

# Digital poverty in the UK

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Dr Becky Faith, Kevin Hernandez, Institute of Development Studies/Digital Futures at Work Research Centre, University of Sussex

James Beecher, Citizens Online

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# 1 Introduction

The British Academy's report on the impacts of Covid highlighted the many ways in which digital inequalities impacted on people's experiences of the pandemic, and ability to recover from it; from health to education (British Academy, 2021b). In light of this, the British Academy's complementary report on shaping the Covid decade (British Academy, 2021a) recommended investment to address the digital divide as one of its seven suggested policy goals:

*Prioritise investment in digital infrastructure as a critical public service to eliminate the digital divide, improve communication and joint problem solving, and create a more equitable basis for education and employment.*

Since the widespread adoption of technology, smartphones, and the introduction of 'digital by default' services in all domains of society, attention has been drawn to divides in access to and use of technology and the resulting social and economic impacts. In the early years of the Millennium there was significant policy focus on this issue, with high levels of investment from the Government in digital inclusion. In recent years ONS and Ofcom digital inclusion surveys have shown near universal 'internet users' thus giving the impression of the issue being fixed – with the EU suggesting that the pandemic had the '*positive impact of increasing further the number of internet users and their interactions online*' (European Commission, 2020, p. 3). However, this problem is not fixed – surveys have not been measuring the barriers users encounter once they become 'internet users' (Hernandez & Faith, 2022). This is now more urgent given that cost of living increases mean that connectivity is both a necessity and becoming a financial burden for many people in society – not just the worst off but those who are 'getting by'.

Our survey data shows the urgency of this issue; that among people living on household incomes under £25,000, one in five never use the internet – rising to nearly a third of disabled people and nearly a half of those aged 65 or over. Around one in five mobile phone users run out of data before the end of the month (17%) and around a third of people who were not using the internet indicated this was because they could not afford it. Chancellor Rishi Sunak's recent Spring Statement offered a below inflation increase in benefit payments, which comes on top of years of similar settlements that have eroded the financial value of benefits – and policies that have restricted eligibility. There has been a welcome recent policy focus and interest on the issue of 'digital poverty' over the past year with the launch of the [Data Poverty APPG](#), the [Digital Poverty Alliance](#) and the Good Things Foundation's Data Poverty Lab, the [National Databank](#) and [National Devicebank](#).

There is an urgent need to rethink both digital poverty and the broader issue of digital inclusion in the face of the removal of offline services. The welfare payment Universal Credit is a 'digital-by-default' benefit 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. Our qualitative data shows how underfunded voluntary sector organisations working on jobseeking and welfare are struggling to meet the needs of their clients. People are included without choice or consent in digital systems – a process which has been accelerated by the pandemic.

This paper consists of the following six sections.

- **About this report:** The data we drew on for this report.
- **Digital poverty or digital divides?** A summary of the literature defining digital poverty and related concepts including digital divide, digital inclusion and digital inequality.

- **Digital poverty in the UK:** An overview of the current state of digital poverty in the UK based on secondary and primary data
- **Digital poverty and access to education & jobseeking:** Reflection on the linkages between digital poverty and access to job-seeking and education
- **Addressing digital poverty:** Exploring the role of different stakeholders involved in addressing digital poverty and the availability of social tariffs to those on low incomes
- **Conclusion and recommendations**

## 2 About this report

This report was commissioned by the British Academy based on the following initial research questions;

- Is the Nesta conceptualisation of digital poverty appropriate and sufficient?
- How do people experience digital poverty in the UK, and how do they understand the drivers of digital poverty?
- What impact has the COVID-19 pandemic had on experiences of digital poverty?
- Which demographic groups are most severely affected by digital poverty?
- How does digital poverty affect capacities around access to financial support, education, training, and job-seeking during unemployment
- Which organisations do people experiencing digital poverty interact with?

This study of data poverty draws on data from the following sources.

A phone poll of 500 people conducted between 22<sup>nd</sup> February and 13<sup>th</sup> March, 2022 by British Polling Council member organisation Survation. The phone poll was designed to be representative of the 10 million people aged 18+ living on gross household incomes of £25,000 or less across England as a whole (27% of the 37.5 million adults across England as of the 2020 ONS estimate).<sup>1</sup> Further details on the polling is included in Appendix 1.

Qualitative Data from the author's ESCRC Digital Futures at Work Research Centre<sup>2</sup> funded study interviews with intermediaries & beneficiaries in London and Brighton and the Digital Brighton and Hove Employment Project funded by the University of Sussex Covid Response: Higher Education Innovation Fund in partnership with Digital Brighton and Hove/Citizens Online.

Desk research by the authors.

## 3 Digital poverty or digital divides?

A recent shift in terminology from digital exclusion, digital divides or digital inequality to digital poverty has both benefits and challenges. The advantage of using this term is that it draws attention to the fact that digital access is now essential for modern life – and thus digital 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

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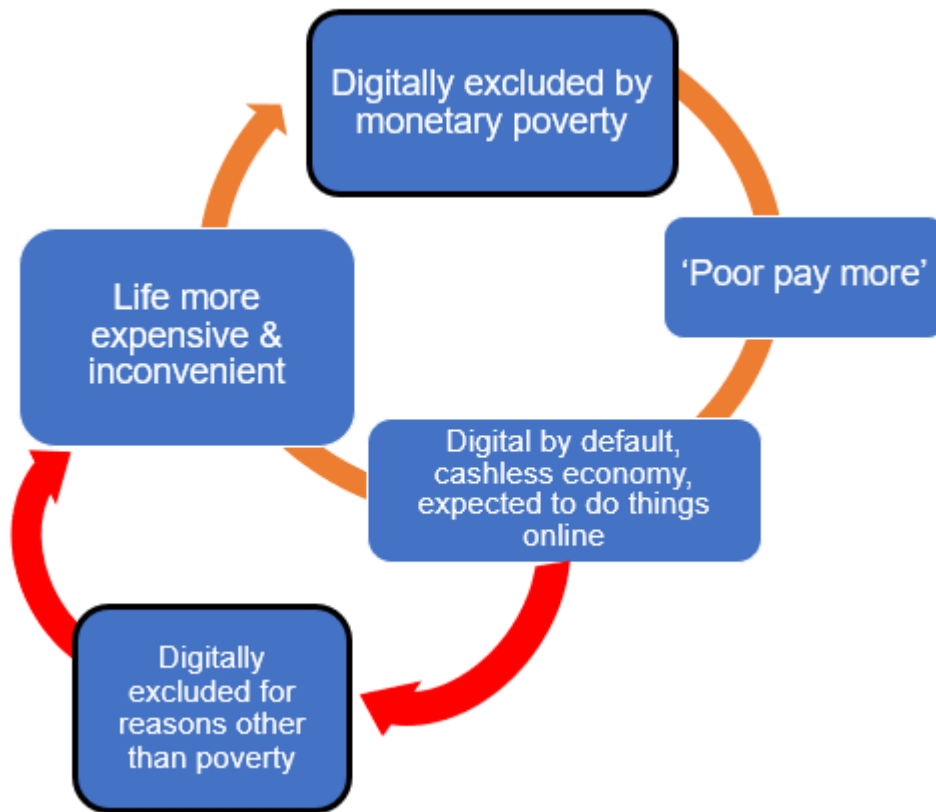
<sup>1</sup> The 10 million figure for adults living on household incomes under £25,000 is an estimate made by request to the Office for National Statistics. The [ONS population estimate for 2020](#) was accessed via Nomis.

<sup>2</sup> As part of the Digital Futures at Work Research Centre (Digit), this work was supported by the UK Economic and Social Research Council [grant number ES/S012532/1], which is gratefully acknowledged.

from the broader digitised structures which might be keeping people in poverty. It risks masking the experiences of groups such as disabled people outside low-income communities who are much more likely to be offline (ONS statistics for 2018 showed that 23.3% of disabled people were offline (Office for National Statistics, 2019)). Using the term 'digital inequalities' also allows for interrogation of the fact that a lack of access to technology can be an amplifier of other axes of inequality (Hernandez & Roberts, 2018; Toyama, 2011).

A recent report by the Good Things Foundation asserted that poverty causes digital poverty (Stone, 2022). However, as early definitions of digital poverty suggest, although the economically poor are indeed more likely to be digitally poor, anyone who lacks sufficient access to digital technology and the means to make use of them can be considered digitally poor (Barrantes, 2007). A narrow conceptualisation of 'digital poverty' risks the creation of government interventions that only target those who are currently poor and digitally connected while ignoring the experiences of other at-risk populations who might not be poor today but whose subpar experiences with digital technology may contribute to them becoming poor or experiencing further disadvantage in the future. This is especially important if we consider the possibility that poverty and digital poverty might follow a mutually causative relationship rather than a linear one. Amidst rapid digitisation in the ways citizens interact with work, the state, each other and the world at large, it is also possible that the social, economic, and other exclusions that result from being disconnected might force the digitally poor into general poverty or at the very least put them at a greater disadvantage than in the past by making their lives more inconvenient. Figure 1 below illustrates this 'vicious circle'. While tackling digital exclusion as experienced by the poor, governments need to ensure they do not ignore the needs of the currently non-poor digitally excluded to ensure their situations do not contribute to future poverty and disadvantage.

Figure 1 The vicious circle of digital poverty



### 3.1 Defining digital poverty

In the UK there has been increasing attention on data poverty, as well as the broader notion of ‘digital poverty’, and it should be noted that these terms are often treated as interchangeable. Nesta’s work on this topic highlights that there is no agreed definition of data poverty, but suggests that ‘*those individuals, households or communities who cannot afford sufficient, private and secure mobile or broadband data to meet their essential needs*’ is a good starting point (Lucas et al., 2020, p. 5). The All-Party Parliamentary Group on Data Poverty similarly define it as when ‘*someone can’t afford to either access or pay for enough access to the internet. This might be because the cost of broadband in the home is too expensive or because they can only afford a certain amount of internet access (or ‘mobile data’) on their mobile plan.*’ (Data Poverty APPG, 2022). As a result of the rapid digitisation during the Covid-19 pandemic The Digital Poverty Alliance was formed in 2021 to convene key stakeholders working on digital inclusion. Writing last year, one of the organisers proposed a broader definition of digital poverty ‘*...digital poverty could be interpreted as a lack of sustained transformational engagement with the digital world. Its causes could be broadly categorised as lack of hardware in homes and hands; lack of infrastructure and connectivity; and lack of skills and education*’ (Donaghy & Crick, 2021, p. 22). They define digital poverty as ‘*the inability to interact with the online world fully, when, where and how an individual needs*’ (Allmann, 2021, p. 3).

The concept of a ‘digital divide’ to explain the relationship between social inequality and access to digital tools and connections has been used in academic and policy spaces for over twenty years (L. Robinson et al., 2020). In parallel with the rapid spread of technology over these last decades, digital divide theories have moved from initial binary conceptions of technology ‘haves and have nots’ to a first, second and third level digital divides (Helsper, 2021; van Deursen & Helsper, 2015) as well as a more recent focus on digital inequalities (Helsper, 2021). These divides evolved in recognition of the

fact that access alone does not translate into the use of digital technology to achieve positive offline outcomes, and included acknowledgements of differences in digital skills, literacy, and usage patterns, as well as reliance on intermediaries. Our recent work on the current measurement of digital divides in the UK shows that digital inclusion statistics have not effectively reflected the existence of these divides; 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 (Hernandez & Faith, 2022).

There have been various attempts over the last 20 years to define digital poverty and distinguish it from the digital divide. In 2007 Barrantes defined it as ‘*the lack of goods and services based on ICTs*’ and highlights the fact that marginalized segments of the population can be digitally poor, including but not limited to the economically poor. She created a four-level categorization of digital poverty consisting of the: extremely digital poor, digitally poor, digitally connected, and digitally wealthy. ‘*Contrary to the [digital] divide concept, the digital poverty concept tries to find the minimum ICT use and consumption levels as well as income levels of the population necessary to demand ICT products.*’” (Barrantes, 2007, p. 2). Barja & Gigler define information and communication poverty as ‘*the deprivation of basic capabilities to participate in the information society*’ (2007, p. 17). They suggest there are three inter-relating capabilities that when combined for the basis of an information and communication poverty line: assets (including devices, social networks to use ICTs and skills), information (capabilities to exchange transparent information about political, social, and economic processes), and communication (the capability to exchange ideas about political processes and institutions).

These definitions highlight the importance not just of access to digital assets, but of how those assets are used. Information poverty is often defined along similar lines: having the necessary ICT access and skills to be an agent in the ‘information society. Although information poverty is correlated with digital poverty, not all digitally poor individuals are economically poor and vice-versa (Yu, 2010). Beyond ownership and access, it is also important to investigate the practices of the ‘information poor’ which can also perpetuate other aspects of inequality as we see below in the section on Digital Poverty as an amplifier of poverty.

### 3.2 Minimum digital living standards

Other approaches to measuring digital poverty use a ‘basket’ approach, defining a minimum level of digital assets. The UN specialized agency for ICTs, the ITU, has been using an ICT Price Baskets approach for its data collection on the affordability of ICT assets since 2008. The methodology has been updated over time to reflect broader trends in technology use and has four different baskets – fixed broadband, data-only mobile-broadband, mobile data and voice low-consumption basket and the mobile data and voice high-consumption basket (ITU, 2021). To assess their affordability, each of these are then compared to the Gross National Income per capita. For the purposes of life in the UK, assuming people are required to access digital by default services the mobile data and voice high-consumption basket is of relevance; it refers to the cheapest plan providing at least 140 minutes of voice, 70 SMS and 2GB of high-speed data ( $\geq 256\text{Kbit/s}$ ) over a 30-day (or four weeks) period from the operator with the largest market share in each economy. As of 2021 the UK figure was 0.58%, ranking 24<sup>th</sup> cheapest in the world.

The related idea of ‘Minimum Digital Living Standards’ is now the subject of both policy and academic scrutiny. This builds on a ‘consensual’ approach to measuring poverty more broadly which identifies necessities by a consensus of public opinion rather than expert views or behavioural norms (Mack & Lansley, 1985). The Welsh Government led Digital Inclusion Alliance for Wales recently proposed “*to lead the world in establishing a ‘Minimum Digital Living Standard for Wales’* -

*an agreed standard of what it is to be digitally included in modern Wales, aligned with our national Well-being Goals. Such a standard should include devices and data, alongside skills, capabilities and support'* (Digital Inclusion Alliance for Wales, 2021, p. 12). This approach is also being explored in a research project being carried out in collaboration with the Good Things Foundation, using the Minimum Income Standard (MIS) methodology to develop a Minimum Digital Living Standard (MDLS) for households with children. This will capture the minimum basket of digital goods, skills and services households need in order to have an adequate quality of life and participate in society (Nuffield Foundation, 2021).

The Alliance for Affordable Internet is focussed on low- and middle-income countries where internet costs tend to be the highest, yet its' work on developing a meaningful connectivity framework is of global relevance (A4AI, 2022). The framework focuses on four pillars: 4G-like speeds, smartphone ownership, daily use, and unlimited access at a regular location, like home, work, or a place of study. Compared to the ITU's definitions, this allows for a deeper understanding of access. The 'basket' approach is valuable in that it allows for comparison between countries and as a time series (as the ITU data shows) but it has limitations as data is a moving target in a constantly changing technological environment. We saw during the pandemic that moving of services online suddenly increased people's need for data, as one mother in London reported her worries about a video consultation with a GP.

*... even a meeting a meeting with a GP through Zoom. If you don't have data.  
how are you going to show your GP the funny dots that your kid has on their skin?*

The Interim Report from the Digital Poverty Alliance makes promising steps towards an understanding of digital poverty as dynamic, not linear, reflecting these changes.

*We now better understand digital inequality as a constellation of diverse but intersecting divides, with salient gaps not just in access to connections and devices but also in awareness and motivation, skills, literacies, and meaningful outcomes. Rather than absolute differences, today these gaps are more often relative differences in terms of quality and degree of access, skills, and experiences. In addition, the benchmark of digital literacy is always changing as the digital world evolves. (Allmann, 2021, p. 3)*

## **4 Digital poverty in the UK**

This section looks at data on digital poverty in the UK with a dual understanding of digital poverty in mind; both the challenges people face affording connectivity and devices and the way that a lack of devices and connectivity can make other aspects of life more expensive.

Ofcom's affordability research shows that people whose main income source provides less than £10,000 a year spend around 10% of their earnings on media and communications services and 18% of households had had an affordability issue with at least one communications service (OFCOM, 2021b). Research by Citizens Advice estimated that in November 2020, 2.3 million people had fallen behind on their broadband bill, and 1 in 6 broadband customers struggled to pay their bill between March 2020 and January 2021 with disproportionate impact on disabled people, people on means-tested benefits, and people from ethnic minority backgrounds (Citizens Advice, 2021). Meanwhile our own survey carried out in March showed that around a third of people who were not using the internet indicated this was because they could not afford it (29% said could not afford home internet, and 30% said they could not afford devices to get online). This reflects previous research

such as the Ofcom Adult Media Use and Attitudes report which found that 36% of those who did not use the internet said it is too expensive, “either due to purchasing the equipment needed or the cost of getting connected” (compared to 37% said they did not have the right equipment, 42% who said the internet is “not for people like me”, and 46% who said the internet is too complicated) (OFCOM, 2021a).

Citizens Online’s research during the pandemic (Centre for Ageing Better, 2021) highlighted the barrier that cost represents for people on low incomes:

*Internet is the major issue... it is the long term of cost and set up of internet that is the main barrier. Local organisation for older people, North West England.*

*We are in a disadvantaged community where many people have problems surviving with food and home expenses let alone internet and digital technology. Church-led community centre, East Midlands*

#### **4.1 Digital poverty as an amplifier of poverty**

The ‘Poverty Premium’ whereby the ‘Poor pay more’ is a well-established concept, defined as ‘the extra cost that households on low incomes incur when purchasing the same essential goods and services as households on higher incomes’ (Corfe & Keohane, 2018, p. 10). Analysis of The National Survey for Wales data for 2018-2019 showed that people who did not have access to internet in their household were more likely to be materially deprived, compared with those who did have access (Hafferty, 2020). Whilst the Covid 19 Pandemic saw a rapid acceleration in online shopping and paying bills online – with 56% of consumers reporting that they were doing this for the first time (Lloyds Banking Group, 2021) – those who are experiencing digital poverty lose out economically from not accessing price transparency information on comparison sites. Research from 2018 estimated newly digitally included individuals could save £444 per year (Centre for Economics and Business Research, 2018). Beyond the access to comparison sites, a whole host of economic benefits are denied to those without connectivity or only limited connectivity who do not download apps onto a smartphone. In Brighton and Hove, [bus tickets](#) are cheaper for passengers who download the app and use it to purchase their tickets. [Olio](#) is a mobile app that allows users to exchange goods for free including furniture, food, household items, clothing, and electronics. Similarly, [Too Good to Go](#) is a mobile app where users can save restaurant meals from being wasted while paying a fraction of the price of regular meals in the process.

#### **4.2 Who is most affected?**

Our survey showed that one in five adults living on a household income under £25,000 never uses the internet. This is much higher than the rate for the broader population. The most recent estimate from the Office for National Statistics (2020) found, for example, that 8% of adults were not recent internet users (Office for National Statistics, 2020). Extrapolating from the poll’s data, we estimate that there are around 2.4 million people living on household incomes under £25,000 who do not use the internet. This equates to almost three-quarters (around 72%) of the 3.4 million the ONS estimate have never used the internet (figure 1).



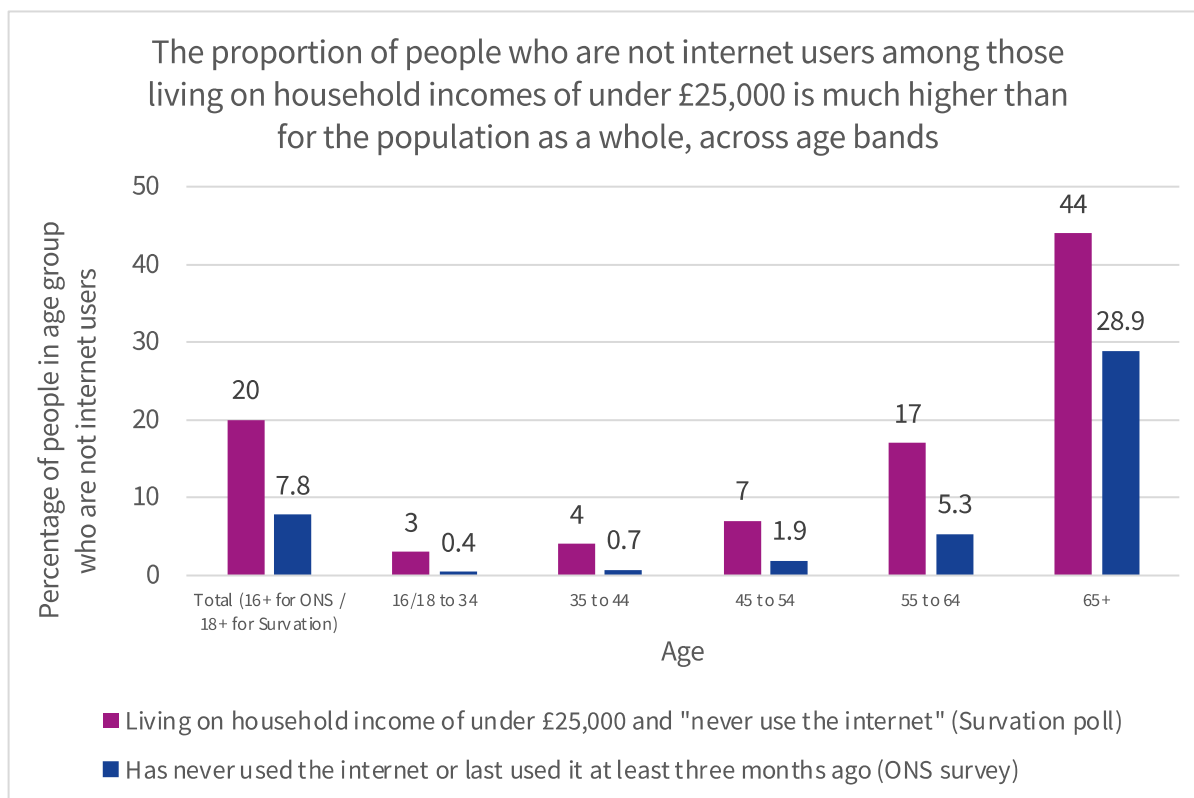


Figure 2: Proportions of people who are not internet users, by age band and income

Though sample sizes are small, for under 65s, we believe almost all the approximately half million people who are not internet users by ONS estimates will be living on household incomes of under £25,000 (488,000 of 516,000 or 95% based on our data). Among over 65s, around 68% of those who have never used the internet may be living on household incomes under £25,000 (1.9 of 2.8 million people). These findings build upon previous work conducted for the Centre for Ageing Better – which likewise found the overwhelming majority of those 50-70 year olds who are not recent internet users (around 1.2 million people) were living on household incomes of under £25,000 (around 994,000 people, (Centre for Ageing Better, 2021)

Age is still a significant factor in digital exclusion risk – nearly half of those aged those 65 and over living on lower incomes never use the internet (44%). However, while proportions among younger age groups are lower, they are still significant and considerably higher than in estimates that aren't categorised by income. This is particularly the case among 55-64s – nearly one in five of whom living on household incomes under £25,000 is not using the internet (17%), compared to just around one in twenty (5.3%) among the population in this age group as a whole. Sample sizes for the youngest age groups were very small and hence subject to margin of error, but it is striking that in a survey of just 500 people, we found five people under the age of 44 who never use the internet (equivalent to around 3%, compared to less than 1% in ONS estimates). This reflects data from the recent Nominet Digital Youth Index which showed that a third of young people (32%) do not have access to home broadband and when asked why they did not have digital devices at home, 57% said it was because they were too expensive (*Nominet Digital Youth Index*, 2021). Among adults who consider themselves to have a disability 31% of those living on household incomes under £25,000 said they never used the internet - compared to 18.4% of all disabled adults, and 16% of people on lower incomes who do not see themselves as disabled.

### 4.3 Digital poverty, Covid and the cost-of-living crisis

A focus on digital poverty has become even more urgent considering drastic rises in the UK cost of living in 2022. Increases in both tax and inflation have resulted in the Office for Budget Responsibility warning that household post-tax incomes adjusted for inflation will fall in over the next year by the largest amount (-2.2%) since records began in the mid 1950s (Francis-Devine et al., 2022, p. 28). 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 people into poverty (Hetherington, 2022).

Rises in inflation have a knock-on effect on the price of mobile and broadband, since the largest Internet Service Providers (ISPs) use a pricing model that links their annual price increases to the level of inflation – using the January Consumer Price Index rate of 5.4% or the Retail Price Index of 7.5%. Companies then adding a flat % on top of these rises (typically 3.9% for Vodafone and BT) leaving UK consumers facing price rises of up to 9.3% in 2022 for their broadband (White, 2022). Some mobile consumers are facing even steeper rises – with O2 and Virgin Mobile choosing to raise their prices pegged to the Retail Price Index of 7.5% and adding 3.9% on top – an overall rise of 11.4%. This translates into a rise of £2.28 on a £20 mobile contract.

Our survey data showed that among lower income adults who do use the internet, one in ten have reduced the amount they spend on food or clothes to be able to continue to afford phone payments or home internet (9%). Affordability issues also affect internet users. Our poll found one in ten adults living on low incomes had reduced the amount they spend on food or clothes to be able to continue to afford phone payments or home internet (9%). Around a third of people living on low incomes who have smartphones or tablets ration their mobile internet usage so they don't go over their data limit (31%), while a quarter do not use video calls or streaming services because it will make their data run out too quickly (23%). One in five adults with a mobile phone living on a lower income had changed their plan to make it more affordable since March 2020 (20%). 7% of those with a mobile or internet plan were not confident their household will be able to pay for their mobile phone services and/or home internet subscription this year.

Our survey data also showed the impact of the cost of living on people with a Pay-as-you-go (PAYG) or pre-pay packages. PAYG packages are more likely to leave people in the situation where they must stop using data, though this may impact people with caps on data in their contracts too. We found that around a third (31%) of mobile phone users ration their use of the internet/data so that they don't go over their limit. Around one in five mobile phone users run out of data before the end of the month (17%) and though 8% say they can buy more data immediately or at least within the week, another 9% of people on lower household incomes reduce or stop using their data until they can top up or their contract renews, including waiting over a week to top up. This represents hundreds of thousands of people on low incomes losing full access to the internet for at least days at a time on a regular basis.

## 5 Digital poverty and access to education & jobseeking

In January 2022 there were 5.6 million people on Universal Credit in the UK. (GOV.UK, 2022). Whilst people can apply for Universal Credit over the phone or arrange for someone to visit them at home in a limited set of circumstances, these exemptions are neither widely known nor used (Citizens Advice, 2022). Unemployed people and those in precarious work or on low incomes are therefore spending up 8% of their monthly disposable income or more on paying to be able to access essential financial support. An employment support worker working in a deprived area of Brighton felt that

the Government had not fulfilled their responsibilities to help people such as him support digital by default policies.

*...and to follow through on their digital by default which led to UC being online – follow through that. They have a responsibility to fulfil their own policy of digital by default.*

As one of the founding team at the UK Government Digital Service, Richard Pope, describes it, Universal Credit is not just a software project, but a political project.

*Universal Credit is a hyper-means-tested benefit based around a monthly payment and a regime of activities that change in response to the earnings, circumstances and behaviour of claimants, and a digital account. It is highly opinionated in how it relates to family and financial circumstances, and is based around a particular view of what constitutes ‘personal responsibility’. It is at once a political project that attempts to reward or compel particular behaviours from the public and a more prosaic reform of the welfare system in the digital age.”*  
(Pope, 2020, p. 4)

The risks of increasing inequality and loss of agency from digitisation of welfare systems is raising concerns globally. Reporting on his visit to the UK, The United Nations Special Rapporteur on extreme poverty and human rights asserted that ‘*Universal Credit has built a digital barrier that effectively obstructs many individuals’ access to their entitlements*’ (Alston, 2018, p. 8). In her work in the United States, Virginia Eubanks suggests that automated welfare systems risk creating a ‘digital poorhouse’ or invisible digital prison for the poor when implemented without careful consideration of the narratives and political systems that they reproduce (Eubanks, 2018). In the UK these narratives reflect a shift towards a new social contract between the state and the individual: which Alston argues is reversing previous notions that the state should be visible and accountable to the individual. New forms of conditionality and digital infrastructures are resulting in new forms of control (Dencik & Kaun, 2020, p. 2). The language of ‘resilience’ is now used as shorthand for the traits of economic self-sufficiency and economic independence from the state (Donoghue, 2021). For Universal Credit claimants, this means that the administrative, financial, and cognitive burdens are pushed onto individual claimants. As support workers we interviewed during lockdowns described it, there is significantly more pressure on individuals;

*You’ve got the whole digital side of things where you need a certain amount of wherewithal to use a computer but the actual welfare benefits system itself is really confusing at the moment.... Lots of changes. Universal Credit is placed on top of an existing, confusing system; it didn’t replace the existing system it was placed on top. That’s a whole sort of welfare rights issue – it doesn’t help! It really doesn’t help.*

*Now what I’ve noticed with universal credit is that now that it has all been digitalized. there’s more expectation on the user to kind of be on top of it all.*

For those supporting welfare claimants these issues are placing a significant burden on their already limited resources. Through interviews with intermediaries, we have seen how people’s experiences are shaped by digital poverty.

*We’ve had some absolutely heart-breaking stories come through where people have not been able to — [or] have been terrified of not being able to — complete their Universal Credit return... update forms that they have to put in [online] and*

*being terrified of being sanctioned because of that. (Centre for Ageing Better, 2021)*

*I know, a young man who moved into Council accommodation in February, just before lockdown and all of the things like trying to access his universal credit online. He doesn't have a device he's just got an old Nokia. The expectation is that actually 'oh everything's there online it's all accessible', but actually he can't access anything that he needs to do.*

As well as connectivity, digital poverty means that people do not have access to the devices they need, or the number of devices they need. We found a third of people living on household incomes under £25,000 that had devices were sharing them with others. During the pandemic the Government introduced device schemes for people in school. The Department for Education said that it provided more than [800,000 laptops](#) and tablets for disadvantaged pupils in response to Covid-19. However, allocations were often felt to be inadequate, particularly after criteria changed. Research from the Sutton Trust in April 2021 found that *'in schools with the most deprived intakes, many children did not have the resources they needed to learn from home, with 15% of teachers in these schools saying over a third of their students would not have access to a device for online learning, compared to just 2% in the most affluent.'* (Different Lockdown, Same Problems?, 2021)

Similar experiences were reported with the people we interviewed who were supporting jobseekers and those who were trying to access training opportunities at home and were faced by challenges of insufficient bandwidth and devices.

*Most of them had Wi-Fi at home because it came as a package with the TV but they didn't have laptops, they were just using their phones. Phones are not designed to do applications or even training. They were trying to do some Excel training online – all of that was impossible on the phone. We also had a participant who had a Mac laptop but was using the public Wi-Fi and the connection was terrible – it was impossible to do a Zoom call anything that required a bit more bandwidth.*

## **6 Addressing digital poverty**

This section explores the challenges of addressing digital poverty in the UK. The trajectory of current UK Digital Exclusion policies can be traced back to the New Labour government 1997 to 2007, with Tony Blair calling in 2000 for universal access to the Internet by 2005 (Blair, 2000). In 2010 the entrepreneur Martha Lane Fox was appointed 'UK Digital Champion' with the aim of getting as many people online by 2012 (Cabinet Office, 2010). Yet since these high-level policy commitments the issue seems to have lost its political appeal. As the digital divide has shrunk, digital exclusion has not been seen as a political priority in the UK. A respondent quoted in a report evaluating the National Lottery-funded One Digital Partnership addressing digital exclusion reflected that *'The topic is seen as politically unattractive, partly because it is intractable – the numbers of the digitally excluded have flatlined they are not coming down – so the UK government does not prioritise spending more money on it* (Sara Dunn Associates Ltd, 2020). As an interviewee in Brighton put it;

*I remember about 10 or so years ago when they were looking very strategically across the city at providing Wi-Fi access training out in the communities, all the*

*UK online courses that were there. It needs to be strategic and not pockets of money here and there; do a City approach. And Wi-Fi for all!*

Yet as funding has decreased the entrenchment of digital by default has risked deepening inequalities for those who experience any form of digital exclusion. These struggles were reflected in our interviews with organisations supporting jobseekers during the Pandemic.

*My experience has been that even with the crisis funders don't want to fund technology or hardware. ... And when I look at some of the funding applications even now it's still quite difficult to access that funding. And I know ESF created this pot of funding where you had 3 months to spend a pot of money but the bureaucracy around tying up that paperwork was just a huge barrier to take on that responsibility. We would never have been able to spend the money and wrap up their paperwork in the time they wanted us to spend it. You're right when you say it's not a priority for the government but also funders seem suspicious about how that funding could be abused in some way.*

There has been a wealth of work carried out by UK Digital Exclusion organisations over the last twenty years exploring strategies and approaches to addressing this issue. Notably in recent years research by Citizens Online/Centre for Ageing Better (Centre for Ageing Better, 2021) and Good Things Foundation (Good Things Foundation, 2022) has provided valuable insight, particularly on the need for 'place based' work. Yet 'individualised' digital inclusion policies which simply provide access to equipment rather than a package including support and data were a subject of criticism from our respondent in Brighton.

*I think people need devices and training, I think there has been a big push, which is good to get devices, you know, we know that devices, is the first thing. But from what I know they haven't come with any expectation of training, it has just been about providing people with the device not providing any support.*

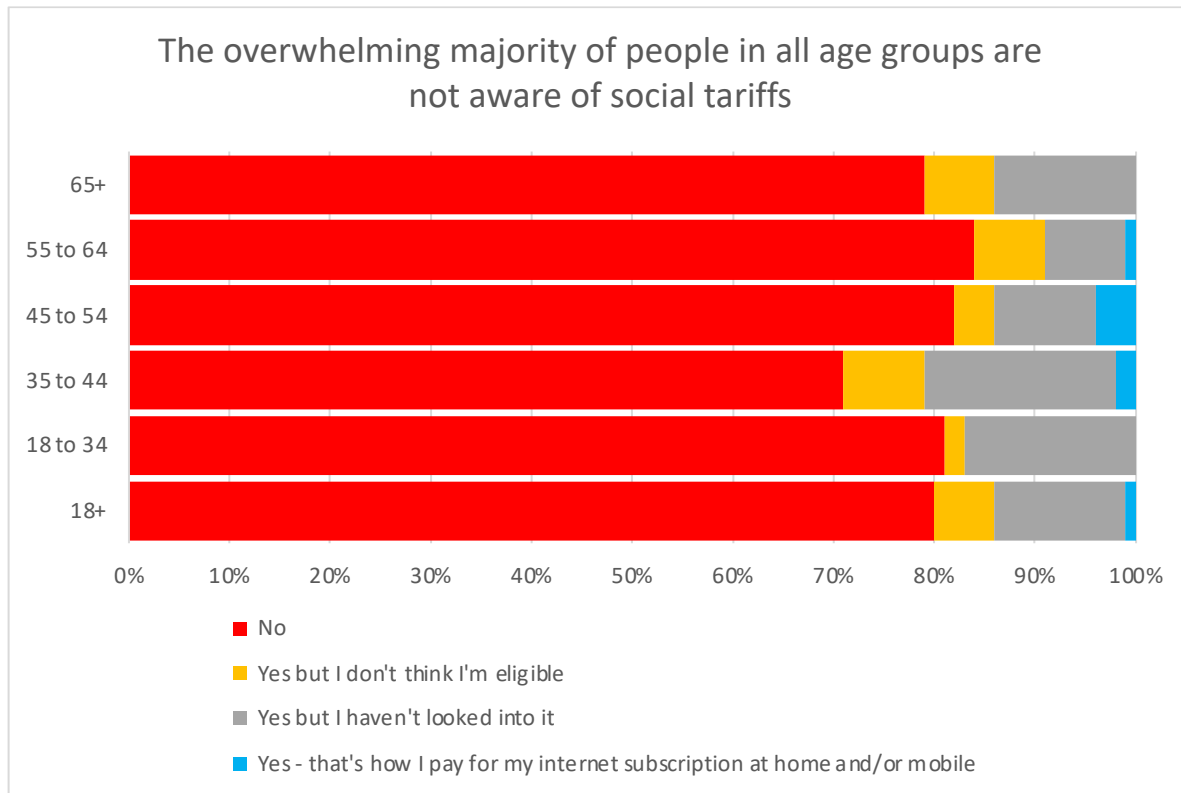
These approaches reflect broader problems with digital inclusion policies that '*...assume that individual changes via improving digital access and skills will fully address issues of inequality without proper attention to social structure*' (Eynon, 2022, p. 4).

### **6.1 Social tariffs**

*I know that there are digital services that you can link into via BT like better price services... but, again, you know with this particular gentleman his English isn't good enough to get in that conversation. Refugee employment Support Worker, Brighton*

This support worker was talking about the challenges her clients faced accessing affordable broadband tariffs which providers were required to provide on the basis of the European Electronic Communications Code and the national legislation based on it from December 2020 (Ofcom, 2020). 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 month, compared to a standard commercial broadband package of around £27 a month. However, we found that only 1% of lower income householders were currently using a "social tariff" to pay for internet. Four in five lower income people said they were not aware of any cheap deals available to people on benefits or low incomes (80%, figure 3). This finding is consistent with recent research from Ofcom which found that only an estimated 1.2% of eligible households have taken up a social tariff (Ofcom, 2022).

Figure 3 Awareness of social tariffs



National policy has attempted to address some issues of data poverty since the pandemic. BT, Openreach, Virgin Media, Sky, TalkTalk, O2, Vodafone, Three, Hyperoptic, Gigaclear, and KCOM signed up to measures to: remove all data allowance caps on all current fixed broadband services, offer new mobile and landline packages to ensure people are connected and the most vulnerable continue to be supported, and work with customers who find it difficult to pay their bill because of Covid-19. However, this policy relies on people having fixed broadband services – excluding those unable to afford connection fees or living in accommodation where arranging this is difficult. In September 2021 BT announced a "connect the unconnected" offer – open to households that receive universal credit with zero other earnings, which have not been connected to the Openreach network for the past 90 days. BT estimated about one million people could save up to £92, depending on how internet firms pass on the saving. However, smaller internet service providers don't have systems in place to identify customers on universal credit, customers are unlikely to be aware of the scheme (just as with social tariffs), and the process of proving eligibility places additional burdens on those under financial pressure. 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 report 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 15 Mbit/s which is likely to be inadequate for households of more than one person, or where an individual is streaming video 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'*.

The broader issue of slow connectivity is a key issue in people's experience of digital exclusion, and community support worker in London reflected on how a whole private estate in his area had been signed up for a deal with Virgin.

*Because it's a private estate they've got some rubbish deal with Virgin or someone; if your Wi-Fi stops working your whole life stops. They pay a service charge of about £1000 a year, plus council tax for very mediocre services.*

## 6.2 Free Wi-Fi

The provision of free Wi-Fi was a popular response to a question raised in our research as to how to fix digital exclusion;

*If you know that you have a council estate that is really deprived, give them free Wi-Fi. If you know that that you have a council estate where you know there are 10 20 families that are on benefits that have it really hard – give them Wi-Fi because it will give them freedom. It will give them information; it will give them knowledge and that's what might get them out of that situation.*

This approach is endorsed by the Digital Inclusion Alliance for Wales who called for *'Free public provision of Wi-Fi alongside community-based support to use the internet safely'* (2021, p. 9). With regard to some forms of accommodation, Citizens Online explored a potential solution to this in collaboration with [Jangala](#), [Justlife](#) and [Diverse and Ability](#), with the Digital Brighton and Hove project launched a [targeted pilot](#) to enable Wi-Fi (as well as tablets and trusted digital support) to vulnerable people in emergency accommodation through 'Get Boxes' paperback-sized internet connectivity devices, that – when connected to mains power create instant Wi-Fi that can cover a dwelling through 4G connectivity. The provision of free Wi-Fi in temporary and sheltered accommodation are key policy ideas that could be explored and should be funded nationally.

Zero rating of some government websites was also introduced to [NHS websites](#), [victims of crime](#) and other support websites already zero rated by some mobile network operators, including Imkaan, a website dedicated to addressing violence against Black and Minority Ethnic women and girls. 'Zero rating' means that accessing these sites would not diminish someone's data allowance. The effort is incomplete however – the #ClickZero campaign *'believes that you shouldn't have to pay through your data to access universal credit, that you should be able to access public health information via the NHS regardless of your data allowance. That if your mobile phone has no credit, you can still access your state pension or contact the emergency social care team in local authorities.'* (#CLICKZERO, n.d.) The APLE Collective asks that " *the Government [to] find practical solutions to cross the digital divide and introduce free Wi-Fi for vulnerable low-income groups*" (APLE Collective, 2020) and Citizens Online called on the government to *'Make the internet free during the Coronavirus pandemic to ensure essential access to the online world for everyone in the UK'*.

## 6.3 Which organisations do people experiencing digital poverty interact with?

In our survey only 7% of respondents had received help to access the Internet and the low take-up of social tariffs suggests that people are broadly unaware of support that is available. This quote from a Local Authority worker reflects a broadly held assumption that digital exclusion is a problem that is 'fixed'.

*I think we've lived with the assumption that there are very few digitally excluded, and so maybe the attention is not being given to that. Certainly in this Borough it's opened our eyes. And I just hope that other Boroughs have also identified it and put something in place.*

An Administrative Justice Council (AJC) report from 2020 on front line providers of advice and assistance in areas of social welfare law found that 34.4% unable to meet demand for requests for digital assistance (Sechi, 2020).

*The question about digital access is constantly coming up; I'm on a big migrant English support WhatsApp group and we still don't know what the pathway is to getting someone a tablet then, how do they get data?*

A recent NCVO report on impact of the pandemic on the Voluntary Community and Social Enterprise Sector (VCSE), showed an acceleration in digital ways of working by the sector, with a resulting ability for the sector serve to more or increasingly diverse people. However this is happening against a backdrop of a broader funding squeeze; with 41% of organisations reported a weakening financial position and 38% a deterioration in their access to long-term funding (NCVO, 2022).

Previous research by Citizens Online (Centre for Ageing Better) found nearly half of organisations surveyed about providing digital inclusion support to 50–70-year-olds during the pandemic were giving/loaning devices (47%), with 34% having started providing services around devices since the pandemic. Fewer were helping with data (32%) – but again, a considerable portion had started the work in this area after March 2020 (20%). It is often said that small, local organisations are best placed to reach digitally excluded populations – through existing relationships of trust. However, these organisations are often financially stretched. Adapting budgets to fund devices and data isn't sufficient alone: organisations need to be able to provide recipients with wrap-around digital skills support. This approach relies on the existence of appropriate and sufficiently funded organisations in all communities. While many organisations were newly providing devices, the research found over a quarter of organisations said not only were they not providing devices, but they did not know of anywhere to refer people for devices (27%). The most significant issues were around data costs, with 38% unable to provide or refer to free WiFi or broadband, and 42% unable to provide or refer to sources of funding for either data or devices.

Lack of internet access at home means that people often rely on public places for internet use. Our poll found 21% of internet users (earning under £25,000) used libraries or internet cafes at least sometimes (15%), with significant proportions often (5%) or always (1%) accessing the internet in these locations. The decline in the number of libraries in England (by 16.8% since 2009/10) means fewer people have a library close by. Even where libraries were open, potential users may have been reluctant to utilise services due to fears related to the pandemic, or because public spaces cannot be used for some types of internet use – such as video calls with health practitioners or those providing mental health support.



Figure 4: Proportion of people living on household incomes of under £25,000 accessing the internet through public places

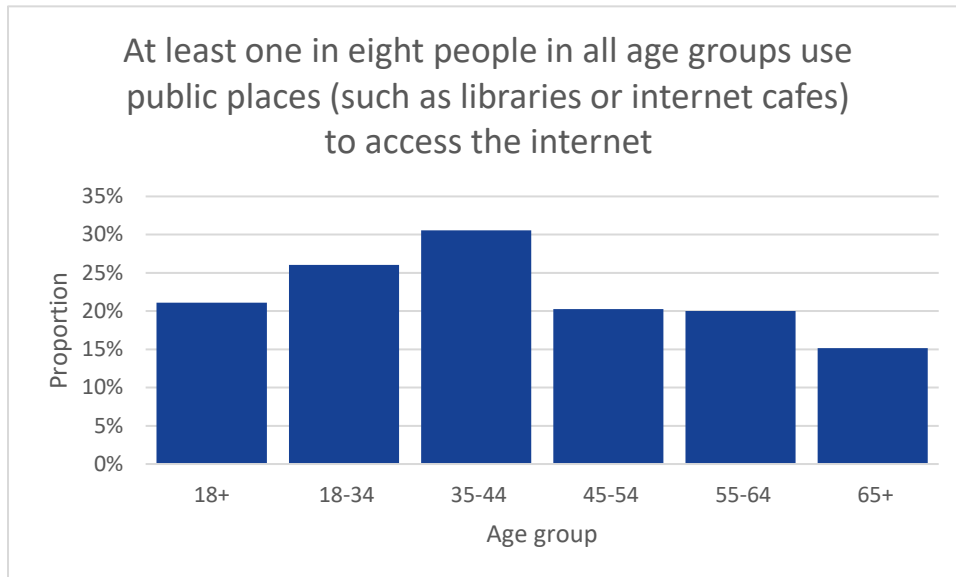
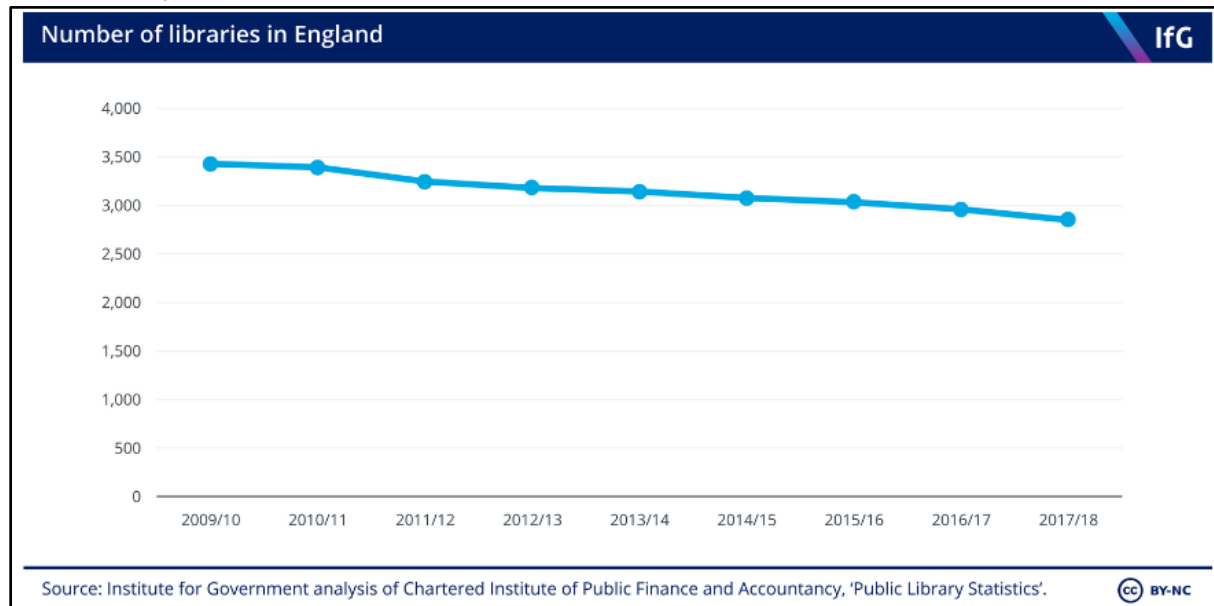


Figure 5: Number of libraries in England 2009/10-2017/18 (Institute for Government/Chartered Institute of Public Finance and Accountancy)



## 7 Conclusion and recommendations

This report has shown both the urgency of the issue of digital poverty given the cost-of-living crisis, and the importance of recognizing a dual conception of digital poverty as the challenges people face affording connectivity and devices, and the way that a lack of devices and connectivity can make other aspects of life more expensive. A report on data poverty during the pandemic highlighted how action by community-led groups has played a vital role in reaching those experiencing digital exclusion but showed that action is needed at a national level by government and industry to address these challenges (R. Robinson et al., 2021).

We commend work by the Good Things Foundation (Stone, 2022) on the different 'levels' of data poverty and ambitious use of a horizons model which ties in recognition of the need for regenerative economic models tied with practical recommendations such as free Wi-Fi and zero

rating. There is a need to draw inspiration from other sectors such as transport and fuel to show how these areas are subsidised. Whilst there are valuable initiatives that are theoretically national in scope through provision via the UK Online Centres network, in practice people may be left behind if they do not live in an area well-served by the network. For example a report on digital exclusion in the North East found a *'...lack of ownership and coordination at national, regional and local levels when it comes to tackling digital exclusion'* (Roscoe & Johns, 2021).

The devolved administrations in Wales and Scotland have, arguably, made better progress in developing a national rather than local approach to tackling digital exclusion than has been seen in England at a national level. The Scottish Government has committed over £48 million to The Connecting Scotland programme which was set up in May 2020 in response to the Covid-19 pandemic. It aims to provide a national, human-centred, consistent and comprehensive approach to reducing the rates of digital exclusion and digital marginalisation due to low income (Connecting Scotland, 2022). In Wales, the Digital Inclusion Alliance has called for internet access needs to be recognised as an essential utility and to see sectors working together to make this a reality (Digital Inclusion Alliance for Wales, 2021).

There is also a risk that a shift in terminology to digital poverty from digital exclusion reduces the focus on the broader societal challenges caused by digitisation. As the Digital Poverty Alliance puts it; *'Digital poverty is not just about access to connection and devices; it is also about ensuring the digitised, algorithmic systems do not perpetuate, deepen, or create new disadvantages for people.'* (Allmann, 2021, p. 10). In a political context where social safety nets are being reduced and increased burdens are placed on individuals, the private and voluntary sectors assume more of the role of the traditional welfare state (Donoghue, 2021). This is the case in the welfare rights and job seeking sectors, where we found many examples of people needing support from the voluntary sector to navigate digital systems to access their basic entitlements. Fixing this issue requires action at all levels; from changes in the information infrastructures underpinning Universal Credit to allow independent auditing to ensure that automated decisions operate in line with claimants' rights (Pope, 2020), right through to a reappraisal and control of the role of technology companies in controlling the infrastructures that underpin our most basic public goods (López et al., 2022).

The Covid Decade report highlighted the need to address the underlying and interconnected propellants of inequality. As the cost-of-living crisis worsens this report has shown how urgent national policy attention and funding is needed to ensure that digital poverty does not continue to amplify other aspect of inequality, from education to health and employment.

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## 9 Appendix 1

**Fieldwork Dates** 22nd of February – 13th of March, 2022

The survey was conducted via telephone interview. combination of landline and mobile data were used. Differential response rates from different demographic groups were taken into account.

**Population Sampled:** Residents 18+ living in England earning up to £25,000

**Sample Size:** 500

**Data Weighting:** Data were weighted to the profile of residents 18+ living in England earning up to £25,000. Data were weighted by age, sex and region. Targets for the weighted data were derived from Office for National Statistics Data.

**Margin of Error**

Because only a sample of the full population was interviewed, all results are subject to margin of error, meaning that not all differences are statistically significant. For example, in a question where 50% (the worst case scenario as far as margin of error is concerned) gave a particular answer, given the sample of 500 it is 95% certain that the 'true' value will fall within the range of 4.38% from the sample result. Subsamples from the cross-breaks will be subject to higher margin of error, conclusions drawn from crossbreaks with very small sub-samples should be treated with caution.