

Digital disengagement and impacts on exclusion



Overview

- Digital disengagement refers to people that have limited access to the internet or digital devices for motivational or personal reasons, rather than other forms of digital exclusion, such as access or affordability barriers. However, reasons behind digital exclusion can be inter-related.
- Digital disengagement and other forms of digital exclusion are negatively associated with social, health, employment, and financial inequalities, and can compound existing inequalities.
- In 2024, Ofcom estimated that 6% (1.7 million) of UK households did not have the internet at home. It is not clear how many are disengaged due to motivational reasons. However, multiple surveys indicate that lack of interest is the most cited reason for being offline. Other motivational reasons include fear of scams, or lack of confidence and skills.
- Levels of digital engagement are on a spectrum. People may engage with some aspects of digital technology but not others, depending on factors associated with the task, device, confidence, or current life circumstances.
- Stakeholders expressed policy considerations including refreshing the 2014 Digital Inclusion Strategy, improving accessibility, developing digital skills, empowering choice when using technology, and preserving non-digital services and solutions.

Background

Digital disengagement refers to motivational and personal reasons for not being online or using digital devices. It is closely linked to digital exclusion, which broadly refers to people who cannot fully participate in society because they have limited access to internet or digital devices, or are unable to use them.¹⁻³

Issues associated with digital exclusion (Box 1) are well recognised in academic research and UK policy.^{1,2,4-6} Motivational barriers have not been researched in as much depth, or been as much of a focus in policy compared to ability, access and affordability.⁷⁻⁹

It can be challenging to separate issues associated with digital disengagement and other forms of digital exclusion. This POSTnote focuses on digital disengagement and references digital exclusion more broadly where relevant and inter-linked.

Box 1: Key issues associated with digital exclusion

Motivation: Motivational or personal barriers preventing people from engaging online include lack of interest, low confidence, mistrust in the internet, or challenges with using the technology due to inaccessibility (see [potential reasons for disengagement](#)).⁷ People may make a deliberate choice to not engage with some digital activities, such as owning a smartphone (see [selective engagement](#)).

Ability: Those lacking basic digital skills are excluded by not being able to navigate the online environment.⁵ Lack of skills can also affect motivation.

Access: Digital exclusion can result from people lacking the infrastructure to access the internet, such as not having adequate broadband or devices to connect with.^{1,4,10}

Affordability: Digital exclusion can occur if people cannot afford the costs of being online.¹¹ Ofcom's 2024 Adult's Media Use and Attitudes report found that 17% of people who did not have internet at home, did not have internet because of reasons relating to cost, for example of broadband and devices.^{a 4}

What is digital disengagement?

Disengagement may be an active choice, as people have differing views on the benefits of online engagement and preferences for non-digital options. It can alternatively be due to external factors that are beyond the person's control.^{7,12,13}

Digital disengagement does not necessarily mean that people are completely offline. Online engagement may be selective based on the type of task, for example (see [selective engagement](#)).¹⁴

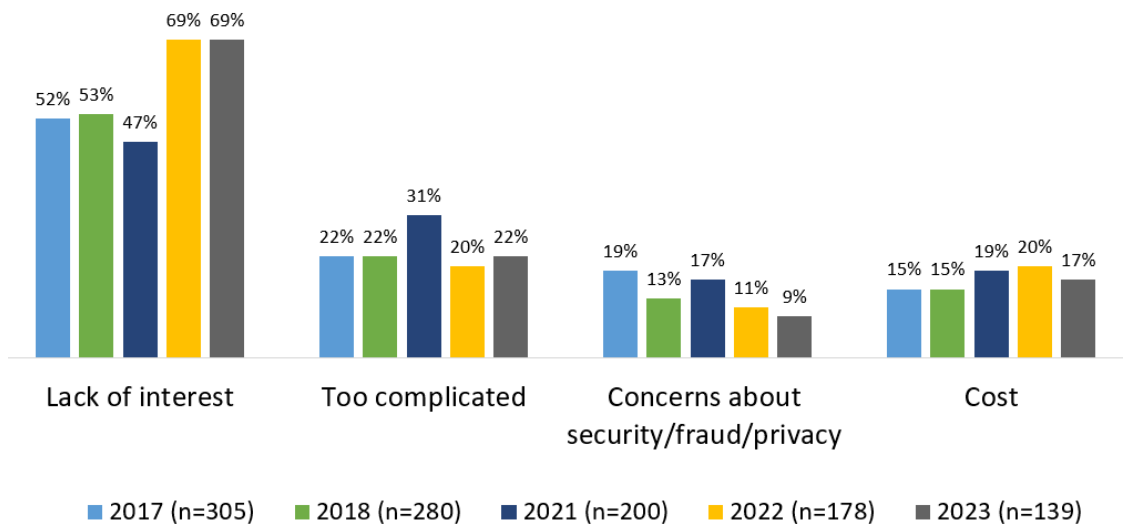
^a This Ofcom report uses data from the quantitative Adults Media Literacy Tracker survey, which discusses media use, attitudes and understanding among UK adults aged 16 or over annually. This statistic is based on answers from 139 respondents, that are UK adults aged 16 or over.

Survey data from Ofcom and others indicate that motivational barriers are the most common reason for being offline (Figure 1).^{4,5,7,15,16} In 2023, respondents were over four times more likely to specify lack of interest for non-use, compared to cost (Figure 1).^{4,10,17,18}

It is not clear exactly what proportion of the public are disengaged, as people may have multiple reasons for being offline and disengagement is not clearly defined.

Research on motivational factors is often based on small sample sizes, potentially as those offline are a smaller and harder to reach proportion of the public (see [future research and representation](#)). The proportion of the public that do not have internet at home has been decreasing, which indicates that the population still not regularly online are increasingly those that are not interested (Figure 1).^{4,10,17}

Figure 1: Percentage of people that don't have internet at home that were asked "Which of these are reasons that you don't have internet access at home?"



Source: Ofcom's Adult Media Use and Attitudes Survey data. Respondents (number in brackets) could pick multiple reasons, and not all answers are presented here. Respondents were UK adults aged over 16 years.

Measures of digital disengagement

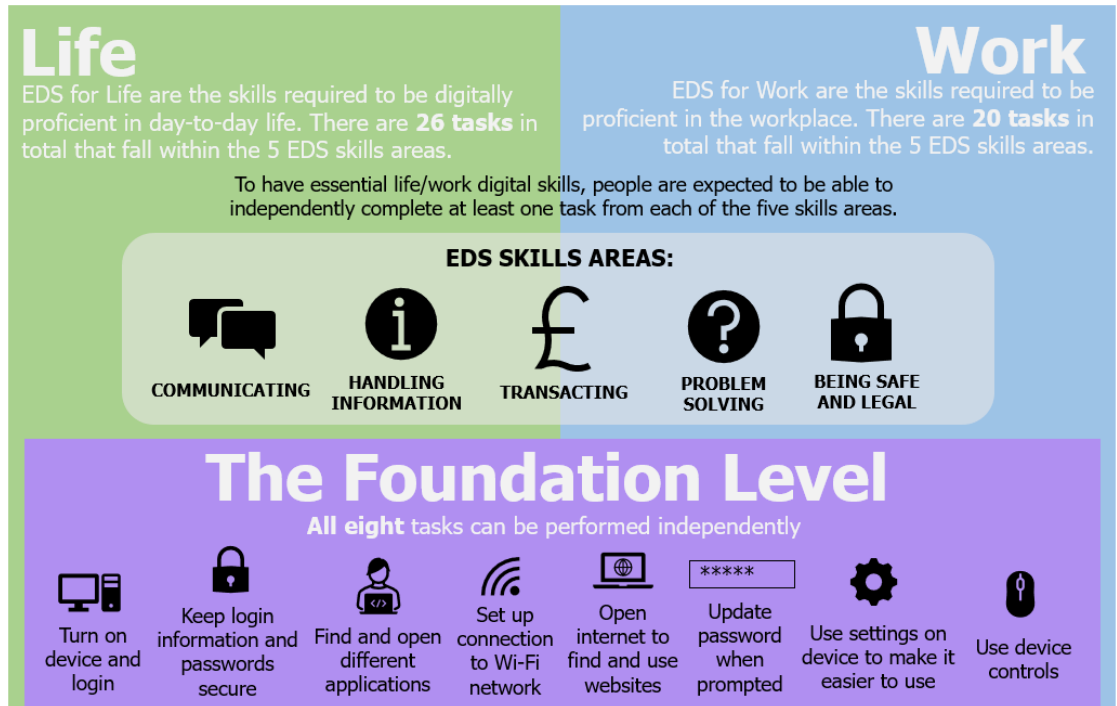
While there is no widely used measure for digital disengagement, measures related to digital skills and access are relevant as lacking skills can be an underlying reason for why people do not engage online (see [potential reasons for disengagement](#)).^{2,12,19-22}

Essential Digital Skills framework

The Essential Digital Skills Framework (EDS) was launched in 2018 by The Tech Partnership, Lloyd's Banking Group, and the UK Department for Education. It is aimed at organisations that support adults to improve their digital skills.^{5,23,24} The framework is composed of foundation level, life skills, and work skills (Figure 2).

The 2023 Lloyd's Consumer Digital Index report estimated that 8.5 million people (16%) lacked at least one of the EDS foundation level skills and 1.3 million (2%) lacked all foundation level skills.^{b 17}

Figure 2. Summary of the Essential Digital Skills (EDS) Framework



Source: Adapted from the Lloyd's Banking Group 2022 and 2023 Consumer Digital Indexes.

Minimum Digital Living Standard 2024

In 2024, a team of academics and professionals published the Minimum Digital Living Standard (MDLS), which outlined the minimum goods, services, and skills that households with children need to participate in a digital society, as defined by members of the public.²⁵ The report found that four in ten (equivalent to 3.7 million) households with children did not meet the MDLS.^{25,26}

Who is more likely to be disengaged?

Studies show that digital disengagement is more common in some demographic groups than others, and that circumstance is linked to attitudes towards being online.^{4,7,14,27}

Digital exclusion (including disengagement) is more likely to be experienced by those that are already disadvantaged in society.^{7,14,28-30}

^b This report is the Lloyd's Banking Group Consumer Digital Index. The annual report uses transactional and survey data to understand and measure the UK's digital and financial capabilities. In 2022 and 2023 reports, telephone survey data was collected from 2,700 18-70 year olds from across the UK.

- **Low social grade^c or income:**^{7,31,32} People in lower social grades (D and E) are more likely to be digitally disengaged than those in higher social grades (A and B).^{2,7} People with lower incomes are also more likely to be disengaged.^{31,33,34}
- **Lower education and/or general literacy:** People who left education before 16 years of age, and/or have low confidence in general literacy, are more likely to be disengaged.^{7,32} Older adults with a higher education level, who do not use the internet, may be more willing to start using the internet in the future.¹³
- **Households without children** are more likely to be disengaged.^{7,33} Good Things Foundation^d found that for every child in the household, non-users were 1.7 times less likely to say “it’s not for me” as the reason they were offline.
- **Older people:**³² Older people (65+ years) are less likely to be online and/or have basic digital skills.^{2,17,31,33–36} Older people are also less likely to believe that the internet is relevant to them.^{13,31,35}
- **Disability or long-standing health issues:** Disabled adults are less likely to use the internet than non-disabled adults.^{17,33,36} Ongoing health concerns, such as fatigue or chronic pain, may also make it more difficult to engage online if technology is inaccessible.^{33,37} A 2024 report by Ipsos UK for the Department for Work and Pensions^e (DWP) found that the greatest self-reported decrease in internet usage was amongst customers with long-term sickness or disability.¹⁹

Influence of life circumstances

People may be less likely to be digitally engaged due to other lifestyle factors. For example:

- **Proxy-users:** According to Ofcom, over half (52%) of those offline have someone else to use the internet for them (proxy-user).⁴ Common reasons include online shopping and accessing health services.^{2,4} A proxy-user can increase interest and confidence, or they can delay or prevent people from gaining online skills if there is no immediate need.^{4,38–40}
- **Covid-19:** The pandemic created a greater reliance on being online, and was a catalyst for engagement, but also heightened impacts of digital exclusion.^{2,41} For example, during the pandemic, people offline were more socially isolated than those online.^{2,20,42}

^c Social Grades were developed by the National Readership Survey to classify households based on the occupation of the main income earner within the household, or individuals. There are six classifications: A, B, C1, C2, D and E, where Grade A is the highest and Grade E is the lowest social grade.

^d This study’s findings were based on (a) a quantitative analysis of the raw data from Ofcom’s 2017 Media Literacy Survey, (b) a literature review, and (c) interviews with 13 non-users at six Good Things Foundation Online Centres. The 2017 survey data had 1,875 respondents in total, and 305 respondents that were non-users and answered questions on why they are not online.

^e This report used research by Ipsos UK that conducted 7,998 interviews with DWP customers between March and June 2023. 76% of interviews were over the phone and 24% were online. The sample of DWP customers was stratified by the type of benefit they claimed, and assigned based on their most recent benefit claim.

Potential reasons for disengagement

Potential reasons for digital disengagement may be inter-related and/or experienced simultaneously.^{4,7,13,13,14,43}

Lack of interest

According to multiple surveys, the most commonly cited reason for not using the internet is lack of interest.^{7,14,19,31}

Ofcom's 2024 Adult's Media Use and Attitudes report found that the most common (69%) reason for not having internet access at home was not being interested or not having the need to go online (Figure 1).⁴

Those with genuine disinterest may be unaware of the benefits of the internet or have less of a need due to non-digital alternatives.^{12,44,45} For example, non-users may make deliberate choices to limit online or digital activities, or prefer face-to-face contact to online interactions.^{19,38}

Disinterest may mask underlying reasons, such as lack of skill, concerns about affordability, or lack of trust in online services.^{7,13,14,35,38} Survey data may therefore show an inflated proportion of people saying they are not interested.

Lifestyle also influences opinions and attitudes towards digital technology use.²⁷ Non-digital alternatives, such as visiting a bank, can be a key part of someone's routine and for such people, online banking may be less convenient.^{21,29,46}

Lack of confidence and skill

Lack of digital skills is a direct form of digital exclusion (Box 1). However, it can also contribute to digital disengagement if it creates a psychological barrier.^{12,20-22,47} People may be reluctant to engage due to low confidence or shame associated with asking for help.^{2,12,19-22}

In 2024, Ofcom found that 22% of respondents did not have internet at home as they perceived the internet as "too complicated".^{f 35} A 2024 report by Ipsos UK for DWP found that internet confidence varied based on age, level of education and social grade, and was related to how often customers accessed the internet.¹⁹

Once gained, digital skills are not necessarily retained, as skills can be lost or become outdated with technological advancements.^{21,22} Confidence and/or skills could also be compromised by becoming less able to access the technology, for example due to sight loss (see [accessibility and user interface](#)).¹⁹

^f This statistic was part of the Adults' Media Literacy Core survey and had 139 respondents aged 16 and over, across the UK.

Safety concerns

Having the skills to navigate the internet safely can build confidence to deal with online risks and improve users' trust and engagement.^{7,31,48} Positive experiences can make someone more confident in dealing with riskier tasks. However, negative experiences, such as scams, viruses or data breaches may cause someone to disengage from online activities.^{12,22,49,50}

In 2024, Ofcom found that 9% of those who did not have internet at home cited concerns about security, fraud and privacy, which has decreased from 19% since 2017 (Figure 1).³⁵ In 2020, Age UK reported that 39% of respondents aged 65-74, and 39% aged 75 and over, who wanted to be online, were offline because they did not trust the internet.^{g 51,52}

Research has found that victims of domestic abuse may develop mistrust around technology if used against them, for example if the perpetrator used online services to monitor or harass them.⁵³⁻⁵⁶

Accessibility and user interface

People may disengage from online systems and devices if they are too difficult to use.^{9,57,58} This is particularly an issue, but not exclusively, for people with physical, sensory, neurological, and cognitive disabilities.^{31,47,49,59-63}

In 2019, the Click-Away Pound survey estimated that 4.9 million people abandoned a retail website because of features that made the website difficult to navigate (Table 1).^{h 64} The report estimated that inaccessibility resulted in £17.1 billion of lost business from these websites, as consumers alternatively spent this money on more "barrier-free" sites.⁶⁴

^g This briefing used data from the 2020 English Longitudinal Study of Ageing Covid 19 Study, Wave 1-2. Data was collected through telephone and online interviews of people aged 52 and over. Wave 1 had 2,040 respondents and wave 2 had 6,794.

^h The Click-Away Pound survey explores online shopping experiences of people with disabilities.

Table 1: Most common website issues faced by users with access needs (including those using Assistive Technology)

Website Issue	Percentage of respondents who had this issue in 2019
Crowded pages with too much content	66%
reCAPTCHA test ⁱ	63%
Poor link information and navigation	59%
Filling in forms	56%
Poor legibility (colour contrast and text layout)	55%
Distracting moving images and graphics	53%
Poor keyboard access	42%
Poor screen reader access	35%
Other	19%

Source: Click-Away Pound Report 2019

Digital accessibility is particularly well researched in older adults, as reduced sensory perception, or physical and cognitive impairments are key barriers to digital engagement.^{9,47,59,65} This is compounded by difficulties finding accessibility features, and user hesitation to use trial-and-error approaches, such as clicking different links to navigate a website.^{65,66}

Selective engagement

Disengagement may be selective, and varies depending on factors including:^{4,31,32,67}

- **Risk:** Different tasks incur different perceived levels of risk associated with online safety (see [safety concerns](#)).⁶⁸ For example, the benefits of online banking may appeal, yet the financial risk from user errors or fraud may prevent engagement.³¹
- **Type of task:**⁶⁷ Complex tasks, such as organising property repairs with local authorities, may be preferable in-person if online support is unavailable.^{19,69} People may also have the skills to do some tasks and not others, which may influence the tasks they engage with.¹⁷
- **Type of device:** In 2024, Ofcom found that 17% of UK adults access the internet exclusively via a smartphone, and 29% of this group feel disadvantaged

ⁱ The reCAPTCHA test is a security measure used to distinguish between human users and automated bots by requiring users to complete tasks that are easy for humans but difficult for bots.

due to this.^{j 4,33} Tasks such as completing forms and working on documents can be more difficult on smartphones, due to the website or application design being incompatible with the device.⁴

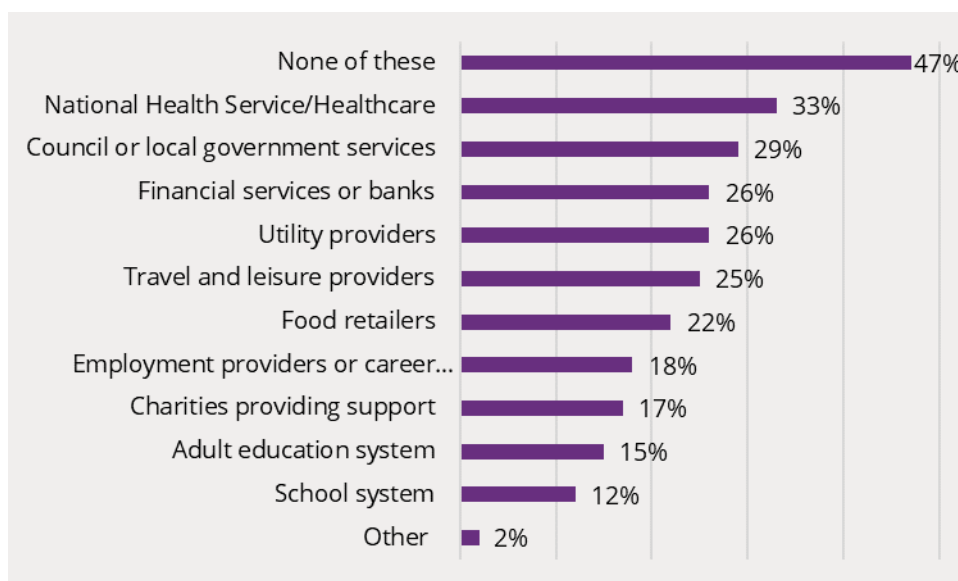
Impacts of digital disengagement

Access to services

UK services are becoming increasingly digitalised, with the aim of making them quicker, cheaper and more efficient.⁷⁰ Ofcom's 2024 Adult's Media Use and Attitudes report^k found that 81% of respondents use online banking or pay bills online, 52% use online local council services, and 55% complete government processes online.^{l 35}

This can make accessing essential services more difficult for those who are digitally disengaged or wish to be selective with online engagement (Figure 3), because non-digital services may be of worse quality or withdrawn.^{5,46,47,71,72}

Figure 3: Results of 125 offline respondents who were asked "Which of the following organisations, if any, do you find more difficult to interact with through not being online?"



Source: Lloyd's Digital Consumer Index 2022

^j This survey question was from the Adults' Media Literacy Core survey. The sample size was 605 people aged 16 and over, across the UK.

^k This statistic uses survey data from the Adults Media Core survey, which had 3,463 respondents aged 16 or over, across the UK.

^l Similarly, the Lloyd's 2022 Digital Consumer Index found that 88% of people use online banking services in the UK, and 58% use online local council or government services.⁵

Exacerbating inequalities due to digital disengagement

As digitisation increases, being offline, or partially offline, can impact somebody's life in new ways that can lead to further inequalities (Table 2). Due to the widespread extent of digitalisation across services, someone that is digitally disengaged will likely experience inequality in multiple areas of life.⁷³

Table 2: Types of inequality of digital exclusion relating to disengagement

Health inequality	<p>Health inequalities may result from reduced access to healthcare services and information (see access to services), or through lack of access to indirect health benefits associated with being online.^{37,74,75}</p> <p>There is limited evidence that digital exclusion directly impacts health.⁷¹ Digital technologies and well-being are complex concepts, which can make them challenging to research, and requires large-scale, broad studies that differentiate between different types of internet use.⁷⁶</p> <p>In 2021, the Lloyd's Consumer Digital Index found that 49% of people said the internet helps them to manage and improve their physical and mental health.⁷⁷ Another review found that frequent use of digital technologies can also have potential harms, such as reduced attention, social isolation, and disruption of sleep.⁷⁸</p> <p>Research by the Ada Lovelace Institute suggested that digital health services in the UK are being designed without consideration for those that are digitally excluded.³⁷ They found that this can lead to a 'data divide', whereby the data of those people are not included in future planning and service design.^{37,75}</p> <p>There is also evidence that a significant number of carers in the UK are not internet users, which may present inequalities for carers and patients as resources and services move online.^{79,80}</p>
Employment inequality	<p>The 2023 Lloyd's Consumer Digital Index found that 18% of the UK labour force can complete at least one task in each of the five work skills areas of the EDS framework (Figure 2).^{m 5}</p> <p>In 2022, the Consumer Digital Index found that those with digital skills made up to £442 more per month in a similar job.⁵ The Centre for Economics and Business Research (CEBR) found that digital upskilling of the workforce could amount to £586 million in additional earnings.⁸¹</p> <p>Being online can also make it easier to find and get a job, as most jobs are only advertised online.^{1,77,81}</p>

^m The 2023 Lloyd's Banking Group Consumer Digital Index telephone survey data was collected from 2,700 18-70 year olds from across the UK.

<p>Education inequality</p>	<p>There are different forms of online education and learning, ranging from formal education, such as school, studying for an academic degree or job training, to informal learning, such as reading the news and fact-checking.⁸² People with negative attitudes toward digital technologies are less likely to engage with online learning activities.^{1,82}</p> <p>School education has become more digitalised since the Covid-19 pandemic, and there are inequalities among students that use digital technologies for school work, driven by digital skills gaps and affordability barriers.^{1,25,83}</p>
<p>Marginalisation and social exclusion</p>	<p>Social inequalities are unequal opportunities, experiences, and rights in society. Evidence suggests that social exclusion and economic disadvantage are determinants of digital disengagement (see who is more likely to be disengaged?).^{1,16,84}</p> <p>Disengagement can exacerbate existing social inequalities, particularly as digital exclusion is more common in disadvantaged groups, such as low income households (see who is more likely to be disengaged?).^{7,14,28,85}</p> <p>Digital disengagement can create new forms of social exclusion when non-users do not fully participate in a modern digital society. For example, many socialisation opportunities are now online through social media, which can make non-users feel left out and isolated.^{1,31}</p>
<p>Representation</p>	<p>In an increasingly digitalised society, being offline may limit someone’s representation in society.¹</p> <p>Good Things Foundation and other academic stakeholders expressed that those offline can lack a voice in society, and risk becoming “second-class citizens”.^{16,28,68}</p> <p>In 2023, a House of Lords Communications and Digital Committee inquiry on digital exclusion highlighted democratic inclusion as a key case for intervention, stating that those without online access “risk being left voiceless”.¹</p> <p>Digital disengagement may limit representation in data used for analytics, such as in artificial intelligence training sets.^{1,75,86,87} This may result in outputs, such as using data to improve services, that are not representative of the needs of people offline.⁷⁵</p>
<p>Financial inequality</p>	<p>Having good digital skills can have a positive impact on personal finances and financial capability.^{n 5,34,88} A 2023 report by The Centre for Social Justice found that on average, consumers without access to the internet paid 25% more across different transactions than online users.³⁴</p> <p>People from lower socioeconomic backgrounds and with lower incomes are more likely to be digitally disengaged and/or excluded, which risks further</p>

ⁿ Financial capability refers to being more capable of managing money, for example by having savings, avoiding debt, or preparing for future and unexpected events.

compounding their socio-economic disadvantage (see [who is more likely to be disengaged?](#)).^{7,89}

The rising cost of living also exacerbated financial inequalities via digital exclusion, as more people experienced poverty, and were unable to benefit from the online tools to save money, apply online for state benefits, or find support.^{90,91}

Policy activity

UK policy relevant to digital disengagement includes responsibilities of the UK Government, as well as power and responsibilities devolved to different nations, regions and local authorities.¹ Community organisations and charities also play a role in providing the experience and expertise to make policy into action and outcomes.¹

Digital Inclusion Strategy 2014

In 2014, the Cabinet Office and Government Digital Service published the Digital Inclusion Strategy, which outlined ten actions that the then-government would deliver over two years to tackle digital exclusion.^{o 92}

Since 2014, the previous government continued to use the strategy principles to inform new cross-departmental initiatives around digital exclusion (Table 3).^{93–95} However, the most recent progress report was in March 2015, and the strategy's central partner, Doteveryone (formerly Go On UK) has not existed since 2020.^{1,96}

UK Digital Strategy 2022

In 2022, the Department for Digital, Culture, Media and Sport published their UK Digital Strategy (Table 3), which aimed to boost the digital economy, develop digital skills and talent, and help the UK to become a world leader in digital technologies.⁹³ This strategy did not specifically set out aims around digital inclusion or engagement, although it included related activities.

House of Lords Communications and Digital Committee inquiry 2023

In 2023, the House of Lords Communications and Digital Committee conducted an inquiry on digital exclusion.¹ The committee recommended that the government publish a new digital inclusion strategy, and a progress update on the 2014 objectives.¹ It also recommended better use of the EDS framework (Figure 2), more in-person support for those who cannot navigate and access online services, and an audit of public sector websites for compliance with accessibility standards.¹

^o Examples of the actions in the Digital Inclusion Strategy include: making digital inclusion part of the wider government policy, programmes and digital services; establish a cross-government digital capability programme; and give all civil servants the digital capabilities to use and improve government services.

Table 3: Government actions to tackle digital exclusion

Government department	Mentioned in UK Digital Strategy 2022 ⁹³	Other actions
Department for Education (DfE)	DfE provides essential skills training for adults in England, including digital skills needed for life, work, and further study.	<p>DfE funded the Future Digital Inclusion programme, managed by Good Things Foundation, which supported digital skills training in community settings between 2014 and 2021.^{97,98}</p> <p>DfE introduced a digital entitlement in 2020 for adults with low or no digital skills to undertake digital qualifications free of charge.^{1,95,99} Qualifications include Essential Digital Skills qualifications (EDSQs) and Digital Functional Skills qualifications (FSQs), introduced in 2023.^{95,99}</p> <p>DfE introduced digital Function Skills Qualifications (FSQs) in August 2023.⁹⁵</p>
Department for Work and Pensions (DWP)	DWP supports adults online who lack digital skills for work by identifying gaps in their skills and referring them to training.	DWP's Flexible Support Fund can be used by Jobcentre Plus staff to purchase digital goods and services to support benefit claimants moving into work. ⁹⁴
Department for Culture, Media, and Sport (DCMS)	DCMS is providing a trusted network of accessible locations offering free Wi-Fi and digital support to users through public libraries.	<p>DCMS launched the Digital Lifeline Fund in 2021 with AbilityNet and Good Things Foundation, which aimed to reduce levels of digital exclusion during the pandemic for people with learning disabilities.^{94,95,98}</p> <p>DCMS launched the first Local Digital Skills Partnerships (DSPs) in 2018 and 2019 across six regions in the UK.¹⁰⁰ Local DSPs bring together and connect partners from the public, private and third sectors to upskill the current workforce, advance digital inclusion, and raise awareness of the importance of digital skills regionally.^{100,101} A review outlining the positive outcomes and future policy considerations was published in 2021.¹⁰¹</p>

Policy considerations

Academic stakeholders suggested that those that are disengaged due to motivational reasons require more of a focus in future policy initiatives, as existing digital exclusion interventions, such as providing devices or social tariffs, do not motivate this group to go online.^{29,48,102}

A report by Good Things Foundation recommended that social inclusion and digital inclusion need to be considered together.⁷ This view is supported by academic stakeholders that suggest digital solutions need to be accompanied by social and economic policies that address wider social inequalities, especially when tackling motivational barriers.^{7,28,29}

Other commentators highlight the importance of preserving non-digital options, rather than assuming that increasing online engagement is the solution. There is a contested assumption that non-users will continue to decline as more digitally engaged cohorts age, however, evidence suggests that this is not the case and there will always be a group in society that is not online.^{4,32,81}

In 2022, Ofcom highlighted that digital exclusion needs to be tackled by “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”.²

Government strategy update

Good Things Foundation, the BT Group, academic stakeholders, and the House of Lords 2023 digital exclusion inquiry have expressed a need for an updated long-term digital inclusion strategy in the modern context of digitalisation.^{1,29,48,68,103,104}

Cross-governmental coordination

Some academics and industry stakeholders proposed the need for coordination across government departments, as well as across organisations, to embed a coherent approach to tackling digital exclusion across sectors and services.^{28,29,46,48,68,74,104}

In the 2023 House of Lords inquiry on digital exclusion, the committee recommended that the government establish a cross-governmental digital exclusion unit.^{p 1} In the same year, the previous government responded that a dedicated unit “risks separating inclusion from dedicated policy expertise and diluting Departmental accountability”.⁹⁴ Instead, the government committed to a cross-Whitehall ministerial group,^q chaired by the Minister for Tech and Digital Economy.^{94,95}

^p The House of Lords describes the role of a cross-government unit as: “a mandate for co-ordinating external stakeholders and working across departments to embed digital inclusion in priority policy areas, notably economic growth; levelling up; public health; education and skills; and employment and welfare”.¹

^q The Government describes the ministerial group as: “[ministerial] group will drive progress and accountability on digital inclusion priorities across Government, setting clear objectives, monitoring delivery, and engaging with relevant sector experts to seek input and advice”.⁹⁴

Non-digital solutions

Access and quality of services is already limited by digitalisation, for people who cannot or do not wish to engage online (see [access to services](#)). However, research shows there is likely to always be a group of individuals that will not engage online.^{19,81}

The [House of Lords digital exclusion inquiry](#) recommended that service providers should “avoid viewing digital as a cheap substitute for good customer service”, and that adequate service provision should be maintained for those who cannot or do not wish to use online services.¹

Charity, industry and academic stakeholders expressed that non-digital options, such as telephone helplines and in-person services, should always be available and maintained at the same standard as digital services.^{1,21,29,46,68,71,105}

A 2024 report by Ipsos UK for DWP highlighted the importance of personal interaction for many DWP customers, and recommended maintaining telephone services as part of a blended channel offering alongside digital services.^{19,106}

While some organisations, such as the BT Group, have expressed that keeping non-digital services may distract policy makers from making online services suitable for more people,⁴⁶ others, such as Good Things Foundation, proposed a ‘twin track approach’, whereby non-digital channels remain available alongside trying to engage more people online.⁶⁸

Improving accessibility

AbilityNet, DWP, and academic stakeholders expressed that future policies should incorporate strategies to design and manufacture online services and devices that are more user-friendly and inclusive for everybody (see [accessibility](#)).^{19,29,48,58,105,107}

Research shows that, particularly for people with disabilities, digital technology has the potential to facilitate greater independence and quality of life, and improved accessibility can facilitate this.^{58–60,107}

Reinforcing accessibility guidelines and standards was a key recommendation raised by the BT Group, AbilityNet and academic stakeholders.^{46,58,59} In the 2023 House of Lords inquiry on digital exclusion, the committee recommended that the government audit public sector websites for compliance with accessibility standards and regulations, and encourage private sector organisations to adopt the same standards.¹

In 2023, the previous government pledged that, by 2025, at least 50 of the government’s top 75 identified services will move to a ‘great’ standard, which includes compliance with the Public Sector Bodies Accessibility Regulations.^{r 70,94}

^r Public Sector Bodies Accessibility Regulations came into force in September 2018. Public sector bodies meet the legal requirement if they meet the Web Content Accessibility Guidelines 2.2 AA standard¹⁰⁸, and publish an accessibility statement that explains how accessible the website or app is.

Developing digital skills

FutureDotNow and TechUK expressed that there is no clear leader of digital skills policy in government.^{1,109} For example, it is unclear where responsibility lies for maintaining and using the [Essential Digital Skills framework](#).^{1,109}

A 2023 report by the Centre for Social Justice recommended that the DfE commits to funding long-term digital skills programmes for unemployed people.^{34,46} FutureDotNow and the BT Group suggested that the EDS work skills (Figure 2) could be used to target skills gaps and coordinate training.^{17,46,109}

Empowerment

Evidence indicates that digital skills and confidence need to be improved to address the underlying reasons behind lack of interest and motivation.^{7,19,74} Good Things Foundation and academic stakeholders highlighted that there can be a patronising attitude towards people who are not online, and people can feel forced or coerced into using digital technologies.^{68,72,110,111}

Empowerment through providing someone with the skills and information to be more confident online could facilitate greater online engagement.^{39,110} AbilityNet gave the example of customisation and accessibility features of devices to empower those who disengage because of accessibility barriers.⁵⁸

Community support

Evidence from Ofcom and Age UK suggests that having someone around to help can encourage people to use the internet.^{22,35}

The 2023 House of Lords inquiry on digital exclusion concluded that support was being best served by local organisations with embedded relationships in the community.¹ This was reiterated in interviews with the Good Things Foundation and other industry and third-sector stakeholders, who highlighted the importance of financially supported local organisations (such as libraries) as sites for ongoing tailored online support.^{2,29,68,72,102,112,113}

The previous government agreed in 2023 that libraries provide “vital and valued” support to people who are digitally excluded, and stated that DCMS would be consulting on a new Government public libraries strategy.⁹⁴

Demonstrating the value of being online

Digital inclusion can provide practical, emotional, financial, social, and health and wellbeing benefits (see [impacts of digital disengagement](#)). However, these benefits are not always obvious, and for some, may not outweigh barriers and concerns.^{7,12}

A 2019 report by Good Things Foundation recommended finding the ‘hook’ to demonstrate the personal relevance and value of being online to non-users,^{7,29,46,48,68,71} particularly since trust grows with more positive experiences of the internet.^{50,114}

The 2023 House of Lords digital exclusion inquiry report described this as a 'nudge approach', and highlighted the responsibility of government and technology businesses to invest in public engagement and education to demonstrate the value of being online.⁷

Future research and representation

Academics highlighted that in research, asking why someone refrains from doing something is difficult, and respondents can give contradictory responses.^{14,29,115} Survey data can also be limited in the conclusions that can be drawn about partial-users if they only conceptualise digital use as online or offline, as this does not capture selective use or frequency of engagement.^{4,116,117}

Academic stakeholders also suggest that future research would benefit from focussing on sampling those offline to increase sample sizes and understand lived experiences of this group in more detail (Figure 1).^{7,118} A report by the Ada Lovelace Institute calls for more public participation research that captures the lived experiences of communities to help design and develop public facing apps.³⁷

Offline groups are more likely to be underrepresented in data sets that use artificial intelligence tools and predictive analytics to influence policy decisions (representation bias).^{86,87} Underrepresented groups risk being left out of the design and evaluation of future technologies, which could further exacerbate issues of hard-to-use devices and interfaces.^{37,72,103}

References

1. Communications and Digital Committee (2023). [Digital Exclusion](#). House of Lords.
2. Ofcom (2022). [Digital exclusion: a review of Ofcom’s research on digital exclusion among adults in the UK](#). Ofcom.
3. Dijk, J. van (2020). *The Digital Divide*. John Wiley & Sons.
4. Ofcom (2024). [Adults’ Media Use and Attitudes Report](#). Ofcom.
5. Lloyds Bank (2022). [2022 Consumer Digital Index](#). Lloyds Bank.
6. Cabinet Office (2012). [Government Digital Strategy](#). UK Government.
7. French, T. *et al.* (2019). [Digital Motivation: Exploring the reasons people are offline](#). *Good Things Foundation*.
8. Hernandez, K. *et al.* (2023). [Online but still falling behind: measuring barriers to internet use ‘after access’](#). *Internet Policy Review*, Vol 12,
9. Kebede, A. S. *et al.* (2022). [Digital Engagement of Older Adults: Scoping Review](#). *Journal of Medical Internet Research*, Vol 24, e40192.
10. Ofcom (2022). [Adults’ Media Use and Attitudes Report](#). Ofcom.
11. Ofcom (2023). [Online Nation 2023](#). Ofcom.
12. Gerli, P. *et al.* (2022). [The hidden power of emotions: How psychological factors influence skill development in smart technology adoption](#). *Technological Forecasting and Social Change*, Vol 180, 121721.
13. Van Deursen, A. J. *et al.* (2015). [A nuanced understanding of Internet use and non-use among the elderly](#). *European Journal of Communication*, Vol 30, 171–187.
14. Helsper, E. J. *et al.* (2013). [A Quantitative Examination of Explanations for Reasons for Internet Nonuse](#). *Cyberpsychology, Behavior, and Social Networking*, Vol 16, 94–99.
15. Ofcom (2023). [Connected Nations](#). Ofcom.
16. Helsper, E. *et al.* (2016). [The emergence of a “digital underclass” in Great Britain and Sweden: Changing reasons for digital exclusion](#). *New Media & Society*, Vol 19, 1253–1270.
17. Lloyds Bank (2023). [2023 Consumer Digital Index](#). Lloyds Bank.
18. Ofcom (2021). [Adult’s Media Use and Attitudes Report](#). Ofcom.
19. Department for Work and Pensions *et al.* (2024). [Digital Skills, Channel Preferences and Access Needs - DWP Customers](#). Ipsos UK.
20. Communications Consumer Panel (2021). [Digital resilience and vulnerability during the pandemic](#). Communications Consumer Panel.
21. Age UK (2024). Personal Communication (POST research interview).
22. Age UK (2020). [Not like riding a bike: Why some older people stop using the internet](#). Age UK.
23. FutureDotNow [The UK workforce digital skills gap](#). Future Dot Now.
24. Department for Education (2019). [Essential digital skills framework](#). *GOV.UK*.
25. Yates, S. J. *et al.* (2024). [A Minimum Digital Living Standard For Households With Children: Survey Report](#). Digital Media and Society Institute.
26. The Minimum Digital Living Standard (2024). [The Minimum Digital Living Standard Overview](#). The Minimum Digital Living Standard.
27. Helsper, E. J. (2011). [Digital Disconnect: Issues of Social Exclusion, Vulnerability and Digital \(Dis\)engagement](#). in Network European Citizenship Education.

28. Helsper, E. J. (2024). Personal Communication (POST research interview).
29. Yates, S. (2024). Personal Communication (POST research interview).
30. Helsper, E. J. (2008). Digital inclusion: an analysis of social disadvantage and the information society. Department for Communities and Local Government.
31. Christie, S. (2024). Empowering Digital Choice. Barclays and Truth.
32. Yates, S. J. *et al.* (2020). Who are the limited users of digital systems and media? An examination of U.K. evidence. *First Monday*, Vol 25, University of Illinois Libraries.
33. Blank, G. *et al.* (2019). Perceived Threats to Privacy Online: The Internet in Britain. Oxford Internet Surveys.
34. The Centre for Social Justice (2023). Left Out: How to tackle digital exclusion and reduce the poverty premium. The Centre for Social Justice.
35. Ofcom (2024). Adults' Media Use and Attitudes: Interactive Report. Ofcom.
36. Department for Science, Innovation and Technology *et al.* (2023). Main report for the Participation Survey (April 2022 to March 2023). UK Government.
37. Ada Lovelace Institute (2023). Access denied? Ada Lovelace Institute.
38. Richardson, J. (2017). I am connected: new approaches to supporting people in later life online. Good Things Foundation.
39. Lee, J. Y. (2022). A qualitative study of latent reasons for internet non-and limited user. *Communication Research and Practice*, Vol 8, 364–382.
40. Grošelj, D. *et al.* (2022). A decade of proxy internet use: The changing role of socio-demographics and family support in nonusers' indirect internet access to online services. *The Information Society*, Vol 38, 240–256. Routledge.
41. Baker, C. *et al.* (2020). COVID-19 and the digital divide. *Parliamentary Office of Science and Technology*.
42. Seifert, A. *et al.* (2021). A Double Burden of Exclusion? Digital and Social Exclusion of Older Adults in Times of COVID-19. *The Journals of Gerontology: Series B*, Vol 76, e99–e103.
43. Dutton, W. *et al.* (2007). Internet in Britain: 2007. Oxford Internet Institute, University of Oxford.
44. Davis, F. *et al.* (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, Vol 13, 319.
45. Irani, Z. *et al.* (2009). Understanding consumer adoption of broadband: an extension of the technology acceptance model. *Journal of the Operational Research Society*, Vol 60, 1322–1334. Taylor & Francis.
46. BT Group (2024). Personal Communication (POST research interview).
47. Oxford Institute of Applied Health Research (2024). Personal Communication (POST written response).
48. Christie, S. (2024). Personal Communication (POST research interview).
49. Harris, J. (2010). The use, role and application of advanced technology in the lives of disabled people in the UK. *Disability & Society*, Vol 25, 427–439. Routledge.
50. Blank, G. *et al.* (2012). Age and Trust in the Internet: The Centrality of Experience and Attitudes Toward Technology in Britain. *Social Science Computer Review*, Vol 30, 135–151.

51. Age UK (2023). [Facts and Figures About Digital Inclusion and Older People](#). Age UK.
52. Marmot, M. *et al.* (2022). [ELSA COVID-19 Substudy English Longitudinal Study of Ageing COVID-19 Study, Waves 1-2, 2020](#). UK Data Service.
53. Tanczer, L. M. (2023). [Technology-facilitated abuse and the internet of things \(IoT\): The implication of the smart, internet-connected devices on domestic violence and abuse](#). in *Technology and Domestic and Family Violence*. 76–87. Routledge.
54. Bermudez, T. *et al.* (2020). [Mapping the state of knowledge on the use of stalkerware in intimate partner violence](#). University College London.
55. Douglas, H. *et al.* (2023). [Policing Technology-Facilitated Domestic Abuse \(TFDA\): Views of Service Providers in Australia and the United Kingdom](#). *J Fam Viol*, 1–12.
56. Matthews, T. *et al.* (2017). [Stories from Survivors: Privacy & Security Practices when Coping with Intimate Partner Abuse](#). in *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems*. 2189–2201. Association for Computing Machinery.
57. Wang, L. *et al.* (2011). [Older Adults' Acceptance of Information Technology](#). *Educational Gerontology*, Vol 37, 1081–1099. Routledge.
58. AbilityNet (2024). Personal Communication (POST research interview).
59. Piper, A. M. *et al.* (2017). [Technology learning and use among older adults with late-life vision impairments](#). *Univ Access Inf Soc*, Vol 16, 699–711.
60. Anagnostopoulou, P. *et al.* (2023). [Digital technologies for sensory and physical disabilities](#). *Eximia*, Vol 7, 50–56.
61. Spanakis, P. *et al.* (2024). [Measuring the digital divide among people with severe mental ill health using the essential digital skills framework](#). *Perspectives in Public Health*, Vol 144, 21–30. SAGE Publications Ltd.
62. Robotham, D. *et al.* (2016). [Do We Still Have a Digital Divide in Mental Health? A Five-Year Survey Follow-up](#). *Journal of Medical Internet Research*, Vol 18, e6511.
63. Greer, B. *et al.* (2019). [Digital Exclusion Among Mental Health Service Users: Qualitative Investigation](#). *Journal of Medical Internet Research*, Vol 21, e11696.
64. Williams, R. *et al.* (2020). [The Click-Away Pound Report 2019](#). Click-Away Pound.
65. Franz, R. L. *et al.* (2019). [Perception and Adoption of Mobile Accessibility Features by Older Adults Experiencing Ability Changes](#). in *Proceedings of the 21st International ACM SIGACCESS Conference on Computers and Accessibility*. 267–278. Association for Computing Machinery.
66. Zamani, E. D. *et al.* (2022). [Appropriating Information Technology Artefacts through Trial and Error: The Case of the Tablet](#). *Inf Syst Front*, Vol 24, 97–119.
67. Yates, S. J. *et al.* (2020). [Digital Engagement and Class: Economic, Social, and Cultural Capital in a Digital Age](#). in *The Oxford Handbook of Digital Technology and Society*. (eds. Yates, S. J. et al.) Oxford University Press.
68. Good Things Foundation (2024). Personal Communication (POST research interview).
69. Canhoto, A. *et al.* (2022). [Written evidence by Dr Ana Canhoto, Professor Ashley Braganza and Dr Asieh Tabaghdehi for Connected tech: smart or sinister?](#) Department for Digital, Culture, Media and Sport Committee.

70. Central Digital and Data Office (2023). [Transforming for a digital future: 2022 to 2025 roadmap for digital and data - updated September 2023](#). UK Government.
71. Atherton, H. (2024). Personal Communication (POST research interview).
72. Centre for Care and Information (2024). Personal Communication (POST written response).
73. Van Deursen, A. J. A. M. *et al.* (2017). [The compoundness and sequentiality of digital inequality](#). *International Journal of Communication*, Vol 11, 452–473. University of Southern California.
74. Stone, E. (2021). [Digital exclusion and health inequalities](#). Good Things Foundation.
75. Ada Lovelace Institute [The Data Divide](#). Ada Lovelace Institute.
76. Dienlin, T. *et al.* (2020). [The impact of digital technology use on adolescent well-being](#). *Dialogues in Clinical Neuroscience*, Vol 22, 135–142. Taylor & Francis.
77. Lloyds Bank (2021). [2021 Consumer Digital Index](#). Lloyds Bank.
78. Small, G. W. *et al.* (2020). [Brain health consequences of digital technology use](#). *Dialogues in Clinical Neuroscience*, Vol 22, 179–187. Taylor & Francis.
79. Blackburn, C. *et al.* (2005). [Carers and the digital divide: factors affecting Internet use among carers in the UK](#). *Health & Social Care in the Community*, Vol 13, 201–210.
80. Hamblin, K. *et al.* (2023). [Digital exclusion and unpaid carers in South Yorkshire](#). Centre for Care.
81. Centre for Economics and Business Research (2022). [The economic impact of digital inclusion in the UK](#). Centre for Economics and Business Research.
82. Eynon, R. *et al.* (2011). [Adults learning online: Digital choice and/or digital exclusion?](#) *New Media & Society*, Vol 13, 534–551. SAGE Publications.
83. van de Werfhorst, H. G. *et al.* (2022). [The digital divide in online education: Inequality in digital readiness of students and schools](#). *Computers and Education Open*, Vol 3, 100100.
84. Goedhart, N. S. *et al.* (2019). [‘Just having a computer doesn’t make sense’: The digital divide from the perspective of mothers with a low socio-economic position](#). *New Media & Society*, Vol 21, 2347–2365. SAGE Publications.
85. Ragnedda, M. (2018). [Tackling Digital Exclusion: Counter Social Inequalities Through Digital Inclusion](#). in *Global Agenda for Social Justice*. (eds. Klocke, B. V. *et al.*) 151–158. Bristol University Press.
86. Mehrabi, N. *et al.* (2021). [A Survey on Bias and Fairness in Machine Learning](#). *ACM Comput. Surv.*, Vol 54, 115:1-115:35.
87. Suresh, H. *et al.* (2021). [A Framework for Understanding Sources of Harm throughout the Machine Learning Life Cycle](#). *Equity and Access in Algorithms, Mechanisms, and Optimization*, 1–9.
88. Lyons, N. (2023). [Closing the digital divide: bridging the gap for a connected future](#). *Vodafone UK News Centre*.
89. Zillien, N. *et al.* (2009). [Digital Distinction: Status-Specific Types of Internet Usage](#). *Social Science Quarterly*, Vol 90, 274–291.
90. Joseph Rowntree Foundation (2022). [Going under and without: JRF’s cost of living tracker, winter 2022/23](#). Joseph Rowntree Foundation.
91. Richardson, R. *et al.* (2023). [Digital exclusion and the cost of living crisis](#). *Cambridge Centre for Housing and Planning Research*, Government Digital Service *et al.*
92. (2014). [Government Digital](#)

- [Inclusion Strategy](#). UK Government.
93. Department for Digital, Culture, Media and Sport (2022). [UK Digital Strategy](#). UK Government.
94. UK Government (2023). [Government Response - Digital exclusion and the cost of living](#). UK Government.
95. Department for Science, Innovation & Technology (2024). Personal Communication (POST written response).
96. Miller, C. (2020). [Five years fighting for better tech for everyone](#). *doteveryone*.
97. Good Things Foundation (2019). [Future Digital Inclusion: delivering basic digital skills for those in need](#). *Good Things Foundation*.
98. Department for Science, Innovation and Technology (2023). [Written response for House of Lords Communications and Digital Select Committee inquiry 'Digital exclusion and the cost of living'](#). House of Lords Communications and Digital Select Committee.
99. Department for Education (2024). [Fully-funded qualifications for adults with low digital skills](#). *GOV.UK*.
100. Department for Culture, Media and Sport (2023). [Digital Skills Partnership](#). *GOV.UK*.
101. Amion Consulting (2021). [Evaluation of the Local Digital Skills Partnership](#). *Department for Culture, Media and Sport*.
102. Selwyn, N. (2024). Personal Communication (POST research interview).
103. Zamani, E. (2024). Personal Communication (POST research interview).
104. Vodafone (2024). Personal Communication (POST research interview).
105. Leidenhag, M. (2024). Personal Communication (POST research interview).
106. Department for Work and Pensions *et al.* (2024). [Digital Skills, Channel Preference, and Access Needs - Personal Independence Payment Customers](#). Ipsos UK.
107. Zitkus, E. (2023). [Written Evidence by Dr Emilene Zitkus, Loughborough University on the Women and Equalities Committee's inquiry on the rights of older people](#). *UK Parliament*.
108. UK Government (2023). [Understanding WCAG 2.2](#). *GOV.UK*.
109. FutureDotNow (2024). Personal Communication (POST research interview).
110. Gerli, P. (2024). Personal Communication (POST research interview).
111. Díaz Andrade, A. *et al.* (2021). [Digital enforcement: Rethinking the pursuit of a digitally-enabled society](#). *Information Systems Journal*, Vol 31, 184–197.
112. Good Things Foundation (2023). [Digital Inclusion in Libraries: Full Report](#). Good Things Foundation.
113. Wagg, S. *et al.* (2024). [Digital inclusion network building: a network weaving analysis](#). in *Proceedings of the 29th UK Academy for Information Systems (UKAIS) International Conference*. UK Academy for Information Systems (UKAIS).
114. Dutton, W. H. *et al.* (2006). [Trust in the Internet as an experience technology](#). *Information, Communication & Society*, Vol 9, 433–451. Routledge.
115. Zaller, J. *et al.* (1992). [A Simple Theory of the Survey Response: Answering Questions versus Revealing Preferences](#). *American Journal of Political Science*, Vol 36, 579–616.
116. Hernandez, K. *et al.* (2022). [Measuring digital exclusion](#). Digital Futures at Work Research Centre.
117. Office for National Statistics (2019). [Exploring the UK's digital](#)

divide. Office for National
Statistics.

118. Canhoto, A. (2024). Personal
Communication (POST research
interview).

Contributors

POST is grateful to Hannah Romanowski for researching this briefing and to the Nuffield Foundation for funding this parliamentary fellowship. For further information on this subject, please contact the co-author, Dr Clare Lally.

POSTnotes are based on literature reviews and interviews with a range of stakeholders and are externally peer-reviewed. POST would like to thank interviewees and peer reviewers for kindly giving up their time during the preparation of this briefing, including:

Members of the POST Board*

Department for Science, Innovation and Technology*

Ofcom*

Chris Andersson, FutureDotNow*

Professor Helen Atherton, University of Southampton*

Fay Benskin, University of Sheffield*

Christopher Brooks, Age UK*

Helen Burrows, BT Group

Professor Ana Isabel Canhoto, University of Sussex*

Holly Chate, FutureDotNow*

Sarah Christie, consumer advisor to Barclays

Robin Christopherson MBE, AbilityNet*

Anna Colom, Ada Lovelace Institute

Dr Catherine Dennison, Nuffield Foundation*

Dr Christopher Dodd, Oxford Institute of Applied Research, Oxford Brookes University*

Becky Driscoll, University of Sheffield*

Charlotte Edney, Nuffield Family Justice Observatory*

Dr Paolo Gerli, Edinburgh Napier University*

Professor Kate Hamblin, University of Sheffield*

Katie Heard, Good Things Foundation

Professor Ellen Helsper, London School of Economics*

Vanessa Higham, Vodafone*

Dr Olga Kozłowska, Oxford Institute of Applied Research, Oxford Brookes University

Dr Mikael Leidenhag, Digital Inclusion Research Hub*

Mavis Machirori, Ada Lovelace Institute*

Jen Reed, University College London*

Dr Anastasia Rousaki, University of Sheffield*

Aliya Saied-Tessier, Nuffield Family Justice Observatory*

Dr Laura Sbaffi, University of Sheffield*

Professor Neil Selwyn, Monash University*

Dr Emma Stone, Good Things Foundation*

Anna Studman, Ada Lovelace Institute*

Dr Leonie Tanczer, University College London*

Dr Emily Tanner, Nuffield Foundation*

Dr Sharon Wagg, University of Sheffield*

Sally West, Age UK

Dr Grace Whitfield, University of Sheffield

Professor Simeon Yates, University of Liverpool*

Dr Efpraxia Zamani, Durham University*

Dr Emilene Zitkus, Loughborough University*

*denotes people and organisations who acted as external reviewers of the briefing.

The Parliamentary Office of Science and Technology (POST) is an office of both Houses of Parliament. It produces impartial briefings designed to make research evidence accessible to the UK Parliament. Stakeholders contribute to and review POSTnotes. POST is grateful to these contributors.

Our work is published to support Parliament. Individuals should not rely upon it as legal or professional advice, or as a substitute for it. We do not accept any liability whatsoever for any errors, omissions or misstatements contained herein. You should consult a suitably qualified professional if you require specific advice or information. Every effort is made to ensure that the information contained in our briefings is correct at the time of publication. Readers should be aware that briefings are not necessarily updated to reflect subsequent changes. This information is provided subject to the conditions of the Open Parliament Licence.

If you have any comments on our briefings please email papers@parliament.uk. Please note that we are not always able to engage in discussions with members of the public who express opinions about the content of our research, although we will carefully consider and correct any factual errors.

If you have general questions about the work of the House of Commons email hcenquiries@parliament.uk or the House of Lords email hlinfo@parliament.uk.

DOI: <https://doi.org/10.58248/PN725>

Image Credit: Photo by Headway on Unsplash

POST's published material is available to everyone at post.parliament.uk. Get our latest research delivered straight to your inbox. Subscribe at post.parliament.uk/subscribe.



 post@parliament.uk

 parliament.uk/post

 [@POST_UK](https://twitter.com/POST_UK)