

OCTOBER 2021

 **MEDIA REFORM  
COALITION**

 **CEU  
Democracy  
Institute**  
**CENTER FOR MEDIA,  
DATA AND SOCIETY**



# MEDIA INFLUENCE MATRIX: UNITED KINGDOM

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Technology, Public Sphere &  
Journalism

## About CMDS

The **Center for Media, Data and Society (CMDS)** is a research center for the study of media, communication, and information policy and its impact on society and practice. Founded in 2004 as the Center for Media and Communication Studies, CMDS is part of Central European University's Democracy Institute and serves as a focal point for an international network of acclaimed scholars, research institutions and activists.

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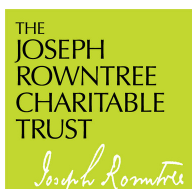
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## About the Report

Research carried out by Leo Watkins for the **Media Reform Coalition** and as part of the Center for Media, Data and Society's Media Influence Matrix, set up to investigate the influence of shifts in policy, funding, and technology on contemporary journalism. The UK component of Media Influence Matrix is coordinated in partnership with **Goldsmiths, University of London** and is funded by the **Joseph Rowntree Charitable Trust**.

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*The Media Influence Matrix Project is run collaboratively by the Media & Power Research Consortium, which consists of local as well as regional and international organizations. The consortium members are academic institutions (universities and research centers), NGOs, journalism networks and private foundations.*

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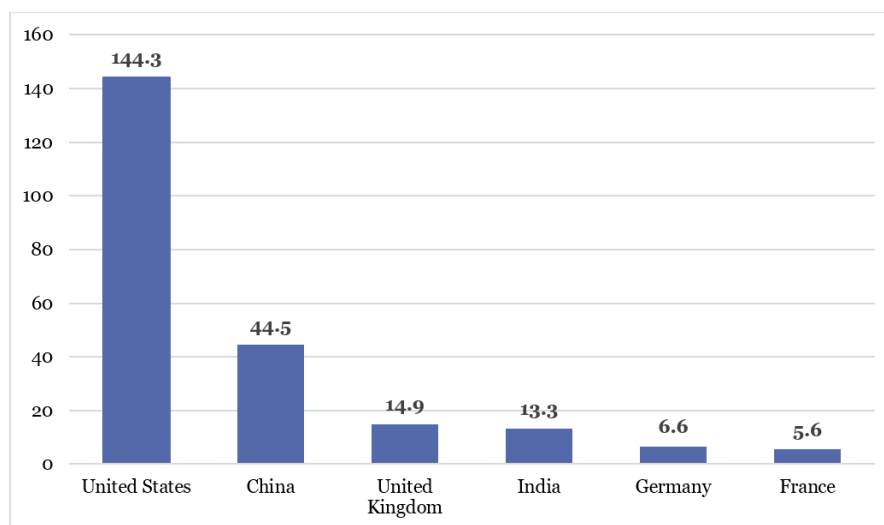
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# INTRODUCTION

The UK has a major technology sector, with the third-highest venture capital (VC) investment in the world behind the US and China, reaching \$15 billion annually in 2020. Leading sub-sectors include fintech, enterprise software, health tech and transport tech. However, the UK's level of investment still places it far behind the US, which leads the world in VC investment, with almost ten times the UK's in 2020.

**Table 1. Venture capital investment in technology companies – by country, 2020 (\$bn)**

Source: Tech Nation, Dealroom 2021



Despite a substantial and growing tech sector, the UK's dominant platforms for many key digital activities like search, social media, communication and audio-visual media are predominantly those of the American tech giants, especially Google and Facebook. The sole exception is in online audio-visual media, where the UK's broadcasters – especially the BBC – still play an important role with their video-on-demand platforms. But even there, American free and paid video streaming platforms like YouTube, Netflix, Amazon Prime Video and Disney+ increasingly threaten to dominate. Moreover, American media conglomerates have acquired two of the UK's major broadcasters over the past decade: Channel 5 was acquired by ViacomCBS in 2014 and Sky was acquired by Comcast in 2018.

The American digital giants have a substantial presence in the UK, with major offices in London that in some cases also serve as their European headquarters. For example, Google has five offices in the UK – four in London, one in Manchester, and is currently building an 11-storey, 650,000 square foot building in London's King's Cross area, with the potential to house up to 7,000 – up from the 4,500 UK employees it has currently.[1] In 2020, over two-thirds of tech investment was in London, which had the fourth-highest VC investment of any city in the world in 2020 with \$10.6 billion. Investment outside London is concentrated in the South East and East of England. 63% of investment in the UK's tech sector in 2020 came from overseas, up from 50% in 2016.[2]

[1] Joanna Partridge, "Google commits to vast London office despite rise of remote working" *The Guardian* 28 July 2020, available online at: <https://www.theguardian.com/technology/2020/jul/28/google-commits-to-vast-london-office-despite-rise-of-remote-working>

[2] Tech Nation, *The future UK tech built: Tech Nation Report 2021*, available online at: <https://technation.io/report2021/>

The tech sector is a major, rapidly growing contributor to the UK's economy. Successive governments have announced strategies to promote the growth of the tech industry and the digital economy, the latest being the current government's '10 Tech Priorities' announced in March 2021.[3] Government ministers repeatedly stress in their speeches how important the tech industry is to the UK's economic growth. Gross Value Added (GVA) in the UK's digital sector increased by 26.5% in real terms between 2010 and 2019, having reached £150.6 billion, 7.6% of total UK GVA.[4] For comparison, GVA in 2019 was £115.9 billion for the creative industries, £74.5 billion for tourism, £129.3 billion for construction, £49.1 billion for the automobile industry and £13 billion for agriculture. Telecoms has been the biggest contributor to digital sector GVA growth between 2010 and 2019, accounting for 20%. The UK's digital sector accounted for 1.6 million jobs in the period between October 2019 and September 2020, with London and the South East accounting for almost half (777,000). Of those 1.6 million jobs, over half (876,000) are in computer programming, consultancy and related activities, 167,000 are in telecoms, and 164,000 are in digital publishing.[5]

There are a number of industry associations that represent the interests of the UK's tech industry. Foremost is techUK, whose board strikingly displays the dominance of the industry by US tech firms with representation from the likes of Microsoft, IBM, Cisco, HP, Oracle, Adobe, Zoom and VMware.[6] In general, UK tech firms do not have the prominence in political debates over digital policy that the tech giants have in the US. In large part this is because they do not play a major role in the digital intermediation of information or communications, or in the online advertising market – the areas that have so far proved the focus of public policy attention around regulating tech.

The deployment of digital and internet technologies is relatively far advanced in the UK. Broadband was already available in 80% of households in 2012, and it is now present in almost all of them – around 96%. During the 2010s, there was rapid adoption of smartphones and other mobile devices, and 4G became the standard mobile internet technology. The UK government's next goals are the rollout of 5G and the rapid rollout of full fibre home broadband, upgrading current superfast (30+Mbit/s) connections to ultrafast (300+Mbit/s) or gigabit connections this decade. The government's official target is 85% full fibre coverage by 2025 but it is unlikely that full fibre will be universally available or widely used until towards the end of the decade.

British politics at Westminster has reacted very slowly to register the existence of distinctive and challenging issues involving technology, digital markets and online platforms that require public policy attention. The beginnings of a sea change in attention can be dated to the panic around 'fake news' after the 2016 US presidential election (examined in more detail below).

The current government has two main policy initiatives with implications for the relationship between technology and journalism in the UK. First, it recently published a draft Online Safety Bill that would introduce a new 'duty of care' for digital platforms requiring them to take more proactive steps to protect their users from a range of 'online harms,' including disinformation and misinformation. Second, it has formulated prospective legislation to update the UK's competition regime to better address the distinctive issues raised by digital markets. These are among the issues considered below.

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[3] Department for Digital, Culture, Media and Sport, "Our 10 Tech Priorities" available online at: <https://dcms.shorthandstories.com/Our-Ten-Tech-Priorities/index.html>

[4] Department for Digital, Culture, Media and Sport, "DCMS Economic Estimates 2019 (provisional): Gross Value Added" 19 February 2021, available online at: <https://www.gov.uk/government/statistics/dcms-economic-estimates-2019-gross-value-added/dcms-economic-estimates-2019-provisional-gross-value-added>

[5] Department for Digital, Culture, Media and Sport, "DCMS Sector Economic Estimates: Employment Oct 2019 - Sep 2020" 21 January 2021, available online at: <https://www.gov.uk/government/statistics/dcms-sector-economic-estimates-employment-oct-2019-sep-2020>

[6] <https://www.techuk.org/who-we-are/our-board.html>

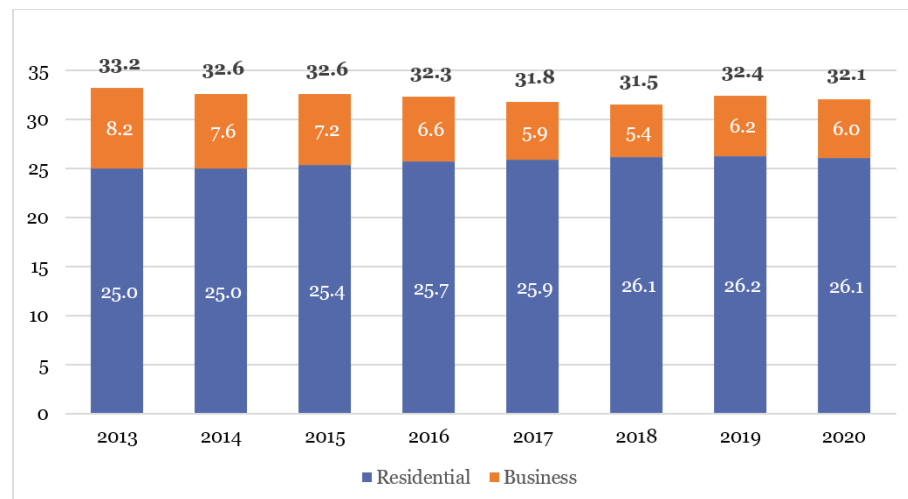
# TECHNOLOGY OVERVIEW

## Infrastructure

The UK has a relatively developed telephony and broadband infrastructure. The number of phone landlines is now in decline, driven by a 25% drop in the number of business landlines between 2013 and 2020 as VoIP and mobile calls increasingly replace fixed-line calls, although residential landlines increased slightly, in line with UK household growth.

**Table 2. Landlines by customer type, millions**

Source: Ofcom / operators

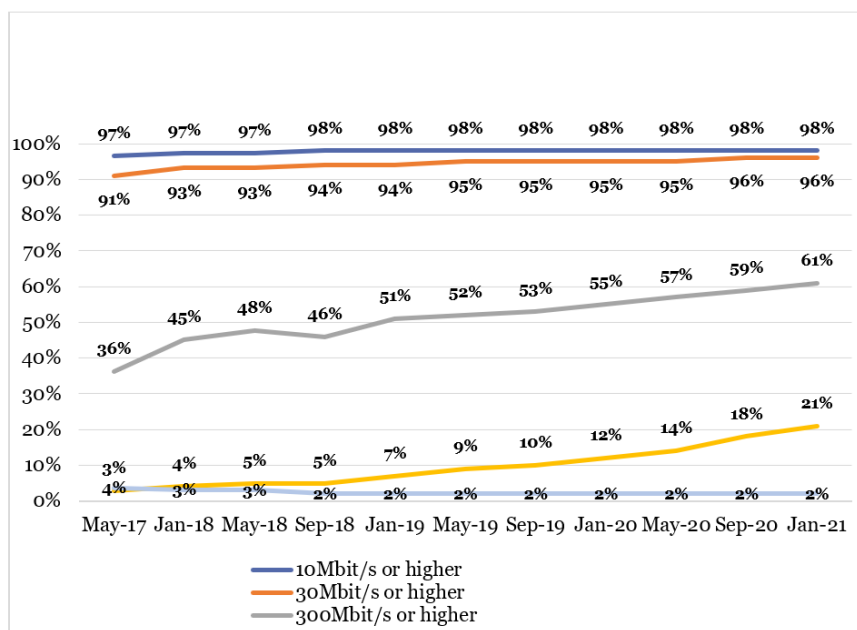


The UK has long had near-universal fixed broadband coverage of 10Mbit/s or higher: the standard defined in law as the Universal Service Obligation (USO). All UK households have a legal right to request at least a 10Mbit/s connection under the USO, unless the cost of installing such a connection would be exorbitant. The 2% of households that do not have such a connection are in remote rural areas where the cost of connection is too high.[7] In the last five years, the UK has nearly completed the rollout of superfast broadband coverage, which is defined as an average speed of 30Mbit/s or higher. The remaining 4% of households without access are predominantly in rural areas and account for 20% of rural households.

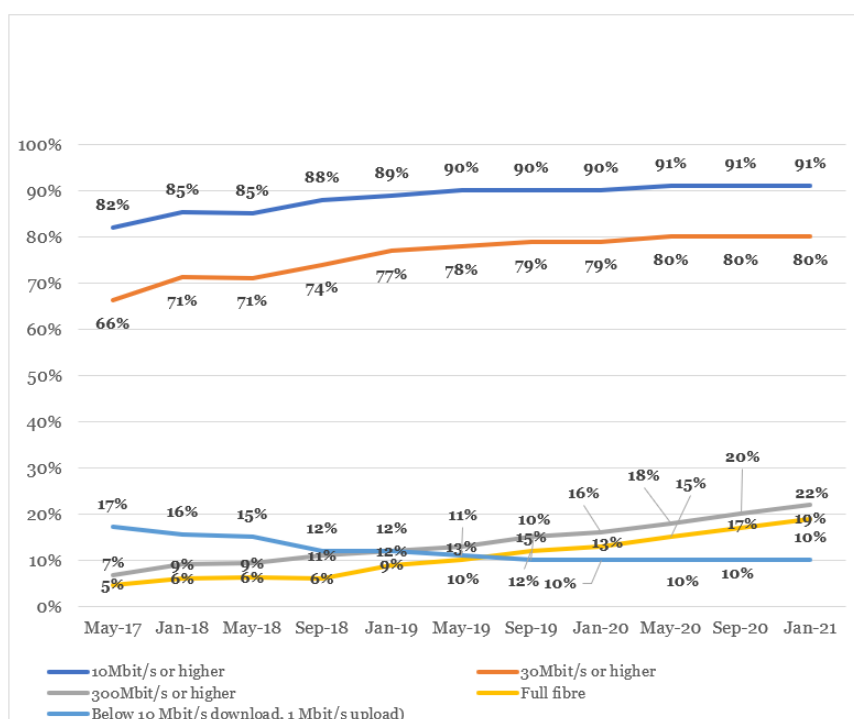
Two key choices have defined the British state's strategy for upgrading the UK's fixed broadband infrastructure. First, reliance on private sector investment to pay for new infrastructure rollout, supplemented by some public subsidies to cover the rollout in rural areas, where the higher cost of connecting households discourages private sector providers from making the necessary investments to do so. Second, the rollout of fibre-to-the-cabinet (FTTC) technology that utilises slower, existing copper wire connections from the cabinet to the household, instead of using fibre optic cables all the way (known as full fibre or fibre-to-the-premises – FTTP). The reason was that although FTTC technology is not capable of FTTP's ultra-fast speeds, FTTC was cheaper and faster to roll out, and provided superfast connections that were fast enough to be capable of many of the core activities for which higher internet speed was sought, like video streaming.

[7] For more on the Universal Service Obligation, see Georgina Hutton, "The Universal Service Obligation (USO) for Broadband" *House of Commons Library* 2 October 2020, available online at: <https://commonslibrary.parliament.uk/research-briefings/cbp-8146/> See also Ofcom, "Your right to request a decent broadband service: What you need to know" 11 August 2021, available online at: <https://www.ofcom.org.uk/phones-telecoms-and-internet/advice-for-consumers/broadband-uso-need-to-know>

**Table 3. Fixed broadband coverage – by available download speeds, UK 2017-2021**  
Source: Ofcom



**Table 4. Fixed broadband coverage in rural areas – by available download speeds, UK 2017-2021**  
Source: Ofcom

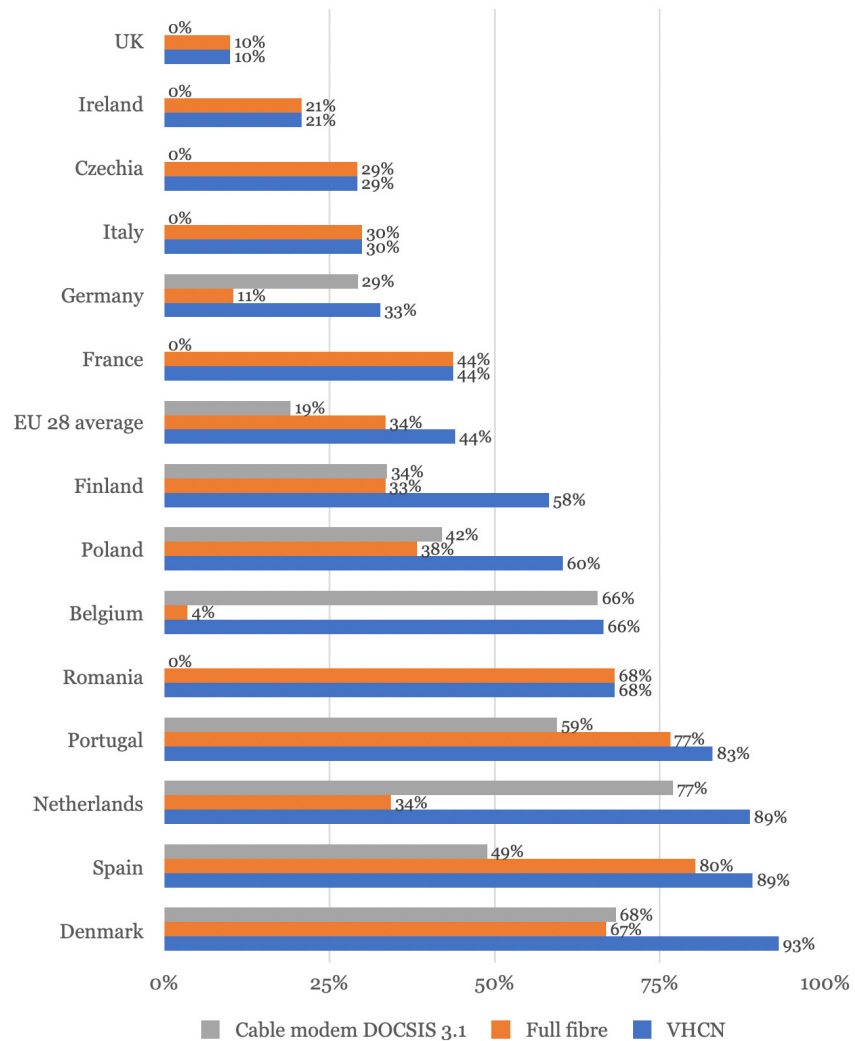


The downside of the UK's strategy of prioritising the rapid, near-universal deployment of FTTC technology delivering superfast speeds is that the UK lags considerably behind other European countries in the rollout of FTTP, 'full fibre' coverage. The most recent EU-wide data, for 2019, showed FTTP coverage in the UK at 10% compared to an EU average of 33.5%, and overall fixed very high-capacity network (VHCN) coverage (which includes DOCSIS 3.1 cable technology as well as FTTP) at 10% compared to an EU average of 44%. Even though full fibre coverage in the UK had doubled to 21% by January 2021, according to Ofcom, that still leaves the UK's VHCN coverage well behind most other major European countries. However, the upside of the UK's approach is that, as of 2019, the UK had more widespread coverage of superfast fixed broadband than the EU average: 95% in the UK compared to 83.3%.



**Table 5. Fixed broadband coverage in Europe – by available connection type, % of households 2019**

Source: European Commission



Although 96% of households have access to superfast connections today, the take-up of superfast connections stands at only 78% – no doubt due to a combination of a lack of need in some low-internet-use households, and an inability to afford the price of superfast internet connection in others. However, the gap between superfast coverage and take-up has closed considerably since 2017, when 91% of households had access but only 51% had taken it up. Take-up has risen from 23% in 2013 to 78% in 2020. Together with some take-up of ultra-fast (100+ Mbit/s) and gigabit broadband, mostly in large urban areas, the result of this upgrading is that the average actual fixed broadband download speed in the UK has increased by over four times between 2013 and 2020, from 18 to 80 Mbit/s. These speeds, easily capable of streaming HD video, are sufficient for all but the heaviest home internet users, but the average figure masks considerable inequalities in the speeds people can access.

Table 6. Fixed broadband connections by technology, UK 2013-2020

Source: Ofcom/operators

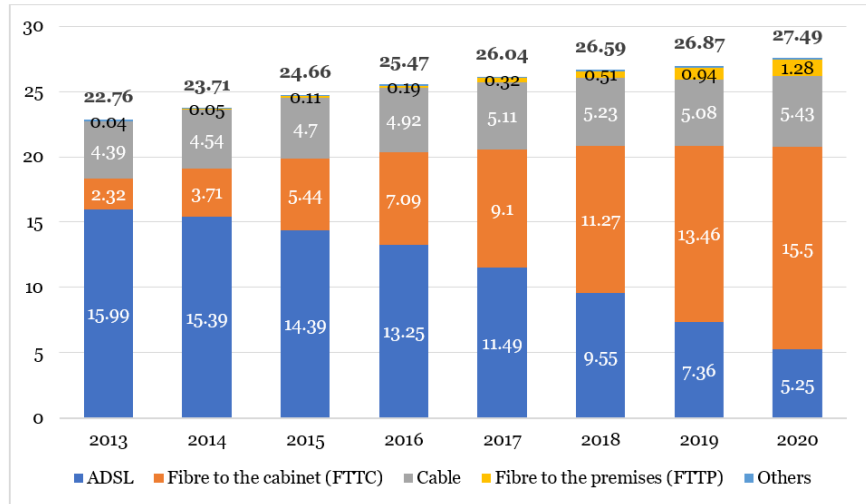


Table 7. Fixed broadband connections by technology, UK 2013-2020

Source: Ofcom/operators

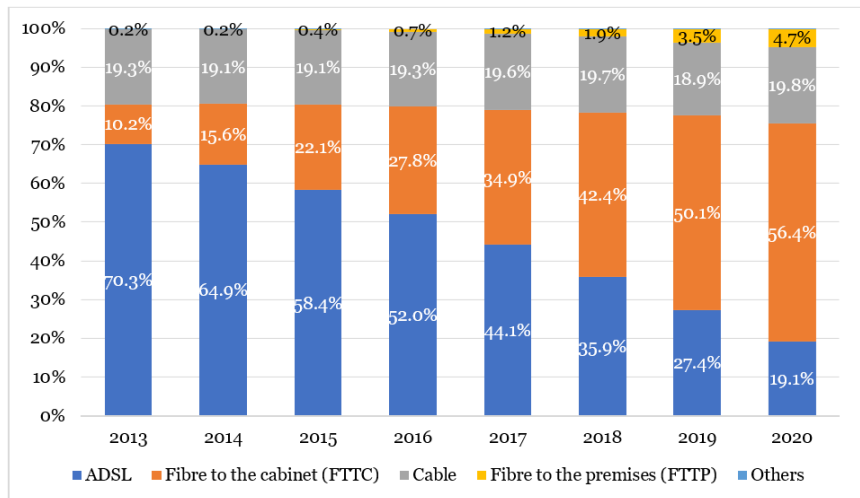
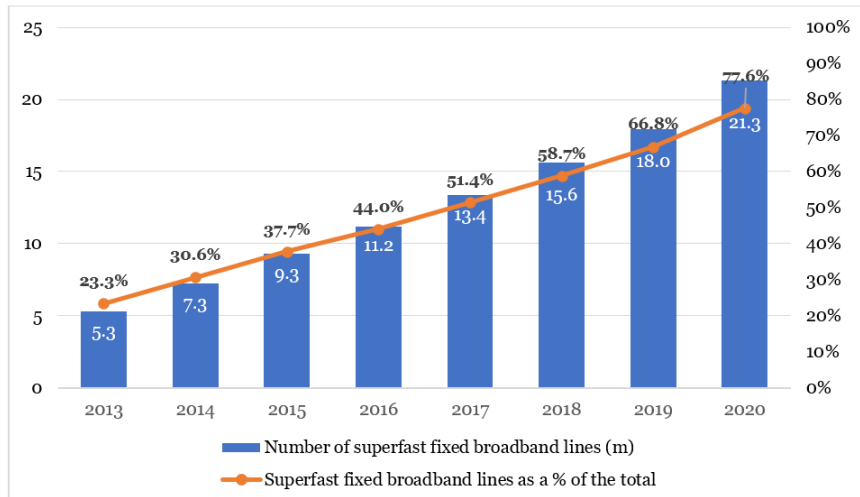


Table 8. Superfast (30+ Mbit/s) fixed broadband lines, UK 2013-2020

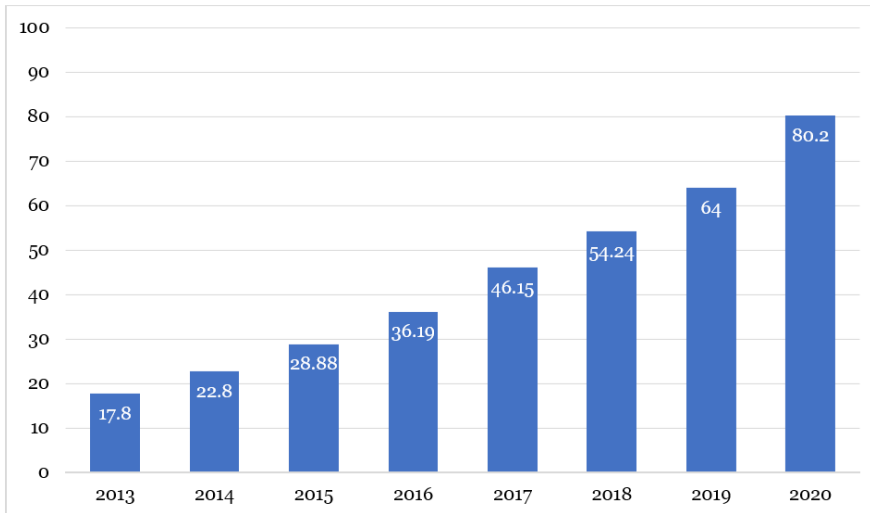
Source: Ofcom/operators.

Note: figures have been adjusted to exclude lines with an advertised download speed of 30+ Mbit/s that are not capable of delivering an actual download speed of 30+ Mbit/s



**Table 9. Average actual fixed broadband download speed (Mbit/s), UK 2013-2020**

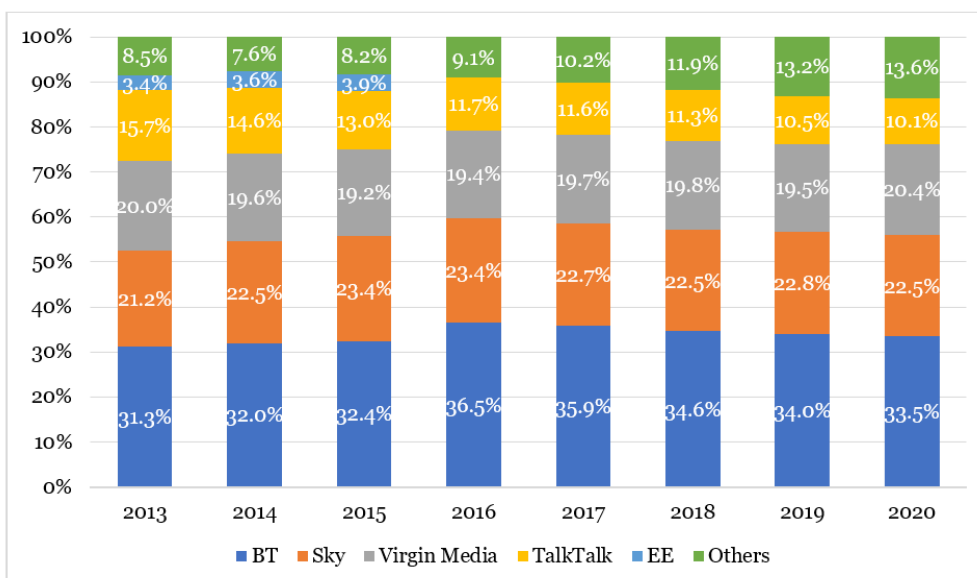
Source: Ofcom/operators. Note: measurements taken in Q4 of each year



BT, formerly the state-owned corporation British Telecom but now a publicly-traded private company, is the dominant internet service provider in the UK, as well as the main provider of fixed line telephone services. BT, Sky and Virgin Media dominate fixed line telecoms in the UK, with a consistent three-quarter market share of fixed broadband connections over the past decade. BT's share has declined slightly since 2016 (when it acquired EE), and TalkTalk's share declined by a third from 2013 to 2020. Growth has come largely from other providers, whose share of connections increased by five percentage points between 2013 and 2020.

**Table 10. Fixed broadband connections by internet service provider (ISP), UK 2013-2020**

Source: Ofcom/operators. Note: BT includes Plusnet and, from 2016 onwards, EE.



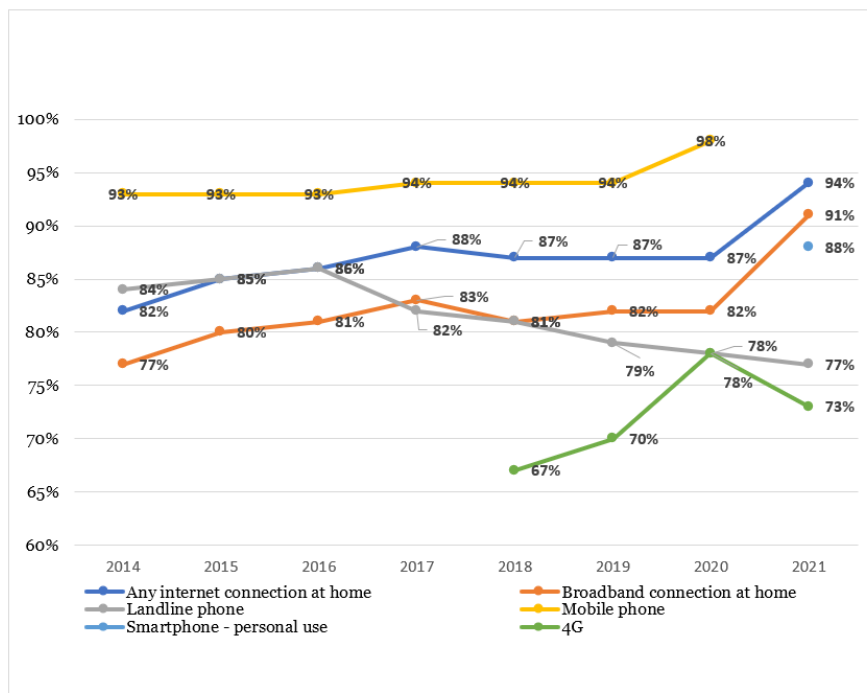
## Telephone and Internet Penetration

Mobile phone penetration in the UK is now virtually universal, as are internet connections. However, 9% of UK households do not have a broadband connection at home – mostly poorer households and those in hard-to-reach rural areas where broadband speeds are low. 4G coverage is widespread but not universal, and 5G coverage has begun to be rolled out, with 7% take-up in 2021. 80% of people have either 4G or 5G mobile data.

**Table II. Telecoms service take-up, 2014-2020**

Source: Ofcom Technology Tracker surveys. All figures refer to households except for smartphone and 4G which represent personal use. Broadband connection at home includes mobile connections and mobile phone access.

Note: the 2021 data is not strictly comparable to the previous years because the pandemic enforced changes to Ofcom's survey methodology (2020 fieldwork was carried out prior to the pandemic): face-to-face surveys could not be used, and were replaced with telephone surveys.



Some of the increase in home internet connections in 2021 is probably due to pandemic-enforced changes to Ofcom's survey methodology (the replacement of face-to-face interviews with telephone surveys). However, some of the increase seems to be genuine: the Office for National Statistics' data gives a slightly higher rate of household internet access over the whole period but its breakdown of internet connections by household composition clearly shows a marked increase in internet access in households with at least one person over the age of 65 in 2020. Most likely, the pandemic pushed some households with older members who started 2020 without internet access to acquire it over the course of the year in order to stay connected to friends and family.

Table 12. Internet connection by household composition, GB 2012 to 2020

Source: Office for National Statistics

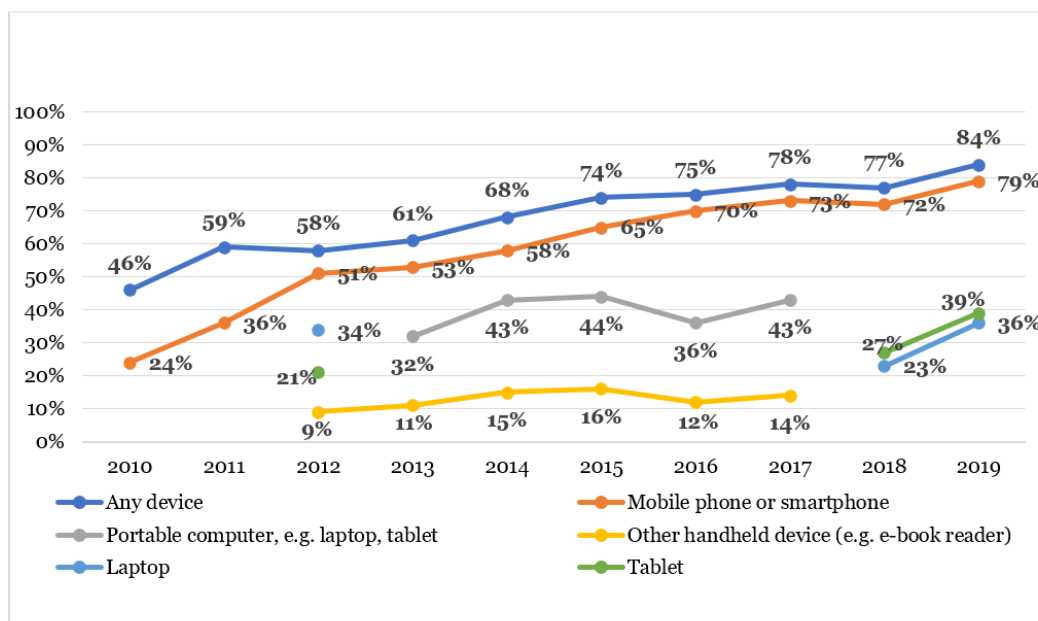
	2012	2013	2014	2015	2016	2017	2018	2019	2020
All households	80%	83%	84%	86%	89%	90%	90%	93%	96%
1 adult aged 16 to 64	76%	74%	81%	80%	87%	88%	91%	94%	95%
1 adult aged 65+	36%	40%	40%	49%	53%	61%	59%	73%	80%
2 adults aged 16 to 64	93%	96%	97%	96%	99%	97%	99%	100%	100%
2 adults, 1 at least 65+	69%	74%	79%	84%	85%	88%	87%	89%	94%
3+ adults, all ages	95%	97%	97%	98%	99%	100%	98%	99%	97%
Households with children	95%	97%	96%	97%	99%	98%	100%	100%	100%

During the 2010s, the internet went mobile: over the decade, the proportion of the population accessing the internet 'on the go' went from less than half to over four-fifths, with the proportion using a mobile phone or smartphone to do so rising from a quarter to four-fifths. The use of tablets to do so increased over the decade, but not by as much – from 21% in 2012 to 39% in 2019.

Table 13. Internet use 'on the go' by device, GB 2010-2019

Source: Office for National Statistics

Note: in 2012, 2018 and 2019 ONS reported laptop and tablet use 'on the go' separately.



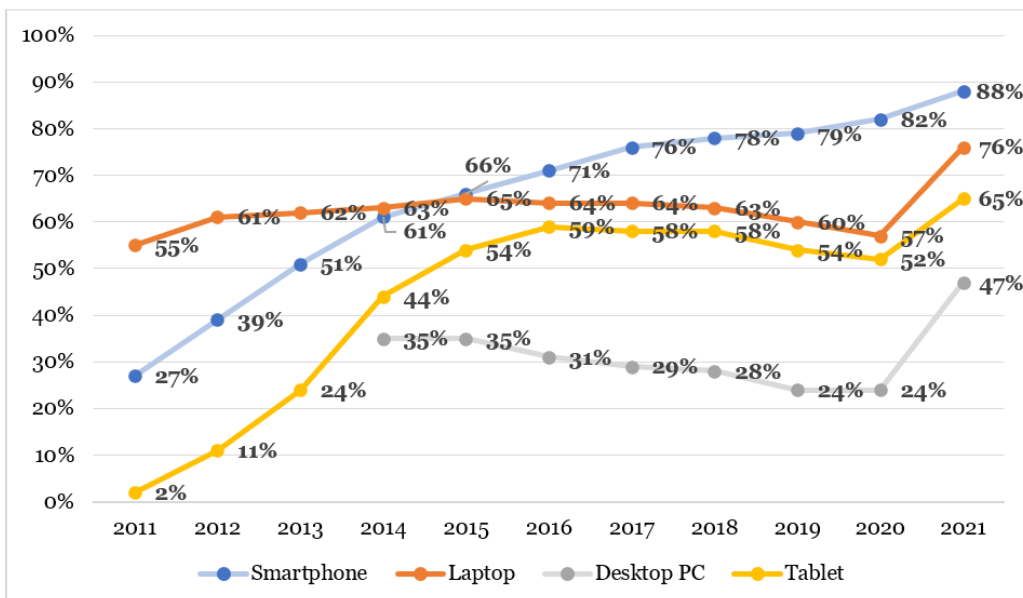
## Devices

During the 2010s, ownership of smartphones took off, rising from 27% in 2011 to 88% in 2021. This was the most fundamental and transformative change in digital technology over the decade. Meanwhile, tablet ownership took off rapidly in the first half of the decade, but then levelled off in the second half at just under 60%. Desktop PC ownership declined from 35% in 2014 to 24% in 2020. Laptop ownership gradually rose in the first half of the decade but then declined slightly in the second half.

Ofcom's survey data appears to suggest a large jump in all types of device ownership in 2021. This may primarily be due to pandemic-enforced changes in its survey methodology which had the effect of overrepresenting computer device owners and underrepresenting those who own none – or fewer – of these devices. But it is also possible that the restrictions on going out – and thus on a number of kinds of spending – as a result of the pandemic led to a reallocation of household budgets, with more people buying computer devices, especially devices for the home like desktop PCs. Staying connected to friends and family amid repeated national lockdowns seems to have provided a compelling reason for older people, in particular, to finally get smartphones.

**Table 14. Computer device take-up, UK 2011-2021**

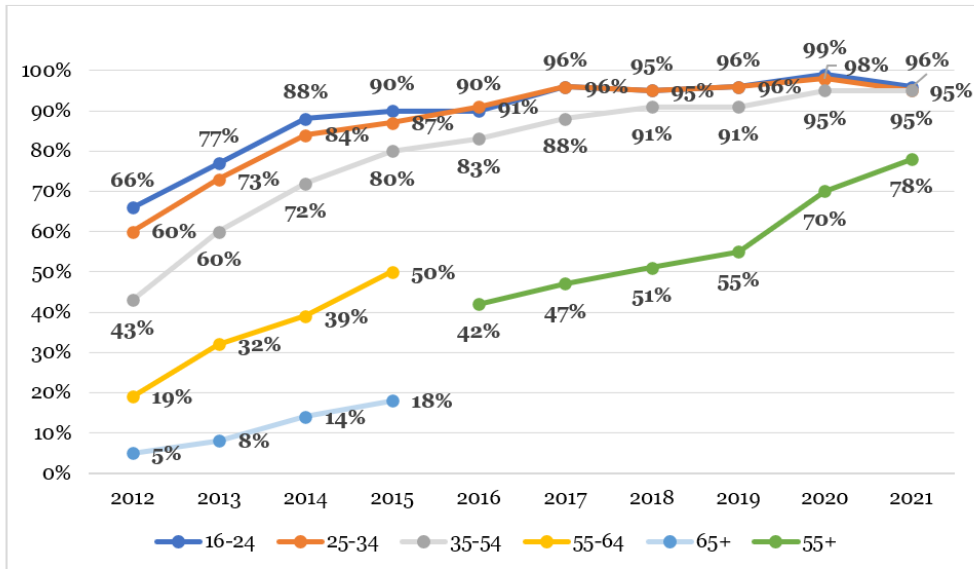
Source: Ofcom Technology Tracker surveys



The speed of take-up of smartphones and tablets was very different for different age groups. By 2016, almost all people under the age of 35 owned a smartphone but only 42% of over-55s did so, and the gulf remained marked up to 2019. However, the gap narrowed considerably in 2020 and 2021.

Table 15. Smartphone ownership – by age, UK 2012-2021

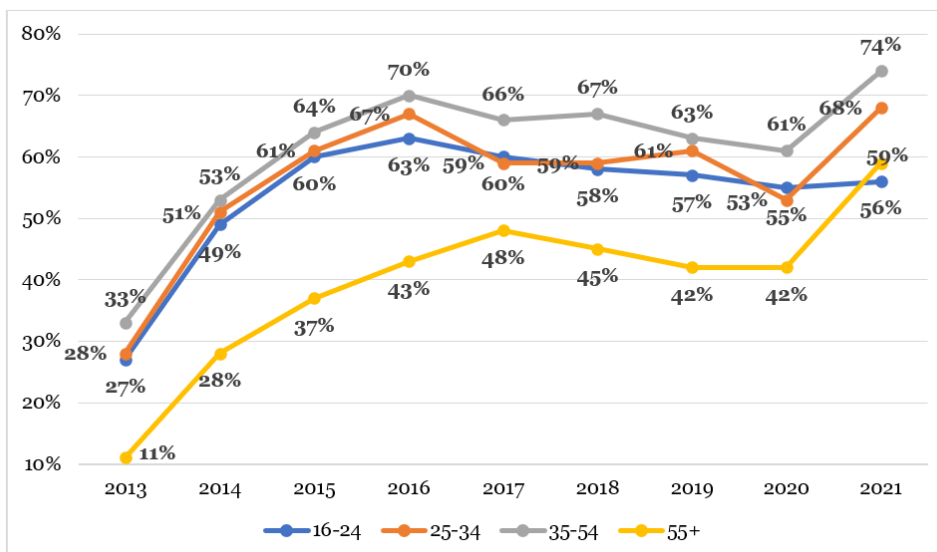
Source: Ofcom Technology Tracker surveys



Tablet ownership rose rapidly until the middle of the 2010s, when it started to decline – until 2021. The gap in ownership between age groups was narrower, and 2021 data suggests over-55s are now more likely to own a tablet than 16-24s. This may be partly a matter of disposable income, with the smartphone being a more essential device for younger people, particularly for social communication.

Table 16. Tablet ownership – by age, UK 2012-2021

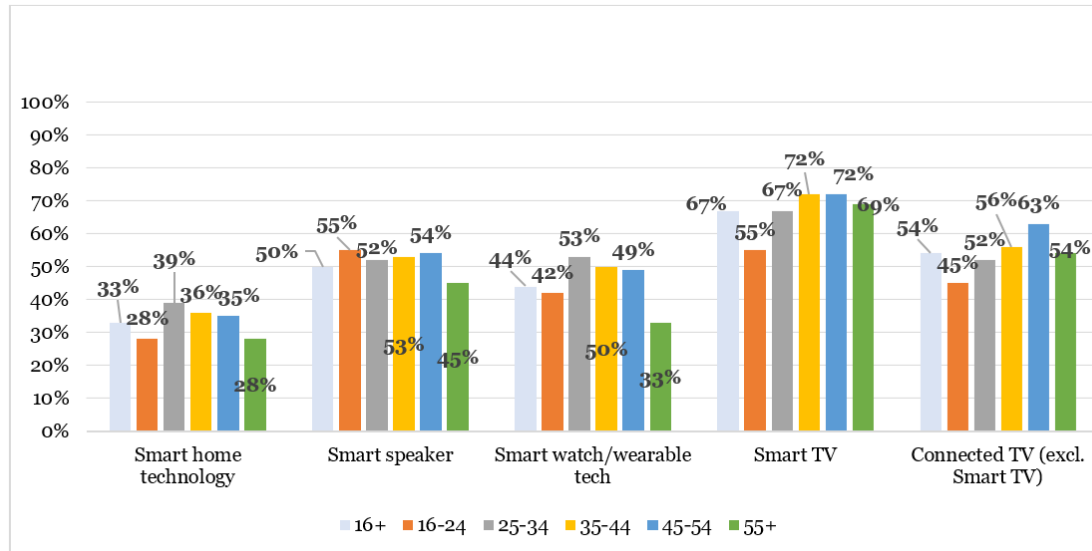
Source: Ofcom Technology Tracker surveys



In 2021, Ofcom surveyed the take-up of 'smart' technology, showing that smart or connected TVs are now in around two-thirds of UK households, and smart speakers are now in around half. Half of 25-54s use wearables, while over-55s and 16-24s use them less.

Table 17. 'Smart' device take-up – by age, UK 2021

Source: Ofcom Technology Tracker surveys

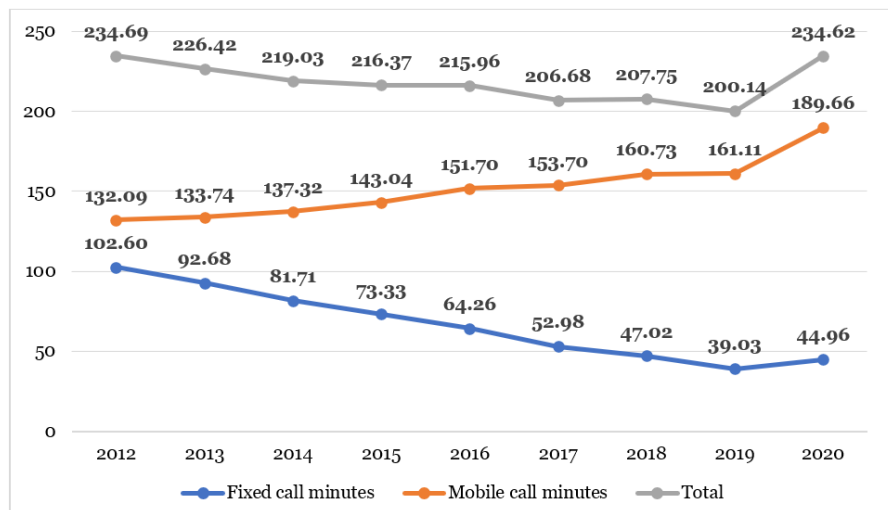


## Usage

The 2010s have seen the rapid decline of the home telephone: fixed line call minutes more than halved between 2012 and 2020, from 102.6 billion in 2012 down to 39.03 in 2019, though there was a slight uptick in 2020 as a consequence of the pandemic. The growth of mobile call minutes did not compensate for the fixed line decline for most of the decade. Although total minutes returned to 2012 levels in 2020, that reversal seems likely to be temporary, an effect of the pandemic and its restrictions on movement. Phone calls – whether fixed line or mobile – are increasingly being supplanted by Voice over Internet Protocol (VoIP) services like WhatsApp, FaceTime and Skype, and internet video calls. As internet connections have improved, the relative attraction of these services over traditional telephony has increased – not least because they are free. However, accurate data is currently lacking on the full volume of these taking place in the UK.

Table 18. Call minutes (billion), UK 2012-2020

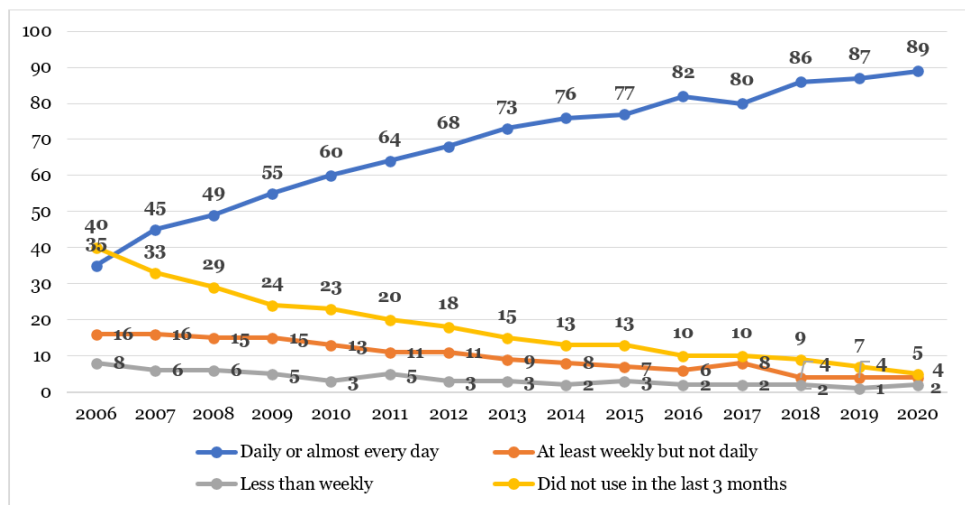
Source: Ofcom/operators/ONS





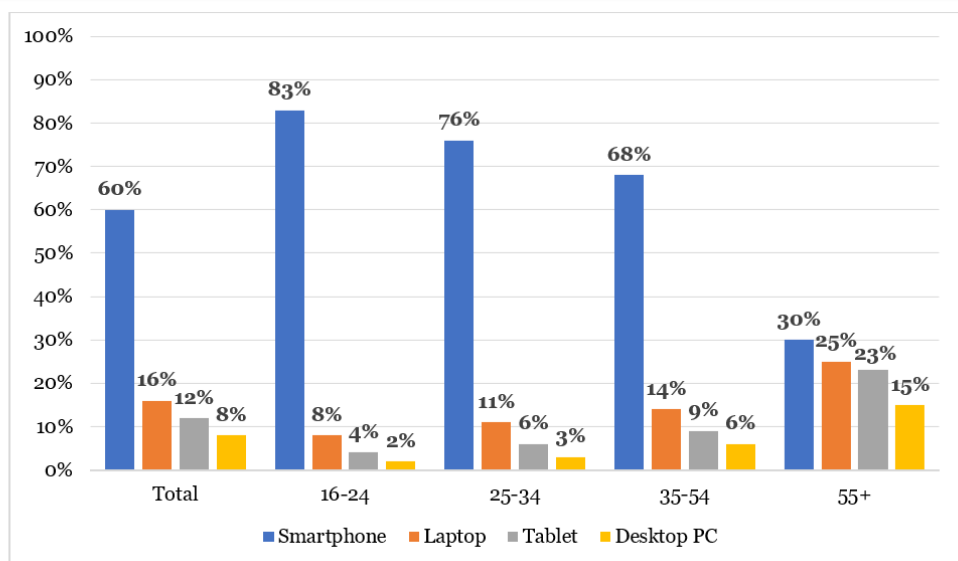
The proportion of the UK population that goes online frequently has increased enormously over the past fifteen years. ONS data shows that in 2020 89% of the UK adult population used the internet ‘daily or almost every day’, up from 60% in 2010 and 35% in 2006. The proportion of the population who had not used the internet in the previous three months fell from 40% in 2006 to 23% in 2010 and just 5% (or around 2.7 million adults) in 2020. The 2020 data shows that use ‘daily or almost every day’ is universal among under-35s, but remains at 67% in the over-65 age group; 18% of over-65s had not used the internet at all in the previous three months, suggesting there is still a substantial part of Britain’s elderly population that is not online.

**Table 19.**  
**Frequency of internet use (%), UK adults 16+ 2006-2020**  
Source: Office for National Statistics



In 2020, for 60% of the internet-using population, the smartphone was the most important device used for connecting to the internet, especially for young people. In contrast, over-55s are more likely to say that one of either a laptop, a tablet or a desktop PC is their most important device for doing so. Overall, it is clear that the smartphone is the device responsible for the huge increase in the frequency of internet use over the last fifteen years.

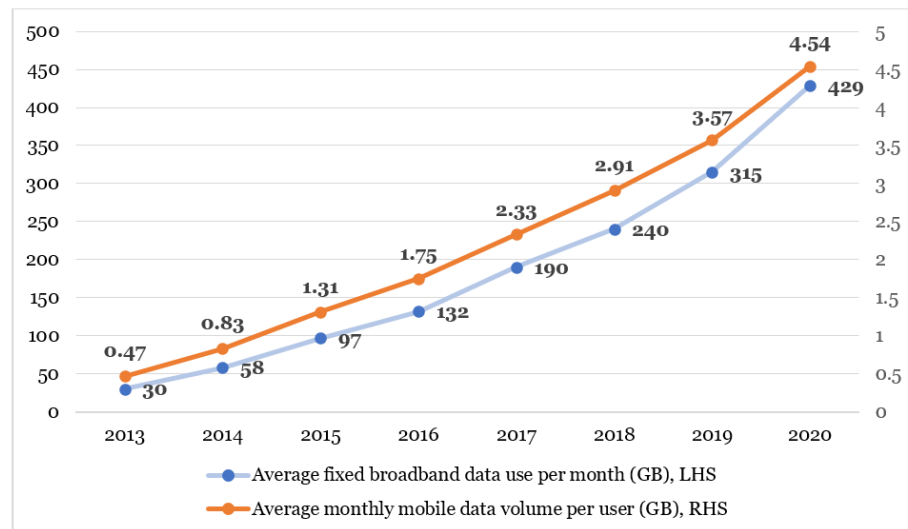
**Table 20. Most important device used to connect to the internet, UK 16+ adults 2020**  
Source: Ofcom.  
Base: those who use the internet at home or elsewhere. Note: this question was not asked in the 2021 survey.



Growing internet use and increasingly fast fixed and mobile internet connections mean that average monthly data use rocketed enormously between 2013 and 2020. Average fixed broadband use grew by over fourteen times, while mobile increased by almost ten times. In 2020, fixed broadband data use soared by 36%, while mobile data use rose by 27% - the highest year-on-year increase since 2017. Some of this growth is likely a result of pandemic-induced internet use, like the hugely increased use of video calling for working from home, online learning, and keeping in contact with friends and family. Nevertheless, there is little sign of a slowdown in the growth of data use.

**Table 21. Average monthly fixed and mobile internet data use per user, UK 2013-2020**

Source:  
Ofcom/operators



The average time UK adults (18+) spent online across computers, tablets and smartphones in 2019, before the pandemic, was three and a half hours, which increased by 9 minutes in 2020. The largest growth was among over-55s, who spent 16 minutes more online compared to the previous year. In April 2020 – at the height of the first coronavirus lockdown – average daily time spent online was four hours and 2 minutes. (Of course, this data does not capture the increasing time that the population spend with a range of other, increasingly popular internet-connected devices like smart TVs, smart speakers and wearables.) Time spent online in the UK is about an hour a day less than the USA, roughly comparable to Canada, and over an hour a day more than France or Germany. Young people use the internet the most, with 16-24s spending an hour and 43 minutes more on it per day than over-55s.

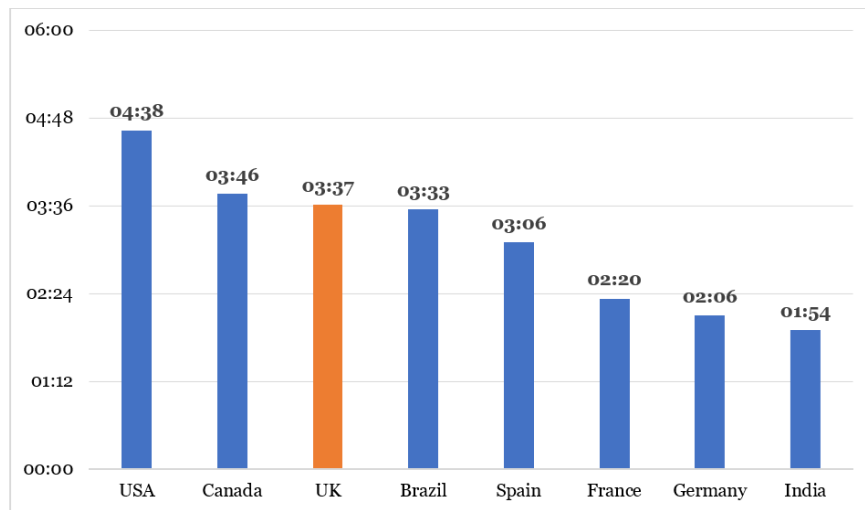
**Table 22. Average time spent online across computers, tablets and smartphones per UK adult per day, by age and year (hours:minutes)**

Source: Comscore MMX Multi-Platform, Total Internet, Age: 18+, Jan-Dec 2019 and 2020, UK

Age	2019	2020	Year-on-year increase
18+	3:28	3:37	9 minutes
18-24	4:24	4:34	10 minutes
25-34	3:55	4:07	12 minutes
35-44	3:41	3:51	10 minutes
45-54	3:35	3:36	1 minute
55+	2:35	2:51	16 minutes

**Table 23. Average time spent online per day in 2020 by adult internet users, selected countries 2020 (in hours)**

Source: Comscore MMX Multi-Platform, age 18+, Jan-Dec 2020, USA, Canada, UK, Brazil, Spain, France, Germany and India



Ofcom found that the main increase in time spent online in 2020 was via connected TVs, estimating that UK individuals (including children) spent 81 minutes per day using a range of services on the TV set, like video-on-demand viewing (Netflix, BBC iPlayer), online gaming and YouTube. This was an 24 minutes more than in 2019 (when their daily use stood at 56 minutes). [8]

The Office for National Statistics has surveyed the UK population since 2007 on what it uses the internet for, and the results show that the vast majority of the UK population uses the internet for some core services like email, search and internet banking. Around 70% use the internet for messaging and social networking services. Around 60-70% use the internet for media consumption: reading online news, watching YouTube, listening to music. Slightly fewer people – 56% – use video-on-demand services like Netflix, Amazon Prime Video and Disney+ but their proportion is increasing rapidly, almost doubling from 29% in 2016 as older age groups are discovering these services, drawn by prestige drama series targeted at them such as Netflix's *The Crown* and *Bridgerton*. Around half of the population now use the internet to make video or voice calls – a major cause of the decline of fixed and mobile telephony highlighted above. Online gaming is still a minority activity at 41%, though more popular by 9 percentage points than it was five years ago.

There are still big differences in what different age groups use the internet for. Over 90% of 16-24s use the internet for instant messaging and social network services, whereas only around 60% of 55-64s and less than 40% of over-65s do so. There are equally large age disparities in online video viewing, with 88% of 16-24s using VOD services compared to only 17% of over-65s. There is less of an age disparity in who reads news online, but this is perhaps partly because 16-24s are less interested in news generally. Rates of 83% and 86% among 25-34s and 35-44s contrast with 47% of over-65s. Nevertheless, of all the different kinds of online media consumption, reading news is the one the most over-65s engage in. Although online gaming is a minority activity in the population as a whole, a majority of under-35s engage in it.

[8] Ofcom, *Online Nation – 2021* report, 9 June 2021, p. 12, available online at: <https://www.ofcom.org.uk/research-and-data/internet-and-on-demand-research/online-nation>

Table 24. Internet activities, GB adults 16+ 2016-2020

Source: Office for National Statistics

Activities	2016	2017	2018	2019	2020
Sending/receiving emails	79	82	84	86	85
Finding information about goods or services	76	71	77	78	81
Internet banking	60	63	69	73	76
Using instant messaging services (e.g. Skype or WhatsApp)	N/A	N/A	N/A	72	71
Social networking (e.g. Facebook or Twitter)	63	66	65	68	70
Reading online news, newspapers or magazines	60	64	N/A	66	70
Watching video content from sharing services such as YouTube	47	N/A	62	N/A	66
Listening to or downloading music	N/A	N/A	N/A	N/A	62
Looking for health-related information (e.g. injury, disease, nutrition, improving health etc.)	51	53	54	63	60
Watching internet streamed live or catch-up TV	43	N/A	56	N/A	59
Watching Video on Demand from commercial services	29	N/A	46	N/A	56
Making video or voice calls over the internet (e.g. via Skype or Facetime)	43	46	45	50	49
Playing or downloading games	32	N/A	31	N/A	41
Selling goods or services over the internet	18	19	25	29	21
Making an appointment with a medical practitioner via a website or app	15	N/A	13	N/A	21
Using other online health services via a website or app instead of having to go to the hospital or visit a doctor, for example getting a prescription or a consultation online	N/A	N/A	N/A	N/A	15
Accessing personal health records online	N/A	N/A	N/A	N/A	8
Listening to music	49	N/A	58	65	N/A

**Table 25. Internet activities by age, GB adults 16+ 2020**

Source: Office for National Statistics

Activities	16-24	25-34	35-44	45-54	55-64	65+
Sending/receiving emails	94	89	93	91	79	72
Finding information about goods or services	84	89	92	87	79	64
Internet banking	90	90	89	82	69	49
Using instant messaging services (e.g. Skype or WhatsApp)	92	87	92	77	59	38
Social networking (e.g. Facebook or Twitter)	97	91	90	72	58	34
Reading online news, newspapers or magazines	78	83	86	77	63	47
Watching video content from sharing services such as YouTube	95	84	86	68	48	34
Listening to or downloading music	93	89	81	62	43	24
Looking for health-related information (e.g. injury, disease, nutrition, improving health etc.)	61	70	71	70	55	40
Watching internet streamed live or catch-up TV	78	73	76	63	48	33
Watching Video on Demand from commercial services	88	85	80	54	33	17
Making video or voice calls over the internet (e.g. via Skype or Facetime)	70	67	66	48	34	21
Playing or downloading games	63	57	47	43	30	17
Selling goods or services over the internet	22	24	30	31	17	6
Making an appointment with a medical practitioner via a website or app	20	20	25	26	15	19
Using other online health services via a website or app instead of having to go to the hospital or visit a doctor, for example getting a prescription or a consultation online	15	11	15	15	19	17
Accessing personal health records online	12	8	10	7	6	8

Excluded from the list of activities above is online shopping and e-commerce. The ONS's survey shows that in 2019 82% of the adult (16+) population had shopped online within the last 12 months, a figure that rose to 87% in 2020, as the pandemic led to lockdowns during which many shops were closed.

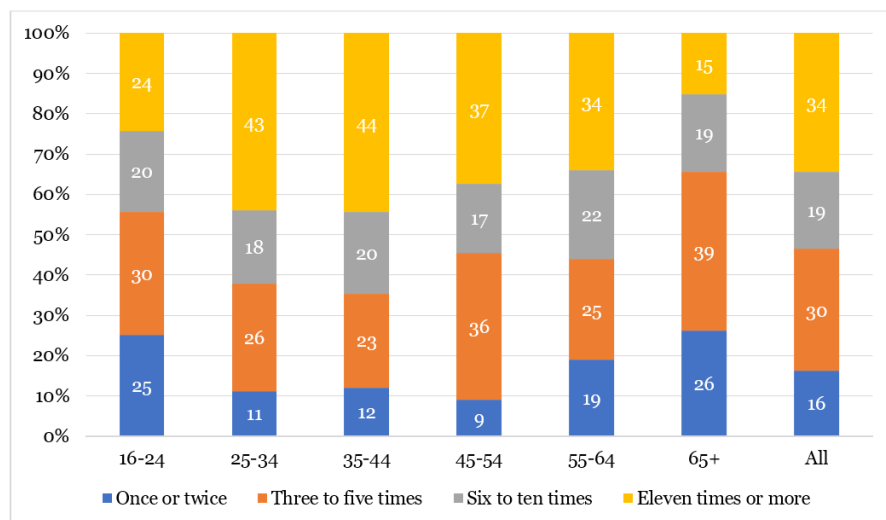
**Table 26.**  
Shopping online  
within the last 12  
months – by age,  
UK adults 16+  
2016-2020  
Source: Office for  
National Statistics

Age group	2016	2017	2018	2019	2020
16-24	89	88	95	97	96
25-34	93	89	96	97	99
35-44	87	91	89	94	95
45-54	86	84	81	89	95
55-64	77	75	71	77	79
65+	45	45	48	54	65
All	77	77	78	82	87

Online shopping is also becoming increasingly frequent: in 2020, 34% of UK adults had shopped eleven times or more within the last three months, and 83% had shopped at least three times with 25-44s the heaviest shoppers and 68% of the population spending at least £100, but only 26% spending over £500. The physical goods most commonly purchased online in 2020 were:

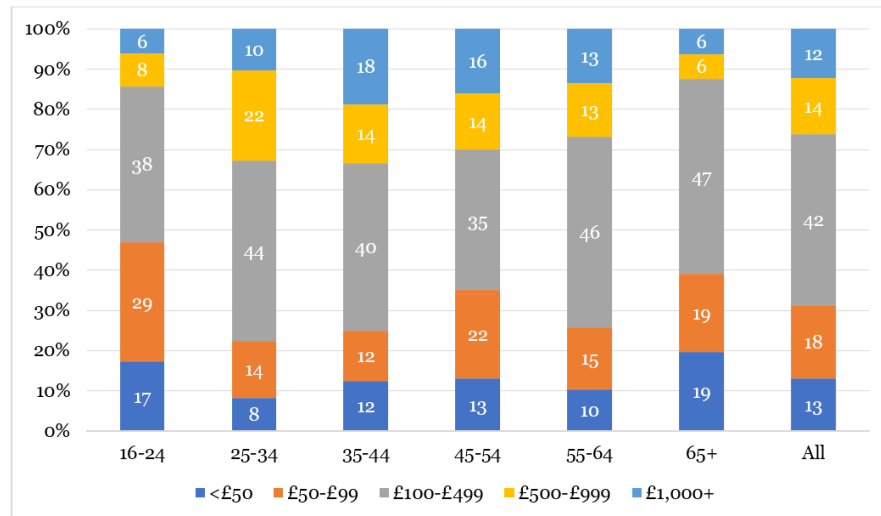
- clothes, shoes and accessories (55%)
- deliveries from restaurants, fast-food chains or catering services (32%)
- printed books, magazines or newspapers (29%)
- furniture, home accessories or gardening products (28%)
- computers, tablets, mobile phones or accessories (24%)

**Table 27.**  
Frequency of  
online shopping  
in the last 3  
months – by age,  
UK adults 16+  
2020  
Source: Office for  
National Statistics



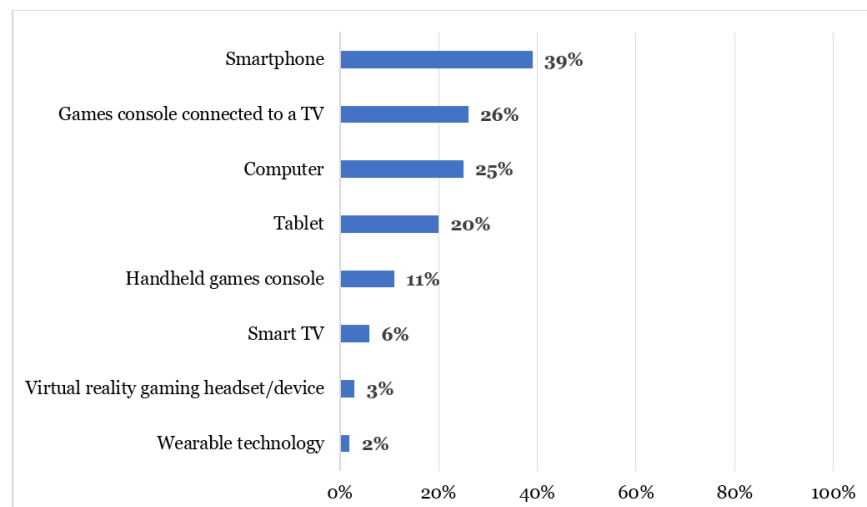
**Table 28. Total value of online purchases in the last 3 months – by age, UK adults 16+ 2020**

Source: Office for National Statistics



Gaming on digital devices has become increasingly popular – Ofcom’s Adults’ Media Literacy Tracker found that 62% of adults in the UK played games on an electronic device, including 92% of 16-24s. A range of devices are used, with smartphones being the most popular at 39%.

**Table 29. Devices used for gaming at home or elsewhere, UK adults 16+ 2020**  
Source: Ofcom Adults' Media Literacy Tracker survey



The most popular internet properties (websites and apps) in the UK are Google and Facebook’s, the latter including the Facebook-owned WhatsApp and Instagram. The list of the top ten most widely accessed internet properties in the UK is dominated by the tech giants and the UK’s most popular news sites. The BBC has long had one of the most visited websites in the UK, thanks to its iPlayer VOD service, the BBC News website, BBC Sport and BBC Radio. Other popular sites include Reach plc’s network of local and national news sites, Sky News, News UK’s sites and Mail Online.

**Table 30. Top ten properties accessed by adults – by reach, UK adults 18+ September 2018-2020**  
Source: Comscore MMX Multi-Platform. Note: does not include TV set and smart speaker use.

Rank	2018		2019		2020	
	Property	Reach	Property	Reach	Property	Reach
1	Google Sites	98%	Google Sites	99%	Google Sites	99%
2	Facebook	96%	Facebook	95%	Facebook	97%
3	BBC Sites	93%	Amazon Sites	92%	Amazon Sites	92%
4	Amazon Sites	91%	Reach Group	88%	Reach Group	91%
5	Microsoft Sites	86%	Microsoft Sites	87%	Microsoft Sites	90%
6	Reach Group	83%	BBC Sites	87%	News UK Sites	89%
7	Verizon Media	72%	News UK Sites	79%	Mail Online	82%
8	eBay	72%	eBay	73%	BBC Sites	82%
9	Sky Sites	72%	Sky Sites	70%	Sky Sites	81%
10	News UK Sites	68%	Verizon Media	70%	Apple Inc.	73%

The sites with the heaviest daily use per user are those of tech giants (Google, Facebook), smaller social media platforms (Twitter, TikTok, Snapchat), e-commerce giants (Amazon, eBay), or VOD, music or gaming services (BBC, Netflix, Spotify, Roblox).

**Table 31. Top ten properties accessed by adults via computer, smartphone and tablet – by average time spent per day by site visitors, UK adults 18+ September 2018-2020**  
Source: Comscore MMX Multi-Platform, based on Top 100 Properties by reach. Note: online use via a TV set or smart device is not measured.

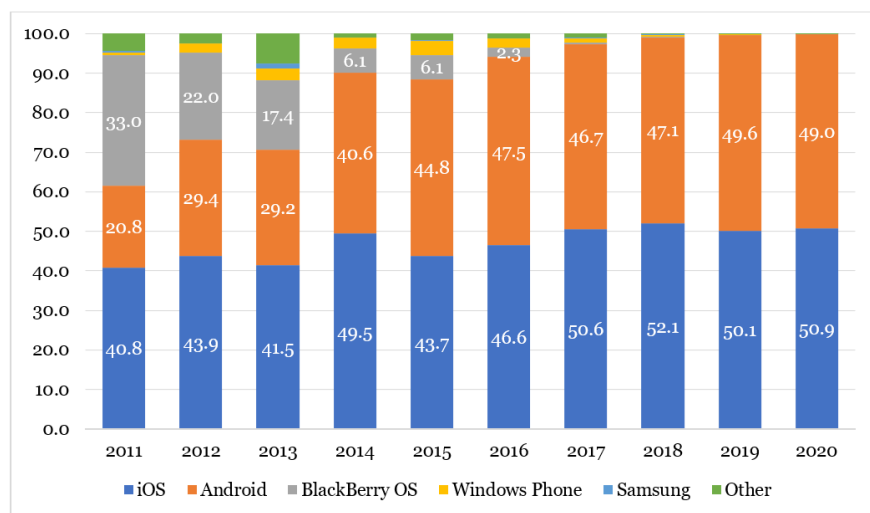
Rank	2018		2019		2020	
	Property	Time	Property	Time	Property	Time
1	Google Sites	43 mins	Google Sites	47 mins	Google Sites	52 mins
2	Facebook	29 mins	Facebook	36 mins	Facebook	29 mins
3	Spotify	23 mins	Spotify	15 mins	Bytedance Inc. (TikTok)	20 mins
4	Netflix	15 mins	Netflix	15 mins	Netflix	16 mins
5	BBC Sites	5 mins	Samsung Group	6 mins	Spotify	15 mins
6	Xhamster	4 mins	Verizon Media	4 mins	Snapchat, Inc.	8 mins
7	Verizon Media	4 mins	Microsoft Sites	4 mins	Twitter	5 mins
8	eBay	4 mins	eBay	4 mins	Roblox	5 mins
9	Microsoft Sites	3 mins	BBC Sites	4 mins	Verizon Media	5 mins
10	Amazon Sites	2 mins	Twitter	3 mins	Microsoft Sites	4 mins



## Platforms

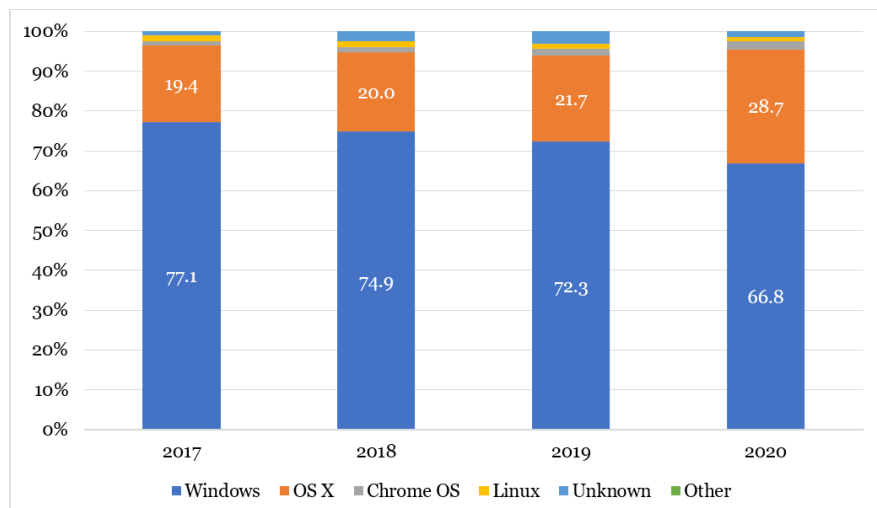
The dominant platforms in the UK are those of the US tech giants often referred together as GAFAM: Google, Apple, Facebook, Amazon and Microsoft. Google's Android and Apple's iOS dominate mobile operating systems in the UK. In 2020, they accounted for 99.9% of mobile devices. Their nearest competitor, BlackBerry, became marginal by 2014 and had disappeared by 2017. Android's market share increased from 21% to 49% over the decade, while iOS's grew from 41% to 51%.

**Table 32. Market share of mobile operating systems (%), UK 2011-2021**  
Source: StatCounter  
Note: data is for December of each year.



Apple's dominance of mobile OS has no doubt contributed to its erosion of Windows's dominance on desktop computers, increasing its share of the market from 19.4% to 28.7% between 2017-2020. Chrome OS and Linux are marginal players, with market shares of 2% and 1.2% in 2020 respectively.

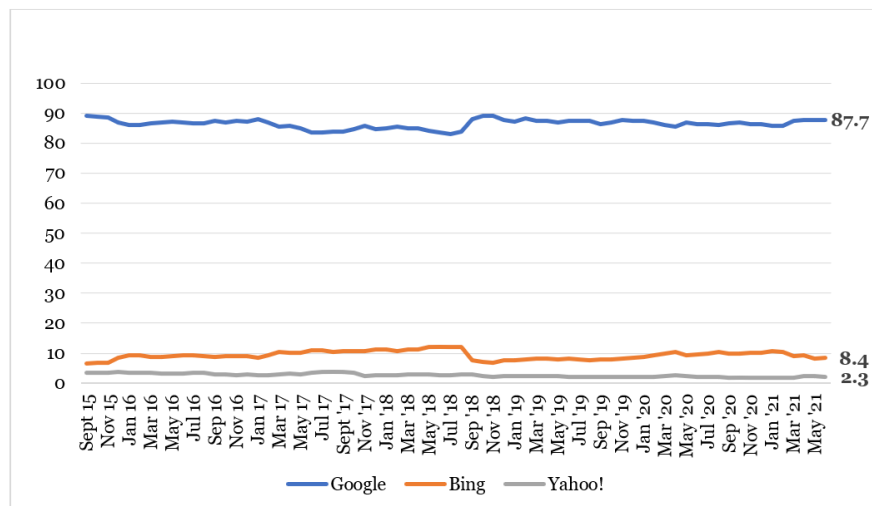
**Table 33. Market share of desktop operating systems, UK 2017-2020**  
Source: StatCounter



Google is the dominant search engine in the UK, with 87.7% of the market in June 2021. Google's closest commercial competitor in the search advertising market is not a search engine as such, but Amazon.

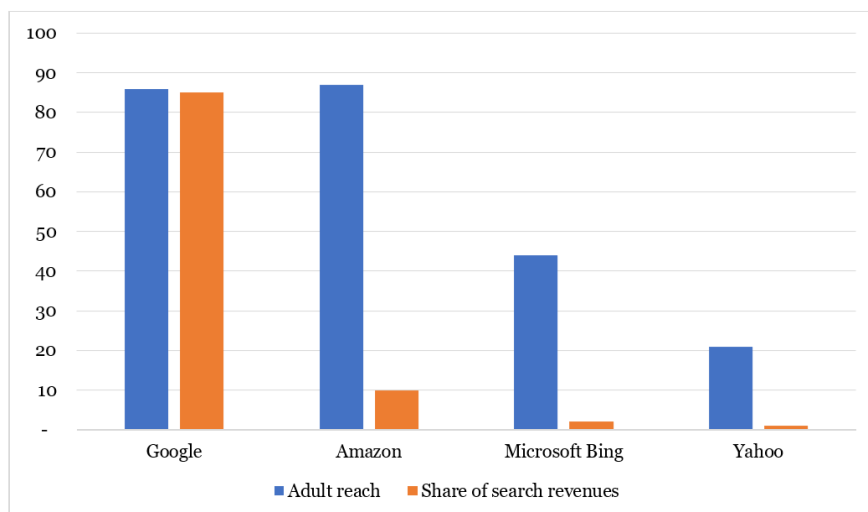
**Table 34. Market share of leading search engines (%), UK Sep 2015-Jun 2021**

Source: StatCounter



**Table 35. Top search sites and search-enabled e-commerce sites (%), UK adults 18+ Sep 2020**

Source: Comscore MMX Multi-Platform and Ofcom estimates using IAB UK/PwC Digital Adspend Study 2020 and company reports

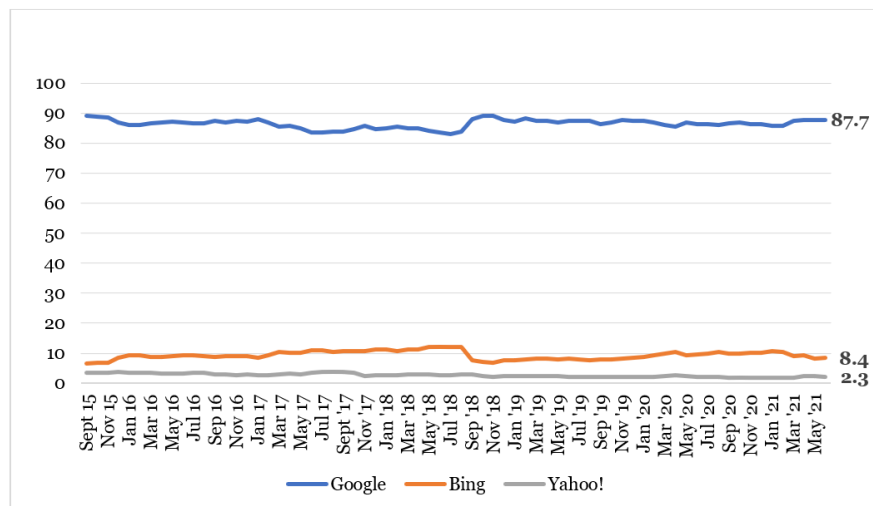


Google's Chrome browser is also the dominant internet browser overall across devices in the UK, followed by Apple's Safari. At the start of the 2010s, Microsoft's Internet Explorer and Mozilla's Firefox were the dominant browsers with 81.1% share of the market. However, at that time the majority of internet use was still on desktop PCs and laptops. As a result of the surge in the use of mobile devices, the smartphone displaced the PC as the most important digital device – the majority of online time is now spent on mobile devices – and Apple and Google's decisive advantages in mobile OS mean that in the first half of the 2010s they rapidly relegated Internet Explorer and Firefox into insignificance. However, their dominance is not quite as complete as in mobile OS, with a combined market share of 82.8%. Microsoft has since replaced Internet Explorer with Microsoft Edge, which its dominant position in desktop OS allows it to promote.

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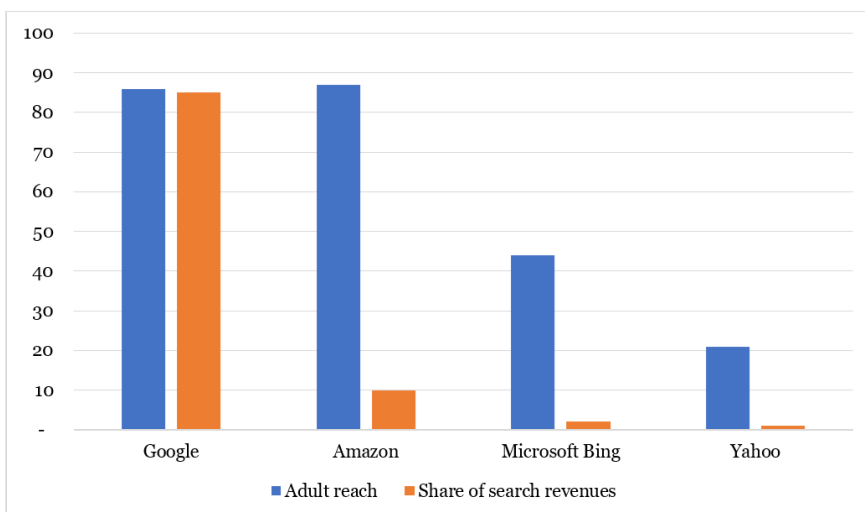
**Table 34. Market share of leading search engines (%), UK Sep 2015-Jun 2021**

Source: StatCounter



**Table 35. Top search sites and search-enabled e-commerce sites (%), UK adults 18+ Sep 2020**

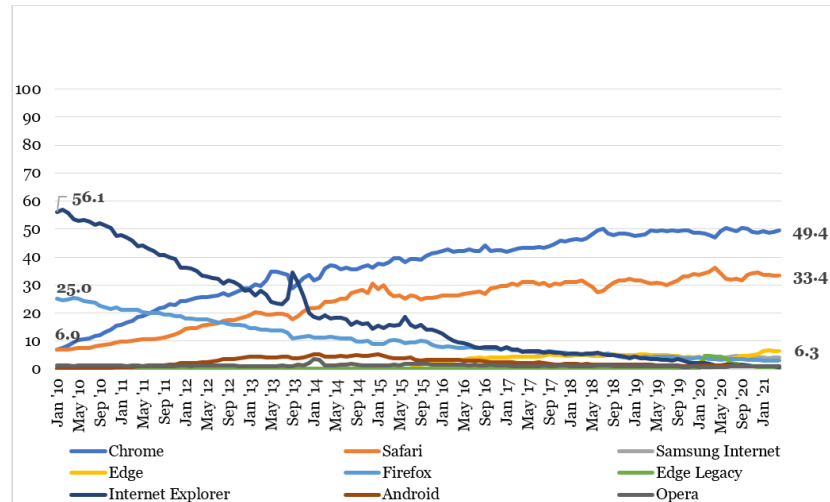
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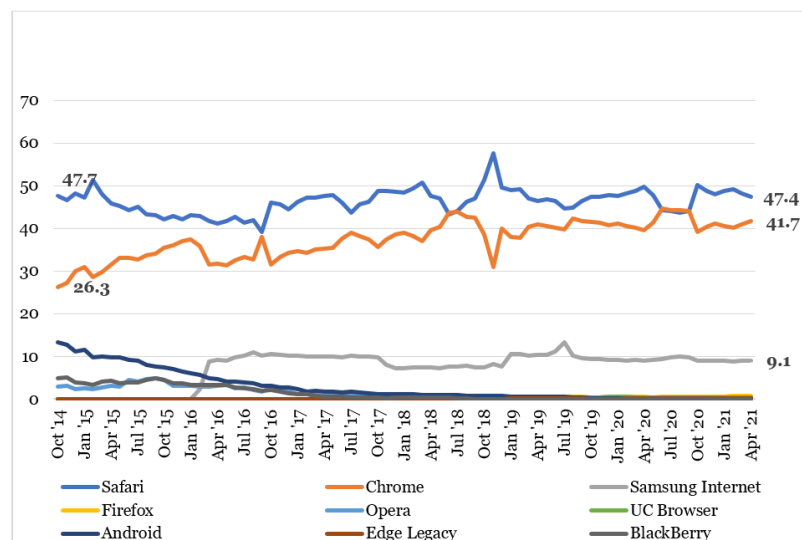
**Table 36. Market share of leading internet browsers (%), UK Jan 2010-Apr 2021**

Source: StatCounter.  
Note: data includes desktop, mobile, tablet and console devices



Despite the dominance of Apple's iOS and the power that gives Apple to promote Safari by making it the default browser for opening links, web pages in apps and so on, Google's Chrome browser has managed to increase its market share since 2015. This growth has been achieved by Google even though Samsung created its own browser app that comes preinstalled on Samsung's mobile devices running Android, which has eaten into Chrome's share on Android. Most likely, Chrome has gained an increasing share of iOS browser usage, despite Apple's efforts to direct users to Safari.

**Table 37. Market share of leading mobile internet browsers (%), UK Oct 2014-Apr 2021**  
Source: StatCounter



The top ten most popular apps in the UK are dominated by Google (Alphabet) and Facebook, who own nine out of ten – the tenth being Amazon. YouTube has only marginally greater reach than Facebook, but the time spent on it per visitor per day is almost double. According to Ofcom's most recent Media Nations report, in 2020, across devices, YouTube on average accounted for 41 minutes out of 5 hours and 40 minutes of total daily video viewing by UK individuals of all ages, or 12% of the total. Among 16-34s, the figure was 23%.<sup>[9]</sup>

[9] Ofcom, *Media nations: UK 2021*, 5 August 2021, p. 6, available online at: <https://www.ofcom.org.uk/research-and-data/tv-radio-and-on-demand/media-nations-reports/media-nations-2021>

**Table 38. Top ten apps on iOS and Android, by mobile reach and time spent per adult visitor per day, UK adults 18+ September 2020**

Source: Comscore Mobile Metrix (app only). Note: Alphabet is Google's parent company.

Rank	App owner	App	Reach (million)	Mobile adult reach	Time spent by visitor per day
1	Alphabet	YouTube	31.9	75%	31mins 56 secs
2	Facebook	Facebook	31.7	74%	16mins 56 secs
3	Facebook	WhatsApp	29.6	70%	7mins 36 secs
4	Alphabet	Google Search	23.9	56%	5 mins 37secs
5	Alphabet	Google Maps	22.5	53%	2mins 18secs
6	Facebook	Instagram	20.8	49%	6mins 45secs
7	Alphabet	Gmail	20.4	48%	4mins 8secs
8	Amazon	Amazon	19.2	45%	2mins 5secs
9	Alphabet	Google Play	18.4	43%	23secs
10	Facebook	Facebook Messenger	18.2	43%	15mins 46secs

Through WhatsApp and Facebook Messenger, Facebook dominates text-based messaging in the UK, reaching two-thirds and nearly half of UK adults respectively. No doubt partly due to the rise in video calling as a result of the pandemic, Microsoft Teams and Zoom each reach a substantial portion of the population – around a fifth each. Most other services are relatively marginal in their reach by comparison.

**Table 39. Top online messaging and calling services by reach, UK adults 18+ September 2020**

Source: Comscore MMX Multi-Platform

Rank	Communications services	Adult reach (million)	Online adult reach
1	WhatsApp	30.4	67%
2	Facebook Messenger	20.4	45%
3	Microsoft Teams	9.5	21%
4	Zoom	8.0	18%
5	Google Duo	3.3	7%
6	Skype	2.7	6%
7	Discord	2.3	5%
8	Viber	1.63	4%
9	Telegram	1.23	3%
10	Kik	770k	1.7%
11	Imo	733k	1.6%
12	Houseparty	703k	1.5%
13	Line	274k	0.6%
14	WeChat	240k	0.6%
15	Signal	137k	0.3%
16	Kakao	14k	0.1%

Email in the UK is dominated by Google's Gmail and Microsoft's Outlook, although Yahoo remains a significant presence.

**Table 40. each of selected email sites/apps, UK adults 18+ September 2020**

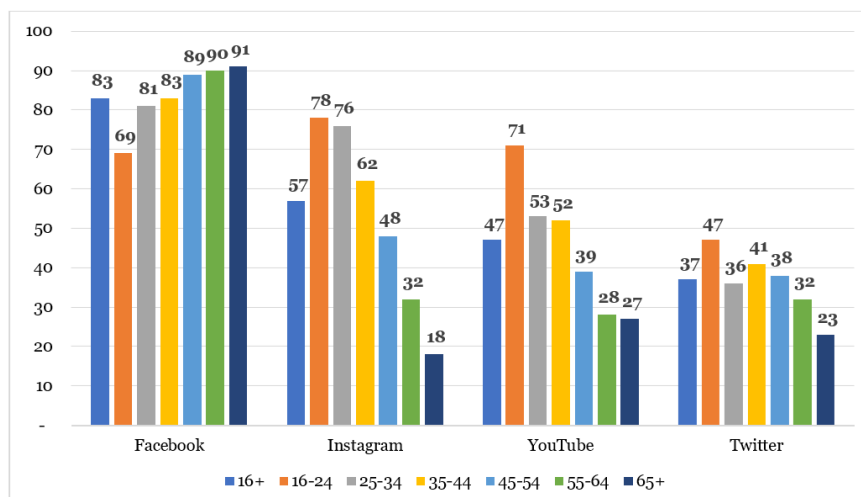
Source: Comscore MMX Multi-Platform

Rank	Email service	Adult reach (million)	Online adult reach
1	Google Gmail	27.9	61%
2	Outlook.com (Microsoft)	14.0	31%
3	Verizon (incl. Yahoo and AOL)	9.3	21%
4	Samsung mail app	5.0	11%
5	ParentMail (IRIS)	933k	2%
6	Mail.com	617k	1%

The use of social media sites and apps varies quite considerably across age groups. Snapchat and TikTok are markedly more popular among 16-24s than other age groups, with almost three-quarters of 16-24s using Snapchat compared to less than a quarter of 35-54s and almost no over-55s. Instagram and YouTube are also more popular among the young than the old – Instagram markedly so, whereas for YouTube the difference is smaller but still marked. Twitter and LinkedIn show much less difference in use across age groups, but they are less widely used than Instagram or YouTube overall. Facebook is by far the most widely used social media platform, even though it is now used more by the old than the young.

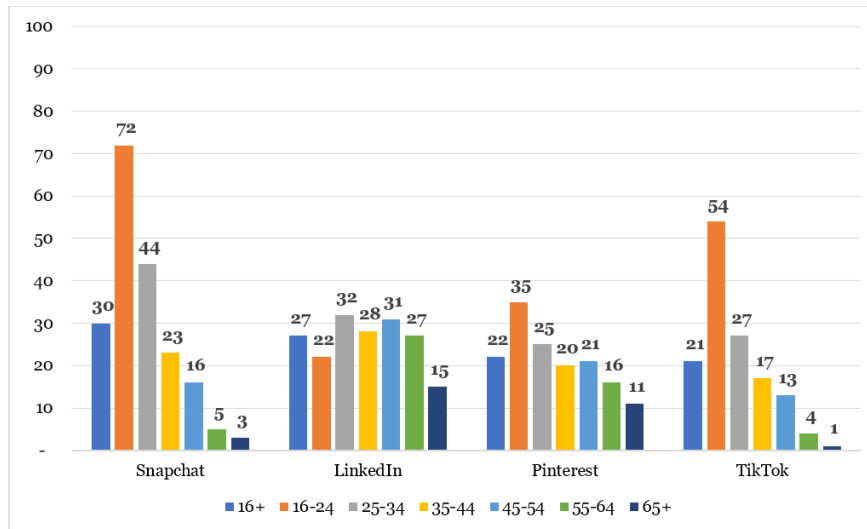
**Table 41. Use of social media sites/apps by social media users – by age (%), UK adults 16+ 2020**

Source: Ofcom Adults' Media Literacy Tracker. Respondents who said they had a profile or account on a social media site or app were asked, "Which social media sites or app have you visited?"



**Table 42. Use of social media sites/apps by social media users – by age (%), UK adults 16+ 2020**

Source: Ofcom Adults' Media Literacy Tracker. Respondents who said they had a profile or account on a social media site or app were asked, "Which social media sites or app have you visited?"

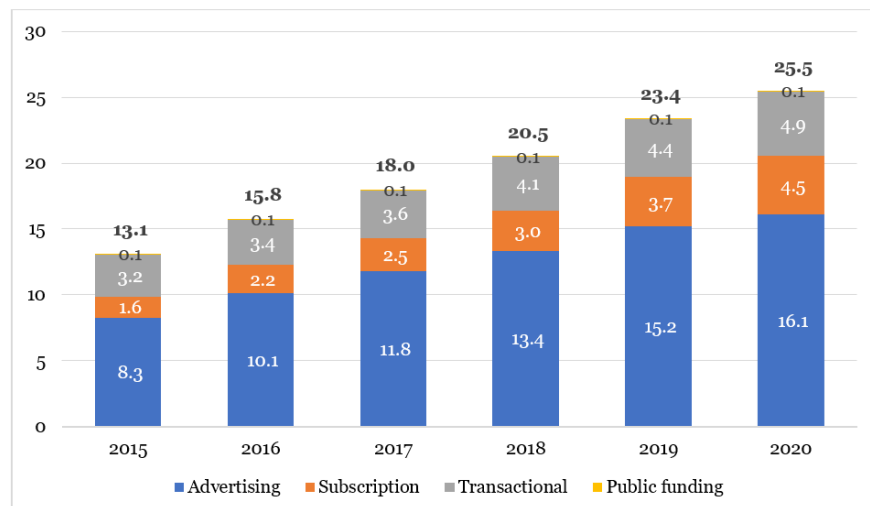


## Revenue

The UK's online sectors are primarily funded by advertising, which according to Ofcom still accounted in 2020 for the two-thirds (63%) share of online revenue it did in 2015. What has changed over that period, however, is that transactional revenue has grown much more slowly than subscription revenue. Buying individual games, songs, albums or movies has been increasingly replaced by subscription gaming, VOD, music and other services. Apps are increasingly funded by subscription rather than one-off purchases. Subscriptions to services like online news and online dating have increased too.

**Table 43. Estimated revenues of online sectors – by business model (£bn), UK 2015-2020**

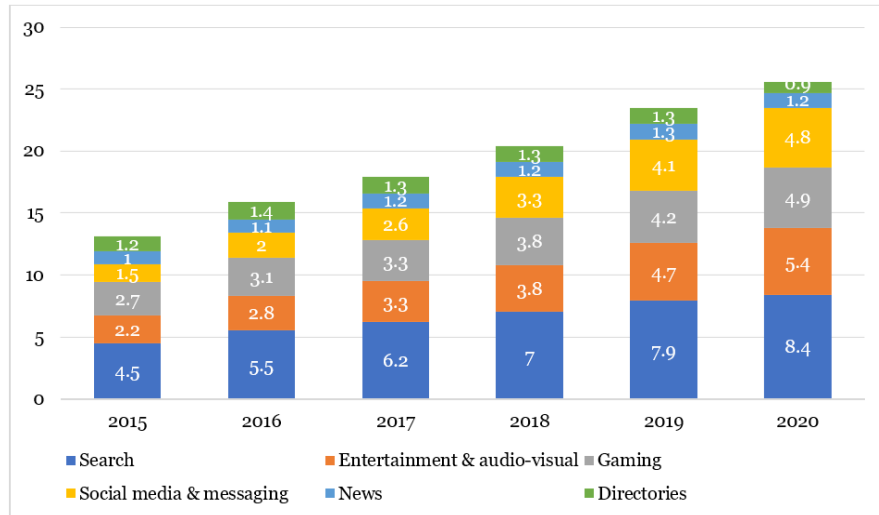
Source: Ofcom estimates and analysis. Note: excludes e-commerce. Pre-2020 figures have been adjusted for CPI at 2020 prices.



Growth in the revenue of the UK's online sectors has been driven by social media & messaging, revenue from which has more than trebled since 2015, and entertainment & audio-visual media, which has more than doubled. The latter has grown faster than gaming, overtaking it between 2015 and 2020 to become the second-largest revenue category after search, which remains dominant.

**Table 44. Estimated revenues of online sectors – by sector (£bn), UK 2015-2020**

Source: Ofcom estimates and analysis.  
Note: excludes e-commerce. Pre-2020 figures have been adjusted for CPI at 2020 prices.

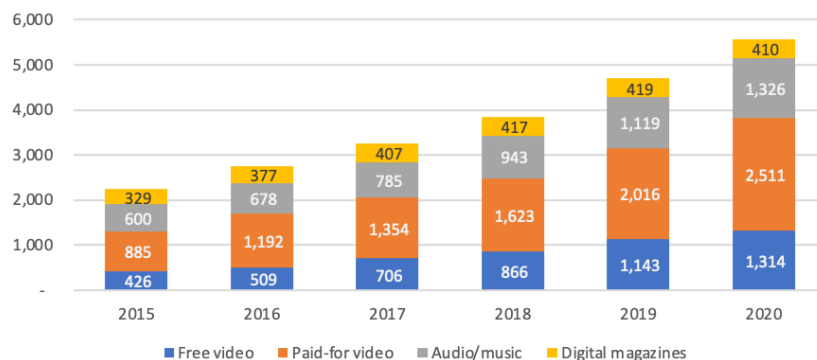


Online entertainment and audio-visual media is increasingly dominated by paid-for video; in other words, by subscription video-on-demand services like Netflix, Amazon Prime Video, Disney+ and Now. Revenue from these has trebled in five years, as it has for free video (i.e. YouTube). Meanwhile, audio media revenue has doubled over the last five years as music streaming services like Spotify and Apple Music become increasingly popular, and as podcasts have started to take off too.

Social media revenues mostly came from non-video advertising in 2015 but now overwhelmingly come mostly from video advertising, reflecting the growth of advertising on video-heavy sites like Instagram, Snapchat and TikTok as well as the increasing volume of video advertising on established platforms like Facebook and Twitter.

**Table 45. Estimated shares of online entertainment and audio-visual media revenues - by media type (£m), UK 2015-2020**

Source: Ofcom estimates based on data from various sources.  
Note: Pre-2020 figures have been adjusted for CPI at 2020 prices.

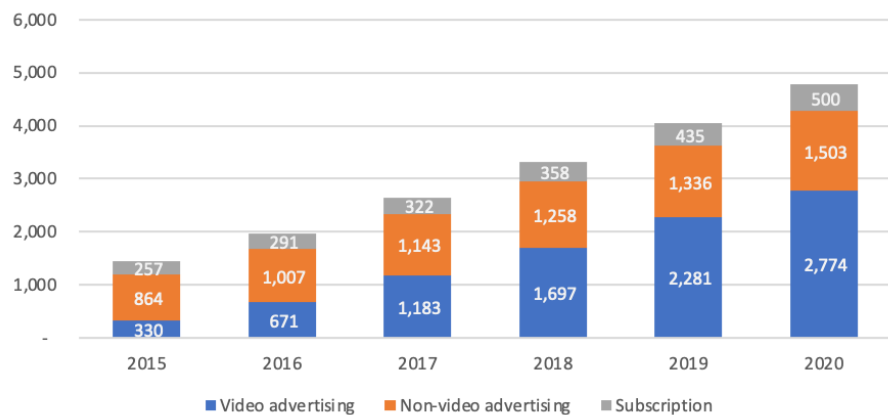




**Table 45. Estimated social media revenues - by revenue stream (£m), UK 2015-2020**

Source: Ofcom estimates based on data from various sources.

Note: Pre-2020 figures have been adjusted for CPI at 2020 prices.



## PROFILES OF KEY PLAYERS

### Internet & Mobile

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**Table 46. Services offered by internet and mobile companies**

Company	Email service	Messaging & VoIP	Mobile ecosystems	Search	Social network & blog	Video & photo
Google	✓	✓	✓	✓	✓	✓
Apple	✓	✓	✓			✓
Facebook		✓			✓	
Microsoft	✓			✓		
Twitter					✓	
Snap Inc.		✓			✓	
ByteDance					✓	

Table 47. Internet and mobile tech company financial data (\$m), 2016-2020

Company	2016	2017	2018	2019	2020
<b>Google</b>					
Revenue	90,272	110,855	136,819	161,857	182,527
Operating income	23,737	26,178	27,524	34,231	41,224
Operating margin	26%	24%	20%	21%	23%
<b>Apple</b>					
Revenue	215,639	229,234	265,595	260,174	274,515
Operating income	60,024	61,344	70,898	63,930	66,288
Operating margin	28%	27%	27%	25%	24%
<b>Facebook</b>					
Revenue	27,638	40,653	55,838	70,697	85,965
Operating income	12,427	20,203	24,913	23,986	32,671
Operating margin	45%	50%	45%	34%	38%
<b>Microsoft</b>					
Revenue	91,154	96,571	110,360	125,843	143,015
Operating income	26,078	29,025	35,058	42,959	52,959
Operating margin	29%	30%	32%	34%	37%
<b>Twitter</b>					
Revenue	2,529	2,443	3,042	3,459	3,716
Operating income	(367)	38	453	366	26
Operating margin	-15%	2%	15%	11%	1%
<b>Snap Inc.</b>					
Revenue	404	825	1,180	1,715	2,506
Operating income	(520)	(3,486)	(1,268)	(1,103)	(862)
Operating margin	-129%	-423%	-107%	-64%	-34%

### Google

Google is an American multinational technology company founded in 1998 by Larry Page and Sergey Brin. Today, Google is the dominant provider of search services, internet browsers, mobile operating systems and email markets in the UK, as well as the owner of YouTube – the dominant free video platform in the UK. As a result, Google is one of the two dominant players in the UK's online advertising market, along with Facebook. It accounts for 90% of online search advertising revenue in the UK.

Google has a nearly 90% share of online search in the UK, its Chrome browser is the leading internet browser across devices with roughly half of total browser usage, and its Android mobile operating system accounts for around half of all mobile devices in use in the UK. Of the top ten most widely used mobile apps in the UK, five belong to Google – more than any other company. YouTube is the most popular, used by 32 million UK adults. Indeed, YouTube accounted for 12% of all video viewing minutes across all devices in 2020, with users spending an average of 41 minutes a day on it. Google's Gmail is used by 28 million UK adults, twice the number who use the next most popular email client, Microsoft Outlook.

After a corporate restructuring in 2015, Google is now the subsidiary of a publicly-traded holding company, Alphabet Inc., whose other subsidiaries are focused on AI, robotics, health, autonomous driving and other 'moonshot' investments. Alphabet has a triple-class share structure. Class A 'normal' shares carry 1 vote per share, Class B shares carry 10 votes per share and Class C 'non-voting' shares carry no vote. Their ownership of 85.3% of the Class B shares mean that, although Larry Page and Sergey Brin own a small amount of Alphabet's equity (just over 10%), they have just over 51% of shareholder votes and are in effective overall control of the company, with, as Alphabet's most recent 10-Q filing puts it, the "ability to elect all of our directors and to determine the outcome of most matters submitted to a vote of our stockholders".<sup>[10]</sup> Eric Schmidt, Google's CEO between 2001 and 2011 and executive chairman of Google (2011-2015) and then Alphabet (2015-2017) owns 7.4% of Class B stock and so holds the next-largest share of votes after Brin and Page, with 4.5%.<sup>[11]</sup>

In the period between 2016 and 2020, Alphabet's global revenue doubled from \$90 billion to \$183 billion. Alphabet is currently the third-largest American company by market capitalization, at \$1.8 trillion, behind only Microsoft and Apple.

Google has had offices in the UK since 2003, and is currently building a new office at King's Cross for 4,000 employees. Google UK reported revenue of £1.8bn in the year ending June 30 2020 but the vast majority of Google's UK ad revenues are booked in Ireland, where tax is lower. Google's total annual UK ad revenue is estimated to stand at roughly £7-8 billion.<sup>[12]</sup> Google has a major lobbying presence in the UK, and the company routinely gives evidence to Parliamentary select committees on digital policy issues.

## *Apple*

Apple Inc. is an American multinational technology company founded in 1976 by Steve Jobs, Steve Wozniak and Ronald Wayne. Today, Apple is the fourth-largest seller of personal computers, the fourth-largest smartphone manufacturer in the world, the largest company selling tech products in the world by revenue <sup>[13]</sup> and, since January 2021, the world's most valuable company by market capitalisation. Apple's primary products are Mac personal computers, iPhones, iPads and now Apple Watches.

[10] Alphabet Inc, 10-Q for the quarterly period ended June 30, 2021, Part II Item 1A: Risk factors, available online at: <https://www.sec.gov/Archives/edgar/data/1652044/000165204421000047/goog-20210630.htm>

[11] Larry Page owns stock worth 26.1% of votes, Sergey Brin 25.1%. See Alphabet Inc, Notice of 2021 Annual Meeting of Stockholders and Proxy Statement, 23 April 2021, p. 32, available online at:

[https://www.sec.gov/Archives/edgar/data/0001652044/000130817921000256/lgoog2021\\_def14a.htm](https://www.sec.gov/Archives/edgar/data/0001652044/000130817921000256/lgoog2021_def14a.htm)

[12] In April 2021, eMarketer estimated that Google would account for around 40% of an estimated £19bn in digital ad spending in the UK.

[13] Amazon has larger revenue than Apple (\$386 billion in 2020 compared to Apple's \$275 billion) but although it sells some digital services and some tech devices, its primary business is more general e-commerce. Amazon is considered a digital retail company rather than a 'pure' tech company.

Alongside these devices, which form the core of its business, Apple is increasingly seeking to generate revenue by selling subscription services. In addition to the revenue generated by Apple's commission on purchases made through its iOS and macOS app stores, Apple now sells subscriptions to Apple Music, its streaming service; Apple TV+, a SVOD service; Apple News+, a bundle of newspapers and magazines; Apple Arcade, a games bundle; Fitness+, which provides workouts, and iCloud, a cloud storage service. These services are available bundled together as Apple One.

Alongside these paid products and services, Apple provides a range of apps and services as part of its iOS and macOS operating systems: Messages, its messaging app; a Mail app, and iCloud email addresses; FaceTime, a voice and video calling app; Safari, its web browser; Photos, its video and photo storage and sharing app. Safari is the second most popular desktop internet browser and the most popular mobile browser in the UK, reflecting Apple's greater share of active mobile devices than of PCs, where Microsoft's Windows is still dominant.

Approximately half of all smartphone users in the UK have an iPhone. Since over 90% of the UK's adult population has a smartphone, that means nearly half of all UK adults have at least one Apple device. By contrast, Macs account for around 29% of desktop computers in the UK.

Apple Inc. is a publicly traded company with no single controlling overall shareholder and only one stock class (unusual among the biggest tech companies). Steve Jobs was the last of the company's three founders to work at the company, as CEO from 1997 until just before his death in 2011. Since then, the company has been run by Jobs's chosen successor, Tim Cook. Its market capitalisation currently stands at \$2.45 trillion. Apple's global revenue stood at \$275 billion in 2020, up by over a quarter on \$216 billion in 2016. Apple has a major sales presence in the UK, with 38 Apple stores – more than in any other country in Europe, and more than the combined total in the two European nations that come after the UK, France and Italy.[14] Nevertheless, the precise size of the revenue it generates in the UK is uncertain. Apple's two UK subsidiaries, Apple Retail UK and Apple UK, reported revenue of £1.1 billion and £372 million in 2020. However, this probably heavily underrepresents the total revenue Apple generates from UK sales of its devices and services, since Apple's total Europe-wide revenue in 2020 was \$69 billion and the number of Apple stores in the UK shows clearly that the UK is one of Apple's largest European markets, as does the fact that Apple has roughly half of the smartphone market in the UK – a larger market share than it has in any other European country.

Apple has for years funnelled its European sales revenue through an Irish subsidiary in order to avoid paying tax in the countries where its devices and services are bought. For this reason, in 2016 the EU's Commissioner for Competition, Margrethe Vestager, brought a case against Apple before the European Court of Justice that sought to require Ireland to collect €13 billion in unpaid taxes from the company, arguing that Apple had unfairly benefited from illegal state aid. In July 2020, the General Court ruled in Apple's favour.[15] In September 2020, Vestager announced that the European Commission would appeal the ruling.[16]

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[14] Statista, "Number of Apple Stores in European countries, as of October 2020", available online at:

<https://www.statista.com/statistics/1041526/apple-store-numbers-european-countries/>

[15] Daniel Boffey, "Apple does not need to pay €13bn Irish tax bill, EU court rules" *The Guardian* 15 July 2020, available online at:

<https://www.theguardian.com/technology/2020/jul/15/apple-does-not-need-to-pay-13bn-irish-tax-bill-court-rules>

[16] Rory Carroll, "European commission to appeal against €13bn Apple tax ruling" *The Guardian* 25 September 2020, available online at:

<https://www.theguardian.com/technology/2020/sep/25/european-commission-appeal-against-apple-tax-ruling-ireland>

In March 2021, the UK's Competition and Markets Authority announced that it was launching an investigation into Apple following complaints of unfair and anti-competitive behaviour in the terms and conditions for app developers using its App Store.[17]

## Facebook

Facebook is an American multinational social media company that was founded in 2004 by Mark Zuckerberg and four fellow Harvard students. Today, Zuckerberg is the only one of the five founders still involved with the company, which he runs as its CEO and owns a controlling voting stake in.

Facebook's primary product is its eponymous social networking site and app, the largest social networking site in the world. Facebook also owns Facebook Messenger and WhatsApp (having acquired the latter in 2014 for \$19.3 billion), two of the most popular messaging apps in the world, and Instagram, a popular photo and video sharing social networking site and app (acquired in 2012 for \$1 billion).[18]

Facebook has nearly 32 million users of its mobile app in the UK, as well as three other apps in the top ten most widely used apps in the UK: WhatsApp, Instagram and Facebook Messenger, used by 30, 21 and 18 million UK adults respectively. 83% of social media users in the UK use Facebook, a figure which rises to over 90% among social media users over the age of 65. Facebook's apps are also among the most heavily used in the UK. Facebook is a major means of news consumption online for much of the UK population.

Facebook has a dual-class share structure, where Class A stock have one vote each but Class B stock have ten votes each. Mark Zuckerberg owns 81.7% of Class B stock and controls 57.7% of total voting power, with fellow founders Dustin Moskovitz and Eduardo Saverin owning stock controlling 3.8% and 6.9% of the latter respectively.[19] Facebook's market capitalisation stands at just over \$1 trillion, making it the sixth-largest company in the world on that metric, behind Apple, Microsoft, Alphabet, Saudi Aramco and Amazon.

Facebook's global revenue has more than trebled in the years since 2016, to \$86 billion in 2020. The Competition and Markets Authority's 2020 investigation of the UK's digital advertising market found that Facebook received more than half of the £5.5 billion spent on online display advertising in the UK. Facebook's UK revenues therefore stand between £2-3 billion; however, only some of this revenue is booked by Facebook's UK subsidiary. For a number of years, Facebook has shifted profits to its Irish subsidiary in order to minimise the corporation tax it is required to pay, but at the end of 2020 it was reported that Facebook is winding up its Irish holding companies.[20]

[17] The inquire page is available online at: <https://www.gov.uk/cma-cases/investigation-into-apple-appstore>

[8] Facebook also attempted to buy Snapchat for a reported \$3bn in 2013, and it has also previously attempted to buy Twitter. See: Dominic Rushe, "Snapchat rejects \$3bn Facebook buyout" *The Guardian* 13 November 2013, available online at:

<https://www.theguardian.com/technology/2013/nov/13/snapchat-facebook-buyout-offer-rejected> Isabella Jibilian, "Facebook tried and failed multiple times to acquire a mystery competitor that wasn't Twitter or Snapchat, according to the FTC's new lawsuit" *Insider* 10 December 2020, available online at: <https://www.businessinsider.com/facebook-ftc-antitrust-mystery-competitor-tried-to-acquire-failed-2020-12>

[19] This includes 7.4% of Class B stock, worth 4.8% of total votes, which is owned by Dustin Moskovitz but over which Mark Zuckerberg holds an irrevocable proxy. See Facebook, "Notice of Annual Meeting & Proxy Statement" (for 2021), p. 61, available online at:

[https://www.sec.gov/Archives/edgar/data/1326801/000132680121000022/facebook2021definitiveprox.htm#ic3434e614c6d4661abc9f5e608f438ab\\_755](https://www.sec.gov/Archives/edgar/data/1326801/000132680121000022/facebook2021definitiveprox.htm#ic3434e614c6d4661abc9f5e608f438ab_755)

[20] Julia Kollwe, "Facebook to close Irish holding companies at centre of tax dispute" *The Guardian* 27 December 2020, available online at: <https://www.theguardian.com/technology/2020/dec/27/facebook-to-close-controversial-irish-holding-companies>

Facebook has a substantial presence in the UK, employing over 4,000 people in a wide range of positions including product management, research, sales and marketing, communications and public policy. Nicola Mendelsohn, a British former advertising executive, is Facebook's vice president for Europe, the Middle East and Africa, while Nick Clegg, the former leader of the Liberal Democrats in the UK, has been Facebook's vice president for global affairs and communications since 2018.

## *Microsoft*

Before the rise of mobile devices in the late 2000s and 2010s, Microsoft's role as the supplier of the Windows operating system for PCs made it the biggest and most important tech company in the world. It remains the world's largest company (by revenue) whose primary business is making software. Today, its main products are the Windows operating system, the Microsoft Office suite and cloud services, the social network for work LinkedIn (acquired in 2016 for over \$26 billion), the Azure cloud computing service, the Xbox video game console, and the Surface range of laptops, tablets and desktop PCs. Microsoft also maintains a search engine, Bing, and provides free e-mail accounts through Outlook.com (formerly MSN Hotmail and then Windows Live Hotmail). It also owns Skype and Teams, applications used for VoIP and video calls.

Windows is still the most popular operating system in the UK for desktop PCs, although its market share has been eroded over time by Apple's macOS. In the 2010s, Microsoft attempted to compete against Apple and Google on mobile devices, acquiring Nokia's mobile phone division and making both the hardware and the operating system for its own Windows Phone, but the product failed and Microsoft exited the smartphone market in 2016. During the same decade, Microsoft's failure in the mobile segment also contributed to the eclipse of Microsoft's Internet Explorer web browser (gradually replaced by Microsoft Edge after 2015) by Google's Chrome and Apple's Safari browsers. Microsoft's search engine Bing is the second most-used in the UK behind Google's, although its share of the market is still minor – around 8% compared to Google's 88%. Outlook.com is the second most popular email service in the UK after Google's Gmail, with 14 million users in the UK in late 2020, according to Ofcom. Skype is one of the more popular video calling services in the UK, although its reach is quite small – 2.7m in late 2020.

Microsoft does not have a dual class share structure: there is only one class of Microsoft stock, and shareholdings are relatively dispersed. Microsoft's largest shareholders are The Vanguard Group, Inc. (8.17% of shares) and BlackRock, Inc. (6.8%): two of the world's largest investment management companies, with around \$7 trillion and \$10 trillion assets under management respectively.[21] Microsoft's revenue and operating margin have both grown significantly over the past five years, with revenue increasing by 57% from \$91 billion in 2016 to \$143 billion in 2020, and its operating margin rising from 29% to 37% in that time.[22] After Steve Ballmer stood down as CEO in 2014 and was replaced by Satya Nadella, Microsoft has shifted away from attempting to compete with Google and Apple on mobile and towards making more revenue from selling software and services.

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[21] Microsoft, "Notice of Annual Shareholders Meeting and Proxy Statement 2020" 19 October 2020, available online at: [https://www.sec.gov/Archives/edgar/data/789019/000119312520272025/d31295ddefl4a.htm#toc31295\\_27](https://www.sec.gov/Archives/edgar/data/789019/000119312520272025/d31295ddefl4a.htm#toc31295_27) For the assets under management of The Vanguard Group and BlackRock, see [https://en.wikipedia.org/wiki/The\\_Vanguard\\_Group](https://en.wikipedia.org/wiki/The_Vanguard_Group) and <https://en.wikipedia.org/wiki/BlackRock>  
[22] Revenue for 2021 was \$168 billion and operating income \$70 billion, meaning that Microsoft's operating margin has increased further still, to 42%.

Microsoft has five offices in the UK, in London (Paddington), Cambridge, Reading, Manchester and Edinburgh. Turnover of its UK subsidiary was £4 billion in 2020, just under 4% of its global revenue.

## *Twitter*

Twitter is a social media and microblogging platform with around 192 million of what it calls ‘monetizable daily active users’ – its key reporting metric – across the globe. In the early 2010s, Twitter’s user numbers appeared to be on a similar trajectory to Facebook’s. However, since then, the two platforms’ trajectories have diverged considerably. Whereas Facebook has become one of the most widely used internet sites and apps in the world, and consequently one of the biggest tech companies globally by revenue and market capitalisation, Twitter has remained stuck at a much lower number of users, and it generates a small fraction – less than one twentieth – of Facebook’s annual revenue. Unlike Facebook, Twitter has not acquired other major social media platforms. Its sole product remains the Twitter platform.

Nevertheless, Twitter is an enormously important social media platform in many countries for news. The volume of news consumption on Facebook may be greater overall by virtue of its huge number of users, but Twitter’s short format and openness makes it the social media platform most suited to reporting and following breaking news, to reacting publicly to news and commentary, and to open debate – however variable the quality of that debate may sometimes be. Because of these qualities, not only all major news organisations are present on the platform but also many – indeed perhaps most – journalists in those countries where Twitter is popular, as are many of the public figures who feature in the news. Twitter is a place where public statements are made, and thus a place where news is created as well as reported. Donald Trump’s prolific use of Twitter was one high-profile example of this. As a result, Twitter is a magnet for those sections of the public most engaged with media, politics, sport and culture.

In the UK, Twitter has the third-largest reach among the major social media platforms, having been overtaken in the last five years or so by Instagram, but it is the second most popular after Facebook by site visits, reflecting a greater depth of average user engagement than Instagram. The use of Twitter is more even across different age groups than for its nearest rivals, Instagram and Snapchat, which are both much more youth dominated.

Twitter has a single class of stock and its three largest shareholders are The Vanguard Group (10.41%), Morgan Stanley and Morgan Stanley Investment Management, Inc. (8.05%) and BlackRock, Inc. (6.65%). Twitter’s CEO, Jack Dorsey, is one of the original founders of the platform and holds 2.26% of Twitter’s stock. Dorsey’s leadership of Twitter has been contentious, and in March 2020 activist investors made an abortive attempt to replace Dorsey and several other directors of the company before Dorsey reached an accommodation with them.[23]

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[23] Dominic Rushe, “Twitter and activist investor agree on truce to keep Jack Dorsey as chief” *The Guardian* 9 March 2020, available online at: <https://www.theguardian.com/business/2020/mar/09/twitter-jack-dorsey-elliott-management-agreement>

Twitter's revenue is far smaller than that of the five big tech companies – Amazon, Apple, Facebook, Google and Microsoft – standing at \$3.7 billion in 2020, 47% more than in 2016. It is hardly the explosive growth many of the other companies have seen over the same period. Its market capitalisation currently stands at just over \$50 billion – far below the big five, whose valuations all stand in the \$1-2.5 trillion range. Indeed, even Snap Inc., whose revenues are smaller, has a market capitalisation over twice as large (\$119 billion).

Twitter has two offices in the UK, employing people in a wide range of roles. Twitter UK's primary activity is marketing and selling advertising on Twitter to UK advertisers, but it also provides design, development and support services to the wider company. Revenue in 2019 – the most recent year available – was £132 million, and the company had 237 UK employees, mostly in sales and marketing.[24]

### *Snap Inc.*

Snap Inc., formerly Snapchat, is an American social media company founded in 2011 by Evan Spiegel, Bobby Murphy and Reggie Brown. The company's main product is the Snapchat social media platform, to which it has added Bitmoji – personalised stickers for messaging apps, and Spectacles: 'smartglasses' that record video for use on Snapchat and retail for \$380. Globally, Snapchat had 265 million daily active users by the end of 2020, up from 218 million at the end of 2019. Of those 265 million, 74 million (28%) were in Europe.[25]

In 2013, worried about the popularity Snapchat was achieving with younger users, Facebook tried to buy Snapchat for a reported \$3 billion.[26] In 2016, Google reportedly offered \$30 billion to buy the company. Both offers were turned down.[27] Snap Inc. went public in 2017 at an initial valuation of \$24 billion, the largest US-listed tech IPO since Facebook. Having failed to acquire Snap, Facebook retaliated against the competitive threat by copying a number of Snapchat's features on its apps, particularly Instagram.[28]

Snap Inc. has a triple-class share structure where Class A stock – the commonly traded stock – has no voting rights. 99.5% of voting capital stock is controlled by the company's two co-founders, Evan Spiegel and Bobby Murphy. Spiegel has slightly more, such that, as Snap's most recent annual report puts it, "Mr Spiegel alone can exercise voting control over a majority of our voting power. As a result, Mr Spiegel and Mr Murphy, or in many instances Mr Spiegel acting alone, have the ability to control the outcome of all matters submitted to our stockholders for approval". [29] Spiegel is the company's CEO, while Bobby Murphy is the company's Chief Technology Officer. Both are in their early thirties, and billionaires.

[24] Twitter UK Limited, *Annual Report: Financial Year Ended 31 December 2019*, p. 21, available online at: <https://find-and-update.company-information.service.gov.uk/company/07653064/filing-history>

[25] Snap Inc, *Annual Report 2020*, p. 46-48, available online at: <https://investor.snap.com/financials/sec-filings/default.aspx>

[26] John Shinal, "Mark Zuckerberg couldn't buy Snapchat years ago, and now he's close to destroying the company" *CNBC* 12 July 2017, available online at: <https://www.cnn.com/2017/07/12/how-mark-zuckerberg-has-used-instagram-to-crush-evan-spiegels-snap.html>

[27] Alex Heath, "Insiders say Google was interested in buying Snap for at least \$30 billion last year" *Business Insider* 3 August 2017, available online at: <https://www.businessinsider.com/google-offered-to-buy-snapchat-for-at-least-30-in-early-2016-insiders-say-2017-8>

[28] Billy Gallagher, "Copycat: How Facebook Tried to Squash Snapchat" *Wired* 16 February 2018, available online at: <https://www.wired.com/story/copycat-how-facebook-tried-to-squash-snapchat/>

[29] Snap Inc, *Annual Report 2020*, p. 15-16



Snapchat is the fourth most popular social media platform in the UK, after Facebook, Instagram and Twitter. Among 16-24s, it is the second most popular after Instagram: according to the most recent Ofcom data, 72% of them use it. However, use falls off more rapidly with age than in the case of Instagram. In recent years, TikTok has begun to emerge as a major rival to Snapchat (and Instagram) among young people.

Snap Inc's revenue remains miniscule by the standards of the big five tech companies: 2020 revenue of \$2.5 billion equates to around 3% of Facebook's – the smallest of the big five. However, revenue is still growing rapidly: up by 620% since 2016, and 46% year-on-year. Snap Inc is running at a substantial loss, and has done continuously since its IPO, but the scale of its losses is declining: from a margin of minus 64% in 2019 to minus 34% in 2020. The company appears to be on a path to profit. Market capitalisation currently stands at \$119 billion.

Snap Inc.'s UK subsidiary is Snap Group Limited, which has an office in London and books Snap's advertising revenue from across Europe. The company employed 184 staff in 2019, of which over half were in sales and operations.

### *ByteDance*

ByteDance is a Chinese multinational technology company founded by Zhang Yiming in 2012, most famous in the UK as the developer of TikTok, an increasingly popular social media platform where users record and share short-form, looped videos. Videos are typically light – jokes, dancing, pranks – but the platform is also used to express opinions. The platform was launched outside of mainland China in May 2017 and has since taken off to become one of the most popular social media platforms in the UK, and the fourth most popular among 16-24s – behind Facebook, Instagram and Snapchat but ahead of Twitter. As of July 2020, TikTok had 689 million global monthly active users.[30] ByteDance's total revenue stood at \$34.3 billion in 2020, an increase of 111% year-on-year.[31] The company aims to go public with an IPO on Hong Kong's stock exchange in late 2021 or early 2022.[32]

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[30] Alex Sherman, "TikTok reveals detailed user numbers for the first time" *CNBC* 24 August 2020, available online at: <https://www.cnn.com/2020/08/24/tiktok-reveals-us-global-user-growth-numbers-for-first-time.html>

[31] "TikTok owner ByteDance sees its earnings double in 2020" *BBC News* 18 June 2021, available online at: <https://www.bbc.co.uk/news/business-57522368>

[32] "TikTok owner ByteDance aims for Hong Kong IPO by early 2022 – FT" *Reuters* 8 August 2021, available online at: <https://www.reuters.com/technology/tiktok-owner-bytedance-aims-hong-kong-ipo-by-early-2022-ft-2021-08-08/>

## Telecommunications

Table 48. Telecommunications company financial data (£m), 2016-2020

Company	2016	2017	2018	2019	2020
<b>BT Group plc</b>					
Revenue	18,909	24,107	23,761	23,459	22,824
Operating profit	3,950	4,273	4,063	3,846	3,611
Operating margin	21%	18%	17%	16%	16%
<b>Virgin Media</b>					
Revenue	4,806	4,963	5,150	5,168	5,129
Operating profit	Not available	Not available	Not available	Not available	Not available
Operating margin	Not available	Not available	Not available	Not available	Not available
<b>Sky</b>					
	£m	£m	\$m	\$m	\$m
Revenue	12,445	12,997	19,814	19,219	18,594
Operating profit	1,569	1,473	Not available	Not available	Not available
Operating margin	13%	12%	Not available	Not available	Not available
<b>TalkTalk</b>					
Revenue	1,835	1,783	1,708	1,632	1,518
Operating profit/(loss)	38	95	(18)	47	197
Operating margin	2.1%	5.3%	-1.1%	2.9%	13.0%
<b>Vodafone UK</b>					
Revenue	8,428	6,925	7,078	6,272	6,484
Operating profit	Not available	Not available	Not available	Not available	Not available
Operating margin	Not available	Not available	Not available	Not available	Not available
<b>Hutchison 3G UK (Three)</b>					
Revenue	2,203	2,357	2,379	2,327	Not available
Operating profit	308	362	78	360	Not available
Operating margin	14%	15%	3%	15%	Not available

*BT (including EE)*

Formerly a state-owned utility, British Telecom was privatised in 1984 and renamed BT in 1991. Today, BT Group plc is a British multinational telecoms company and the largest provider of fixed-line, of broadband and, through EE, of mobile services in the UK, as well as pay-TV – BT TV and BT Sport – and internet services. It provides these services to both businesses and consumers, serving 1.2 million business and public sector organisations in the UK and the Republic of Ireland, and over 14 million households in the UK, making it the largest provider of consumer telecoms in the UK. As of June 2021, BT had just over 9 million broadband subscribers, therefore the company's share is around a third of the market. EE has around 32 million customers, making it the largest mobile network provider in the UK. BT has over 580 BT/EE retail stores in the UK and employs 80,400 full-time equivalent staff in the UK.

Openreach Limited is a fixed-line telecoms infrastructure company wholly owned by BT and responsible for installing and maintaining the UK's telecoms infrastructure used by telecoms providers including BT. Openreach was previously a division of BT, regulated so that rival telecoms operators had equal access to BT's network. In 2017, following a series of reviews by Ofcom which found competition problems with BT's control over Openreach, BT agreed to separate Openreach into a legally separate company; however, the company is still wholly owned by BT Group plc. The central issue was whether Openreach's decisions were being overly influenced by BT's commercial interests, rather than treating all its customers equally in the broader interest of the development and good maintenance of the UK's fixed-line infrastructure. Ofcom continues to keep Openreach's performance and independence under review through a dedicated Openreach Monitoring Unit.[33]

In 2013, in order to compete with its major rival Sky, BT launched its first TV channels, BT Sport, and began competing for Premier League and Champions' League sports rights (a major cause of Premier League rights inflation in the 2010s). In 2016, BT acquired the mobile network operator EE – the largest in the UK – for £12.5 billion.[34]

BT is a publicly traded company with no single dominant shareholder. Its two largest shareholders are the French multinational telecoms company Altice, founded by Patrick Drahi, which holds a 12.1% stake, and Deutsche Telekom, which has a 12.06% stake as a result of BT's 2014 acquisition of EE (Deutsche Telekom part-owned the latter and was paid partly in stock).

*Sky*

Formerly a publicly listed company, Sky has been a wholly owned subsidiary of the American multinational telecoms and entertainment giant Comcast since 2018. Sky operates in the UK, the Republic of Ireland, Germany, Austria, Switzerland and Italy. In the UK its primary products are pay-TV, fixed broadband connections, fixed and mobile phone services, sold to consumers and businesses. It is the UK's largest pay-TV broadcaster, and one of the largest in Europe.

[33] For more on why this happened, see Georgina Hutton and Sara Priestley, "BT and Openreach" *House of Commons Library* 11 January 2019, available online at: <https://commonslibrary.parliament.uk/research-briefings/cbp-7888/>

[34] Daniel Thomas and Arash Massoudi, "BT seals £12.5bn deal to buy EE" *Financial Times* 5 February 2015, available online at: <https://www.ft.com/content/9a74a0ec-ac6c-11e4-9aaa-00144feab7de>

Across Europe, Sky had 23.9 million subscribers at the end of 2020. Its revenue in 2020 was \$18.6 billion, of which the vast majority came from direct-to-consumer sales. Sky supplies the second highest number of broadband connections in the UK, after BT, with 22.5% of connections.

Sky's parent company, Comcast, is a publicly traded company with a revenue of over \$103 billion in 2020. Sky accounts for around 18% of Comcast's revenue. Comcast has a dual class share structure. The largest shareholders of Class A stock, worth 0.0622 votes per share, as of 10 March 2020 were The Vanguard Group (8.9% of Class A) and BlackRock (7.1%). There is only one holder of Class B stock, worth 15 votes per share: Brian Roberts, Comcast's CEO, who is the son of the company's founder, Ralph J. Roberts. Roberts's share equates to 33 1/3% of the combined voting power of the two classes of stock. This percentage is non-dilutable under the terms of the company's articles of incorporation.[35]

### *Virgin Media-O2*

Until June 2021, Virgin Media was a wholly owned subsidiary of Liberty Global, at which time it merged with the mobile network operator O2, owned by Telefónica, in a deal worth £31 billion. [36] Virgin Media-O2 is a joint venture, half-owned by each of Liberty Global and Telefónica. The aim of the merger was to create a rival that can challenge BT, the UK's dominant telecoms provider in Britain.

Virgin Media is the third-largest provider of fixed broadband connections in the UK, after BT and Sky, with 20.4% of connections in 2020, having gained just under one percent of market share since 2016. Virgin Media is a major provider of gigabit-speed broadband through fibre optic cables to the premises (FTTP), offering gigabit speeds to over 8 million homes, more than half of the 15.5 million homes that its fixed network passes. Virgin Media O2 also accounts for a total of 47 million connections in the UK across broadband, mobile, TV and home phone, with 24 million mobile customers, making it the second biggest mobile network provider in the UK, after EE.[37] Virgin Media O2 employs around 18,000 people and has more than 430 retail stores in the UK.

Liberty Global is a publicly traded Anglo-Dutch-American multinational telecoms company with a triple-class share structure. Class A shares are worth one vote, Class B shares ten votes, and Class C shares are non-voting. There are seven holders of Class B shares, of whom the largest by far, with 70% of them, is John C. Malone, Liberty Global's chairman (and also the largest private landowner in the United States, owning upwards of 2.2 million acres, with personal wealth of over \$9 billion). Malone's combined holdings of Class A and Class B shares gives him 30.1% of voting power. The second highest number of shares of voting power are those of Harris Associates L.P., which owns 24.5% of Class A stock and holds 10.6% of overall voting power, and Michael T. Fries, Liberty Global's CEO, who owns 19.8% of Class B stock and 1.8% of Class A, giving him 9.1% of overall voting power. Other shareholders with significant voting power include Berkshire Hathaway (5.9%), Goldman Sachs (3.6%), Bill Gates (3.5%) and Robert R. Bennett – former CEO and president of Liberty Media (3.2%).[38]

[35] Comcast, *Notice of 2020 Annual Meeting of Shareholders of Comcast Corporation*, p. 4-5, available online at:

<https://www.sec.gov/Archives/edgar/data/1166691/000119312520118504/d781322ddef14a.htm>

[36] Nic Fildes, "Newly merged Virgin Media O2 'ready to fire' at incumbent BT" *Financial Times* 1 June 2021, available online at:

<https://www.ft.com/content/9329ed0e-6ba4-46ed-992c-2b9538507e36>

[37] <https://news.virginmediao2.co.uk/about-us/> and <https://news.virginmediao2.co.uk/investors/>

[38] Liberty Global, *Notice of Annual General Meeting of Shareholders to be Held June 16, 2021*, p. 17-18, available online at: [https://libertyglobal.gcs-web.com/node/26611/html#toc31532\\_18](https://libertyglobal.gcs-web.com/node/26611/html#toc31532_18)

Telefónica is a publicly traded Spanish multinational telecoms company, one of the largest telephone and mobile network operators in the world. The three shareholders with the largest shares of total voting rights are Banco Bilbao Vizcaya Argentaria BBVA (4.96%), CaixaBank, S.A. (4.7%) and BlackRock Inc. (4.68%).<sup>[39]</sup>

### *Talk Talk*

TalkTalk Telecom Group plc was originally created as a subsidiary of the Carphone Warehouse in 2003 before being demerged into a standalone company in 2010. The company provides pay-TV, broadband, and fixed telephony services to businesses and consumers in the UK. Until 2018 it provided mobile network services before exiting that market. TalkTalk is the fourth largest supplier of broadband connections in the UK, after BT, Sky and Virgin Media, with around 10% in 2020 – although its market share has declined considerably since 2013, when it stood at 15.7%.

For some years, TalkTalk was a publicly listed company but in December 2020 it offered £1.1 billion to its shareholders to take the company private, which came from Toscafund – a hedge fund, and the company’s second-largest shareholder. The bid was endorsed by TalkTalk’s largest shareholder, Sir Charles Dunstone, who originally founded the Carphone Warehouse. The company’s shareholders approved the offer in March.<sup>[40]</sup> Dunstone has donated to both Labour and the Conservatives in the past. He publicly backed the Labour Party under Tony Blair before resigning from the party after it moved leftwards in the 2010s.<sup>[41]</sup>

Dido Harding, TalkTalk’s CEO, was given a peerage by her friend David Cameron when he was Prime Minister in 2014. She later stood down in 2017 after TalkTalk experienced a cyber-attack in which the personal and banking details of up to four million of its customers may have been accessed. An investigation by the Information Commissioner’s Office found that TalkTalk had not taken sufficient measures to protect its customers’ data. The ICO report said “For no good reason, TalkTalk appears to have overlooked the need to ensure it had robust measures in place despite having the financial and staffing resources available.”<sup>[42]</sup> The company was issued with the ICO’s largest ever fine – £400,000. In May 2020, the Health Secretary Matt Hancock announced that Harding was to be put in charge of the NHS Test and Trace programme, having served since 2017 as the chair of NHS Improvement, a non-departmental body responsible for overseeing the NHS’s foundation trusts, NHS trusts and independent providers of NHS-funded care. These appointments were criticised as cronyism.<sup>[43]</sup>

<sup>[39]</sup> <https://www.telefonica.com/en/web/shareholders-investors/share/significant-shareholdings>

<sup>[40]</sup> Alex Ralph, “TalkTalk investors say yes to takeover by Toscafund” *The Times* 2 March 2021, available online at: <https://www.thetimes.co.uk/article/talktalk-investors-say-yes-to-takeover-by-toscafund-sw973z93w>

<sup>[41]</sup> Christopher Hope and Steven Swinford, “Tony Blair’s former business backer Sir Charles Dunstone ‘frightened’ by Ed Miliband winning election” *The Telegraph* 5 February 2015, available online at: <https://www.telegraph.co.uk/news/politics/11394001/Tony-Blairs-former-business-backer-Sir-Charles-Dunstone-frightened-by-Labour-winning-election.html>

<sup>[42]</sup> Information Commissioner’s Office, “TalkTalk cyber attack – how the ICO’s investigation unfolded” 15-21 October 2015, available online at: <https://ico.org.uk/about-the-ico/news-and-events/talktalk-cyber-attack-how-the-ico-investigation-unfolded/>

<sup>[43]</sup> Ashleigh Furlong and Charlie Cooper, “Britain’s new health boss Dido Harding sparks cries of cronyism” *Politico* 22 August 2020, available online at: <https://www.politico.eu/article/the-businesswoman-leading-britains-mid-pandemic-shakeup-of-public-health/>

## Vodafone

Vodafone Group plc is a British multinational telecoms company, one of the largest mobile network operators in the world, owning and operating networks in 21 countries and with partner networks in a further 48. The UK is one of Vodafone's largest markets, accounting for 13% of Vodafone's overall revenue – only Germany accounts for more (31%).<sup>[44]</sup> Vodafone's primary business is selling mobile phone and internet services, with 65.4 million mobile contract customers across Europe, but it also has 25.6 million broadband customers across the continent, although only 1.1 million of the latter in the UK.<sup>[45]</sup> In total it has over 18 million UK mobile and fixed line customers, making it the third-largest mobile network provider in the UK after EE and O2.<sup>[46]</sup> Vodafone employs around 8,500 people in the UK. Vodafone is a publicly traded company with one class of stock. Its largest shareholders are BlackRock (4.32%), Norges Bank Investment Management (3.05%) and The Vanguard Group (2.75%).

## Hutchison 3G UK Limited (Three)

Hutchison 3G UK Limited ("3 UK") is the UK subsidiary of CK Hutchison Holdings, a Hong Kong-based multinational conglomerate with core businesses in ports and related services, retail, infrastructure and telecoms. CK Hutchison Group Telecom Holdings Limited, incorporated in the Cayman Islands, manages telecoms businesses in the UK, Italy, Sweden, Denmark, Austria and Ireland through 3 Group Europe. As of June 2021, 3 Group Europe has around 44 million registered mobile customers, of whom 38 million are active customers. 3 UK serves around 13 million registered customers, of whom around 10 million are active customers. <sup>[47]</sup>

Three is the fourth-largest provider of mobile network services in the UK, launching in March 2003 as the UK's first commercial 100% 3G network. Three's parent company attempted to acquire O2's UK operations for around £10 billion in 2015 but the European Commission blocked the acquisition on the grounds that it would be detrimental to competition in the UK's telecoms market.<sup>[48]</sup>

CK Hutchinson Holdings was formed by a merger of Cheung Kong Holdings and its main associate company Hutchison Whampoa in 2015. The company is listed on the Hong Kong stock exchange. It has only one class of stock, but the largest shareholder by far is the family of Li Ka-shing, a Hong Kong business magnate and investor, which holds 30.1% of stock. (The next-largest shareholder is The Vanguard Group, which holds 1.7%.) Li Ka-shing is one of the wealthiest people in the world, and the richest person in Hong Kong with net assets of US \$35.4 billion.<sup>[49]</sup> He was chairman of the board of CK Hutchison Holdings until he resigned in 2018. He remains senior advisor to the company.

[44] Vodafone, *Annual Report 2021*, p. 24, available online at: <https://investors.vodafone.com/sites/vodafone-ir/files/2021-05/vodafone-annual-report-2021.pdf>

[45] Vodafone, *Annual Report 2021*, p. 14, 25

[46] <https://newscentre.vodafone.co.uk/about-us/vodafone-uk-in-numbers/>

[47] [https://www.ckhutchisontelecom.com/en/business/our\\_businesses.php](https://www.ckhutchisontelecom.com/en/business/our_businesses.php) See also Hutchison 3G UK Limited, *Annual Report and Financial Statements: For the Year Ended 31 December 2019*, p. 5, available online at: <https://find-and-update.company-information.service.gov.uk/company/03885486/filing-history>

[48] "EU blocks Three's takeover of O2" *BBC News* 11 May 2016, available online at: <https://www.bbc.co.uk/news/business-36266924>

[49] <https://www.forbes.com/hong-kong-billionaires/#31603f8e3e46>

# TECHNOLOGY & GOVERNMENT

The Parliament at Westminster has generally been slow to recognise the existence of important digital issues requiring public policy intervention. In the past, this has no doubt been partly due to some degree of digital illiteracy – the average age of members of the House of Commons is 51; in the House of Lords the average is 70.[50] Another probable factor has been the generally free-market, ‘light-touch’, deregulatory direction of state policy since the 1980s. The last major piece of communications legislation – the 2003 Communications Act passed by Tony Blair’s New Labour government – was mostly deregulatory in intent and effect. There have been minor bills since then, but no major new piece of legislation. The UK does not have a dedicated regulator for the internet. Ofcom is tasked with regulating the UK’s telecoms infrastructure, but it does not – yet – have a formal remit to regulate the internet.

This section of this report will consider some of the main issues that have emerged as a result of the development of digital technology and platforms, and the companies that provide them, in the UK.

## Broadband Rollout: Superfast and Full Fibre

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As already shown above, the UK has one of the lowest rates of full-fibre broadband rollout in Europe. It is due to the fact that a conscious policy decision was taken by government in the 2010s to quickly achieve the rapid, universal rollout of superfast broadband (30 Mbps or more) across the UK. Doing so would only require rolling out fibre optic technology to local street cabinets, so-called ‘fibre-to-the-cabinet’ (FTTC) and not also from the cabinet to individual households, ‘fibre-to-the-premises’ (FTTP). FTTC then uses the existing, slower copper telephone wires that run from the cabinet to the premises. This copper telephone network is owned and operated by Openreach, the subsidiary of BT, and broadband retail providers deliver broadband services to consumers using Openreach’s network.

FTTP might deliver much faster speeds, but it was decided that it would be more costly, take longer to roll out and require bigger public subsidies to cover the cost of laying cables in sparsely populated rural areas. In the first half of the 2010s, broader government policy was one of cutting public spending – ‘austerity’. Public investment was one of the first things cut drastically by the Coalition government that took power in May 2010 – a 40% real terms cut.[51] In this fiscal context, substantial new public investment in rolling out FTTP across the country was unlikely. Superfast rollout would be quicker and cheaper.

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[50] Christopher Watson, “House of Commons trends: The age of MPs” *House of Commons Library* 3 November 2020, available online at: <https://commonslibrary.parliament.uk/house-of-commons-trends-the-age-of-mps/> For the House of Lords, see: <https://www.parliament.uk/about/faqs/house-of-lords-faqs/lords-members/>

[51] John Van Reenen, “Austerity in the UK: past, present and future” *LSE Politics and Policy Blog* 11 March 2015, available online at: <https://blogs.lse.ac.uk/politicsandpolicy/austerity-past-present-and-future/>

In 2010, the government announced a superfast broadband rollout programme that, in its first phase, would use £530 million of public funding to ensure 90% of UK premises could access superfast broadband by early 2016 and all UK premises could access basic broadband (2 Mbps or more) by December 2015. In June 2016 Ofcom confirmed the first target had been met, but still in July 2017 115,000 UK premises (0.5% of the total) could not access basic broadband. The second phase of the programme would use an extra £250 million of government funding to extend superfast coverage to 95% of premises by the end of 2017. Ofcom confirmed that this target was met by February 2018. Phase three of the programme – the rollout of superfast broadband to the remaining 5% of (mostly rural) premises – had no new funding attached and no targets for when universal coverage would or should be achieved. In October 2020 a National Audit Office report found that the government now expects contracts for the remaining delivery of superfast coverage to run until 2024, four years longer than originally planned. Total government money committed to the programme was £780 million. As of August 2020, the total funding spent by the government was £719 million, supplemented by an additional £1.2 billion spend by local bodies, for total public funding of £1.9 billion over the decade or so.[52] The result of this government policy was that in 2019, the most recent year for which Europe-wide comparisons are available, the UK had 95% superfast coverage, well above the EU average of 83%. However, it had only 57% coverage with speeds above 100 Mbps compared to an EU average of 68% and 9% coverage above 1 Gbps compared to an EU average of 32%.

One criticism of the superfast rollout programme was that the easiest-to-reach premises were tackled first, and that public funding did not sufficiently focus on the areas least likely to be targeted by private investment. As a result, many hard-to-reach areas were either connected very late on in the programme or have remained left behind. Even the most recent coverage data from Ofcom indicates that whereas only 3% of urban premises lack access to superfast broadband, the figure for rural premises is 20%. Average monthly broadband data use in the UK was 429 GB in 2020, fourteen times larger than the 30 GB average in 2013. The rapid rise of use is being driven by online video streaming and video calls. It has become increasingly clear over the last several years that, relatively soon, superfast broadband will be inadequate to the needs of many UK internet users. In the 2018 Future Telecoms Infrastructure Review (FTIR), the then-government shifted its policy goal to prioritise the rollout of gigabit-capable broadband.[53] At the 2019 election, all the main politics parties were committed to significantly upgrading the UK's digital infrastructure.

The current Conservative government has identified the delivery of gigabit-capable broadband as a major part of its 'levelling up' agenda. In its December 2019 general election manifesto, the Conservatives committed to delivering nationwide gigabit-capable broadband by 2025. In late November 2020, the government's National Infrastructure Strategy included a commitment to spend £5 billion to support UK-wide gigabit broadband rollout, and a Shared Rural Network extending 4G mobile coverage to 95% of the UK. However, less than a month later in the Spending Review 2020, it emerged that the government was only committing to spend a total of £1.2 billion of this '£5 billion commitment' by 2025. The government's target is now only for 85% coverage by 2025, and majority 5G coverage by 2027. In December 2020 a report by the House of Commons Digital, Culture, Media and Sport Select Committee concluded that "even meeting the revised target will be a challenge".[54]

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[52] For more on the superfast broadband programme, see Carl Baker and Georgina Hutton, "Superfast broadband in the UK" *House of Commons Library* 4 March 2021, available online at: <https://commonslibrary.parliament.uk/research-briefings/sn06643/>

[53] Department for Digital, Culture, Media and Sport, *Future Telecoms Infrastructure Review* 23 July 2018, available online at: <https://www.gov.uk/government/publications/future-telecoms-infrastructure-review>

[54] House of Commons Digital, Culture, Media and Sport Committee, *Broadband and the road to 5G – Fourth Report of Session 2019-21*, 17 December 2020, p. 3, available online at: <https://committees.parliament.uk/work/89/broadband-and-the-road-to-5g/publications/>



Gigabit coverage is currently expanding rapidly. It is now available to 37% of UK homes (11 million), driven largely by the rollout of Virgin Media's DOCSIS3.1 cable technology, way up from 9% in 2019.[55] Full fibre deployment is now at 21% (just under 6 million homes). The government has forecast that 60% of the UK will have access to gigabit broadband by the end of 2021.[56] Nevertheless, the UK is still considerably behind where many other European countries already were two years ago.

Three questions remain. First, is even the government's revised target of 85% coverage by 2025 realistic? The Commons Select Committee identified some reasons for scepticism. For example, the build rate of full-fibre services achieved between May 2019 and May 2020, during which 1.8 million premises were connected, would have to be increased threefold in order to connect the remaining 22 million required to meet the government's revised target by 2025.[57] There are a range of barriers to achieving this rate, including a lack of enough telecoms engineers unless the government takes steps to ensure a sufficient supply of skilled labour, either through training or immigration.[58]

Second, when will the hardest-to-reach parts of the UK – the parts it is least profitable for private sector broadband providers to connect – get access to gigabit-capable broadband? In revising its target for 2025 down to 85% of UK premises, the government has not offered any estimate of when after 2025 the final 15% of households – most likely to be rural and remote ones – could expect to be connected. The question is compounded by doubts about whether even the £5 billion originally committed to connecting the 20% of premises most difficult to connect would actually be sufficient to achieve that purpose. The FTIR estimated that connecting the final 10% of premises would cost between £3-5 billion.

Third, achieving widespread gigabit-capable coverage is not the same as widespread take-up of gigabit-capable connections. Even if the government's target of 85% coverage by 2025 was achieved, would connections be available at affordable enough prices? At the moment, a superfast broadband connection costs upwards of £25 a month, whereas a gigabit connection usually costs upwards of £60 a month. There is the potential for increasing inequality of connection speeds across the country, due not only to the uneven rollout of coverage but also to unequal incomes and abilities to pay. The UK has 14.5 million people in poverty, including 4.3 million children.[59] Will they be able to afford gigabit broadband? Can they afford the kinds of devices that would allow them to take full advantage of it? Moreover, levels of consumer take-up will have an impact on the level of private sector investment: there is no profit in rolling out infrastructure that relatively few people are prepared to pay to use. So far, the take-up of gigabit connections has remained low. In December 2020, Ofcom estimated that around 25% of consumers with access to full fibre take it up, whereas 60% of premises with access to superfast do so.[60]

[55] Ofcom, "Connected Nations Update: Spring 2021" 12 May 2021, p. 1, available online at:

[https://www.ofcom.org.uk/\\_data/assets/pdf\\_file/0028/218881/Connected-Nations-Spring-Update-2021.pdf](https://www.ofcom.org.uk/_data/assets/pdf_file/0028/218881/Connected-Nations-Spring-Update-2021.pdf)

[56] Department for Digital, Culture, Media and Sport, "PM and Digital Secretary welcome broadband jobs boom" 1 April 2021, available online at: <https://www.gov.uk/government/news/pm-and-digital-secretary-welcome-broadband-jobs-boom>

[57] House of Commons Digital, Culture, Media and Sport Committee, *Broadband and the road to 5G – Fourth Report of Session 2019-21*, p. 19

[58] For more on policy reforms required to assist the rollout of gigabit infrastructure, see part five of Carl Baker and Georgina Hutton, "Gigabit-broadband in the UK: Government targets and policy" *House of Commons Library* 30 April 2021, p. 20, available online at:

<https://commonslibrary.parliament.uk/research-briefings/cbp-8392/> For more on the programme, see also Georgina Hutton, "Gigabit-broadband in the UK: Public funding" *House of Commons Library* 2 September 2021, available online at:

<https://commonslibrary.parliament.uk/research-briefings/cbp-9207/>

[59] Poverty is defined as people in 'relative low income' – living in households with income below 60% of the median income that year, after housing costs. See Brigid Francis-Devine, "Poverty in the UK: statistics" *House of Commons Library* 31 March 2021, available online at:

<https://commonslibrary.parliament.uk/research-briefings/sn07096/>

[60] Carl Baker and Georgina Hutton, "Gigabit-broadband in the UK: Government targets and policy", p. 27

## Tax Avoidance by Major Tech Companies

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Tax avoidance is increasingly recognised as a major issue around the world. International efforts to tackle tax avoidance are ongoing. In the UK, the small amounts of tax paid by major tech companies who generate billions of pounds of revenue in the UK each year have often been a focus of media attention, public anger and political inquiry. One of the first flashpoints was Google's tax affairs, which came under scrutiny over several years by the influential House of Commons Public Accounts Committee. In its first report on the subject, published in 2013, the Committee estimated that, between 2006 and 2011, Google generated \$18 billion revenue in the UK but paid just \$16 million of UK corporation taxes even though Google's global operating profit in the period was substantial. The Committee found Google's defence of this discrepancy unconvincing:

*“Google defends its tax position by claiming that its sales of advertising space to UK clients take place in Ireland—an argument which we find deeply unconvincing on the basis of evidence that, despite sales being billed from Ireland, most sales revenue is generated by staff in the UK. It is quite clear to us that sales to UK clients are the primary purpose, responsibility and result of its UK operation, and that the processing of sales through Google Ireland has no purpose other than to avoid UK corporation tax. This elaborate corporate construct has damaged Google's reputation in the UK and undermined confidence in the effectiveness of HMRC. In contrast to evidence given to us previously, Google has also conceded that its engineers in the UK are contributing to product development and creating economic value in the UK.”*

However, the Committee concluded the problem went much further than Google.

*“International tax rules are complicated and have not kept pace with the way businesses operate globally and through the internet. ... it is far too easy for companies to exploit the rules and set up structures in low-tax jurisdictions, rather than pay tax where they actually conduct their business and sell their goods and services. We are also particularly concerned about the out-of-date tax frameworks covering international internet based commerce which rely on a fully automated process.”[61]*

In 2016, Google announced that it had reached an agreement with Her Majesty's Revenue and Customs (HMRC) to pay an additional £130 million in corporation tax covering the period between January 2005 and June 2015, after a six-year investigation by HMRC. The Public Accounts Committee published a second report on Google, examining this deal, in 2016. The Committee concluded that “The lack of transparency about tax settlements makes it impossible to judge whether HMRC has settled this case for the right amount of tax. Taxpayers' legal right to confidentiality means that HMRC cannot explain how it has arrived at this or other settlements, or demonstrate that the rules have been applied correctly.” But it was unequivocal that Google was avoiding tax:

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[61] House of Commons Committee of Public Accounts, *Tax Avoidance—Google – Ninth Report of Session 2013-14*, 13 June 2013, p. 5-6, available online at: <https://publications.parliament.uk/pa/cm201314/cmselect/cmpubacc/112/112.pdf>

*“Multinational firms such as Google have made a choice to avoid tax, despite any claims they make to the contrary. Google told us that international tax rules are complex and that it just follows them. This is disingenuous. There is nothing in the rules that says you must set up two companies in Ireland and send large royalty payments, via the Netherlands, to a company that is tax resident in Bermuda. Multinational companies seem to be able to control how much corporation tax they pay in each country by the way they structure their business and allocate profits between their overseas entities. The fact that companies can do this within the rules shows that the corporation tax system is in urgent need of reform.”*

The Committee also registered its concern that HMRC appeared “to have settled for less corporation tax from Google than other countries are willing to accept,” despite the UK being Google’s second largest market after the US and contributing around 10% of Google’s worldwide revenue in 2015.[62]

Nevertheless, after the settlement Google continued to engage in tax avoidance through elaborate profit shifting manoeuvres.[63] At the start of 2020, it announced it would no longer use the ‘Double Irish, Dutch sandwich’ tax loophole, following a crackdown from Irish tax authorities (under pressure from the European Union) and a requirement from US authorities for companies to end their use of the system by the end of 2020. The loophole had allowed Google to enjoy an effective tax rate on non-US profits in the single digits, estimated at around a quarter the average tax rate in overseas markets.[64] Nevertheless, Google has continued to pay a relatively low amount of corporation tax: £50 million in 2020 despite Google UK posting revenues of £1.8 billion, itself only a fraction of the roughly £7-8 billion of UK advertising revenue Google is estimated to account for.[65]

Google is by no means the only tech giant to have engaged in tax avoidance. In 2015 it was reported that in 2014 Facebook paid only £4,327 in corporation tax in the UK. Facebook made an accounting loss of £28.5 million in the UK that year, despite making a global profit of \$2.9 billion on revenue of \$12.5 billion (a margin of 23%).[66] In 2016 it was announced that Facebook could pay millions of pounds more in UK tax after changing its corporate structure in Europe, invoicing large UK customers from Facebook UK rather than Facebook Ireland.[67] However, the following year it became clear that in 2016 Facebook’s UK operations had only actually paid £5.1 million in corporation tax (£2.58 million after deductible expenses) even though its revenue rose to £842 million. In 2019, it was reported that Facebook had paid only £28 million corporation tax on UK revenues of £1.6 billion in 2018. Facebook UK said that 12% of its sales were converted to profits – compared to a global average for the company of 44%. [68]

[62] House of Commons Committee of Public Accounts, Corporate tax settlements – *Twenty-fifth Report of Session 2015-16*, 24 February 2016, p. 4-7, available online at: <https://publications.parliament.uk/pa/cm201516/cmselect/cmpubacc/788/788.pdf>

[63] Reuters, “Google shifted \$23bn to tax haven Bermuda in 2017, filing shows” *The Guardian* 3 January 2019, available online at: <https://www.theguardian.com/technology/2019/jan/03/google-tax-haven-bermuda-netherlands>

[64] Edward Helmore, “Google says it will no longer use ‘Double Irish, Dutch sandwich’ tax loophole” *The Guardian* 1 January 2020, available online at: <https://www.theguardian.com/technology/2020/jan/01/google-says-it-will-no-longer-use-double-irish-dutch-sandwich-tax-loophole>

[65] Chris Newlands, “Google UK pays just £50m of tax on revenues totalling £1.8bn, while staff are paid almost £1.25bn” *i* 21 April 2021, available online at: <https://inews.co.uk/news/google-uk-pays-just-50m-of-tax-on-revenues-totalling-1-8bn-966557>

[66] Heather Stewart, “Facebook paid £4,327 corporation tax despite £35m staff bonuses” *The Guardian* 11 October 2015, available online at: <https://www.theguardian.com/global/2015/oct/11/facebook-paid-4327-corporation-tax-despite-35-million-staff-bonuses>

[67] Samuel Gibbs, “Facebook to pay millions more in UK tax” *The Guardian* 4 March 2016, available online at: <https://www.theguardian.com/technology/2016/mar/04/facebook-pay-millions-more-uk-tax-reports>

[68] Mark Sweney, “Facebook paid just £28m tax after record £1.6bn revenues in UK” *The Guardian* 11 October 2019, available online at: <https://www.theguardian.com/technology/2019/oct/11/facebook-paid-just-28m-on-record-16bn-earnings-in-the-uk>

“Apple and Amazon have likewise been criticised for minimising their UK tax bills. For example, Apple paid just £13 million in corporation tax in the UK in 2015, when approximately 10% of its £153 billion revenue and £35 billion profits were made in the UK. Assuming £3.5 billion of its profits for the year were generated in the UK, and at the UK’s corporation tax then of 20%, Apple would have owed £700m in tax: 54 times what it actually paid.[69] In 2017, the ‘Paradise Papers’ investigation by The Guardian and other media partners into offshore wealth and tax avoidance revealed that when Apple concluded that basing its operations in Ireland for tax purposes was no longer sustainable, it just secretly moved key parts of its empire to Jersey instead.[70] Meanwhile, Amazon only started paying UK corporation tax in 2015, after the UK’s introduction of a punitive ‘diverted profits’ tax discouraged it from continuing to use its previous tax avoidance strategy of booking its UK sales in Luxembourg.[71] Nevertheless, in 2019, Amazon was criticised for paying only £14 million in UK corporation tax in 2018, despite its UK operation having total sales of £10.9 billion in the year.[72]

According to Tax Watch UK, a research and pressure group, eight tech companies – Amazon, Google, Apple, Facebook, Microsoft, Adobe, Cisco Systems and eBay – collectively avoided an estimated £1.5 billion in UK tax in 2019. The majority of this amount came from two of the eight companies: Apple and Google, which were estimated to underpay by £518 million and £452 million respectively.[73] Tax Watch UK also estimated that Apple, Google Facebook, Microsoft and Cisco Systems had avoided roughly £5 billion of UK tax between 2012 and 2017.[74] Meanwhile, a study by the campaign group Fair Tax Foundation, published in May 2021, accused ‘the Silicon Six’ – Amazon, Facebook, Google, Netflix, Apple and Microsoft – of inflating their stated tax payments in their annual financial reports by almost \$100 billion (£70 billion) over the previous decade.[75]

The central cause of the problem, by general agreement, is the fact that the international tax system is based on some outdated fundamental assumptions. Currently, tech companies are liable for tax in the UK only on profits that arise from value created in the UK, not sales in or revenue from the UK. This ‘source-based’ approach is the common foundation of tax regimes across the OECD. But globalisation and the rise of companies based on intangible assets – like branding, software and other intellectual property – is making it much harder to say definitively where a company that operates across multiple national markets is creating its value and its profits. Currently, the profits a company makes through each of its national subsidiaries are calculated by the pricing of transactions between a multinational corporation’s subsidiaries – what is called ‘transfer pricing’, and it relies on the ‘arms-length principle’, which states that the company must treat transactions between its subsidiaries as though they were taking place between two unconnected companies.

[69] David Pegg, “The tech giants will never pay their fair share of taxes – unless we make them” *The Guardian* 11 December 2017, available online at: <https://www.theguardian.com/commentisfree/2017/dec/11/tech-giants-taxes-apple-paradise-corporation-avoidance>

[70] Nick Hopkins and Simon Bowers, “Apple secretly moved parts of empire to Jersey after row over tax affairs” *The Guardian* 6 November 2017, available online at: <https://www.theguardian.com/news/2017/nov/06/apple-secretly-moved-jersey-ireland-tax-row-paradise-papers>

[71] Simon Bowers, “Amazon to begin paying corporation tax on UK retail sales” *The Guardian* 23 May 2015, available online at: <https://www.theguardian.com/technology/2015/may/23/amazon-to-begin-paying-corporation-tax-on-uk-retail-sales>

[72] Sarah Butler, “Amazon accused of handing over ‘diddly-squat’ in corporation tax” *The Guardian* 3 September 2019, available online at: <https://www.theguardian.com/technology/2019/sep/03/amazon-accused-of-handing-over-diddly-squat-in-corporation-tax-despite-tripling-payment>

[73] Tax Watch, “Eight tech companies in the UK avoided an estimated £1.5bn in 2019”, available online at: [https://www.taxwatchuk.org/tech\\_companies\\_global\\_minimum\\_tax/](https://www.taxwatchuk.org/tech_companies_global_minimum_tax/)

[74] Tax Watch UK, “Corporate tax and technology companies – still crazy after all these years” available online at: <https://www.taxwatchuk.org/corporate-tax-and-tech-companies-in-the-uk-2/>

[75] Fair Tax Foundation, “Silicon Six end the decade with \$100 billion tax shortfall” 31 May 2021, available online at: <https://fairtaxmark.net/silicon-six-end-the-decade-with-100-billion-tax-shortfall/>

The problem is that in those fields where a company relies heavily on intellectual property, it is very difficult to say where the value creation is occurring, and the company has an obvious self-interest in declaring the value to be created in places where the resulting tax bill is minimal. Moreover, it is difficult to see how new technologies that have never been traded on a market can be priced at all. Consequently, differences between national tax systems, and the existence of tax havens, can be exploited by multinational tech companies to heavily decrease their tax bills. The current system was created a century ago, at a time when production predominantly meant the production of physical goods: in those cases, it was evident where the value was being created. But today it is much harder to say where, for example, a transaction involving a US tech company selling online display advertising space on its social media platform to a German furniture company that tries to reach the digital screens of British consumers is actually taking place. And tech companies can increasingly sell enormous amounts in the digital markets of countries where they have no physical presence.

After many years in which little was done to address this problem, international efforts have been launched to reconsider and update the international tax system. As the major American tech companies have grown larger and larger, so has the amount of tax revenue been forgone by the non-US countries in which these companies sell a major share of their products and services. Year after year news stories about the miniscule amounts of corporation tax that these companies pay have fanned the flames of public anger. Governments have been under increasing public pressure to find ways of collecting at least some more tax revenue from these companies.

Nowhere has this been truer than in the UK. The first major stories about tax avoidance by big multinational companies came to light in 2012, and they were followed by the Public Accounts Committee's report into the issue published in December 2012. Following a wave of public outrage, the first move in the government's response was the introduction of a General Anti-Abuse Rule in July 2013. The second was the announcement in late 2014 of a new Diverted Profits Tax (DPT) to tackle artificial profit-shifting. Despite being widely dubbed the 'Google tax', the DPT did not actually cover Google's particular tax avoidance strategy – although it did affect Amazon's.[76] The subsequent settlement between HMRC and Google in 2016 for £130 million in back taxes and interest covering the decade to 2015 was widely criticised at the time for raising a paltry amount of revenue, and widely taken as proof that not enough had changed in the government's approach to tackle tax avoidance by multinational companies.[77]

Alongside these efforts in the UK, talks were progressing slowly between the OECD and its member countries about modernising the principles of the international tax system in order to better address the problems outlined above. In 2013, the OECD and the G20 established the Base Erosion and Profit Shifting Project (BEPS Project) to develop a new international framework.

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[76] The DPT's peak yield was £219 million in 2017/18, although the yield fell to £12 million in 2018/19 and £17 million in 2019/20; however, the primary purpose of the DPT was not to achieve a large yield but to encourage companies not to use contrived tax arrangements to minimise their tax liabilities, and instead to pay additional corporation tax. For more on the DTP and HMRC's approach to transfer pricing, see HMRC, "Tackling profit diversion by multi-national companies" 12 November 2020, available online at:

<https://www.gov.uk/government/publications/transfer-pricing-and-diverted-profits-tax-statistics-2019-to-2020/tackling-profit-diversion-by-multi-national-companies>

[77] Murad Ahmed, Vanessa Houlder and George Parker, "Google tax: the 6-year audit that ended in a political storm" *Financial Times* 29 January 2016, available online at: <https://www.ft.com/content/flc5ca30-c677-11e5-b3b1-7b2481276e45> John McDonnell, "These mate's rates from George Osborne let Google off the hook on tax" *The Guardian* 3 February 2016, available online at:

<https://www.theguardian.com/commentisfree/2016/feb/03/george-osborne-google-tax-labour> Jon Stone, "George Osborne's tax deal with Google in the spotlight as French authorities raid the company's offices" *The Independent* 25 May 2016, available online at:

<https://www.independent.co.uk/news/uk/politics/george-osborne-tax-deal-google-spotlight-french-authorities-raid-firm-s-offices-a7048266.html>

In October 2015, after two years of discussions, the OECD published a series of recommendations on each of the 15 ‘action points’, which were endorsed by the leaders of the G20 countries that November. These recommendations fell into three categories: minimum standards to which all countries involved would agree to conform; revised international standards to be incorporated into tax treaties; recommended best practices. The central uncertainty was how widespread conformity with these recommendations would be, given that the OECD itself has no power to compel its member states: would sufficient international pressure be able to be brought to generate conformity to the recommended standards? In 2016 the UK government followed the BEPS Project’s recommendations and made a number of changes to the UK’s tax rules, including those on transfer pricing.

Although the BEPS Project’s 2015 recommendations were widely agreed to be a step forward, for many they were not enough. In 2017, the government published a position paper setting out its approach to addressing the specific taxation problems raised by the tech giants, which said that while it would support a second OECD-led effort to reach an international agreement on taxing multinationals, it would at the same time explore the possibility of a UK tax on major digital platforms. In the 2018 Budget, the then Chancellor Philip Hammond announced the introduction of a new Digital Services Tax (DST) from April 2020 that would deliver tax revenue from the tech giants to compensate for the ongoing lack of an international agreement on taxing them. Such DSTs have been introduced in a number of countries around the world over the past few years. [78] The UK’s version would be a 2% tax on the revenues of certain digital businesses, namely those providing a social media service, search engine or online marketplace to UK users [79], and whose worldwide revenues from these digital activities were more than £500 million, with more than £25 million of these revenues derived from UK users. The DST came into force in April 2020 and was forecast to raise £280 million in the 2020/21 tax year, rising to £515 million by 2024/25. The UK government’s position is that the DST is currently necessary to compensate for the inadequacies of the current international tax regime but will become superfluous once that regime has been reformed adequately. The US government, on the other hand, rejects the use of DSTs and on 2 June 2021 the US Trade Representative confirmed plans to impose trade tariffs on certain countries with DSTs, including the UK; however, these tariffs would be suspended for up to 180 days in order to allow the conclusion of multilateral negotiations on international tax reform at the OECD.

On 1 July 2021, the OECD announced that 130 countries and jurisdictions representing over 90% of global GDP had signed up to a new, two-pillar plan to reform international tax rules and reduce tax avoidance. [80] Pillar One primarily concerns the reform of profit allocation rules – the core of the UK’s issue with the tech giants. Under it, large, profitable multinationals will be required to pay tax in the countries in which they operate, not just where their headquarters are based. Global firms with at least a 10% profit margin will be able to be taxed in the countries in which they operate on at least 20% of their residual profits above that 10% margin. Pillar Two concerns the creation of a global minimum 15% corporation tax rate. [81]

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[78] For a comprehensive, up-to-date list of international developments in digital economy taxation, see KPMG’s reports, available online at: <https://home.kpmg/xx/en/home/insights/2019/06/tnf-digital-economy0.html>

[79] HMRC, “Digital Services Tax” 11 March 2020, available online at: <https://www.gov.uk/government/publications/introduction-of-the-digital-services-tax/digital-services-tax>

[80] OECD, “130 countries and jurisdictions join bold new framework for international tax reform” 1 July 2021, available online at: <https://www.oecd.org/tax/beps/130-countries-and-jurisdictions-join-bold-new-framework-for-international-tax-reform.htm>

[81] The Biden administration originally sought agreement on a 21% minimum tax rate, but its proposal was watered down. See Phillip Inman, “Agreement to tax Google and Facebook is historic. Will Brexit Britain stay onside?” *The Observer* 6 June 2021, available online at: <https://www.theguardian.com/politics/2021/jun/06/agreement-to-tax-google-and-facebook-is-historic-will-brexite-britain-stay-onside>

The Biden administration is more keen on Pillar Two because of its potential to reduce the ability of US firms to respond to a rise in US corporate tax rates by offshoring their operations; the fact that the minimum tax would be global also helps prevent US firms suffering a competitive disadvantage against firms from other countries: if nobody can pay taxes offshore, US firms can't be undercut as easily by foreign firms paying lower tax bills. In other words, the Biden administration's central goal is to be able to raise more US corporate tax revenue without disadvantaging US firms in international competition. In effect, the US agreed to Pillar One in order to get Pillar Two, whereas for the UK and a number of other countries Pillar One was the main priority. The UK government's view is that implementation of Pillar One will largely obviate the need for the Digital Services Tax.

Much remains to be done before the agreement becomes reality. Treaties have to be drawn up and ratified. Key details like the way in which the tax base will be determined have yet to be defined. Some low-tax countries did not sign the agreement, including Ireland, Hungary, Barbados and Estonia. Even if all goes according to plan, the regime will not come into effect until 2023. Nevertheless, the OECD's announcement represents a significant step towards reforming the international tax system.[82]

## Digital Competition & Anti-Trust Policy

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Over the past five years, there have been mounting concerns about the dominance that a handful of giant American tech firms have acquired in certain markets and in the public life of countries like the UK. For instance, in the UK, Google accounts for over 90% of search advertising revenue and Facebook accounts for over 50% of online display advertising revenue. Between them, these two firms account for around 80% of online advertising revenue.[83] Google alone will account for around 29% of global online ad spending, according to eMarketer's projections.[84] This dominance has led to complaints from UK news publishers that the digital dominance of these two firms is preventing them from generating enough digital advertising revenue to facilitate their transition away from print newspaper publishing and into digital news publishing, on a business model that is sustainable for the long term.

Not only do these tech giants appear to be unassailably dominant in their core product markets and to be taking an enormous share of digital advertising revenue in the UK. They are also big and profitable enough to be able to acquire competitive threats – as Facebook did by acquiring Instagram in 2012 for \$1 billion and WhatsApp in 2014 for \$12 billion – or to give themselves unfair advantages over rivals and advertisers, as Google has repeatedly been charged with doing in a succession of anti-trust cases in recent years.

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[82] For more on the DST and the OECD agreement, see Antony Seely, "Digital Services Tax" *House of Commons Library* 2 July 2021, available online at: <https://commonslibrary.parliament.uk/research-briefings/cbp-8719/> For more on the history of corporate tax reform in the UK since 2010, see Antony Seely, "Corporate tax reform (2010-2020)" *House of Commons Library* 7 July 2021, available online at: <https://commonslibrary.parliament.uk/research-briefings/sn05945/>

[83] Competition and Markets Authority, *Online platforms and digital advertising: Market study final report*, 1 July 2020, p. 5 and 9, available online at: <https://www.gov.uk/cma-cases/online-platforms-and-digital-advertising-market-study>

[84] Ethan Cramer-Flood, "Duopoly still rules the global digital ad market, but Alibaba and Amazon are on the prowl" *eMarketer* 10 May 2021, available online at: <https://www.emarketer.com/content/duopoly-still-rules-global-digital-ad-market-alibaba-amazon-on-prowl>

In June, the European Commission launched a new competition investigation of Google's digital advertising business. (The Commission has already fined Google \$9.5 billion over the past decade for anti-competitive behaviour.)[85] The overarching complaint, then, is that the tech giants' dominance in one or several core product markets enables them to behave in anti-competitive ways in those and other markets, in ways that ultimately exploit consumers or unfairly disadvantage other firms.

These concerns about the effect the tech giants are having on competition in digital markets arises in the context of a broader concern that competition – often held to be one of the drivers of economic growth – is in decline in many countries, including the UK, as industries become more concentrated into a smaller number of larger firms.[86] This problem has long been identified as a source of concern by analysts of media and cultural industries, but it is much a wider phenomenon. In November 2020, the UK's Competition and Markets Authority (CMA) published a major report on the state of competition in the UK – the first of what will now be a regular survey. The report found that “all the measures of competition” the CMA examined had deteriorated during the 2008-9 recession due to a rise in industry concentration, that they had only partially recovered since then, and therefore that the level of competition in the UK is now lower than it was at the start of the twenty-first century.[87] The effect of the last recession naturally gives rise to a concern that one of the economic impacts of the pandemic will be to further increase industry concentration and reduce competition.

The European Commission has led the way on anti-trust enforcement against the tech giants: it has been bringing competition cases against them for over a decade, beginning with the investigation it launched into Google in 2010 based on the claim that Google unfairly promoted its own products and services over those of its competitors in its own search engine results pages, leading to a case against the company in 2015 that resulted in a €2.42 billion fine in 2017.[88] Another two Commission antitrust investigations followed, leading to fines in 2018 and 2019.[89] However, action has been slower to take shape in the United States and the UK. In the US, 2020 was a breakthrough year: a number of anti-trust cases have now begun to be brought against the tech giants there.[90] Meanwhile, Congressional efforts are underway to introduce six bills that would lead to what *The New York Times* called a “sweeping overhaul” of US anti-trust law and policy.[91]

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[85] Foo Yun Chee, “Google in EU crosshairs again with advertising antitrust inquiry” *Reuters* 22 June 2021, available online at: <https://www.reuters.com/technology/eu-antitrust-regulators-investigate-googles-adtech-business-2021-06-22/>

[86] For an analysis centring on the United States, see David Wessel, “Is Lack of Competition Strangling the U.S. Economy?” *Harvard Business Review*, March-April 2018, available online at: <https://hbr.org/2018/03/is-lack-of-competition-strangling-the-u-s-economy>

[87] According to the report, “industry concentration across the economy rose in the recession following the financial crash in 2008. Although concentration began to decrease from 2010, it remains 3 percentage points higher than it was in 1998.” CMA, “The State of UK Competition” 30 November 2020, p. 3, available online at: <https://www.gov.uk/government/publications/state-of-uk-competition-report-2020>

[88] European Commission, “Antitrust: Commission fines Google €2.42 billion for abusing dominance as search engine by giving illegal advantage to own comparison shopping service” 27 June 2017, available online at: [https://ec.europa.eu/commission/presscorner/detail/en/IP\\_17\\_1784](https://ec.europa.eu/commission/presscorner/detail/en/IP_17_1784)

[89] Lauren Feiner, “Google's antitrust mess: Here are all the major cases it's facing in the U.S. and Europe” *CNBC* 18 December 2020, available online at: <https://www.cnbc.com/2020/12/18/google-antitrust-cases-in-us-and-europe-overview.html>

[90] See Daisuke Wakabayashi, Mike Isaac, Karen Weise, Jack Nicas and Sophia June, “13 Ways the Government Went After Google, Facebook and Other Tech Giants This Year” *The New York Times* 16 December 2020, available online at: <https://www.nytimes.com/interactive/2020/technology/tech-investigations.html>

[91] Cecilia Kang, “Lawmakers, Taking Aim at Big Tech, Push Sweeping Overhaul of Antitrust” *The New York Times* 11 June 2021, available online at: <https://www.nytimes.com/2021/06/11/technology/big-tech-antitrust-bills.html> See also, Cecilia Kang and David McCabe, “Antitrust Overhaul Passes Its First Tests. Now, the Hard Parts.” *The New York Times* 24 June 2021, available online at: <https://www.nytimes.com/2021/06/24/technology/antitrust-overhaul-congress.html>



As in the US, efforts in the UK to address the concerns arising from the tech giants' size and dominance have been slow to arise. Policymakers' awareness of the issues and their interest in devising policies to address them were both limited throughout most of the 2010s. The beginnings of a change in mentality in the UK can be dated to late 2016, the election of Donald Trump and the panic in Anglo-American media about 'fake news' and disinformation. This then opened the door to a wider conversation about tech companies' dominance; one that the UK's politically influential news publishers were happy to promote, given their increasing awareness of the conflict of commercial interests in the digital advertising market between them on the one hand and Google and Facebook on the other.[92]

The last major piece of competition legislation in the UK was the Enterprise Act 2002, which was subject to mostly minor revisions in the Enterprise and Regulatory Reform Act 2013. Therefore, the UK's competition regime completely pre-dates the tech giants' rise to dominance and the distinctive problems and challenges their dominance has generated. To some extent, while the UK was a member state of the EU, it was left to the European Commission to take the initiative in addressing competition problems involving the tech giants. But with the UK leaving the EU at the end of 2019 it became clear, once policymakers finally turned their attention to issues of digital dominance and competition, that a new policy framework was needed in the UK.

The first step towards that new framework was the government's appointment in 2018 of a Digital Competition Expert Panel, led by Jason Furman – former chief economist to President Obama. The panel's March 2019 report, *Unlocking digital competition*, argued that the UK needed to update its merger and antitrust rules, and to create a new regime for proactively promoting competition in digital markets, including by promoting data mobility, data openness and systems with open standards.[93] Meanwhile, in June 2019 the Competition and Markets Authority (CMA) published its first digital markets strategy.[94] In March 2020 the CMA was asked by the government to lead a Digital Markets Taskforce, working with Ofcom and the ICO, to produce expert advice for the government on a new pro-competition regime for digital markets. In July 2020, the CMA, ICO and Ofcom launched a Digital Regulation Co-operation Forum to ensure greater co-operation between them.[95] At the same time, the CMA published the final report of its market study of online platforms and digital advertising in the UK. The study concluded:

*“Both Google and Facebook grew by offering better products than their rivals. However, they are now protected by such strong incumbency advantages – including network effects, economies of scale and unmatched access to user data – that potential rivals can no longer compete on equal terms. These issues matter to consumers. Weak competition in search and social media leads to reduced innovation and choice and to consumers giving up more data than they would like.*

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[92] News Corp, the dominant national newspaper publisher in the UK, has long inveighed against Google in particular. In March 2019 it told Australia's competition regulator that Google should be broken up to end its “overwhelming” market power in digital advertising. See Amanda Meade and Amy Remeikis, “Google must be broken up due to its 'overwhelming' power, News Corp says” *The Guardian* 12 March 2019, available online at: <https://www.theguardian.com/media/2019/mar/12/google-must-be-broken-up-due-to-its-overwhelming-power-news-corp-says> In February 2017, The Times published an investigation showing that a number of brands were unwittingly funding “Islamic extremists, white supremacists and pornographers” by advertising on their websites and videos through programmatic ad trading and YouTube's ad platform. See Alexi Mostrous, “Big brands fund terror through online adverts” *The Times* 9 February 2017, available online at: <https://www.thetimes.co.uk/article/big-brands-fund-terror-knnxfgb98>

[93] <https://www.gov.uk/government/publications/unlocking-digital-competition-report-of-the-digital-competition-expert-panel>

[94] CMA, “The CMA's Digital Markets Strategy: June 2019”, available online at: <https://www.gov.uk/government/publications/competition-and-markets-authoritys-digital-markets-strategy/the-cmas-digital-markets-strategy>

[95] For more information about the Digital Regulation Cooperation Forum, including its launch document, see <https://www.gov.uk/government/collections/the-digital-regulation-cooperation-forum>

*Weak competition in digital advertising increases the prices of goods and services across the economy and undermines the ability of newspapers and others to produce valuable content, to the detriment of broader society.*

*The concerns we have identified in these markets are so wide ranging and self-reinforcing that our existing powers are not sufficient to address them. We need a new, regulatory approach – one that can tackle a range of concerns simultaneously, with powers to act swiftly to address both the sources of market power and its effects, and with a dedicated regulator that can monitor and adjust its interventions in the light of evidence and changing market conditions.”[96]*

In November 2020 the government responded to the CMA’s market study by announcing the establishment of the DMU to oversee a new pro-competition regime for digital platforms.[97] In December 2020 the Digital Markets Taskforce’s report, *A new pro-competition regime for digital markets*, was published, following a call for information to which a wide range of firms and groups responded.[98] It made two main recommendations. The first was the creation of a new Digital Markets Unit (DMU) inside the CMA, already endorsed by the government. The second was the development of a new regulatory framework for overseeing the most powerful digital firms, who would be designated with ‘Strategic Market Status’ (SMS). Firms with SMS would be subject to an enforceable code of conduct, pro-competition interventions to address the sources of their market power, and special merger rules to ensure closer scrutiny of transactions involving them.

In light of the progress made since mid-2019, the CMA published a ‘refresh’ of its digital markets strategy in February 2021.[99] The DMU then launched in April 2021 [100], initially in a ‘shadow’ non-statutory form, ahead of the legislation that will grant it its full statutory powers. The DMU’s role is also, in part, to advise the government of the shape of the new statutory regime.[101] The final form of the DMU has yet to be determined but the government has committed to putting the body on a statutory footing “as soon as parliamentary time allows.”

In July 2021, the government published its proposals for the new pro-competition regime for digital markets, launching a public consultation which is due to close on 1 October.[102] At the same time, the government launched a wider consultation on reforming competition and consumer policy more broadly.[103]

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[96] CMA, “Online platforms and digital advertising: Market study final report” 1 July 2020, p. 5, available online at: <https://www.gov.uk/cma-cases/online-platforms-and-digital-advertising-market-study>

[97] Department for Business, Energy and Industrial Strategy and Department for Digital, Culture Media and Sport, “Response to the CMA’s market study into online platforms and digital advertising” November 2020, available online at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/939008/government-response-to-cma-study.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/939008/government-response-to-cma-study.pdf)

[98] <https://www.gov.uk/cma-cases/digital-markets-taskforce>

[99] CMA, “The CMA’s Digital Markets Strategy: February 2021 refresh” 9 February 2021, available online at:

<https://www.gov.uk/government/publications/competition-and-markets-authoritys-digital-markets-strategy/the-cmas-digital-markets-strategy-february-2021-refresh>

[100] Department for Digital, Culture, Media and Sport and CMA, “New watchdog to boost online competition launches” 7 April, available online at: <https://www.gov.uk/government/news/new-watchdog-to-boost-online-competition-launches--3>

[101] Department for Business, Energy & Industrial Strategy and Department for Digital, Culture, Media and Sport, “Digital Markets Unit (non-statutory) - terms of reference” 7 April 2021, available online at: <https://www.gov.uk/government/publications/non-statutory-digital-markets-unit-terms-of-reference/digital-markets-unit-non-statutory-terms-of-reference>

[102] The consultation document is available online at: <https://www.gov.uk/government/consultations/a-new-pro-competition-regime-for-digital-markets> For an overview of government activity around digital regulation generally, see <https://www.gov.uk/guidance/digital-regulation-overview-of-government-activity>

[103] Department for Business, Energy and Industrial Strategy, “Reforming competition and consumer policy” 20 July 2021, available online at: <https://www.gov.uk/government/consultations/reforming-competition-and-consumer-policy>

Despite not yet being established on a statutory footing, the DMU has already used the CMA's existing powers to launch major investigations into Google, over its proposals to remove third party cookies and other functionalities from its Chrome browser[104], and into Apple, over the terms and conditions governing app developers' access to its App Store on iOS and iPadOS devices.[105] The DMU is also investigating Facebook's acquisition of Giphy, and in August it announced that it had provisionally found competition concerns with the acquisition.[106] An earlier investigation of acquisitions involving Adevinta ASA and eBay launched in December 2020 concluded in June 2021 after a 'phase 1' inquiry by accepting undertakings in lieu of reference to a longer 'phase 2' investigation.[107]

## Online Harms

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Everyone agrees that harms can occur on internet platforms. Most people – except perhaps the platform companies themselves – agree that the platforms have been too slow to do much about these harms, been reactive rather than proactive in dealing with them, and put too few resources and too little effort towards mitigating them. It has been observed that some social media companies appear to be able to take down sports or other media content that infringes commercial broadcasting or intellectual property rights much more quickly than they are able to remove certain forms of socially harmful content.

The problem of 'online harms', as it has come to be called in the UK's public policy debate over the issue, is in effect a classic problem of negative market externalities – akin to pollution by fossil fuel companies, or workplace accidents in the manufacturing and construction industries. As in those cases, the problem is at root one of for-profit companies failing to accord enough importance to limiting the socially harmful side-effects of their businesses, and only addressing them insofar as it is in their commercial self-interest to do so – for instance for reputational or 'branding' reasons. The classic solution to the problem of negative externalities is to use regulation to impose greater financial, reputational and other costs on firms that allow them to occur. For instance, in the case of workplace accidents, the 1974 Health and Safety at Work Act imposed a statutory 'duty of care' on employers to protect their employees by taking reasonable precautions, explaining risks, consulting with their employees, providing health and safety training, and providing protective equipment and clothing in good condition.

There have been calls in the UK for several years for the government to legislate to address the problem of online harms. Particularly since the panic about 'fake news', 'post-truth' politics and disinformation that began in late 2016 and reached its first peak in 2017 (see the chart below), the media policy debate in the UK have focused heavily on the question of whether, and how, to regulate the internet.

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[104] CMA, "Investigation into Google's 'Privacy Sandbox' browser changes" 8 January 2021, available online at: <https://www.gov.uk/cma-cases/investigation-into-googles-privacy-sandbox-browser-changes>

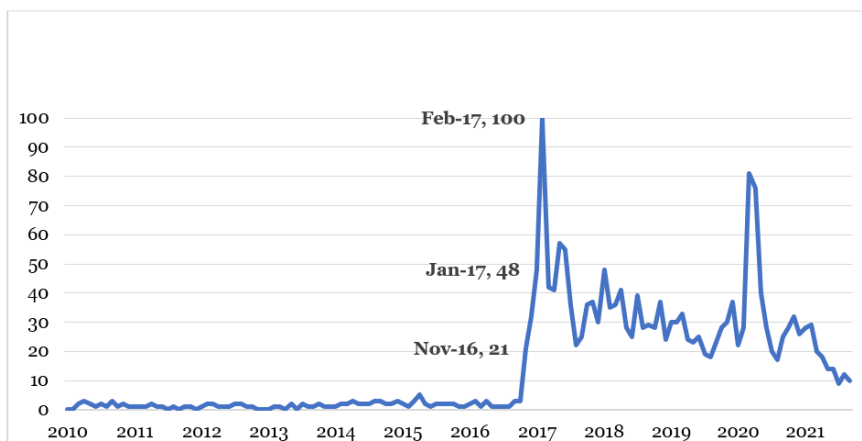
[105] CMA, "Investigation into Apple AppStore" 4 March 2021, available online at: <https://www.gov.uk/cma-cases/investigation-into-apple-appstore>

[106] CMA, "Facebook, Inc / Giphy, Inc merger inquiry" 16 August 2021, available online at: <https://www.gov.uk/cma-cases/facebook-inc-giphy-inc-merger-inquiry>

[107] CMA, "Adevinta / eBay merger inquiry" 30 June 2021, available online at: <https://www.gov.uk/cma-cases/adevinta-ebay-merger-inquiry>

**Table 49. Google web search interest in the term "fake news" - indexed to peak interest, UK 2010-2021**

Source: Google Trends



Since 2017, a series of news stories about online harms – particularly involving children – have raised the general level of concern, and the pressure on the government to act. These have been supplemented by mounting research from regulators and civil society organisations showing that many adults are specifically concerned about online harms to children, and that many children have either suffered harm online or been exposed to harmful content. In 2018, Ofcom commissioned the first in an annual report series on internet users’ experience of harm online, which showed survey evidence that there was widespread public concern about the issue.[108] The National Society for the Prevention of Cruelty to Children’s (NSPCC) annual ‘How safe are our children?’ reports for 2018 and 2019 each focused on children’s exposure to harm online. The 2018 report declared, “Most platforms have failed to integrate child safeguarding into their business models or the design of their platforms. Rapidly developing technology creates new opportunities to initiate, maintain and escalate abuse.”[109]

It has taken some time for the government to develop its legislative proposals in this area. In October 2017 the government first published an Internet Safety Strategy ‘green paper’, which considered what responsibilities internet companies have to their users and how online harms could be prevented. A consultation on the green paper then ran to December 2017, to inform the government’s intended publication of a white paper on the issue by the end of 2018.[110] In fact, the Online Harms White Paper was not published until April 2019. In fact, the Online Harms White Paper was not published until April 2019.[111] Another consultation then ran for several months on the White Paper; the government published an initial response to the consultation in February 2020 indicating it was minded to give the task of regulating the platforms to Ofcom. [112]

[108]The reports are available online at: <https://www.ofcom.org.uk/research-and-data/internet-and-on-demand-research/internet-use-and-attitudes/internet-users-experience-of-harm-online> Ofcom’s most recent *Online Nation* report also contains information on public attitudes towards, and experiences of, harm online. See Ofcom, *Online Nation: 2021* report, 9 June 2021, available online at: <https://www.ofcom.org.uk/research-and-data/internet-and-on-demand-research/online-nation>

[109] NSPCC, *How safe are our children? 2018*, p. 6, available online at: <https://learning.nspcc.org.uk/research-resources/how-safe-are-our-children>

[110] Department for Digital, Culture, Media and Sport, “Internet Safety Strategy green paper” 11 October 2017, available online at: <https://www.gov.uk/government/consultations/internet-safety-strategy-green-paper>

[111]Department for Digital, Culture, Media and Sport, “Online Harms White Paper” April 2019, available online at: <https://www.gov.uk/government/consultations/online-harms-white-paper>

[112] Department for Digital, Culture, Media and Sport and the Home Office, “Online Harms White Paper: Initial consultation response” 12 February 2020, available online at: <https://www.gov.uk/government/consultations/online-harms-white-paper/public-feedback/online-harms-white-paper-initial-consultation-response>

A full government response to the consultation was only published in December 2020 [113], and a draft Online Safety Bill was finally published in May 2021.[114] In July, a Joint Committee on the draft Online Safety Bill, composed of members of both Houses of Parliament, was established to scrutinise the proposed legislation. It is required to report on the bill by 10 December 2021.[115] Legislative passage of an Online Safety Bill will most likely happen by the middle of 2022, therefore implementation may not take place until 2023 or 2024.

At the heart of the draft Online Safety Bill is the proposal that a statutory ‘duty of care’ ought to be imposed on internet companies requiring them to take reasonable steps to protect their users from harm. Companies that fail to fulfil the duties imposed on them will face financial sanctions, at the least. Ofcom will have the power to issue fines of up to £18 million or 10% of a company’s global annual, whichever is higher, as well as the power to block sites. The draft bill also contains reserved powers for Ofcom to pursue criminal action against named senior managers who do not comply with Ofcom’s requests for information, which the government has said it will introduce “if tech companies fail to live up to their responsibilities.”[116]

Which internet companies would come within the scope of the legislation? It would apply to all companies that either:

- host user-generated content which can be accessed by users in the UK,
- facilitate public or private online interaction between service users, one or more of whom is in the UK, or
- provide search engines.

Any company that meets this definition and provides one of these services to UK users is within the scope of the legislation, regardless of where they are based.

The regulatory framework will establish differentiated expectations on different companies regarding specific types of harm. All in-scope companies will have to act against illegal content and activity, and to assess the likelihood of children accessing their services and provide additional protections if this is likely. “Category 1” services – in essence, the biggest platforms with the most users – would in addition be required to act against harmful content and activity accessed by adults, on the basis that, given their large user numbers and increased potential for sharing content, if they permit certain kinds of activity there is a much greater risk of harm. The legislation defines high-level factors that lead to a significant risk of harm occurring to adults through legal but harmful content; the government will determine and publish thresholds for such factors that will define whether a service is ‘Category 1’, with Ofcom providing advice on where the thresholds should be set. Ofcom will then assess services with regard to these factors and publish a register of all those that meet the thresholds set by the government and are therefore classed as ‘Category 1’.

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[113] Department for Digital, Culture, Media and Sport and the Home Office, “Online Harms White Paper: Full government response to the consultation” 15 December 2020, available online at: <https://www.gov.uk/government/consultations/online-harms-white-paper/outcome/online-harms-white-paper-full-government-response>

[114] Department for Digital, Culture, Media and Sport, *Draft Online Safety Bill* 12 May 2021, available online at: <https://www.gov.uk/government/publications/draft-online-safety-bill>

[115] The Joint Committee’s page on the Parliament website is: <https://committees.parliament.uk/committee/534/draft-online-safety-bill-joint-committee/>

[116] Department for Digital, Culture, Media and Sport and the Home Office, “Landmark laws to keep children safe, stop racial hate and protect democracy online published” 12 May 2021, available online at: <https://www.gov.uk/government/news/landmark-laws-to-keep-children-safe-stop-racial-hate-and-protect-democracy-online-published>

All regulated services will have to take action against ‘illegal content’ and ‘content that is harmful to children’. Furthermore, Category 1 services will also have to address ‘content that is harmful to adults’. How is ‘harm’ defined? Regulated content will be considered harmful under the legislation if:

- it is designated in secondary legislation as “primary priority content” that is harmful to children or “priority content” that is harmful to children or adults
- a service provider has “reasonable grounds to believe that the nature of the content is such that there is a material risk of the content having, or indirectly having, a significant adverse physical or psychological impact” on a child or adult of “ordinary sensibilities”
- a service provider has “reasonable grounds to believe that there is a material risk” of the dissemination of the content “having a significant adverse physical or psychological impact” on a child or adult of “ordinary sensibilities”.

In short, there is a common core effect of ‘harm’ – “having a significant adverse physical or psychological impact” – which can occur either due to the *nature* of content, or specifically due to its dissemination. Alongside this general definition, there are specific kinds of harm that will be identified in secondary legislation. It is important to note that the government also believes that disinformation and misinformation that could cause harm to individuals, e.g., anti-vaccination content, will be covered. However, certain types of harms are not intended to be within the scope of the system: for instance, those involving intellectual property rights, data protection and cyber security breaches.

In response to concerns raised by a number of civil society groups and media organisations about the potential threat to freedom of expression online from a definition of ‘harm’ as wide as the one that the government has chosen, the government introduced some specific protections when it turned its White Paper into the draft bill. Content defined as ‘democratically important’ – e.g., that which relates to promoting or opposing government policy, or a political party – will be protected. Companies will be specifically forbidden from discriminating against particular political viewpoints, and will be required to apply protections equally to a range of political opinions. Companies will need to take into account the political context around content shared on their platforms and give it a high level of protection if it is democratically important. Journalistic content on news publishers’ websites is explicitly excluded from the scope of the duty, as are articles by ‘recognised news publishers’ shared on regulated platforms. In fact, platforms would have a statutory duty to safeguard access to journalistic content shared on their platforms. Finally, all in-scope companies would also have to consider and put in safeguards to protect freedom of expression while fulfilling their duties to prevent harms.

Companies that provide ‘Category 1’ services will be required to publish transparency reports about the steps they have taken to tackle online harms. The processes companies will need to follow in order to fulfil their duty of care will be set out in codes of practice published by Ofcom after consultation. Companies will need to be able to demonstrate either that they are complying with the codes or that an alternative approach they have taken is equally effective. Ofcom’s primary duty will be to improve the safety of those using online services, as well as those who could be directly affected by others’ use. Ofcom would also be responsible for establishing a ‘transparency, trust and accountability’ framework, and for requiring all in-scope companies to have effective and accessible mechanisms for users to report concerns.

The debate over the government's draft bill will no doubt continue throughout its legislative passage. For example, an initial analysis by the Carnegie UK Trust – the original source of the idea of imposing a 'duty of care' on platforms – identified a number of shortcomings with the bill, including the fact that it gave the Secretary to State too many powers. It would be up to the Secretary of State, for example, to define what kinds of content are identified as 'priority content' or 'primary priority content' in secondary legislation – a process that would occur without Parliamentary scrutiny or approval. The Trust also argued that *“adults on the largest platforms are not well covered ... The government needs to spell out how huge volumes of racism, misogyny, antisemitism etc – that are not criminal but are oppressive and harmful, particularly to prominent figures – will be addressed. No special treatment is given to protect politicians, candidates and journalists involved in the democratic process.”*[117]

The House of Lords Communications and Digital Committee's July 2021 report on freedom of expression in the digital age also expressed a number of criticisms of the legislation:[118]

*“We support the Government's proposal that, through the draft Online Safety Bill, platforms should be obliged to remove illegal content. Ofcom should hold them to strict timeframes where content is clearly illegal. We also support the Government's intention to protect children from harm, although the draft Bill is inadequate in this respect—particularly in relation to pornographic websites. Nor are we convinced that the draft Bill sufficiently protects vulnerable adults. ... The Government also proposes to introduce duties in relation to content which is legal but may be harmful to adults. This is not the right approach. If the Government believes that a type of content is sufficiently harmful, it should be criminalised. ... Content which is legal but some may find objectionable should instead be addressed through regulation of the design of platforms, digital citizenship education, and competition regulation. This approach would be more effective, as well as better protecting freedom of expression.”*

The civil society group Index on Censorship has expressed a more fundamental objection to the 'duty of care' concept at the centre of the proposed regulatory system:

*“With little debate, an abstract concept, the “Duty of Care” has become central to civil service thinking about freedom of expression online. The “Duty of Care” applies notions best applied to health and safety law in the workplace to freedom of speech online. It will reverse the famous maxim, “published and be damned”, to become, “consider the consequences of all speech, or be damned”. It marks a reversal of the burden of proof for free speech that has been a concept in the common law of our country for centuries.”*[119]

Meanwhile, Julian Petley, a professor of journalism at Brunel, University of London, has published a narrative and critique of the national press's efforts to ensure that the scope of the legislation would not include their websites or their content, in which he concluded:

[117] Lorna Woods, William Perrin and Maeve Walsh, “The Draft Online Safety Bill: Carnegie UK Trust initial analysis” 15 June 2021, available online at: <https://www.carnegieuktrust.org.uk/blog-posts/the-draft-online-safety-bill-carnegie-uk-trust-initial-analysis/>

[118] House of Lords Communications and Digital Committee, *Free for all? Freedom of expression in the digital age – 1st Report of Session 2021-22*, 22 July 2021, available online at: <https://committees.parliament.uk/work/745/freedom-of-expression-online/publications/>

[119] Index on Censorship, “Right to type: How the “Duty of Care” model lacks evidence and will damage free speech” 23 June 2021, available online at: <https://www.indexoncensorship.org/2021/06/governments-online-safety-bill-will-be-catastrophic-for-ordinary-peoples-freedom-of-speech-says-david-davis-mp/>

*“the proposed legislation threatens to create a two-tier system of online regulation. Intensive press lobbying, and government acquiescence to it, have led to a potential measure which would almost certainly prove to be quite unworkable and also open to serious challenge by those aggrieved by its double standards – not least, albeit for different reasons, the tech companies and campaigners against the debased journalistic standards of the UK national press. The latter will most certainly argue that if something is judged to be “harmful” or “unsafe” by the standards laid down by the legislation, then it is so wherever it appears. For example, whether or not speech is deemed to be hate speech is determined not by its location, nor by who has uttered it, but by the very words that are used.”[120]*

Petley’s analysis gets to the heart of the problem with the draft bill: it effectively establishes different regimes for the freedom of expression of individual users of internet platforms on the one hand, and that of news organisations on the other. The latter are fully exempted from the scope of this regulatory regime. The perverse result is that if an individual user posts disinformation about coronavirus vaccines on YouTube or Facebook, YouTube or Facebook would have a duty to act against that individual and their content, yet if, on the other hand, the exact same disinformation content is contained in a news article from an organisation that meets the legislation’s definition of a news publisher and that article is shared on Facebook, it would appear that Facebook will be required not only not to take any action against it but to protect the publisher’s freedom of expression. A cynic might say that all this legislation could end up achieving – at least with respect to the problem of online disinformation– is to grant news publishers a more exclusive monopoly on the supply of it.

A further undue consequence of the incoherent regulatory architecture that would result from the combination of this legislation with the existing system of press self-regulation is that the fines that could potentially be levied against internet companies on the one hand, and media organisations on the other, for distributing the same disinformation are totally different. Facebook had global revenue of \$86 billion in 2020, meaning that under the terms of the proposed legislation, the maximum fine for which it could be eligible for failing to fulfil its duty of care with respect to protecting its users from harmful disinformation would be 10% of its global revenue, \$8.6 billion. Clearly, a fine that large is unlikely in any event, but the potential for large fines is there. This seems to be widely accepted as necessary to incentivise companies like Facebook to comply with the legislation.

On the other hand, not only do national newspaper publishers in the UK face no penalties or consequences for their blanket refusal to join a press regulator that meets Parliament’s criteria, but the maximum they can be fined by the self-regulator (IPSO) that the majority of them have joined for any breaches of its code of conduct, following a standards investigation, is £1 million. A £1 million fine equates to around 0.01% of News Corporation’s annual global turnover, 0.08% of DMGT’s annual turnover, or 0.4% of Guardian Media Group’s. IPSO has never launched a single standards investigation into, nor levied a single fine against, any of its member publishers since it was established in 2014.

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[120] Julian Petley, “A Thoroughly Unsafe Bill” *Hacked Off* 13 July 2021, available online at: <https://hackinginquiry.org/julian-petley-a-thoroughly-unsafe-bill/>



In short, the financial penalties the government envisages for internet companies *hosting* disinformation or other kinds of harmful content are enormous by comparison to the penalties that can potentially be imposed on commercial news publishers for *publishing* the same disinformation. It is, moreover, likely that the enforcement regime to which the internet companies will be subject will be considerably more robust than the one IPSO maintains for the press. The exemption from the regime for news publishers means that the whole regulatory architecture is predicated on the assumption that the kinds of online harms the government is concerned about – including misinformation and disinformation – are solely the result of the content and activity of users, never of news publishers. This is a view that, in a UK context at least, is hard to credit. Some of the biggest examples of misleading news stories in the run-up to the Brexit referendum came from the national press [121] and some of the worst examples of the same in the run-up to the 2019 general election came from the Conservative Party.[122] Neither case would be covered by the government’s proposals.[123]

## Technology & Journalism

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Two events have defined the history of the British news media over the past decade. The first was the phone hacking scandal in 2011, leading to the 2011-2012 Leveson Inquiry. The scandal was an enormous hit to the reputation of the British press: not only because illegal newsgathering had been going on for years at several national newspapers, but because it emerged that the illegal activity was widely known – and even publicly joked about – in the industry for years, and yet a conspiracy of silence had kept the public in the dark. In its most fundamental task – the exposure of corruption and the abuse of power – the British news media had collectively failed for years with regard to itself. The Leveson Inquiry shone a light on the corrupt relationship between many senior British politicians and some press publishers, damaging public trust in both.

Throughout the period from the publication of the Leveson Report in November 2012 to the next general election, in May 2015, the media policy debate in the UK was dominated by the question of whether the Leveson Report’s recommendations for a new system of press standards regulation would be implemented, and if so, how. This new system would have been independent of government but monitored for adequacy and independence by an arms-length state body. Although cross-party agreement was reached in March 2013, the Conservative Party only agreed under Parliamentary duress: in a coalition government with the Liberal Democrats, the Conservatives lacked a majority in the House of Commons and knew that if the other parties – who were all much more in favour of regulating the press than them – joined forces against them, they would lose a Commons vote. (The Conservatives were, and always have been, the British political party with the closest ties to the national press, which has always been one of the party’s most important sources of support.) The Conservatives agreed to the March 2013 settlement in order to avoid that outcome.

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[121] Jim Waterson, “Britain Has No Fake News Industry Because Our Partisan Newspapers Already Do That Job” *BuzzFeed News* 24 January 2017 <https://www.buzzfeed.com/jimwaterson/fake-news-sites-cant-compete-with-britains-partisan-newspape>

[122] Carlotta Dotto, “Thousands of misleading Conservative ads side-step scrutiny thanks to Facebook policy” *First Draft* 6 December 2019, available online at: <https://firstdraftnews.org/articles/thousands-of-misleading-conservative-ads-side-step-scrutiny-thanks-to-facebook-policy/>

[123] For more on the detail of the draft Online Safety Bill and its process of development, see John Woodhouse, “Regulating online harms” *House of Commons Library* 12 August 2021, available online at: <https://commonslibrary.parliament.uk/research-briefings/cbp-8743/> For a selection of responses to the draft bill, see John Woodhouse and Maria Lalic, “Reaction to the Draft Online Safety Bill: a reading list” *House of Commons Library* 12 August 2021, available online at: <https://commonslibrary.parliament.uk/research-briefings/cbp-9243/>

The next two years or so saw the agreement's implementation proceed extremely slowly – deliberately so: it was the Conservatives who controlled the government department responsible for implementing it. After the Conservatives won a (small) Commons majority at the 2015 election, the agreement was effectively dead. Attempts by campaigners to force implementation, and to initiate the originally promised 'Part Two' of the Leveson Inquiry were both defeated by the Conservative government. Nevertheless, the dominant narrative about the British national press continued to be one centred on its problems of poor journalistic standards and criminal activity; not least because of a constant procession of criminal trials. The most famous such trial was the six-month 'phone hacking trial' in 2014 [124] and the last one of these trials did not conclude until 2016.

By 2016 the threat of the full implementation of the Leveson Report's recommendations on press regulation seemed dead. The Conservatives had a majority and the Labour Party had just chosen a leader – the lifelong socialist Jeremy Corbyn – whom mainstream media and Westminster opinion unanimously regarded as incapable of winning an election. The 2016 Brexit referendum and its aftermath saw the press return to some of its most unscrupulous tactics and damaging practices, and triumph in securing victory for Leave – which most titles strongly supported – in spite of the fact that the leaders of all Britain's major political parties (except UKIP) supported Remain. Subsequent analysis showed that the press had played a major role in shaping the news agenda in Leave's favour in the final weeks of the campaign.[125]

One strand of the reaction to the referendum's outcome in Parliament – where, against the result of the referendum, the majority of MPs and peers were pro-Remain – was a renewed interest in returning to the issues of press regulation and Part Two of the Leveson Inquiry. It was widely thought that the press's conduct during the referendum campaign illustrated that, once again, despite promises of reform the press had not really reformed itself or addressed its persistent problem of low journalistic standards and misleading – sometimes deliberately misleading – stories. In autumn 2016, parliamentary momentum began to gather behind efforts (often starting in the House of Lords) to bring both press regulation and Leveson Two to a vote in the House of Commons. The Conservative government's small majority, and the fact that the majority of MPs were pro-Remain, made it somewhat uncertain what the result might be.

It was in this political context that the second defining event of the last decade occurred: the election of Donald Trump in November 2016. Although it is often forgotten now, the Google Trends chart above shows that Trump's election was the trigger for transatlantic panic over 'fake news' and disinformation. What had been a trickle of articles on the issue of 'fake news' on Facebook before the election – mostly by the *BuzzFeed* reporter Craig Silverman – quickly became a flood afterwards, as established news media in Britain and America cast around for reasons that could explain such a massive electoral upset.

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[124] "Phone-hacking trial explained" *BBC News* 25 June 2014, available online at: <https://www.bbc.co.uk/news/uk-24894403>

[125] Martin Moore and Gordon Neil Ramsay, "Lessons for the election campaign from UK media's role in Brexit" *The Conversation* 10 May 2017, available online at: <https://theconversation.com/lessons-for-the-election-campaign-from-uk-medias-role-in-brexit-77433> That article is a summary of their report, *UK media coverage of the 2016 EU referendum campaign*, May 2017, which is available online at: <https://www.kcl.ac.uk/policy-institute/assets/cmcp/uk-media-coverage-of-the-2016-eu-referendum-campaign.pdf>

Despite the enormous volume of (free) TV news coverage Trump had benefited from, and despite the arguably disproportionate coverage newspapers scrupulously dedicated to political 'balance' and objectivity like The New York Times had given to a relatively minor scandal about Hillary Clinton's emails, the debate about what role the news media played in Trump's victory quickly shifted to people viewing completely made-up stories published online by fake news websites. For example, it was revealed that some teenagers in Macedonia had created a batch of fake news websites full of articles designed to pander to the attitudes of strong Trump supporters in the hope of making money out of the articles going viral on social media and generating substantial ad revenue.[126] Much media attention and commentary then focused on the culpability of the biggest online platforms, like Facebook and Google, in allowing this 'fake news' to spread, be seen, and potentially influence American voters.[127]

Trump's election was no less shocking to mainstream opinion in the UK. From 8 November 2016 onwards, *The Guardian* and the *Financial Times* in particular published a long series of articles on 'fake news' and the mounting pressure on Google and Facebook to do something about it. In December 2016 and January 2017, however, there was a new development on the 'fake news' front: some right-wing national newspapers and Conservative MPs evidently began to see a way of using the panic about 'fake news' as a way of redirecting policy attention away from regulating the press and towards regulating the big online platforms instead. The argument was that the press now constituted a bulwark against the rising tide of 'fake news' and disinformation online. The press could now be rebranded as the producers of 'high-quality journalism' in contrast with the low quality of much of what circulated on social media.

It was enormously in the press's interests to reshape the narrative around itself, for two main reasons. First of all, it would help defeat efforts to regulate or investigate the press. Publishers and their supporters could now argue that those efforts were driven by outdated concerns based on bad behaviour now long in the past: most of the prosecutions brought after the phone hacking scandal related to alleged crimes committed more than a decade earlier. Now there was a new problem to address: 'fake news' online, which was nothing to do with the press. Matt Hancock, the then Culture Secretary, explicitly made this argument in the House of Commons while speaking in opposition to amendments to a government bill that would have forced the government to commence Leveson Part Two:

*“Crucially, the arrival of the internet has fundamentally changed the landscape. That was not addressed at the core of the first Leveson inquiry, but it must be addressed. Later this month we will publish our internet safety strategy, as I mentioned, in which we will set out the action we need to take to ensure that the online world is better policed. ... However, the internet has also fundamentally undermined the business model of our printed press. Today's core challenge is how to ensure a sustainable future for high-quality journalism that can hold the powerful to account. The rise of clickbait, disinformation and fake news is putting our whole democratic discourse at risk. This is an urgent problem that is shaking the foundations of democracies worldwide.*

[126] Craig Silverman and Lawrence Alexander, "How Teens In The Balkans Are Duping Trump Supporters With Fake News" *BuzzFeed News* 3 November 2016, available online at: <https://www.buzzfeednews.com/article/craigsilverman/how-macedonia-became-a-global-hub-for-pro-trump-misinfo> See also Heather C. Hughes and Israel Waismel-Manor, "The Macedonian Fake News Industry and the 2016 US Election" *PS: Political Science & Politics*, Vol. 54, Issue 1, 25 August 2020, available online at: <https://www.cambridge.org/core/journals/ps-political-science-and-politics/article/macedonian-fake-news-industry-and-the-2016-us-election/79F67A4F23148D230F120A3BD7E3384F>

[127] For an assessment of the extent of 'fake news' consumption in the run-up to the election, and some analysis of its possible influence, see Hunt Allcott and Matthew Gentzkow, "Social Media and Fake News in the 2016 Election" *Journal of Economic Perspectives*, Vol. 31 No. 2 Spring 2017, available online at: <https://web.stanford.edu/~gentzkow/research/fakenews.pdf>

*Liberal democracies such as Britain cannot survive without the fourth estate, and the fourth estate is under threat like never before. These amendments would exacerbate that threat and undermine the work we are doing through the Cairncross review [into the sustainability of the press] and elsewhere to support sustainable journalism.”[128]*

The ‘fake news’ panic also allowed the press to redirect public and political attention towards the very real problem of their commercial sustainability online. By 2016 many press publishers were well-aware of the fact that their efforts to transform themselves into sustainable digital news businesses had run into considerable difficulty. To take one example, in the year ended 3 April 2016 Guardian Media Group plc made a staggering pre-tax loss of £68.7 million on revenue of £209.5 million: a margin of -32.8%. *The Guardian’s* strategy of a free, ad-funded website expanding into Australia and the US and generating a huge enough volume of traffic to make up for low ad revenue per user had clearly failed. The simple reason for this was that even huge volumes of traffic could not compensate for such low ad yields per user. The dominance of Google and Facebook in the UK’s online ad market made it clear who the revenue was going to instead: their share was reckoned at 54% of it in 2016, projected to grow to over 70% by 2020.[129] In fact, as the CMA’s 2020 market study showed, that was an underestimate: the real figure ended up being around 80%.

There were, and are, a number of reasons why the print-to-digital transition has been so difficult for the UK’s newspaper publishers. But for them, the power of Google and Facebook online, and their dominance of the UK’s online advertising market, was at the top of the list. In view of the total collapse of press advertising revenue over the past two decades (examined in Part 2 of this report), there is clearly much truth to that belief. However, the press’s focus on that explanation does occlude some of the other reasons for their difficulties for which they are more culpable. If it is true that the press has lost an enormous amount of its former advertising revenue to Google and Facebook in the course of the print-to-digital transition, it is also true that US newspaper publishers have faced the same problem. In the US, they have responded by trying to build up digital subscription businesses. For many years they struggled to do so until, in 2016, some of them were able to make a major breakthrough. There was an enormous ‘Trump bump’ in digital subscribers to *The New York Times* and *Washington Post* from late 2016; the two brands had both tripled their numbers by late 2020.[130]

There was no real equivalent to their success in the UK’s press, except perhaps *The Guardian’s* growth in reader revenues over the past five years. The reason is simple: the British public has long had very low trust in the national press, as confirmed by a number of trust surveys. Indeed, according to Eurostat, Britain has the least trusted press in Europe. It may well be that one reason the press finds it so difficult to convince any more than a tenth of the population to pay for their digital services is simply that their services aren’t valued any more than what is available for free. The UK’s equivalents to the Trump phenomenon have been Brexit and the rise of Boris Johnson. On both issues, most of the UK press have acted as cheerleaders rather than as watchdogs. One renegade right-wing journalist, Peter Osborne, has written a series of denunciations of this record, claiming in one:

[128] Hansard HC Deb. vol. 640, col. 711, 9 May 2018, available online at: [https://hansard.parliament.uk/Commons/2018-05-09/debates/CE43B0ED-87D3-4F63-B8A4-2A66964790C2/DataProtectionBill\(Lords\)#contribution-D47A766F-FF9C-4B15-8939-0115E6F0A9AC](https://hansard.parliament.uk/Commons/2018-05-09/debates/CE43B0ED-87D3-4F63-B8A4-2A66964790C2/DataProtectionBill(Lords)#contribution-D47A766F-FF9C-4B15-8939-0115E6F0A9AC)

[129] Ben Bold, “Google and Facebook dominate over half of digital media market” campaign 18 September 2017, available online at: <https://www.campaignlive.co.uk/article/google-facebook-dominate-half-digital-media-market/1444793>

[130] Sara Fischer, “Trump bump: NYT and WaPo digital subscriptions tripled since 2016” *Axios* 24 November 2020, available online at: <https://www.axios.com/washington-post-new-york-times-subscriptions-8e888fd7-5484-44c7-ad43-39564e06c84f.html>

*“I have been a political reporter for almost three decades and have never encountered a senior British politician who lies and fabricates so regularly, so shamelessly and so systematically as Boris Johnson. Or gets away with his deceit with such ease. ... In theory Johnson should not be able to get away with this scale of lying and deceit. In a properly functioning democracy, liars should be exposed and held to account. But that isn't happening. As with Donald Trump, for Johnson there seems to be no political price to pay for deceit and falsehood. The mainstream media, as Washington's response to Johnson's speech shows, prefers to go along with his lies rather than expose them. ... A big reason for Johnson's easy ride is partisanship from the parts of the media determined to get him elected.” [131]*

The basic problem with the UK news media's focus on 'fake news' has long been that it has not been clear what problems in the UK 'fake news' is supposed to explain. In the US, the explosion of interest was very clearly driven by a need to explain both the shock of Trump's election and what many seemed to regard as the inexplicable endurance of his public support, throughout his presidency. Until the pandemic, Trump had appeared on course to win re-election in 2020. The development and spread of the Q-Anon conspiracy theory also seemed to indicate something was badly wrong with the information diets of many Americans.

In the UK, it is not necessary to invoke 'fake news' to explain either Brexit or Johnson's rise. Both were heavily supported by large sections of the UK's established media, specifically the right-wing press. These titles have no interest in attributing Brexit or Johnson to the pervasiveness of disinformation because they do not believe that people have to be misinformed to support either. Until the pandemic, and the spread of misinformation about Covid-19 and the vaccines against it, there wasn't much for 'fake news' to explain.

Perhaps partly for that reason, the UK news media's concerns about the big internet platforms quickly spread from 'fake news' and disinformation onto other kinds of 'online harms'. Focus quickly shifted to the effects of social media on children, as did one on the inadvertent funding of extremism and other harmful activity via YouTube.[132] In 2019, a number of UK news sites, including *MailOnline*, *The Sun* and the *Daily Express* published stories about the 'Momo challenge' – an alleged game in which children and adolescents were being enticed into violence, self-harm and suicide on YouTube by a user called Momo. These stories were then widely shared on Facebook. It quickly emerged that the whole story was a hoax.[133]

[131] Peter Osborne, “It's not just Boris Johnson's lying. It's that the media let him get away with it” *The Guardian* 18 November 2019, available online at: <https://www.theguardian.com/commentisfree/2019/nov/18/boris-johnson-lying-media>

[132] See, for example, from 2017 alone:

-John Bingham, “One in three children send naked selfies online because parents let them 'roam free' on the internet” *The Telegraph* 5 January 2017, available online at: <https://www.telegraph.co.uk/news/2017/01/05/one-three-children-send-naked-selfies-online-parents-let-roam/>

-Alexi Mostrous, “Big brands fund terror through online adverts” *The Times* 9 February 2017, available online at: <https://www.thetimes.co.uk/article/big-brands-fund-terror-knnxfgb98>

-Daisy Dunne, “How Facebook hacks your brain: Ex-Google product manager reveals the tricks apps use to get us hooked” *MailOnline* 10 April 2017, available online at: <https://www.dailymail.co.uk/sciencetech/article-4397834/Google-employee-speaks-apps-ADDICTIVE.html>

-Denis Campbell, “Facebook and Twitter 'harm young people's mental health'” *The Guardian* 19 May 2017, available online at: <https://www.theguardian.com/society/2017/may/19/popular-social-media-sites-harm-young-peoples-mental-health>

-Alexi Mostrous, “YouTube adverts fund paedophile habits” *The Times* 24 November 2017, available online at: <https://www.thetimes.co.uk/article/youtube-adverts-fund-paedophile-habits-fdzfmqlr5>

-Tim Collins, “Google and Amazon really DO want to spy on you: Patent reveals future versions of their voice assistants will record your conversations to sell you products” *MailOnline* 15 December 2017, available online at: <https://www.dailymail.co.uk/sciencetech/article-5182577/How-Google-Amazon-SPYING-you.html>

-Matthew Moore, “Social media is bad for your mental health, Facebook admits” *The Times* 18 December 2017, available online at: <https://www.thetimes.co.uk/article/social-media-is-bad-for-your-mental-health-facebook-admits-82vnjlnk5>

[133] Tom Phillips and Joël Reland, “The ‘Momo challenge’ is an online hoax fuelled by media coverage” *Full Fact* 1 March 2019, available online at: <https://fullfact.org/online/momo-challenge-hoax/>

The history of the crystallisation of the ‘online harms’ agenda into legislative proposals has been covered above. But the question remains: what stands behind the UK news media’s particular interest in the issue of ‘online harms’? The media has never shown such an interest in, for example, the harms suffered by UK workers in the workplace, or the environmental harms caused by fossil fuel companies. The particular media focus on and attentiveness to the issue of ‘online harms’ occurring on big internet platforms is best explained as the product of a ‘common sense’ across the UK’s news media about the big internet platforms that has deep roots in news publishers’ own interests. Those interests are threefold.

First, to convince the British public that internet platforms, and especially social media platforms like Facebook, are fundamentally unsafe and unreliable places to get news from, and that people need instead to visit news websites and apps directly, and to buy subscriptions to these services. Rebranding themselves as the producers of ‘high-quality journalism’ and social media as the locus of disinformation and misinformation straightforwardly serves publishers’ commercial self-interest. This is nothing new: right-wing newspapers have claimed that the BBC has a pervasive left-wing bias for years, for much the same reason. This campaign has been highly effective, not least because it is grounded in some truth – the spread of disinformation around coronavirus during the pandemic is the latest illustration of that fact. As the data on the UK public’s trust in news media in Part 2 of this report showed, the public trusts news on social media much less than news in general. Moreover, among journalists, academics and policy makers there is now much attention devoted to the issue of disinformation and misinformation online, as the section above on the government’s draft Online Safety Bill shows. It is noteworthy that the legislation effectively defines disinformation and misinformation as problems that can result only from user-generated content or social communication on internet platforms, and never from news publishers’ output or its dissemination on those platforms. The political attention given to issues of ‘fake news’, disinformation and misinformation is examined in more detail below.

The second interest of news publishers is in convincing policy makers that there need to be significant pro-competition interventions in the online advertising market in order to reduce the dominance of Google and Facebook and help news publishers generate more advertising revenue. First of all, the argument that Google and Facebook’s dominance in online advertising needs to be tackled is easier to make in the context of a climate of opinion in which Google and Facebook are generally agreed to be causing a range of social problems as a result of their dominance. Second, representatives of the UK news media industry have explicitly linked Google and Facebook’s dominance of the advertising supply chain to the spread of fake news, arguing that it is those platforms that create the conditions that make the production of fake news profitable enough. Third, the problem of ‘fake news’ online can be used to underscore the need for steps to be taken to support established news publishers. The government’s plans to reform the UK’s antitrust regime in order to better address competition issues in digital markets has been outlined above. The specific issue of Google and Facebook’s dominance of the online advertising market is examined in more detail below.

The third interest news publishers have at stake is in forcing Google and Facebook to reach a more favourable commercial accommodation with them in a number of areas such as revenue sharing, data, prominence. In conventional competition terms, news publishers clearly lack bargaining power with Google and Facebook. The latter are monopolists in their core markets – search and social media – which are both major sources of news publishers’ traffic. By contrast, news publishers operate in a ferociously competitive market that is in commercial decline. However, what news publishers do possess is an ability to produce original news stories that set the news agenda and thereby influence both public opinion and the political agenda.

Google and Facebook's chief vulnerability is that they are information *intermediaries* who do not engage in original news production of their own. Their ability to shape the news agenda is limited compared to that of the news publishers. Moreover, as intermediaries, the degree to which the public trusts them – to function as intermediaries, to hold their personal data, to display ads, and so on – is at the core of their business model. It will become even more so if competition interventions facilitate the development of commercial rivals, or if new services come along that threaten to rival their core functions.[134] Therefore, for news publishers, their news coverage, their influence over public opinion and their influence over public policy makers is arguably their most effective means for exerting pressure on Google and Facebook to reach a more favourable accommodation with them. It does not seem accidental that it was in January 2017 that Facebook suddenly decided to appoint a former TV news anchor to oversee its relationship with the news industry.[135] The final part of this report therefore looks at the evolving terms of platform-publisher relationships in the UK.

## 'Fake News', Disinformation & Misinformation

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In the immediate aftermath of Trump's election, during the months of November and December in 2016, much of the coverage of *The New York Times*, *The Guardian* and the *Financial Times* focused on the problem of 'fake news'. By contrast, right-wing British titles like *The Times* and *The Telegraph* were much slower to take up the issue. The first *Telegraph* article did not appear until 6 January 2017. The first article in *The Times* was published on 30 January 2017. In both cases, the articles were op-eds written by the Conservative MP Damian Collins, then chair of the House of Commons Culture, Media and Sport Select Committee.[136] The *Telegraph* article explicitly argued that the focus of regulatory attention ought to shift now from newspapers to fake news online: "Press regulation is an important issue. But the greatest threat to the credibility of the media no longer emanates from newspapers. Instead it comes via the internet, where "fake news" spreads without regulation through social media platforms and numerous other channels. That should be a greater concern for us now."

Collins's committee then launched an 18-month inquiry into disinformation and fake news, whose final report was published in February 2019. The report argued,

*"Social media companies cannot hide behind the claim of being merely a 'platform' and maintain that they have no responsibility themselves in regulating the content of their sites. We repeat the recommendation from our Interim Report that a new category of tech company is formulated, which tightens tech companies' liabilities, and which is not necessarily either a 'platform' or a 'publisher'. This approach would see the tech companies assume legal liability for content identified as harmful after it has been posted by users. We ask the Government to consider this new category of tech company in its forthcoming White Paper."* [137]

[134] As Instagram, WhatsApp and Snapchat all threatened to do to Facebook – hence its acquisition of the first two and attempted acquisition of the third.

[135] Hannah Kuchler, "Facebook appoints former CNN anchor to media role" *Financial Times* 6 January 2017, available online at: <https://www.ft.com/content/cb44264e-d43c-11e6-9341-7393bb2e1b51>

[136] Damian Collins, "MPs should be targeting fake news - not the free press" *The Telegraph* 6 January 2017, available online at: <https://www.telegraph.co.uk/news/2017/01/06/mps-should-targeting-fake-news-not-free-press/>

Damian Collins, "Facebook and Google must stop the spread of fake news" *The Times* 30 January 2017, available online at: <https://www.thetimes.co.uk/article/facebook-and-google-must-stop-the-spread-of-fake-news-hpsm3qw01>

[137] House of Commons Digital, Culture, Media and Sport Committee, *Disinformation and 'fake news': Final Report – Eighth Report of Session 2017-19*, 18 February 2019, p. 89, available online at: <https://publications.parliament.uk/pa/cm201719/cmselect/cmcomeds/1791/1791.pdf>

In April 2019, the committee launched a new sub-committee on disinformation, now the Sub-committee on Online Harms and Disinformation, whose current inquiry is examining the government's approach to tackling online harms.[138] The sub-committee's membership is the same as the main DCMS committee. During the early months of the pandemic in 2020, the main committee conducted an inquiry into misinformation relating to the pandemic. The report, *Misinformation in the COVID-19 Infodemic*, was published in July 2020. The report viewed the pandemic as a useful test case to examine the extent to which tech companies had reformed their policies and methods for tackling misinformation. Overall, they found these efforts lacking:

*“Whilst tech companies have introduced new ways of tackling misinformation through the introduction of warning labels and tools to correct the record, these innovations have been applied inconsistently, particularly in the case of high-profile accounts. Platform policies have also been too slow to adapt, while automated content moderation at the expense of human review and user reporting has had limited effectiveness. The business models of tech companies themselves disincentivise action against misinformation while affording opportunities to bad actors to monetise misleading content. At least until well-drafted, robust legislation is brought forward, the public is reliant on the goodwill of tech companies, or the bad press they attract, to compel them to act.” [139]*

The government's draft Online Safety Bill is the primary means through which it intends to address these issues. As already described, the Bill will explicitly exclude recognised news publishers from its scope, as well as elected politicians, so that the 'duty of care' requirement on platforms will relate primarily to ordinary users of platforms. This will undoubtedly cover some of the misinformation on platforms like Facebook, particularly the hoaxes and scams identified by the committee as a key source of misinformation during the pandemic, as people tried to exploit the crisis for financial gain. On the other hand, misinformation spread either by journalists and commentators working for recognised news publishers or by political figures, will not be covered. The committee's report acknowledged the possibility of the latter as a source of misinformation – citing the examples of Donald Trump and Jair Bolsonaro. Yet there has been some misinformation about coronavirus, identified by the fact checking website *Full Fact*, that has come from political and media figures.[140] Meanwhile, the press reform campaign group Hacked Off alleged in January 2021 that 55 national newspaper articles containing “dangerous conspiracy theories and disinformation about Covid-19” had been published since the start of the pandemic over which the press's self-regulator IPSO had failed to take action.[141]

[138] “MPs probe the Government's approach to tackling harmful online content” 27 July 2021, available online at:

<https://committees.parliament.uk/work/1432/online-safety-and-online-harms/news/156956/mps-probe-the-governments-approach-to-tackling-harmful-online-content/>

[139] House of Commons Digital, Culture, Media and Sport Committee, *Misinformation in the COVID-19 Infodemic – Second Report of Session 2019-21*, 21 July 2020, p. 3, available online at: <https://committees.parliament.uk/publications/1954/documents/19089/default/>

[140] Recent examples include misleading claims made by a former Supreme Court judge, a Telegraph newspaper columnist, and a prominent talk radio host. See, “Lord Sumption made several errors about Covid on Today” Full Fact 20 July 2021, available online at:

<https://fullfact.org/health/lord-sumption-covid-errors/> “Allison Pearson tweets misleading stats about Covid hospital patients” Full Fact 16 July 2021, available online at: <https://fullfact.org/online/Allison-Pearson-Covid-stats-hospital/> “More than 10 people are dying of Covid-19 each week in the UK” Full Fact 2 June 2021, available online at: <https://fullfact.org/health/talk-radio-covid-death-statistics/>

[141] Hacked Off, “Hacked Off report identifies 55 fake news stories about Covid-19 published in National Newspapers in 2020. IPSO failed to uphold a complaint on any of the stories included in the report” 18 January 2021, available online at: <https://hackinginquiry.org/hacked-off-report-identifies-55-fake-news-stories-about-covid-19-published-in-national-newspapers-in-2020-ipso-failed-to-uphold-a-complaint-on-any-of-the-stories-included-in-the-report/>



## ‘Google & Facebook’s Dominance of the Online Advertising Market

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The decline of print newspapers and the rise of the internet has been devastating to the finances of most UK newspaper publishers. They have tried to replace their collapsing newspaper businesses with new digital news operations but, as Part 2 of this report showed, only a tiny fraction of the print advertising revenue that UK newspaper publishers have lost over the past twenty years has been replaced by new digital advertising revenue.

It is no mystery where the advertising money has gone. Advertising budgets in the UK are increasingly spent on online advertising and, as the CMA’s 2020 market study established, Google and Facebook account for over 80% of online advertising revenue in the UK.

Meanwhile, most newspaper titles are either managing their decline into eventual closure or attempting the painful transition to new digital business models. For most of the titles that do survive, revenues coming directly from paying readers will play a much bigger part of their business than they did in the past. This is just as true of the elite-oriented titles that – from a financial point of view at least – have found the print-to-digital transition easiest: the likes of *The Economist*, *The Times* and the *Financial Times*. In fact, it is these titles, aimed at a mix of business and very affluent readers (often the same thing), that have found it easiest to switch away from a dependence on advertising, towards a more heavily subscription-oriented business model. Other titles have chosen to pursue a free, ad-funded model that relies on huge audience scale to compensate for low ad yields per user. As mentioned above, *The Guardian*’s attempt at this strategy had clearly failed by 2016 and it quickly pivoted towards raising much more revenue directly from readers, either through subscriptions to its premium apps or through simply asking readers to make regular donations. A number of other newspaper brands have continued with the free, ad-funded model: the *Express*, the *Mirror*, *MailOnline*, *The Sun* and *The Independent* being the most popular online, although *MailOnline* and *The Independent* have added ‘premium’ subscription tiers. [142]

In March 2018, the government asked Dame Frances Cairncross, a former journalist, to chair a review into the commercial sustainability of ‘high-quality journalism’ in the UK – meaning the press. The review was specifically asked to consider threats to the financial sustainability of the news industry, the role and impact of digital search engines and social media platforms, and the role of digital advertising. The review was published in February 2019.[143] It found that Google and Facebook held considerable power over news publishers online because of their critically intermediary role in the distribution of news content. Publishers – and especially publishers pursuing the free, ad-funded business model – are heavily dependent on search and social media platforms to drive large volumes of traffic to their websites. This position of structural power, along with their enormous profitability, enables the platforms to impose terms on publishers in a range of key areas, with little need for consultation or negotiation. The review believed this posed a potential threat to the viability of publishers’ online businesses and therefore made two key recommendations. First, that the CMA conduct a deeper market study of the online advertising market to determine if competition was working correctly, and if not, to recommend remedies.

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[142] Sky News is free and does run advertising but it is heavily cross subsidised by Sky as a whole.

[143] The Cairncross Review: A Sustainable Future for Journalism, 12 February 2019, available online at: <https://www.gov.uk/government/publications/the-cairncross-review-a-sustainable-future-for-journalism>

Second, that the platforms be required to draw up codes of conduct to regulate their relationships with news publishers, on something like the model of the Public Service Broadcasters' codes of conduct that regulate their terms of trade with independent TV production companies.[144] The government's response to the review was to accept the recommendation for a CMA market study and to agree to explore the idea of developing codes of conduct.[145]

The CMA's market study published its provisional findings in December 2019. These included the suggestion that a code of conduct might be a useful means of regulating the behaviour of advertising-funded platforms with significant market power. The CMA's final report was published in July 2020 and set out the proposal in more detail. Notably, where the Cairncross Review had proposed the platforms should draw up their own codes, with guidance from the regulator, the CMA proposed that the codes should be developed primarily by the regulator and given a statutory basis, with the DMU being given enforcement powers by future legislation to ensure compliance. Moreover, its proposals for the code of conduct covered a wider range of relationships than just the platform-publisher ones that were the Cairncross Review's focus.

Building on the recommendations of the Furman Review, the report recommended an enforceable code of conduct be established to govern the behaviour of platforms that were designated with 'strategic market status', defined as those that hold enduring market power over a strategic gateway market, and over the users of their products, resulting in a powerful negotiating position that put other businesses in a relationship of dependency.[146] The CMA believed it was highly likely that Google and Facebook met this definition: "*Google has enduring market power in search and search advertising and in open display*" while "*Facebook has enduring market power in social media and display advertising*"; both platforms "*play an important role as a gateway for large numbers of businesses to access users on the other side of the platform.*"[147]

The CMA found that news publishers were particularly dependent on both Google and Facebook. In the case of Google, the CMA found:

*"it has had 90% or more of the search market for over 10 years, as well as having a share of over 90% in the key publisher ad server market. It has a reach of over 90% of UK internet users and many businesses depend on Google for accessing these consumers. Publishers are particularly reliant on appearing within Google's search results and are vulnerable to changes to its algorithm which can have a material impact on user traffic. Google also frequently hosts publishers' content within its ecosystem. ... Google has developed unrivalled access to data through its operation of the largest browser (Chrome) and the Android mobile operating system. Through its display advertising businesses, including the largest publisher ad server (Google Ad manager) and the largest advertiser-facing demand side platforms (DV360 and Google Ads), Google is a vital trading partner for advertisers wanting to secure conversions. This access to data and presence along the ad tech supply chain can limit the availability of genuine alternative choices for publishers and advertisers."*[148]

[144] The Cairncross Review, Chapter 4: The role of the online platforms in the markets for news and advertising, p. 56-74

[145] DCMS, "Government response to the Cairncross Review: a sustainable future for journalism" 27 January 2020, available online at: <https://www.gov.uk/government/publications/the-cairncross-review-a-sustainable-future-for-journalism/government-response-to-the-cairncross-review-a-sustainable-future-for-journalism> "The government agrees that codes of conduct that formalise the relationships between news publishers and online platforms may help to rebalance that relationship. The government is working with interested parties to further assess this recommendation over the coming months."

[146] CMA, "Online platforms and digital advertising: Market study final report" 1 July 2020, p. 336, paragraph 7.55-7.56, available online at: <https://www.gov.uk/cma-cases/online-platforms-and-digital-advertising-market-study>

[147] CMA, "Online platforms and digital advertising: Market study final report", p. 336, paragraph 7.59

[148] CMA, "Online platforms and digital advertising: Market study final report", p. 336-7, paragraphs 7.60-7.61

In the case of Facebook, the CMA found:

*“Facebook (including Instagram and WhatsApp) has a reach of over 85% of UK internet users, around 75% of the time spent on social media for a number of years, and a share of over 50% of all UK display advertising revenues. This significant online presence means that Facebook plays an important role in driving consumer traffic to content providers, including publishers, in particular through its Newsfeed. Facebook also has extensive access to data and is the only medium through which advertisers can run certain valuable campaigns. It is a valuable portal through which advertisers can access a large number of users, with over one million UK advertisers using the platform in 2019. In addition, it can leverage this position to request data from advertisers or businesses interoperating with Facebook which is then used to create rival products in adjacent markets. Facebook also plays an important role for developers who are reliant on its platform to grow their userbase. Alterations made to its platform could require developers to make technical or even business model changes to their apps. Facebook may also leverage its position by creating products that compete directly with those of developers.” [149]*

The CMA recommended that the code of conduct should apply to whole companies, with main provisions applying to ‘core markets’ (i.e. those in which the firm has market power) and ‘adjacent markets’ (i.e. those into which that market power can be leveraged, e.g. via the use of data or consumer attention). The code for Google and Facebook should take the form of “high-level principles rather than detailed rules”, and comprise the following elements:

- a) a statement of scope
- b) three high-level objectives: fair trading, open choices, trust and transparency – that is, to prevent the exploitation of customers, the exclusion of rivals or the reduction of transparency (undermining trust)
- c) principles within each objective
- d) guidance setting out in more detail the potential application of the code to each specific platform
- e) enforcement powers enabling the DMU to force firms to comply, with the ability to order conduct and issue financial penalties for non-compliance with either DMU orders or the code. [150]

The two relationships that it is critical for publishers are regulated in this way are (i) those between advertisers and publishers on one hand, and the platforms on the other, in the buying and selling of digital advertising, and (ii) platforms as gateways to content, that publishers need to direct traffic to their sites in order for them to generate ad revenue and in many cases sell digital subscriptions. Nevertheless, the CMA rejected the idea of it directly controlling levels of ad load on platforms, or the prices paid by advertisers. [151]

The fundamental problem for UK news publishers, though, is that even if both of those relationships they have with the platforms are regulated by codes of conduct, it is unlikely to have a transformative effect on the amount of advertising revenue they can generate. Google and Facebook will remain formidable competitors in the online advertising market because only some of their revenue is the result of their abuse of market power.

[149] CMA, “Online platforms and digital advertising: Market study final report”, p. 337, paragraphs 7.62-7.63

[150] CMA, “Online platforms and digital advertising: Market study final report”, p. 338-339, paragraphs 7.67, 7.69

[151] CMA, “Online platforms and digital advertising: Market study final report”, p. 343, paragraphs 7.79-7.80

Much of it is the result of them occupying far superior structural positions in the digital environment with respect to the acquisition of both user attention and user data. And much of it is the result of the fact that their business models allow them to operate at a scale that enable them to develop qualitatively superior technical capacities in the targeting of digital advertising and the measurement of its efficacy. There is simply no way that any of the UK's news publishers will ever operate at a large enough scale to be able individually to invest in developing remotely comparable technical capacities. So while it may be possible for them to limit some of the worst abuses of Facebook and Google's superior market positions, they cannot eliminate or end that superiority altogether. It is that superiority which is the core reason why publishers have over the last twenty years lost a huge share of the advertising spending that used to come to them. In short, it is unlikely that these pro-competition interventions will bring back any more than a small fraction of the revenue that publishers have lost to the platforms.

The larger issue for commercial news publishers is that the rise of the internet has had the structural effect of marginalising news's importance as a genre of content which provides a key context for selling advertising space. In the twentieth century, the print newspaper and magazine were technologies that protected that enduring centrality. In the twenty-first century, the online world is one in which advertising can occur in a vast range of other contexts: search engine results, online shopping, mobile games, user-generated content on social media or video platforms, dating apps. This enormous expansion in the amount of daily attention we give to spaces where advertising can be supplied is, in other words, a huge expansion in the supply of advertising space. The inevitable result is that prices fall, and those who are able to identify, track and understand users – the targets of advertising – the best will command the highest premium. The overall result is to displace news publishers from their previous privileged and central position in the advertising market.<sup>[152]</sup> The consequence is that news publishers either compensate for the advertising revenue lost by developing new sources of revenue, or they accept that some of their titles will close and others will in the future be much smaller businesses than in the past. In practice, a mixture of these has occurred.

## The Evolving Relationship Between Tech Giants and UK News Publishers

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The UK's news publishers have strongly advocated for the development of the new pro-competition regime for digital markets currently developing in the UK. As the section above shows, one effect of that regime is likely to be to regulate the terms of the relationships between the UK's news publishers and the big tech platforms, particularly Google and Facebook. But it is unlikely that the regime eventually established will, on its own, lead to significant incremental revenue for the publishers. Publishers are therefore pursuing other efforts to try and get better terms from the platforms.

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[152] This conclusion was reached back in 2014 by an influential report from the Tow Center for Digital Journalism at Columbia University. See C.W. Anderson, Emily J. Bell and Clay Shirky, *Post-Industrial Journalism: Adapting to the Present*, 2014, available online at: <https://academiccommons.columbia.edu/doi/10.7916/D8N01JS7>

At the core of the issue is the peculiar ‘frenemy’ relationship between platforms that play a significant role in information intermediation, like Google and Facebook, and publishers of online journalism. On the one hand, the platforms need journalism. It is one of the major content categories users come to their platforms to access: in Google’s case through web search results and Google News; in Facebook’s case, through the Newsfeed. As such, the platforms derive substantial engagement – and therefore users, advertising revenue and user data – from journalistic content featured as part of the mix of content available through their services. Yet the competition between platforms to feature this content on their services is far less – the platforms being much bigger and fewer – than the competition between publishers to have their content featured prominently on those services. Indeed, news publishers aren’t only competing with each other – and that would be competition enough. They are competing for user attention with a whole range of new competitors: some are suppliers of journalism, most are not. This imbalance between the relative need that the platforms have for news content compared to the news publishers’ need to acquire traffic from the platforms is one of the major structural features of the current online news market that works against publishers.

Nevertheless, just because Google and Facebook need journalism less than publishers need traffic from the platforms, does not mean to say that the former do not need journalism. The argument increasingly heard around the globe from news publishers is that the platforms use their structural power to exploit them, under-paying them for the value their journalism creates for the platforms. Concretely, news publishers argue they deserve a share of the advertising revenue their content generates for the platforms. They have therefore argued that regulators ought to compel Facebook and Google to pay them royalties or licensing fees when their content is viewed by the platforms’ users, for instance on the Newsfeed or via Google News. Initially, the platforms’ response was to argue that the revenue they derive from featuring journalism is insignificant, and that if they were required to pay such licensing fees, they would sooner remove their services from the countries in question. Google has had showdowns with news publishers and regulators in France, Germany and Spain. In February 2021, Facebook temporarily blocked all sharing of news in Australia, causing a major backlash against the company.[153] The ban was reversed after the Australian government agreed to amend its proposed news media bargaining code.[154]

In 2013 Germany introduced a so-called ‘ancillary copyright for press publishers’ which would have required Google to pay German publishers for displaying their content, even if the content is shared in the form of short snippets on web search results or on the Google News aggregation service. Google challenged the law, and took Germany to the European Court of Justice, winning its case in 2020 on the basis that the EU executive had not been notified of the German technical regulation.[155] However, while the case was ongoing, the EU was in the process of developing and introducing its own law to give publishers similar rights.

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[153] Josh Taylor, “Facebook’s botched Australia news ban hits health departments, charities and its own pages” *The Guardian* 18 February 2021, available online at: <https://www.theguardian.com/technology/2021/feb/18/facebook-blocks-health-departments-charities-and-its-own-pages-in-botched-australia-news-ban> See also Calla Wahlquist, “‘Time to reactivate MySpace’: the day Australia woke up to a Facebook news blackout” *The Guardian* 18 February 2021, available online at: <https://www.theguardian.com/technology/2021/feb/18/time-to-reactivate-myspace-the-day-australia-woke-up-to-a-facebook-news-blackout>

[154] Amanda Meade, Josh Taylor and Daniel Hurst, “Facebook reverses Australia news ban after government makes media code amendments” *The Guardian* 23 February 2021, available online at: <https://www.theguardian.com/media/2021/feb/23/facebook-reverses-australia-news-ban-after-government-makes-media-code-amendments>

[155] Foo Yun Chee and Klaus Lauer, “Google wins legal battle with German publishers over fee demands” *Reuters* 12 September 2019, available online at: <https://www.reuters.com/article/us-google-germany-publishers-idUSKCN1VXOR2>

In April 2019 the Council of the European Union approved the Directive on Copyright in the Digital Single Market (CDSM), whose Article 15 requires member states to give publishers of press publications direct copyright over “the online use of their press publications by information society service providers”.[156] Member states are required to implement the directive by 2021. Since the UK left the European Union on 31 January 2020, the UK government’s position is that it is not required to implement the directive in the UK, and it has no intention to do so. However, the government has indicated that it broadly supports the aims of the directive. It is therefore possible that the government will, in future, legislate to give UK publishers similar rights.[157]

The increasing global momentum behind efforts to force the platforms to pay for their use of news content led Google to recognise the inevitability of reaching some kind of accommodation with news publishers.[158] In July 2020 it announced its intention to launch a new global licensing program to pay news publishers.[159] The following October, it announced the launch of Google News Showcase, committing to ‘\$1 billion over the next three years’ in payments to publishers.[160] In February 2021 the service launched in Australia and the UK. The same month, News Corp struck a global deal for Google to make “significant payments” for its journalism.[161] Facebook had already announced plans to pay major UK news outlets to licence their articles in December 2020.[162]

The logic for the platforms is simple: once it became clear that enough governments around the world were prepared to resort to legislation requiring them to reach agreements to license news content from publishers, it was in the platforms’ interest to conclude such agreements with the publishers sooner rather than later. The longer they waited, and the more obstinate they were, the greater the likelihood that countries would have legislated to make bargaining mandatory for Facebook and Google, which would have given the news publishers a stronger hand in the eventual negotiations or even see governments intervene directly to impose settlements on the platforms themselves. Striking bargains before any of this occurs means that negotiations are conducted more on the platforms’ terms and may in some cases even lead governments to conclude that it is unnecessary to legislate.

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[156] Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC (Text with EEA relevance), available online at: <https://eur-lex.europa.eu/eli/dir/2019/790/oj>

[157] James Vincent, “The UK won’t implement EU’s controversial copyright directive after Brexit” *The Verge* 27 January 2020, available online at: <https://www.theverge.com/2020/1/27/21083295/eu-copyright-directive-uk-brexit-no-implementation>

[158] Brad Bender, “A new licensing program to support the news industry” *Google* 25 June 2020, available online at: <https://www.blog.google/outreach-initiatives/google-news-initiative/licensing-program-support-news-industry/>

[159] Sundar Pichai, “Our \$1 billion investment in partnerships with news publishers” *Google* 1 October 2020, available online at: <https://blog.google/outreach-initiatives/google-news-initiative/google-news-showcase/>

[160] Kate Beddoe, “Google News Showcase launches in Australia” *Google* 4 February 2021, available online at: <https://blog.google/products/news/google-news-showcase-launches-australia/> Ronan Harris, “Google News Showcase is launching in the U.K.” *Google* 10 February 2021, available online at: <https://blog.google/products/news/google-news-showcase-launches-uk/> “In the U.K., Google has signed partnerships with publishers such as Archant, DC Thomson, Evening Standard, The Financial Times, Iliffe Media, The Independent, Midland News Association, New Statesman, Newsquest, JPI Media, Reach, The Telegraph and Reuters. In total, more than 120 publications in the U.K. will start curating content for News Showcase, many of them local newspapers who do not have the same resources that many larger, national papers have to invest in their digital transformation.”

[161] Alex Hern, “News Corp agrees deal with Google over payments for journalism” *The Guardian* 17 February 2021, available online at: <https://www.theguardian.com/media/2021/feb/17/news-corp-agrees-deal-with-google-over-payments-for-journalism>

[162] Jim Waterson, “Facebook to pay UK media millions to license news stories” *The Guardian* 1 December 2020, available online at: <https://www.theguardian.com/technology/2020/dec/01/facebook-to-pay-uk-media-millions-to-licence-news-stories>

In the UK, for example, there is not yet any legal requirement for the platforms to pay UK news publishers – by quickly reaching voluntary agreements with many of the biggest UK news publishers, Google and Facebook may have delayed or avoided the introduction of legislation that would have allowed the news publishers to negotiate from a stronger position, or led to terms that more deeply affected their core businesses, like if Google was required to pay royalties for news stories that appear in Google Search.[163]

One criticism of this arrangement is that because agreements are usually being concluded by individual publishers, the biggest, most politically connected publishers are potentially in a position to secure better terms from the platforms than smaller publishers, since buying off the former is, from the platforms' perspective, more useful for heading off the threat of legislation. [164] Google has reportedly said it will terminate agreements with any publishers participating in a legal claim or complaint against the company.

In short, one of the central functions of Google News Showcase is to halt the political momentum behind proposals for mandatory fair bargaining with news publishers.[165] Moreover, Google News favours the biggest established media outlets, so the deals may potentially contribute to marginalising alternative media online.[166] The introduction of a news media bargaining code may still be necessary, if governments are concerned to ensure that smaller publishers are able to conclude deals with platforms on the same terms as larger rivals. Whether the UK government will be concerned enough to do so once the big newspaper publishers are satisfied with the deals they have concluded remains to be seen.

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[163] James Meese, "Why Google is now funnelling millions into media outlets, as Facebook pulls news for Australia" *The Conversation* 18 February 2021, available online at: <https://theconversation.com/why-google-is-now-funnelling-millions-into-media-outlets-as-facebook-pulls-news-for-australia-155468>

[164] Kate Kaye, "'I'm afraid of repercussions': Publishing industry members question Google's motives in paying off News Corp" *Digiday* 18 February 2021, available online at: <https://digiday.com/media/googles-motives-in-paying-off-news-corp/>

[165] Lucinda Southern, "'Quite cynical': Publishers leery about Google's \$1 billion news licensing pot" *Digiday* 1 October 2020, available online at: <https://digiday.com/media/draft-do-not-include-in-newsletters-quite-cynical-publishers-leery-about-googles-1-billion-license-pot/> See also Joshua Benton, "'Google paying publishers' is more about PR than the needs of the news industry" *Nieman Lab* 25 June 2020, available online at: <https://www.niemanlab.org/2020/06/google-paying-publishers-is-more-about-pr-than-the-needs-of-the-news-industry/>

[166] Axel Bruns, "Google News favours mainstream media. Even if it pays for Australian content, will local outlets fall further behind?" *The Conversation* 22 September 2020, available online at: <https://theconversation.com/google-news-favours-mainstream-media-even-if-it-pays-for-australian-content-will-local-outlets-fall-further-behind-146565>



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