

Tackling digital poverty in rural communities

NATIONAL POLICY BRIEFING

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Glossary

Digital poverty:

The inability to interact with the online world fully, when, where and how an individual needs to.

Rural North West England:

Areas across Cheshire, Cumbria and Lancashire which are not major metropolitan areas or larger cities and towns but settlements with a population of less than 10,000, such as villages or more isolated hamlets or dwellings.

Universal Credit:

A means-tested benefit for people of working age who are not in employment or on a low income. Universal Credit replaced six means-tested benefits previously available.

Executive Summary

A variety of interrelated factors drive digital poverty, including cost, connectivity and confidence.

Our research focussed on the experiences of those living in rural communities in North West England found that digital poverty presents in specific instances. Individuals can face real barriers when attempting to navigate the welfare system or applying for a job online for the first time. Rather than categorising people as either being in digital poverty or not, interventions must be designed to meet the specific moments of digital poverty that people face.

Across our quantitative survey of over 500 rural residents living in the North West, and qualitative findings, we found:

- 28% of the entire sample lack a form of digital skills;
- The two skills that respondents had the most trouble with were: looking for work or applying for jobs online (26%) or video calls using Zoom, Microsoft Teams etc (23%);
- In responding to challenges such as this, a high proportion of the survey sample would ask family or friends for help – 22%, with older participants and those on lower incomes even more likely to do so;
- Survey results found that while 95% of the sample have access to the internet through broadband or WiFi, just under a quarter of respondents unable to make the most of online engagement, either having trouble doing the things they want to do on the internet or wanting to use more online services than they currently do;
- Older people, aged 65 above, and those on lower incomes, are more likely to experience digital poverty.

Informed by this evidence, Government should take a strategic approach to tackling digital poverty at a local level.

This briefing outlines policy recommendations that could help to assuage digital poverty in rural areas, including:

- Raising the awareness of social tariffs as available to Universal Credit claimants, with plans for a joint campaign to be set out in the forthcoming Digital Strategy 2022;
- Ofcom should require providers fully disclose the full range of charges included within mobile or broadband package with these new regulations to be drawn up in consultation with bodies such as Citizens Advice and other advisory groups.
- DCMS should set out plans to coordinate and share good practice on increasing digital confidence within its forthcoming Digital Strategy.

Figure 1. Digital Poverty in rural North West England: summary

Digital poverty in the North West

Digital Poverty is a significant issue across the UK with specific challenges for individuals living in rural areas.

In a survey of 500 adults we found...



25% are unable to make the most of their internet connection, with 16% struggling to do the things they want to online, and 14% want to use more online services



What is it like to experience digital poverty?



"I live in a small village and being online is like fumbling around in the dark and I just can't do it. When I wanted to be part of my choir online during lockdown, I didn't know who to ask or where to start, so I felt left out and let down."

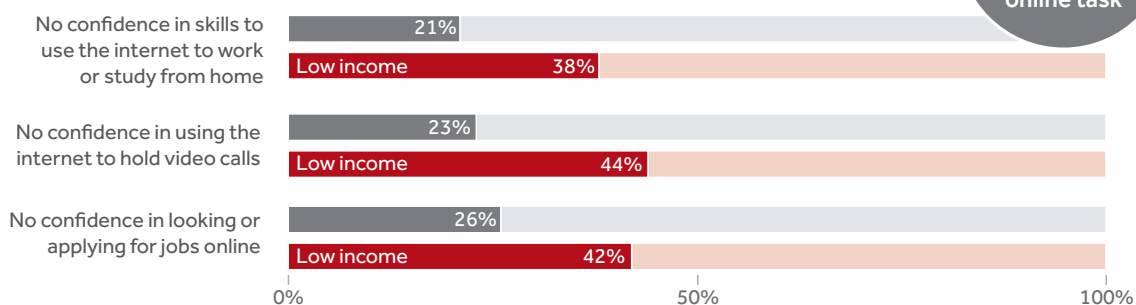
"Being a forester can be dangerous. When I'm in some of our forests there's no mobile signal, so no safety net. If something goes wrong, I'm stuck until the estate manager comes to check up on me – that could be two or three hours."



What are the barriers?

Lack of confidence and skills are a greater barrier to accessing digital services than **connectivity**.

There is a strong correlation between **lacking digital confidence** and **low income**:



28%
aren't
confident
with a key
online task

For those that had access to an internet connection and a device:



73% reported there is a **strong enough signal** for them to use mobile internet at home (3G, 4G, or 5G)



71% of those with **WiFi at home** described the connection as **good quality**. 9% reported poor quality WiFi. 5% don't have WiFi at home

Introduction

More than ever, public services require users to engage with digital platforms. Across welfare, health and housing, the 'Digital-by-Default' policy agenda has become the standard approach for service delivery.¹ As a consequence, individuals without a secure digital connection or confidence to carry out tasks online are at severe risk of not being able to access critical services.

This risk is heightened in rural areas. Research from the Good Things Foundation indicates that on average 80% of rural households in the UK have standard broadband availability compared to 98% in urban households.² Individuals experiencing digital poverty in rural areas are less likely to have alternative ways to access services within their local community. 17% of England's population live in rural areas according to research by DEFRA³ and this segment of the population have persistently been at a disadvantage with regard to digital connectivity. Government have recognised the importance of increased connectivity within its Levelling Up White Paper - pledging that by 2030 the UK will have nationwide gigabit-capable broadband and 4G coverage, with 5G coverage for the majority of the population.⁴

Connectivity barriers could be impairing business growth in rural areas. These areas contribute 16% of England's economy, with small businesses key to economic activity - 71% of employment across rural areas is based in SMEs, compared to 41% in urban areas.⁵ It is also worth noting that employment rates are 3% higher in urban settings compared to rural areas within England. Predominantly urban areas in England also enjoy higher workplace-based earnings over rural places at £25,400 (excluding London) to £22,900 outside of urban places.⁶

Covid-19 has accelerated the move towards digital service delivery and the movement to working from home, which also places greater onus on the need for digital skills and access in order to ensure that job opportunities related to remote working can be taken up by individuals across a range of socio-economic backgrounds.

This briefing is based on a study undertaken to understand the drivers of digital poverty among rural communities in the North West. The statistics cited are based on a survey of 501 rural residents in the North West, conducted for the project. Sixteen qualitative interviews were also conducted with a selection of survey respondents. Output from an expert policy workshop is also included in the briefing.

In the North West of England, progress towards closing the digital divide has been slow in comparison with other regions. The UK's Digital Inclusion Strategy, published in 2014, set out a target to reduce the number of people offline by 25% every two years. But between 2017-2019, the North West only achieved a 15.4% reduction rate, with the region ninth out of twelve in making progress to bridge the digital divide.

The profile of the North West's business community is mostly concentrated in micro-sized businesses which make up 83% of all firms. 16% are SMEs employing between 10 and 249 people, and just 0.4% (or 1,300 firms) employ 250+ people.⁷ Sectors that are significant employers in the region include retail and logistics (21%), health (14%) and accommodation and food services (7%). The region also has a rich manufacturing heritage with the sector employing 9% of overall jobs.

While these factors indicate that the North West region's rural population and economy holds a set of distinctive features, the findings hold implications that are applicable both to policy makers in other regions and at a national level.

What is digital poverty?

We draw on a Digital Poverty Alliance definition of “digital poverty” for this research - as “the inability to interact with the online world fully, when, where and how an individual needs to.”⁸

Context is essential here: digital poverty occurs where a specific need cannot be achieved through digital engagement.

While for one individual this might be around engaging in social media, another person may

experience digital poverty in relation to needing to access Universal Credit online. Although digital poverty is closely linked with socio-economic conditions, it is distinct from economic poverty. Individuals who are not on a low income may face other barriers to digital services⁹, including confidence and connectivity. Digital poverty can be experienced despite having a good income. As this briefing sets out, besides costs, there are broader drivers of digital poverty which include confidence and connectivity.

Key findings

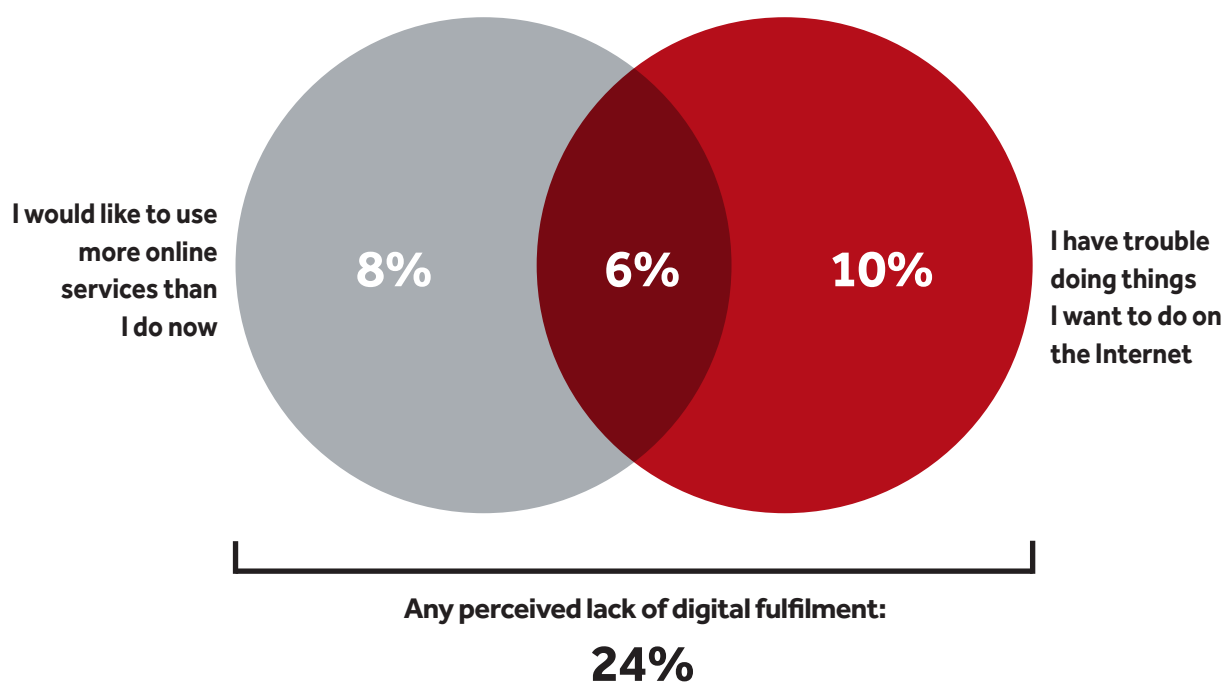
Digital Poverty is multi-faceted. Access is a key component but other significant barriers affect the extent to which people choose to, and are able to, engage with digital services through the internet. The key themes underpinning digital poverty among rural communities in the North West are set out below.

This research has explored the ways that digital poverty is impacting rural residents in North West England. Survey results found that 95% of the

sample have access to the internet through broadband/WiFi, and nine in ten agreed that the internet provides advantages in every-day life. However, just a quarter of respondents were able to make the most of that, with 14% saying they would like to use more online services and 16% reporting they have trouble doing things that they want to do online. 24% of the sample have a perceived lack of digital fulfilment, in that they would like to use more online services, but have trouble doing so.

Figure 2. Proportion of rural North West residents who aren't able to do the things they want to online

N:501



Age, income and education are linked with digital poverty

There are strong demographic and socio-economic drivers underpinning attitudes to internet use and fulfilment. For example, while the overall proportion of respondents who had trouble doing things they wanted to do online was 16%, this rises to 28% among respondents of 65 years and above and 32% of those whose household income is £20,000 or less.

Older people and those on a lower income those who had completed fewer years of formal education are at greater risk of experiencing digital poverty. There is a strong correlation between lacking digital skills and being on a low income.

Our research found that digital poverty is exhibited in

moments in which there are multiple connections between different drivers, such as accessibility and cost.

Digital poverty is preventing individuals from making the most of key online services. 79% of the sample stated that they were confident to work or study from home, with this dropping to 62% among the respondents from a household which has an income of £20,000.

There are similar differences across other digital skills, with survey respondents who report a household income of £20,000 or less demonstrating less confidence:

Figure 3. Digital Skills by Income Full sample, N:501; lower income, N:115

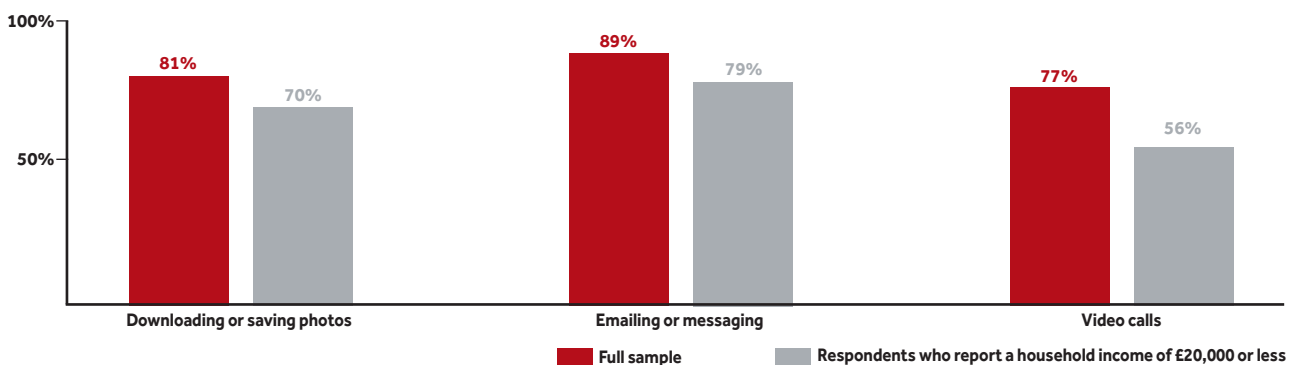
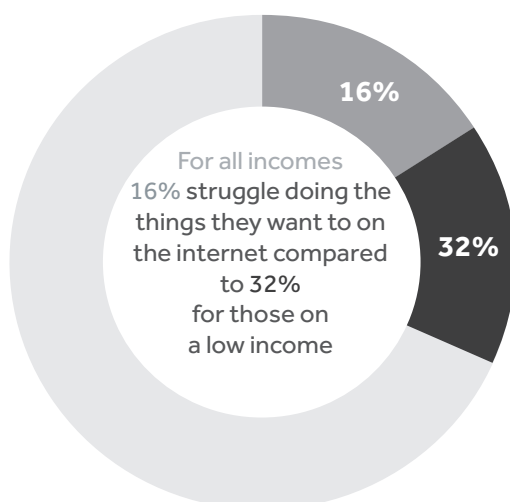


Figure 4. Using Digital Services

Who is affected?

14% of survey respondents would like to use online services more than they do, with those living on a **low income** and **older people** most likely to experience digital poverty.



43% of respondents aged **65 years old or older** rely on friends and family to use the internet...

...compared to **21%** of those aged **45-65**...

...and only **6%** of those aged **18-44**

The degree to which rural residents can access devices and the extent to which affordability constraints hinder their usage, are closely related with having more limited digital skills. Confidence is also strongly correlated with age - 28% of the entire sample lack a form of digital skills but this rises to over half of those aged 65 and above.

Our evidence highlights a set of factors which drive digital poverty, manifesting in relation to specific digital tasks, creating moments of digital inclusion and exclusion. In navigating potential moments of

digital poverty, individuals will weigh up decisions and actions in ways that could either be enabling or disabling; evaluating where engagement with the digital world offers sufficient benefits to outweigh the risks; and assessing trade-offs and remedial action for poor connectivity against carrying on without taking remedial measures. Policy measures must be based around these key 'touch points' and moments at which lacking engagement can result in poor outcomes for residents who require online public services.

What are the drivers of digital poverty in the Rural North West of England?

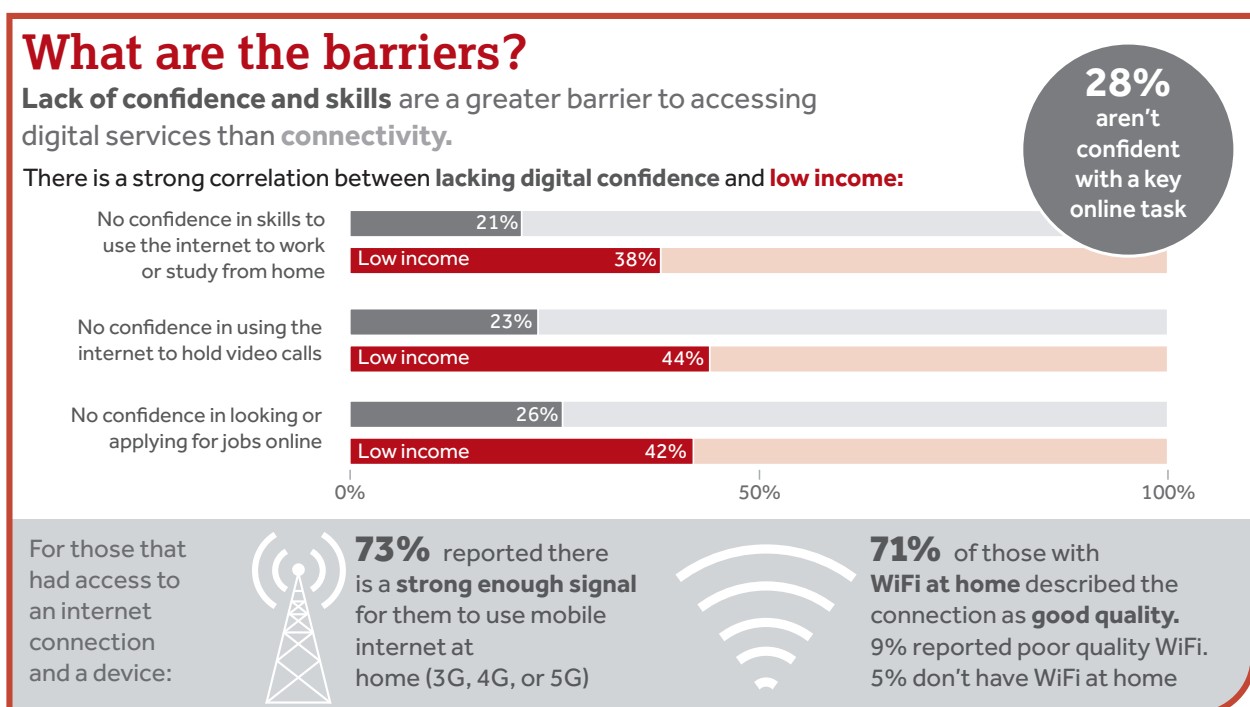
Lacking confidence is a strong driver of digital poverty

Our research found that inability to effectively carry out key online tasks and services was a key driver of digital poverty:

- 28% of the sample lack one form of digital skills across the measures asked about: e.g. installing apps, online banking.

- The two skills that respondents had the most trouble with were:
 - looking for work or applying for jobs online (26%) or
 - video calls using Zoom, Microsoft Teams (23%)

Figure 5. Confidence using digital technology



Based on a survey of 501 adults in rural northwest communities, between 25th February and 13th March

Again, older respondents and those on low incomes exhibited even further struggles with these tasks.

Given the shift to remote working resulting from the Covid-19 pandemic, it is concerning that such a high proportion of the rural population within the North West struggle with these skills. Data taken from the Annual Population Survey in 2020 shows that rural areas have a higher rate of home working than urban places (25% to 16%).¹⁰

Those lacking confidence in online job searches and applications may well struggle. Even for jobs that are not computer-based, such as customer service within the hospitality industry, recruitment will predominantly be conducted online. Evidence also shows that strong digital skills are associated with higher wages – with proficiency shown to lead to an increase in earnings of between 3% and 10%.¹¹

There appears to be a compounding dynamic occurring with those with limited digital skills struggling to engage with vital online services. And lacking confidence and familiarity with key digital tasks such as making online payments can have wider impacts for financial wellbeing. Recent reports found that council tax rebates of £150 that Government has made available to low income households to manage rising energy prices, are being delayed for consumers who do not pay council tax by direct debit.¹²

Low confidence and willingness to engage with digital activities may also be influenced by a lack of trust which prior research has shown to be a driver of digital exclusion.¹³

16% of the survey sample lacked confidence in engaging with online banking services and these reservations were also evident within the qualitative interviews:

"I should do [online banking] because it saves you money in the end just getting information is so much easier but I'm just old-fashioned... But I know at some stage I will have to because I suspect that even cheques will get faded out soon."

"I changed bank because they closed my branch in my village. I don't want to be doing it online."

In responding to these challenges, a high proportion of the survey sample would ask family or friends for help – 22%, with older participants and those on lower incomes even more likely to do so.

"Family or friends help. I've got neighbours that are pretty good upstairs... and a friend just round the corner sorted something out on my phone for me."

Lacking confidence with digital technology could also limit engagement with online social groups, which during the pandemic sprung up to replace in-person meetings:

"During lockdown I joined the isolation choir, but I didn't feel I could go ahead with it, because I didn't feel I could do the... where you have to send in what you're singing, record yourself singing and send it in. I couldn't go the full way with that, which I was a bit sorry about really..... I just hadn't got anybody to ask about it, so I didn't continue with that. Never mind, I enjoyed the rehearsals anyway."

Lacking access as a driver of digital poverty

Access is one element of digital poverty among rural North West communities but is far from the only factor that prevents people from engaging with digital services. There are, however, barriers to access experienced by individuals in rural North West. Our survey found that:

- 13% of the sample have poor quality or no Wi-Fi
- 1 in 5 have no mobile broadband

High speed internet access has been persistently lower in rural areas compared to urban ones. Ofcom data shows that 98% of urban areas in the UK enjoy a superfast broadband connection which drops to 83% among rural places.¹⁴ Research shows that the absence of digital infrastructure in rural areas can negatively affect communities, with young people drawn towards cities in order to pursue lifestyles which are closely related to digital technology.¹⁵

Qualitative findings highlighted that participants with poor digital connectivity could be vulnerable in the event of their connectivity being cut-off, lacking a 'plan B'. This could result in people needing to adapt their approach in ways that are not conducive to the task at hand, such as when working from home:

"I have to have the hub in a certain place [in my house] otherwise it's very difficult for me to pick up a signal. I tend to work in the kitchen where I've got a goods surface to work on but I have to go where the walls aren't too thick to make a call."

Adaptive practices also included individuals relying on their mobile phone data at home, over and above their Wi-Fi connection. For lower paid workers in particular, lacking access or unreliable broadband or mobile signal could be a key cause of concern as disruption to work may result in a loss of salary or not being paid, as our qualitative research found.

Qualitative findings also showed how uncertainty about the reliability of their device or connection also impacted both people's ability and willingness and ability to work from home, which in the context of Covid-19 and the health challenges it presented, could give rise to challenging situations.

"I literally have to go into an office, during lockdowns principally because working from home was not an option for me. Which was very frustrating because we do have clinical vulnerability in the house. So, it's not without consequence.... It's two trains... more than one hour away"

"I probably wouldn't be able to hold down a job that relied on the internet... I am not confident in working from home... the internet is fine, most of the time. It's the phones, the phones are bad. I'm not confident that I would be able to work a job where I would have to use the phone, because it would just be so unreliable."

Accessibility challenges also included mobile coverage and reliability, which could result in everyday working practices needing to be altered. Mobile phone coverage was important to participants who were aware of 'not spots' in their area:

"You really have to go to the top of the drive if you want to use that [mobile signal]. It dramatically improves at the top of the drive..... I think people are used to it. People who know us are used to it and they probably email us before they'd text us."

Affordability concerns and low consumer confidence are limiting digital engagement

People living in rural areas have to contend with higher prices for fast broadband connectivity, with previous survey evidence showing prices were 76% higher on average than urban areas.¹⁶ Coupled with the cost of devices, this can present a disincentive to engaging with the digital world.

Our survey included a series of questions to gauge the affordability of getting online. We found that 19% exhibited some form of cost barrier, whether in relation to broadband access, mobile data or access to devices. Cost is certainly a driver of digital poverty and unsurprisingly, households on low incomes are more adversely affected, which will compound inequality with limited connectivity (more likely to be experienced in low income households) limiting earning potential. 19% of the sample found either their PC, home broadband, a smartphone headset or mobile data unaffordable, rising to 36% among households with an income of £20,000 or less.

"I would probably get a more modern phone [a smartphone] if it was more affordable But I have a limited income at the moment so I have to watch what I'm spending... I can't just go out and spend a few hundred pounds on a phone, I would maybe like to..."

Qualitative findings provide rich context around the ways digital costs can create a struggle to balance other costs and results in other forms of poverty. Given the current cost of living crisis, these expenses will be felt all the more severely with the costs of essentials outpacing wages and welfare benefits.

Personal circumstances were closely interwoven with choices that people had to make when deciding on how and to what extent they can afford to make use of digital technologies.

"Maybe if I didn't have a child, it wouldn't have bothered me so much."

"I felt really stuck where I was. The boiler kept breaking. The internet was ... always going off; and for a while, I was so skint, ... because I was paying two mobile phone contracts."

Qualitative findings also highlighted how low levels of consumer confidence and technical understanding could result in people committing to costly and sub-optimal contracts that they are then tied in to, such as product-service contract bundles that include Wi-Fi and mobile data services.

"My internet was terrible... loads of people didn't [have reliable connectivity] but the best one [connectivity] was if you went up to the third floor... you could kind of get signal there, or you could go outside and get signal. But that was about it. So, I changed my mobile phone connection, because I was in a contract with one company which I didn't get any signal for. So, I phoned them and said, "I don't get any signal here, you know, in my own home and I'm a new mum, a single parent, do you think I could maybe cancel this contract?", "not really, no". I just ended up paying out that whilst opening up another and at the time, ... I was really... yes, really skint..."

Policy development to address rural digital poverty

Engagement with online public services and all of the benefits that this can provide must be promoted across the UK as a whole, so that each and every place can benefit from it. However, the 'rural premium', made up of unreliable internet connectivity, reduced local resources and additional costs, represents compounding drivers of digital poverty for rural areas.

Digital poverty will have a range of negative implications for people in rural areas. Being excluded from the digital world can prevent people from engaging in essential routine tasks and from participating in services that are conducted online, such as booking a virtual GP appointment or online banking.

Connectivity

As part of its Levelling Up agenda, the Government has set out a range of targets to increase digital connectivity. For example, a target has been set for the UK to have nationwide gigabit-capable broadband and 4G coverage by 2030, with 5G coverage for the majority of the population, as set out in the Levelling Up White Paper.¹⁷

SMEs are intrinsic to the health of local rural economies but often are more dependent on reliable digital connectivity to help them achieve their key business activities than their urban equivalents¹⁸, with poorer digital infrastructure in rural areas presenting greater risks to these smaller rural firms.

Work

The nature of work has been significantly impacted by the Covid-19 pandemic. More flexible and remote working has risen sharply and more than ever, searching for and applying for a job requires familiarity with online resources and key digital skills. In light of this context, it is all the more concerning that searching and applying for work is the area where confidence was lowest among our survey sample. Currently, employers are struggling to recruit in what is a very tight labour market¹⁹,

but there is a real risk that rural residents who lack key digital skills, and who fall out of work following a long period of employment, will face pronounced barriers to using online job platforms.

There are signs that the move towards remote working could help young people to access new roles traditionally located in urban centres²⁰, but this will be contingent on reliable and strong connectivity.

Cost

Affordability is a thread that runs across the research findings. Survey respondents from low income households were less confident carrying out digital tasks and more likely to suffer from sub-optimal connectivity. For rural communities to be empowered to engage with online public service effectively and opportunities for remote and flexible working, affordability barriers will need to be addressed.

Given the current cost of living crisis facing the country, Government must ensure that policies and programmes seeking to address digital poverty are developed and implemented within the context of the acute financial pressures that many people are facing. Our research showed that people need to balance digital cost requirements alongside other competing financial obligations, such as energy bills. As living costs rise, there is a risk that many rural residents will be left with stark choices that may present them with a strong financial imperative to discontinue subscriptions to digital technology, or to lower usage, thus increasing the risk that they will fall in to digital poverty.

Policy recommendations

Taken together, these challenges are impacting different rural communities in diverse ways, reflecting wider challenges they face. Without concerted policy action, there is a real risk that aspects of digital poverty more prevalent in rural communities could become further entrenched, just as the shift towards online public services is accelerated.

It will be crucial for central government to work effectively with regional and local tiers of government in addressing digital poverty.

A separate set of recommendations are outlined in the accompanying regional briefing for these policymakers, and a range of stakeholders, both at a national and local level should be consulted to ensure they are effectively implemented.

To help rural areas bridge the gaps that prevent people from engaging with the digital world and online services, national policymakers should take the following steps:

Recommendation 1: DCMS and DWP should work together to raise awareness of the availability of social tariffs to Universal Credit claimants, with plans for a joint campaign to be set out in the forthcoming DCMS Digital Strategy 2022

Beginning to claim Universal Credit can be a transition that causes anxiety for people, who often will be struggling financially as they enter the system. People on Universal Credit are eligible for social tariffs, which allow individuals to benefit from broadband connection at a reduced cost. There are a range of social tariffs offered by providers, at varying levels of discount, but often at reduced connection speeds. Too often however, low income households are unaware of these offers which go un-utilised with only a reported 1-2% of Universal Credit claimants taking up social tariffs.²¹ Providers, consumer bodies, digital teams across local authorities and regional branches of the Department for Work and Pensions should coordinate efforts to provide this information across local Job Centre Plus branches.

This should include clear communication about eligibility and the process for exiting the social tariff. Digital champions within more local initiatives, overseen by third sector bodies, should also have a role to play in this.

Even on a social tariff, broadband expenditure can make up a relatively significant proportion of disposable income for people getting Universal Credit, so there is also an onus on providers to offer genuinely affordable rates for at risk customers.

Recommendation 2: Ofcom should require providers fully disclose the full range of charges included within mobile or broadband packages and ensure this information reaches vulnerable consumers in clearly understandable terms. These new regulations should be drawn up in consultation with bodies such as Citizens Advice and other advisory groups.

This should include an explicit focus on digital access and connectivity in rural areas, with exit clauses and routes to compensation for consumers who find that they are unable to access the internet where they live.

Our research indicates that prohibitive mobile and broadband package costs could affect digital engagement. The qualitative findings in particular revealed that in some cases individuals are sold contracts without being informed about network connectivity where they live, only to find that with very limited coverage at their home, their new device and contract are rendered not useful.

Recent research has also found that customer trust in providers is poor, with a study identifying that 41% of UK households do not believe their broadband provider does enough to ensure they are on the best deal.²²

Rural areas hold the potential to contribute significantly to the country's prosperity and wellbeing. To fully leverage this capacity however, digital connectivity must be improved. This will achieve a range of further benefits. Rural businesses, SMEs in particular, will be better equipped to reach their goals and low confidence among rural residents can be addressed through targeted peer-to-peer support as outlined in the accompanying regional briefing. Public service delivery in rural areas could also be improved, with rural residents more comfortable in engaging with online formats.

Recommendation 3: DCMS should set out plans to coordinate and share good practice on increasing digital confidence within its forthcoming Digital Strategy. It will be important to base this approach on cross-departmental collaboration, particularly with the DfE. A What Works Centre for digital skills should be established to marshal the evidence on approaches to improving confidence and to support a range of bodies engaged in delivering digital skills interventions.

As highlighted in this research, low confidence is a key driver of digital poverty. This finding is supported by a range of existing evidence on lacking digital skills. For example, Lloyds Bank found that 36% of the workforce lack essential digital skills for work.²³ One element to successfully addressing this problem will be a coordinated and strategic approach, as overseen centrally by DCMS, working closely with a range of local bodies.

Digital skills policy is fragmented across different sectors and at different levels, from local to national. Key national initiatives are held by the DfE, such as the digital skills bootcamp programmes. It is crucial that these national initiatives are coordinated with more local programmes, such as the Digital Skills Partnerships which proved effective in delivering improved digital skills across local areas.²⁴

A What Works Centre for digital skills would play a strong supportive role in coordinating and implementing good practice. The organisation's remit would necessarily include evaluating the effectiveness of various interventions and advising government on their approach to measurement and data collection. The skills bootcamp programmes had demonstrated the need for this form of oversight with gaps in data impairing the extent to which meaningful evaluation can be conducted on the initiative.²⁵

References

- ¹ Wagg, S. and Simeonova, B., (2021). A policy-level perspective to tackle rural digital inclusion, Information Technology & People, Vol. Ahead-of-print, No. Ahead-of-print. DOI 10.1108/ITP-01-2020-0047.
- ² Good Things Foundation (date unavailable). Doing Digital Inclusion: Rural Handbook. Available at: <https://www.goodthingsfoundation.org/insights/doing-digital-inclusion-rural-handbook/>
- ³ Department for Environment, Food & Rural Affairs (2022). Statistical Digest of Rural England. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1072780/03_Statistical_Digest_of_Rural_England_2022_April_edition_final1.pdf
- ⁴ The Department for Levelling Up, Housing and Communities (2022). Levelling Up the United Kingdom. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1052706/Levelling_Up_WP_HRES.pdf
- ⁵ Department for Environment, Food and Rural Affairs (2022). Rural Economic Bulletin for England, April 2021. Available at: <https://www.gov.uk/government/statistics/quarterly-rural-economic-bulletin/rural-economic-bulletin-for-england-april-2021>
- ⁶ Department for Environment, Food & Rural Affairs (2022). Statistical Digest of Rural England. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1072780/03_Statistical_Digest_of_Rural_England_2022_April_edition_final1.pdf
- ⁷ The Productivity Institute (2021). The North West of England's Productivity Challenge: Exploring the issues. Available at: <https://www.productivity.ac.uk/wp-content/uploads/2021/11/PIP003-The-North-West-of-Englands-Productivity-Challenge-FINAL-301121.pdf>
- ⁸ Digital Poverty Alliance: We define "digital poverty" as "the inability to interact with the online world fully, when, where and how an individual needs to" (Digital Poverty Alliance).
- ⁹ Barrantes, R. (2010.) Digital poverty: An analytical framework, 17th Biennial Conference of the International Telecommunications Society, Montreal.
- ¹⁰ Defra (2022). Statistical Digest of Rural England. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1072013/03_Statistical_Digest_of_Rural_England_2022_April_edition_final.pdf
- ¹¹ (Centre for Economics and Business Research (CEBR).
- ¹² Wearn, R. (2022). Warning poorest households are struggling to get £150 energy rebate. Available at: [Warning poorest households are struggling to get £150 energy rebate - BBC News](https://www.bbc.com/news/health-61444444)
- ¹³ Lee, B., Chen, Y., Hewitt, L. (2011). Age differences in constraints encountered by seniors in their use of computers and the internet, Comput. Hum. Behav., Group Awareness in CSCL Environments 27, 1231–1237.
- ¹⁴ Ofcom (2021). Connected Nations 2021. Available at: https://www.ofcom.org.uk/__data/assets/pdf_file/0035/229688/connected-nations-2021-uk.pdf
- ¹⁵ Correa, T. and Pavez, I. (2016). Digital inclusion in rural areas: A qualitative exploration of challenges faced by people from isolated communities, Journal of Computer-Mediated Communication, 21(3), 247–263.

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- ¹⁶ Paton, T. (2021). Study: Rural UK Pays 76% More for Slower, Less Reliable Broadband. Available at: <https://broadbandsavvy.com/rural-broadband-survey/>
- ¹⁷ Department for Levelling Up, Housing and Communities (2022). Levelling Up the United Kingdom. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1052706/Levelling_Up_WP_HRES.pdf
- ¹⁸ Morris, J., Morris, W. and Bowen, R. (2022). Implications of the digital divide on rural SME resilience. *Journal of Rural Studies*, 89, pp.369-377.
- ¹⁹ Work Foundation (2022). A tale of two labour markets: inflation outstripping wages and vacancies outpacing unemployment. Available at: <https://www.lancaster.ac.uk/work-foundation/news/blog/a-tale-of-two-labour-markets>
- ²⁰ Taylor, H. (2021). Interning in Lockdown: lessons in adapting placements for the hybrid environment. Available at: <https://www.lancaster.ac.uk/work-foundation/publications/interning-in-lockdown-lessons-in-adapting-placements-for-the-hybrid-environment>
- ²¹ Vallance, C. (2022). Broadband firms 'must do more to promote social tariffs'. Available at: <https://www.bbc.co.uk/news/technology-60983343>
- ²² EY (2021). Digital home services book fuels UK consumer anxiety around well-being and data privacy finds EY study. Available at: https://www.ey.com/en_uk/news/2021/05/digital-home-services-boom-fuels-uk-consumer-anxiety-around-well-being-and-data-privacy-finds-ey-study
- ²³ Lloyds Bank (2021). Essential Digital Skills Report 2021. Available at: https://www.lloydsbank.com/assets/media/pdfs/banking_with_us/whats-happening/211109-lloyds-essential-digital-skills-report-2021.pdf
- ²⁴ Amicon Consulting (2021). Evaluation of the Local Digital Skills Partnerships. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1021163/Evaluation_of_LDSP_final_report_270921.pdf
- ²⁵ Camden, B. (2021). Bootcamps evaluation rings spending review alarm bells. Available at: <https://feweeek.co.uk/bootcamps-evaluation-rings-spending-review-alarm-bells/>