a fifth (20%) in Q1 2009.

Younger people are more likely to use mobiles for web and data access than home internet users generally. Forty-five per cent of 15-24 year olds claimed to use their mobile phones for this in Q1 2010, up from 38% in Q1 2009. This is nearly twice the number of 35-54 year olds who make the same claim (24%), and nearly six times the number of 55-64 year olds (8%).

Consumers in the AB (29%) and C1 (26%) socio-economic groups are more likely than C2s (20%) and DEs (16%) to use their mobiles for web or data access, although all groups have seen moderate increases in take-up over the past year. Men (25%) are more likely than women (21%) to use their phones in this way; over the past year the gap between the proportions of men and women who use their mobiles for web access has halved from eight percentage points to four percentage points.

Figure 4.14 Use of mobile phones for web/data access



QD9A: Which if any, of the following activities, other than making and receiving voice calls, do you use your mobile for?

Source: Ofcom technology tracker, Q1 2010.

Base: all adults 15+ (n = 9013 UK, 1351 15-24, 1378 25-34, 3038 35-54, 1334 55-64, 1912 65+).

Note: Web/data access includes accessing the internet, downloading and streaming content, connecting using WiFi and using VoIP.

Consumers' consumption of content over the web on mobile phones may differ from their consumption of content using fixed broadband. Differences in the quality of service between fixed and mobile networks⁶¹, and differing habits of consumption on small mobile devices compared to computer, laptop and TV screens could all influence internet use. In particular, some content consumed through mobile devices is likely to be either mobile-specific or particularly suited to mobile consumption. Examples include mobile applications and location-based services.

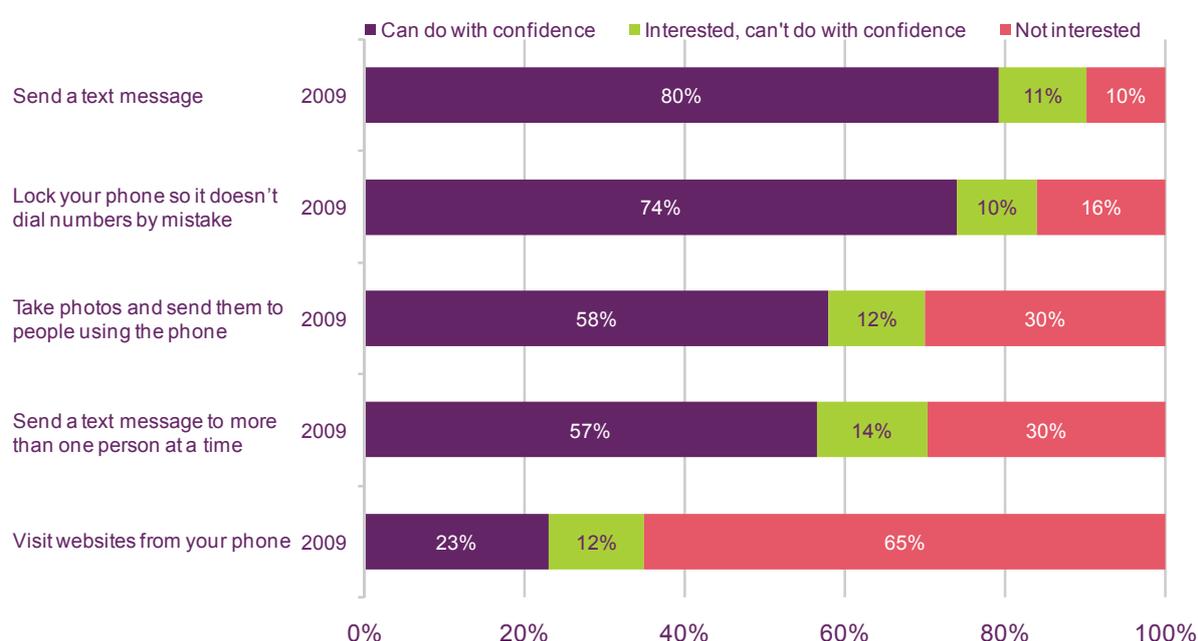
⁶¹ Fixed-line broadband speeds are typically much higher than those on mobile networks. Ofcom's research into fixed-line broadband speeds found that average speeds in the UK were 5.2Mbit/s in May 2010 (<http://stakeholders.ofcom.org.uk/market-data-research/telecoms-research/broadband-speeds/broadband-speeds-2010/>); Epiteiro found that average mobile broadband speeds were around 1Mbit/s in May 2009 (<http://www.epiteiro.com/news/epiteiro-publishes-uk-mobile-broadband-research.html>)

...but some are *not* confident in using the web on their mobile

Nearly a quarter (23%) of the population say that accessing the internet over a mobile phone is something that they can do with confidence (Figure 4.15). A further 12% say that they are interested in this activity, but are not confident in carrying it out, while nearly two-thirds (65%) of people say they have no interest in using their mobile phone in this way. This may reflect the fact that many still see their mobile phone primarily as a telephone, rather than a multi-functional device, and it may also reflect confusion about data charges for consumers not on unlimited data plans.

In comparison, many more people are confident users of the more basic mobile phone functions such as sending a text message (80%), sending photo messages (58%) and sending simultaneous text messages (57%).

Figure 4.15 Confidence and interest in mobile phone functions



M3A-M3E – I'm going to read out some different types of things that you can do with some kinds of mobile phone, and for each one I'd like you to say which of the options on the card applies to you.
Base: Adults aged 16+ with a mobile phone (1632).

Source: Ofcom research, fieldwork carried out by Saville Rossiter-Base in April to May and September to October 2009.

4.2.3 The demographics of internet access

Home internet access varies significantly by age and socio-economic group

While 73% of the UK population had access to the internet at home by Q1 2010, the figure varies substantially by age and socio-economic group (Figure 4.16). Among 15-54 year olds internet take-up is above 80%, and peaks at 85% among 35-54 year olds. But take-up falls for consumers aged 55 and older. Among 55-64 year olds the figure stands at 69%, and this drops to half (51%) of 65-74 year olds and a quarter (23%) of 75+ year olds. Despite this, much of the growth in internet take-up appears to have taken place among older age groups. The highest absolute growth in take-up took place among the 55-64 and 65-74 age groups, which grew by six and seven percentage points respectively.

There is also a relationship between levels of home internet take-up and socio-economic group. Nearly nine in ten (88%) ABs report having a broadband connection; this drops

steadily to 80% of C1s, 71% of C2s and 54% of DEs. The difference in internet take-up between men and women is less pronounced, but men are more likely than women to have access to the internet at home, by 75% to 72%.

Figure 4.16 Home internet access, by age, socio-economic group and gender



QE2: Do you or does anyone in your household have access to the internet/Worldwide Web at home?

Source: Ofcom technology tracker, Q1 2010.

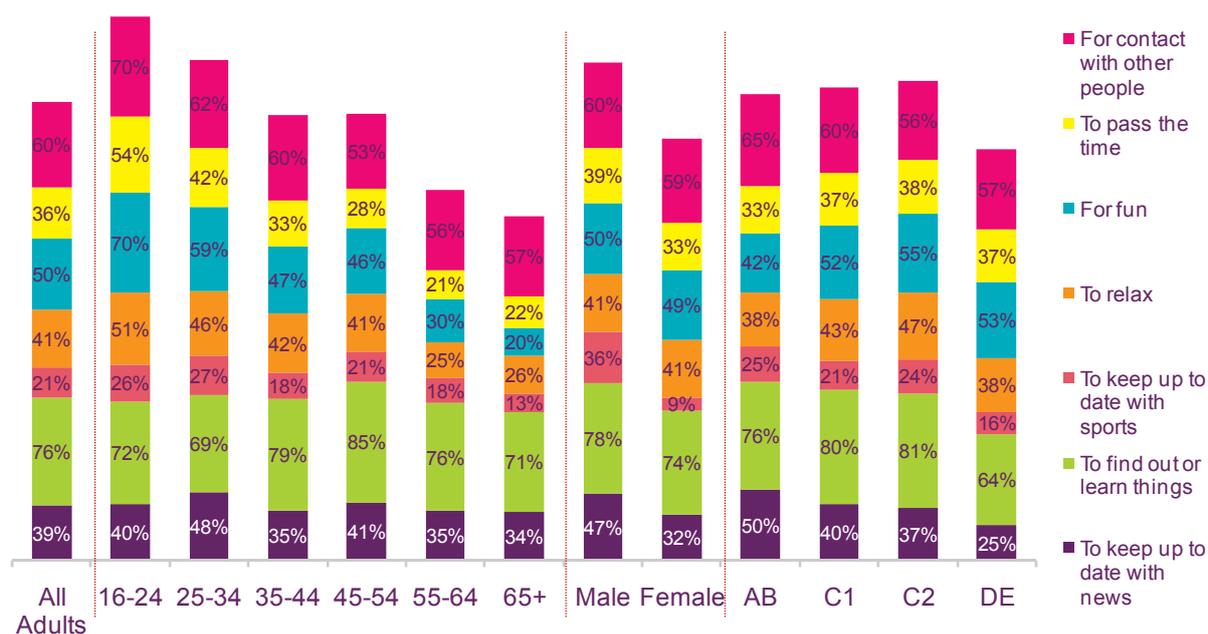
Base: all adults 15+ (n = 9013 UK, 1351 15-24, 1378 25-34, 3038 35-54, 1334 55-64, 1109 65-74, 803 75+, 2029 AB, 2631 C1, 1735 C2, 2569 DE, 4298 male, 4715 female).

Younger people are more likely to use the internet for leisure pursuits while older internet users tend to focus on functional activities

Just as home internet access varies by age, gender and socio-economic group, so do the reasons for using the internet. Ofcom's media literacy research (Figure 4.17) shows the reasons for using the internet across the demographic groups in 2009, 'stacked' to show the breadth of responses.

These data show a divide between older and younger age groups in terms of attitudes to the internet. Internet users aged 16-34 were more likely to say they used the internet to relax and 'for fun' than the rest of the internet-using population, with 16-24s more likely to say they went online to pass the time and to contact other people. Older internet users, aged 55-64 and 65+, were more likely to use the internet 'to find out or learn things' and 'for contact with other people', suggesting that older users take a much more functional approach than younger people to the internet.

Figure 4.17 Reasons for using the internet, by age, gender and SEG



IN42 – Which, if any of these are reasons why you use the internet? (prompted responses, multi-coded)

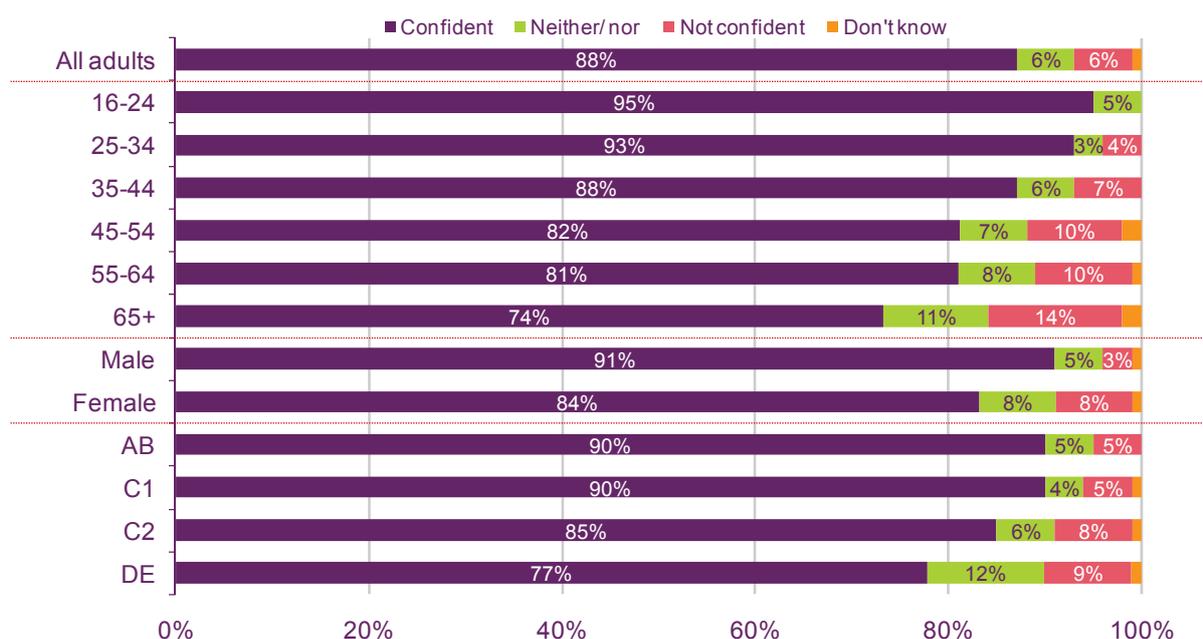
Base: All adults aged 16+ who use the internet at home or elsewhere (1282 aged 16+ in 2009, 225 aged 16-24, 235 aged 25-34, 313 aged 35-44, 213 aged 45-54, 168 aged 55-64, 128 aged 65+, 615 male, 667 female, 341 AB, 417 C1, 232 C2, 290 DE).

Source: Ofcom research, fieldwork carried out by Saville Rossiter-Base in April to May and September to October 2009.

Nearly nine in ten internet users feel confident online

Confidence in using the internet is high across all age groups of internet users, ranging from 74% of 65+ users to 95% of 16-24s. Men claim to be more confident online than women, (91% to 84%), and ABC1s (90%) claim to be more confident than C2s (85%) and DEs (77%) (Figure 4.18).

Figure 4.18 Confidence as an internet user in 2009, by age, gender and SEG



IN10D – Overall then, how confident are you as an internet user? (Prompted responses, single coded).

Base: All adults aged 16+ who use the internet at home or elsewhere (1282 aged 16+, 225 aged 16-24, 235 aged 25-34, 313 aged 35-44, 213 aged 45-54, 168 aged 55-64, 128 aged 65+, 615 male, 667 female, 341 AB, 417 C1, 232 C2, 290 DE). Significance testing shows any differences between any age group and all adults aged 16+, between males and females, between any socio-economic group and all adults aged 16+.

Source: Ofcom research, fieldwork carried out by Saville Rossiter-Base in April to May and September to October 2009.

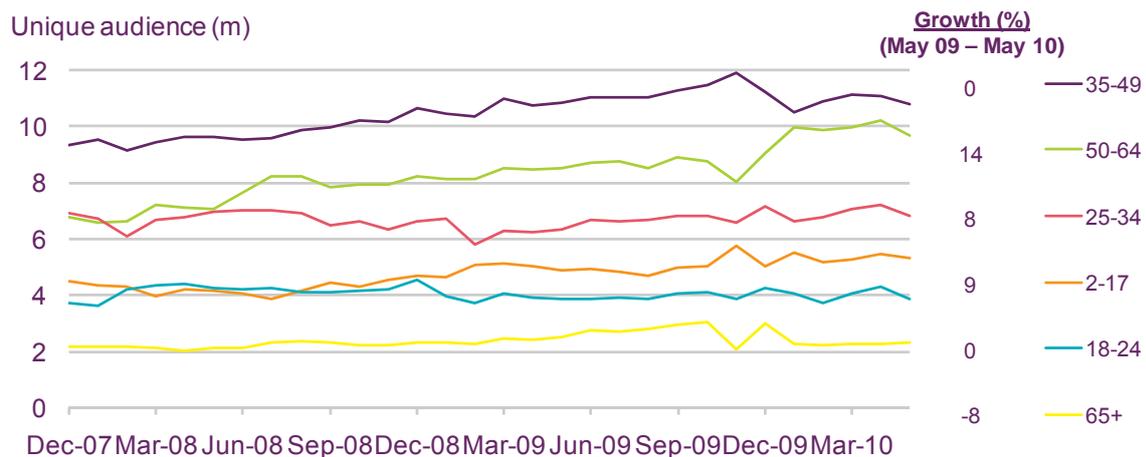
Internet audiences are highest around the Christmas period

Figure 4.19 shows the active online universe over time, by month and age. This is the number of individuals (aged 2+) who used an internet-enabled computer during a particular month, and in May 2010 stood at 38.8 million people.

The online universe has grown relatively slowly over the past year. According to UKOM/Nielsen data, the fastest growing age group over the past year was people aged 50-64, which saw 14% growth.

Figure 4.19 also shows how unique audiences vary on a monthly basis, with audiences often peaking around Christmas time, and plateauing over the summer. This may be explained by the use of the internet to purchase Christmas presents and consumers connecting newly acquired devices to the internet.

Figure 4.19 Active online universe, by age



Source: UKOM/Nielsen, home and work panel, applications included.
 Note: active online universe = number of users aged 2+ who use an internet-enabled computer.

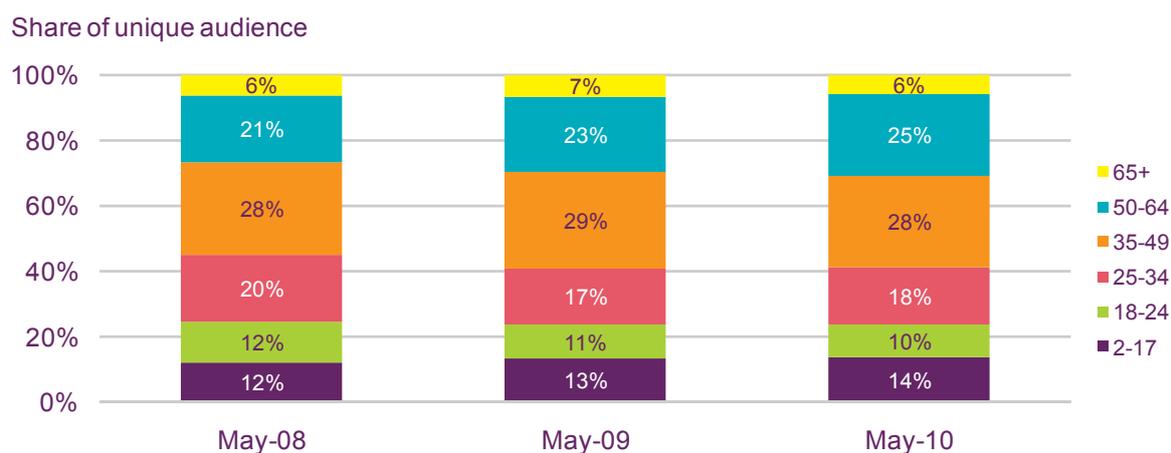
The online audience is maturing as internet take-up among older people rises faster than among other age groups

Data from UKOM/Nielsen also suggest that the active online universe is ageing as older age groups online grow faster than younger age groups. In May 2008 users aged 50+ made up 27% of the active online universe. By May 2010 this had risen to 31%. During the same period the share of the active online universe accounted for by 18-34 year olds declined from 32% to 28% (Figure 4.20).

This growth in the audience share of older consumers is a result of faster growth in internet take-up among this group. Internet take-up grew by seven percentage points among 65-74s and six percentage points among 55-64s, compared to three percentage points among the population as a whole. But despite strong growth in take-up among people aged 55-74, among the oldest consumers (people aged 75+), growth mirrored the wider population, at just three percentage points (Figure 4.16).

The growth in internet take-up among people aged 65+ is not reflected in this group’s share of total audience, which has stayed constant at around 6% according to UKOM/Nielsen data. This is likely to reflect differences in research methodology between the two metrics, and the fact that older users may be less frequent users of the internet, and so less likely to register in UKOM’s data in a given month.

Figure 4.20 Share of active online universe, by age

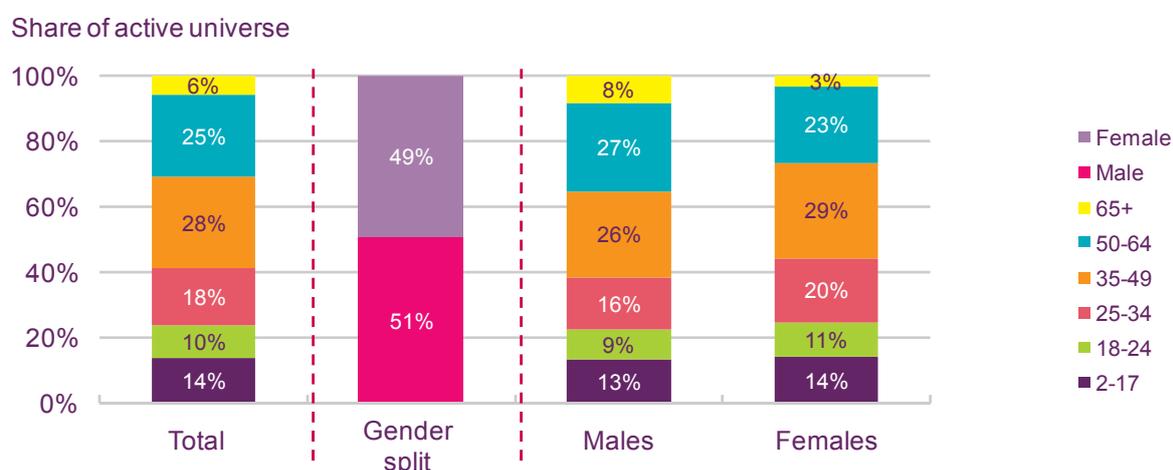


Source: UKOM/Nielsen, home and work panel, applications included, month of may 2010.
 Note: active online universe = number of users aged 2+ who use an internet-enabled computer.

Younger people make up a greater proportion of female internet users than of male internet users

The active online universe is split very slightly in favour of men, by 51% to 49% (Figure 4.21). But between male and female internet users there appear to be a number of differences by age. In particular, younger people make up a greater share of female internet users than male internet users. Among men, users aged under 35 account for 38% of internet users, but among women the comparable figure is 45%. Correspondingly, people aged 65+ account for only 3% of the female online universe but 8% of the male online universe.

Figure 4.21 Share of active online universe, by age and gender



Source: UKOM/Nielsen, home and work panel, applications included, month of May 2010.
 Note: active online universe = number of users aged 2+ who use an internet-enabled computer.

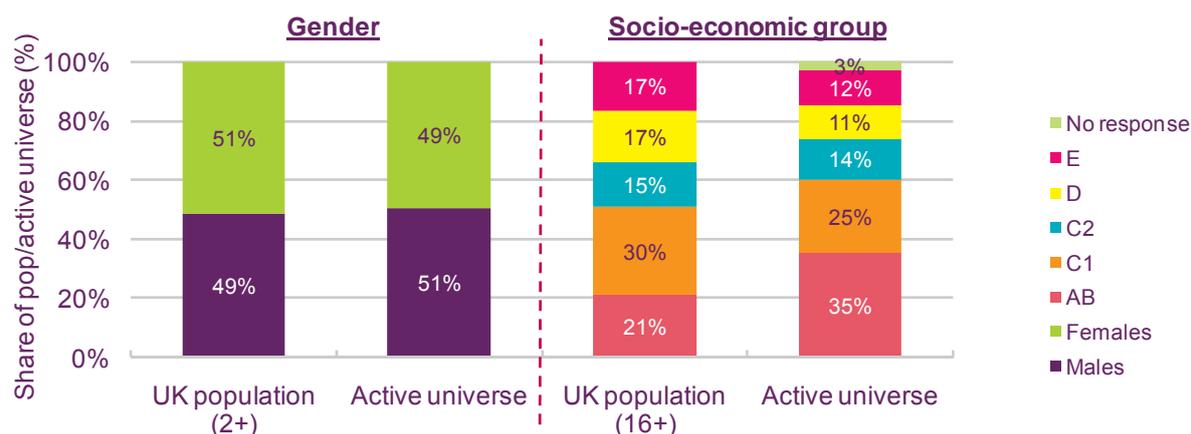
The active online universe shows a skew towards ABC1 users

We can see how the profile of the active online users compares to the general UK population by contrasting audience data from UKOM/Nielsen with population data from the Office of National Statistics (Figure 4.22). These data show that the gender breakdown of the active universe is the opposite of the UK population, 51:49 in favour of men.

The starkest difference between the general UK population and the active online universe relates to socio-economic group. ABC1s make up 51% of the UK population, but account for 60% of the active online universe. The contrast is more striking for the AB group – these make up 21% of the population but 35% of the online universe.

Several factors may play into these differences. For example, higher disposable income, greater propensity to have a fixed telephony connection and therefore a fixed-broadband connection, and greater likelihood of using the internet for work purposes.

Figure 4.22 Gender and demographic breakdown of active online universe



Source: ONS / UKOM/Nielsen, home and work panel, applications included, month of May 2010.
 Note: active online universe = number of users aged 2+ who use an internet-enabled computer.

Internet users in Lancashire spend the most time using an internet-enabled computer

Across the UK the average monthly time per person spent using an internet-enabled computer was 54.8 hours in May 2010 (Figure 4.23). But there are regional differences in the time spent per person. Users in Lancashire appear to use their internet-enabled PCs most intensively, with the average user spending just over 62 hours 30 minutes in May 2010. This compares to Border, where the average user spent just under 44 hours using a PC during the same period. Regional differences in time spent in this way are likely to be driven by a number of factors including age profile, socio-economic profile and the rural/urban split of a region.

Figure 4.23 Monthly internet-enabled PC time per user, by region



Source: UKOM/Nielsen, home and work panel, applications included. Month of May 2010. Regions based on ISBA regions.

Note: active online universe = number of users aged 2+ who use an internet-enabled computer.

4.3 Consumption of web-based content

4.3.1 Introduction

Section 4.3 examined how people access the internet and the platforms that they use to do so. This section considers what they use the internet for, and looks at some forms of content that are specific to the internet:

- Section 4.3.2 considers what people use the internet for, their engagement with online content, the most popular content online and the ways in which consumers navigate to that content.
- Section 4.3.3 looks briefly at popular content consumed over mobile networks.
- Section 4.3.4 considers one of the most popular forms of web content – user-generated content.
- Finally, section 4.3.5 concludes by looking at the concerns that people have about the internet.

Key findings

The key findings from this section of the report are:

- **Consumers are increasingly using the internet to shop and save money.** Around half of all broadband users say they are now more likely to shop online to save money (53%) or use voucher codes (47%) than they were 12 months ago. And six in ten (61%) say they are more likely to use price comparison sites (page 262).
- **The same top 10 websites are popular across all age groups, differing only in order.** Just nine internet brands account for the top 10 sites across all age groups, and the top three sites (Google, Google search and MSN/WindowsLive/Bing) are identical across all age groups (page 265).
- **Consumers hold a range of views on the accuracy and impartiality of search engine results.** Half of all search engine users (54%) make some sort of critical evaluation of the websites listed in the search results. But a fifth (20%) trust that the websites returned will contain accurate and unbiased information (page 269).
- **User-generated content sites are continuing to grow.** YouTube remains the most popular video-sharing site, growing by 13% year-on-year to reach 17.5 million monthly unique users (page 274).
- **Overall, six in ten (61%) of users express some concerns about the internet.** Concerns are highest among the 55-64 age group (74%) and lowest among 16-24s (48%) (page 275).

4.3.2 Internet use and consumption

Email and web browsing are the most popular web activities

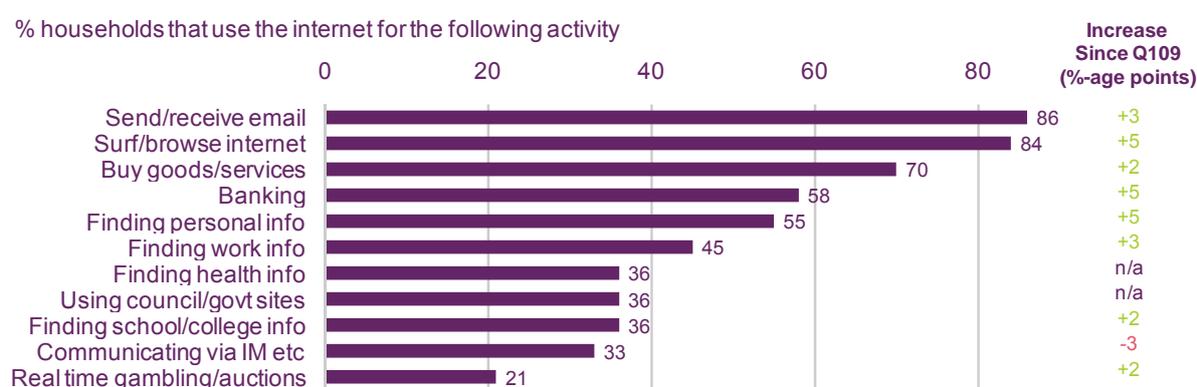
Consumers use the internet for a wide range of activities, including finding information and accessing services (Figure 4.24), shopping and saving money (Figure 4.26) and consuming various types of media (Figure 4.27). The most popular internet activity in Q1 2010 was sending and receiving email (85%), closely followed by surfing and browsing the internet

(84%). The popularity of both activities has risen slightly on Q1 2009, by three and five percentage points respectively.

Buying goods and services over the internet can offer significant advantages to consumers. These can include discounts, more extensive choice and the convenience of purchasing goods from home. Seventy per cent of internet users claim to use the internet to buy goods and services online, while 58% of internet users report using online banking.

The only activity (tracked by Ofcom) whose popularity fell over the past year is instant messaging. This may reflect the fact that alternatives to standalone instant messaging have grown in popularity recently. Examples include instant messaging capabilities built into popular social networking sites like Facebook, and instant messaging applications incorporated into mobile phones.

Figure 4.24 Claimed use of the internet for selected activities



QE10A: Which, if any, of these do you or members of your household use the internet for while at home?

Source: Ofcom technology tracker, Q1 2010.

Base: All with internet access (n=6163).

Users aged 55+ are much more likely to use the internet for only a few activities

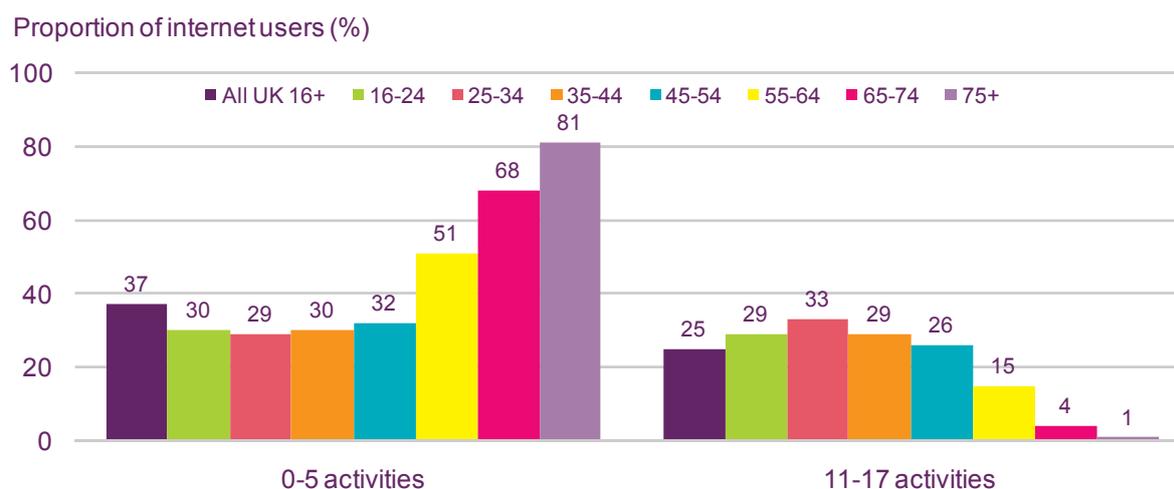
Ofcom's research into digital participation shows that breadth of internet use varies substantially by age⁶². We asked people how many of a specified list of 17 online activities they engaged in, and compared the results by age group (Figure 4.25).

Across all internet users aged 16+ just over a third (37%) of people engaged in five or fewer online activities. This figure dropped to around 30% for internet users aged 16-54, but rose sharply for older internet users. Half (51%) of 55-64s, two-thirds (68%) of 65-74s and eight in ten (81%) internet users aged 75+ engaged in five or fewer of our list of activities. This may be because older people often acquire the internet for a particular purpose, such as keeping in contact with relatives by email.

Among those who engage in a large number (11-17) of our list of activities the situation is reversed. Users aged 16-24 are more likely to engage in a large number of our list of activities. The largest group engaging in multiple activities in 25-34 year olds: a third (33%) of this group engaged in at least 11 of our list of 17 activities.

⁶² <http://stakeholders.ofcom.org.uk/market-data-research/media-literacy/medlitpub/medlitpubrssi/cdp/>

Figure 4.25 Breadth of internet use (number of internet activities undertaken)



Q10A: Which, if any, of these do you or members of your household use the internet for whilst at home?

Source: Ofcom Technology Tracker digital participation research, Q1 2010

Base: all home internet users (n=6946).

Consumers are increasingly using the internet to shop and save money

Consumers are increasingly likely to use the internet for money-saving purposes. Ofcom-commissioned research to examine the impact of the economic downturn shows that significant numbers of people are now more likely to take advantage of some of the money-saving opportunities online than they were 12 months ago (Figure 4.26).⁶³

Fifty-three per cent of those with broadband access reported that they were more likely to try to save money by purchasing goods and services online than they were 12 months ago. And the data suggest that consumers are more likely to use more sophisticated money-saving techniques online. Six in ten (61%) said they were now more likely to use price comparison websites (such as uSwitch, pricerunner and moneysupermarket.com) than they were 12 months ago, while nearly half (47%) of broadband users said they were more likely to use online vouchers and voucher codes.

⁶³ See section 1.1 for a more detailed look at consumers' communications habits during the economic downturn.

Figure 4.26 Consumers' agreement/disagreement on their use of online services



Q: How much do you agree or disagree... I am more likely to purchase goods and services over the internet than in shops in order to save money / I am more likely to use price comparison websites (such as uswitch.com or pricerunner.co.uk) in order to find the best deal / I am more likely to use vouchers from websites or emails offering money off goods and services.

Source: Ofcom-commissioned research

Base: all those with broadband access (n = 1554)

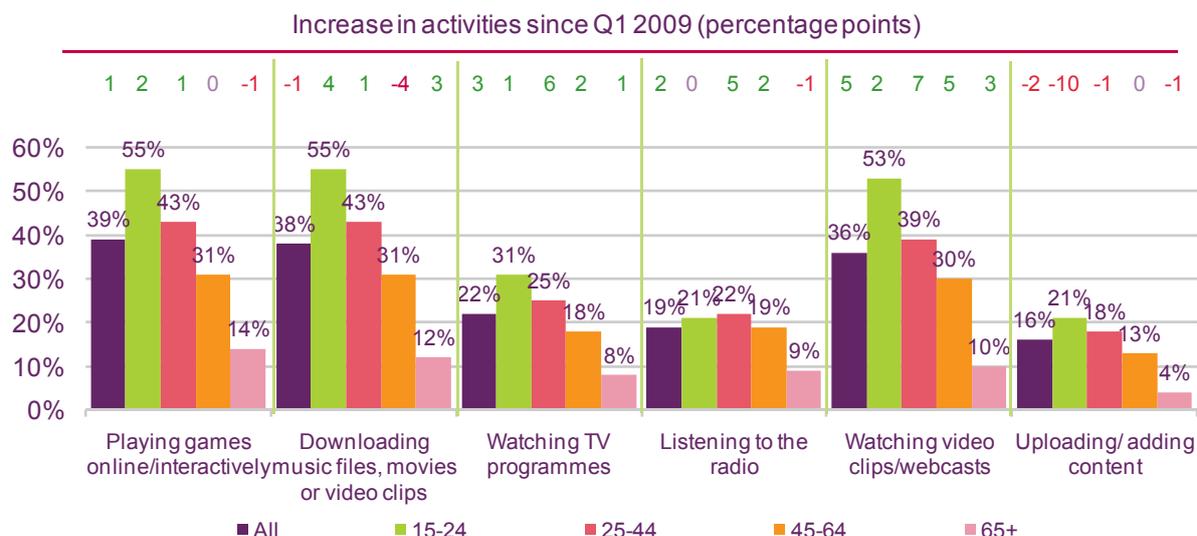
Online media content: playing games online is now as popular as downloading music and video

Playing games is now the most popular form of online media consumption (Figure 4.27). Thirty-nine per cent of internet users claim to play games online (38% in Q1 2009), compared to 38% who claim to download music and films online (39% in Q1 2009), the next most popular category. Among 15-24 year olds, the figure for both activities now stands at 55%, up from 53% for playing games and from 51% for downloading content since Q1 2009.

The only category that declined significantly was uploading and adding content. The only age group in which this figure did not fall since 2009 was 45-64 year olds, while the number of 15-24 year olds claiming to upload content fell by 10 percentage points.

Figure 4.27 Engagement with online media content, by age

% of households who use the internet for the following activities



QE10A: Which, if any, of these do you or members of your household use the internet for while at home?

Source: Ofcom research, Q1 2010.

Base: All adults who have the internet at home (n= 6163).

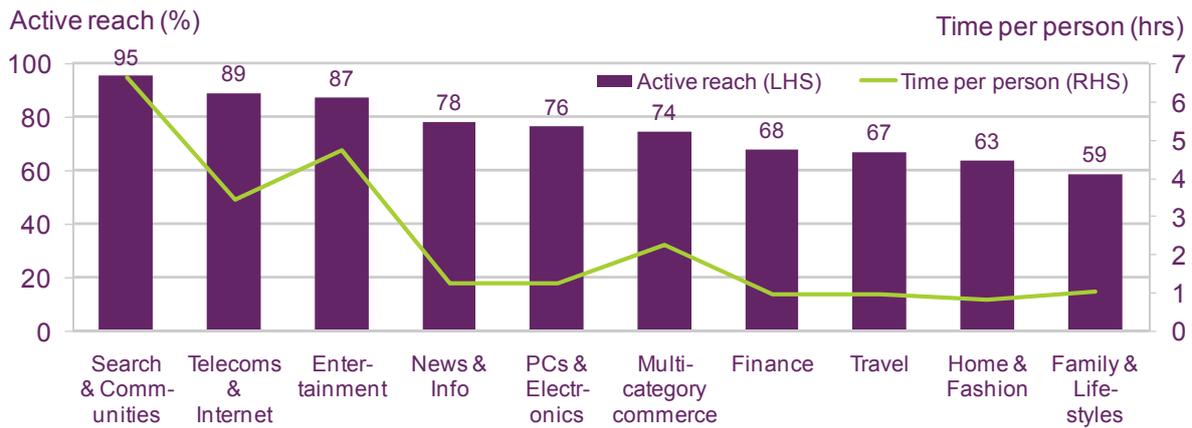
‘Search and communities’ is the most popular category of website

UKOM/Nielsen audience analysis organises websites into a number of different categories. The most popular category in May 2010 was ‘search and communities’ (this includes search engines, portals like Yahoo! and member communities like Facebook and MySpace). It attracted a monthly active reach of 95%, meaning that 95% of all unique internet users visited a site in this category. It was also the most popular category from the perspective of time spent per person, with the average person using sites in this category for nearly 6 hours and 40 minutes in May 2010 (Figure 4.28).

Other categories of sites had lower active reach and lower average time spent.

‘Entertainment’ sites (which includes most video and music sites) reached 87% of web users, who each spent an average of four and three-quarter hours on such sites, while ‘news and info’ sites reached 78% of users, who each spent around an hour and a quarter using these sites in May 2010.

Figure 4.28 Most popular site categories, by active reach



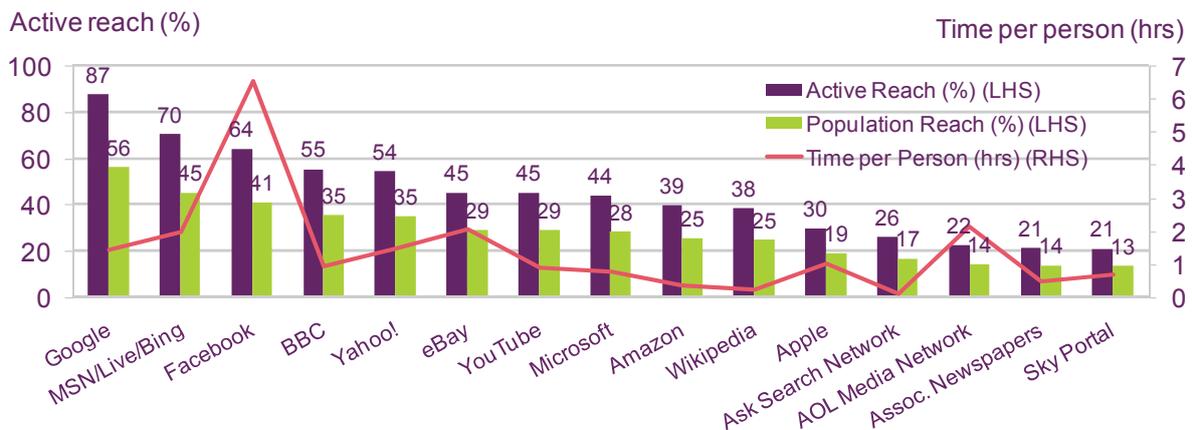
Source: UKOM/Nielsen home and work panel, applications included, month of May 2010.
 Note: “active reach” = the percentage of all active 2+ unique persons who visited the site or used the application. ‘Active’ is defined as anyone who used an internet-enabled computer within the time period.

Google, Microsoft and Facebook are the most popular internet brands

Google has the highest reach of any online brand in the UK, with 87% of active users (someone who used an internet-enabled computer in May 2010) visiting a Google site in May 2010. This equates to 56% of the total UK population. MSN and Facebook were the next most popular brands, reaching 70% and 64% of all active users (45% and 41% of the population) respectively (Figure 4.29).

While Google is the leading brand in terms of reach, Facebook leads in terms of average time spent per person. The average user spent around 6 hours 30 minutes hours using Facebook in May 2010, compared to nearly 1 hour 30 minutes for users of Google, and nearly two hours for users of MSN services. This reflects the difference between Facebook (and similar communities) to sites such as Google and MSN. Facebook is a community where users tend to browse, check for updates and interact with others on a regular basis, whereas Google’s main site is a search tool that performs a specific function.

Figure 4.29 Most popular online brands, by reach



Source: UKOM/Nielsen home and work panel, applications included, month of May 2010.
 Note: “active reach” = the percentage of all active 2+ unique persons who visited the site or used the application. ‘Active’ is defined as anyone who used an internet-enabled computer in May 2010.
 “Population reach” = percentage of the total UK population a brand reaches.

The same top ten sites are popular across all age groups, differing only in order

There are few differences in the most popular websites across age groups. The same nine brands account for all the top ten sites across all age groups. The only major difference is in the order of the fourth to tenth sites in the list for each age group. For all age groups the top three sites are Google, Google Search, and MSN/WindowsLive/Bing (Figure 4.30).

The presence of the same brands across all age groups shows the increasing popularity of a relatively small number of large, general audience websites. Facebook, perhaps traditionally thought of as attracting a younger audience, is still the ninth most important site, by unique audience, among the over-65s. It also suggests that the age of an internet user may in some instances determine less *which* sites they use than *how they use them*, at least for the bigger sites.

Figure 4.30 Top ten sites by unique audience, split by age

Rank	2-17	18-24	25-34	35-49	50-64	65+	
1	Google	Google	Google	Google	Google	Google	
2	Google Search	Google Search	Google Search	Google Search	Google Search	Google Search	
3	MSN/WindowsLive/Bing	MSN/WindowsLive/Bing	MSN/WindowsLive/Bing	MSN/WindowsLive/Bing	MSN/WindowsLive/Bing	MSN/WindowsLive/Bing	
4	Facebook	Facebook	Facebook	Facebook	Yahoo!	BBC	
5	YouTube	Windows Live Hotmail	Yahoo!	BBC	Facebook	Yahoo!	
6	BBC	YouTube	BBC	Yahoo!	BBC	Google Maps	
7	Windows Live Messenger	Windows Live Messenger	Google Maps	Google Maps	Google Maps	Microsoft	
8	Yahoo!	Yahoo!	YouTube	eBay	Microsoft	Amazon	
9	YouTube Homepage	BBC	eBay	Microsoft	eBay	Facebook	
10	Google Image Search	eBay	Windows Live Hotmail	YouTube	Amazon	Wikipedia	

Key

- Google (ex. YouTube)
- Microsoft
- Facebook
- Yahoo!
- BBC
- YouTube
- eBay
- Amazon
- Wikipedia

Source: UKOM/Nielsen home and work panel, applications included, month of May 2010.

Note: "Unique audience" = the total number of unique persons that have visited a website or used an application at least once in the specified reporting period. Persons visiting the same website or using the same application more than one time in the reporting period are only counted once.

Windows Live Messenger is the most popular internet application

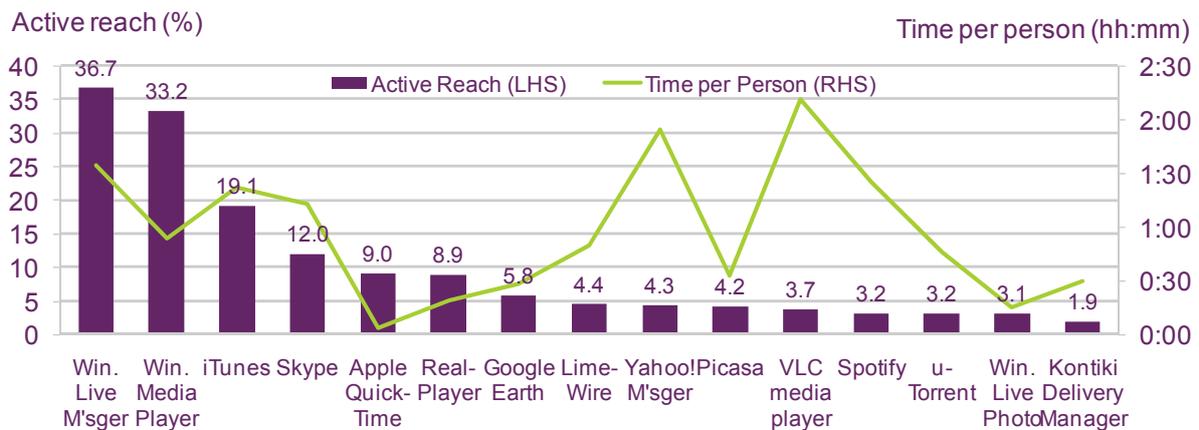
Although content is increasingly available streamed over the internet directly to web browsers, a significant amount is still delivered to consumers using standalone internet applications or clients. These are downloadable pieces of software providing access to specific media files or types of content, or that allow consumers to exchange files with one another directly rather than from a content provider's server. Many applications also allow content providers and/or consumers to manage the content they consume more effectively, both on- and offline.

According to UKOM/Nielsen, the most popular online application in May 2010 was Windows Live Messenger, Microsoft's instant messaging program, with an active reach of 37% in May 2010. This was followed by Windows Media Player (WMP), Microsoft's media suite that allows users to manage their digital media libraries (Figure 4.31). WMP had an active reach of 33% in May 2010. iTunes (Apple's media player) had the next highest reach at 19%, followed by Skype (a VoIP service) at 12%. The high reach of Windows Media Player can be

partly explained by the fact that it is the default media player on many Windows PCs, while iTunes' reach is helped by the fact that it is required for those who own an iPod or an iPhone.

Yahoo! Messenger and VLC media player had the highest average time per person of the top applications, with 1 hour 54 minutes and 2 hours 11 minutes respectively. But caution should be used in comparing time spent online, as these metrics are not always compatible. Time per person refers only to the application that is 'in focus' (i.e. the one to which keyboard and mouse activity is directed), and does not count minimised applications or applications running in the background. So applications that tend to require people to keep them in focus the whole time (such as video or messaging applications) will record higher time spent than audio applications which can run in the background.

Figure 4.31 Most popular internet applications, by active reach



Source: UKOM/Nielsen home and work panel, applications included, month of May 2010.

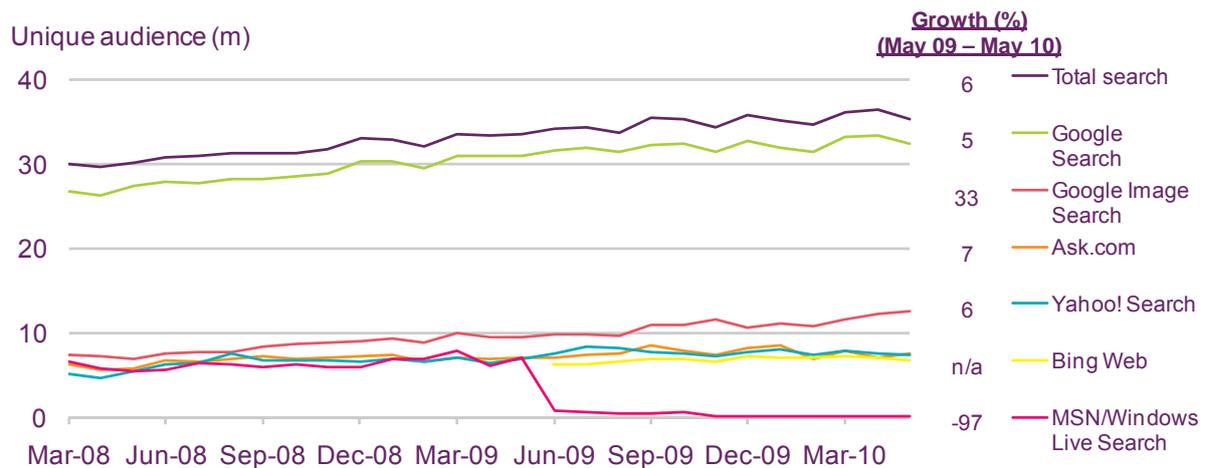
Note: "active reach" = the percentage of all active 2+ unique persons who visited the site or used the application. 'Active' is defined as anyone who used an internet-enabled computer within the time period.

Google's image search saw its reach grow by a third over the past year

The main way that consumers discover content on the web is via search engines. More than 35 million people visited a search engine in May 2010, an increase of 6% during 2009-10. Of the 35 million, 32.4 million visited Google search, an increase of 5% on May 2009 (Figure 4.32). The next most popular search engines, Ask.com, Yahoo! Search and Bing, recorded unique audiences of 7.6 million, 7.3 million and 6.7 million respectively.

Among sites for which data are available, the fastest-growing search engine over the past year was not one of Google's competitors, but Google Search's sister site, Google Image Search. Its audience grew by 33% between May 2009 and May 2010, compared to 5% growth for the main search site. This may indicate that consumers are increasingly searching for certain types of content – in this case images - rather than using a generic search. It may also be a function of improvements in the algorithms that search engines use that enable them to distinguish more accurately between different types of content. Most major search engines now include options to search for particular types of content such as video and, increasingly, audio.

Figure 4.32 Unique audience of leading search sites



Source: UKOM/Nielsen home and work panel, applications included, month of May 2010.

Note: "Unique audience" = the total number of unique persons that have visited a website or used an application at least once in the specified reporting period. Persons visiting the same website or using the same application more than one time in the reporting period are only counted once. MSN/Windows Live search rebranded as Bing in May 2009.

Facebook is the most popular search term on Google

As the most popular search engine in the UK, search term data from Google provides insights into the sorts of content that UK internet users search for. Figure 4.33 shows the top ten most popular search terms and destinations for Google in the UK during 2009.

'Facebook' was the most popular search term, followed by 'YouTube'. This suggests that user-generated content is one of the most-searched-for content forms. Perhaps surprisingly, the eighth most popular Google search term is the word 'google'.

Facebook is also the third-most-popular destination from Google (i.e. the site that users click through to from Google). The most popular destination from Google, clients1.google.co.uk relates to the Google suggestion service which auto fills search queries as they are being typed. The second most popular destination is the English-language Wikipedia site. The latter probably reflects the fact that Wikipedia is for many people a first port of call for information.

Figure 4.33 Top 10 Google search terms and top 10 Google destinations

Rank	Search term	Rank	Destination
1	facebook	1	clients1.google.co.uk
2	youtube	2	en.wikipedia.org
3	bbc	3	www.facebook.com
4	hotmail	4	maps.google.co.uk
5	ebay	5	www.youtube.com
6	news	6	www.bbc.co.uk
7	games	7	news.bbc.co.uk
8	google	8	www.amazon.co.uk
9	you	9	www.google.com
10	yahoo	10	answers.yahoo.com

Source: Search terms – Google Insights for search, May 2010; destination urls – UKOM/Nielsen, home and work panel, May 2010.

Consumers hold a range of views on the accuracy and impartiality of search engine results – and some are indifferent

Search engines provide a wealth of information to help internet users navigate the web. But unlike broadcast platforms, where there are rules relating to the impartiality of content, no such rules exist on the internet.

Ofcom's media literacy research shows that internet users have a mixture of views about the accuracy and bias of results returned through a search engine. Around half of search engine users (54%) claim that they make some sort of critical evaluation of the websites listed in search engine results. Those aged 45+ (60%) or in ABC1 social groups (58%) are the most likely to claim to make a judgement of this kind (Figure 4.34).

By contrast, a fifth (20%) of search engine users trust that the websites returned by the search engines will contain accurate and unbiased information. This is more likely among users aged under 45 (23%) and among users in C2DE socio-economic groups (25%). Across all ages and groups, around a fifth of users do not think about accuracy or bias; they simply use sites that they like the look of.

Figure 4.34 User attitudes towards accuracy or bias of search engine results



NIN46 – When you use a search engine to find information, you enter a query in the search box and the search engine will then show some links to websites in the results pages. Which one of these is closest to your opinion about the level of accuracy or bias of the information detailed in the websites that appear in the results pages? (Prompted responses, single coded).

Base: All adults aged 16+ who mostly use search engines to look for information on the internet (407 aged 16+, 252 aged 16-44, 155 aged 45+, 201 male, 206 female, 251 ABC1, 155 C2DE).

Source: Ofcom research, fieldwork carried out by Saville Rossiter-Base in September to October 2009

4.3.3 Mobile internet use

Surfing the web is the most frequently-used mobile internet service

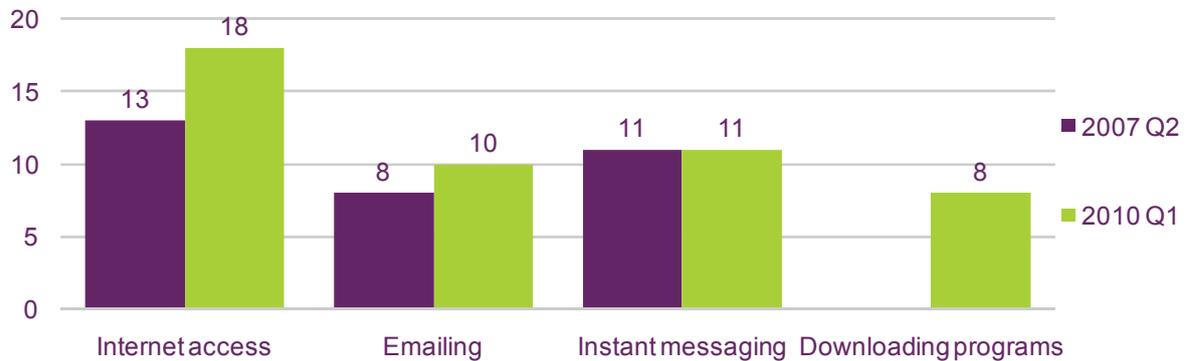
As a result of the growth of fast mobile data networks and increasing take-up of internet-enabled phones and smartphones, mobile content and data services are one of the fastest-growing types of web-based content. Mobile internet use has been given a particular fillip recently as a result of the growth in popularity of mobile applications.

We asked mobile users about which online services they accessed using their handsets and found that in Q1 2010 surfing the web was the most frequently-used service, with 18% of mobile users (equivalent to around 90% of mobile internet users) saying that they did this (Figure 4.35). This represented a five percentage point increase since Q2 2007, possibly a reflection of the introduction of more sophisticated handsets which make this a more user-friendly experience.

While the proportion of mobile users using their handset for instant messaging was unchanged, at 11% in the year to Q1 2010, the proportion of people who said they used email on their handset increased from 8% to 10%, again possibly due to the better integration of email on newer handsets. The growing popularity of downloading mobile programs (or 'apps') to mobile handsets was reflected by the fact that 8% of mobile users said that they did this in the first quarter of 2010.

Figure 4.35 Use of mobile data services

Proportion of mobile users using service (per cent)



QD9A: Which if any, of the following activities, other than making and receiving voice calls, do you use your mobile for?

Source: Ofcom technology tracker, Q1 2010.

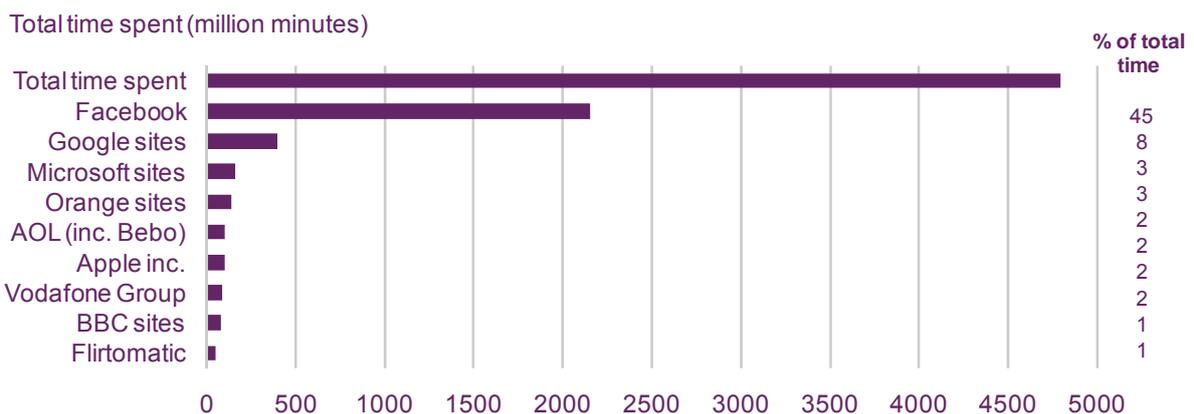
Base: All mobile users aged 15+ (n=7826).

Facebook accounts for 45% of total time spent using the mobile internet

According to GSMA mobile media metrics, UK mobile internet users spent nearly five billion minutes using the mobile internet in December 2009 (Figure 4.36). Facebook was easily the most popular mobile internet site in terms of time spent, accounting for 45% of total time spent online in December 2009. Google sites were the next most intensively-used, accounting for 8% of total mobile internet time.

Apart from Google and Facebook, no other mobile internet site accounted for more than 3% of total time spent online. Other sites in the top ten by time spent include the sites of mobile operators, for example Orange and Vodafone Group.

Figure 4.36 Top 10 UK mobile internet sites, December 2009



Source: GSMA mobile media metrics.

4.3.4 User-generated content

The internet is fundamental to the growth of user-generated content (UGC). The interactive and social possibilities of the internet, coupled with low publishing costs (for consumers at least), has allowed this type of content to flourish, and sets it apart from content delivered over other platforms. It has, in some areas, led to concerns about navigation, content quality, safety online and wider issues of media literacy.

UGC takes a variety of forms, but commonly includes blogs, photos, videos, audio applications and websites. Many sites also add social features and allow users to set up personal profiles. Some UGC websites specialise in a particular type of content (for example Flickr and Picasa which are dedicated to photos and photo sharing), while others allow people to aggregate several content types (social networking sites and blogs are a good example of this).

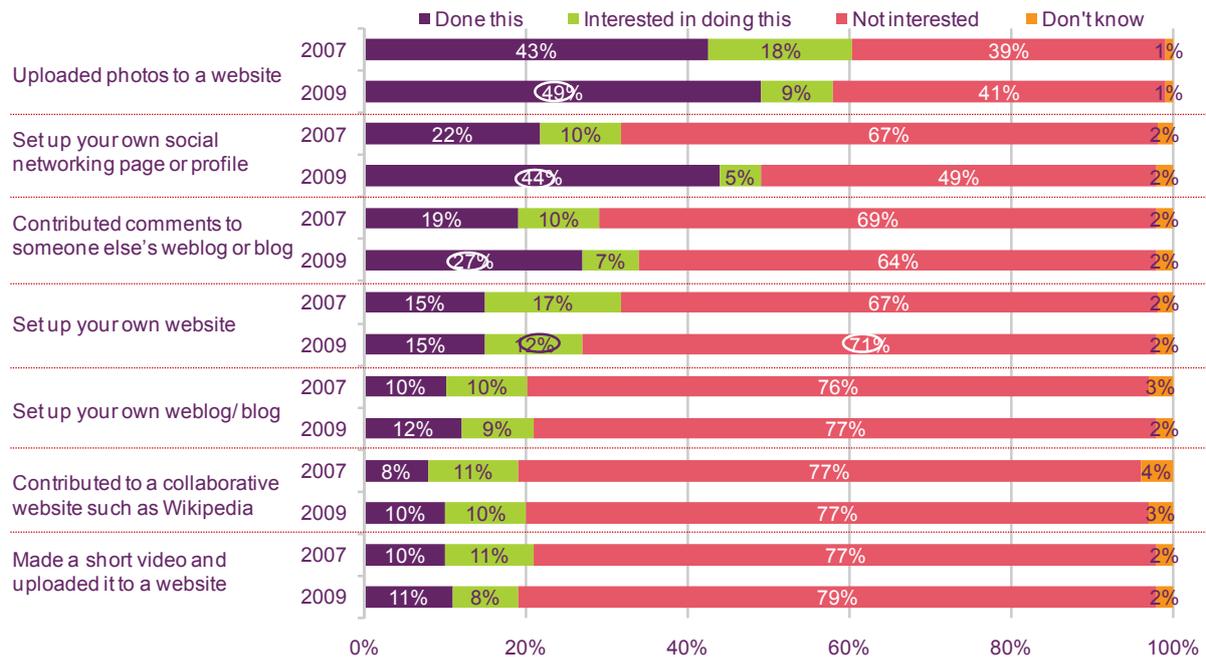
Apart from photo sharing and social networking, most internet users have little interest in UGC

Ofcom research into user-generated content shows that social networking and photo-sharing are very popular. But most other activities are minority pursuits that do not arouse much interest in the wider population of people with internet access (Figure 4.37).

Uploading photos to a website was the most popular form of content creation that internet users engaged in, with 49% (up from 43% in 2003) claiming to have done this; a further 9% of internet users expressed interest in doing this in the future. Social networking was the next most popular activity, with 44% claiming to have set up a profile (double the level of 2007), and a further 5% expressing an interest.

Among other forms of content creation, only commenting on blogs saw a significant growth in take-up between 2007 and 2009, from 19% to 27%. Most other types saw flat take-up and levels of interest, while the number of people expressing interest in setting up their own website fell from 17% to 12%. All activities except social networking and photo-sharing generated relatively low levels of interest (at least 64% of internet users indicated that they were 'not interested').

Figure 4.37 Experience of, and interest in, content creation



IN23A-I – I'm going to read out a number of things people might do online. Please tell me for each one I read out if you've done it, or you'd be interested in doing it, or not interested. (prompted responses, single coded)

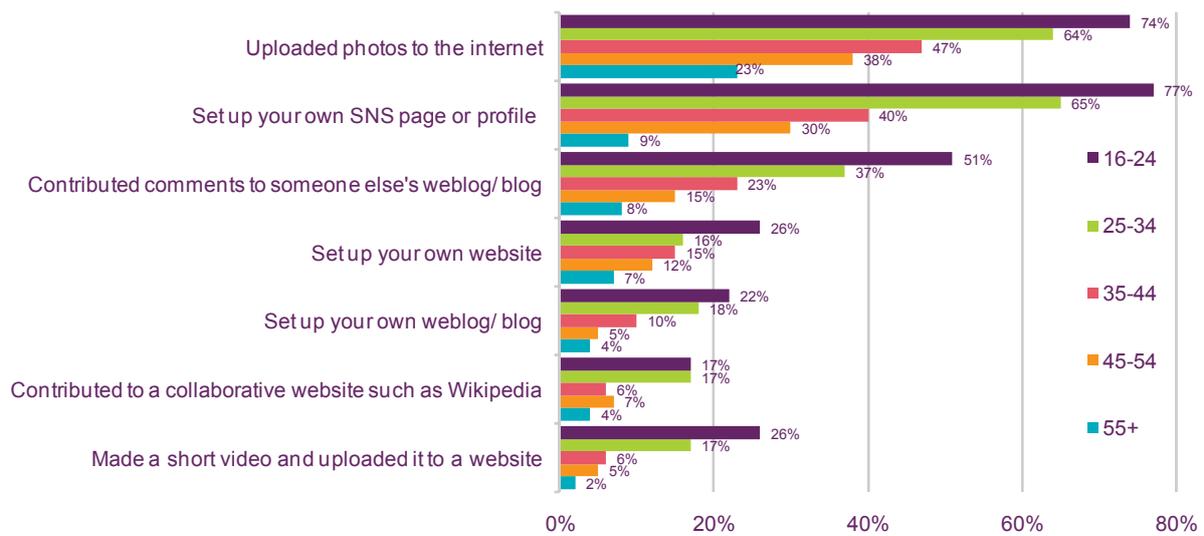
Base: All who use the internet at home or elsewhere (1723 in 2007, 1282 in 2009). Significance testing shows any change between 2007 and 2009.

Source: Ofcom research, fieldwork carried out by Saville Rossiter-Base in April to May and September to October 2009.

Young people were most likely to have engaged in user-generated content activities online (Figure 4.38). For example, while a quarter (26%) of 16-24 year olds claimed to have made a short video and uploaded it to a website, only 2% of people aged 55+ with internet access make the same claim.

In general, the older an internet user is, the less likely they are to have experience of a given UGC activity. The exception to this rule appears to be contributing to collaborative websites such as Wikipedia; 25-34 year olds were as likely to have done this as 16-24 year-olds (17%).

Figure 4.38 Experience of creative activities, by age



IN23A-I – I'm going to read out a number of things people might do online. Please tell me for each one I read out if you've done it, or you'd be interested in doing it, or not interested.
 All who use the internet at home or elsewhere (1278 aged 16+, 238 aged 16-24, 268 aged 25-34, 295 aged 35-44, 209 aged 45-54, 268 aged 55+).
 Source: Ofcom research, fieldwork carried out by Saville Rossiter-Base in April to May and September-October 2009.

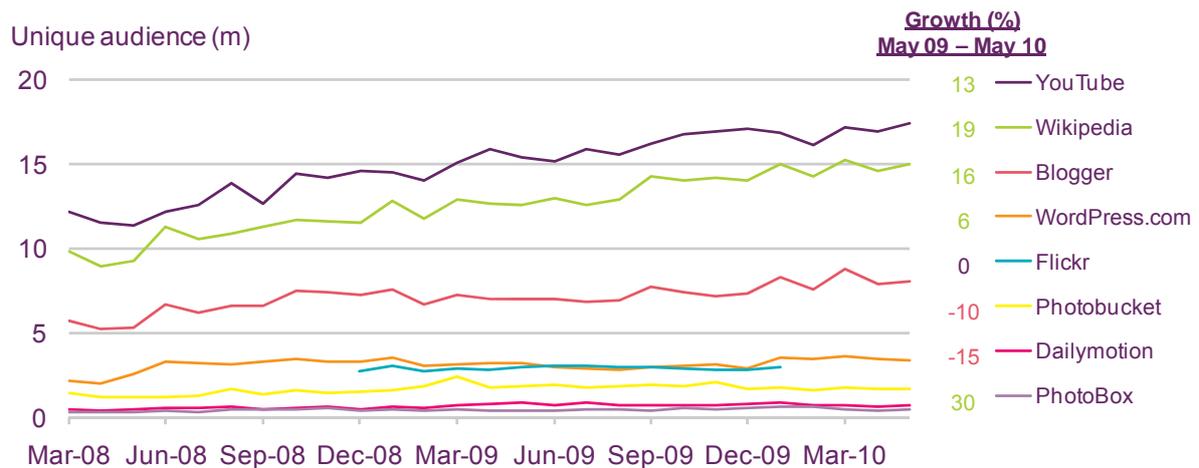
Audiences for many user-generated content sites continue to grow

According to data from UKOM/Nielsen, many UGC sites' audiences are growing steadily, although annual growth rates are falling. Figure 4.39 shows unique audience trends for selected UGC websites (note: social networking sites are not included – see Figure 4.3).

Photobox (30%), Wikipedia (19%), Blogger (16%) and WordPress.com (6%) all experienced solid growth in the year to May 2010, although audiences to Dailymotion (-15%) and Photobucket (-10%) fell. Dailymotion competes with YouTube, while some of Photobucket's decline may be due to users turning to social networking sites to store their photos instead.

YouTube remains the most popular video-sharing site, with nearly 17.5 million unique visitors in May 2010, an increase of more than two million in a year. But it is increasingly difficult to categorise YouTube purely as a UGC site, since it hosts a significant amount of professionally-produced content made available by film studios, broadcasters, record labels and other content providers. For example, in November 2009 Channel 4 made its 4OD catch-up and archive service available through YouTube, and in December 2009 Five made similar content from its Demand Five service available on the video-sharing site.

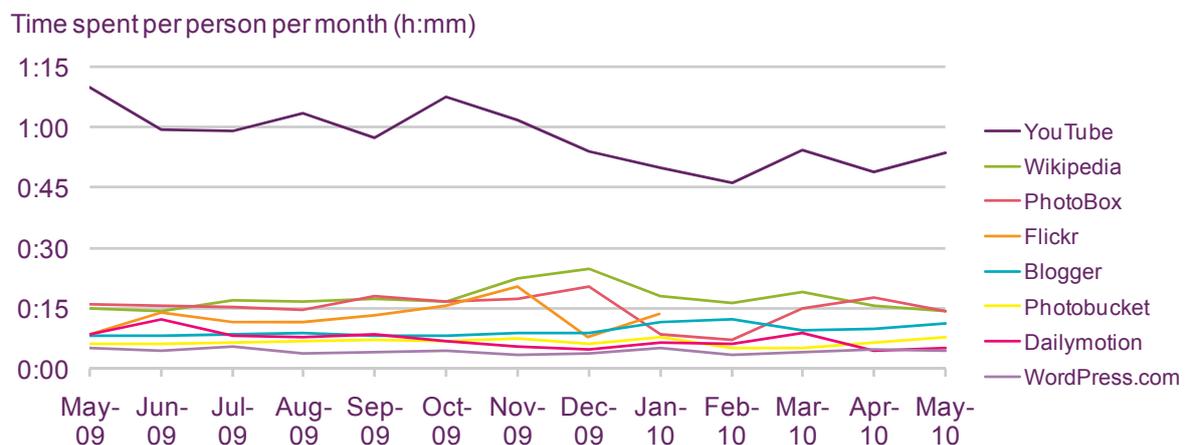
Figure 4.39 Unique audience of selected user-generated content sites



Source: UKOM/Nielsen home and work panel, applications included, month of May 2010.
 Note: "Unique audience" = the total number of unique persons that have visited a website or used an application at least once in the specified reporting period. Persons visiting the same website or using the same application more than one time in the reporting period are only counted once.

For the UGC sites we consider, UKOM/Nielsen data shows that YouTube was the most intensively-used site (Figure 4.40). In May 2010 the average user spent 54 minutes per month on YouTube, compared to 15 minutes or less for the average users of the other sites that we looked at. Average time spent on YouTube appears to have declined throughout the past year, from a high of 70 minutes in May 2009 to 54 minutes in May 2009. This may reflect a more casual use pattern among later adopters of the site, and increasing video-sharing functionality on social networking sites such as Facebook and MySpace.

Figure 4.40 Time spent on selected user-generated content sites



Source: UKOM/Nielsen home and work panel, applications included, month of May 2010.

4.3.5 Concerns about the internet

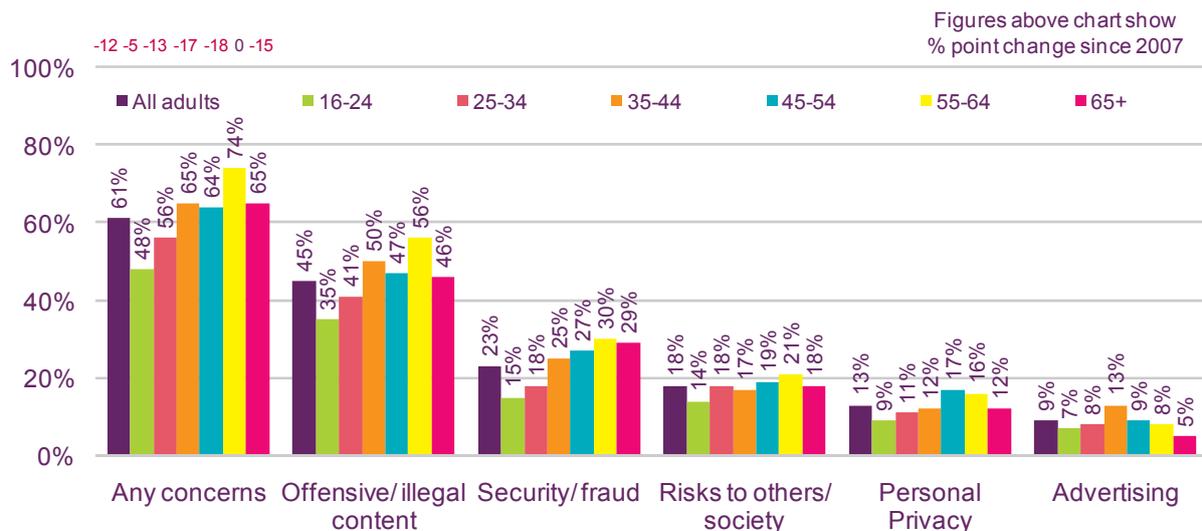
Six in ten internet users have some concerns about the internet

According to Ofcom media literacy research, just over six in 10 (61%) internet users have some concerns about the internet (Figure 4.41). Levels varied across age groups, from less than half of 16-24s (48%) to nearly three-quarters (74%) of 55-64s. The former may relate to greater familiarity with the internet among younger people (Figure 4.41).

The most prevalent concerns were those related to offensive and illegal content (mentioned by 45% of users) and those related to security and fraud (23%). Again, in both these categories 16-24 year olds were significantly less likely than users in general to have concerns.

Concerns about the internet have fallen since 2007 among internet users of all ages, except among those aged 55-54 where levels stayed the same. The overall numbers of people reporting any concern about the internet fell by 12 percentage points. The steepest falls in levels of people expressing concerns about the internet were among those aged 45-54 (18 percentage points) and those aged 35-44 (17 percentage points).

Figure 4.41 Concerns about the internet among users, by age



IN30 – Can you tell me if you have any concerns about what is on the internet? (Spontaneous responses, multi-coded).

Base: Adults aged 16+ who use the internet at home or elsewhere (1282 aged 16+, 225 aged 16-24, 235 aged 25-34, 313 aged 35-44, 213 aged 45-54, 168 aged 55-64, 128 aged 65+). Significance testing shows any differences between any age group and all adults aged 16+.

Source: Ofcom research, fieldwork carried out by Saville Rossiter-Base in April to May and September to October 2009

Internet users are more likely than non-users to have concerns about the internet

Internet users are more likely to express concerns about the internet than non-users (61% vs. 40%). Internet users were more likely to express concerns in all the categories we researched except 'risks to others/society' (Figure 4.42).

This suggests that the more people know about, and are aware of, the internet and its capabilities, the more they are likely to be aware of the risks involved in using it.

Figure 4.42 Concerns about the internet among users and non-users



IN30 – Can you tell me if you have any concerns about what is on the internet? (Spontaneous responses, multi-coded).

Base: Adults aged 16+ who use the internet at home or elsewhere (1282)/ who do not use the internet at home or elsewhere (542). Significance testing shows any differences between internet users and non-users.

Source: Ofcom research, fieldwork carried out by Saville Rossiter-Base in April to May and September to October 2009

Our children’s *Media Literacy Audit* found that while children have some dislikes associated with their use of media, relatively few children aged 8-15 have concerns about being exposed to media content that makes them “feel sad, frightened or embarrassed” or content that they feel is too old for them.

In terms of children’s attitudes towards the internet, around one in six children state that “it’s easier to keep things private or secret on the internet than it is in real life” (16%) with one in seven children aged 8-15 saying they “feel more confident online than they do in real life” (14%), or that “it’s easier to talk about personal things on the internet” (14%).



The Communications Market 2010

5 Telecoms and networks

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5.1 Key market developments in telecoms and networks

5.1.1 Industry metrics and summary

Figure 5.1 UK telecoms industry: key statistics

	2004	2005	2006	2007	2008	2009
Operator-reported retail revenue (£bn)	28.0	29.0	29.9	30.9	31.2	30.4
Operator-reported wholesale revenue (£bn)	9.3	9.6	10.1	10.4	10.5	10.2
Total operator-reported revenue (£bn)	37.3	38.6	40.0	41.3	41.7	40.6
Fixed voice call minutes (billions)	163	160	150	147	139	133
Mobile voice call minutes (billions)	64	71	82	100	111	118
Average monthly household telecoms spend (£)	71.1	71.4	69.4	67.0	64.5	62.1
Fixed access and call revenues (£bn)	10.6	9.9	9.5	9.3	9.1	8.8
BT share of fixed revenues (%)	58.8	56.9	54.7	53.9	52.4	49.8
Proportion of households connected to an unbundled exchange (%)	-	39.6	66.6	80.2	84.2	84.5
Fixed lines (millions)	34.5	34.0	33.6	33.5	33.2	32.1
Mobile retail revenues (£bn)	11.9	13.1	13.9	15.0	15.4	14.9
Active mobile connections per 100 population	99.9	109.2	115.9	121.8	126.3	131.7
Active 3G mobile connections per 100 population	4.3	7.7	12.8	20.6	30.3	41.8
Internet connections per 100 population	25.8	27.5	28.2	30.1	30.6	31.5
Fixed broadband connections per 100 population	10.2	16.4	21.5	25.7	28.4	29.9

Source: Ofcom / operators

With retail revenues totalling over £30bn in 2009 (equivalent to around £500 for every person in the UK), telecoms networks in the UK (fixed voice and internet networks, and mobile networks) contributed around 75% of total service revenues for the UK's communications industry.

However, after years of growth, 2009 was a difficult year for the UK's telecoms operators. For the first time, overall revenues declined, falling below 2007 levels. This was driven in part by the economic downturn, but also by the impact of falling prices and a slowdown in the growth of mobile and broadband connections. Revenues from mobile voice and messaging declined for the first time, and revenues from fixed-line internet connections also fell. But at the same time, massive growth in data use, the widening availability of super-fast broadband networks and changing consumer behaviour as more people access internet services on mobile phones all suggest a dynamic industry in which operators seek new revenue streams and consumers are presented with increasing opportunities to find new and better ways to communicate, to seek information and to find entertainment.

The following two sections look at the telecoms sector from an industry and then from a consumer perspective. In this section we look at five key market developments that are shaping the future of the industry and changing consumer behaviour.

- **Declining retail revenues while use increased.** We look at how the revenue mix in the telecoms industry has changed over the past decade, and highlight how in 2009 the long-term growth in mobile and internet revenues reversed, despite increases in voice volumes, data use and mobile messaging (page 280).
- **The growing gap between data use and revenues.** This decline in revenues came in the context of massive increases in data use; we examine how this gap has developed (page 282).
- **Broadband speeds increase.** The roll-out of ADSL2+ services and upgrades to cable networks resulted in actual broadband speeds increasing. However, with most DSL broadband now sold at an advertised speed of 'up to' 20Mbit/s or more, there is a growing gap between this and the average actual speed of 5.2Mbit/s. Meanwhile, deployments of super-fast broadband point to a new high-speed future, but current take-up is still very low (page 286).
- **Mobile broadband finds its niche.** After rapid growth in 2008, take-up of mobile broadband slowed in 2009. However, as fixed-line broadband take-up plateaus, mobile broadband is enabling some households to get online for the first time (page 291).
- **Growth of the 'pocket internet'.** The increasing take-up of smartphones is driving significant increases in the number of people accessing the internet on mobile phones, creating new business models and changing consumer behaviour (page 297).

5.1.2 Revenues fell across the board

For the first time since Ofcom began collecting data on the telecoms industry in the 1990s, retail revenues from telecoms service fell during 2009, down 2.6% to £30.4bn (Figure 5.2).

Although there has been a gradual shift from fixed to mobile, and from voice to data, the previous ten years had seen a continuous growth in revenues, which increased by an average of 5% year on year from 1998 to 2008. Revenue from fixed voice, which accounted for over 60% of total telecoms service revenue in 1998, continued to grow until 2000, but has subsequently experienced nine years of year-on-year decline. By 2009 revenue from fixed voice telephony had declined by an average of 2% annually since 1999, and now contributes less than 30% of telecoms revenue.

In contrast, revenue from mobile services has grown by an average of 12% a year over the past decade, accounting for nearly half of telecoms service revenue by 2008. Internet access revenue has also grown, by an average of 6% a year over the past five years, as broadband services have been taken up by the majority of households, while revenue from corporate data service increased by 2.7% annually over the same period. Overall, growth in mobile and data services ensured continued growth in revenue for the UK telecoms industry overall up until 2008.

In 2009, however, this revenue growth stalled. Revenue from mobile services, particularly from voice and messaging, declined sharply, the first decrease since mobile telephony

became a mass-market service in the late 1990s, falling by 3.5% to £14.9bn (and accounting for over two-thirds of the overall fall in telecoms retail revenues). In addition, growth in service revenue from fixed internet access, which had more than doubled from £1.7bn in 2002 to £3.4bn, declined for the first time, by 1.9% to £3.3bn.

Meanwhile, revenue from fixed voice services (including line rental) continued to fall; down to £8.8bn in 2009; a 24.7% decline from its peak in 2001. Fixed voice revenues fell by £284m in 2009, compared to a fall of £233m in 2008.

Figure 5.2 Operator-reported UK telecoms industry retail revenue



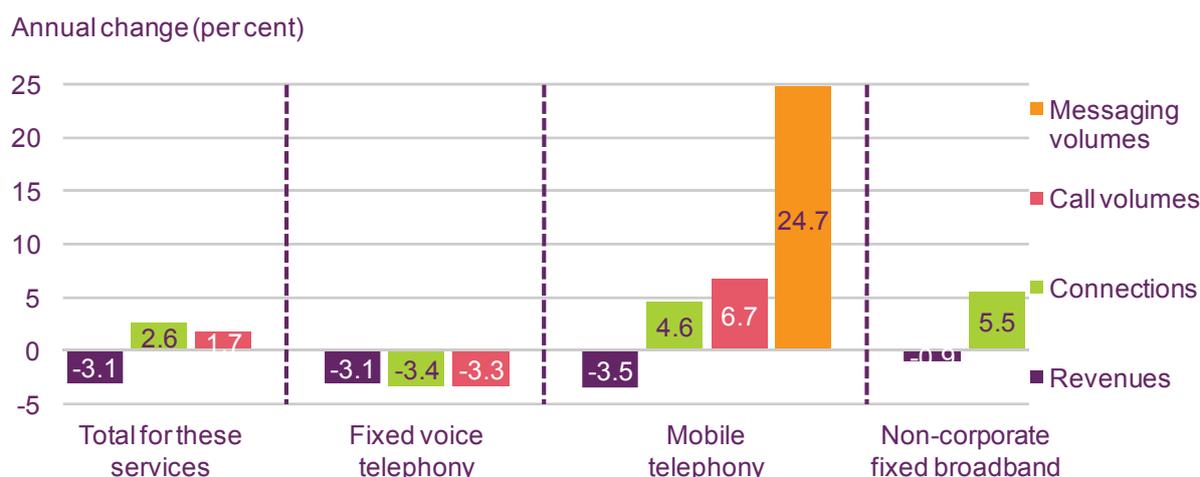
Source: Ofcom / operators / IDC

Figure 5.3 details how revenues, connections and use of telecoms services changed in 2009 compared to 2008. It illustrates that the decline in mobile revenues came in the context of an increase in the number of connections, and an increase in the number of call minutes and SMS/MMS messages. Revenues from voice and messaging services have declined due to falling prices, as an increasing amount of bundled voice minutes and text messages are included within access charges (i.e. monthly line rental charges), and consumers have taken advantage of SIM-only tariffs, where a large number of bundled minutes and/or text messages are included within a relatively low monthly line rental fee. However, it should also be noted that some costs have also fallen as the growth in SIM-only contracts and the emergence of 24-month contracts (see Section 5.1.7) have reduced acquisition costs, and network sharing has reduced network costs.

Similarly, the decline in broadband revenue came despite an increase in the number of connections. This was in part due to the increased take-up of dual-play and triple-play services, whereby consumers purchase broadband in association with another service (see Section 5).

In contrast, the falls in number of fixed voice connections and fixed voice minutes were slightly higher than the fall in revenues, indicating that prices increased slightly as consumers paid more per minute and more per connection. The fall in connections and call volumes was driven by an increasing number of households and businesses going mobile-only; the number of fixed-line connections fell by over 1.1 million in 2009, the largest annual decline since connections began falling in 2001 (see Figure 5.45 in the Telecoms Industry section below).

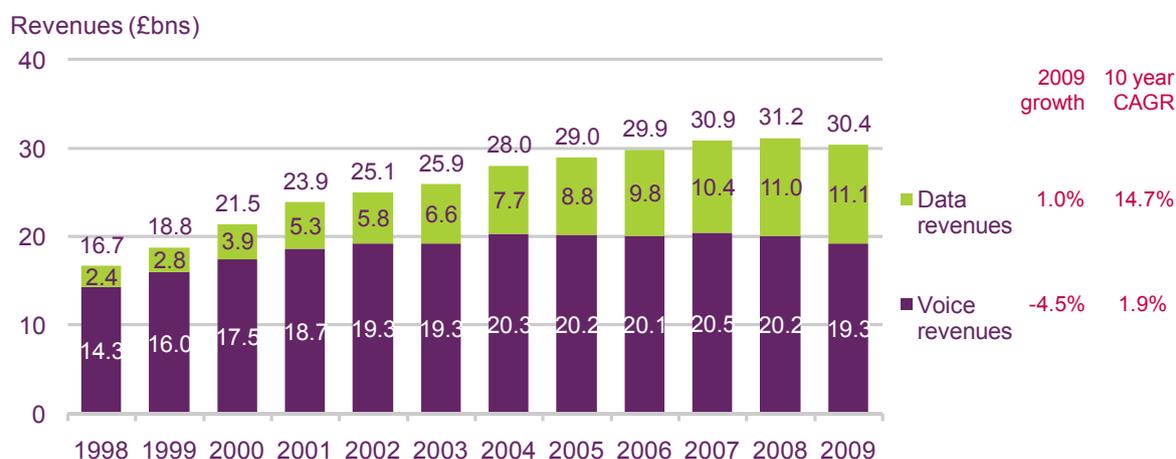
Figure 5.3 Change in operator-reported telecoms retail revenues and use in 2009



Source: Ofcom / operators

Figure 5.4 indicates that since 2002, revenues from voice (fixed and mobile combined) have been flat, while growth has been driven by data services. In 2009, this also stalled as revenue from data services slowed to just 1%, compared to 6% in 2008 and 6.6% in 2007. Revenue from residential fixed-line data services (mainly the provision of broadband) declined, while growth in mobile data services (including SMS) remained flat with increasing revenues from internet-based mobile services (which grew by at least 26% in 2009) offset by falling revenues from text messages. Revenues from corporate data services showed a positive increase, rising by 2.6% in 2009 compared to 1.5% in 2008.

Figure 5.4 Voice and data operator-reported UK telecoms industry retail revenue



Source: Ofcom / operators

The bundling of messaging and data services with monthly rental tariffs means that voice revenue includes an element of mobile data revenue.

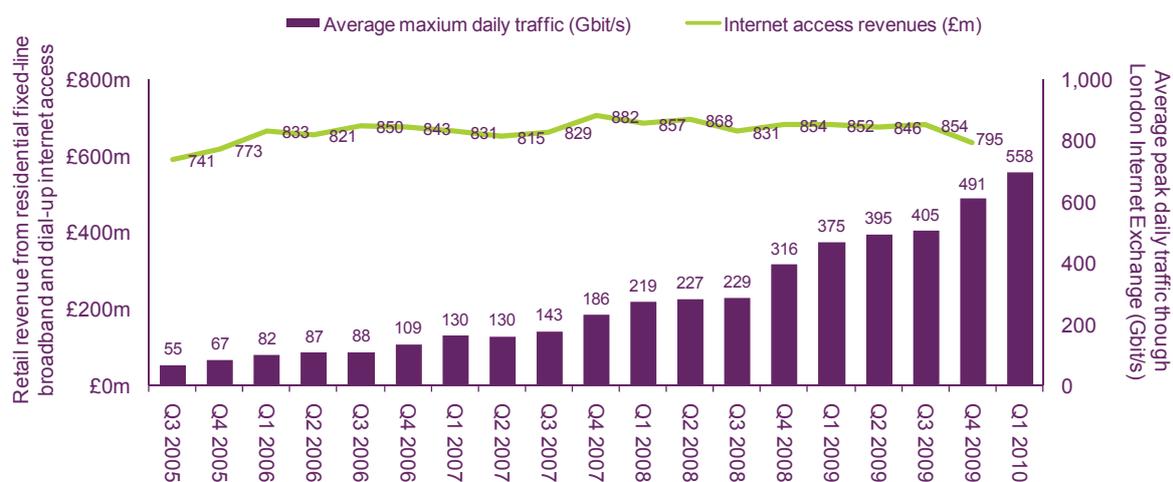
5.1.3 The growing gap between data volumes and data revenues

It has been a characteristic of the UK telecoms market for a number of years that revenues have not kept pace with usage. Analysis in Section 5.3.3 below finds that in nominal terms the revenue per minute for mobile voice has fallen from 15.1p in 2004 to 8.8p in 2009, while despite falling call volumes, the price per minute for fixed voice has increased at a slower rate than inflation, up from 6.6p in 2004 to 7.3p in 2009.

However, a striking feature of the telecoms market in 2009 was that a fall in overall retail revenues came in the context of massive increases in data use; total data volumes over the UK's infrastructure were an estimated 68% higher in 2009 than in 2008, and data volumes over mobile networks increased by 240%. It is clear that there is a growing wedge between data volumes, which have increased by a compound annual growth rate of around 70% between Q4 2005 and Q4 2009, and revenues from internet access, which have increased by a compound annual growth rate of less than 1% over the same period. (However, it should be noted that the relationship between data usage and costs is not linear – and that within access networks there may be scope for very significant increases in usage without any significant increase in costs.)

While there is no data available on the actual data volumes transferred over the UK's internet infrastructure, data transferred over the London Internet Exchange provides a useful proxy for tracking changes. Figure 5.5 indicates that amounts of data transferred have increased significantly every quarter since Q3 2005, with an increased rate of growth since the end of 2008. Over the same period, data revenues from residential internet access (fixed-line broadband and dial-up) have remained relatively flat.

Figure 5.5 Internet access revenues and average peak daily data traffic flowing across London Internet Exchange (LINX) switches



Source: Revenue data – Ofcom based on operator returns; Data traffic – LINX,

<https://www.linx.net/pubtools/trafficstats.html>

Note: LINX traffic data represent the average of the five-minute daily peaks of aggregate traffic across each of the LINX members' ports; LINX data exclude private peering; revenue data are for residential fixed-line internet access only and are not available for Q1 2010

Mobile data revenues have grown at a faster rate than fixed revenues, with Ofcom data, based on operator returns, indicating that non-SMS data revenues increased by 90% between Q4 2007 and Q4 2009. This has been driven by the increasing take-up of mobile broadband (whereby users connect to the internet via a cellular network on a PC by connecting a datacard or 'dongle'), and increasing use of internet services on smartphones such as the Apple iPhone and RIM's Blackberry devices.

Figure 5.6 uses Q4 2004 as a baseline to depict the growth in mobile data volumes and mobile revenues⁶⁴. It indicates a substantial growth in data revenues, but a much faster growth in data use, which we estimate increased by over 2200% in the two years to the end of 2009. During 2009 there was a slowdown of growth in data revenues, which increased by 26%, while data volumes more than doubled. Overall, this represents a 92% fall in the cost per unit of data between Q4 2007 and Q4 2009, and a 59% fall in the cost per unit of data between Q4 2008 and Q4 2009.

However, it should be noted that data revenues are likely to be understated, as we are only able to include data-specific revenues (i.e. metered fees or separate add-ons), whereas increasingly a data allocation is included within the monthly line rental fee for mobile contracts. The increase in data volumes and revenues should also be seen in the context of operators using existing capacity on 3G networks, and achieving substantial increases in capacity with the relatively inexpensive upgrade of 3G networks to HSPA.

Figure 5.6 Mobile data use and data revenues



Source: Ofcom / operators

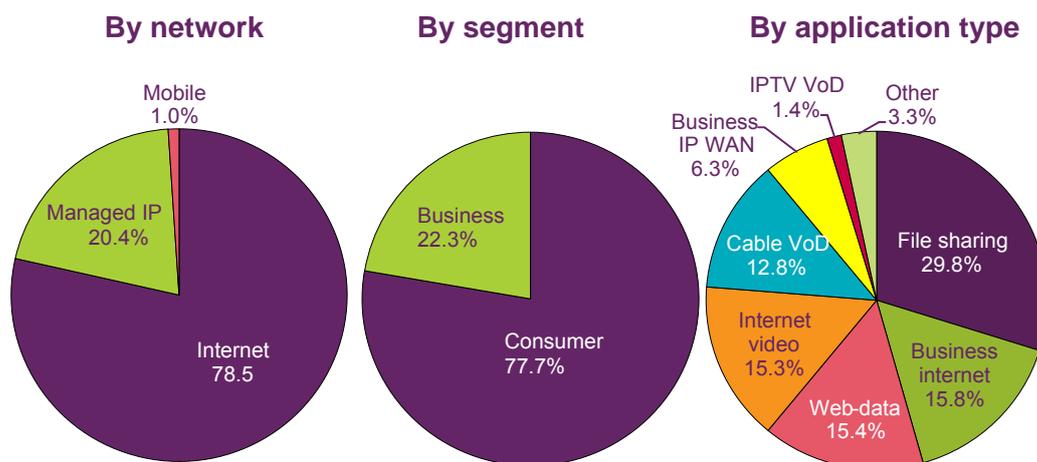
Note: Includes estimates where Ofcom does not receive data from operators; data revenue is likely to be understated as it excludes any data element included within standard pay-monthly tariffs.

Cisco estimates that the total volume of internet traffic in the UK was around 600 petabytes a month by the end of 2009 (a petabyte is approximately one million gigabytes). Figure 5.7 details Cisco's estimates on how this traffic broke down. It indicates that the majority of traffic (79%) was generated by fixed-broadband internet access while managed IP networks, such as VoIP and IPTV, accounted for 20%, and traffic carried over mobile networks represented about 1% of total monthly internet traffic. Consumer IP traffic represented 78% of the UK's traffic, with business use accounting for the remainder.

Only around 15% of this internet traffic was web data. File sharing (i.e. peer-to-peer sharing where internet users connect with each other and directly share files stored on their hard drives) accounted for around 30% of traffic and video (including cable and IPTV video on demand, but not including video exchanged through P2P file sharing) accounting for another 30%. In Section 4.3.2 of this report we detail the increasing use of video services on the internet, with 31% of adults in the UK watching catch-up TV on the internet in Q1 2010, while in April 2010 17.4 million people in the UK watched videos on YouTube.

⁶⁴ We have used an index rather than an absolute number as mobile data volumes are based on an incomplete and aggregated set of operator returns.

Figure 5.7 UK IP traffic, 2009



Source: Cisco Visual Networking Index (VNI) Global IP Traffic Forecast, 2009-2014

Notes: The Cisco VNI forecast methodology rests on a foundation of analyst projections for internet users, broadband connections, video subscribers, mobile connections, and internet application adoption. Upon this foundation are layered Cisco's own estimates for application adoption, minutes of use, and kilobytes per minute based on Cisco VNI usage data (quantitative insights into current activity on service provider networks and qualitative samples of consumers' online behaviour) and other sources.

Other includes online gaming, mobile data and Internet-video-to-TV

There have been a number of drivers of this increase in data use – the availability of higher-speed fixed and mobile networks, the wide availability of ‘free’ online content (and in particular video and music content), the increase in use of peer-to-peer file sharing and hardware advances such as the emergence of increasingly sophisticated smartphones. Meanwhile, the availability of ‘unlimited’ broadband and data services from many operators has also contributed to a market where customers are used to, and expect, a great deal ‘free’.

The popularity of services such as the iPlayer, Spotify and Skype show that service providers as well as consumers have been able to benefit from this market situation. However, operators face a challenge as they attempt to ensure that they receive a return on investment for the infrastructure upgrades they need to make in order to address the growing demand for bandwidth.

One response has been to link tariffs to data use. Fixed broadband tariffs are increasingly now priced primarily by the data usage available rather than the speed offered – in the last year BT Retail, Orange, TalkTalk and Sky have all re-configured their tariffs to offer the same headline speed on all packages (‘up to’ 20 or 24Mbit/s) with different tariffs offering different data limits (or unlimited data on some of the highest-priced packages). Meanwhile, in June 2010 O2 became the first UK mobile operator to put a usage cap on new iPhone tariffs, setting a standard limit of 500MB per month with payments of an additional £5 for each additional 500MB of usage.

Another challenge for operators is to reduce the peak in usage by balancing traffic throughout the day. This has long been integral to operators' traffic management policies; for example, by prioritising certain types of data during peak periods, or by throttling the speeds that users get when they exceed a certain volume of data in the peak period. Other ways of attempting to do this are by introducing time-of-day based charging into tariffs; for example, Plusnet has monthly data limits associated with its tariffs, but use between midnight and 8am

does not contribute to this limit. One of Orange's mobile broadband tariffs for business users offers unlimited use during 9am to 5pm, but sets data limits at other times of the day (the peak time for mobile data use is typically after 6pm in the evening). Another response is to find alternative ways of delivering content, such as increased use of direct peering or content distribution networks; this can mean that increasing traffic does not always generate additional cost.

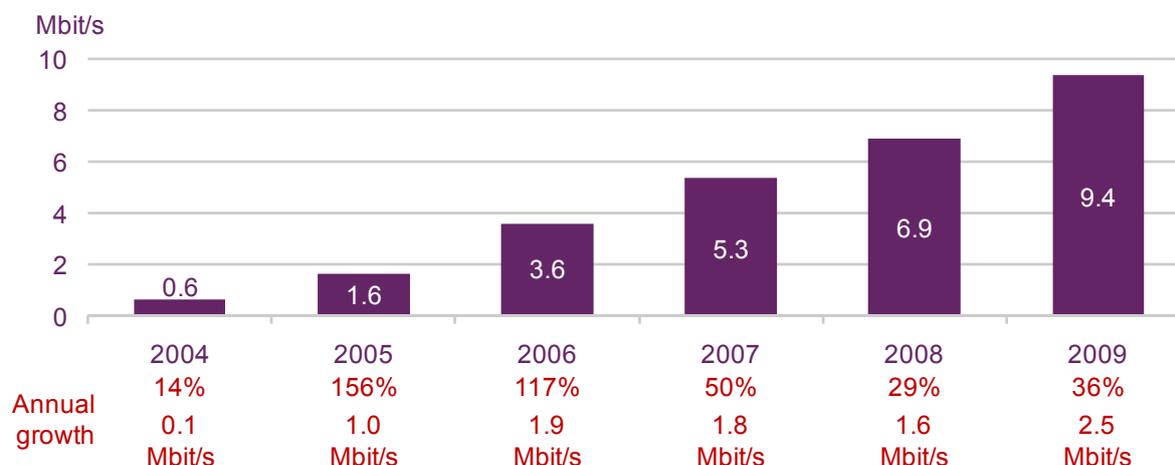
With data volumes continuing to increase, there is increasing focus on the 'net neutrality' debate. ISPs and network operators may seek new ways of internet traffic management to handle traffic more efficiently, to prioritise traffic by type, to guarantee bandwidth or to degrade the quality of certain content.⁶⁵

5.1.4 Broadband speeds increase, but the gap between actual and advertised speed grows

Average headline speeds pass 8Mbit/s for the first time in 2009...

During 2009 average headline broadband speeds (the 'up to' xMbit/s speeds at which services are frequently advertised) continued to increase, and in doing so passed 8Mbit/s for the first time (Figure 5.8). For a number of years 'up to 8Mbit/s' was the most commonly-offered headline DSL broadband speed, and the increase in average headline speeds to above this level is a major milestone in the development of the UK's broadband services. The increase in average broadband headline speed in 2009 was 2.5Mbit/s, the largest ever recorded and an increase of over a third on the 2008 figure.

Figure 5.8 Average non-corporate fixed broadband connection headline speeds



Source: Ofcom / operators

Note: Includes estimates where Ofcom does not receive data from operators; excludes mobile broadband connections

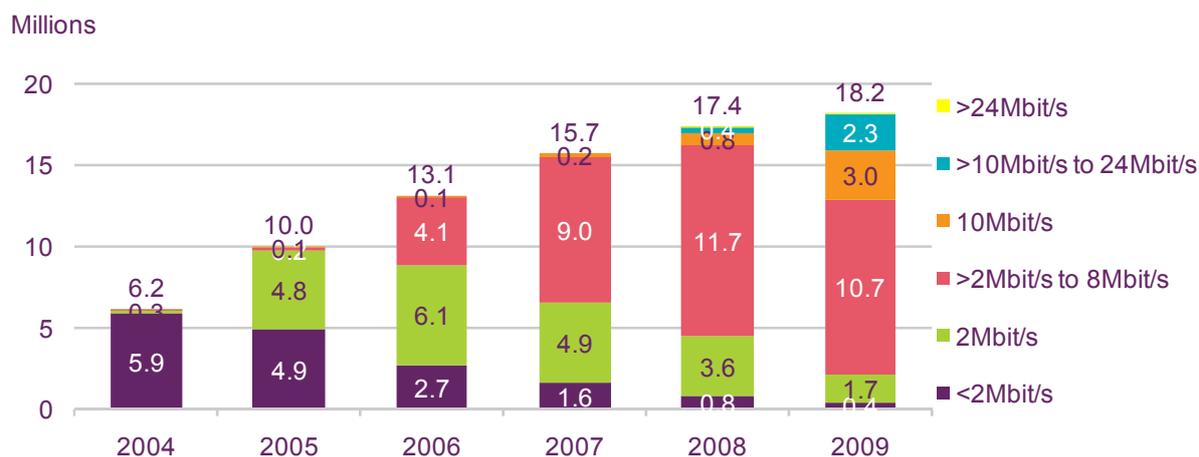
...driven by the upgrade of cable and roll-out of ADSL2+ services...

The increase in average headline connection speeds to above 8Mbit/s in 2009 comes as a result of growing take-up of LLU-based ADSL2+ services offering headline speeds of 'up to' 10Mbit/s, 20Mbit/s or 24Mbit/s, along with Virgin Media increasing the headline speed of its

⁶⁵ This has led to concerns that ISPs and network operators could engage in anti-competitive behaviour and suppress the quality of content from provider services. In June 2010 Ofcom published a discussion paper on traffic management and net neutrality: <http://stakeholders.ofcom.org.uk/binaries/consultations/net-neutrality/summary/netneutrality.pdf>

basic service from ‘up to 2Mbit/s’ to ‘up to 10Mbit/s’ and increasing take-up of its ‘up to 20Mbit/s’ and ‘up to 50Mbit/s’ packages. During 2009 the number of UK non-corporate broadband connections with a headline speed in excess of ‘up to 8Mbit/s’ increased from 1.2 million to 5.3 million (Figure 5.9), and this trend looks to continue in 2010 as a number of major DSL providers (including BT, TalkTalk, Orange and Sky) market their basic service as offering ‘up to 20Mbit/s’ or 24Mbit/s and migrate their existing customer bases to these higher-speed packages.

Figure 5.9 Non-corporate broadband connections, by headline speed



Source: Ofcom / operators

Note: Includes estimates where Ofcom does not receive data from operators; excludes mobile broadband connections

But the gap between headline and actual speeds is increasing

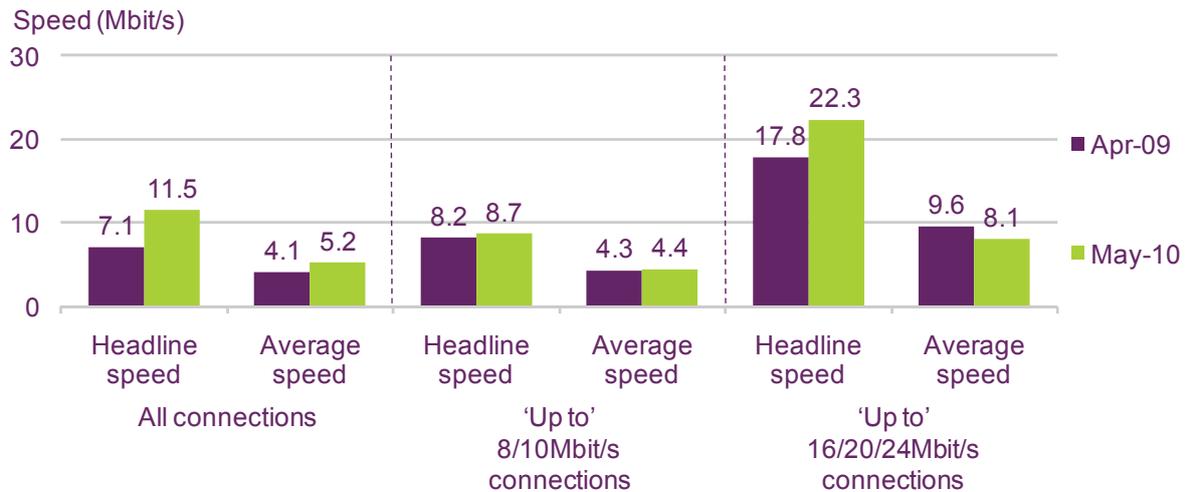
However, focusing on headline ‘up to’ speeds represents only a partial view of the evolution of broadband services. Average actual speeds delivered are well below these headline speeds, and as more ‘up to’ 20 or 24Mbit/s services have been launched, the gap between headline speeds and the actual speeds delivered has grown (Figure 5.10).

Ofcom research into the actual broadband speeds delivered to UK consumers (conducted in association with SamKnows)⁶⁶ found that although headline speeds increased by nearly 50% between April 2009 and May 2010, actual speeds delivered increased by just 27%, and averaged just 46% of headline speeds.

Mobile broadband connections suffer from similar issues, with connection speeds slowing considerably in peak periods when capacity does not keep up with demand. This is reflected in section 5.3.4, which shows that in Q1 2010 only 73% of mobile broadband users were either ‘very’ or ‘fairly’ happy with the speed of their connection, compared to 80% of fixed broadband users. We are currently looking to expand our broadband speeds research to cover mobile broadband connections, and hope to publish our findings in early 2011.

⁶⁶ <http://stakeholders.ofcom.org.uk/market-data-research/telecoms-research/broadband-speeds/broadband-speeds-2010/>

Figure 5.10 Average headline and actual broadband speeds, April 2009 and May 2010

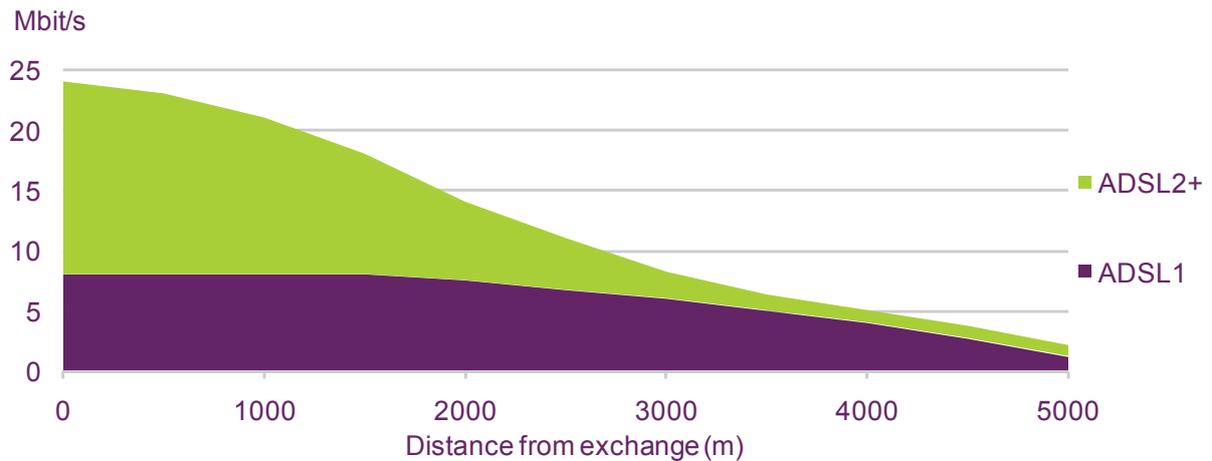


Source: SamKnows measurement data for all panel members with a connection in May 2010
 Panel Base: 1506 Notes: (1) Data have been weighted by ISP package and LLU/non-LLU connections, Rural/Urban, Geographic Market classification and distance from exchange to ensure that they are representative of UK residential broadband consumers as a whole; (2) As sufficient sample sizes were not available for consumers on packages of 'up to' 2Mbit/s or less, data collected for these packages in April 2009 have been factored in, in proportion to share of all connections in May 2010; (3) Data collected from single-thread download speed tests

ADSL2+ offers significant benefits only to those living less than 3km from the local exchange

The difference between actual speeds and headline speeds is mainly due to the limitations of ADSL technology, by which maximum attainable speeds decline rapidly over the length of the copper wire from telephone exchange to the end user's premises. As Figure 5.11 indicates, those living more than 3km from the local exchange will see little benefit from the switch from ADSL1 to ADSL2+, and very few connections will achieve anything approaching 24Mbit/s actual speeds. Cable services are not subject to the same constraints and our research found that cable services delivered actual speeds averaging over 80% of headline speeds, while for DSL broadband the average actual speed was less than 40% of headline speeds.

Figure 5.11 Theoretical maximum DSL speeds, by length of line from exchange to premises



Source: <http://www.tpg.com.au/dslam/faq.php>

Super-fast broadband is available to many... but take-up is very limited

‘Super-fast’ fibre-enabled broadband offers a step-change from the speeds available via DSL broadband, with headline speeds of ‘up to 40Mbit/s’ for fibre-to-the-cabinet services and ‘up to 50Mbit/s’ and higher for fibre-to-the-home and cable services. However, take-up of superfast services has been slow: for example, despite having launched at the end of 2008 (and being available to around half of UK households) there were only 74,000⁶⁷ ‘up to 50Mbit/s’ Virgin Media cable connections at the end of June 2010 (Figure 5.12).

There was little availability of super-fast services other than Virgin Media’s ‘up to 50Mbit/s’ at the end of 2009. However, in 2010 BT’s roll-out of its ‘up to 40Mbit/s’ Infinity service has accelerated; BT has announced that its fibre roll-out had reached over 1.5 million households⁶⁸ by July 2010 and was passing 100,000 additional premises each week. BT’s super-fast services are set to be available to 40% of the UK population by the end of 2012 and to 66% of the UK population by 2015, although, despite growth in the availability of its super-fast services in 2010, Point Topic estimates that there were around 12,000⁶⁹ live BT fibre connections at the end of June 2010.

In addition to these nationwide deployments by BT and Virgin Media, a number of local fibre deployments are making superfast broadband services available to consumers across the UK.

⁶⁷ <http://phx.corporate-ir.net/External.File?item=UGFyZW50SUQ9NTQ4ODI8Q2hpbGRJRD0tMXxUeXBIPtM=&t=1>

⁶⁸ <http://www.btplc.com/News/ResultsPDF/q110release.pdf>

⁶⁹ Source: Point Topic report: NGA UK struggles to gain scale (<http://point-topic.com/content/ukplus/shortreports/BBVnga100803.html>)

Figure 5.12 Selected UK next-generation access projects

Operator	Project locations	Technology	Coverage	Estimated connections June 2010
Atlas Communications	Middletown, Northern Ireland	FTTC	150 homes	50
BT	Various locations across the UK	FTTC	1.5 million homes passed by July 2010, 40% of the UK population by 2012 and 66% by 2015	Ipswich - 50, Muswell Hill - 6,000, enabled exchange areas - 6,000, Ebbsfleet - 100
FibreCity Holdings	Bournemouth and Dundee	FTTP	88,000 homes passed in Bournemouth and 70,000 premises including 55,000 homes in Dundee (networks planned in Derby, Halton, Nottingham, Plymouth and York)	350
Independent Fibre Networks (IFNL)	Corby, Swindon and Andover	FTTP	6,000 homes passed in Corby, 835 in Swindon and 2,500 in Andover	350
Isrighthere	Liverpool, Leeds and Chelsea	FTTP	498 apartments and 160 retail units passed in Liverpool and 166 residential apartments in Leeds (plus 55 apartments to be passed in Chelsea)	719
Rutland Telecom	Lyddington, Rutland	FTTC	Between 180 and 200 homes passed in Lyddington	50
Velocity1	Wembley	FTTP	4,200 homes passed in Wembley City, North London	550
Virgin Media	Virtually all cabled areas nationwide (around half of UK homes)	DOCSIS 3.0	12.6 million homes passed	74,000 'up to' 50Mbit/s connections
West Whitlawburn Housing Co-operative	Glasgow	FTTP	100 new homes in Glasgow	100

Source: Ofcom / Point Topic 'NGA UK struggles to gain scale' (<http://point-topic.com/content/ukplus/shortreports/BBVnga100803.html>)

So, why such low current take-up

With almost half of UK homes able to get super-fast broadband via cable, why is current take-up so low? One reason may be the price differential between current super-fast services and lower-speed services. Virgin Media's standalone 'up to 50Mbit/s' service costs £38 a month for residential consumers, compared to £20 for its 'up to 10Mbit/s' offering. However, the price differential between BT Retail's fibre-based Infinity service and its DSL service is smaller, with its cheapest 'up to 40Mbit/s' Infinity FTTC product (where available) costing £19.99 a month (plus line rental from £9.49) compared to £14.49 plus line rental for its lowest cost 'up to 20Mbit/s' service. Figure 5.13 provides a summary of selected super-fast broadband tariffs.

A second reason may be the perception that current speeds are sufficient for most internet applications; for example, the BBC recommends a minimum speed of just 500kbit/s to use its iPlayer and 3.2Mbit/s for the high-definition service. However, it may still be video streaming that provides the tipping point from current generation to super-fast broadband services.

In 2010 the first generation of internet-ready televisions have been launched. Since the launch of flat-panel models the rate of television set sales has grown significantly, as prices have fallen and larger screen sizes have become available (according to GfK,⁷⁰ annual UK TV set sales grew by 68% in the five years to 2009). Within a few years, as main sets are replaced and are moved around the home, we may find there is the need for several HD web content feeds per household, and therefore a requirement for the higher bandwidths that only super-fast broadband connections can provide.

Figure 5.13 Selected super-fast broadband tariffs

	BT Infinity Option 1	BT Infinity Option 2	Virgin Media Broadband XXL	Velocity (Bournemouth)
Headline monthly charge	£19.99 (plus landline rental)	£24.99 (plus landline rental)	£38 (£28 with a landline)	£19.99
Headline speed ('up to')	40Mbit/s	40Mbit/s	50Mbit/s	100Mbit/s
Monthly data allowance	20GB	Unlimited	Unlimited	Unlimited
Contract length	18 months	18 months	12 months	12 months
Activation fee	£50	£0	£20	£50

Source: Ofcom

5.1.5 Mobile broadband finds its niche

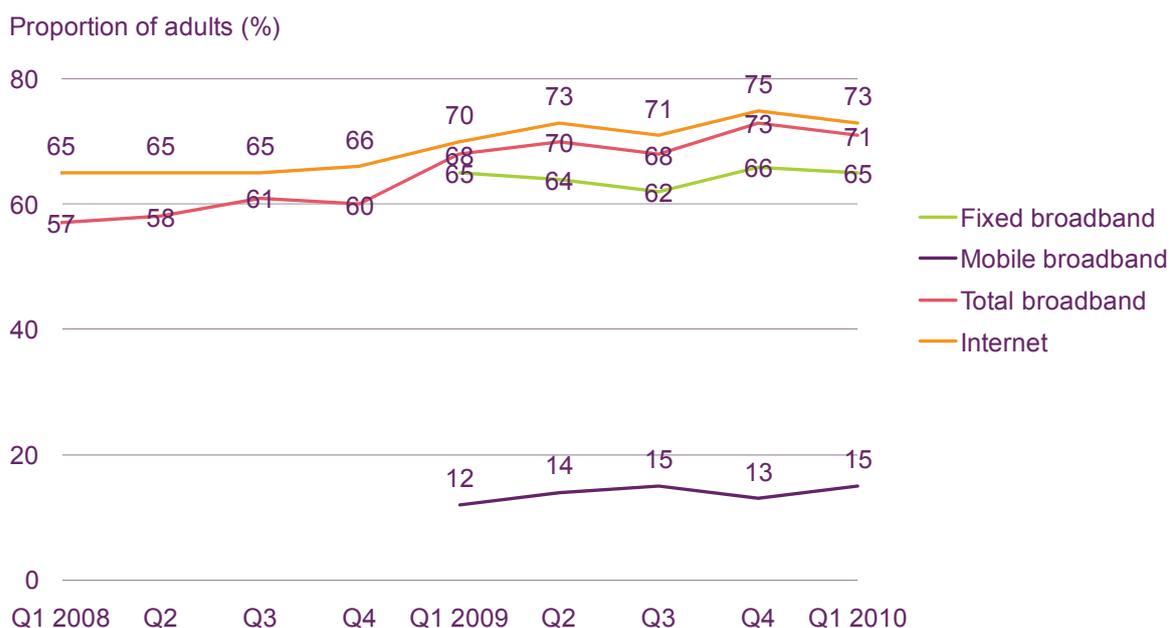
Mobile broadband take-up levels off

After rapid growth in the take-up of mobile broadband (where users connect to the internet using a cellular network via a USB modem or dongle connected to a laptop) following the launch of 3G 'dongles' in April 2007, there are indications that growth in take-up is beginning to decline.

By March 2009, mobile broadband appeared to have entered the mainstream, with Ofcom research indicating that 12% of all households were using mobile broadband (see Figure 5.14), equivalent to approximately three million households. In the 12 months to the end of March 2010 growth in household adoption of the service appears to have slowed, with penetration reaching a peak of 15% in Q3 2009. This is consistent with data collected by Ofcom from the UK operators, which finds that there were 4.1 million active mobile broadband subscribers at the end of 2009.

⁷⁰ Source: GfK retail sales data 2004-2010

Figure 5.14 Household penetration of broadband



Source: Ofcom research

Note: Data covering household penetration of fixed and mobile broadband is not available for 2008. Error margins on this data are +/- 1% at the 95% confidence interval.

Mobile broadband user groups

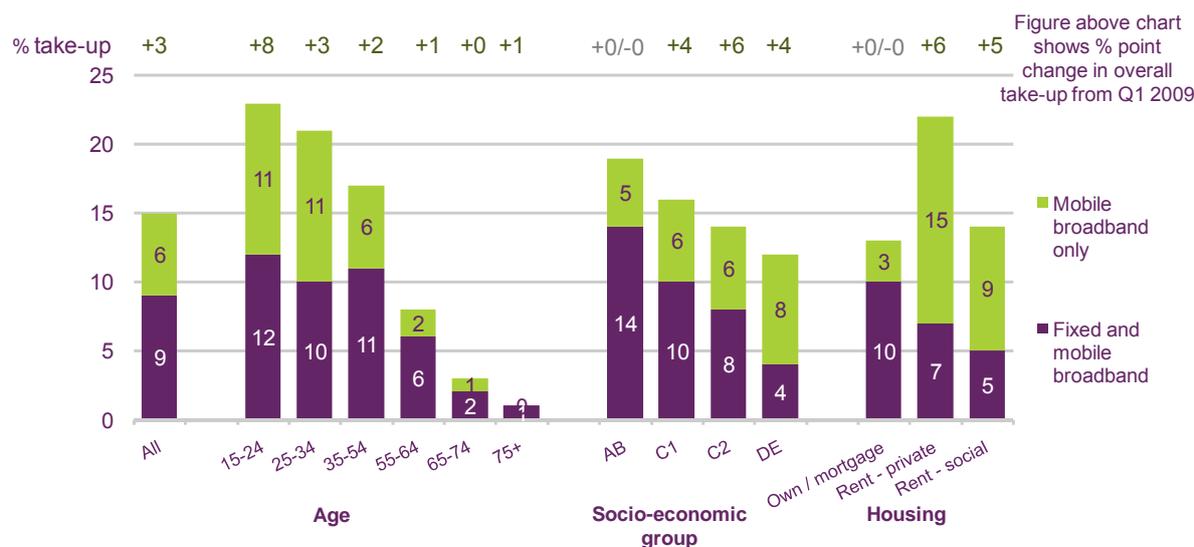
In the early stages of mobile broadband take-up, most people used it as a complement to an existing fixed-broadband service. However, by Q1 2010 there are some indications that more households are using mobile broadband as their only internet connection – Ofcom research finds that 60% of mobile users also had a fixed-line connection in Q1 2010, compared to 75% a year previously (see Figure 5.15), and our research suggests that the number of households which only had a mobile broadband connection doubled from 3% of all households in Q1 2009 to 6% of all households in Q1 2010 (note, however, that this should be treated as indicative only, as there is a margin of error associated with this consumer survey research). With fixed-line broadband levelling off at around 65%, it appears that the growth in overall household broadband take-up (up 68% to 71% in Q1 2010) is now being driven by households getting online for the first time via mobile broadband, mainly by purchasing lower-priced contract plans or pre-pay offerings,⁷¹ but also potentially by purchasing a computer for the first time, with a mobile broadband tariff that includes the price of a laptop or netbook PC within the monthly contract. A demographic analysis of mobile broadband take-up identifies some significant differences between types of user:

- The higher up the socio-economic classification, the more likely a user is to have mobile broadband. Nearly 20% of AB households claim to have mobile broadband, with nearly three-quarters of them using it as a complement to fixed broadband. These users represented the majority of early adopters. However, there was no change in levels of take-up among these users in the 12 months from March 2009.

⁷¹ Contract plans below £10.00 represented 21% of mobile broadband contract sales during May 2010, compared to only 7.3% in August 2009 according to Gfk. Based on data provided by operators, we estimate that one in five mobile broadband connections were prepay in Q4 2008, increasing to over one-third in Q4 2009.

- Much of the growth in take-up of mobile broadband since Q1 2009 has been among households in lower socio-economic groups. The largest increase in take-up has occurred in C2 households (where it has increased by six percentage points, to 14% of all C2 households) followed by C1 and DE groups (up four percentage points to 12% of all DE households). This is likely to be related to a combination of affordability and higher levels of 'mobility'. Unlike fixed broadband, mobile broadband users do not have to pay a monthly line rental, and pre-pay or one-month contracts allow users greater flexibility and control on spending without being tied into a long contract. Students (who fall mainly within DE households) and young professionals are more likely to invest in a mobile broadband connection as they can take their connectivity wherever they go, unlike a fixed-line broadband contract. More than a quarter of DE households have no fixed connection of any kind (see Figure 5.68 in the Telecoms User section below), and two-thirds of DE households that use mobile broadband do not have fixed broadband.
- Take-up is skewed towards younger consumers, with nearly one in four 15-24 year-olds and one in five 25-34 year-olds claiming to use the service and half of these using it as their only internet connection (see Figure 5.15). These two age groups have seen eight percentage point and three percentage point respective growth in penetration since Q1 2009. But only one in 12 55-64 year olds, and one in 33 65-75 year olds use mobile broadband, and this has remained largely static since Q1 2009. This higher take-up of mobile broadband among younger age groups is indicative of the changing behaviour patterns by younger users of mobile services. Increasingly referred to as 'mobile natives', they have grown up with interactive and mobile network access as the norm, and are making the step from mobile voice to mobile data services. By comparison, older users are more rooted to fixed-line communications and landline/broadband-based platforms, and are therefore less inclined to migrate to using mobile to connect to the internet.
- Adults living in rented private accommodation are more likely to use mobile broadband, with one in seven using it as their only method of accessing the internet. This is probably because those living in shared accommodation or in short-term lets, typically students and young professionals, do not want to be tied to a long-term fixed broadband contract, and prefer to take their broadband connectivity with them. It also reflects that a mobile broadband service is typically an individual purchase, whereas a fixed-line broadband service is typically a household purchase.

Figure 5.15 Take-up of mobile broadband, by socio-economic group



Source: Ofcom research, Q1 2010
 Base: All adults aged 15+ (n=9013)

Many consumers view the service as ‘not for them’

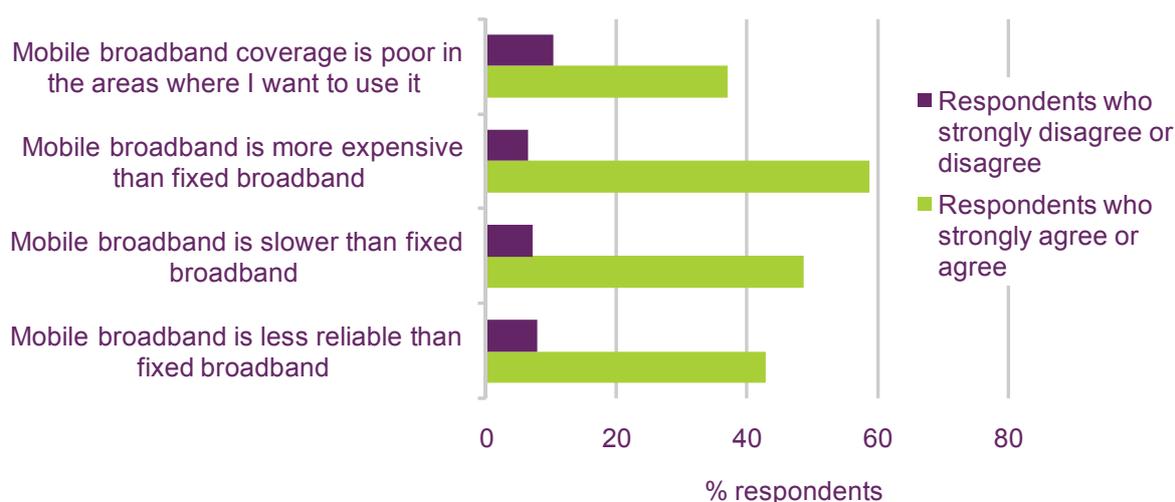
Despite the initial rapid take-up of mobile broadband, research by Analysys Mason indicates that a large majority within the UK (69%) would not consider taking the service and 45% of UK respondents disagreed with the statement that ‘mobile broadband is for me’, in comparison to the 15% who agreed⁷².

A number of factors may be driving this. The take-up of internet services on mobile phones (see Section 5.1.6) may reduce the perceived need for PC-based mobile broadband, as consumers may regard mobile-internet enabled handsets such as smartphones as a better and cheaper way to access the internet wherever they are, rather than relying on wireless connectivity through a laptop.

Another factor may be that many consumers do not perceive mobile broadband as an attractive alternative to fixed-line broadband. Nearly 60% of those who use both mobile and fixed-broadband agree that mobile broadband is more expensive than fixed, compared with less than 10% who disagree. This is despite many mobile broadband contract tariffs being priced at a similar level to fixed-broadband (with line rental) at £15 per month, and perhaps reflects the lower data caps and higher out-of-allowance data charges on mobile as opposed to fixed broadband. Less than one in ten mobile broadband users disagreed with the statement that “mobile broadband is slower than fixed broadband” and over 40% agreed that it was less reliable.

⁷² Analysys Mason, Mobile broadband survey: analysing consumer attitudes and usage, January 2010

Figure 5.16 Attitudes towards mobile broadband in the UK



Source: Analysys Mason

Question: 'How far do you agree or disagree with the following statement' n = 1024

Less than satisfied

Consumer satisfaction with mobile broadband is significantly lower than with fixed-line broadband, and has fallen since mid-2008 (Figure 5.17). There could be many reasons for differences in satisfaction between fixed and mobile broadband and the decline in satisfaction with the latter, including:

- Failure to meet consumer expectations – with mobile broadband tariffs priced at a similar level to fixed broadband and the service initially marketed by some providers as a substitute to fixed, new users of the service may be less satisfied with the service based on coverage, speed and/or reliability when compared with fixed broadband (average speeds from mobile broadband are around 1Mbit/s compared to over 4Mbit/s for fixed-line broadband⁷³).
- In some areas and at some times of the day, capacity on mobile networks may have not kept up with demand, creating network congestion resulting in poor download speeds and service disconnections. According to YouGov, satisfaction among mobile broadband users with 'staying connected' has seen the steepest declines of all network-related attributes, with 20% of mobile broadband rating their experience as poor in July 2009, compared to 9% in June 2008⁷⁴.
- Consumers may perceive that typical mobile broadband speeds and usage caps are insufficient for the use of data-hungry applications which have become increasingly popular via fixed broadband access, such as music downloads, video on demand and catch-up TV services

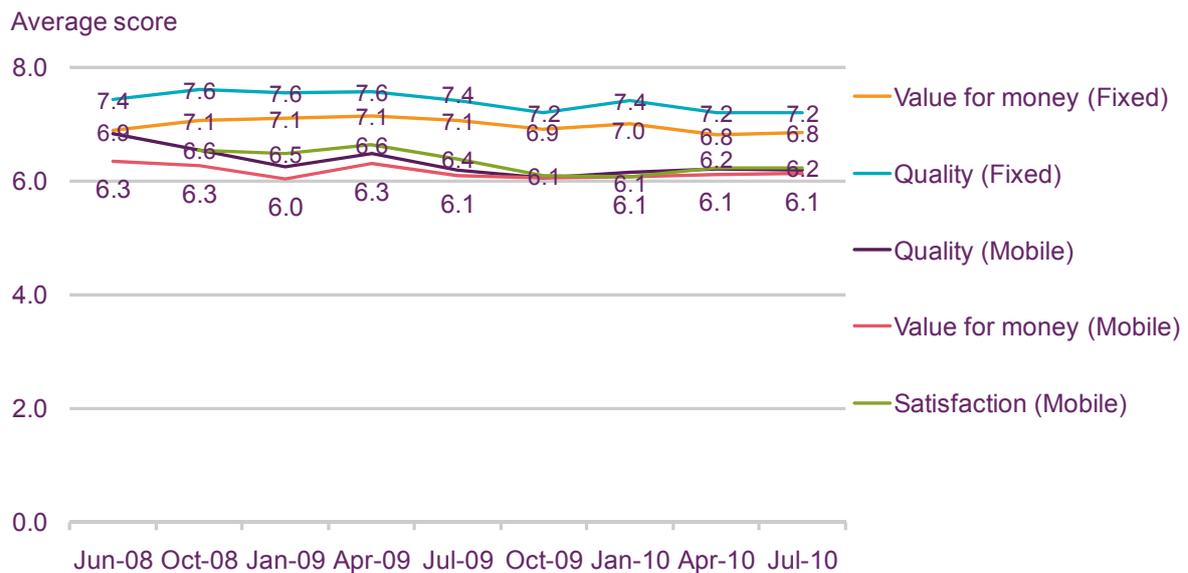
⁷³ Eptiro research in June 2009 found that the average UK mobile broadband speed was just under 1Mbit/s (<http://www.epitiro.com/news/epitiro-publishes-uk-mobile-broadband-research.html>); Ofcom research into fixed-line broadband found that average speeds were 4.1Mbit/s in April 2009 and 4.9Mbit/s in May 2010 (<http://stakeholders.ofcom.org.uk/binaries/research/telecoms-research/bbspeeds2010/bbspeeds2010.pdf>). Ofcom has commissioned research into mobile broadband performance and expects to publish findings in early 2011.

⁷⁴ YouGov Dongle Tracker Report, Wave 5. Using a scale of 1 to 10 where 1 is very poor and 10 is excellent 20% and 9% respectively rated their experience at between 1 to 3.

Operators have responded to increasingly levels of dissatisfaction by:

- Managing consumer expectations by focusing more on mobile broadband as a complement to fixed broadband.
- Providing more information on coverage and average download speeds. The majority of operators now offer a full refund within a set time period if the service fails to meet a customer's expectations.
- Increased coverage – by investing more heavily in network upgrades to the higher-speed HSPA standard and by sharing network services (T-Mobile/Orange and 3UK are in partnership, as are O2 and Vodafone). 3UK claims that by October 2010 it was providing HSPA coverage to 98.5% of the population.
- Using WiFi as a means to 'offload' data and ease capacity on the mobile networks. Many handsets are WiFi-enabled, and operators offer connectivity to public and private WiFi hot spots. Currently, O2 is in partnership with The Cloud and BT Openzone; Orange and Vodafone are in partnership with BT Openzone, and T-Mobile offers mobile users access to its own-branded WiFi hot-spots. Orange's UMA service and the Vodafone Sure Signal product allow users to create WiFi hot-spots (connected to a fixed broadband connection) for their mobile devices within their own homes.

Figure 5.17 Mobile broadband customer indicators



Source: YouGov

Base: All mobile broadband respondents who rated their mobile broadband operator and all respondents that had a fixed broadband provider.

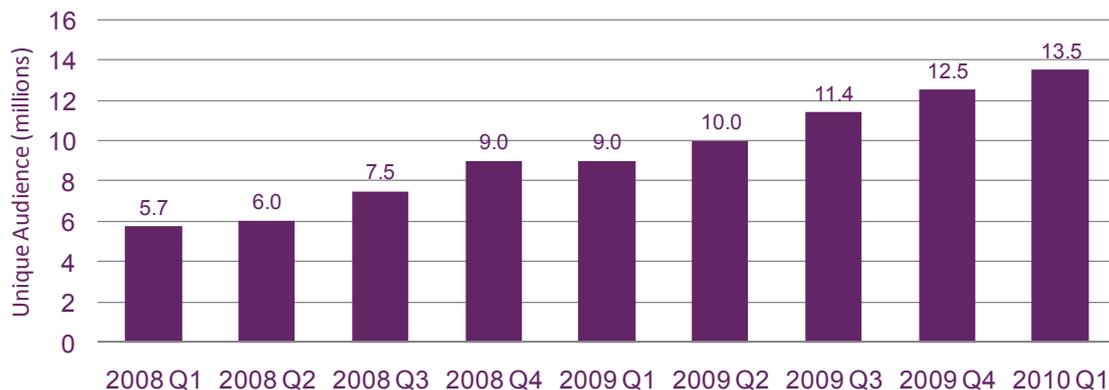
Q. Using a scale of 1 to 10 where 1 is very poor and 10 is excellent, how would you rate internet access from your provider?

5.1.6 Smartphones and the growth of the 'pocket internet'

Use of mobile internet has doubled in the past two years

In the two years to March 2010, the number of people in the UK accessing the internet on their mobile more than doubled, with data from Nielsen finding that around 13.5 million adults, or around 28% of UK adults with a mobile phone, reported that they visited at least one site on their mobile in March 2010 (Figure 5.18).⁷⁵

Figure 5.18 Number of people in the UK using the internet on mobile phones



Source: The Nielsen Company

Note: The figure reflects the number of people (aged 15+) who declare having visited any site on the internet on their mobile phone in the past 30 days

Take-up of smartphones mirrors the take-up of mobile internet

The large majority of mobile handsets in use are capable of providing internet access. MobileSQUARED estimate that 91% of handsets in use in mid-2010 were categorised either as 'smartphones' (phones that use an advanced operating system that facilitates the development and installation of third party applications which can be downloaded via the internet) or 'feature phones' (phones which are less advanced and support a simpler range of applications). Just 9% of handsets in use were categorised as 'legacy phones'; incapable of accessing the internet.⁷⁶

The take-up in the use of the internet on mobile phones has mirrored the increase in take-up of smartphones⁷⁷. Research from comScore Inc. finds that in May 2010, 26.5% of UK mobile phone users claimed to have a smartphone⁷⁸, more than double the number of two years' before. Growth has been particularly strong over the past year, growing by 81% from 7.2 million users in May 2009 to 12.8 million in May 2010 (Figure 5.19).

⁷⁵ The Nielsen data measures unique UK individuals who access the internet from a mobile phone. Data collected from mobile network operators by the GSMA/ComScore found that 16 million mobile connections accessed the internet in December 2009 (*Mobile Media Metrics* - GSMA / ComScore, 2010). The difference between the consumer research and operator data is likely to be primarily due to individuals using more than one mobile phone connection (e.g. multiple handsets/SIM cards) to access the internet. A second factor may be that some people access the internet on mobile phones without knowing it, or without visiting what they consider an internet site – for example by viewing maps via a mobile application.

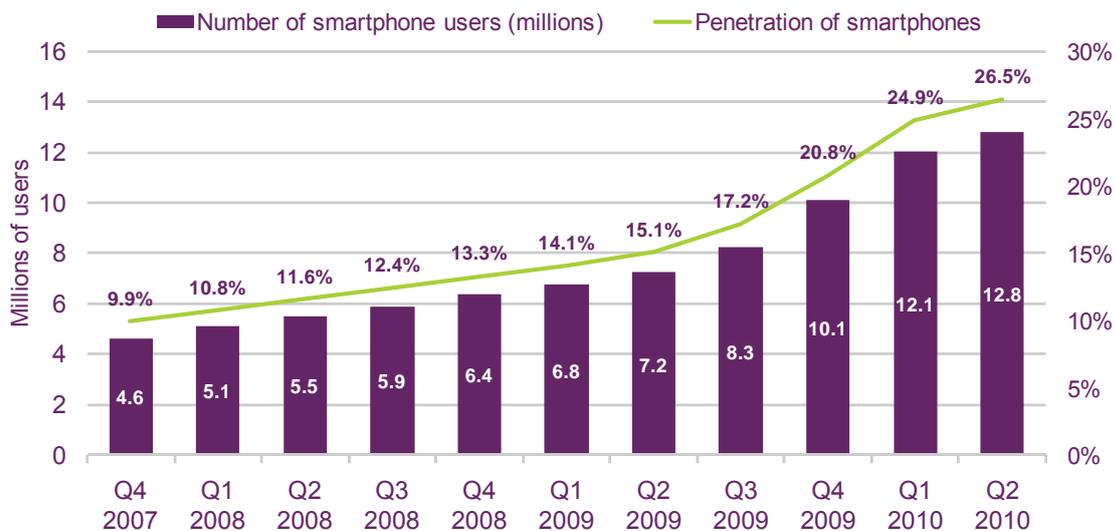
⁷⁶ www.mobilesquared.co.uk

⁷⁷ Although there is no generally agreed definition of a smartphone, the use of an advanced operating system that facilitates the development and installation of third party applications is commonly accepted as differentiating smartphones from 'feature' phones. In most cases, smartphones have other characteristics such as a large colour screen, a touchscreen or full QWERTY keyboard, access to fast internet through WiFi or 3G connection, or large memory storage.

⁷⁸ ComScore: MobiLens, June 2010

The number of mobile users with smartphones designed for internet access looks set to increase. In June 2010, nearly three-quarters (73.5%) of handsets sold with post-pay mobile contracts were smartphones⁷⁹. The arrival of smartphones based on Android (the open-source mobile operating system developed by Google) has extended choice, and relatively new players in the UK handset business, such as ZTE, Acer and Huawei, are now announcing targets to win significant parts of UK smartphone market share. Several of them, under their own brands or under the operators' brand names, aim to offer low-cost smartphones, with some models priced at under £100⁸⁰. Meanwhile, established smartphone manufacturers have enhanced their offerings, with Apple launching the iPhone 3GS in June 2009 and iPhone 4 in June 2010 and Research in Motion increasingly marketing its Blackberry-branded smartphones to the consumer segment.

Figure 5.19 Number of smartphone users and penetration of smartphones in the UK



Source: comScore, Mobilens, December 2007 - May 2010

⁷⁹ GfK 26 July 2010, Android Phones go from Strength to Strength in UK Contract Market http://www.gfkr.com/news_events/market_news/single_sites/006252/index.en.html

⁸⁰ Mobile Today, ZTE to grab share for top three spot, <http://www.mobiletoday.co.uk/News/news.aspx?id=66008&terms=android>

Open-source mobile operating systems

A mobile operating system (mobile OS, also called mobile platform) is the software that controls a mobile device – similar in principle to an operating system such as Windows or Linux that controls a desktop computer or laptop. The rise of smartphones has triggered intense competition in the area of mobile OS. Several large technology players are attempting to capture market share, but their approaches vary.

Some mobile operating platforms are closed-source and proprietary, like iOS, used on Apple's iPhones, or RIM OS, used on Blackberries. Ownership of the mobile OS allows the smartphone manufacturer to retain greater control over the end-user experience. A proprietary mobile OS may be used as a differentiating factor and may not be allowed to run on other devices, or may be licensed to a handset maker subject to a commercial agreement. Third-party developers can write software that runs on it using the application programming interface (API) and software development kit (SDK) provided by the mobile OS owner.

Other mobile platforms, such as Symbian or Google-backed Android, are open-source, which means that any handset manufacturer can install the OS on their devices and any third-party software developer can write applications for them.

In November 2007, Google formed a Linux-based open-source alliance to make inroads into the mobile platform market. Google's approach was to make open-source mobile OS Android simple to use for both end-users and application developers. Google's Android was made available to all handset makers, free of charge, placing few restrictions on its use.

As a result, now smartphone manufacturers can avoid spending time and effort creating their own OS by using Android and by just modifying it slightly for each handset. Google's strategy is similar to the strategy Microsoft used in the past in making the Windows operating system available for any computer hardware. The difference is that Google offers Android free of charge and encourages the development of third-party applications. Android has been embraced by some large handset manufacturers such as Samsung and Sony Ericsson, but also by smaller manufacturers such as HTC, Acer and ZTE.

With wide support among handset manufacturers, new Android phones are likely to be launched frequently. And, just as for the Apple iPhone, there is a vibrant and enthusiastic software developer community, committed to developing new applications for Android.

Android has made considerable progress over the past 12 months; the worldwide market share of Android-based smartphones rose from 2.8% in Q2 2009 to 17.1% in Q2 2010⁸¹. Due to successful launches of several Android-based smartphone models in the first half of 2010 Android's share of the UK mobile contract market has grown from 3% in Q1 2010 to reach 13.2% in Q2 2010.⁸²

More than three-quarters of smartphone users access the internet on their phones

Recent research by Ipsos finds that 56% of smartphone users claimed to use the mobile internet frequently, and only 22% said that they did not use it at all. This compares to half of feature-phone users⁸³ who claimed never use the mobile internet at all (Figure 5.20).

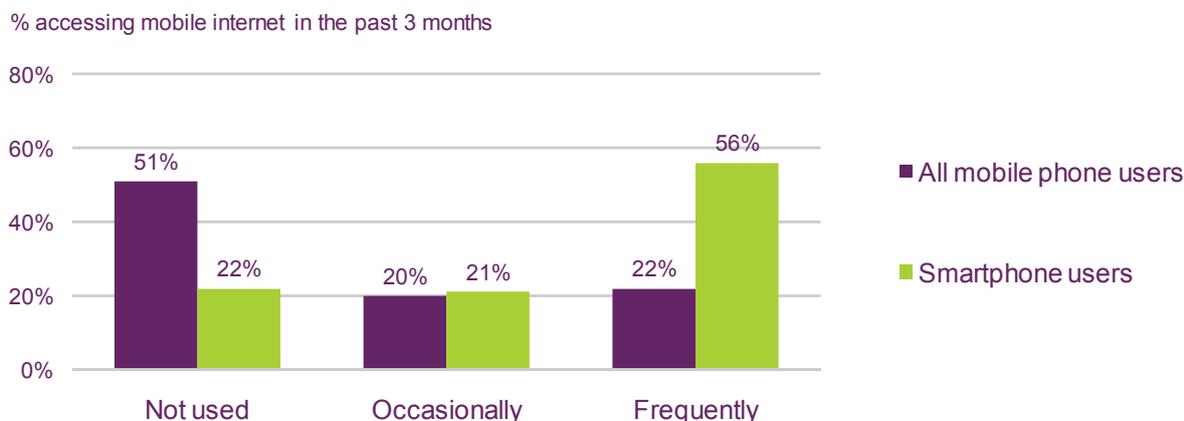
⁸¹ <http://www.bbc.co.uk/news/technology-10839034>

⁸² GfK, 26 July 2010, Android Phones go from Strength to Strength in UK Contract Market http://www.gfkr.com/news_events/market_news/single_sites/006252/index.en.html

⁸³ Feature phones are less advanced than smartphones and support a simpler range of applications, however, they are still capable of accessing the internet.

Separately, research from Essential Research found that 38% of all smartphone users claim to use the mobile internet every day, compared to 10% of all mobile users.⁸⁴

Figure 5.20 UK phone users accessing mobile internet, by handset type



Source: IPSOS MediaCT, based on an online survey carried out in November 2009 among a representative sample of 500 general mobile consumers aged 16-50

iPhone and Android users are heaviest users of mobile internet

The most popular smartphone in the UK is Apple's iPhone, which was launched in 2007 and has sold over four million in the UK. Designed specifically for ease of internet access, and with more than 100,000 applications (or 'apps') available, the iPhone has transformed the way in which consumers use data services on mobile handsets. iPhone users typically access the mobile internet more frequently and more intensively than most other smartphone users, with 87% of iPhone users declaring that they access some form of mobile internet every day⁸⁵. Although the iPhone accounts for a relatively small percentage of all mobile handsets, iPhone users account for 24% of all daily mobile internet users⁸⁶. As a result, iPhone users generate a substantial share of mobile internet traffic. Figures collected by mobile advertising company Admob suggest that Apple devices generated 59% of all mobile internet page requests in May 2010 (see Figure 5.21).

Adopters of Android-based smartphones are similarly frequent users of mobile internet services. Despite accounting for just 6.7% of all handsets sold in the UK in May 2010, the share of requests generated by Android-based devices was already 26%, according to Admob. The overall share of requests generated by iPhone handsets has fallen in recent months, reflecting the rise in volumes of mobile internet traffic generated by Android-based devices.

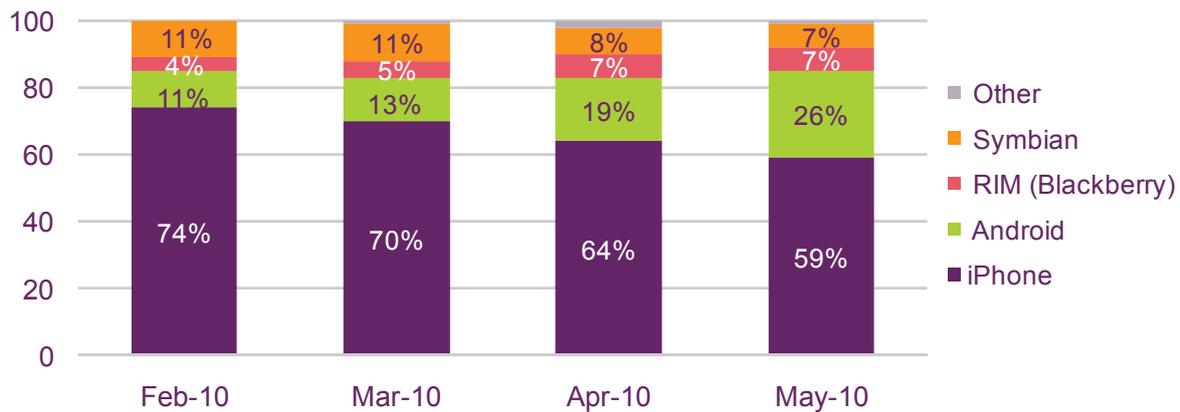
⁸⁴ Essential Research, Brandheld, March 2010 (page 9 and 17). Brandheld report is based on data collected in the survey of 2018 UK adults aged 16+, between June and December 2009.

⁸⁵ Essential Research, Brandheld, 2010 (page 9 and 17)

⁸⁶ In the Essential Research survey sample, 3% of respondents claimed to own an iPhone, and this 3% accounted for 24% of all mobile internet users. However, as other smartphone models have been launched in the first half of 2010, including Android-based handsets, iPhone 4, and others, the market may have moved on. For example, according to Ipsos MediaCT, in January 2010 iPhones accounted for 7% of all mobile phones, but this number may have risen. (Ipsos, *Moving Mobile Internet into the Mainstream*, 24 February 2010

http://ipsosmorigrads.com/DownloadPublication/1339_MediaCT_thoughtpiece_Moving_mobile_internet_into_the_mainstream_Feb10_web.pdf)

Figure 5.21 Mobile internet traffic volumes: share of requests, by mobile operating system

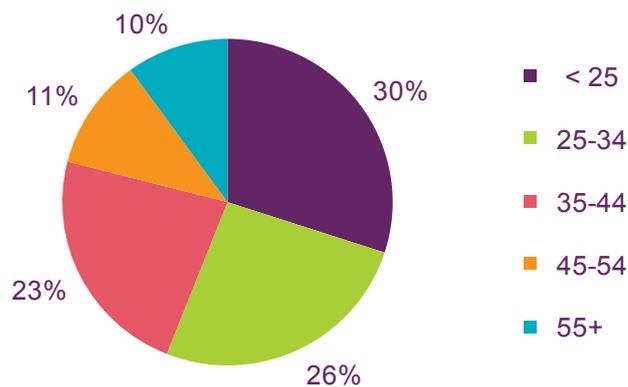


Source: Admob, May 2010, <http://metrics.admob.com/2010/06/may-2010-country-data/>

Young people more likely to use the mobile internet – but not necessarily on smartphones

Younger people are much more likely than older people to access the internet on their mobile phones. Research from MobileSQUARED (Figure 5.22) finds that 30% of mobile internet users are under 25, and just 10% are over 55. However, the correlation between smartphone ownership and age is less straightforward (Figure 5.23). Although 15-24 year-olds are most likely to use the mobile internet, they are also more likely to be using a feature-phone rather than a smartphone; iPhones account for only 7% of handsets used by 15-24 year olds, compared to 20% among 25-45 year-olds. This is likely to be related to affordability. However, those young people who do have a smartphone tend to use their handsets more intensively. According to GfK, 16-24 year olds who own a smartphone use 10.03 apps daily (mean score) which is double the national average of 4.76.⁸⁷

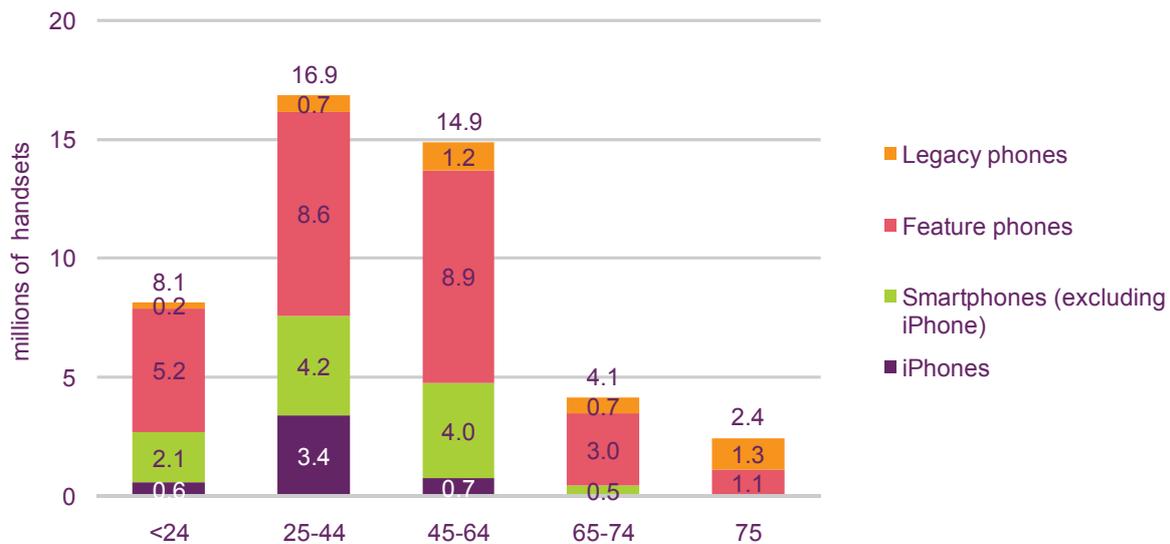
Figure 5.22 The majority of mobile internet users are under 35



Source: MobileSQUARED (2010)

⁸⁷ UK mobile app culture shows no sign of abating, 25 June 2010, GfK http://www.gfknop.com/imperia/md/content/gfk_nop/newsandpressinformation/uk_mobile_app_culture_release.pdf

Figure 5.23 Type of handset used, by age



Source: MobileSQUARED (2010)

5.1.7 Standard mobile contract lengths just got longer...

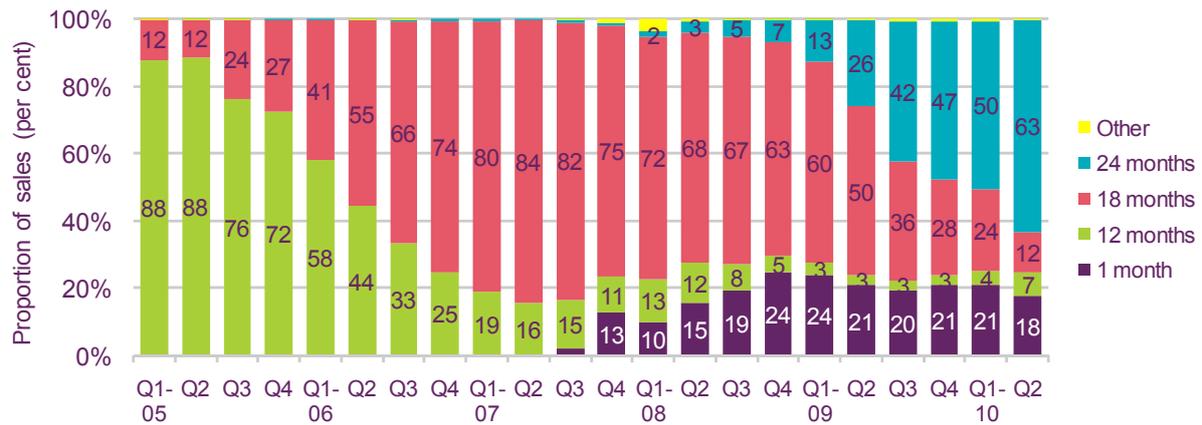
Two-year contracts with handsets become standard

Before 2005, most pay-monthly mobile connections were sold as 12-month contracts; in 2006 there was a shift towards 18-month contracts; and in 2009-10 there has been a shift towards offering 24-month contracts as standard (Figure 5.24). In Q2 2010 around 80% of all new pay-monthly contracts sold with handsets were for two years, this compares to less than one in three the year before, and less than one in thirty in Q2 2007. Most operators, by July 2010, were marketing 24-month contracts as their standard offering, with 18-month plans available at an additional cost, usually £5 per month. The savings which consumers make on longer contracts are in part related to the greater commitment they make to mobile operators, but are also driven by the cost of the mobile handset – with mobile operators able to charge a lower monthly fee as they recoup the cost of a subsidised handset over a longer period.

There is a suggestion that 12-month contracts are again becoming popular, with these accounting for 7% of new contracts in Q2 2010 compared to just 4% the previous quarter. It is uncertain whether this trend will continue, but there is increasing take-up of 12-month SIM-only contracts (which accounted for 15% of all SIM-only sales in March 2010, compared to less than 3% in March 2009, according to GfK⁸⁸), and some operators are offering alternative shorter contracts to those consumers who are wary of a 24-month lock-in. For example, Tesco Mobile launched the first 12-month contract on the iPhone 4 in June 2010, and in July announced that all Tesco Mobile contract tariffs would be available on a 12-month basis.

⁸⁸ GfK Retail and Technology UK Ltd, SIM Only share of new Mobile Connections, Mar09-Mar10.

Figure 5.24 Contract lengths for new mobile connections



Source: GfK Retail and Technology UK Ltd, *Contract Length Sales of new Mobile Connections, Q105-Q210*.

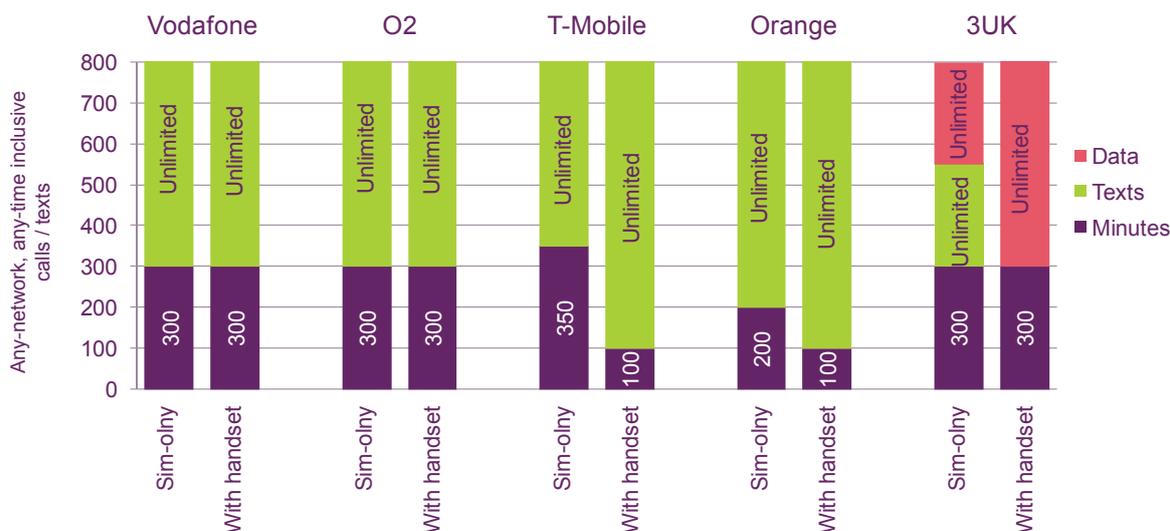
Notes: England, Scotland and Wales only (excludes Northern Ireland); based on GfK's coverage of 94% of the consumer market; based on new post-pay connections; excludes contract renewals; only represents sales through consumer channels (i.e. most business connections are excluded)

Low cost SIM-only one-month contracts the most popular alternative choice

For consumers not looking to replace their handset, a SIM-only pay-monthly contract often offers the best value, and, having launched in 2007, these contracts now account for more than one in five new pay-monthly connections. Figure 5.25 indicates that all UK operators offer £15-a-month SIM-only tariffs which include unlimited text messages and at least 200 minutes a month. Interestingly, the allowances within these SIM-only tariffs are broadly comparable to those available in a 24-month contract that includes a basic handset.

Growth of SIM-only sales are primarily being driven by consumers who are unwilling to commit to long contracts (many of these were previously pay-as-you go users) but who are attracted to the inclusive minutes, texts and data allowances. In addition, SIM-only contracts are attractive to consumers with high-end handsets who are either out of contract (because their initial contract has expired) or have purchased their handset upfront. They may prefer to keep their current handset and purchase a bundle of services on post-pay, or are wary of signing up to a 24-month subscription.

Figure 5.25 Inclusive any-network, any-time allowances in £15 SIM-only 30-day contracts, and £15 handset-inclusive 24-month contracts, July 2010



Source: Ofcom/tariff data from Pure Pricing UK Mobile Pricing Factbook/Operator websites
 Notes: Data based on tariffs available in July 2010; standard tariff with basic handset selected which offers highest number of anytime, any-network minutes and texts for £15 where available on a 24-month contract ; SIM-only one-month tariff selected with highest number of anytime minutes at £15; this table is indicative of inclusive any-time, any-network minutes only (and texts when they are additional to the maximum number of minutes) and should not be used to compare overall pricing as many additional factors are excluded, such as handset included, on-net calls, off-net calls, off-peak calls, data bundles and metered pricing

The share of post-pay mobile connections continues to increase

An ongoing trend in the UK market is the gradual migration of consumers from pre-pay (pay-as-you-go) to post-pay (pay monthly) packages. Figure 5.26 indicates that in 2009 41% of mobile connections were post-pay. During the year the number of post-pay subscriptions grew by over 3.1 million, significantly faster than pre-pay subscriptions, which increased by 455,000. This increase is likely to have been driven by the two trends discussed above:

- The increasing take-up of smartphones and the ability for consumers to pay for these phones over the course of a long (18-month or 24-month) contract.
- The increasing availability of monthly contracts, offering a sizeable number of minutes and/or text messages within contracts of £15 or less a month, and in particular, SIM-only contracts.

Figure 5.26 Market share of post-pay and pre-pay subscriptions



Source: End-year data provided to provided to Ofcom by operators

5.2 The telecoms industry

5.2.1 Introduction

In this section of the report we examine the recent trends in the telecommunications market from an industry and operator viewpoint. This section is structured as follows:

- Section 5.2.2 provides an overview of the industry in its entirety, considering recent developments in revenue growth, and availability and take-up of telecom services.
- Section 5.2.3 covers the latest developments in the roll-out of local loop unbundling (LLU) and the take-up of LLU services.
- Section 5.2.4 looks at the industry from the perspective of voice services, across both fixed and mobile networks. This section covers all methods of voice telephony including voice over internet protocol (VoIP).
- Section 5.2.5 looks at the industry from the perspective of data services, across both fixed and mobile networks. Internet access is the most common data service, particularly over fixed-broadband networks, and increasingly, over mobile networks. Text messaging is regarded as a data service within this section, although it is primarily used as a substitute for voice calls.

Structuring our market data by voice and data is a change from previous *Communications Market* reports in which we grouped our analysis by fixed-line voice, broadband and mobile. We believe that the wide availability and take-up of voice and data services across fixed and mobile networks means that this structure makes for easier comparison of voice and data services across all platforms. It also allows us to better explore the contrasting trends of voice and data services, where we see voice use flattening off and data use continuing to grow rapidly.

The key findings in this section of the report are:

- **Total retail revenue falls for the first time.** Operator-reported retail telecoms revenue declined by 2.6% to £30.4bn in nominal terms in 2009. This was driven by the first year-on-year fall in mobile voice revenues, combined with a small fall in fixed-line broadband revenues and an acceleration in the decline in fixed-voice revenues.
- **Fixed-line connections continue to fall.** The number of fixed lines fell by 1.1 million to 32.1 million lines during 2009 ; mobile connections continued to rise, reaching over 80 million driven mainly by growth in mobile broadband connections
- **Mobile increases proportion of voice calls; but share of voice revenue falls.** Forty six per cent of voice minutes originated on mobile phones in 2009, up from 41.8% in 2008. However, mobile's share of voice revenues fell slightly from 54.9% in 2008 to 54.3% in 2009
- **BT's share of fixed-line connections fell to under 60% for the first time in 2009.** The number of lines provided by BT fell from 20.6 million to 18.2 million lines during 2009. This is 5.2 percentage points lower than in the previous year and 23.3 percentage points lower than at the end of 2004.

- **Revenues from fixed internet and broadband services declined by 10%.** Despite an increase in the penetration of broadband among households to 73%, revenues from these services fell by £0.1bn to £3.3bn during 2009.
- **Adoption of 3G mobiles accelerates.** Nearly one in three mobile connections were using 3G at the end of 2009, as total 3G connections increased by 39% during the year to 25.5 million.

5.2.2 Industry overview

According to the Office of National Statistics (ONS) the UK telecommunications industry generated £63.9bn in turnover during 2009, an increase of 3% on 2008 (Figure 5.27). This figure and the trend in growth shown by ONS data is significantly different to the figures reported by the telecom operators to Ofcom; this has led us to estimate total wholesale and retail telecoms revenue at £40.6bn, 3% lower than in 2008.

This discrepancy is explained by the fact that ONS figures include turnover from activities in markets not regulated by Ofcom, such as revenue from the transmission of radio and television programmes, and network installation and maintenance costs.

Figure 5.27 UK telecoms industry revenue overview



Source: Ofcom / ONS / operators

Note: Includes estimates where Ofcom does not receive data from operators

Overall service revenues fall for the first time

Ofcom's own figures from operators show that overall retail service revenues from telecoms operators fell during 2009, for the first time since market data began to be collected by Oftel in 1992. Figure 5.28 shows that total operator-reported revenues fell by 2.6% during 2009, to £30.4bn. The main cause of this fall was the first-ever decline in mobile revenue, which was down 3.5%. Fixed-line internet and broadband services fell by 1.9%, while the long-term decline in revenue from fixed-line voice services accelerated in 2009, decreasing by 3.1% compared to 2% in 2008 and 1% in 2007.

Figure 5.28 UK telecoms industry retail revenue



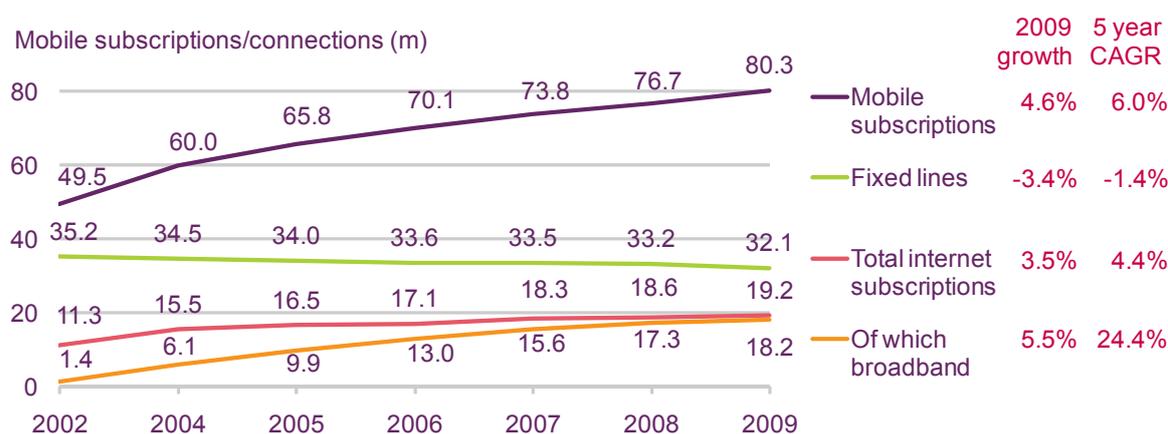
Source: Ofcom / operators / IDC

Fixed-line decline accelerates as mobile connections exceed 80 million

Fixed-line telephony continued to decline in 2009, falling by 3.4% (1.1 million) to 32.1 million lines (Figure 5.29), the fastest rate of decline since connections began to decrease in 2002. The rate of decline in lines used by business was nearly twice as high (-5%) as that in the residential fixed telephony market (-2.7%), suggesting that business users are more likely to switch away from fixed voice to other methods of communication, including VoIP and mobile.

The number of mobile connections continued to rise in 2009, increasing by nearly 5% to 80.3 million, partly driven by the increasing take-up of mobile broadband connections using a USB dongle or data card, which grew by 1.6 million connections over the year. Growth in the total number of residential and SME broadband connections slowed during 2009 to 5.5%, indicative of a mature market with a high level of penetration (65%).

Figure 5.29 Total telecoms connections



Source: Ofcom / operators

Note: Includes estimates where Ofcom does not receive data from operators; broadband excludes corporate connection; fixed-line connections includes PSTN lines and ISDN channels.

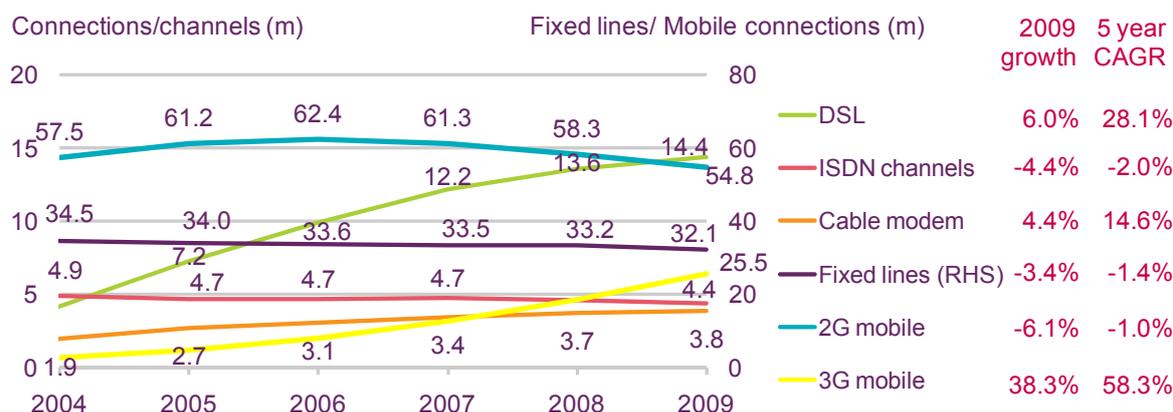
3G and DSL connections on the rise

The number of digital subscriber-line (DSL) connections continued to grow in 2009, rising by 6% to 14.4 million, reflecting the continued growth in broadband penetration (Figure 5.30). In contrast, the decline in ISDN channels began to accelerate in 2009 (-4.4%) compared to

2008 (-2.5%), suggesting that an increasing number of businesses are switching their voice calls to cheaper alternatives such as VoIP over broadband DSL and mobile telephony.

The number of mobile connections able to access third-generation mobile technology (3G) increased by 7.1 million during 2009 to 25.5 million; double the total number at the end of 2007. 2G connections fell by just 6.1% or 3.5 million connections during 2009, to 54.8 million, as the overall number of mobile connections grew by 4.6% to 80.3 million.

Figure 5.30 Fixed and mobile connections, by technology



Source: Ofcom / operators

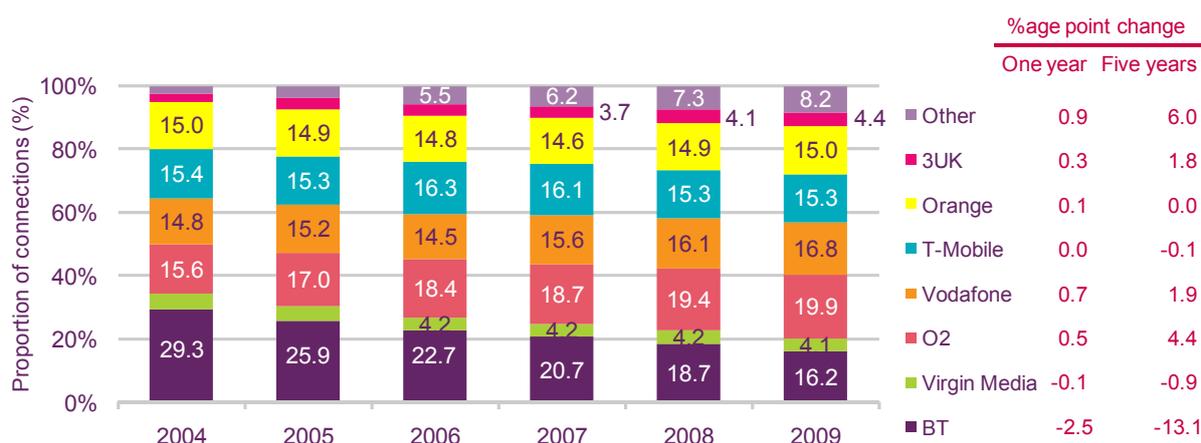
Note: Includes estimates where Ofcom does not receive data from operators; broadband excludes corporate connections

Mobile continues to take greater share of connections

Mobile operators made up over 71% of all telecoms connections at the end of 2009 according to Figure 5.31; an eight percentage point increase over the five-year period. This increase is likely to continue as the number of mobile-connected devices - particularly focused on data-centric services - continues to expand. Vodafone reported the largest increase in share among the mobile operators, increasing by 0.7% due to a strong increase in post-pay connections in the second half of 2009.

The decline in BT's share accelerated slightly in 2009 falling by 2.5 percentage points to 16.2%; this compares to a 2pp decline in 2008. Its share of total fixed connections stood at 56.7% at the end of 2009, down 5.2pp, as alternative operators, particularly LLU operators, continued to take market share. Growth in the number of cable connections (+33,000) during 2009 was less than growth in connections overall, resulting in a slight decline (-0.1%) in overall share.

Figure 5.31 Share of total UK fixed and mobile telecoms connections



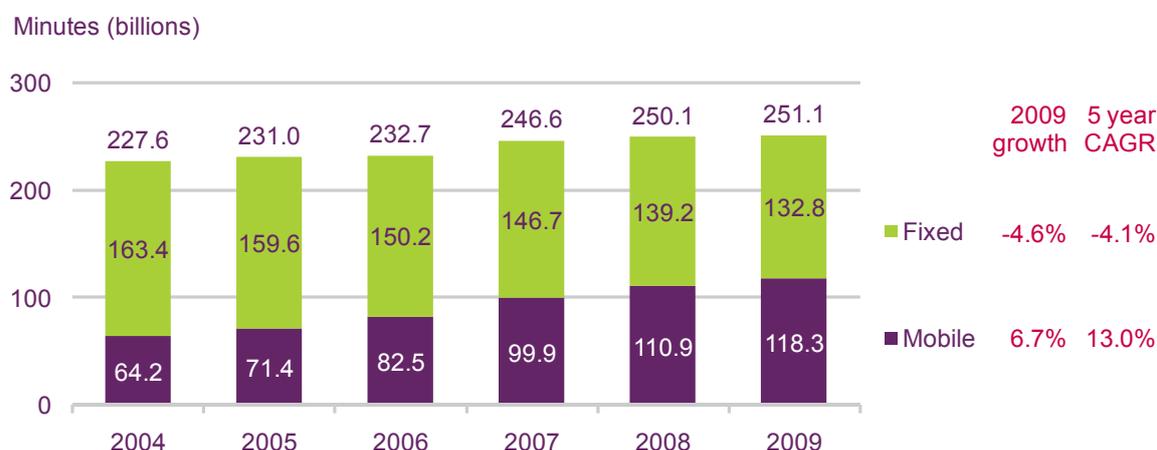
Source: Ofcom / operators

Note: Includes estimates where Ofcom does not receive data from operators; 'Other' includes carrier pre-selection and wholesale line rental in addition to fixed other licensed operators. MVNOs and mobile service provider connections are included within the network operator figures

Mobile drives up overall voice telephony call volumes

Figure 5.32 indicates that since 2004 the growth in mobile voice has more than offset the decline in fixed voice volumes. This trend continued in 2009, although the overall increase in voice volumes was just 0.4%. Mobile voice volumes have increased by an average of 13% annually over the last five years, although the increase slowed to 6.7% in 2009 from a peak of 21% in 2007.

Figure 5.32 Total voice volumes



Source: Ofcom / operators

Note: Includes estimates where Ofcom does not receive data from operators

5.2.3 Local loop unbundling

Growth in proportion of unbundled local exchanges slows

During 2009 the proportion of UK premises connected to an unbundled exchange increased by just 0.4% to 84.5%, this compares to increases of 4.0% in 2008 and 13.6% in 2007. The slow-down in growth probably reflects LLU providers' focus on increasing take-up of their

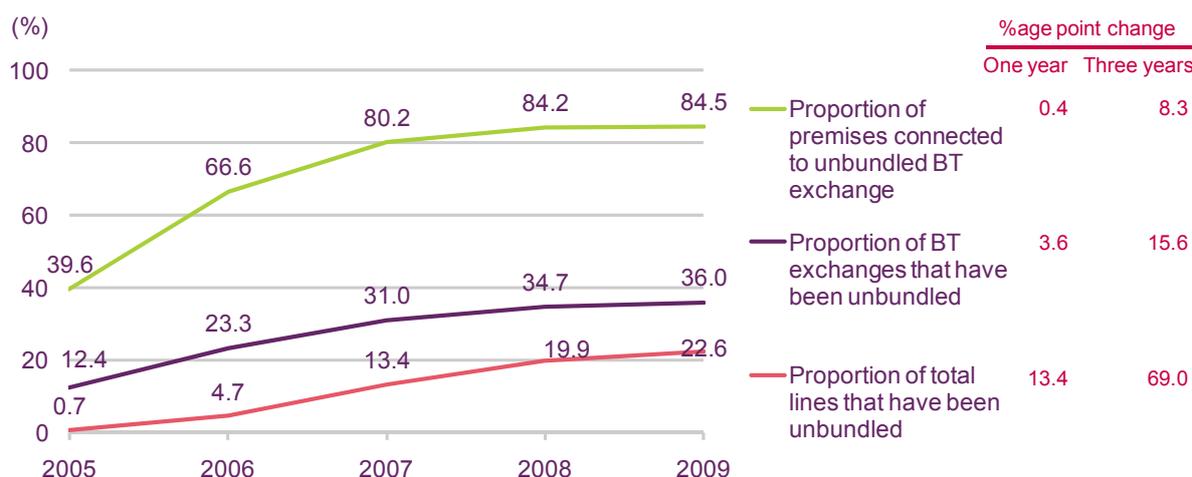
services from existing unbundled exchanges, shown by a 13.4% increase in the proportion of lines taking LLU services in 2009, compared to a 6.5% increase in 2008.

In the early years of LLU, alternative providers concentrated initially on unbundling exchanges that were connected to a large number of premises; unbundling just 36% of BT local exchanges achieved nearly 85% LLU availability (see Figure 5.33). Given the high up-front costs of unbundling an exchange, LLU providers are likely to be less inclined to unbundle the remaining BT exchanges, as these are typically connected to far fewer premises than those which have already been unbundled.

Local loop unbundling (LLU)

LLU enables operators to site their own equipment in the incumbent's local exchange, lease the local loop (the twisted copper pair from the exchange to the customer's premises) and, after connecting the local exchange to their own network, provide either DSL broadband or DSL broadband and fixed voice services. Under partial LLU the unbundling operator and the incumbent share the same line, with the LLU operator providing DSL broadband services and the consumer continuing to be billed for voice services by the incumbent. With full LLU the unbundling operator provides both DSL broadband and voice services and the customer's relationship with the incumbent ceases.

Figure 5.33 Proportion of unbundled exchanges and connected premises



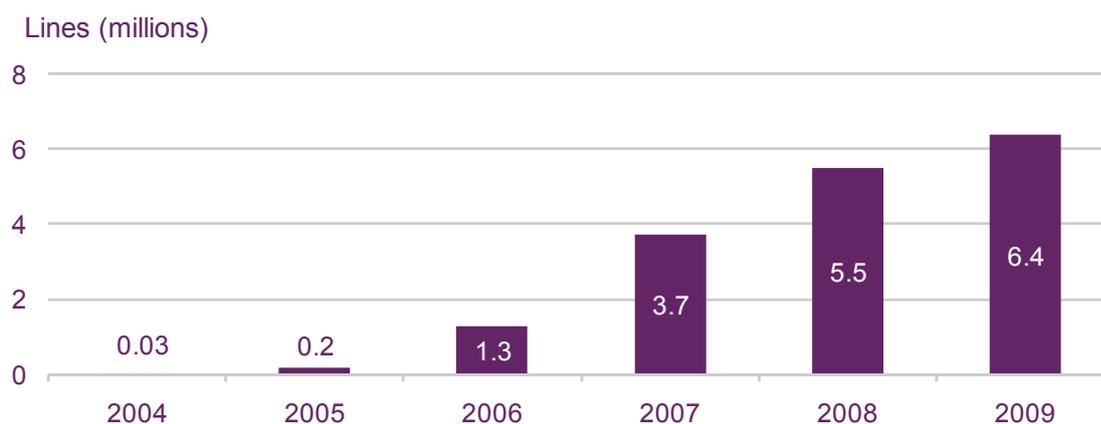
Source: Ofcom / operators

Growth in LLU lines slows to 16% during 2009

There were a total of 6.4 million unbundled lines providing either broadband or fixed voice and broadband services at the end of 2009, an increase of 0.9 million lines on 2008, considerably lower than growth in 2008 (+1.8 million) and 2007 (+2.4 million) Figure 5.34.

In the past, providers using unbundled lines have typically focused on providing unbundled broadband, while relying on the incumbent, BT, to continue supplying fixed voice services. But recently, LLU providers such as Sky (May 09) and O2 (Feb 2010) have begun to offer unbundled voice services as part of their bundled packages; Sky's use of bundled voice packages within its triple-play voice, broadband and TV accounts for a growing proportion of unbundled lines.

Figure 5.34 Fully and partially unbundled lines



Source: Ofcom / operators

5.2.4 Voice services

Fixed-line voice revenues

Fixed-line voice revenues fall by £0.3bn during 2009

The decline in fixed line voice revenues accelerated in 2009, falling by 3.1% to £8.8bn (Figure 5.35). This was partly due to a decline in revenue from international calls (-7.3%) as well as a decline in revenues from calls to mobiles (-5.8%) as the volume of fixed-to-mobile calls decreased (-6.3%). Revenue from 'other' voice calls, including calls to special services and premium-rate calls, declined by 5%, while revenues from access fell by 2.3% compared to a 1.2% increase in the previous year, mainly due to the significant fall in the number of fixed-line connections.

The loss of revenue from international calls is likely to be due to the growth of standard fixed-line access tariffs with discounted international call rates, or inclusive international minutes within a standard bundle of minutes. For example, Sky customers purchasing the Sky Unlimited Talk package for £5 a month receive unlimited calls to 20 international destinations and unlimited calls to mobiles in the USA & Canada, while new customers subscribing to TalkTalk's UK Anytime and UK Evening and Weekend phone packages receive unlimited calls to 36 international landline destinations.

Figure 5.35 Fixed voice telecoms revenues



Source: Ofcom / operators

Average access revenue per fixed line continues to rise

Average revenue per fixed line fell marginally during 2009, declining by £0.11 to £23.21. Revenue from access (line rental), however, increased (by 3.2%) as providers raised line rental charges in line with BT's £1 increase in April 2009 (Figure 5.36). At the same time, most providers are including more inclusive minutes within standard line rental tariffs, contributing to a 4.1% decline in average revenue from metered use, as users take advantage of their bundled minutes, although this decline slowed compared to 2008 (-4.4%) and 2007 (-5.9%). (Note that these data are from 2009, and pre-date BT and several other operators changing the hours of off-peak calls (which are inclusive within many tariffs) from 6am to 6pm to 7am to 7pm; we have yet to see whether this will have any impact on revenues.)

Figure 5.36 Average monthly voice revenue per fixed line



Source: Ofcom / operators

Note: Includes spend on non-geographic voice calls

Mobile voice revenues

Mobile voice revenues fail to keep pace with growth in mobile call volumes

Since 2004 an increasing proportion of total voice volumes have originated from mobile devices. Based on current trends, mobile will account for the majority of voice telephony services within the next two years (Figure 5.37). Comparative revenues for mobile voice

(including line rental), however, have not grown at a similar rate and in 2009 mobile voice revenues actually declined as a proportion of total voice revenues, from 54.9% to 54.3%. This trend underlines how revenue per mobile voice minute has fallen, especially during 2009; it should also be noted that this decline is likely to be understated, as bundled tariffs revenues, which are included in this analysis, increasingly include not only voice minutes but also SMS (in some cases unlimited) and mobile data allowances.

Figure 5.37 Mobile telecoms share of voice connections, revenue and volumes



Source: Ofcom / operators

Note: Includes estimates where Ofcom does not receive data from operators. Mobile figures do not include dongles/PC datacard connections

Revenue from voice and line rental falls by 6%

Revenue from line rental, bundled mobile services (i.e. use which is included within the line rental fee) and metered voice (i.e. voice calls that are outside the line rental fee, including pay-as-you-go use) fell overall by £0.7bn in 2009 to £10.4bn, significantly more than the £0.1bn decline in 2008 (Figure 5.38). Since 2006 revenue from line rental (i.e. the monthly fee payable by contract customers, which typically includes a number of voice minutes and/or SMS and/or data, and often also includes payment for some or all of a mobile handset) has been in decline, falling from £6.4bn to £5.7bn in 2009. This decline has largely been driven by falling prices, but the rise in SIM-only contracts is probably also a factor; SIM-only tariffs are typically lower in price, as operators do not have to recoup the value of a subsidised handset over the duration of the contract.

Until 2009 this trend was largely counter-balanced by increased revenues from voice charges outside bundled offerings. In 2009 however, these revenues also began to decline, and fell at a faster rate (-7.4%) than revenue from bundled services (-4.6%). It appears that a combination of lower pricing (whereby more inclusive voice minutes are included for the same priced tariff bundles) in combination with an increasing proportion of mobile users taking pay monthly contracts rather than pay-as-you-go, has resulted in a decline in the number of chargeable minutes that fall outside the allowance.⁸⁹

⁸⁹ According to research conducted by Opinium which surveyed 2,000 UK adults, 55% of mobile phone users on monthly contracts never use up their free minutes
http://www.reghardware.com/2010/07/05/contract_phones_wrong_contractss/

Figure 5.38 Estimated mobile telecom retail revenue from bundles and voice services



Source: Ofcom, based on data provided by operators

Note: The split between revenue from rental, bundled calls and SMS AND voice revenue (outside bundle) is available only from 2006 onwards.

Average voice revenue per connection fell by 10% in 2009

Average voice and access revenue per mobile connection has fallen steadily since 2004 as a result of falling prices and an increasing number of mobile connections (there are now over 1.3 connections per person in the UK). Since 2004 the average amount of revenue generated by each mobile connection from services other than SMS and data has fallen by 23% to £11.10, and this decline accelerated in 2009, as revenue per connection fell by a further 10% (Figure 5.39).

Figure 5.39 Average monthly retail voice revenue per mobile subscription



Source: Ofcom, based on data provided by operators

Note: The split between revenue from rental, bundled calls and SMS AND voice revenue (outside bundle) is available only from 2006 onwards.

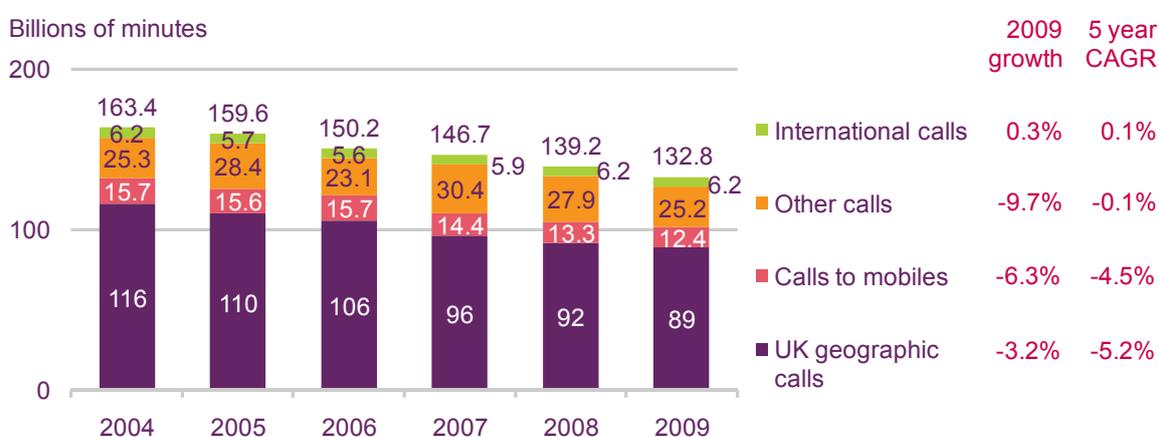
Fixed-line call volumes

Decline in fixed call volumes slows to 4.1%

Fixed call volumes have fallen by nearly 20% over the past five years, from a peak of 164 billion minutes to 133 billion, largely as a result of the decline of calls to UK fixed and mobile numbers (Figure 5.40). The annual rate of decline slowed to 4.1% in 2009, compared to 4.6% in 2008, although it was higher than in 2007 (-2.3%).

The largest fall in fixed-line volumes during 2009 originated from 'other' calls, in which category volumes declined by nearly 10% to 25.2 billion, possibly caused by the decline in calls to directory enquiries and premium rate numbers, as consumers use the internet to access information. The only type of fixed line calls that increased in 2009 were international calls, up by 0.3% to 6.19 billion minutes, a level similar to that reported in 2004.

Figure 5.40 Fixed telecom call volumes

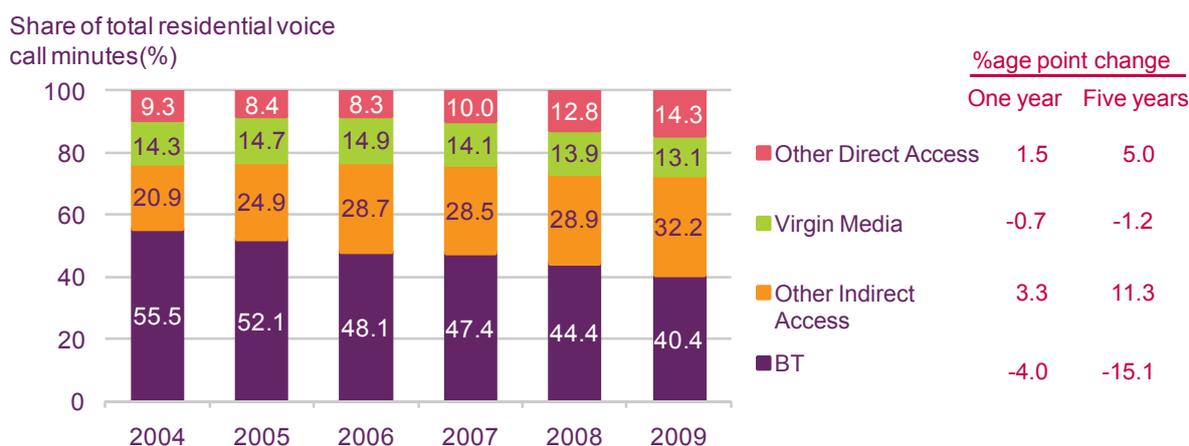


Source: Ofcom / operators

BT's share of fixed call volumes continues to fall

BT's share of total fixed-line call volumes fell by 4.0 percentage points during 2009 to 40.4%, while other direct (+1.5pp) and indirect access providers (+3.3pp) increased their share (Figure 5.41). Growth in the share of call volumes made using indirect access providers other than BT is driven mainly by providers of services via wholesale line rental (WLR) and local loop unbundling (LLU).

Figure 5.41 Share of retail residential voice call volumes



Source: Ofcom/operators
Excludes NTS calls

BT's share of UK and international calls continues to fall

Against other fixed-line providers, BT lost share of international calls (-4.1pp), UK calls (-4.4pp) and in particular calls to mobiles (-5.9pp) during 2009. The incumbent operator now accounts for less than 50% of all three call types (Figure 5.42).

Figure 5.42 BT share of retail fixed-voice call volumes, by type



Source: Ofcom / operators

Mobile call volumes

Growth in mobile voice slows

The number of call minutes made from mobiles increased by 6.7% during 2009, down from 11.1% in 2008 and 21% in 2007 (Figure 5.43). Growth in the amount of international call volumes (+11.3%) contributed to 'other' call volumes increasing by 12% during 2009, reflecting the growth of international call-focused MVNOs such as Lebara Mobile and Lycamobile, in addition to lower international pricing and 'bolt-on' international tariffs from mobile network operators. UK mobile-to-mobile calls (off-net and on-net) increased by 7.8% during 2009, with calls to fixed lines increasing by just 1.6%.

Figure 5.43 Mobile telecom call volumes



Source: Ofcom / operators

Note: Includes estimates where Ofcom does not receive data from operators

Pre-pay call minutes grow at faster rate than contract

Despite pre-pay losing market share in terms of connections (see Figure 5.44), pre-pay voice volumes grew faster than contract (pay-monthly) voice volumes in 2009 (+7.9%) and achieved a higher average annual growth rate (+17.9%) over the five years since 2004. By the end of 2009 pre-pay accounted for 29% of mobile call volumes, compared to 28% in 2008 and 23% in 2004. This is driven by falling prices for pre-pay services prompting higher use (we find that the cost per minute for pre-pay calls has fallen by 19% over the last two years – see Section 5.3.3 in the Telecoms User section). However, it also reflects lower use per contract subscriber over the past two years (-0.4%) compared to pre-pay (+24%), suggesting that recent growth in contract connections comes largely from mobile users with lower call volumes (and perhaps an increasing proportion of younger users, who are more likely to rely on text messaging rather than voice as their main means of communication, switching to contract plans, which now often include unlimited SMS).

Figure 5.44 Mobile telecom call volumes, by subscription type



Source: Ofcom / operators

Note: Includes estimates where Ofcom does not receive data from operators

Fixed-line voice connections

BT's share of fixed voice connections falls to below 60%

BT's share of analogue lines and ISDN channels fell to 56.7% in 2009 (18.2 million lines). This is 5.2 percentage points lower than in the previous year and 23.3 percentage points lower than at the end of 2004. Virgin Media's share has remained flat over the past five years at around 14%, while the number of lines provided by operators other than BT and Virgin Media has increased by over 340% since 2004, accounting for 9.3 million lines and 29% of total fixed-line connections at the end of 2009 (Figure 5.45).

Figure 5.45 Fixed-line connections, by operator



Source: Ofcom / operators

Note: Includes estimates where Ofcom does not receive data from operators

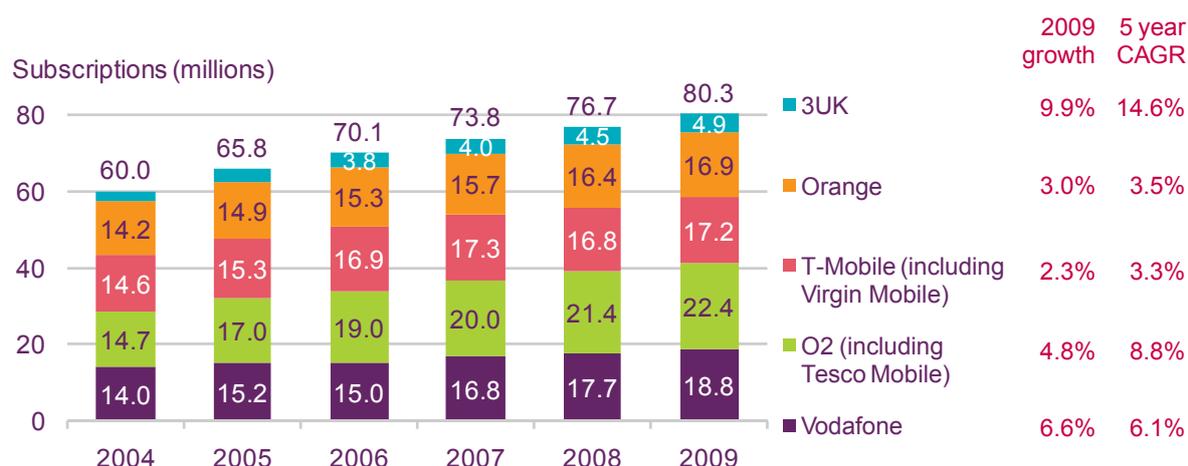
Mobile connections

Vodafone achieves highest increase in mobile connections in 2009

At the end of 2009 O2 had the largest number of mobile connections on its network, at 22.4 million, although Vodafone managed to achieve a higher growth rate over the year (+6.6), gaining 18.8 million connections (Figure 5.46). The UK's smallest mobile network operator, 3UK, recorded the largest percentage increase (9.9%) in connections during 2009, although this was lower than in 2008 (13.9%), possibly as a result of the slow-down in growth of mobile broadband (see Section 5.1.5) which 3UK spearheaded from 2007 onwards.

All five mobile network operators increased their number of subscribers in 2009, with Orange and T-Mobile achieving the lowest growth in connections during the year and over the five-year period since 2004. In May 2010 the two operators merged to form a new company called Everything Everywhere Ltd, which (based on end-of-2009 data) had a combined subscription base of 34.1 million on both networks (including MVNOs such as Virgin Mobile). The company has announced that the T-Mobile and Orange UK brands will continue to operate in the UK for at least 18 months following the merger.

Figure 5.46 Mobile connections, by operator



Source: Ofcom / operators

Note: Includes estimates where Ofcom does not receive data from operators

T-Mobile/Orange merger – Everything Everywhere

In September 2009 the European owners of Orange and T-Mobile UK (France Telecom and Deutsche Telekom) announced that they would merge their UK businesses to create a 50/50 joint venture under the company name Everything Everywhere Ltd. The European Commission granted clearance to the proposed merger in March 2010, after commitments were given on spectrum and network sharing.

The new entity merged its accounts in April 2010 and was officially launched on 1st July. The companies involved said that they expected the merger to lead to operational cost savings of £445m per year from 2014 onwards, dependent on spend of up to £800m in integration costs over the next four years. The two brands will co-exist for 18 months, at which time a new branding strategy will be rolled out.

At the end of 2009, Orange and T-Mobile's combined customer base stood at over 34 million subscriptions on their network and a market share of 42.5% (36.4% excluding independent service providers and MVNOs).

Contract continues to increase share of mobile connections

Contract (pay-monthly) connections continued to account for an increasing proportion of mobile connections during 2009, increasing by 10% to 33 million connections (Figure 5.47). The growth of one-month SIM-only contracts, which enable subscribers to pay for their mobile service in arrears without committing to a long-term contract, has contributed to some pay-as-you-go subscribers migrating to contract tariffs. In addition, the latest smartphones are usually initially available only on post-pay contracts, and the high up-front costs of paying for high-end smartphones such as the iPhone 4 (typically retailing at around £500 SIM-free), means that contract tariffs are a way of spreading the cost of the handset over a 12, 18 or (increasingly) 24-month period, as contract subscribers effectively pay for their 'free' or low-cost smartphone over the length of their contract.

Figure 5.47 Pre-pay and contract mobile connections



Source: Ofcom / operators

Notes: Based on data provided to Ofcom by operators; includes estimates where Ofcom does not receive data from the operators

5.2.5 Data services

The growing importance of data services to the telecoms industry is evident in Figure 5.48, which shows that data services contributed 37% of total industry service revenues in 2009, up from 15% ten years previously.

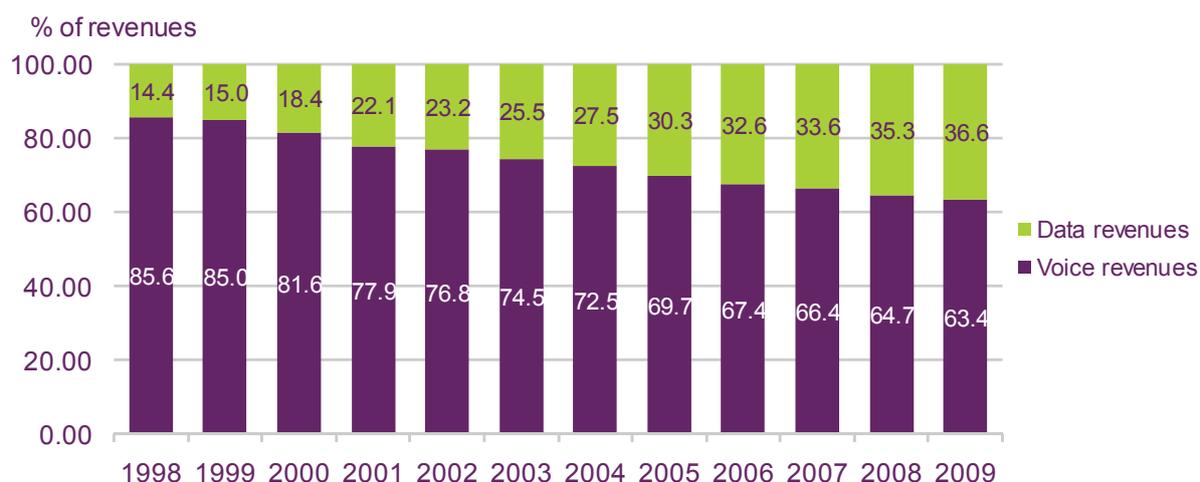
With overall voice revenues in decline since 2003, and mobile voice revenues falling for the first time in 2009, operators are looking to data revenues to drive growth. The following examines the development of data services in terms of revenues, connections and volumes from the perspectives of both fixed-line and mobile operators.

Fixed-line broadband revenues

Revenue from fixed-line broadband has gone some way to counter the falls in revenues from voice telephony; however, as shown in Section 5.2.2, internet access revenues declined in 2009 as fixed-line broadband take-up levelled off. Nevertheless, it is likely that in the coming years, fixed-line operators will look to data services to drive growth, through offering higher-speed connectivity with the roll-out of superfast broadband, and developing new revenue streams through offering new services such as IPTV, cloud computing (file storage online) and machine-to-machine services such as smart metering and fleet management.

Mobile network operators (MNOs) face a similar challenge, with a steep fall in mobile voice revenues in 2009 leading to overall mobile revenues falling for the first time. MNOs are therefore looking to generate revenue growth from mobile broadband services available over connected laptops, handsets and new wirelessly connected devices such as e-readers, 'tablets' and other data-centric devices. Like fixed operators, mobile providers are investing in networks that provide faster data speeds (3G+ and 4G services) and are looking to develop new services that allow for the continued growth of devices connected wirelessly.

Figure 5.48 Voice and data revenue as a % of total telecom revenue



Source: Ofcom / operators

The bundling of messaging and data services in with monthly rental tariffs means voice revenue will include an element of mobile data revenue

Fixed-line broadband and internet revenues fall by £0.1bn

Revenues from fixed-line internet and broadband services declined by 2% in 2009 to £3.3bn; mainly driven by a 28% reduction in residential narrowband revenues and 21% decline in revenues from SME. Growth in revenues from residential broadband services was flat during 2009, rising by 5.6%, compared to 5.7% in 2008.

Figure 5.49 Estimated UK internet and broadband retail revenue



Source: Ofcom / operators

Mobile data revenues

Revenue from non-bundled SMS falls by 9% during 2009

It is difficult to separate out data revenues from overall mobile revenues, as the line rental fee in contract connections frequently includes SMS messages and a data usage allowance. Figure 5.50 below shows the revenues from out-of-bundle SMS and data, and indicates that SMS revenues fell for the first time in 2009, by £0.3bn to £2.7bn. However, this does not tell the whole story; a characteristic of mobile pricing is that an increasing number of contract and pay-as-you-go tariffs include a high volume of inclusive SMS messages, and in some

cases unlimited messages; for example, T-Mobile offers ‘free texts for life’ for pre-pay users that top up by at least £10 every month.

Similarly, mobile tariffs increasingly offer inclusive data use within the monthly fee; all iPhone tariffs, for example. ‘Metered’ data revenues (i.e. those outside the monthly line rental fee) grew by 26% to £1.7bn in 2009, although it is likely that the actual contribution of data revenues was much greater, as they are now a more important component of the monthly rental fee (which contributed 57% of total mobile service revenues in 2009).

Figure 5.50 Mobile data revenues



Source: Ofcom / operators

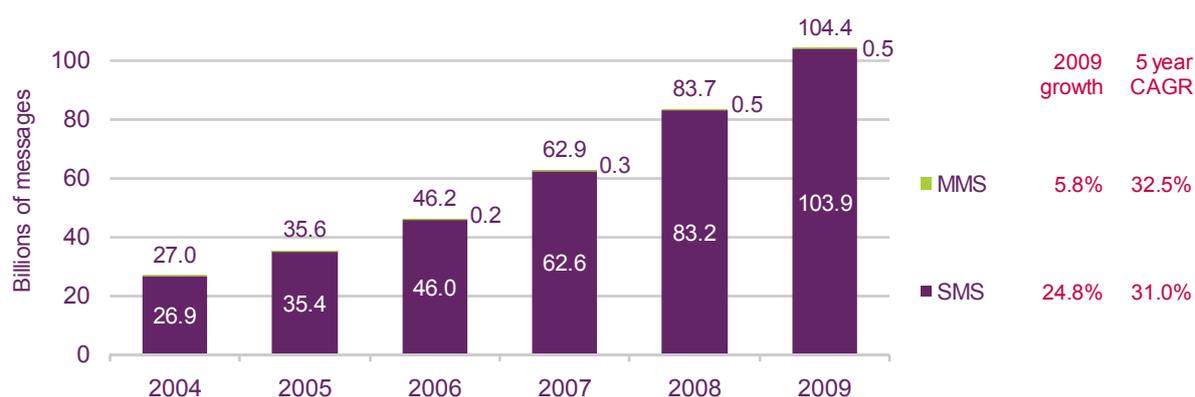
Note: The split between revenue from rental, bundled calls and SMS AND voice revenue (outside bundle) is only available from 2006 onwards.

SMS use soars even higher

Despite the increasing use of internet-based communications services such as social networking sites and instant messaging (see Section 4.1.2), the numbers of text messages sent by mobile users continued to climb, growing by nearly one-third to 104.4 billion messages in 2009 (representing an average of over four a day for every person in the UK), a faster rate of growth than in 2008 (24.8%) but on a similar level to annual growth between 2005 and 2007 (Figure 5.51). Meanwhile, the volume of MMS grew by just 5.8% during 2009 to around half a billion messages.

An increasing proportion of mobile users, particularly in younger age groups, rely on SMS as their main means of communication via a mobile handset, rather than mobile telecoms. In fact, as shown in Section 1.3 (*The Consumer’s Digital Day*), penetration of SMS on a daily basis is actually higher among mobile users than is voice. This increasing growth in SMS volumes is likely to reflect the increasing availability of tariff plans with unlimited text allowances at lower price points; attractive not only to younger users but also to most cost-conscious consumers.

Figure 5.51 Mobile messaging volumes



Source: Ofcom/operators

Fixed-line broadband connections

Total internet connections increase by 50% over five years

At the end of 2009 over 23 million connections accessed the internet, either over a dial-up, or fixed or mobile broadband connection, compared to 15.5 million at the end of 2004 (Figure 5.52). Fixed broadband accounted for the vast majority of connections (78%) in 2009, although its rate of growth slowed to 5.5% in 2009, compared to 11% in 2008 and 20% in 2007. This slow-down reflects the high penetration of fixed broadband services (with 65% of UK households having a fixed-line broadband connection in Q1 2010). Take-up of fixed-line broadband may also be constrained by some households opting to take only a mobile broadband connection (Section 5.1.5 details that much of the increase in mobile broadband during 2009 came from households having it as their only broadband connection), and potentially also by some households relying on their mobile phone for an internet connection (see Section 5.1.6).

Figure 5.52 Estimated UK internet connections



Source: Ofcom / operators

Mobile broadband is defined as connection to the internet via a PC datacard or dongle

Fewer than a million households use dial-up internet

Ninety-five per cent of residential fixed internet connections were broadband at the end of 2009, compared to 37% in 2004 (Figure 5.53). Among small and medium-sized enterprises

(SMEs), fixed broadband was the main method of access, with just over 10% still relying on dial-up. Based on recent trends, there will be approximately 150,000 SMEs and fewer than half a million residential users of dial-up by the end of 2010.

Figure 5.53 UK residential and small business fixed internet connections



Source: Ofcom / operators

Note: SME broadband includes some connections over leased lines

LLU providers continue to gain market share

The proportion of fixed broadband connections using local-loop unbundling (LLU) grew to over one-third by the end of 2009; this compares to just one in ten three years earlier (Figure 5.54). However, BT Retail continues to have the largest share of broadband subscribers and increased its share by one percentage point during 2009, to 27%.

Growth in the number of fixed broadband connections using cable slowed during 2009 to 4.4%, nearly half the rate of growth in 2008 (7.9%).

Figure 5.54 UK residential and small business fixed broadband connections



Source: Ofcom / operators

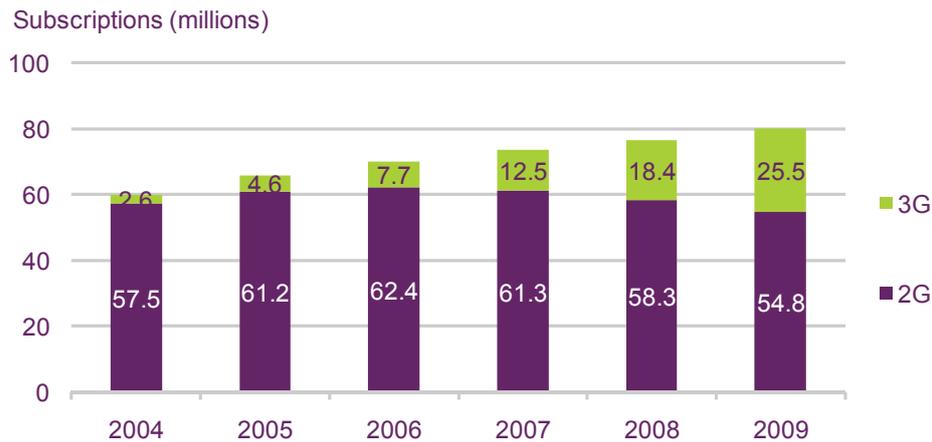
Note: Excludes connections made over cellular networks

Mobile data connections

3G adoption accelerates

Growth in the number of 3G connections accelerated in 2009, increasing by 7.1 million compared to 5.9 million in 2008 (Figure 5.55). This reflects the increasingly availability of lower-cost 3G-enabled handsets, particularly mass-market smartphones, and the take-up of mobile broadband using PC datacards and dongles (4.1 million connections), combined with greater network coverage and enhanced speeds using HSPA and HSPA+ technologies.

Figure 5.55 2G and 3G share of mobile connections, 2009

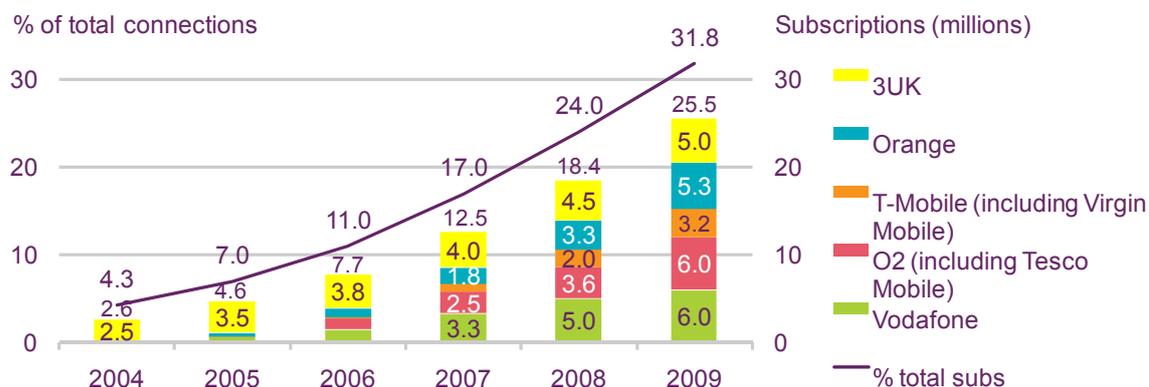


Source: Ofcom / operators

Nearly eight million 3G connections added in 2009

Nearly one-third of all mobile connections were using 3G at the end of 2009, compared to one in 25 at the end of 2004 (Figure 5.56). From its launch in 2003, 3UK managed to maintain its market lead with the largest number of 3G connections until 2008, when Vodafone claimed that number-one spot. In 2009, however, O2 became the largest carrier of 3G connections, with 6.01 million connections (23.6% of all 3G connections), slightly ahead of Vodafone (5.98 million). All three of these operators have adopted slightly different approaches to increasing 3G connectivity: O2 has focused on 3G-enabled smartphones (particularly the iPhone, and more recently, the Palm Pre) and less on mobile broadband, whereas Vodafone has grown its 3G subscription base through a mix of 3G-enabled handsets and mobile broadband connections, and 3UK has spearheaded the adoption of mobile broadband since it rolled out HSDPA on its network in 2007.

Figure 5.56 3G connections, by network operator



Source: Ofcom / operators

3G includes connections made via laptops/dongles as well as handsets

5.2.6 Business markets

Despite increasing use of mobile services, business telecoms revenues fell by 4.2% in 2009

Business spend on telecoms declined by £0.6bn to £13.5bn in 2009 (Figure 5.57). This is the first fall in business revenues recorded by Ofcom since 2002, and reflects declines in spend on internet (-21.2%), fixed voice (-6.2%) and mobile (-4.5%). Only spend on corporate data services increased during 2009, from £3.2bn to £3.3bn.

Although the impact of the economic downturn (see Section 1.1) may be a contributory factor in the reduction of telecoms revenue from businesses, the main driver behind declining revenues from mobile services is likely to be falling prices, as business use of increased during 2009 (see Figure 5.60 below). In contrast revenues from fixed-line voice have been in decline since 2000, falling from a peak of £5.4bn to £3.0bn in 2009 as a result of declining use.

Figure 5.57 Business telecoms service revenue



Source: Ofcom / operators / IDC

Average monthly revenue per business fixed line fell by £0.71

Average monthly revenue per business line continued to fall in nominal terms in 2009, falling by 2.8% to £24.53 (Figure 5.58). The largest reduction in spend during 2009 was in national calls (-8.5%), followed by calls to international destinations (-4.5%) and local calls (-3.8%); however, the rate of decline in spend on fixed-to-mobile calls slowed to just 0.9% in 2009, compared to 11% in 2008 and 10% in 2008.

Figure 5.58 Average monthly voice revenue per business fixed line



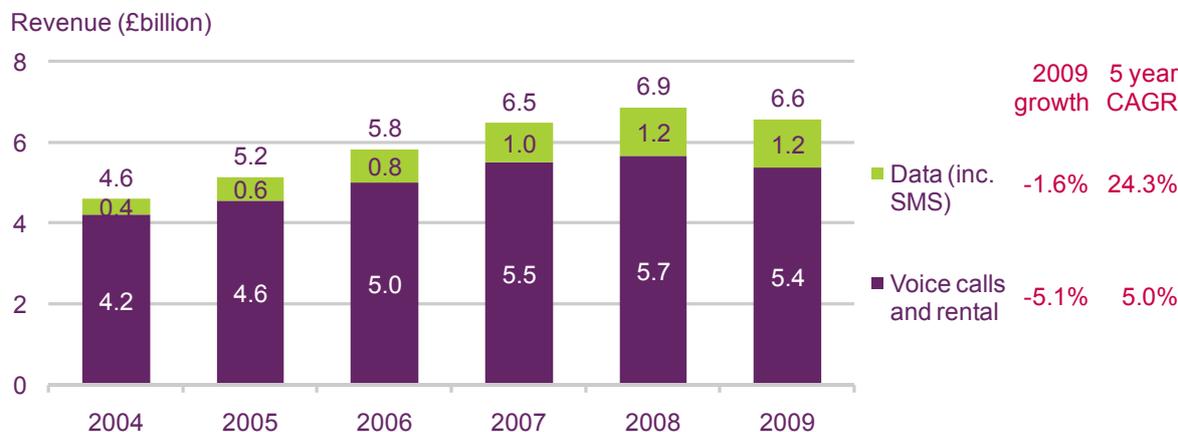
Source: Ofcom / operators

Note: Excludes revenues from non-geographic voice calls

Business spend on mobile voice falls by 5.1%

Revenues from business spend on mobile services declined by £0.3bn in 2009 to £6.6bn; this compares to year-on-year increases of £0.2bn in 2008 and £0.5bn in 2007 (Figure 5.59). The majority of this decline was due to falling revenues from rental and voice calls. This came despite an increase in overall call volumes (see Figure 5.60 below), indicating a fall in prices as an increasing amount of bundled voice minutes are included within access charges (i.e. monthly line rental charges). Revenues from mobile data services declined by 1.6% to £1.19bn during the year.

Figure 5.59 Breakdown of business mobile revenue



Source: Ofcom / operators

Mobile continues to drive overall growth in business voice volumes

Total originating business call volumes increased by 2% to 91.4 billion in 2009, driven by a 8.2% rise in mobile call volumes to 59 billion (Figure 5.60). Over two-thirds of all calls made by business users (excluding VoIP calls, for which data are not available) during 2009 were mobile-originated during 2009, this compares to just over one-third in 2004. The shift towards more business calls using mobile is probably being driven by growth in mobile-to-mobile call volumes, as an increasing number of mobile business plans provide free on-net calls, meaning that businesses incur no incremental cost when employees call each other.

Fixed-originated call volumes continued to decline in 2009, falling by 7.7% to 32.4 billion minutes. In addition to the increasing use of mobile for voice telephony, the use of cheaper VoIP services is also likely to be a contributory factor in driving down call volumes made from analogue lines, and may be a reason why overall growth in business voice call volumes slowed in 2009 compared to 2008 (3.5%) and 2007 (6.2%).

Figure 5.60 Business voice call volumes

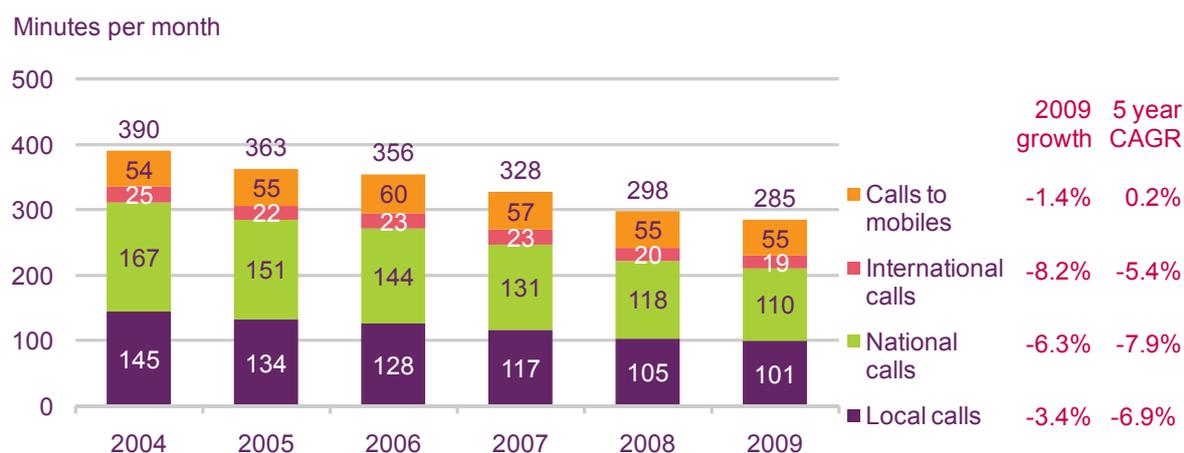


Source: Ofcom / operators

Note: Fixed data excludes NTS voice call volumes

Call volumes per business fixed line fell by 4.5% during 2009 (Figure 5.61). The largest proportional fall in business fixed-line call volumes was for international calls (-8.2%); this is likely to be the result of the increasing use by businesses of cheaper substitutes such as VoIP, and also the increasing use of mobiles for international calls, with overall outgoing mobile international call volumes (consumer and business) increasing by 11% during 2009. Call volumes for national and local calls continued to fall during 2009, as they have done over the last five years, while the decline in calls to mobiles fell by 1.4% in 2009 (a slowdown in the decline, with a fall of 3.5% in 2008 and 4.8% in 2007).

Figure 5.61 Average monthly outbound voice call volumes per business fixed line



Source: Ofcom / operators

Note: Excludes non-geographic voice call volumes

The number of business fixed lines falls by 0.5 million

Decline in the number of analogue lines used by businesses accelerated in 2009, falling by 5.6%, the largest annual decline since 2002 (Figure 5.62). There was a 4.2% decline in ISDN30 lines, to 3.2 million in 2009, as well as a 4.8% fall in ISDN20 lines, to 1.2 million, a reflection that businesses are starting to move away from ISDN technology towards cheaper and faster broadband connections for internet access and voice over IP (VoIP).

Figure 5.62 Business fixed lines, by type



Source: Ofcom / operators

Note: Figures may be overstated due to an element of double-counting of WLR lines

ISDN

ISDN is a set of standards for digital transmission over ordinary telephone copper wire (and other media). The key feature of the ISDN is that it integrates speech and data on the same lines, resulting in better voice quality than a conventional analogue phone.

ISDN offers connections in increments of 64kbit/s (the equivalent of a standard analogue line). In the UK there are two main types of ISDN: ISDN2 (which consists of two 64kbit/s channels and a 16kbit/s signalling channel) and ISDN30 (thirty 64kbit/s channels and a 64kbit/s signalling channel). Each channel can be used independently, so an ISDN2 line can be used as two voice lines, one voice line and a 64kbit/s data connection, or as a 128kbit/s data connection.

Cheap broadband means that ISDN has largely been superseded as a method of internet connection, but it is still used in some industries, as an ISDN data connection is always a fixed, reliable 64kbit/s. ISDN30 remains popular as a way for large businesses to obtain multiple fixed-voice lines for a set cost.

5.3 The telecoms user

5.3.1 Introduction

In this section we look at the major consumer trends in the use of telecoms services. Analysis is based on data received from telecoms providers, our own consumer research and, where appropriate, third-party data.

We define a consumer as being any user of telecoms services, separated into two main categories: residential and business. In this section we focus on the residential sector.

In December 2009 Ofcom published *The Business Consumer Experience*⁹⁰ report, which looked at business consumers' views of telecoms services, and the 2010 report (which is also due to be published in December) will look at small businesses' use of telecoms services. An overview of business markets and average use is also given in section 5.2.6 of this report.

The key findings of this section are as follows:

- **Household take-up of broadband increased from 68% in Q1 2009 to 71% in Q1 2010.** Growth was driven by mobile broadband take-up, with fixed broadband take-up remaining at 65% (page 335).
- **There is some evidence that younger consumers are moving to mobile broadband.** Our research shows that among the 15-24 year-old age group fixed broadband take-up fell by 4 percentage points to 66% in the year to Q1 2010, while mobile broadband penetration increased by 8 percentage points to 23%. The 65-74 year-old age group was the only one among which fixed broadband take-up grew.
- **Average monthly household spend on telecoms services fell by 3.7% to £62.10 in 2009.** This represented 3.0% of average household spend, down from 3.2% in 2008, with most of this decline being due to falling mobile telephony prices (page 335).
- **People spent an average of around half an hour a day accessing the internet at home using a PC in May 2010.** This was more than twice as much as they had done five years before (page 352).
- **Over a quarter of DE homes were mobile-only in Q1 2010.** Our research shows a clear correlation between mobile-only households and socio-economic group, with 26% of DE households relying on mobile for all their telephony needs, compared to 9% of ABC1 homes (page 338).
- **Non-voice use of mobile phones accounted for 64% of total time spent by adults using mobile phones.** This proportion ranged from 41% among those aged 55 and over to 77% among those aged 16 to 24 (page 352).
- **More than 90% of consumers were satisfied with their fixed voice, mobile and fixed broadband services.** However, satisfaction with mobile broadband was lower (83%) and only 80% of those with fixed broadband and 73% with mobile broadband were satisfied with the speed of their service (page 356).

⁹⁰ <http://stakeholders.ofcom.org.uk/market-data-research/market-data/consumer-experience-reports/bce/>

5.3.2 Residential sector overview

More households have mobile connections than fixed connections

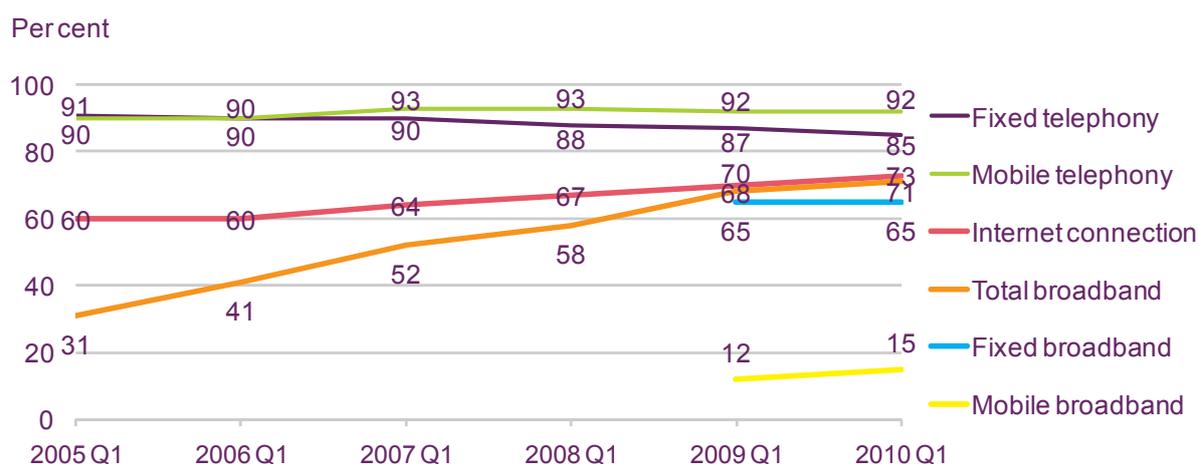
Household service take-up figures for the last few years show interesting parallels between the voice and broadband markets. The introduction of pre-pay mobile tariffs in the late 1990s led to rapid growth in mobile take-up, fierce competition between providers and falling prices. As the cost of a mobile voice call fell towards that of the equivalent call from a fixed line, mobile take-up and use increased while fixed began to decline, and in 2006 household mobile take-up passed that of fixed lines for the first time.

Since then, household take-up of mobile phones has plateaued at around 92% (Figure 5.63) while fixed-line penetration has started to fall as an increasing proportion of homes give up their landline and use mobiles as their sole form of voice telephony. Ofcom consumer research suggests that in Q1 2010 15% of households did not have a landline, an increase of two percentage points on the previous year. Differing levels of telecoms service take-up were evident across the UK nations, and household landline take-up was lowest in Scotland and Wales at 79%, while it was highest in England at 86%. Levels of mobile take-up among adults were highest in England (90%) and lowest in Scotland (85%) as were overall household broadband take-up levels, at 73% and 61% respectively.

Our research also suggests that the proportion of households using a mobile broadband connection as their only form of broadband is increasing. While total household broadband penetration grew by three percentage points to 71% in the year to Q1 2010, fixed broadband penetration was unchanged at 65%, indicating that mobile broadband was the main driver of growing overall broadband growth. In Q1 2010, 15% of all households had a mobile broadband connection, and 6% of all households had a mobile broadband connection and no fixed-line connection. The growth of mobile broadband is discussed in section 5.1.5.

It is unlikely that mobile broadband take-up will eclipse fixed broadband services, as has happened in the voice market, as it is difficult to see when mobile services will be able to match the speeds of their fixed equivalents: although HSPA-enabled mobile networks are capable of downstream speeds of up to 14Mbit/s, actual speeds are typically less than 1Mbit/s, around a fifth those of their fixed-line equivalents. The introduction of ADSL2+ and fibre-based fixed broadband services mean that this speed gap is likely to widen. Similarly, the download caps on most mobile broadband services are much lower than those on fixed broadband services meaning that for some users mobile broadband is not a direct substitute for similarly priced fixed offerings.

Figure 5.63 Household take-up of key telecoms technologies



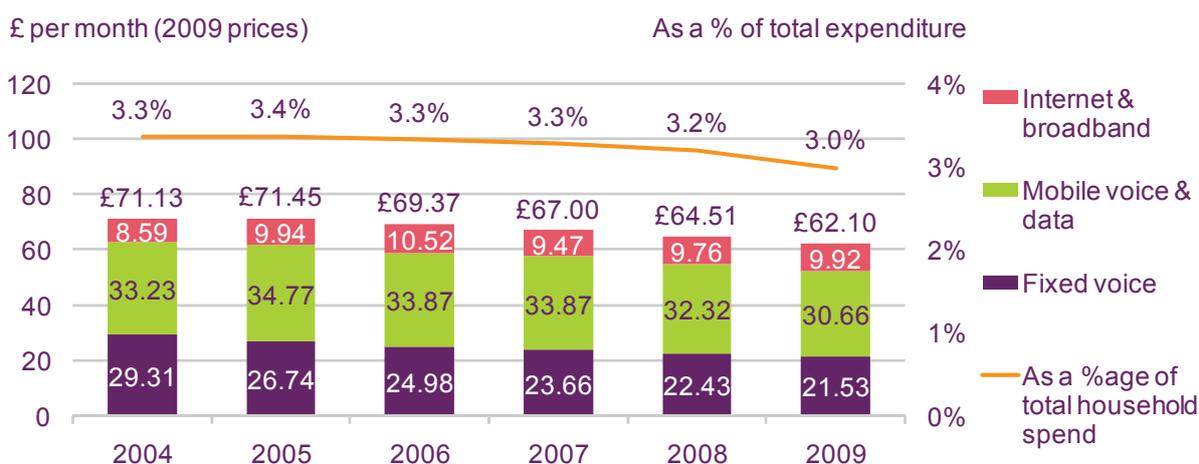
Source: Ofcom research
Base: All adults aged 15+

Average household telecoms spend falls to 3% of total household spend

Despite increasing levels of take-up and use, average spend on telecoms services has fallen in real terms in every year since 2005, as has the proportion of total household spend taken up by telecoms services (Figure 5.64). Average household telecoms spend fell by £2.41 a month to £62.10 in 2009, a fall of 3.7%, while the proportion of total household spend taken up by the purchase of telecoms services fell by 0.2 percentage points to 3.0%.

The majority of the fall in average monthly spend was in mobile services, where average spend fell by £1.66 to £30.66. Average spend on fixed voice services per household also fell by £0.90 a month to £21.53, to a large extent as a result of a fall in the number of connections (the analysis below shows the average spend for all UK households, including those which do not take communications services). Fixed internet and broadband was the only area where average spend increased, growing by £0.16 a month (1.6%) as a result of a 4% increase in the number of residential internet connections.

Figure 5.64 Average household spend on telecoms services



Source: Ofcom / operators / ONS
Notes: Includes estimates where Ofcom does not receive data from operators; adjusted to RPI; includes VAT

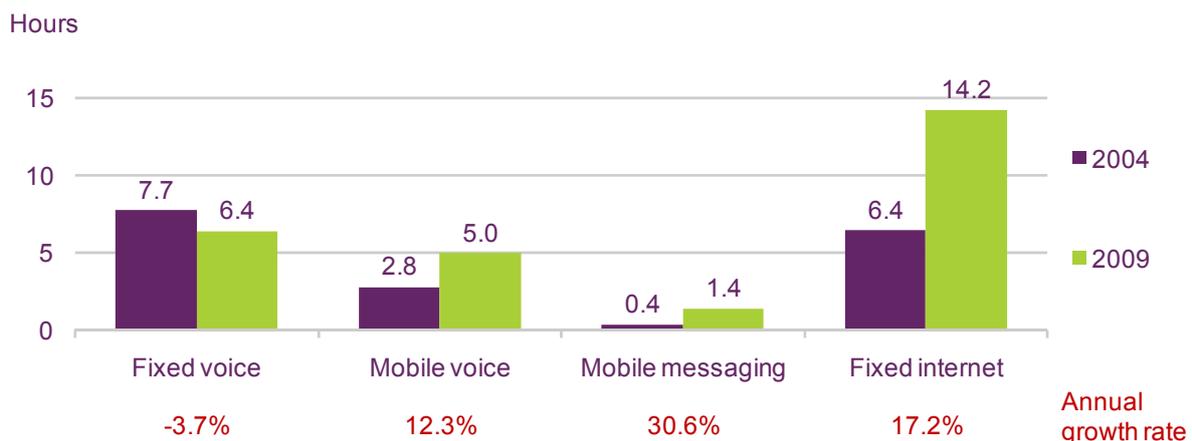
The average person spends around half an hour a day surfing the web at home over a fixed internet connection

Average monthly time spent per person making or receiving voice calls increased in the five years to 2009 as falling average fixed voice call volumes were offset by growth in mobile calls (Figure 5.65). Over the period fixed voice call volumes per person fell by 3.7% a year to 6.4 hours a month, while mobile use increased by 12.3% a year to 5.0 hours a month in 2009. This meant that in total, voice calls per person increased by an average of 1.6% a year over the five-year period, to 11.3 hours a month.

The amount of time spent on mobile messaging per person increased by an average of 30.6% a year in the five years to 2009, to an estimated 1.4 hours per person (assuming 35 seconds to send and receive each message). However, the main driver of growing average time spent using data services was an increase in accessing the internet using a PC or laptop at home, to 14.2 hours a month (broadly in line with the results from our *Consumer's digital day* study, which can be found in Section 1.3 of this report).

Growth in the average time spent online can be attributed to use of the internet becoming more mainstream, and to the popularity of social networking sites and sites streaming content, such as BBC iPlayer and Spotify (see Section 3.3.12) for more information on use of these services).

Figure 5.65 Average monthly time per person spent using telecoms services



Source: Ofcom / operators / Nielsen / UKOM

Note: Includes estimates where Ofcom does not receive data from operators; fixed voice call figures include NTS voice calls; mobile messaging figures assume an average of 35 seconds per message; Ofcom estimate of fixed internet use per person is based on Nielsen's data on the average monthly time spent online at home including the use of applications across the online population only; Nielsen's methodology changed in October 2006 so comparisons before this period should be treated with caution; fixed internet use figures are for May of the following year.

5.3.3 Fixed and mobile voice services

Take-up

In Q1 2009 92% of all households had at least one mobile phone while 85% of homes had a fixed line. Figure 5.66 shows that take-up varies significantly by age and socio-economic group:

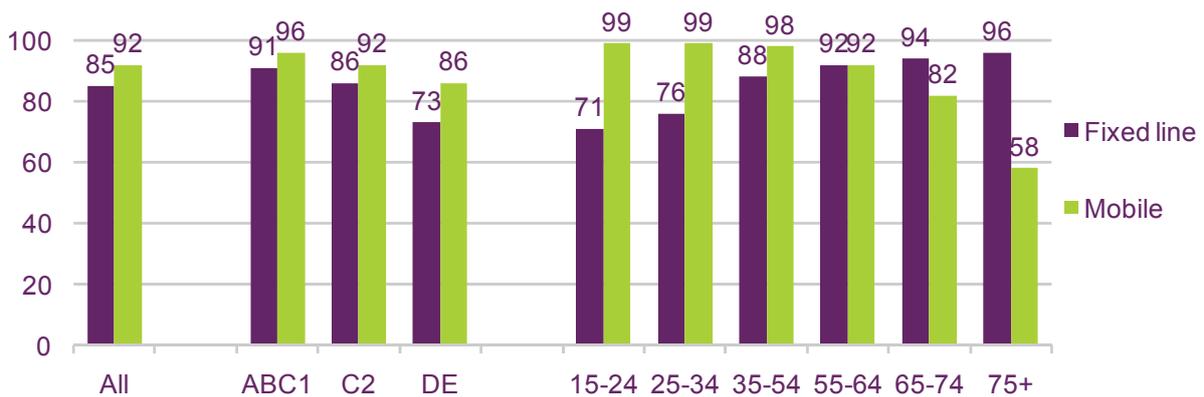
- Household take-up of both fixed and mobile services was higher among the ABC1 socio-economic group; for example, household landline penetration was 18

percentage points higher among ABC1 households than among DE homes, while for mobile services the difference was ten percentage points.

- Older people were more likely to have a landline, with 96% of over-75s having a landline, and take-up falling with age; just 71% of 15-24 year-olds lived in a household with a landline. The opposite was true for take-up of mobile services, which fell from 99% among the 15-24 and 25-34 year-old age groups to 58% among the over-75s.

Figure 5.66 Household telecoms connections, by socio-economic group and age

Proportion of respondents with service (per cent)



Source: Ofcom research, Q1 2009

Base: All adults aged 15+

15% of households did not have a landline in Q1 2010

Over the past few years there has been a marked increase in the proportion of mobile-only households, that is, households without a fixed line which use a mobile / mobiles as their sole form of voice telephony. Ofcom research suggests that in the three years to Q1 2010, the proportion of homes that were mobile-only grew by five percentage points to 14% (Figure 5.67).

Growth in the proportion of mobile-only homes comes as the mobile networks increase the amount of minutes that are bundled with their mobile contract line rental, and as growth in the take-up of mobile broadband (on a PC) and mobile internet (on a mobile phone) means that it is not always necessary to have a landline in order to be able to access the internet. There are several possible reasons why a higher proportion of DE respondents are in mobile-only households: it is easier for them to get a pre-pay phone than a fixed line contract, pre-pay mobiles enable them to better control their telephony spend, and pre-pay is the cheapest way of keeping in contact for those who make only a few outgoing calls.

Figure 5.67 Household penetration of fixed and mobile telephony



Source: Ofcom research
Base: All adults aged 15+

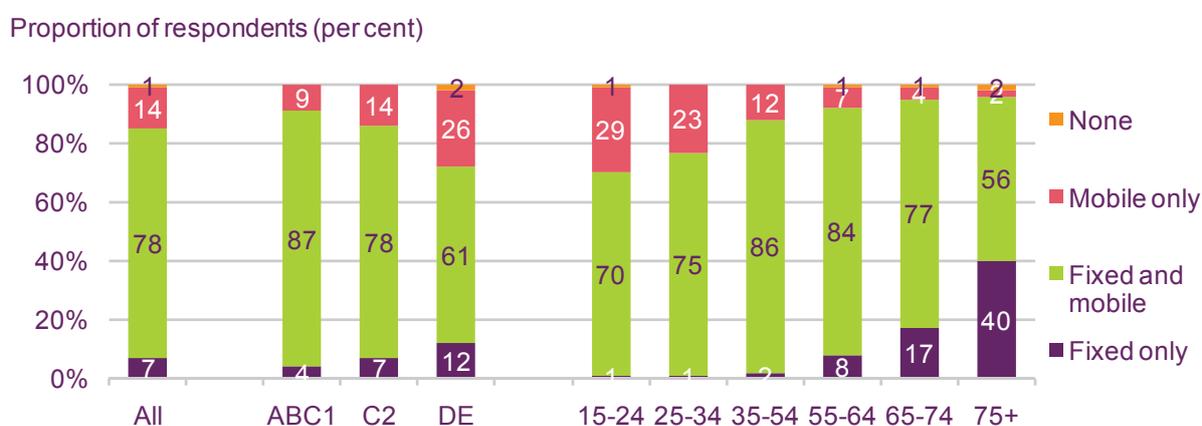
Over a quarter of DE households are mobile-only

Our research shows a clear correlation between age, socio-economic group and levels of mobile-only households, with the DE socio-economic group and younger respondents being more likely to live in homes where mobiles are the sole form of telephony (Figure 5.68). According to our figures, in Q1 2010 26% of DE households were mobile-only compared to 9% of ABC1 homes, and 29% of households aged 15-24 were mobile-only compared to 2% of those aged 75+.

Forty per cent of over-75 households had only a landline, compared to just 1% of those aged 15-24 and 25-34. Respondents in lower socio-economic groups were more likely to live in fixed-only households, and were therefore less likely to use both fixed and mobile telephony (overall, 12% of DE households have a fixed line only, compared to just 4% of ABC1 households).

These results are unsurprising, as DE households tend to be lower-income and may therefore choose not to use both fixed and mobile telephony in order to reduce their telecoms spend, or may be wary of signing up to a contract that commits them to a regular monthly spend. Similarly, many older households might be happy to stick with a fixed line, as they do not see the need for a mobile or its additional expense.

Figure 5.68 Household penetration of fixed and mobile telephony, by socio-economic group and age



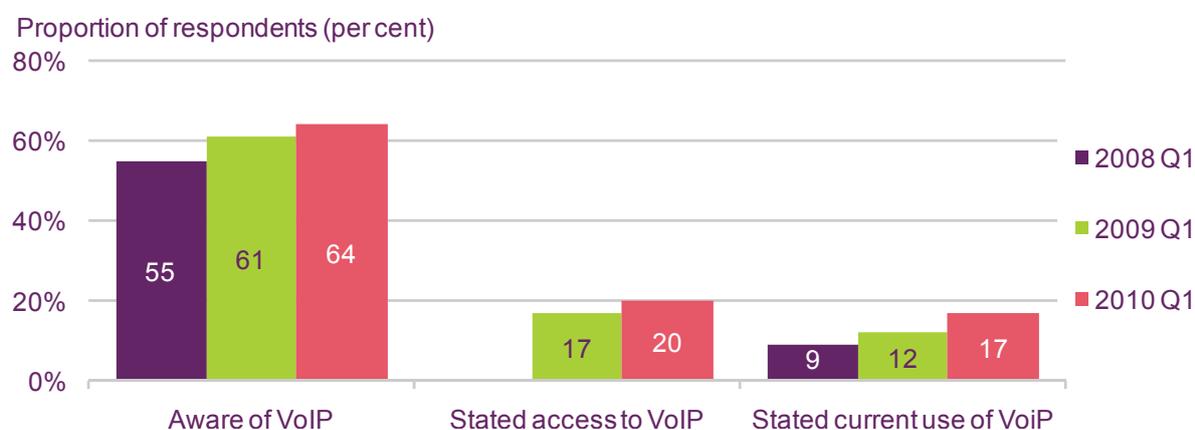
Source: Ofcom research
Base: All adults aged 15+

17% of adults say that they currently use voice over internet protocol (VoIP) services

VoIP services allow consumers to make voice calls to fixed and mobile phones, as well as voice and video calls to suitably-equipped PCs over a broadband internet connection. The benefit of this is that PC-to-PC VoIP calls are generally free, and 'breakout' VoIP calls to fixed and mobile numbers tend to be cheaper than the equivalent calls originating on a fixed or mobile network. Whereas, traditionally, PCs and laptops have been used to make VoIP calls, in recent years fixed phones and mobile phones which allow the use of VoIP have become available.

Our research shows that in the year to Q1 2010 there have been increases in the proportion of people who are aware of VoIP, who have access to VoIP and who say that they currently use VoIP (Figure 5.69). The largest increase was in the proportion of people who said that they currently used VoIP, which increased by five percentage points to 17% during the year, driven in part by three percentage point increases in both the proportion of people who were aware of VoIP (to 64%) and those with access to it (to 20%) during the period.

Figure 5.69 Awareness, stated access to and use of VoIP



Source: Ofcom research

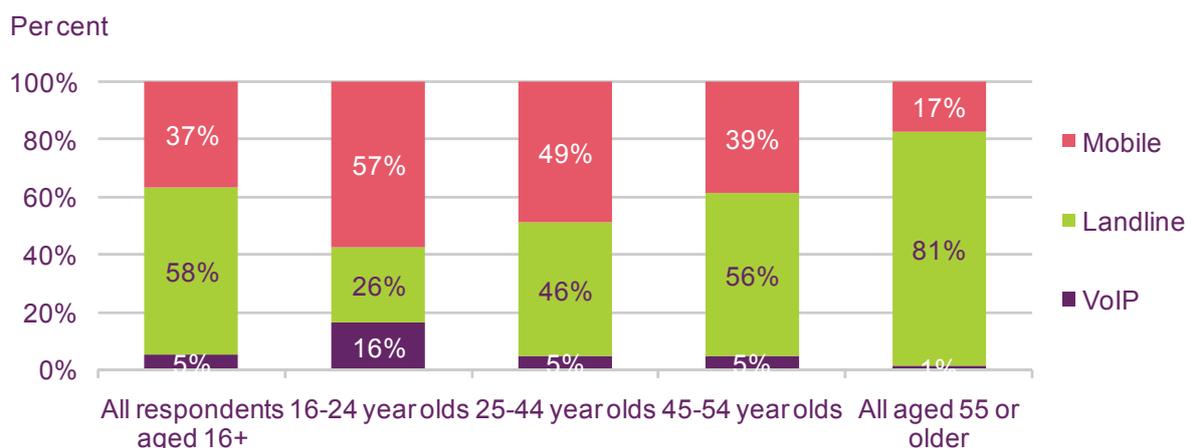
Base: All adults aged 15+

Note: Question wording changed in 2009 so treat comparisons with previous data with caution; stated access not collected in 2008.

16-24 year-olds are the highest users of VoIP services in the home

Ofcom research showed that in Q1 2010 the use of VoIP among 16-24 year olds accounted for a higher proportion of total voice calls while in the home (16%) than any other age group. This was more than three times the level reported among any of the other age groups covered by the research and the 5% average among all respondents (Figure 5.70). The 16-24 year-old age group's use of voice communication services also stood out due to the low proportion of total voice calls made using a landline (26%), and the high proportion made using a mobile (57%). These compare to averages of 58% for landline use and 37% for mobile use among all respondents.

Figure 5.70 Use of voice communication services in the home



Source: Ofcom research, Q1 2010

Base = All respondent days: 16+ = 7966; 16-24s = 1106; 25-44s = 3003; 45-54s = 1484; 55+ = 2373

Use of fixed and mobile voice services

Average calls per person fall by 5% in 2009

Average fixed voice call volumes per person fell by 5% to 182 minutes per month in 2009, having fallen in each of the previous five years (Figure 5.71). The continued decline in average fixed telephony use came despite the increasing number of landline tariffs that include an allowance of inclusive calls.

Figure 5.71 Average monthly outbound fixed voice call volumes per person



Source: Ofcom / operators

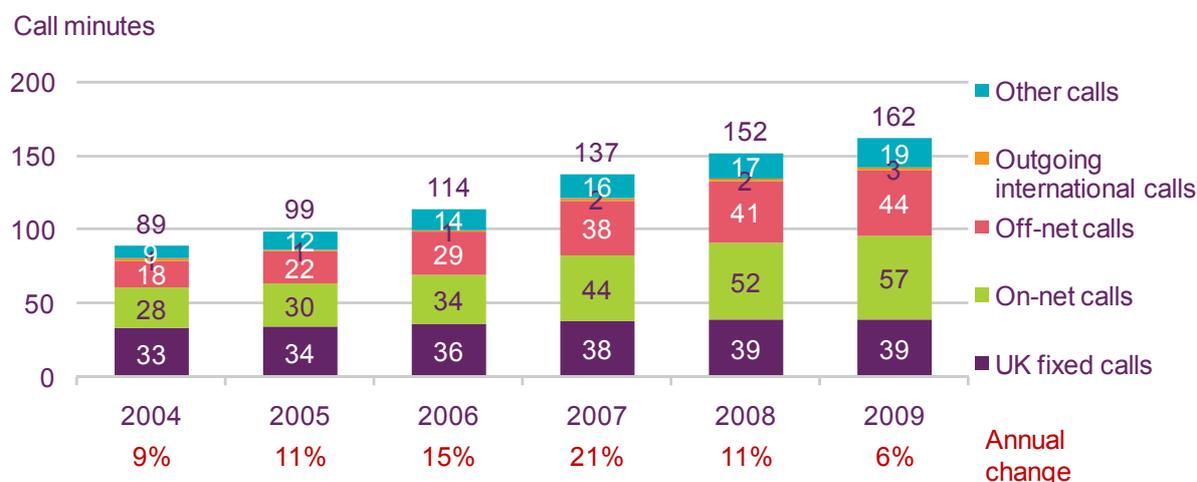
Note: Includes estimates where Ofcom does not receive data from operators

Growth in average mobile voice call use slows to 6% in 2009

Average outgoing calls per person increased by 6% to 162 minutes a month in 2009 (Figure 5.72). This represents a significant slowdown in growth, with average call volumes having increased by 11% in 2008 and 21% in 2007. This slowing growth comes in the context of a market approaching saturation with new connections coming from consumers adding second handsets (we estimate that, excluding mobile broadband connections, there were around 1.25 active mobile subscriptions per UK inhabitant at the end of 2009), and late adopters who are likely to be less frequent users. In addition, advances in handset capabilities and the

availability of tariffs including unlimited text messages and data use mean that these services will increasingly be used as a substitute for voice calls.

Figure 5.72 Average monthly outbound mobile voice call minutes per person



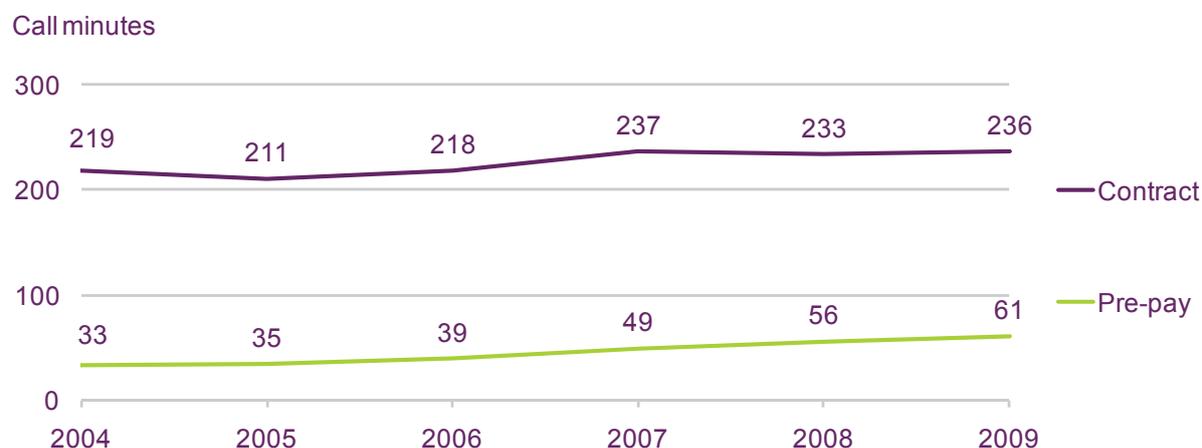
Source: Ofcom / operators

Note: Includes estimates where Ofcom does not receive data from operators; excludes 3UK

Average calls per contract and pre-pay mobile subscription both grow in 2009

Average voice calls per contract (pay-monthly) mobile subscription (236 minutes) were almost four times those from pre-pay (pay-as-you-go) subscriptions (61 minutes) in 2009. However, while average call minutes per pre-pay subscription grew by 9% in 2009, calls per mobile contract increased by just 1% (Figure 5.73).

Figure 5.73 Average monthly outbound mobile call minutes, by subscription type



Source: Ofcom / operators

Note: Includes estimates where Ofcom does not receive data from operators; calculation excludes mobile broadband connections

Cost of fixed and mobile voice services

Cost of a basket of fixed voice calls is unchanged in 2009

We use analysis of the cost of a basket of telecoms services as a means of comparing costs over time. This analysis derives the 'real cost' to the consumer by calculating the average price per minute for access and calls (and price per text message for mobile) in a year, and

then defining the basket as the average number of minutes (and messages) used in 2009. Costs are then adjusted for changes in the retail prices index (RPI) in order to provide a year-on-year comparison.

The cost of a basket of fixed voice call services was unchanged in 2009 in real terms, having fallen in each of the previous five years (Figure 5.74). However, this cost includes VAT, which from December 2008 to the end of 2009 went down from 17.5% to 15%; had this not been the case, the cost of the basket of residential fixed services would have increased by 2% during the year.

Figure 5.74 Cost of a basket of residential fixed voice services



Source: Ofcom / operators

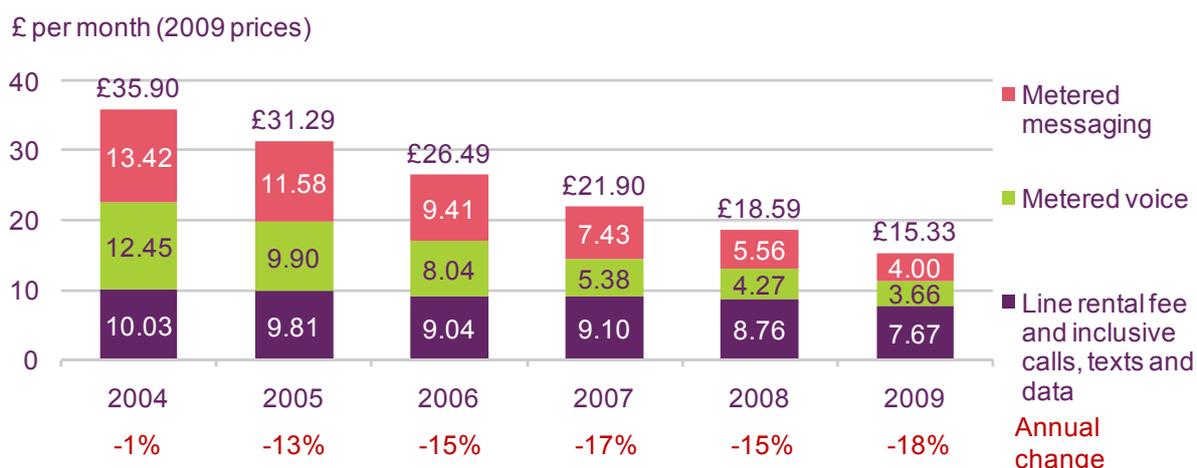
Note: Includes estimates where Ofcom does not receive data from operators; excludes non-geographic voice calls; adjusted for RPI; includes VAT

Cost of a basket of mobile services continues to decline, falling by 18% in 2009

The cost of a basket of mobile services continued to decline in 2009, falling by £3.26 a month to £15.33 (Figure 5.75). This represents an 18% fall, and the cost of our basket of mobile voice and text services in 2009 (which equates to average use in that year) was less than half than it would have been four years previously in 2005, when it would have cost £31.29.

However, this must be treated with caution as there is, of course, a relationship between prices and usage – average call volumes were much lower in 2004 than in 2009, partly because prices were higher, so while using 2008 call volumes to compare pricing does provide some insight into pricing trends, it does not represent consumer spending. Although the cost of the basket halved between 2005 and 2008, average revenue per subscription fell by just 9% over the same period (see Figure 5.39 in the telecoms Industry section above). In addition, this analysis will include an element of rental revenues that are associated with inclusive data allowances.

Figure 5.75 Cost of a basket of mobile services



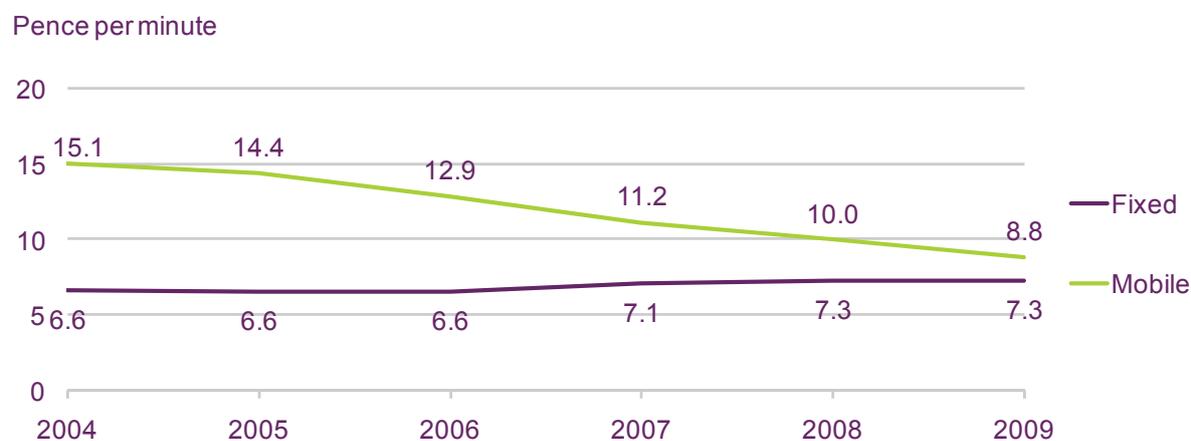
Source: Ofcom / operators

Note: Includes estimates where Ofcom does not receive data from operators; excludes non-geographic voice calls; adjusted for RPI; includes VAT

Average landline and mobile costs converging

Figure 5.76 shows the average cost of fixed-originated and mobile-originated voice minutes, calculated by dividing total access and call revenues by total call volumes. It indicates that the difference in costs has gradually converged as the cost of mobile minutes have fallen sharply and the cost of fixed minutes have slowly increased (in nominal terms – costs have not been adjusted for inflation). The average cost of a mobile-originated call was 8.8 pence per minute in 2009, 21% higher than the 7.3 pence per minute for fixed-originated calls.

Figure 5.76 Comparison of average fixed and mobile voice call charges



Source: Ofcom / operators

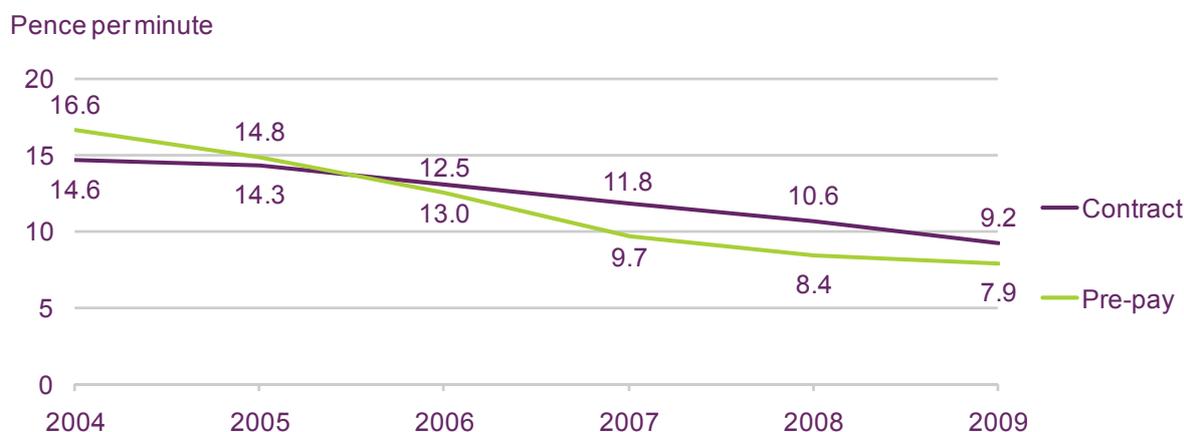
Note: Includes estimates where Ofcom does not receive data from operators; fixed calculation excludes non-geographic voice calls

Average costs of pre-pay and contract call minutes decline in 2009

The average cost of a contract (pay-monthly) mobile-originated call minute was 9.2 pence in 2009, 17% more than the 7.9 pence average for pre-pay calls (Figure 5.77). This difference was less than the 26% figure for 2008, as the average cost of a contract call minute fell by 13% compared to a 7% fall in the cost of a pre-pay minute. It should be noted, however, that the cost per minute for contract connections also includes the cost of the handset, which is included ‘free’ or heavily subsidised in many contract subscriptions. In addition, over half of all call minutes made by pre-pay users are on-net (i.e. to a number on the same network),

compared to just over a quarter of contract call minutes, and on-net calls are typically charged at a lower rate than calls to another mobile network and calls to landlines.

Figure 5.77 Average mobile cost per voice minute, by customer type



Source: Ofcom / operators

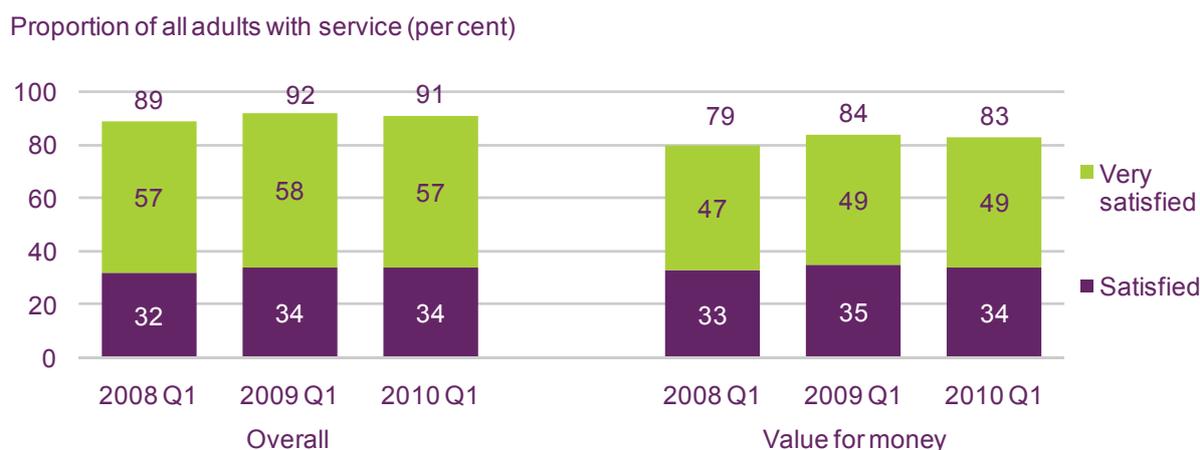
Note: Includes estimates where Ofcom does not receive data from operators; contract calculation includes rental element which will often include a number of inclusive messages and data allowance; calculations use actual minutes of use

Satisfaction with fixed voice and mobile phone services⁹¹

Satisfaction with fixed-line services is unchanged

In the year to Q1 2010 levels of satisfaction with fixed-line voice services were unchanged (Figure 5.78). Overall satisfaction with landline services remained high, with 91% of respondents with a landline saying that they were either satisfied, or very satisfied, with their overall service, and 57% saying that they were very satisfied with it. As in previous years, levels of satisfaction with the value for money of fixed-line services were lower than overall satisfaction levels, with 83% of adults with a fixed phone saying they were either very, or fairly, satisfied with the value provided by their service.

Figure 5.78 Residential consumer satisfaction with aspects of fixed-line service



Source: Ofcom research

Base: All adults aged 15+ with a fixed line phone

Note: Includes only those who expressed an opinion

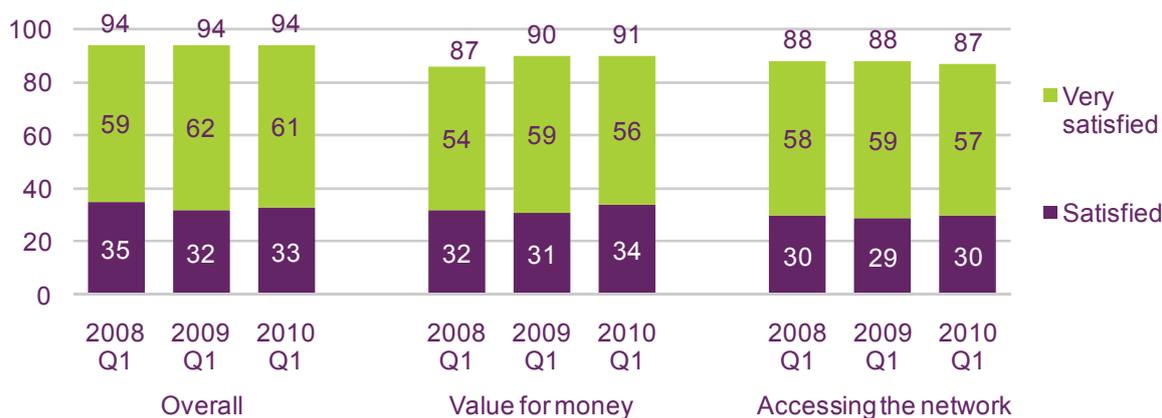
⁹¹ See Figure 5.95 and Figure 5.96 below for data on satisfaction with fixed and mobile broadband services

Satisfaction with mobile telephony services remains high, at 94%

In Q1 2010 94% of respondents with a mobile phone said that they were very, or fairly, happy with their mobile service, identical to levels in both of the previous two years (Figure 5.79). The perceived value for money offered by mobile services was 91% in Q1 2010, higher than the corresponding fixed-line figure of 83%. Satisfaction with accessing mobile networks was also high, with 87% of mobile users saying that they were either fairly, or very, satisfied with the ease with which they could access their network.

Figure 5.79 Residential consumer satisfaction with aspects of mobile service

Proportion of all adults with service (percent)



Source: Ofcom research

Base: All adults aged 15+ with a mobile phone

Note: Includes only those who expressed an opinion

5.3.4 Data services

Take-up

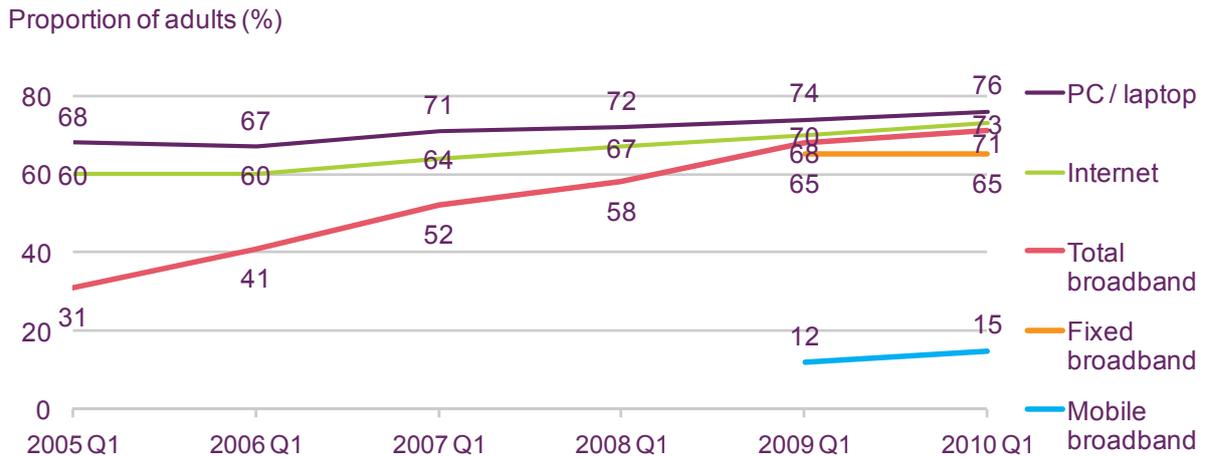
Two per cent of households continue to use dial-up services

In Q1 2010 71% of households claimed that they had a PC broadband connection, either fixed or mobile (Figure 5.80). This represented a three percentage point increase on the figure for a year previously, a significant slowing in take-up growth, given that there was double-digit growth in 2008 (caused by the migration of dial-up users to fixed broadband and also due to the growth of mobile broadband). According to our research, fixed broadband take-up was unchanged in the year to Q1 2010 and it was growth in take-up of mobile broadband services that drove the increase in overall broadband penetration (see Section 5.1.5 above).

A key factor limiting further broadband growth is PC/laptop penetration, which was 76% in Q1 2010, a two percentage point increase on the year before and just five percentage points higher than overall broadband take-up. Of the 5% of households with a PC/laptop and no broadband connection in Q1 2010, 3% did not have an internet connection, while 2% used dial-up internet services, presumably either because they were infrequent internet users, were not aware of the benefits of broadband or the online services that it enables them to use, or because it was not available to them.

It should also be noted that a growing number of people are using the internet on mobile phones (see Section 5.1.6 above), with 28% of mobile phone users accessing the internet on their phone in Q1 2010.

Figure 5.80 Household PC and internet take-up



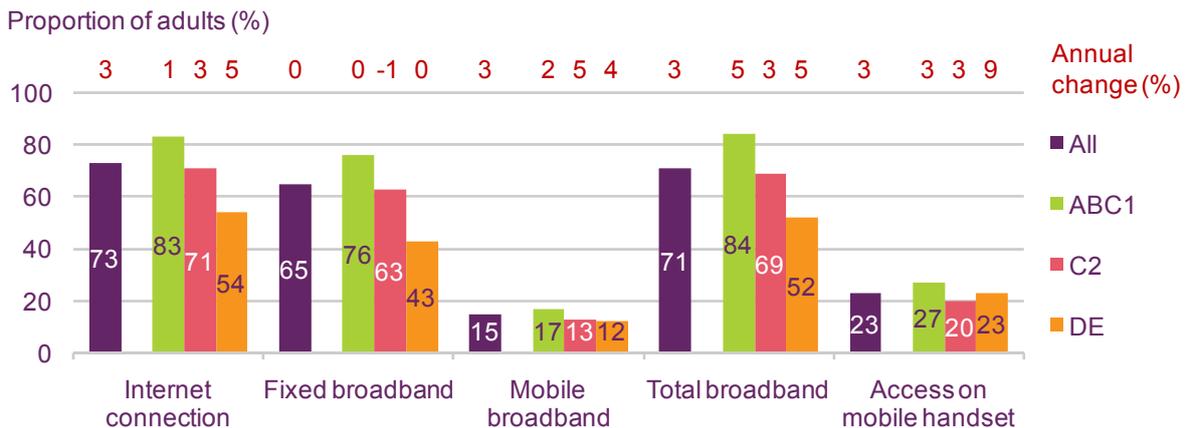
Source: Ofcom research
Base: All adults aged 15+

Use of data services is higher than average among ABC1 households

Our research suggests that take-up of internet services, fixed and mobile broadband services and overall broadband was higher than average among ABC1 households (Figure 5.81). Overall internet take-up among ABC1 households was 83%, ten percentage points higher than the UK average of 73%, while total broadband take-up among ABC1 respondents was 84%, 13 percentage points higher than average. ABC1 household take-up of fixed broadband was 76%, 11 percentage points higher than the 65% average, mobile broadband take-up was 17% compared to an average of 15% and mobile internet use on a mobile phone at 27% was four percentage points higher than average (23%).

Take-up of all of these services was lower among C2DE homes than it was in ABC1 households. For example, total broadband take-up was 69% in C2 homes and 52% in DE homes.

Figure 5.81 Household take-up of data services, by socio-economic group



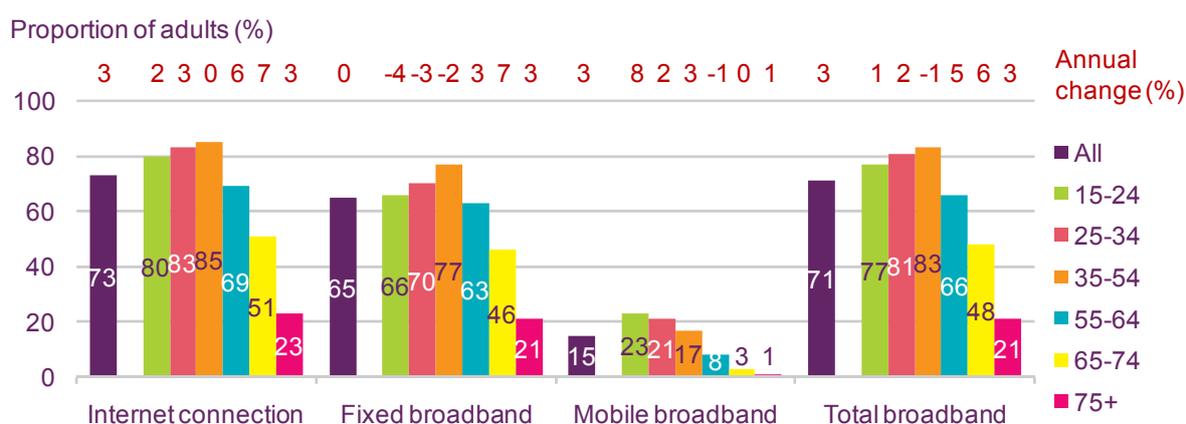
Source: Ofcom research, 2010 Q1 data
Base: all adults aged 15+

Broadband take-up highest among 35-54 year olds at 83%

Whereas there is a simple relationship between the age of a respondent and take-up of fixed and mobile voice services, with mobile take-up falling and landline take-up increasing as age increases (see section 5.3.3), this is not the case for data services (Figure 5.82)

Household take-up of all data services was higher among younger age groups than older respondents, and, for all services except mobile broadband, highest among 35-54 year-olds. For internet, fixed broadband and overall broadband services take-up rates increased with age to a peak among 35-54 year olds, after which they declined sharply as age increased. The take-up of mobile broadband by age more clearly followed that of mobile telephony, with household take-up declining as age increased (also in section 5.3.3).

Figure 5.82 Household take-up of data services, by age



Source: Ofcom research, 2010 Q1 data

Base: all adults aged 15+

Six per cent of households used mobile and not fixed broadband in Q1 2010

Our research suggests that in Q1 2010 56% of UK households had a fixed broadband internet connection and did not use mobile broadband, while 9% of homes used both (Figure 5.83). Both of these figures were unchanged from those reported in 2009, although operator data show that there has been some growth in the number of residential fixed broadband lines (see section 5.2.5).

The data also suggest that in the year to Q1 2010 the proportion of households using mobile broadband as their only form of broadband doubled, from 3% to 6%, and it was this that drove the three percentage point increase in overall broadband take-up. Section 5.1.5 of this reports looks at the use of mobile broadband services in more depth.

Figure 5.83 Household penetration of fixed and mobile broadband



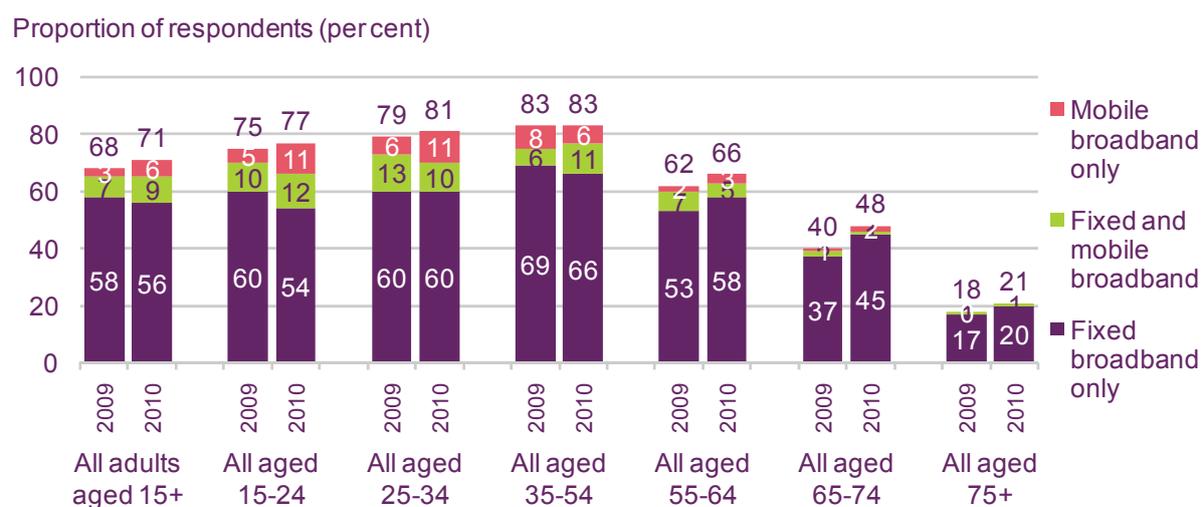
Source: Ofcom research
Base: All adults aged 15+

Older consumers embrace fixed broadband services as younger people switch to mobile broadband

Ofcom consumer research suggests that while overall fixed broadband take-up was unchanged at 65% in the year to Q1 2010, take-up increased among older age groups and fell among younger consumers. While there was a four percentage point fall in fixed broadband penetration among those aged 15 to 24 years old over the period, fixed broadband penetration rates increased by seven percentage points among those aged 65 to 74 (Figure 5.84).

Our research indicated that although there was no change in mobile broadband take-up among those aged 55 and over in the year to Q1 2010, take-up increased by eight percentage points among those aged 15 to 24 and by three percentage points among 35-54 year-olds. This suggests that younger age groups may be switching from fixed to mobile broadband (and driving overall mobile broadband growth by doing so), while increasing fixed broadband take-up among older consumers has offset the resulting fall in take-up among younger people.

Figure 5.84 Take-up of fixed and mobile broadband services, by age



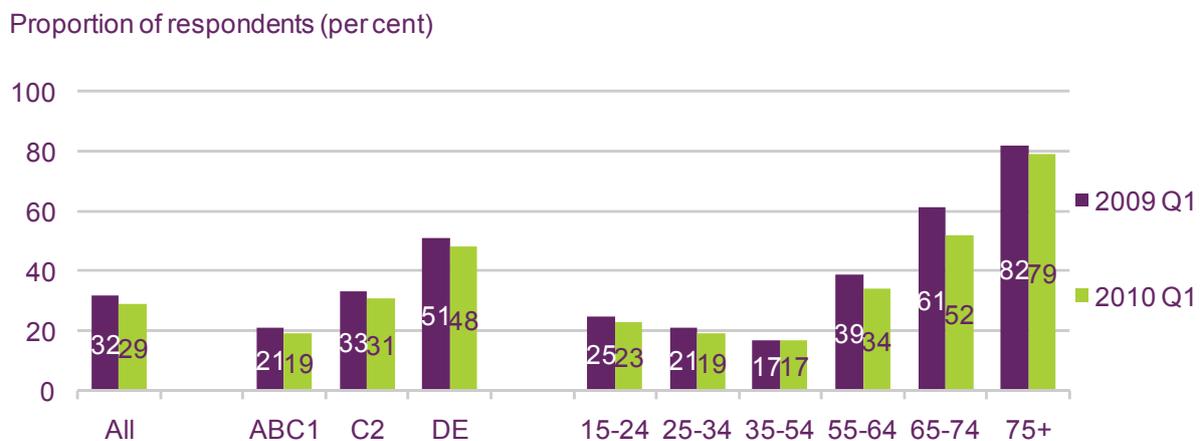
Source: Ofcom research, data as at Q1 of each year
Base: All adults aged 15+

29% of UK households did not have a broadband connection in Q1 2010

Figure 5.85 below examines the 29% of households that do not have a broadband connection and how these break down by socio-economic group and age. It shows that households in lower socio-economic groups are more likely to not have broadband; while less than a fifth of ABC1 households (19%) did not have a broadband connection in Q1 2010 the same was true of almost half (48%) of DE households

An interesting story emerges when looking at household non-ownership of broadband by respondent age. Non-ownership of broadband declined slowly as respondent age increased up to the 35-54 age group, where broadband non-ownership was at its lowest, at 17% of respondents. Above this age group levels of broadband non-ownership rose sharply, up to a maximum among the 75+ age group where almost four-fifths (79%) of respondents said that they did not have a home broadband connection.

Figure 5.85 Non-ownership of home broadband, by socio-economic group and age



Source: Ofcom research, Q1 2009

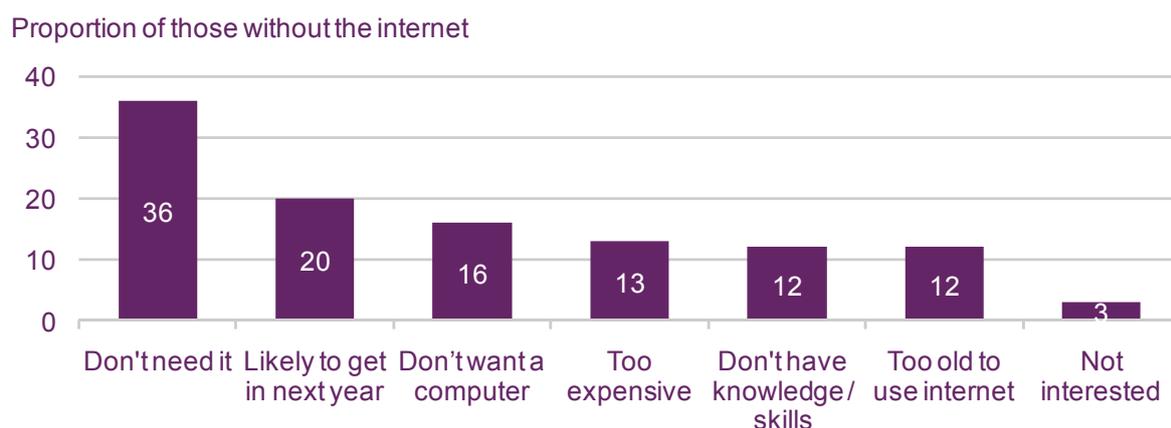
Base: All respondents

Perceived lack of need for internet is the most-cited reason for not having it

We asked all respondents who did not have a home internet connection what the main reasons for this were. Of these, one in five (20%) said that they intended to get a home internet connection within the next twelve months, while the most frequently-cited reason for not having it (mentioned by 36% of those without the internet) was that they did not have the need for an internet connection (Figure 5.86). Despite the fact that internet take-up is lower among lower socio-economic groups, only 13% claimed that the main reason for not having an internet connection was that it was too expensive.

In total, 60% of those without the internet (17% of all adults) claimed that they did not need it (36%), did not have the knowledge and skills to use it (12%) or were too old to use it (12%). This suggests that there is still a need for web and internet education among certain sectors of society.

Figure 5.86 Main reasons for not having a home internet connection



Source: Ofcom research

Note: Note: 4% of people without the internet did not know what their main reason was or provided an 'other' reason

Base: All adults without a home internet connection aged 15+

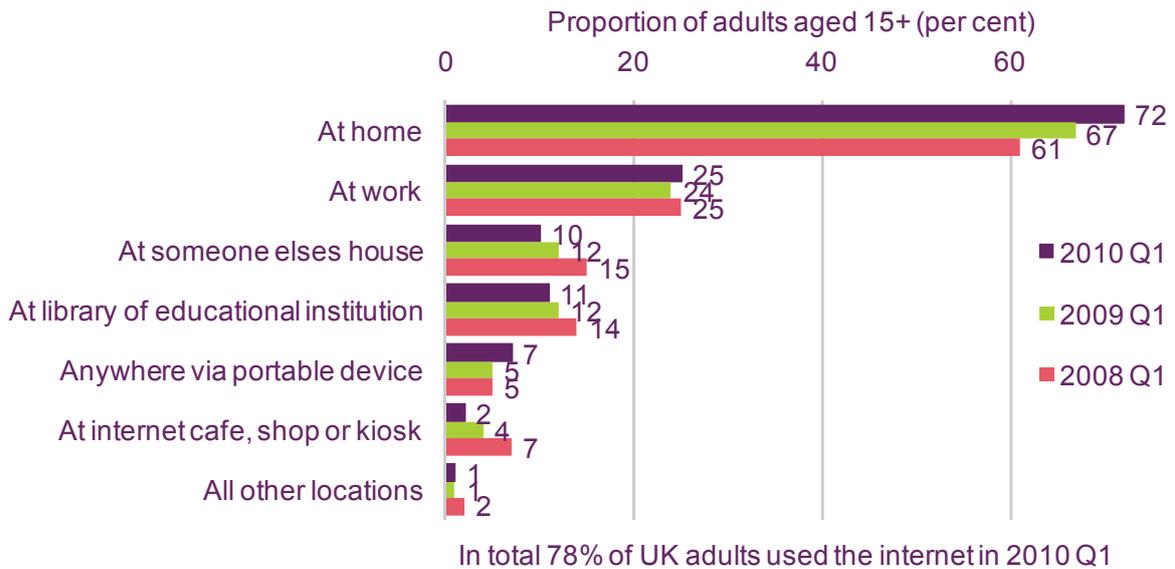
Six per cent of people only access the internet in a place other than home

Our research also asked about where people access the internet, and the most frequently-cited response was at home, which was mentioned by 72% of respondents (Figure 5.87). However, a number of other places were mentioned, including work (mentioned by 25% of respondents), someone else's house (10%), at a library or educational establishment (11%) or at an internet cafe, shop or kiosk (2%).

A further 7% of people said that they accessed the internet on the go, using a mobile device, two percentage points more than said they had done this a year previously, and partly a reflection of advancements in mobile handset internet capabilities over the past few years. While 72% of respondents said that they used the internet at home, 78% of people said that they ever used the internet (up from 74% a year previously) suggesting that 6% of people in the UK only ever access the internet while outside the home.

More information on the location of media use can be found in our *Consumer's digital day* study which can be found in Section 1.3 of this report.

Figure 5.87 Location of internet access

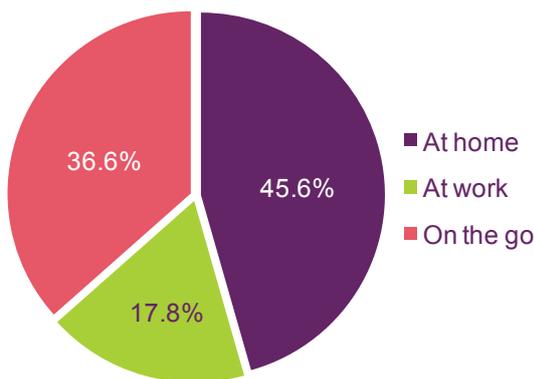


Source: Ofcom research
 Base: All internet users aged 15+

Almost half of internet use on a mobile handset is at home

Figures from Cisco show that almost two-thirds of the time spent using mobile internet services in the UK is either at home or at a place of work, with over 45% of time spent online being in the home. Similarly, just over a third (37%) of mobile internet use is on the go, as shown in Figure 5.88. With many mobile handsets offering WiFi as well as cellular connectivity, the fact that almost half of mobile internet use is in the home means that some data traffic will be routed over the user's home WiFi network and fixed broadband connection rather than the mobile provider's cellular network (our research suggests that 66% of UK homes used wireless routers in Q1 2010).

Figure 5.88 Location of internet access using a mobile device



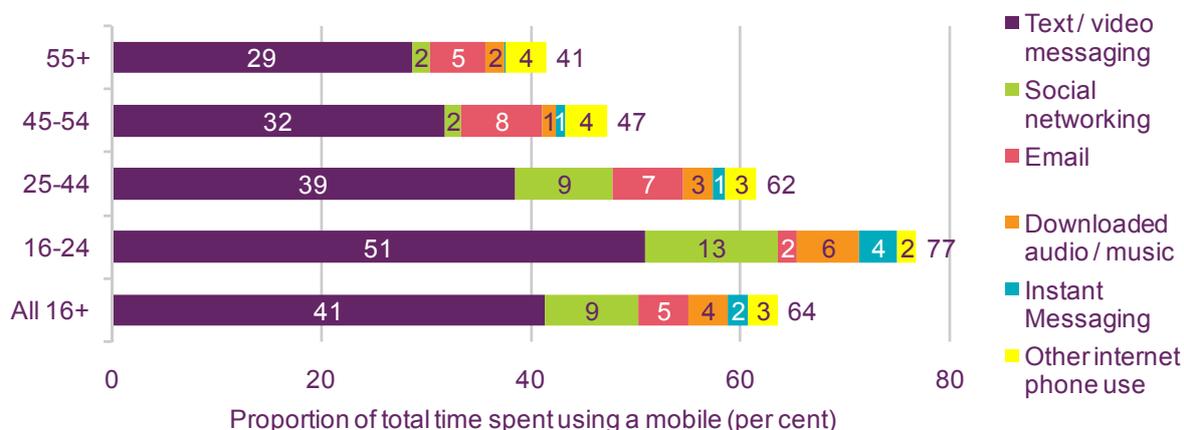
Source: Cisco Visual Networking Index Global Mobile Data Forecast, 2009-2014

Many mobile users mainly use their mobiles for messaging and other data services

Ofcom research in Q1 2010 showed that many mobile users spent the majority of time using their mobile for non-voice purposes (Figure 5.89). In terms of time spent, on average, only those aged 45 or older used their mobile mainly to make voice calls, while 16-24 year-olds spent more than three-quarters (77%) of their time using a mobile on data services (including text and video messaging, which accounted for over half of total time using a

mobile). On average, respondents spent almost a quarter of their time using a mobile (22%) on data use other than text or picture messaging.

Figure 5.89 Mobile phone data services use as a proportion of total use



Ofcom research, Q1 2010

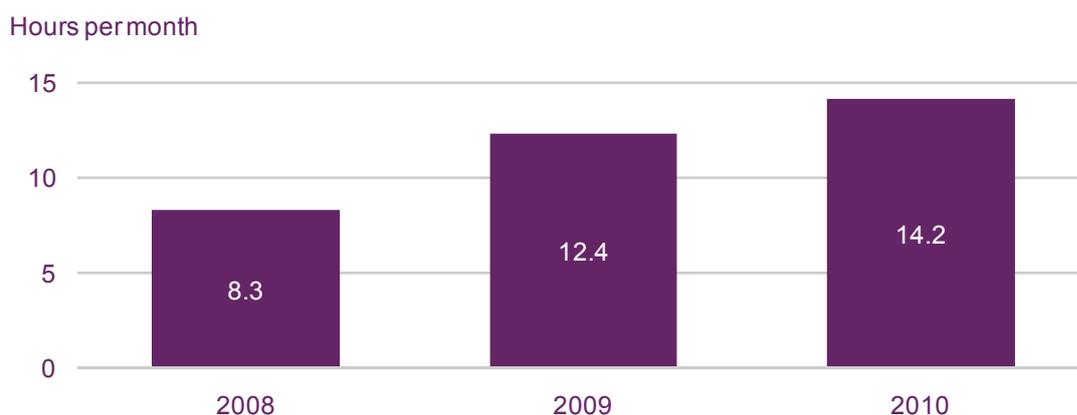
Base = All respondent days: 16+ = 7966; 16-24s = 1106; 25-44s = 3003; 45-54s = 1484; 55+ = 2373

Use of fixed and mobile data services

PC / laptop internet use grows by 15% in the year to May 2010

The average person spent over 14 hours surfing the internet on a PC or laptop at home in May 2010 (Figure 5.90), equivalent to 27 minutes a day and a 15% increase on the 12.4 hours (24 minutes a day) reported for May 2009. However, growth in the average time spent surfing the web on a PC/laptop is slowing, with growth in the year to May 2010 being less than a third of the estimated 49% growth for the previous year. The main reason for this slowdown is likely to be slowing growth in household broadband penetration, which grew by three percentage points in the year to Q1 2010, compared to double-digit growth in the previous year (note that the analysis below looks at the average time online per person in the UK, not the average time online spent by internet users).

Figure 5.90 Average fixed PC / internet time online at home per person



Source: Ofcom / Nielsen / UKOM

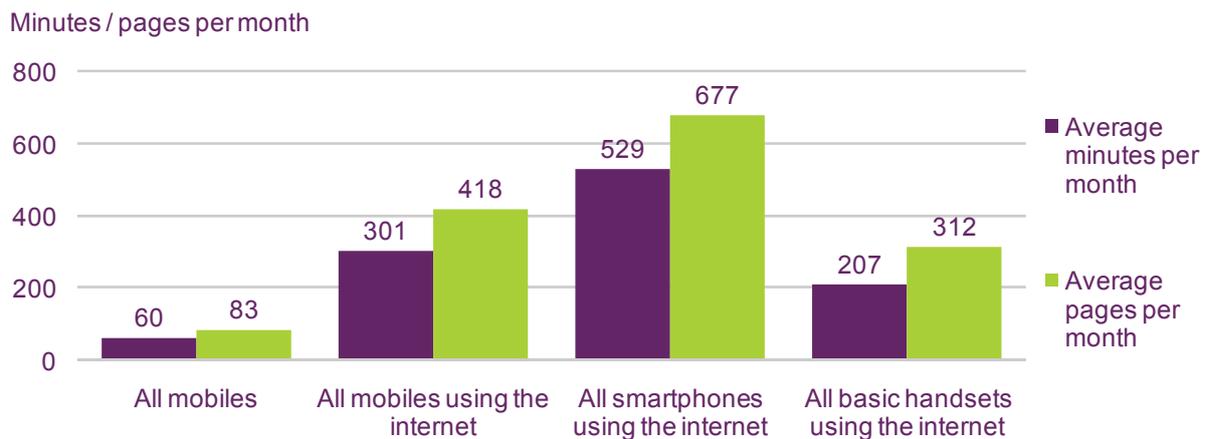
Note: Ofcom estimate of fixed internet use per person is based on Nielsen's data on the average monthly time spent online at home including the use of applications across the online population only; data are for May of each year.

The average mobile user spends an hour accessing the internet on their handset

Data from the GSM Association's *Mobile Media Metrics* shows that in December 2009 the average mobile user spent an hour a month surfing the internet on their handset and in doing so looked at an average of 83 web pages (Figure 5.91). The data also show that there were 15.9 million unique mobile internet users during the month.

Mobile internet users spent on average over five hours a month using mobile internet services, with use by those with a smartphone (8.8 hours a month) being more than twice that of basic handset users (3.5 hours). See Section 5.1.6 for a more in-depth analysis of use of the internet on mobile phones.

Figure 5.91 Average internet use per mobile subscription



Source: GSMA *Mobile Media Metrics*

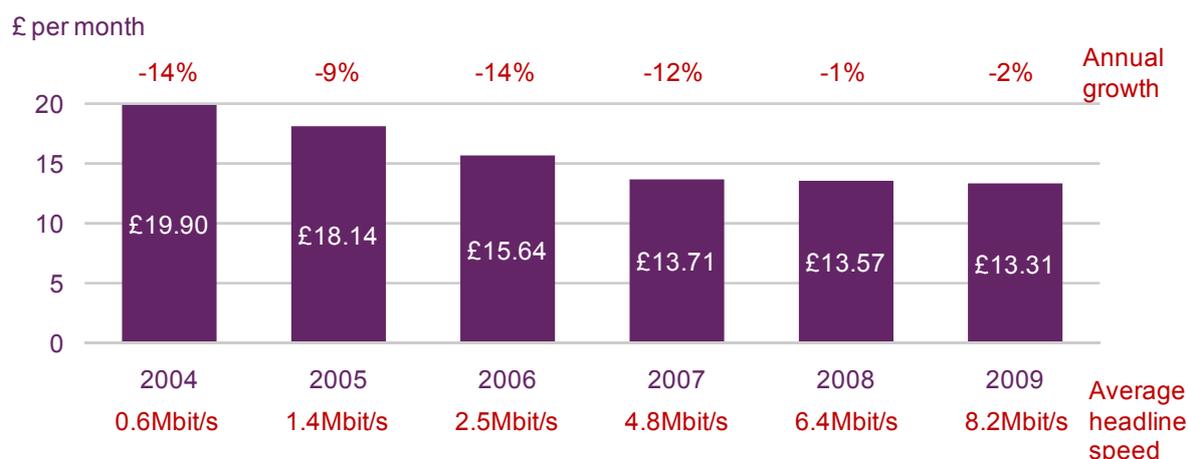
Note: Based on pre-production data for December 2009

Cost of fixed and mobile data services

Average cost of a residential fixed broadband connection falls by 2% in 2009

The average cost of a residential fixed broadband connection continued to fall in 2009, when it was an estimated £13.31 (Figure 5.92). This represented an annual decrease of 2% in nominal terms during the year, slightly higher than the 1% fall in 2008. Overall, the cost of having a home broadband connection has levelled off since steep falls in 2004, 2005 and 2006, while average connections' headline speeds have continued to increase (see Figure 5.10).

Figure 5.92 Estimated average monthly cost of a residential fixed broadband connection



Source: Ofcom / operators

Note: Includes estimates where Ofcom does not receive data from operators

Wide variety of tariffs available, with savings for those who bundle services

A summary of the lowest-cost broadband tariffs from a selection of ISPs, as at June 2010, is shown in Figure 5.93 below. A wide variety of tariffs are available to UK consumers, with the monthly cost of a broadband connection (and a fixed line, as is required with all providers except Virgin Media cable) ranging from £17.74 to £27.53 among those ISPs listed. The table also gives an indication of the discounts that are available for consumers who bundle communications services: for example, Virgin Media's standalone 'M' broadband service costs £20 a month, while a bundle of the same broadband service, a fixed line and a digital TV service costs just £5.99 a month extra. More information on bundling can be found in Section 1.1 of this report.

Figure 5.93 Lowest-cost fixed broadband options from major suppliers, July 2010

Provider	Broadband only	Broadband and fixed calls	Broadband and fixed line	Broadband and mobile	Broadband and pay-TV	Broadband, fixed line and mobile	Broadband, fixed line and pay-TV
AOL	£14.99 ¹	£9.99 ¹	£21.24	-	-	-	-
BSkyB	-	-	-	-	-	-	£29.00
BT	-	-	£27.53	-	-	-	£42.52
O2	£7.50 ^{1,2}	-	-	£7.50 ^{1,2}	-	-	-
Orange Home	£12.00 ¹	-	£20.50	£9.00 ²	-	£17.50 ²	-
Plusnet	£6.49 ¹	-	£17.74	-	-	-	-
TalkTalk	-	-	£18.48	-	-	-	-
Virgin Media	£20.00	-	£24.49	£30.00	£30.50	£34.49	£25.99
Vodafone	-	-	£25.00	-	-	£25.00 ²	-

Source: PurePricing UK Broadband, Bundling and Convergence Update, July 2010

¹ Also requires BT fixed line rental at £11.54 a month

² Plus cost of mobile tariff

Notes: All tariffs exclude activation charges and promotional discounts and include VAT; all tariffs are the lowest price available, contract lengths vary; allowances for fixed-line and mobile calls, plus availability of TV channels included within packages may differ by operator and option;

Mobile broadband services available for less than £10 a month

Figure 5.94 below summarises the cheapest stand-alone mobile broadband products available from UK providers. This shows that, excluding the effect of the increase of VAT to 17.5% in 2010, of the providers listed O2, 3UK and Virgin Mobile have launched lower-cost tariffs, while Vodafone and Orange have increased the download limits on existing products. Because mobile broadband does not require rental of a fixed line, it represents a lower-cost way for some households to get online, although, as detailed in Section 5.1.5 above, the typically slower speeds provided and the lower usage limits do not make it directly comparable to fixed-line broadband.

Figure 5.94 Lowest-cost stand-alone mobile broadband contracts, by provider

Provider		Monthly charge	Data allowance	Minimum contract length	Charges above allowance	WiFi hotspot use
Vodafone	2009	£14.68	1GB	1 month	£14.68 / GB	Not included
	2010	£15.00	3GB	1 month	£15.00 / GB	Not included
O2	2009	£14.69	3GB	1 month	19.6p / MB	Unlimited
	2010	£10.00	1GB	1 month	2.4p / MB	Unlimited
T-Mobile	2009	£14.68	3GB fair use	18 months	n/a	Unlimited
	2010	£15.00	3GB fair use	18 months	n/a	Unlimited
Orange	2009	£9.79	1GB	18 months	1.43p / MB	Not included
	2010	£10.00	1.5GB	18 months	2p / MB	Not included
3UK	2009	£9.79	1GB	12 months	10p / MB	Not included
	2010	£7.50	1GB	18 months	10p / MB	Not included
Virgin Mobile	2009	£14.68	3GB	18 months	£14.68 / GB	Not included
	2010	£10.00	1GB	2 months	£15 / GB	Not included

Source: Pure Pricing UK Mobile Pricing Factbook

Note: Data as at March of each year; all tariffs exclude activation charges, hardware costs and promotional discounts; all tariffs are the lowest price available, contract lengths vary

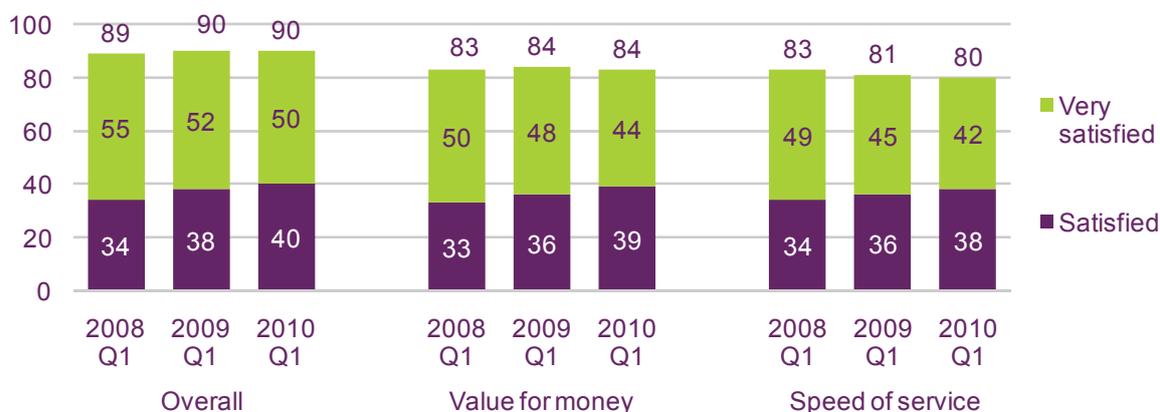
Satisfaction with fixed and mobile data services

Ninety per cent of consumers are satisfied with their fixed broadband service

Overall satisfaction with fixed broadband services was unchanged among consumers in the year to Q1 2010, with 90% of those with a broadband connection at home being either very, or fairly, satisfied with their service (Figure 5.95). Satisfaction with the value for money of fixed broadband services was also unchanged, at 84%. A lower proportion of consumers (80%) were satisfied with the speed of fixed-line services, and satisfaction levels have fallen slightly over the last two years. This comes despite increasing actual speeds, so is likely to be due to a combination of an increasing demand for internet services that require higher speeds (for example streaming video), a perception among an increasing minority that the speeds delivered to them are not satisfactory for these services, and an increasing gap between the actual speeds delivered and the advertised 'up to' speeds.

Figure 5.95 Residential consumer satisfaction with aspects of fixed broadband service

Proportion of all adults with service (per cent)



Source: Ofcom research

Base: All adults aged 15+ with a fixed broadband connection

Note: Includes only those who expressed an opinion

Consumers not as satisfied with mobile broadband services as with fixed

Levels of satisfaction with mobile broadband services continued to be lower than for fixed services in Q1 2010, when 83% of mobile broadband users said that they were satisfied or very satisfied with their service (Figure 5.96). Satisfaction with the value for money of mobile broadband was at a similar level, with 81% of mobile broadband users being very, or fairly, satisfied. However, satisfaction with the speed of mobile broadband connections was lower, with less than three-quarters (73%) of users being either very or fairly satisfied with the download speeds provided by their connection. This is likely to be due to the relatively low speeds provided by mobile broadband, which average less than 1Mbit/s, around a fifth of the average speed of fixed-line broadband services (see Section 5.1.5 above).

Figure 5.96 Residential consumer satisfaction with aspects of mobile broadband service

Proportion of all adults with service (per cent)



Source: Ofcom research

Base: All adults aged 15+ with a mobile broadband connection

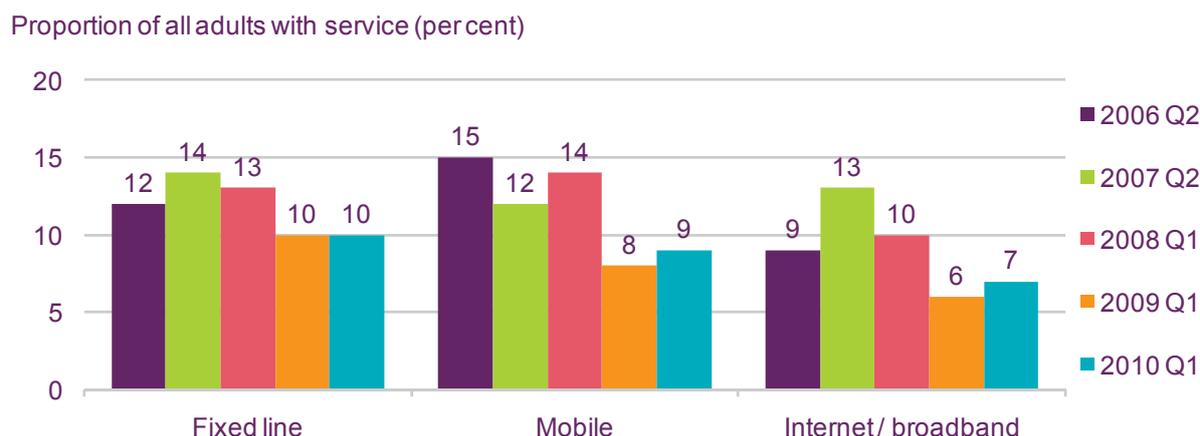
Note: Includes only those who expressed an opinion

5.3.5 Switching

Switching levels unchanged for all services

Levels of switching of landline, mobile and broadband services were unchanged in the year to Q1 2010, with 10% of people with a landline, 9% of people with a mobile phone and 7% of broadband users saying that they had switched provider in the previous year (Figure 5.97). Switching levels remain lower than they had been before Q1 2009 for all services.⁹²

Figure 5.97 Proportion of consumers who switched provider in the previous 12 months



Source: Ofcom research

Note: Data for 2008 onwards are the proportion of broadband consumers who had changed broadband provider in the last 12 months and is not directly comparable with previous data which is the proportion of internet users who had switched; 2009 data are based on fixed broadband consumers; switching when moving home is excluded from these data.

⁹² Ensuring that consumers can switch communications provider, by removing unnecessary barriers, is one of Ofcom's nine priorities in its *Annual Plan* for 2010/11, <http://www.ofcom.org.uk/files/2010/06/annplan1011.pdf>, pp13-14

Glossary

2G Second generation of mobile telephony systems. Uses digital transmission to support voice, low-speed data communications, and short messaging services.

2.5G In mobile telephony, 2.5G protocols extend 2G systems to provide additional features such as packet-switched connections (GPRS) and higher-speed data communications.

3G Third generation of mobile systems. Provides high-speed data transmission and supports multimedia applications such as full-motion video, video-conferencing and internet access, alongside conventional voice services.

3.5G Refers to evolutionary upgrades to 3G services, starting in 2005-2006, that provide significantly enhanced performance. High Speed Downlink Packet Access is expected to become the most popular 3.5G technology (see HSDPA).

3G LTE See LTE

3DTV Three-dimensional television. A television viewing system whereby a 3D effect is created for the viewer. The 3D image is generated using red and blue colour tints on two overlaid images intended for left and right eye. Some forms of 3D TV can involve the viewer wearing glasses (stereoscopic) but more advanced systems do not require glasses (auto-stereoscopic).

802.11 see Wireless LANs (WiFi)

Access network An electronic communications network which connects end-users to a service provider; running from the end-user's premises to a local access node and supporting the provision of access-based services. It is sometimes referred to as the 'local loop' or 'last mile'.

ADSL Asymmetric digital subscriber line. A digital technology that allows the use of a standard telephone line to provide high-speed data communications. Allows higher speeds in one direction (towards the customer) than the other.

ADSL2+ A technology which extends the maximum theoretical downstream dataspeed of ADSL from 8Mbit/s to 24Mbit/s/

ADS-RSLs Audio distribution systems restricted service licences. These licences are issued for broadcast radio services using spectrum outside the 'traditional' broadcast bands (i.e. FM and AM). Typically offering commentary and other information for attendees within a stadium or venue on specially-designed radio receivers for sale at the event (as they do not use standard broadcast frequencies).

Alternative operator Refers to service providers, usually in telecoms, other than the incumbent (or established) operator/s (see incumbent operator/s).

AM Amplitude modulation. Type of modulation produced by varying the strength of a radio signal. This type of modulation is used by broadcasters in three frequency bands: medium frequency (MF, also known as medium wave (MW)); low frequency (LF, also known as long wave (LW)), and high frequency ((HF, also known as short wave (SW)). The term AM is also used to refer to the medium frequency band (see MF, below).

ARPU Average revenue per user. A measurement used by pay-television or mobile companies to indicate the average monthly revenue earned from a subscriber.

ATT Analogue terrestrial television. The television broadcast standard that all television industries launched with. Most countries in this study are planning to phase out ATT in the next ten years.

BARB Broadcasters Audience Research Board. The pan-industry body that measures television viewing.

Bit-rates The rate at which digital information is carried within a specified communication channel.

BitTorrent A peer-to-peer file sharing protocol which uses 'trackers' on websites to index content and is used by a number of BitTorrent clients to download and upload content.

Blog Short for weblog. A weblog is a journal (or newsletter) that is frequently updated and intended for general public consumption. Blogs generally represent the personality of the author or the website.

Bluetooth Wireless standard for short-range radio communications between a variety of devices such as PCs, headsets, printers, mobile phones, and PDAs.

Broadband A service or connection generally defined as being 'always on' and providing a bandwidth greater than narrowband.

CAGR Compound Annual Growth Rate. The average annual growth rate over a specified period of time. It is used to indicate the investment yield at the end of a specified period of time. The mathematical formula used to calculate $CAGR = (\text{present value}/\text{base value})^{(1/\#\text{of years})} - 1$

Catch-up TV Usually refers to a services that allow consumers to watch or listen to content on a non-linear basis after the initial broadcast.

Communications Act Communications Act 2003, which came into force in July 2003.

'Connected' TV A television that is broadband-enabled to allow viewers to access internet content.

Contention ratio An indication of the number of customers who share the capacity available in an ISP's broadband network. Figures of 50:1 for residential broadband connections and 20:1 for business are typical).

CPS Carrier pre-selection. The facility offered to customers which allows them to opt for certain defined classes of call to be carried by an operator, selected in advance and with whom they have a contract. CPS does not require the customer to dial a routing prefix or use a dialler box.

DAB Digital audio broadcasting. A set of internationally-accepted standards for the technology by which terrestrial digital radio multiplex services are broadcast in the UK.

Data packet In networking, the smallest unit of information transmitted as a discrete entity from one node on the network to another.

DCMS Department for Culture, Media and Sport

Digital Britain The Government report, published in June 2009, outlining a 'strategic vision for ensuring that the UK is at the leading edge of the global digital economy'.

Digital switchover The process of switching over the analogue television or radio broadcasting system to digital.

DMB Digital mobile broadcasting. A variant of the DAB digital radio standard for mobile TV services, and an alternative to DVB-H (see DVB, below).

DRM Digital rights management. The technology that controls access and use of digital content.

Dongle A physical device, attached to a PC's USB port, which adds hardware capabilities.

DSL Digital subscriber line. A family of technologies generally referred to as DSL, or xDSL, capable of transforming ordinary phone lines (also known as 'twisted copper pairs') into high-speed digital lines, capable of supporting advanced services such as fast internet access and video on demand. ADSL, HDSL (high data rate digital subscriber line) and VDSL (very high data rate digital subscriber line) are all variants of xDSL).

DTR See DVR

DTT Digital terrestrial television. The television technology that carries the Freeview service.

DVB Digital Video Broadcasting. A set of internationally-accepted open standards for digital broadcasting, including standards for distribution by satellite, cable, radio and hand-held devices (the latter known as DVB-H). The DVB Project develops the standards.

DVB-T2. The latest digital terrestrial transmission technology developed by DVB. The technology is being used to facilitate the introduction of HDTV on DTT in the UK. DVB-S2 (satellite) and DVB-C2 (cable) are also available.

DVD Digital versatile disc. A high-capacity CD-size disc for carrying audio-visual content. Initially available as read-only, but recordable formats are now available.

DVR Digital video recorder (also known as 'personal video recorder' and 'digital television recorder'). A digital TV set-top box including a hard disk drive which allows the user to record, pause and rewind live TV.

EPG Electronic programme guide. A programme schedule, typically broadcast alongside digital television or radio services, to provide information on the content and scheduling of current and future programmes.

E-reader An electronic, portable device capable of downloading and displaying text such as digital books or newspapers.

Feature phone A low-end mobile phone that has less computing ability than a smartphone, but more capability than the most basic handsets.

Fibre-to-the-cabinet Access network consisting of optical fibre extending from the access node to the street cabinet. The street cabinet is usually located only a few hundred metres from the subscriber premises. The remaining segment of the access network from the cabinet to the customer is usually a copper pair but could use another technology, such as wireless.

Fibre-to-the-home A form of fibre optic communication delivery in which the optical signal reaches the end user's living or office space.

Fibre-to-the-building A form of fibre-optic communication delivery in which an optical fibre is run directly onto the customer's premises.

FM Frequency modulation. Type of modulation produced by varying the frequency of a radio carrier in response to the signal to be transmitted. This is the type of modulation used by broadcasters in part of the VHF (Very High Frequency) band, known as VHF Band 2.

Format The type of programme service broadcast by radio stations. Also, the part of a radio station's licence which describes the programme service.

Free-to-air Broadcast content that people can watch or listen to without having to pay a subscription.

GDP Gross Domestic Product.

GPRS General packet radio service, a packet data service provided over 2.5G mobile networks.

GPS The GPS (global positioning system) is a 'constellation' of 24 well-spaced satellites that orbit the Earth and make it possible for people with ground receivers to pinpoint their geographic location.

GSM Global standard for mobile telephony, the standard used for 2G mobile systems.

HDTV High-definition television. A technology that provides viewers with better quality, high-resolution pictures.

Headline connection speed The theoretical maximum data speed that can be achieved by a given broadband. A number of factors, such as the quality and length of the physical line from the exchange to the customer, mean that a given customer may not experience this headline speed in practice.

HSPA Jointly, downlink and uplink mobile broadband technologies are referred to as HSPA (High Speed Packet Access) services.

Incumbent operator/s An incumbent operator usually refers to a market's established provider/s and in the case of the UK fixed market this is BT and Kingston Communications.

IDTV Integrated digital television set. A television set that includes a digital tuner (as well as analogue) and therefore does not require an additional set-top box to receive digital television. IDTVs are most commonly capable of receiving DTT but also digital satellite (Freesat).

International roaming A service offered by mobile operators that allows customers to use their phone abroad. The home operator has agreements with foreign operators that allow customers to make and receive calls, send and pick up text messages, and use some of the other mobile services (such as access to voicemail or topping-up credit on pre-pay phones). The exact services available and the charges for their use vary between operators.

Internet A global network of networks, using a common set of standards (e.g. internet protocol), accessed by users with a computer via a service provider.

Internet-enabled mobile phone A mobile phone which allows its user to access the internet via in-built access technology such as GPRS or WCDMA.

IP (internet protocol) The packet data protocol used for routing and carrying messages across the internet and similar networks.

IPTV Internet protocol television. The term used for television and/or video signals that are delivered to subscribers or viewers using internet protocol (IP), the technology that is also used to access the internet. Typically used in the context of streamed linear and on-demand content, but also sometimes for downloaded video clips.

ISDN Integrated services digital networks. A standard developed to cover a range of voice, data, and image services intended to provide end-to-end, simultaneous handling of voice and data on a single link and network.

ISP Internet service provider. A company that provides access to the internet.

ITC Independent Television Commission, one of the regulators replaced by Ofcom in 2003

ITV licensees ITV Broadcasting Limited, STV, UTV and Channel Television.

ITV All references to ITV1 should be read as including STV, UTV and Channel Television.

LAN (Local area network) A network for communication between computers covering a local area, like a home or an office.

L-Band A range of frequencies within which an allocation has been made in much of the world for broadcasting (1452 to 1492 MHz), generally by satellite, but in Europe for terrestrial digital sound broadcasting in the range 1452 to 1480 MHz. Some DAB digital radio receivers can tune to this range.

Leased line A transmission facility which is leased by an end user from a public carrier, and which is dedicated to that user's traffic.

LLU (local loop unbundling) LLU is the process where the incumbent operators (in the UK it is BT and Kingston Communications) make their local network (the lines that run from customers premises to the telephone exchange) available to other communications providers. The process requires the competitor to deploy its own equipment in the incumbent's local exchange and to establish a backhaul connection between this equipment and its core network.

Local Loop The access network connection between the customer's premises and the local PSTN exchange, usually a loop comprised of two copper wires.

L-RSL See also S-RSLs – Long Term Restricted Service Licences. L-RSLs are a means of providing a radio service for a non-resident population within a defined establishment such as hospital patients and staff, students on a campus, or army personnel. They are available on demand, provided they meet the licensing criteria and that a suitable frequency is available. Licences are renewable after the initial five-year term.

LTE (Long-term evolution). Part of the development of 4G mobile systems that started with 2G and 3G networks.

Microblogging Short-form blogging. The term is commonly associated with the Twitter service, on which messages are no longer than 140 characters.

MMS Multimedia Messaging Service. The next generation of mobile messaging services, adding photos, pictures and audio to text messages.

MNO Mobile Network Operator, a provider which owns a cellular mobile network.

Mobile Broadband Various types of wireless high-speed internet access through a portable modem, telephone or other device.

MP3 (MPEG-1 Audio Layer-3) A standard technology and format for compressing a sound sequence into a very small file (about one-twelfth the size of the original file) while preserving the original level of sound quality when it is played.

MP3 player A device that is able to store and play back MP3 files.

MPEG Moving Picture Experts Group. A set of international standards for compression and transmission of digital audio-visual content. Most digital television services in the UK use MPEG2, but MPEG4 offers greater efficiency and is likely to be used for new services including TV over DSL and high-definition TV.

Multichannel In the UK, this refers to the provision or receipt of television services other than the main five channels (BBC One and Two, ITV1, Channel 4/S4C, Five) plus local analogue services. 'Multichannel homes' comprise all those with digital terrestrial TV, satellite TV, digital cable or analogue cable, or TV over broadband. Also used as a noun to refer to a channel only available on digital platforms (or analogue cable).

Multiplex A device that sends multiple signals or streams of information on a carrier at the same time in the form of a single, complex signal. The separate signals are then recovered at the receiving end.

MVNO An organisation which provides mobile telephony services to its customers, but does not have allocation of spectrum or its own wireless network.

MW See MF and AM above.

Narrowband A service or connection providing data speeds up to 128kbit/s, such as via an analogue telephone line, or via ISD.

Near video on demand (NVoD), a service based on a linear schedule that is regularly repeated on multiple channels, usually at 15-minute intervals, so that viewers are never more than 15 minutes away from the start of the next transmission.

Net neutrality The principle that all traffic on the internet should be treated equally, regardless of content, site or platform.

Next generation core networks (NGN) Internet protocol-based core networks which can support a variety of existing and new services, typically replacing multiple, single service legacy networks

Next generation access networks (NGA) New or upgraded access networks that will allow substantial improvements in broadband speeds and quality of service compared to today's services. This can be based on a number of technologies including cable, fixed wireless and mobile. Most often used to refer to networks using fibre optic technology.

Non-linear Content that is delivered 'on demand' as opposed to linear, broadcast content.

Ofcom Office of Telecommunications, whose functions transferred to Ofcom on 29 December 2003.

'Over-the-top' video Refers to audio-visual content delivered on the 'open' internet rather than over a managed IPTV architecture.

Pact Producers Alliance for Cinema and Television, the UK trade association for independent film, television, animation and interactive media companies.

Pay-per-view A service offering single viewings of a specific film, programme or event, provided to consumers for a one-off fee.

PDA Personal Digital Assistant.

Peak time The period during which: a radio station broadcasts its breakfast show and, on weekdays only, also its afternoon drive-time show; a television station broadcasts its early- and mid-evening schedule, typically used by Ofcom to refer to the period between 18:00 and 22:30 each day (including weekends).

Peer-to-peer (P2P) distribution The process of directly transferring information, services or products between users or devices that operate on the same hierarchical level.

Podcasting A way for digital audio files to be published on the internet, and then downloaded onto computers and transferred to portable digital audio players.

'Pull' VOD A video-on-demand system where content is delivered in real time to the viewers. The approach is usually favoured on platforms that have a high-speed return path, such as cable or IPTV

'Push' VOD A video-on-demand system where content is downloaded to the hard disk of a set-top box rather than streamed in real time via a wired network. The approach is usually favoured on platforms that do not have a high-speed return path, such as satellite or terrestrial.

PSB Public service broadcasting, or public service broadcaster. The Communications Act in the UK defines the PSBs as including the BBC, ITV1 (including GMTV1), Channel 4, Five and S4C.

PSTN Public switched telephone network. The network that manages circuit-switched fixed-line telephone systems.

PVR See DVR

RAJAR Radio Joint Audience Research – the pan-industry body which measures radio listening.

RSL Restricted service licence. A radio licence serving a single site (e.g. a hospital or university campus) or serving a wider area on a temporary basis (e.g. for festivals and events).

Service bundling (or multi-play) A marketing term describing the packaging together of different communications services by organisations that traditionally only offered one or two of those services.

Service provider A provider of electronic communications services to third parties, whether over its own network or otherwise.

SIM (Subscriber Identify Module) A SIM or SIM card is a small flat electronic chip that identifies a mobile customer and the mobile operator. A mobile phone must have a SIM card inserted before it can be used.

SIM-only A mobile contract that is sold without a handset.

Share (radio) Proportion of total listener hours, expressed as a percentage, attributable to one station within that station's total survey area.

Share (TV) Proportion of total TV viewing to a particular channel over a specified time, expressed as a percentage of total hours of viewing.

Simulcasting The broadcasting of a television or radio programme service on more than one transmission technology (e.g. FM and MW, DAB and FM, analogue and digital terrestrial television, digital terrestrial and satellite).

Smartphone A mobile phone that offers more advanced computing ability and connectivity than a contemporary basic 'feature phone'.

SME Small to medium-sized enterprise. A company with fewer than 250 employees.

SMS Short Messaging Service, usually used to refer to mobile text messaging (see text message below).

Social networking site (SNS) A website that allows users to join communities and interact with friends or to others that share common interests.

S-RSLs Short-term restricted service licences (S-RSLs) are issued for temporary local radio stations which usually serve a very localised coverage area, such as an education campus, a sports event, or a music or religious festival site. These licences are also used for temporary trials of community stations, sometimes to gauge interest before applying for a five-year community licence.

Streaming content Audio or video files sent in compressed form over the internet and consumed by the user as they arrive. Streaming is different to downloading, where content is saved on the user's hard disk before the user accesses it.

Telecommunications, or 'telecoms' Conveyance over distance of speech, music and other sounds, visual images or signals by electric, magnetic or electro-magnetic means.

Text message A short text-only communication sent between mobile devices

Time-shifting The broadcasting of a television service on more than one channel with a specified delay (typically an hour), to provide more than one opportunity for viewers to watch the service. Alternatively, the recording of programmes by viewers (using DVRs, recordable DVDs or VCRs) to watch at another time.

Transmitter A device which amplifies an electrical signal at a frequency to be converted, by means of an aerial, into an electromagnetic wave (or radio wave). The term is commonly used to include other, attached devices, which impose a more simple signal onto the frequency, which is then sent as a radio wave. The term is sometimes also used to include

the cable and aerial system referred to above, and indeed the whole electrical, electronic and physical system at the site of the transmitter.

TSA Total survey area. The coverage area within which a radio station's audience is measured by RAJAR.

TV over DSL/TV over broadband A technology that allows viewers to access TV content – either in a linear programme schedule, or on demand – using internet protocol via broadband services, either on a PC or (via a set-top box) on a TV set.

TVWF Television Without Frontiers. A range of provisions designed to achieve coordination of the legal, regulatory and administrative frameworks of European Union member states with respect to television broadcasting, adopted by the European Council in 1989 and amended in 1997. TVWF was replaced by the Audio Visual Media Services (AVMS) Directive in December 2007.

UKOM UK Online Measurement. A media industry measurement of UK consumers' online activity, specified by UKOM Ltd and delivered by Nielsen.

UMA Unlicensed Mobile Access, a technology that provides roaming between GSM and 802.11 WiFi

UMTS Universal mobile telecommunications system. The 3G mobile technologies most commonly used in the UK and Europe.

Unbundled A local exchange that has been subject to local loop unbundling (LLU).

Usage caps Monthly limits on the amount of data which broadband users can download, imposed by some ISPs.

Unique Audience The number of different people visiting a website or using an application.

UWB Ultra-wideband A technology developed to transfer large amounts of data wirelessly over short distances, typically less than ten metres.

VCR Video cassette recorder.

VHF Very High Frequency The part of the spectrum between 30 MHz and 300 MHz. FM radio is broadcast on part of this band (87.6 MHz to 107.9 MHz) and DAB digital radio is broadcast on another (Band III: 217.5 MHz to 230 MHz in the UK, and over a wider range, but shared with TV services, elsewhere in Europe).

VoD Video-on-demand A service or technology that enables TV viewers to watch programmes or films whenever they choose to, not restricted by a linear schedule (also see 'push' VOD and 'pull' VOD).

VoIP Voice over Internet Protocol. A technology that allows users to send calls using internet protocol, using either the public internet or private IP networks.

WAP Wireless application protocol.

Web 2.0 A perceived 'second generation' of web-based communities and hosted services - such as social networking sites and wikis, which facilitate collaboration and sharing between users.

WiFi hotspot A public location which provides access to the internet using WiFi technology.

WiMAX A wireless MAN (metropolitan area network) technology, based on the 802.16 standard. Available for both fixed and mobile data applications.

Widget Widgets are small chunks of code embedded on desktops, web pages, mobile phones and TVs to enable content to be distributed.

Wireless LAN or WiFi (Wireless fidelity) Short-range wireless technologies using any type of 802.11 standard such as 802.11b or 802.11a. These technologies allow an over-the-air connection between a wireless client and a base station, or between two wireless clients.

WLR (Wholesale line rental) A regulatory instrument requiring the operator of local access lines to make this service available to competing providers at a wholesale price.

XHTML (Extensible HTML) A mark-up language for Web pages from the W3C. XHTML combines HTML and XML into a single format (HTML 4.0 and XML 1.0).

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