

Digital exclusion

A review of Ofcom's research on digital exclusion among adults in the UK

[Digital exclusion review](#) – Welsh overview

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1. Overview

This report provides an overview of Ofcom's historical research on digital exclusion and of the more recent impacts of the Covid-19 pandemic, both positive and negative.

It shows that the number of adults in the UK unable to access the internet fell steadily in the years leading up to the pandemic, and that the pandemic has made people more reliant on internet access than ever before: the latest figures indicate that **the number of households who do not have access to the internet at home currently stands at 6%**.

However, we know from our research that **online access is not the only factor in digital exclusion**. Confidence in navigating the online sphere and knowing how to stay safe online are prerequisites to reaping the full benefits of the internet.

Furthermore, our research suggests that **as the proportion of people without internet access declines, the negative impacts of remaining offline become more acute**, as an increasing number of services and support networks become digital-only.

While much of Ofcom's work focuses on helping consumers get online and navigate the digital sphere, we also accept that **there are some consumers for whom digital access will never be a priority**, whether due to lack of interest, a limiting condition, or being part of an older generation.

Digital exclusion is therefore a **challenge to be tackled on three fronts**: supporting those who want to get online; providing less confident users with essential digital skills; and ensuring that those who remain offline are not left behind.

Key points and statistics

- 6% of households did not have access to the internet at home in December 2021.
- Those more at risk of digital exclusion included older citizens; the most financially vulnerable; those not working; people living alone; and people impacted by a limiting condition e.g. hearing or vision impairment.
- User choice, cost issues, and a lack of skills or confidence are all contributory factors in digital exclusion.
- The Covid-19 pandemic enabled some adults to gain new digital skills and enjoy the benefits of being online, but for others the digital divide has become more entrenched as an increasing number of everyday activities and services have moved online.

This overview is a simplified high-level summary only.

2. Introduction

Background

The purpose of this review is to provide an overview of Ofcom's research findings on the topic of digital exclusion among adults in the UK. For many years Ofcom has carried out a wealth of research exploring aspects of digital exclusion to gain a better understanding of those who are affected by it, and the challenges they face. The following review summarises the key findings, looking at how we define digital exclusion: how many UK adults are digitally excluded; which population groups are statistically more likely to be affected and the reasons behind this; and how Covid-19 has impacted digital exclusion in the UK.

Scope of the review and documents used

This review outlines the data sources that Ofcom uses to explore and understand digital exclusion. Reference is made throughout to several key sources: a brief description of their provenance and methodology is provided below.

Adults' Media Literacy Tracker (2021)

The Adults' Media Literacy Tracker studies provide quantitative evidence on media use, attitudes and understanding. Of the media literacy research conducted in late 2021, data related to digital exclusion can be found in the Adults' core survey, which asked both internet users and non-users about ownership and use of devices; confidence online; awareness of funding; and attitudes towards smartphone use. Since 2020 the tracker has used a combination of online and postal methodology due to Covid-19. An accompanying computer-assisted telephone interview (CATI) omnibus survey was also carried out, with the explicit aim of establishing the incidence of internet access and finding out more about barriers to access, and the reasons why some adults choose to remain offline.

Technology Tracker (2021)

Ofcom's Technology Tracker provides us with an understanding of the ownership and use of different technologies in the UK communications markets (fixed and mobile telecoms, internet, multichannel TV, on-demand services, and radio/audio) among people aged 16 and over. It is one of our longest-running surveys and has traditionally been conducted face to face on an annual basis; however, the Covid-19 pandemic necessitated a mixed-mode online and postal methodology in 2021.

Use of Communications Services Survey (2020)

The Use of Communication Services Survey looks at access to, and use of, communications devices and services among people with conditions that impact or limit their use of communications services. Using the data from this survey, we analysed the likelihood of digital exclusion resulting from a number of different characteristics, including age, living alone, having a condition that limits or impairs the use of communications services, being financially vulnerable, and having more than one of these characteristics. This analysis was conducted shortly before the onset of the pandemic, providing us with context on digital exclusion before the onset of Covid-19.

Communications Affordability Tracker (June 2020 onwards)

Research findings from the Communications Affordability Tracker were based on telephone interviews conducted from June 2020 onwards with about 1,000 UK households; these interviews were originally carried out monthly, moving to bi-monthly from April 2021. The research focuses on affordability issues that consumers of communications services may be facing and asks about any actions they had taken to help them afford communications services in the month before the interview.

Adults' Media Lives (2021)

Ofcom's Adults' Media Lives research is a qualitative, longitudinal, ethnographic video-based project which has been running since 2005. The research has followed the same (as far as possible) 20 participants over time, interviewing them at home to understand their relationship with digital media. In 2021, 60-minute interviews were conducted online via Zoom.

Understanding the financial impact of Covid-19 (2020-2021)

This qualitative research followed 25 British households from May 2020, to understand everyday consumer confidence in the context of Covid-19 and to explore the effects of Covid on their financial lives. In January 2021, the sample was boosted to include an additional five households that had been negatively impacted financially by the pandemic. There were six waves of fieldwork in total, each of which involved an online task, survey-style questions to monitor change over time, and a 60-minute video call with a researcher.

Digital resilience and vulnerability during the pandemic (CCP research, 2021)

The aim of this research was to explore the role of digital connectivity during the pandemic and the effects during this time of having, or not having, access to the digital connectivity required, or the skills to make use of it. A programme of 60 qualitative in-depth interviews was completed between 10 February and 5 March 2021. The focus of the research was on people who wanted to use the internet differently during the pandemic, or who had tried to do this. It primarily targeted those who had had difficulties in achieving these online goals, but also included people without such problems. Within these parameters, the sample comprised a range of audiences including older people, people living on low incomes, people with disabilities, micro-businesses, people living in the nations and people living in rural as well as urban areas.

3. What is digital exclusion?

Ofcom recognises that in its broadest definition, digital exclusion among UK adults comprises three aspects that are often intertwined. These are:

Access – those who are digitally excluded because they have no access to the internet at home or elsewhere.

Ability – those who lack the digital skills and/or confidence to navigate the online environment safely and knowledgeably.

Affordability – those who struggle to afford access to the internet, and so either go without it, or experience other financial strains to retain access.

These three related aspects encompass a range of issues that are connected to digital exclusion, including insufficient access to devices (device poverty); the inability to pay for an adequate data package (data poverty); the inability to navigate the online world alone due to lack of skills or knowledge; limited or narrow internet use; only using the internet via others (proxy users); or having access to the internet only outside the home, e.g. at a library.

Ofcom has examined these specific elements of digital exclusion through a variety of research questions and methodologies. The reports mentioned in this review sometimes use different metrics or definitions to measure and analyse digital exclusion; where necessary, this is highlighted throughout the review.

4. How many people in the UK are digitally excluded?

Ofcom has long recognised the importance of monitoring the number of people in society who remain offline. Since 2004, yearly data gathered for the Ofcom Technology Tracker has measured access to and use of the internet and digital devices among UK households. In the years between 2011 and 2020, the number of households with home internet access increased from 76% to 89%. This indicates that before the pandemic (March 2020), 11% of households in the UK remained digitally excluded in regard to internet access in the home.

Ofcom's latest data indicates that the number of households without home internet access now stands at 6%.¹ Interpreting these statistics through the lens of the pandemic suggests that as a huge proportion of everyday life moved online, more people decided it was time to get internet access at home. Some caution is necessary here, as methodology changes in the survey, following the onset of the pandemic, prohibit direct comparability with the data collected in the years preceding it. Nevertheless, data from both the Technology Tracker (March 2021) and the Adults' Media Literacy Tracker (Dec 2021) enable us to be confident that the proportion of households in the UK without internet access currently stands at 6%.² A further 5% of households rely solely on mobile internet access to connect to the internet, whether via mobile data, a dongle or USB.³

Research into the affordability of communications services can also tell us about households that are affected by, or at risk of, digital exclusion. According to Ofcom's Communications Affordability Tracker, the latest estimate regarding the number of households which do not have internet access, at least partially due to cost, stands at 100,000, indicating the role that affordability plays in keeping people offline.⁴ Ofcom also estimates that in October 2021 about 2 million households were experiencing affordability issues with either their fixed broadband and/or smartphone.⁵ This suggests that a number of households in the UK do currently have access to the internet, but are at risk of having to modify or even cancel their service, or reduce household spending elsewhere. As the graph below demonstrates, the affordability of communication services has remained broadly stable in recent years. However, in the light of rising inflation and concerns about the cost of living, affordability issues with communication services could become worse in the months to come.

¹ Adults' Media Literacy Tracker 2021, CATI Omnibus Survey (2021).

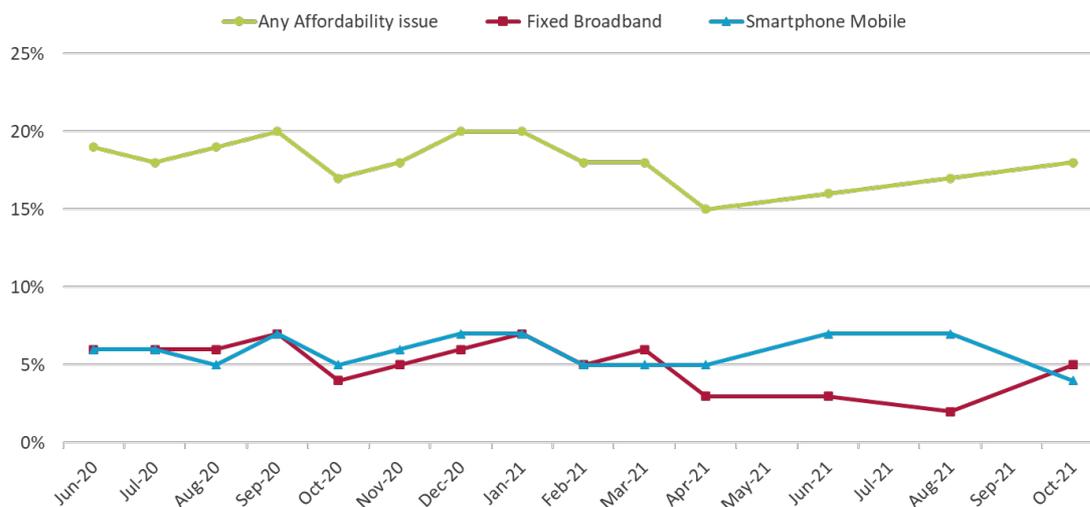
² Technology Tracker, CATI Omnibus Survey (2021); Media Literacy Tracker, CATI Omnibus Survey (2021).

³ Technology Tracker, CATI Omnibus Survey (2021).

⁴ Affordability of communications services: Summary of findings (July 2021). This report's Consumer research technical annex (p. 63-64) explains how this estimate was calculated.

⁵ Affordability of communications services: Summary of findings (February 2022).

Trend in experience of affordability issues



Source: Communications Affordability Tracker (2021).⁶

In addition to the level of home internet access, other measures add to our understanding of how many adults in the UK are affected by problems relating to digital exclusion. For example, our latest Adults’ Media Literacy Tracker data revealed that of those who are online, 21% access the internet exclusively on a smartphone, and use no other device to go online.⁷ According to our trackers, this proportion who go online using only their smartphone has grown in recent years. As the majority of these users say they don’t feel disadvantaged because of this, we can conclude that an increasing number of people access the internet solely via their phone out of choice.⁸

However, our data also indicates that smartphone-only users are more likely to be ‘narrow’ internet users⁹, defined as such because they use the internet for only a small number of tasks.¹⁰ And smartphone-only users include those who simply cannot afford another device: the most financially vulnerable respondents¹¹ were significantly more likely than the most well-off respondents to say

⁶ Note: ‘Any’ affordability issue also includes issues with landline (3%), pay TV (8%) and on-demand streaming services (6%), not shown in the chart above. Some consumers experienced more than one affordability issue either within a given service and/or across multiple services. ‘Any affordability issue’ only counts each issue/service once i.e. affordability issues for each service are not additive

⁷ Adults’ Media Literacy Tracker 2021, Core Survey (2021).

⁸ Adults’ Media Literacy Tracker 2021, Core Survey (2021).

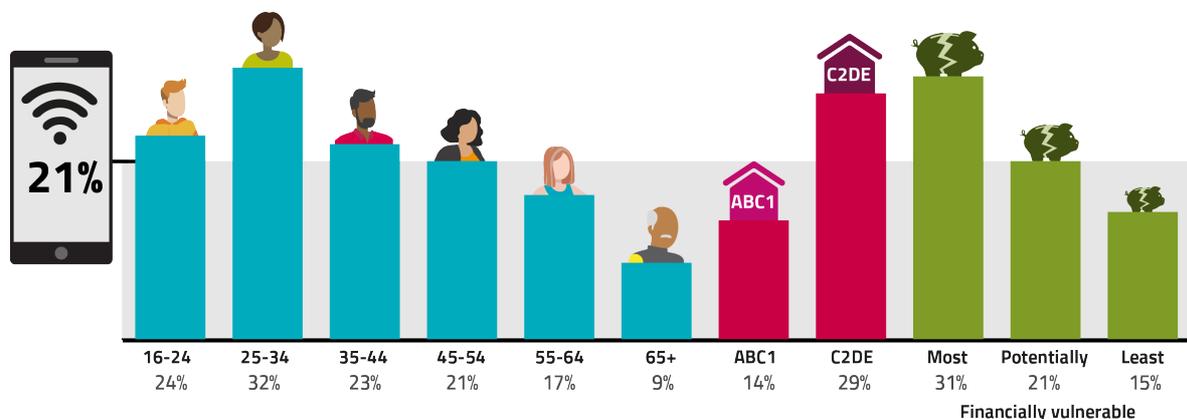
⁹ Adults’ Media Literacy Tracker 2021, Core Survey (2021).

¹⁰ ‘Narrow’ internet users are defined as those who ever undertake between one and four of the 13 online activities asked about in the Media Literacy Tracker. The 13 activities asked about were: online banking or paying bills, paying for council tax or another local council service, looking for public services information on government sites, finding information for work/ business/ school/ college/ university, looking or applying for jobs, finding information for leisure time, completing government processes, signing a petition or using a campaigning website, using streamed audio services, listening to live, catch-up or on-demand radio through a website or app, watching TV programmes/ films/ content, watching or posting livestream videos. This is not an exhaustive list of online activities, but was found to be the most discriminating in determining breadth of use from an initial longer list of activities.

¹¹ Financial vulnerability is a measure that has been devised by Ofcom to better understand the impact of financial vulnerability on ownership and use of communications services. The analysis creates three distinct household types by combining household income and the size of the household (including number of children).

that using a phone only was a disadvantage.¹² In regard to digital exclusion, this indicates that there is a small but significant number of people who would prefer greater digital access but, due to affordability issues, are limited to using only their smartphone.

Internet users who only use a smartphone to go online



Source: Adults’ Media Literacy Tracker 2021, Core Survey (2021).

In addition to access via networks and devices, a key requirement for getting the most out of the online world is having the skills and knowledge to navigate it. Among those with access to the internet, 8% say outright that they are not confident in using it. This proportion rises to 18% when respondents were asked specifically about their confidence in managing who has access to their personal data online, including details like their address and phone number, or information on where they shop and what their interests are. A further 23% weren’t sure whether they were confident or unconfident in doing this.

When asked about recognising advertising online, 7% said that they didn’t feel confident and 14% said they were not sure. Finally, when asked about judging whether the information they see online is true or false, 10% were not confident and 21% were not sure. A lack of confidence in these areas can contribute to people staying offline altogether, which is reflected in the fact that 14% of respondents disagreed that the benefits of being online outweigh the risks, and a further 28% were unsure. These statistics indicate that it is not enough to provide people with access to the internet: they must also be equipped with the proficiency and awareness to use the internet effectively and safely.

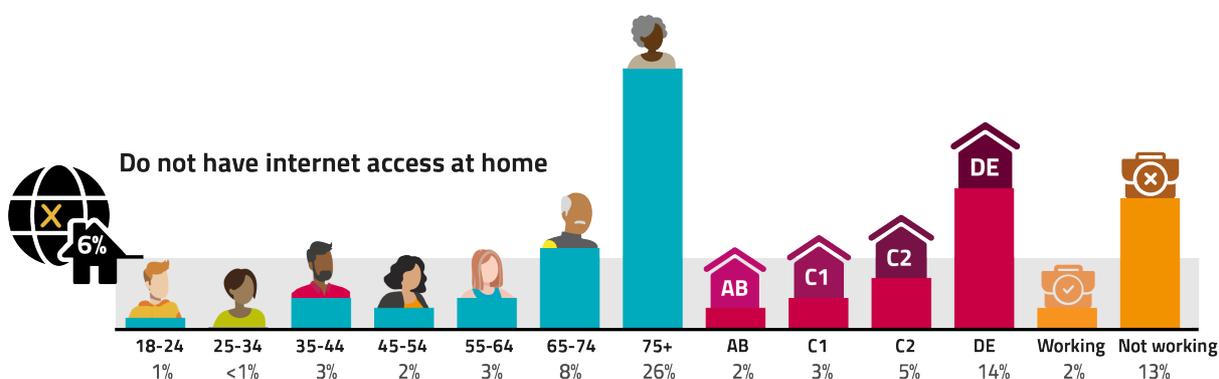
Overall, these additional measures of affordability, levels of device access, and people’s feelings about skills and confidence show the importance of looking beyond whether an individual has an internet connection at home when considering how and why they might be impacted by digital exclusion.

¹² Adults’ Media Literacy Tracker 2021, Core Survey (2021).

5. Which population groups are more likely to suffer from digital exclusion?

From our research, we know that the prevalence of digital exclusion is not split equally across the population: there are certain demographics who are more likely to be digitally excluded, including older people, those who are not working¹³, the most financially vulnerable, and those who live with a condition that limits or impairs their use of communication services. Understanding the demographic characteristics of those who are affected by digital exclusion enables Ofcom to identify specific barriers, carry out targeted research, and better understand how to support and protect consumers who continue to have little or no access to the online world. Below, we set out the evidence for which groups are more likely to be digitally excluded, highlighting and explaining the differences between the sources and their findings.

The most recent data acquired through the Media Literacy Tracker CATI survey was based on 3,143 questionnaire responses (via telephone interview) from UK adults aged 18 and over. Analysis indicated that the groups more likely not to have internet access at home – and therefore, more likely to be at risk of digital exclusion – were those aged 75 and over (26%), those in DE households (14%)¹⁴ and those who were not working (13%).¹⁵ Furthermore, among all those of working age (aged 18-64) in DE households, the incidence of not having internet access at home was 5%; this incidence increased to 30% among those aged 65+ in DE households.¹⁶ These are the most up-to-date figures that Ofcom possesses on the groups of people who are statistically more likely to have limited or no access to the online world.



Source: Adults’ Media Literacy Tracker 2021, CATI Omnibus Survey (2021).

¹³ ‘Not working’ includes people who are retired, still at school, in full-time higher education and not in paid employment (not seeking work).

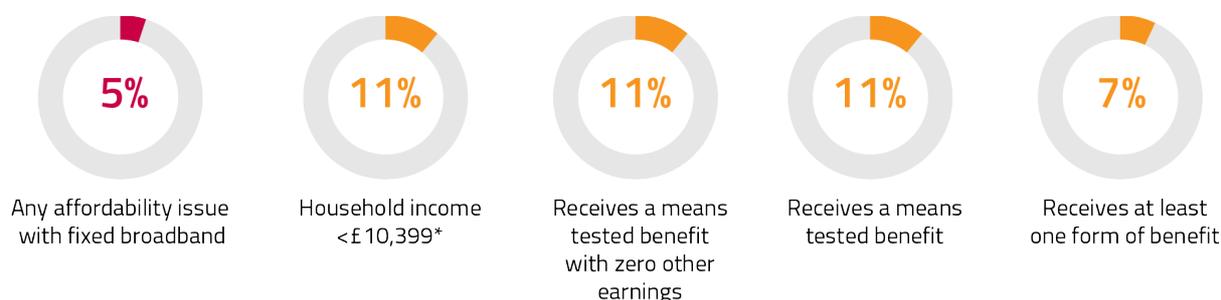
¹⁴ DE is a socio-economic classification which refers to households whose chief income earners are semi-skilled and unskilled manual workers, casual and lowest grade workers, unemployed with state benefits only, and state pensioners.

¹⁵ Adults’ Media Literacy Tracker 2021, CATI Omnibus Survey (2021).

¹⁶ Adults’ Media Literacy Tracker 2021, CATI Omnibus Survey (2021).

Data from the Communications Affordability Tracker also reveals which groups are more likely to have experienced any affordability issues, such as having to modify or cancel their fixed-broadband contract. Around one in ten (11%) fixed broadband households with the lowest incomes (up to £10,399)¹⁷ and the same proportion of those receiving means-tested benefits¹⁸ experienced an affordability issue with this service. The lowest-income households (3%) (up to £10,399), those receiving means-tested benefits with no other earnings (2%) and those currently unemployed (2%) were among those more likely than average (0.4%) to have cancelled their fixed broadband service. Households including someone with a limiting or impacting condition were also more likely than average to experience affordability issues with their broadband service (8%) and to say they had cancelled the service (2%).

Any affordability issue experience with fixed broadband, by group



Source: *Communications Affordability Tracker, 2021. 19*

Previous analysis, using data from the 2020 Use of Communication Services survey, also looked at the likelihood of experiencing digital exclusion issues through the lens of demographic characteristics. Using a base of 4,278 UK adults aged 16 and over, the survey looked at household and personal access to connected devices, use of smartphones, and use of the internet at home or elsewhere. It found that 10% of adults did not use the internet or have access to it at home.²⁰ The analysis indicated that old age, living alone, having a limiting or impacting condition²¹, and being financially vulnerable all significantly contributed to the likelihood of being digitally excluded in terms of use of or access to the internet.²²

¹⁷ Household income up to £10,399 has a low base (80), treat as indicative only. A further 4% of households with an income between £10,400-£15,599 and 7% of households with an income between £15,600- £25,999 experienced any affordability issue with their fixed broadband service.

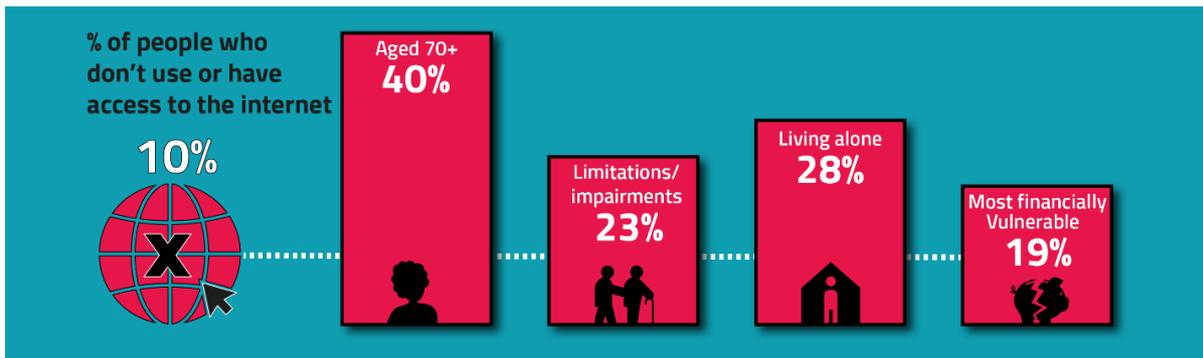
¹⁸ Receive means tested benefits: These are households who receive one or more of the following benefits: income support, income-based job seeker’s allowance, employment and support allowance (ESA), universal credit (both with and without earnings in addition to this). Those who receive more than one form of these benefits are not double counted.

¹⁹ Note: Any affordability issues with fixed broadband based on October data (889). Affordability issues within sub-groups based on rolled data June, August and October 2021 due to low base size in October.

²⁰ Use of Communications Survey: Digital Exclusion Analysis (2020).

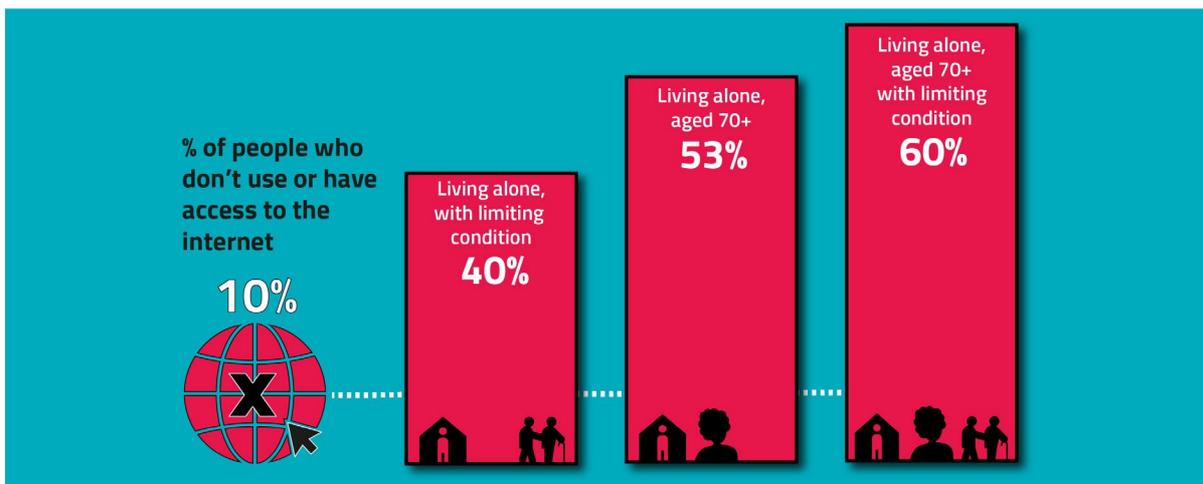
²¹ Limiting/impacting conditions include: Hearing, eyesight, mobility, dexterity, breathing, mental abilities, social behaviour, mental health and other illnesses.

²² Use of Communications Survey: Digital Exclusion Analysis (2020).



Source: Use of Communications Survey: Digital Exclusion Analysis (2020).

When someone has more than one of these characteristics, the likelihood of their being digitally excluded increases further. For those who were living alone with a condition that limited or impacted their use of communications services, 40% said they didn’t use the internet or have access to it at home. Among those living alone who were also aged 70 and over, more than half said they didn’t use the internet or have access to the internet at home (53%). This proportion rose to 60% for people who lived alone, were aged 70+ and had an impacting or limiting condition.²³ This survey will be conducted again in 2022, at which point it should be possible to make comparisons and estimate the effects of the pandemic on these circumstances.



Source: Use of Communications Survey: Digital Exclusion Analysis (2020).

²³ Use of Communications Survey: Digital Exclusion Analysis (2020).

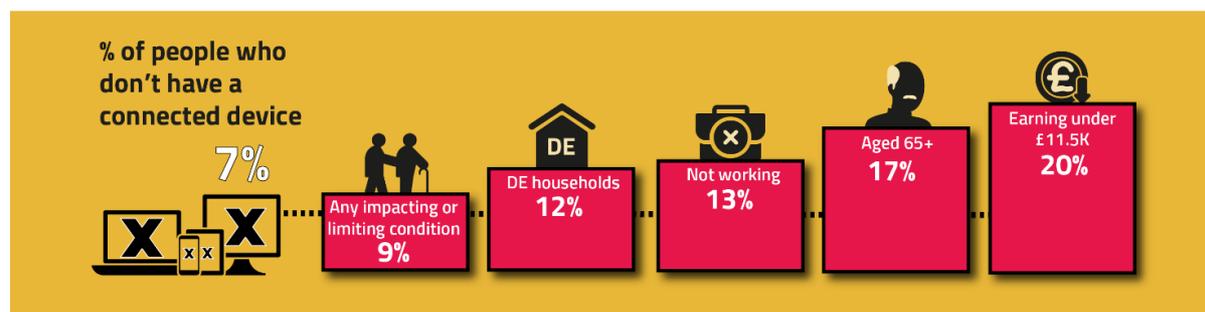
6. What are the causes of and reasons for digital exclusion?

There are a number of reasons why 6% of UK adults remain digitally excluded. These vary from user choice (individuals who feel they have no need for the internet) to issues regarding cost, skills and confidence, and concerns about security and fraud. At times, our various research sources ascribe different levels of importance to these factors; where necessary, these distinctions are drawn out and potential explanations provided.

Physical and financial access

Some adults remain offline because of barriers to access, such as not being able to afford a connected device (device poverty), a broadband service, or sufficient data (data poverty).

According to the 2021 Technology Tracker, 7% of UK adults are affected by device poverty, whereby they have limited access to the internet because they do not own a PC, laptop, tablet or smartphone.²⁴ This is more likely among those aged 65 and older, people on lower incomes, those not working, and those who live with an impacting or limiting condition.²⁵ For the 6% of UK adults who do not have household internet access, the vast majority (77%) do not own a connected device.²⁶ This group may include adults who say that they do not want or need to own a device or get online; however, it is reasonable to assume that a significant proportion of this group would like to get online but cannot afford to. Indeed, the most recent data on the reasons behind not being online indicates that 19% of all adults aged 18+ without internet access at home did not have it because of cost, whether due to set-up fees, monthly payments or the cost of a device.²⁷



Source: Ofcom Technology Tracker: CATI Omnibus Survey (2021).

The 2020 Use of Communication Services survey similarly found that 7% of UK adults did not have access to a connected device in their household.²⁸ This survey used different demographic categories to analyse those more likely to be digitally excluded, and found that those defined as most financially vulnerable, those who live with a condition that limits or impacts their use of

²⁴ Technology Tracker, CATI Omnibus Survey (2021).

²⁵ Technology Tracker, CATI Omnibus Survey (2021).

²⁶ Technology Tracker, CATI Omnibus Survey (2021).

²⁷ Adults' Media Literacy Tracker 2021, CATI Omnibus Survey (2021).

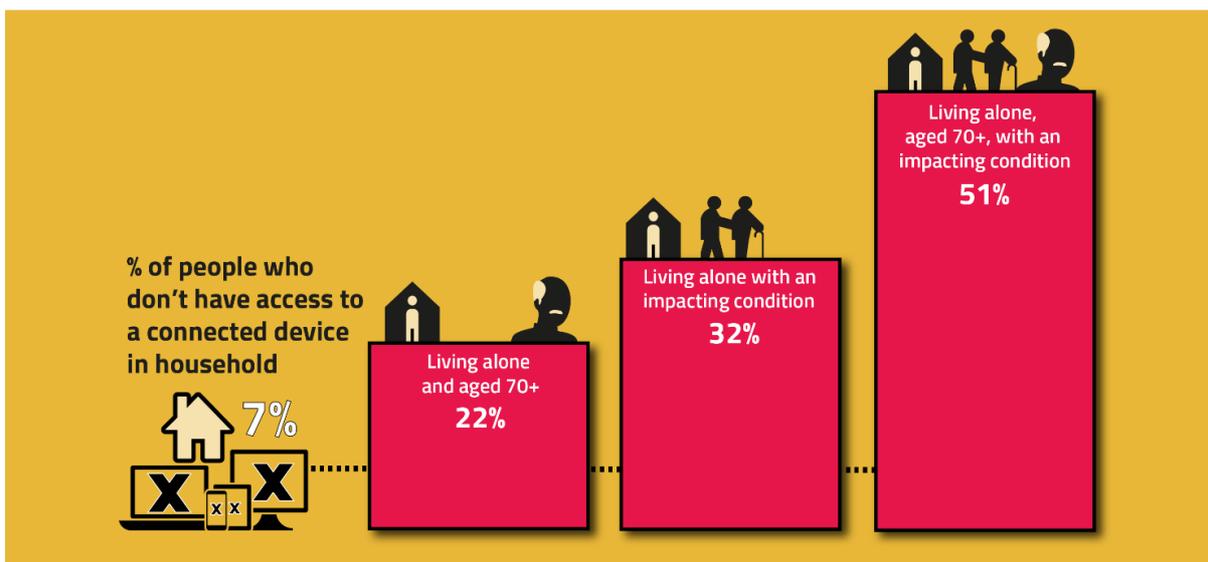
²⁸ Use of Communications Survey: Digital Exclusion Analysis (2020).

communication services, those who live alone, those aged 70 and over, and those who were outside the workforce, were more likely not to own a connected digital device.



Source: Use of Communications Survey: Digital Exclusion Analysis (2020).

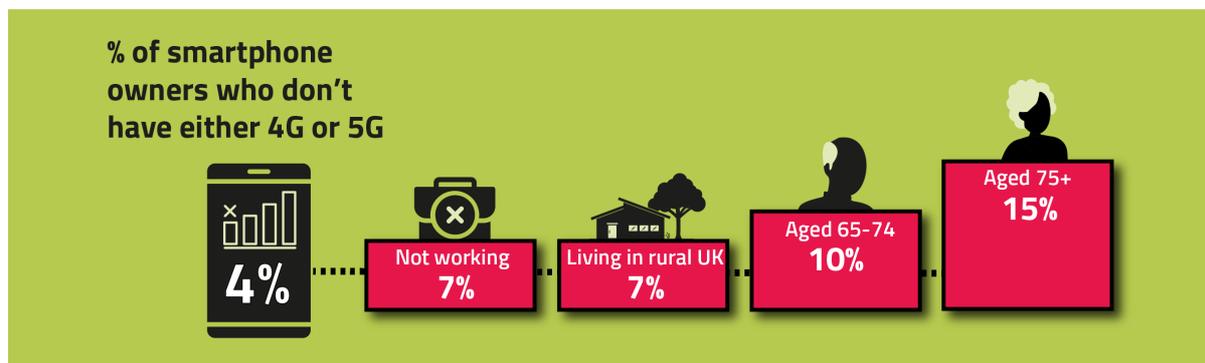
The 2020 Use of Communication Services survey also reveals the impact of combining multiple demographic characteristics on levels of device ownership. For example, one in five of those aged 70+ and living alone lacked access to a connected device in the household, as did a third of those living alone and with an impacting or limiting condition. Of those who lived alone, were aged over 70 and had a limiting condition, more than half didn't have access to a connected device in their household. This demonstrates that there is a correlation between certain demographic characteristics, in terms of how likely an adult is to have access to a connected device in their household; or, in other words, the people who are most vulnerable in our society are less likely to have access to connected devices. It should, however, be noted that this data was collected between 26 February and 17 March 2020, so does reflect the impact of the pandemic.



Source: Use of Communications Survey: Digital Exclusion Analysis (2020).

Owning a digital device does not, of course, guarantee online access. Ownership of smartphones among UK adults is high (88%), but research from our 2021 Technology Tracker reveals that of those

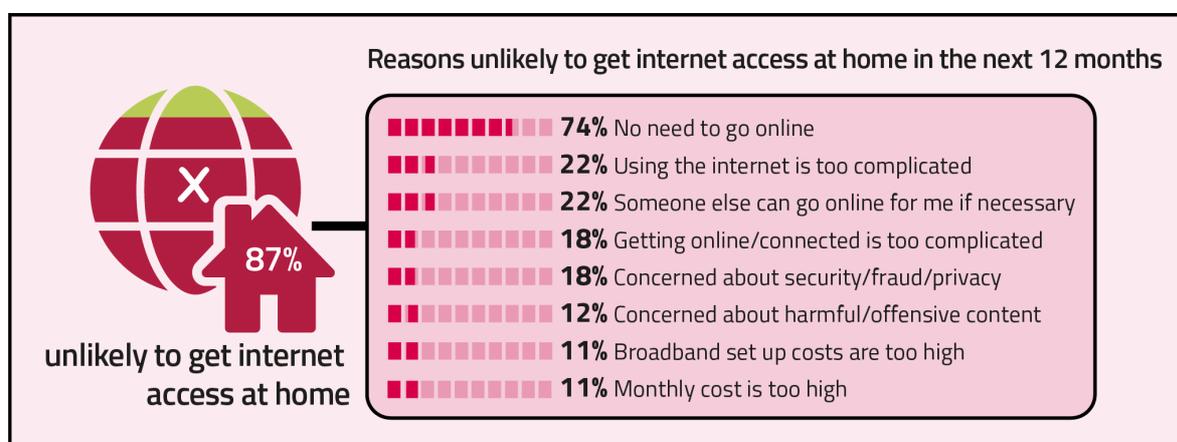
with a smartphone, 4% do not have either 4G or 5G.²⁹ Not having access to 4G or 5G data was more likely among older adults, those living in rural areas of the UK, and those who were not working.³⁰



Source: Ofcom Technology Tracker, Core Survey (2021).

Motivation (including understanding or appreciation of the benefits)

The Technology Tracker (2021) asked those without internet access whether they were likely to get access in the next 12 months: 87% said that they were unlikely to do so. For nearly three-quarters of this group, this was because they did not consider themselves as needing to or were not interested in doing so.³¹



Source: Ofcom Technology Tracker: CATI Omnibus Survey (2021).

The Adults’ Media Literacy Tracker asked adults who were not online why they didn’t have internet access at home. Of this sample, 47% chose lack of interest as the main reason for not getting online.³² A potential explanation for the difference between the results of the two surveys is the question wording and base: the 2021 Technology Tracker asked those who were offline **and** described themselves as unlikely to get online in the next 12 months why this was; the Adults’ Media Literacy Tracker asked all those in the sample who were offline why they did not have internet

²⁹ Technology Tracker, Core Survey (2021).

³⁰ Technology Tracker, Core Survey (2021).

³¹ Technology Tracker, CATI Omnibus Survey (2021).

³² Adults’ Media Literacy Tracker 2021, CATI Omnibus Survey (2021).

access at home. Those who are not online because of cost issues or a current lack of skills and confidence might reasonably assume that they will be able to get online access in the coming year, while those who simply lack interest are less likely to change their intentions.

Nevertheless, both data sources indicate that a considerable proportion of offline adults simply lack interest in the online world. In a world that is increasingly online, for both essential and non-essential purposes, it is perhaps surprising that this proportion is not smaller. However, among those who do not have access and claim to have no interest, some still reap the benefits of the online world as proxy users: almost half (49%) of those who did not use the internet at home had asked someone to do something for them online in the past year.³³ Among these proxy users, the most common reason to ask for help was to buy something (63%).³⁴



Source: Adults' Media Literacy Tracker 2021, CATI Omnibus Survey (2021).

Skills and confidence

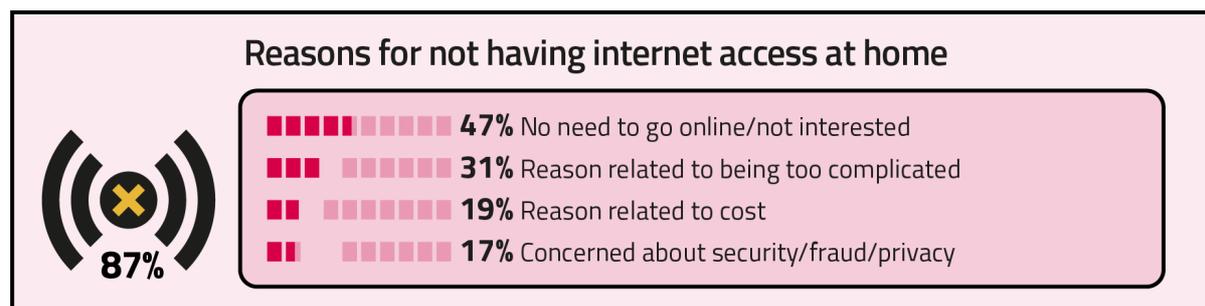
According to the Adults' Media Literacy Tracker, another common reason for not going online was an issue of skills and understanding; almost one third of those offline stated that the internet was too complicated (31%) – either getting connected to it or using it.³⁵ Related to this, 17% of those without internet access at home cited concerns about security, fraud and privacy as a reason for staying offline.³⁶ This indicates that a lack of confidence, and in some cases concerns about the safety and security of the internet, are significant reasons why 6% of UK adults are still digitally excluded.

³³ Adults' Media Literacy Tracker 2021, CATI Omnibus Survey (2021).

³⁴ Adults' Media Literacy Tracker 2021, CATI Omnibus Survey (2021).

³⁵ Adults' Media Literacy Tracker 2021, CATI Omnibus Survey (2021).

³⁶ Adults' Media Literacy Tracker 2021, CATI Omnibus Survey (2021).



Source: Adults' Media Literacy Tracker 2021, CATI Omnibus Survey (2021).

Some of those who have access to the internet at home do not feel confident using it. The Adults' Media Literacy Tracker asked respondents who go online why they do not complete government processes online, such as updating Universal Credit, renewing a driving licence or a passport. The responses demonstrate that there are still many people who find using the internet more complicated than the alternative, potentially more arduous offline processes: 18% preferred to make a phone call; 17% preferred to talk in person; and 14% said that the websites or apps are difficult to use or take too long.³⁷ This suggests that there is a residual section of the population who prefer to carry out important everyday tasks by other means, despite having access to the internet.

The Communications Consumer Panel (CCP) research into digital connectivity during the pandemic found that lack of digital skills and development opportunities were two of the main barriers. The CCP characterised this as those without digital skills and confidence feeling as though they were 'driving without a licence'. The following quotes illustrate the distress and frustration that can arise as a result of not having the right skills to use the internet effectively.

"I haven't got a clue, I can be sat looking at a blank screen and I just can't make it work. You think it's your fault, and it makes me cross." 58-year-old man, runs a microbusiness, lives in a rural area in Wales.

"(My family) were keeping in touch with one another on Zoom but I wasn't able to see them. I was mad at myself, I wanted to do it myself and I felt so stupid as it's a wee simple task, but I can't do it." 58-year-old woman, has a mental health condition and is living on a very low income, lives in an urban area in Scotland.

"I haven't got enough knowledge, it's not easy for old people. Downloading – I've got no idea what that means. I don't want to make mistakes, I'm frightened to because of the outcome. Banking online I don't trust, as you hear all these stories about people being swindled." 84-year-old woman, first-time internet user, clinically vulnerable and shielding, lives in an urban area in the South of England.

Together, these insights paint a picture of internet users who, despite having some form of access, are nonetheless limited in their ability to navigate the online world because of a lack of confidence, skills or knowledge. The next section of this report examines how the Covid-19 pandemic has made these negative impacts all the more acute.

³⁷ Adults' Media Literacy Tracker 2021, Core Survey (2021).

7. How has Covid-19 impacted digital exclusion among adults in the UK?

Ofcom has long conducted research into the number of people who are digitally excluded in the UK, showing a downward trend over the last ten years, as more and more people have gained access to the online world. The Covid-19 pandemic brought new challenges for adults in the UK who were not online. It also brought challenges to Ofcom as a provider of robust, up-to-date research which had traditionally been conducted face to face. This required us to adapt our methodologies and approach digital exclusion from new angles to uncover the impact of the pandemic on those who lived with limited or no digital access. Our research has shown that for some, the pandemic has been a catalyst for the acquisition of new digital skills. But for others, the digital divide has become more entrenched as an increasing number of everyday activities and services have moved online, potentially forever.

On the one hand, the pandemic has been a catalyst for positive change

As previously stated, it is not possible to measure change by directly comparing the results of the most recent Technology Tracker and Adult Media Literacy Tracker waves with previous years, because of the necessary changes in methodology. However, Ofcom's qualitative research gives us an insight into how the pandemic has been a catalyst for change. Several participants in the Adults' Media Lives study with limited digital skills have embraced new technology and become more confident online, because they needed to find new ways to access services or support networks that were no longer available face to face.³⁸ They used services such as online shopping, banking and video-calling apps for the first time. Other participants helped older or less digitally-literate friends and relatives get online or navigate new online activities.

³⁸ Adults' Media Lives (Wave 16) (2020).

“You're forced to learn and to keep up with what was going on. It was a point of contact, it was important... I was so grateful for WhatsApp, and I was grateful that I could do the banking online.” Female, 54, housing officer, Coventry.

“Because I'm over 75 I've got to apply for a [driving] licence every three years... I was able to do that online without any assistance which was quite good... Certainly I'm more comfortable enquiring about things, I'm not so frightened of clicking buttons and making mistakes.” Female, 76, retired, Edinburgh.

“They've actually stepped up quite a bit with the tech, the parents, to be fair... I've actually got them on online banking which is a bit of a coup because my dad is [usually of a mind that] if he hasn't got his passbook it's not happening.” Female, 43, fundraising manager, Cardiff.

On the other hand, the pandemic has entrenched the digital divide and put others at risk

For those who have remained offline during the pandemic, life has probably become more difficult as vital support networks and services have moved online. The CCP's research uncovered a range of negative impacts associated with insufficient connectivity, which at the most extreme affected some people's access to essential products and services, health outcome, finances, and their ability to maintain social connections, contributing to their isolation.³⁹

The CCP identified which types of people are most likely to have been affected by connectivity challenges during the pandemic. It highlighted that some of the barriers faced were structural rather than personal issues. These included the lack of option to upgrade their internet access; lack of an adequate response from communication providers regarding connection problems; lack of financial support to get the necessary equipment; the inherent lack of usability of some digital government services; and insufficient access to assisted digital support or skills development.

³⁹ Digital resilience and vulnerability during the pandemic, Communications Consumer Panel (2021).

CHALLENGES	WHO IS AFFECTED AND WHY
 <p>Connection reliability/speed</p>	<ul style="list-style-type: none"> → People who live and/or work in locations with poor or no digital connectivity, particularly in rural and remote areas, have difficulty accessing the online world. → But connection and speed issues also affect people living in: <ul style="list-style-type: none"> ◆ certain types of housing e.g. basement flats, high rise, high density, etc; and ◆ larger households, or those with high bandwidth requirements.
 <p>Equipment/devices</p>	<ul style="list-style-type: none"> → People who lack spare device(s) for their children to learn at home. → People who have no device other than a mobile. → People who require additional equipment to work from home. → People whose hardware or software is outdated.
 <p>Affordability/contract</p>	<ul style="list-style-type: none"> → People who can’t afford the cost of equipment (including devices as well as additional items like printers, monitors, headsets etc.) → People who cannot afford a broadband contract or data costs. → People who feel they are not getting a satisfactory broadband service and therefore not receiving value for money. For many in this group, the solution offered by their service provider involves additional cost and for some this did not improve their situation.
 <p>Digital skills</p>	<ul style="list-style-type: none"> → People who lack technical skills; the social skills needed to interact online; and/or the critical thinking skills needed to understand and navigate a complex landscape of online information.
 <p>Other types of challenges</p>	<ul style="list-style-type: none"> → People with low literacy or English language proficiency are less able to navigate essential government services or official information; this is compounded in an online environment for those who, in addition, lack adequate digital skills. → In addition, having low literacy or English skills could be a barrier to accessing support to help overcome any difficulties experienced. → People who are financially excluded, such as not having access to a debit card, are therefore not able to undertake online transactions. → Some people with mental health conditions have lower personal resilience; this can make it difficult to overcome challenges and engage with services.

Source: *Digital resilience and vulnerability during the pandemic, CCP (2021).*

Ofcom has gathered research on people who are at risk of becoming digitally excluded because of financial difficulties, brought on or made worse by the pandemic. Qualitative research conducted to understand the financial impact of Covid-19⁴⁰ found that older and more affluent groups were largely unaffected financially, and that most impact was felt by younger and less affluent groups. Those categorised as being in a ‘tight spot’⁴¹ financially felt worse off and more vulnerable as a result of the pandemic. They spoke of difficulty managing their finances, even when prioritising the most important bills: rent or mortgage; food; energy; and crucially, access to the internet.⁴² These

⁴⁰ Blue Marble research: Understanding the financial impact of Covid-19, (2020-2021). Qualitative interviews among 25 GB households via 60-minute video call. Each household was interviewed across six waves between May 2020 and June 2021 to gain an understanding the changes that Covid-19 has had on their financial lives.

⁴¹ They stated their income was down and expenditure the same (or higher).

⁴² Blue Marble: Understanding the financial impact of Covid-19 (2020-2021).

qualitative findings add context to the Communications Affordability Tracker, which identifies that the lowest-income households and those in receipt of benefits were more likely to have an affordability issue with their fixed broadband service.⁴³

⁴³ Communications Affordability Tracker (2021).