As every aspect of life – from job seeking to health care – moves online, digital connectivity is a daily necessity, not a luxury. Against the backdrop of the UK’s worst cost of living crisis in 40 years, discussions about fuel and food poverty are now joined by a new concern with what has become known as digital poverty – challenges affording the cost of online connectivity and devices. Using data from a survey of low-income households, this Policy Briefing explores the extent of digital poverty in the UK and shows how it can exacerbate other forms of poverty among the most disadvantaged households. It also shows how current fixes, including social tariffs aimed at the poorest in society, are not effectively addressing this critical issue.

**Key messages**

- Digital poverty sets up a vicious circle: those without digital connectivity lose out and become financially poorer.
- Digital connectivity is no longer a luxury but a utility, as the shift to digital-by-default service provision was accelerated by the pandemic and replaced many face-to-face services.
- The UK’s biggest cost of living increase in decades means that welfare payments and wages are not keeping up with rising mobile and broadband bills, leaving many people struggling to pay for the internet access they need to find work, claim welfare payments, or access health care.
- Having access to connected devices is not enough; support to develop those digital skills is crucial. New national and regional approaches plus funding to tackle digital poverty and the broader issue of digital inclusion, including skills, are urgently needed.
Essential services from banking to health care, and welfare provision to job seeking, have increasingly moved online, raising concerns about unequal access to and use of digital technology and the resulting social and economic impacts. It is easy to assume that in a relatively wealthy country like the UK these digital divides have closed, but the Covid–19 pandemic highlighted that this problem is not fixed. Varying levels of digital access had a significant impact on people’s experiences of the pandemic – be it the technology needed for home-schooling, for working remotely, or for accessing the NHS app for the Covid Pass required for venue access or travel.

Drastic rises in the cost of living in 2022 led the UK’s Office for Budget Responsibility to warn that household post-tax incomes adjusted for inflation will fall over the next 12 months by the largest amount (~2.2 per cent) since records began in the 1950s. At the same time, welfare benefits are not keeping pace with inflation, leading to the greatest fall in the value of the basic rate of unemployment benefit since 1972, with the potential to pull 600,000 more people into poverty.

We analysed research from several sources to explore the extent of digital poverty in the UK and policy recommendations to address this issue. This included desk research and survey data from a phone poll of 500 people living on gross household incomes of £25,000 or less across England between 22 February 2022 and 13 March 2022, both funded by the British Academy; and interviews with civil society organisations providing digital access and skills support to job seekers and interviews with individual job seekers receiving the support in London and Brighton. The latter interviews were conducted as part of research funded by the Higher Education Innovation Fund for the ESRC-funded Digital Futures at Work Research Centre.

What do we mean by digital poverty?

Recent years have seen a new focus on the cost of connectivity, with Nesta’s work on ‘data poverty’ defining data poverty as ‘those individuals, households or communities who cannot afford sufficient, private and secure mobile or broadband data to meet their essential needs’. A range of initiatives have been launched to address this issue including the Data Poverty All-Party Parliamentary Group, the Digital Poverty Alliance, and the Good Things Foundation’s Data Poverty Lab, National Databank and National Device Bank.

Whilst we welcome this new focus on digital poverty, a shift in terminology away from digital exclusion, digital divides, or digital inequality has both benefits and challenges. The advantage of using the term ‘digital poverty’ is that it draws attention to the fact that digital access is now a utility and essential for modern life – and thus digital

Among people living on an annual household income of £25,000 or less, one in five never use the internet.

annual price increases to the level of inflation. These providers use either the January 2022 Consumer Prices Index rate of 5.4 per cent or the Retail Price Index of 7.5 per cent. Companies then add a flat per cent on top of these rises (typically 3.9 per cent for Vodafone and BT) leaving UK consumers facing price rises of up to 9.3–11.4 per cent in 2022 for their broadband. Mobile phone consumers face even steeper rises in prices – with O2 and Virgin Mobile choosing to peg their price rises to the Retail Price Index of 7.5 per cent and adding 3.9 per cent on top – an overall rise of 11.4 per cent. This means a rise of £2.28 on a £20 monthly mobile contract. A UK family claiming the welfare payment Universal Credit could now expect to spend 8.3 per cent of their income on broadband.
poverty could be seen as analogous to fuel or food poverty. However, there is a risk that the broader issues captured by the terminology of digital exclusion and digital inequalities are ignored; taking the focus away from the broader digitised structures that could be keeping people in poverty.

Using the terms ‘digital exclusion’ or ‘digital divides’ enables us to acknowledge the fact that digital access alone does not translate into the use of digital technology to achieve positive offline outcomes. It also enables us to look at differences in digital skills, literacy, and usage patterns, as well as reliance on intermediaries for support. Our recent Data Commentary on the current measurement of digital divides in the UK shows that official digital inclusion government statistics have not effectively reflected the existence of these divides. The Office for National Statistics (ONS), for example, counts individuals as ‘internet users’ as long as they have used the internet once in the last three months. Once people are counted as ‘internet users’ they are no longer considered to be digitally excluded in many surveys, and so factors that restrict their use are seldom explored, such as only having access through public libraries, public WiFi, or at the homes of family or friends; needing to borrow devices to go online; needing help to carry out some digital tasks; slow internet speeds; and old, broken or cheap, subpar devices among many other factors.

**Digital poverty in the UK: choosing to be online?**

Our survey data shows the urgency of this issue. Among people living on an annual household income of £25,000 or less, one in five never use the internet. This number rises to nearly one third of people with disabilities and nearly half of those aged 65 or over. Around one in five mobile phone users regularly run out of data before the end of the month. Extrapolating from the poll’s

---

**Figure 1 The digital poverty trap**

**Lower-income adults who use the internet**

- 1 in 10 (9%) reduced spending on food or clothes in order to afford phone or home internet
- Almost 1/3 (31%) with a smartphone or tablet ration mobile internet use to avoid running out of data

**Lower-income adults with pay-as-you-go or pre-pay mobile data packages**

- Almost 1 in 5 (17%) run out of data before the end of the month
- Almost 1 in 10 (9%) stop using mobile data until they can top up or their contract renews, including waiting over a week to top up

Source: Authors’ own.

[ids.ac.uk](http://ids.ac.uk)
data, we estimate that there are around 2.4 million people living on household incomes of £25,000 or less who do not use the internet. Ofcom’s affordability research shows that, on average, individuals at the bottom 10 per cent of the income distribution would spend around 19 per cent of their income (after the deduction of essential costs such as housing, utilities, and food) on a fixed broadband tariff, which is well over ten times higher than the percentage the average household would spend (1.3 per cent). But those in higher-income communities are also at risk of digital exclusion. For example, ONS statistics for 2018 showed that 23.3 per cent of people with disabilities were not using the internet.

Research by Citizens Advice estimated that in November 2020, 2.3 million people had fallen behind on their broadband bill, and one in six broadband customers struggled to pay their bill between March 2020 and January 2021, with a disproportionate impact on people with disabilities, people on means-tested benefits, and people from ethnic minority backgrounds. Meanwhile, our own survey carried out in March 2022 showed that around one third of people who were not using the internet indicated that this was because they could not afford it: 29 per cent could not afford home internet and 30 per cent could not afford devices to get online. This reflects previous research such as the Ofcom Adult Media Use and Attitudes Report 2021 which found that 36 per cent of those who did not use the internet said it was too expensive.

Our survey data showed a significant proportion of low-income households taking measures to restrict their internet usage due to affordability struggles, as Figure 1 shows.

**The vicious cycle of digital poverty**

As connectivity becomes more expensive and incomes decline, digital access can be seen as a cause of poverty, putting pressure on household incomes alongside existing ‘poverty premiums’ whereby the ‘poor pay more’. The Institute for Fiscal Studies recently estimated that the bottom 10 per cent of the population in terms of income face inflation at the rate of 10.9 per cent – 3 percentage points higher than the inflation rate of the richest 10 per cent. Yet research shows how people without internet access in their household are more likely to be materially deprived, compared with those who did have access.

Whilst the Covid-19 pandemic saw a rapid acceleration in online shopping and paying bills online – with 56 per cent of consumers reporting that they were doing this for the first time – those experiencing digital poverty lose out economically from not accessing price transparency information on comparison sites. A host of economic benefits are also denied to those either without connectivity or with only limited connectivity who cannot download apps onto a smartphone – from cheaper bus tickets to discounts on parking and food.

Research from the Centre for Economics and Business Research in 2018 estimated that newly digitally included individuals could save £444 per year. Figure 2 shows how this vicious cycle of digital poverty plays out in people’s lives.

**Who should fix digital poverty?**

Like many other government services, the welfare payment Universal Credit is a ‘digital-by-default’ service that, in practice if not in policy, requires people to have internet access and digital skills to be able to apply and to maintain their claim and receive ongoing financial support. We interviewed an employment support worker based in a deprived area of Brighton who felt that the government had not fulfilled its responsibilities when it came to the digitisation of services: ‘... and to follow through on their digital by default which led to Universal Credit being online. They have a responsibility to fulfil their own policy of digital by default.’

---

1 In the financial year ending 2021, the UK median household disposable income in the UK was £31,400.
Internet providers in the UK are legally required to provide affordable ‘social tariffs’ to low-income consumers. Currently, six broadband providers (BT, Community Fibre, G.Network, Hyperoptic, KCOM, and Virgin Media O2) offer social tariffs – cheaper deals costing between £10 and £20 per month, compared to a standard commercial broadband package of around £27 per month. However, our survey found that only 1 per cent of lower-income householders were currently using a social tariff to pay for internet. Four in five lower-income adults (80 per cent) said they were not aware of any cheap deals available to people on benefits or low incomes. This finding is consistent with recent Ofcom research which found that only an estimated 1.2 per cent of eligible households have taken up a social tariff.

The social tariffs policy has attempted to address some issues of digital poverty since the pandemic; however, this policy relies on people having fixed broadband services, which excludes those unable to afford connection fees or who live in accommodation where arranging this is difficult. It should also be noted that social tariffs are often not competitive when compared to the cheapest offers available to all consumers. For example, at the time of writing this briefing, the website MoneySavingExpert was advertising a range of tariffs that were available to all consumers that were considerably cheaper than the advertised social tariffs.

Whilst these social tariffs offer a lifeline for some households, they offer slower speeds than regular tariffs. For example, the Virgin Media Essential Broadband Offer is just 15Mbps (megabits per second), which is likely to be inadequate for households of more than one person, or where an individual is streaming videos or playing games. In our survey, one in five low earners that do use the internet reported that their home internet connection is ‘too slow for all the people in my house or the activities I want to do online’.

Source: Authors’ own.
**Policy recommendations**

Place-based approaches leveraging embedded local knowledge reach those most at risk of digital exclusion, but the organisations doing this work are often financially stretched. We therefore need the following to ensure that no one faces economic barriers to getting online.

**Action at a national level by government and industry.** This could mean subsidising broadband in a similar way to other services such as public transport, where free bus travel is provided for elderly people and people with disabilities. Funding could be raised by taxing profits of telecommunications companies. BT, for example, reported **profits after tax of £1.3bn** for the year ending March 2022.

**Recognition of the increased burden on individuals from digital-by-default service delivery.** At a time when cash-strapped local authorities must reduce or remove face-to-face services, as well as cut back on telephone services, digital-by-default service provision risks deepening inequalities for those experiencing any form of digital exclusion; be it unaffordable connectivity, reliance on slow devices, or a lack of digital skills.

**New national and regional approaches and funding to tackle digital poverty and the broader issue of digital inclusion.** Pioneering approaches such as the Greater Manchester Technology Fund, where the business community support disadvantaged families across the region by donating technology and connectivity, demonstrates how this can be done at scale. Other regional approaches include work by the Digital Inclusion Alliance Wales to develop a minimum digital living standard that households need to have an adequate quality of life and participate in society, and is also recommending consideration of free public WiFi provision. Social tariffs could be designed to meet these living standards in terms of speed and cost. There are also precedents for providing free access to essential online services by ‘zero rating’ or waiving data charges. During the Covid–19 pandemic free access to some government websites was introduced for **NHS websites** and other support websites, already zero-rated by some mobile data providers, showing the feasibility of such approaches.