From Exclusion To Inclusion

How mobile connectivity can further narrow the digital divide









About Mobile UK

Mobile UK is the trade association of the UK's mobile network operators (MNO)s - EE, Virgin Media O2, Three and Vodafone. Mobile UK's mission is to realise the power of mobile to improve the lives of our customers and the prosperity of the UK.

For further information on the work of Mobile UK visit: http://www.mobileuk.org/



About #LiveBetterConnected

The Live Better Connected awareness campaign is designed to raise awareness and educate how they, and wider society. rely on mobile connectivity.

For further information about Live Better Connected visit: www.mobileuk.org/live-better-connected



About Building Mobile Britain

Mobile UK launched Building Mobile Britain to support the mobile industry's collaboration with national and local government, regulators, industry, consumers and citizens to overcome the challenges to expanding mobile networks.

For further information about Building Mobile Britain visit: http:// www.buildingmobilebritain.org.uk



About #5GCheckTheFacts

The #5GCheckTheFacts campaign provides factually accurate information about 5G and offers answers to common queries to help improve understanding.

For further information about #5GCheckTheFacts visit: https:// www.mobileuk.org/5g-and-health





About This Report

The report was produced by Mobile UK with assistance from Steve Hughes (Policy Points), Purplefish and Block B.

Policy Points conducts evidence-based research and data analysis related to public policy:

https://www.policypoints.co.uk/about-policy-points.html

Purplefish is an award winning Bristol PR and communications agency: www.purplefish.agency



Contents

Foreword	4
Summary	5
Summary of recommendations	6
How the UK's mobile network operators are prioritising digital inclusion _	7
Introduction - the digital divide and mobile connectivity	8
The UK's digital divide - where are we now?	9
The scale of digital exclusion	9
Barriers to digital inclusion	9
The consequences of the digital divide	10
The future of the digital divide	11
Case Studies	12
Mobile connectivity - narrowing the digital divide	14
Recommendations – narrowing the digital dividewith the help of mobile connectivity	16
Endnotes	17



Foreword

In today's world, it is becoming harder to conduct our day-to-day lives without needing access to the internet. Bricks-and mortar-banks are disappearing from the high street as they move to online banking; grocery shopping can be conducted via apps and delivered directly to your door; and GP appointments and medical consultations are increasingly conducted via video software. Even access to new jobs and relationships has become an 'online first' activity.

This trend will only go in one direction, and for those excluded, it will become more difficult to engage with or keep up with the society that is evolving around them. But in commissioning this report, Mobile UK is also seeking to highlight the role of mobile connectivity in tackling the important debate around digital inclusion.

More often than not digital inclusion is seen simply through the prism of a broadband connection, yet 21% of UK adults only access the internet using a smartphone. This proportion is higher among the most financially vulnerable. Mobile connectivity is convenient, accessible and, according to the ONS, makes up less than 2% of average weekly household expenditure.

However, the reasons why people are digitally excluded vary. While mobile has become the primary access point for many, it is often not the case that those providing services have woken up to this fact. Many websites are not mobile-friendly and become difficult to access or too fiddly from a mobile device.

Tablets, often encouraged as a simpler way to access the internet and offered to the elderly, who are statistically more sceptical or less confident online, also default to inaccessible mobile versions of websites, further compounding the problem. Local authorities, in many cases a vital access point for many, especially vulnerable users, compound the problem with clunky websites, further restricting people's access to important information or services. Mobile companies have a role to play and are actively taking action in this space. They are not only investing heavily in coverage and capacity, rolling out 5G and extending coverage to rural areas via the Shared Rural Network, but within this report, readers will find many initiatives designed to help those that find themselves digitally excluded, including collaborating with the Good Things Foundation to provide data via the National Data Bank. But equally, the Government must create a stable investment environment to drive investment to deliver increased capacity and coverage.

It is also important that when framing the public policy debate around digital inclusion, it is not solely focused on the availability of internet access but on why people cannot access it. This report found that even where the internet is widely available, there are many other reasons why people continue to be excluded. For these reasons, Mobile UK concludes by calling on the Government to urgently update the national digital inclusion strategy and explore ways to build up skills and confidence among those currently excluded.



Gareth Elliott Director of Policy and Communications **Mobile UK**



Summary

There is a divide between the digital haves (the digitally included) and the digital have nots (the digitally excluded). There are numerous and complex factors driving this divide. They include inability to access the internet, a lack of motivation, and low skills and confidence. Taken together, this creates poorer outcomes for individuals, the economy and society.

This report looks into the growing role of mobile connectivity in the digital inclusion debate, and the need for public policy to better consider its impact. Significantly, more and more people are using mobile connectivity to access the Internet, and as this report will highlight for many it is also their only way of access. It can also often be a more affordable, although other forms of connectivity may be more suited to individual circumstances.* Further to this, Internet of Things technology is only likely

to increase the demand for, and reliance on, mobile connectivity in the future.

of adults access Huge progress has been made in the internet only recent years to ensure that a good via a mobile quality mobile connection is as widely available across the country as possible. At least two-thirds of the population now has 5G coverage in their area, and the Shared Rural Network (the SRN) is bringing coverage to hard-toreach places, with a target to extend 4G coverage to 95% of the UK's landmass. In addition, the Government's Wireless Infrastructure Strategy has set a new ambition for coverage of standalone 5G in all populated areas by 2030.



Please note that while mobile broadband and internet access is a flexible way to get online, for long-term use, a fixed line can work out cheaper than mobile because mobile data is more expensive. The cost of a mobile data package will depend on the specific provider, the data allowance, and the other features and services included in the package.



All of this is happening, while mobile connectivity is getting relatively more affordable:

- Average mobile phone costs have been falling over time.
- Mobile connectivity makes up less than 2% of household weekly spend.
- The cost of mobile data in the UK is low by international comparisons.

Moreover, mobile network operators (MNOs) are also active in promoting initiatives to address digital exclusion, including cheaper tariffs, the donation of devices and supporting digital skills provision.



Summary of Recommendations



As digital inclusion becomes ever more necessary in today's society there is more that can be done by Government, MNOs, charities, and industry to turn the digitally excluded into the digitally included. The following recommendations will help to ensure that mobile connectivity can continue to contribute to the narrowing of the digital divide and can help to narrow it further still:

- UK Government to update national digital inclusion strategy digital inclusion strategy. An updated digital inclusion strategy could include explicit targets. It could also include minimum expectations of what Whitehall departments need to consider in respect of digital exclusion and public services, as well as incorporating the subsequent recommendations.
- Enable investment to keep mobile connectivity competitively priced. In 2021, MNOs invested £2bn in capital investment to improve their networks. The current investment environment is extremely challenging. Over the last decade mobile operators have faced flat or declining average revenues per user (ARPU), increased regulation, and a huge increase in demand for data as more and more people rely on mobile connectivity. This has created an investment gap, meaning that the Government needs to implement a framework to narrow that gap and incentivise investment.
- Promote the use of accessible and mobile-friendly websites. With 71% of smartphone users saying that it is more difficult to complete a form on a phone than a laptop, there is scope to make websites more accessible to mobile phone users, as well as those people less familiar with the internet. This can be done both by setting standards for public bodies and by setting standards for the private sector.
- Use public services to promote digital inclusion. Public services both have significant contact points with the vast majority of digitally excluded people, and a motivation to get them online so they can better access that public service. For example, Local Authorities could act as a "front door" to digital services
- UK Government centrally funded Digital Champions across all local authorities. These are senior roles within local authorities which must be underpinned with political support created to coordinate digital policy and work with industry to smooth the way for the deployment of digital infrastructure.



How the UK's mobile network operators are priortising digital inclusion

EE/BT has one million customers on social or discounted tariffs, and its unique and use services like online maps even when their monthly

Vodafone's

everyone.connected programme has already provided free connectivity to 1
million people and w help a total of **four million people** cross the digital Three aims to set up one million new digital connections to the Samaritans vital support services

Virgin Media O2 is committed to reducing data poverty by connecting one million digitally excluded



DATA POVERTY

COMMUNITY

All four operators are providing social tariffs across mobile and broadband to

support customers on Universal Credit and other benefits



their staff paid

volunteer days to help the vulnerable in their community

SHARED RURAL **NETWORK**



NATIONAL DATABANK & DEVICE BANK

The National Databank has been and with data donated by Virgin Media O2. Vodafone and Three; to help thousands of the UK to get connected. There are now 1,000 National Databank Hubs

Three, Virgin Media O2 and Vodafone have also joined **the UK National Device Bank** run by the Good Things Foundation

to provide direct support to the UK's most vulnerable children, offering **2,500 house-**

Refurbished online will help around 500,000 people to get



connected.



Vodafone is working to build digital confidence and skills within with its business.connected programme and will digitally transform

800.000 businesses by 2025

DIGITAL DIVIDE



The Three Discovery program ain impact 1.7 million people by 2030 to get the most from their connectivity



EE/BT is working to provide 25 million people with essential digital skills



Virgin Media O2's Better Connections Plan is working to equip twomillion people with the digital skills and tools to help them feel more connected by the end of 2025

EE's PhoneSmart Licence is an online skills module which helps prepare young phone users for life as digital citzens

ONLINE SAFETY



Through the Three Discovery programme, Three delivers free safety workshops to schools, parents and teachers



Virgin Media O2 supports families to be safer online via its Internet Matters partnership



Vodafone's Digital Parenting Pro is a free resource to help families better understand parental controls on the latest apps, games and devices

The UK's Mobile Network Operators EE, Three, Virgin Media O2 and Vodafone have several measures to support customers struggling with their bills. If you are affected, please get in touch with your operator directly.











Introduction

The digital divide and mobile connectivity

Interaction with the digital world is an established and essential part of daily life. Be it work, school, shopping or socialising, our world is dominated by the internet, accessed through fixed broadband or mobile networks. But there is a divide between the digital haves (the digitally included) and the digital have nots (the digitally excluded). Not everyone can access the full range of benefits that digital connectivity has to offer. Those people who cannot, of which there are millions in the UK, often experience lower levels of wellbeing and poorer life outcomes.

While digital exclusion can take many forms, it will include at least one of the following:

- No or limited access to an Internet connection.
- Limited or a lack of skills to use or access the internet / or a lack of confidence to go online safely and knowledgeably.
- The inability to afford internet access (or significant financial sacrifices being made to establish internet access).

This report is about the vital role of mobile connectivity in addressing digital exclusion and narrowing the digital divide. Mobile connectivity is not the only answer to digital exclusion. Indeed, mobile data charges will mean that fixed broadband packages may be a more suitable and economical method of accessing the internet for some. Nevertheless, mobile connectivity can provide an accessible gateway to the internet (and the only gateway for many). Moreover, the use of - and reliance on - mobile connectivity is only likely to increase in the future. Internet of Things technology that is enabled by mobile connectivity is set to be integral to sectors as diverse as social care and climate monitoring.

The numerous and complex drivers of digital exclusion mean that promoting digital inclusion through mobile connectivity is far from straightforward. But two essential and interlinked principles should underpin policymakers' ideas:

Promoting investment in mobile connectivity.

The availability and affordability of mobile connectivity is necessary for some to be digitally included (as noted above, fixed connectivity will be more suitable for some; for others, connectivity will not be the factor driving exclusion at all). Continued investment in mobile connectivity infrastructure, supported by a favourable policy environment for investment, will ensure greater coverage and more competitive pricing for mobile connectivity.

A partnership approach.

Several policy levers - and appropriate funding for them - need to be pulled at both a local and national level to address exclusion. In designing and implementing policy, it is necessary for the public sector to work closely with the private and third sectors. For instance, charities can connect with older people who struggle with using the internet, providing help with using technology; Mobile Network Operators (MNOs) can offer insight on how digital exclusion arises. It is also important for the Government to demonstrate further leadership within this partnership. For instance, the Digital Inclusion Strategy has not been updated since 2014.

Methods of meeting these principles are set out over the following chapters:

- Chapter Two describes the digital divide in the UK.
- Chapter Three sets out how MNOs and mobile connectivity support digital inclusion.
- Chapter Four sets out policy recommendations to maintain and enhance the role of mobile connectivity in narrowing the digital divide.



The UK's digital divide

Where are we now?

The scale of digital exclusion

While there are different ways to measure digital exclusion, some key statistics indicate its scale:

of households have no access to the internet.2 4.2 million

adults have either never used the internet or have not used it in the past 3 months.³

Behind the headline statistics, exclusion is more prominent among certain groups within society. Those who are older, on lower incomes, jobless, living in social housing, disabled, less educated, or homeless are much more likely to be digitally excluded than others.4

Barriers to digital inclusion

Ofcom highlights three broad factors acting as barriers to inclusion:5

Physical and financial access.

Not being able to afford a device and / or the data needed to browse the internet through a device. Those with vulnerable characteristics - e.g. lower and low income - are less likely to have access to connected devices.

Motivation.

A large proportion of people without internet access do not think they need the internet, or are not interested in having the internet (although some evidence suggests that at least some of these people had asked others to do something online for them).

Skills and confidence.

Some people who are offline think that the internet is too complicated - with some of this group thinking websites and apps take to long to perform tasks, and some preferring speaking to a person to complete tasks (either in-person or over the phone). Moreover, there are also concerns about security and fraud, and privacy.

While noting that different studies assign different levels of importance to the above barriers, they also interlink and present a complex picture. For instance, to address issues of cost access, BT conducted pilots offering fully funded broadband to low-income households and found varied difficulties in encouraging take-up. These included pessimism about the future (one person said they didn't want their children getting used to something they knew they couldn't afford when the free pilot ended), language barriers (some families offered support did not have an adult English speaker, in the home) and unstable living circumstances (a broadband service cannot be installed in temporary accommodation or an unregistered address).



The UK's digital divide

Where are we now?

The consequences of the digital divide

What is evident is that those who are digitally excluded can experience poorer outcomes in life. Some examples are:

Healthcare.

Using a pilot study, NHS research has found that, of those receiving digital care, 21% had less visits to their GP for minor ailments.⁶

Education.

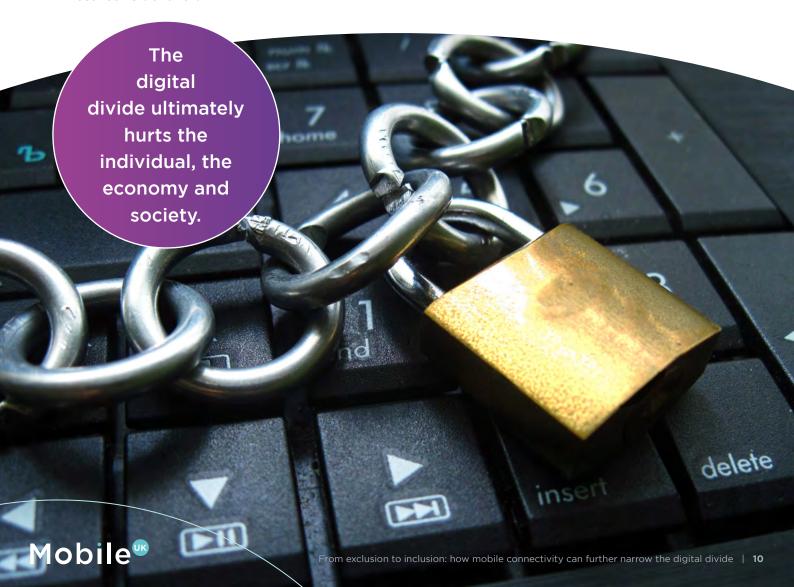
Covid-19 restrictions meant that children had to engage in distance learning. An Ofcom survey from Jan-March 2020 found that 9% of households containing children did not have home access to a laptop, desktop PC or tablet.⁷

Time and money.

Accessing government services and banking online rather than in person is estimated to save 30 minutes per transaction;⁸ the most digitally engaged pay £228 less on their yearly bills than the least engaged.⁹

Earnings.

Those without digital skills earn less, with it estimated that those with digital skills increase earnings between 3% and 10%.



The UK's digital divide

Where are we now?

The future of the digital divide

The barriers to digital inclusion and the consequences of digital exclusion have changed over time, and will continue to do so. The recent experience of the pandemic is an example - hybrid working is now a much more common way of working than before, and there is some evidence that it forced some to raise their digital skills requirements. Another example can be seen in the data on how the number of people who have never used the internet or have not used it in the past three months has changed over time. The number fell by almost half in the period 2013-2020 (see Figure One).

As technology advances, the nature of digital exclusion will change still further. For instance, there are a variety of ways that Internet of Things (IoT) technology can improve certain groups' lives and help them connect to the internet:

Helping disabled people access information and control their home using their voice." Community Research (on behalf of Ofcom) gathered case studies on this subject, with specific use cases including people with mobility issues being able to (for example) change the radio station, people with visual impairments accessing information without a screen and supporting children with learning difficulties and delayed development.12

- Supporting independent living and healthier lives. IoT technology can help older people living on their own, in terms of both monitoring their health, safety and wellbeing and providing companionship.¹³ Mobile wearable technology is helping people to live healthier lives by monitoring their fitness and health readings.
- Changing how young people learn.

Education provision in schools, colleges and universities is becoming ever more digital. Augmented reality and virtual reality are thought to be increasingly useful teaching aids. E-learning can support the personalisation of teaching, enabling a greater understanding of topics and concepts. Cloud-based learning will allow access to classes from any location.14

Efforts to promote digital inclusion will help to ensure that these types of technologies are in as widespread use as they can be, creating economic and societal benefits



Source: ONS internet users Note: sum of people who have never used the internet and who have not used the internet in the past three months

Figure One:

People who have not used the internet within the past three months by age band (UK, 2013-2020)



Case Studies

The Industry Approach

As well as offering low-cost connectivity, MNOs are also active in promoting initiatives to address digital exclusion. As can be seen below, these initiatives range from cheaper tariffs to donating devices to skills provision.









Examples of MNOs work on promoting digital inclusion:

- Together, **BT** and **EE's** social tariffs and subsidised products are keeping more than one million of the most vulnerable customers connected across the UK. BT and EE's industry-leading social tariff broadband delivers 36Mbps for £15pm and the **EE Mobile Basics** initiative provides customers on universal credit and a range of other benefits access to low-cost SIM only mobile plans. The plan offers 5GB of data, unlimited texts and calls for £12 per month on a 30-day rolling contract.
- More than half a million people are harnessing EE's unique Stay Connected data plans to enable them to stay online even when their monthly data allowance has run out. This ensures they can stay connected when they need it most.
- Working with charity partner Home-Start UK, BT and **EE** are also supporting the most socially excluded households with thousands of laptops, mobiles and free broadband vouchers and running workshops with charity Ability Net to help digitally excluded older people get online.
- BT / EE Skills for Tomorrow has a target to help 25 million people by 2026 across the UK with the provision of essential digital skills.
- Three UK's Reconnected scheme enables customers to donate old phones, which are repackaged with six-month unlimited data. Texts and calls are provided to individuals seeking employment, disadvantaged students or vulnerable to digital exclusion.
- Three UK has added seven financial advice and guidance websites to its list of zero-rated websites that customers can access without using data (StepChange, Business Debtline, National Debtline, Citizens Advice, Money Advice Plus, Money and Pensions Service and Money Helper)
- Virgin Media O2's Essential Broadband and Essential **Broadband Plus plans** are available for people facing financial difficulty and receiving certain benefit payments. Essential Broadband plan offers speeds of 15Mbps and costs £12.50 per month, while Essential Broadband Plus provides 54Mbps broadband for just £20 per month. Both plans are available for people who receive Universal Credit, Income-based Employment

- Support Allowance, Income-based Jobseekers Allowance, Income Support and Pension Credit.
- The Community Calling scheme by Virgin Media O2 has rehomed 15,000 smartphones along with free data, texts and calls with people who need them.
- Virgin Media O2 offers 20GB of free O2 mobile data per month via the National Databank. In addition, the company is increasing its data donation as it pledges to gift more than 61 million GB of free data by the end of 2025.
- Virgin Media O2's Better Connections Plan is working to equip two million people with the skills and tools to help them feel more connected to our digital society by 2025.
- O2 and Virgin Mobile customers can now access Citizens Advice, Money Advice Service. debt charity Step Change, National Debtline, Business Debtline, Turn2us, Debt Advice Foundation and National Energy Action without using any of their mobile data.
- Through its subsidiary VOXI, Vodafone offers its, for Now, mobile tariff costing just £10 a month with unlimited data, calls and texts. This is alongside Vodafone's offer of a fixed social tariff for £12 per month with 38Mbps download speeds with no set-up fees, termination fees and no in-contract price rises.
- Vodafone, through its charities.connected, Great **British Tech Appeal and Vodafone** Together programmes have partnered with the Trussell Trust and Barnardo's to provide free connectivity to those that require support.
- Vodafone has further pledged 24 million GB of data to the National Databank to connect 200,000 people. Vodafone also operates the Buy One Get One initiative via Vodafone Together to offer free connectivity for up to a year via a prepaid 20GB sim.
- **Vodafone** launched the **Discover Digital** programme with **Barnardo's** last year to provide digital skills training to some of the most disadvantaged young people in the UK - those who are not in education, employment or training (NEET). They've also launched business.connected with Enterprise Nation to support over 100,000 small businesses adopting technology, boosting digital skills and staying safe online.



Case Studies

Industry collaboration: The Good Things Foundation



Digital inclusion is no longer a nice-to-have, it's an essential lifeline. A lack of digital skills and access can have a huge negative impact on a person's life, leading to poorer health outcomes and a lower life expectancy, increased loneliness and social isolation, less access to jobs and education.

It can mean paying more for essentials, financial exclusion, an increased risk of experiencing poverty. People who are digitally excluded also lack a voice and visibility in the modern world, as government services and democracy increasingly move online.

What's more, it's those already at a disadvantage - through age, education, income, disability, or unemployment who are most likely to be missing out, further widening the social inequality gap.

Good Things Foundation are proud to partner with innovative public and private sector organisations that enable us to make a real impact and succeed in our mission to fix the digital divide.

National Databank

The National Databank, created with Virgin Media O2 and supported by Vodafone and Three, is now active in 1,000 locations across the UK. The first cross-sector collaboration of its kind in the world, the National Databank allows registered grassroots organisations within the National Digital Inclusion Network to become National Databank Hubs, providing free SIMs and mobile data (as well as talk minutes and texts) to residents and vulnerable people in need.

According to Ofcom, there are 2 million households struggling to afford internet access in the UK today, and Lloyds Banking Group report that 10 million adults lack the most basic digital skills. The National Databank aims to tackle the burden of the cost of living crisis, helping families across the UK stay connected.

About Good Things Foundation

Good Things Foundation is the UK's leading digital inclusion charity with one clear goal: to fix the digital divide - for good.

Our services tackle digital exclusion, through the National Digital Inclusion Network made of over 2,000 local Digital Inclusion Hubs that provide digital skills support and services such as our National Databank and National Device Banks, like foodbanks but for data and devices.

National Device Bank

The National Device Bank is an initiative that's helping digitally excluded people access technology across the UK. Powered by Good Things, the National Device Bank accepts donations of used corporate IT equipment, refurbishing and distributing the donated tech to the hands of people who can't afford or access their own devices.

Secure, sustainable and socially responsible, the National Device Bank is a brilliant free solution for organisations who have technology to recycle or dispose of.

Digital skills

The Covid-19 pandemic led to an acceleration in the adoption and application of digital technology which has been transformative for both people and businesses. During this period, BT Skills for Tomorrow was launched with the aim of helping 10 million people make the most of life in the digital world. As part of the programme, BT partnered with Good Things Foundation to provide face-to-face digital skills training in communities, delivered through the National Digital Inclusion Network.



Mobile connectivity

Narrowing the digital divide

Mobile connectivity plays a vital role in promoting digital inclusion through:

- The use of devices.
 - Mobile devices can be an affordable method of connecting to the internet cheaper, for instance, than desktop PCs or laptops - and are easier to use.
- The availability of data services.
 - Mobile connectivity gives people access to the internet wherever there is a signal, including in homes where fixed connectivity would be too expensive or impractical.

Tens of millions of people access the internet using mobile devices and mobile data. Crucially, a significant number of people only access the internet using mobile devices and mobile data:

- 21% of UK adults only access the internet using a smartphone.¹⁵ This proportion is higher within those groups more likely to be digitally excluded, including the most financially vulnerable (31%) and those in lower socio-economic groups (29%).¹⁶
- 1.5 million households only have access to a mobile internet connection at home.¹⁷

Huge progress has been made in recent years to ensure that a quality mobile connection is available to as much of the population as possible:

- At least two-thirds the population has 5G coverage in their area. Ofcom data shows that the level of 5G coverage provided outside of premises by at least one mobile network operator is 67-77%.18
- The Shared Rural Network (the SRN) is bringing coverage to hard-to-reach places. £1bn is being spent on the SRN, which aims to extend 4G coverage to 95% of the UK landmass by the end of 2025.19

in April 2023 - sets a new ambition for nationwide coverage of standalone 5G in all populated areas by 2030.20 The above statistics show that a significant number of people rely on mobile connectivity to be digitally included, and that greater mobile coverage offers the opportunity for more people to be digitally included. But it is not the only route to digital inclusion. Indeed, in

mobile connectivity. The Wireless Infrastructure Strategy - published

Government policy is also targeted at boosting how many people can access

some instances mobile connectivity will be a more expensive option than fixed alternatives. Yet, that available data shows the mobile connectivity is



Mobile[®]



Mobile connectivity

Narrowing the digital divide

Average mobile phone costs are falling over time.

The cost fell by a third between 2016 - 2022, whilst the amount of data used has more than tripled.

Source: Pricing trends for communications services in the UK (Ofcom, 2022)

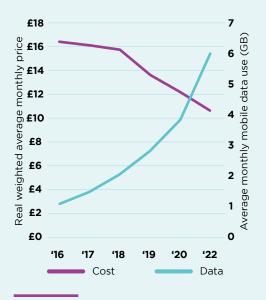


Figure Two:

Cost and quantity of typical mobile phone use (2016-2022)

Mobile connectivity makes up less than 2% of household weekly spend.

Data from the Office for National Statistics shows that the average household spends £8.30 a week on mobile phone accounts and £0.70 a week on mobile phone purchases. This is 1.9% of total average household weekly expenditure, and roughly half of what the average household spends on restaurants and hotels and a fifth of what is spent on recreation and culture.

Source: Living Costs and Food Survey, 2021

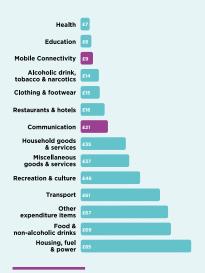


Figure Three:

Average household weekly spend on mobile connectivity and communication in comparison to other types of spending

Communication spend takes up 5.4% of overall spend for households.²¹

In the bottom decile; mobile makes up less than half of this spend. The younger the household, the lower the proportion of spend on communication. Where the household reference person is under 30, communication spend takes up 3.8% compared to 5.1% where the reference person is aged over 75.

Source: Living Costs and Food Survey, 2021



Figure Four:

Proportion of spending attributable to communication by household disposable income decile

The cost of mobile data in the UK is low by international comparisons.

The cost of mobile internet in the UK is the 8th lowest among OECD countries. The cheapest UK plans provide 1GB of data for \$0.12, around a fifth of the average price in the OECD of \$0.59.

Source: World Mobile Data Pricing (Cable, 2022)

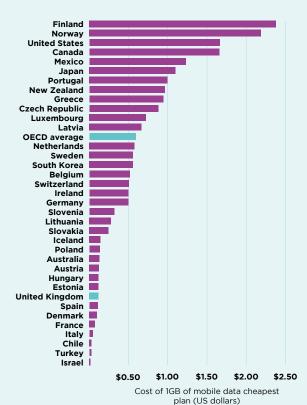


Figure Five:

Cost of mobile data in the OECD, 2022



Recommendations

Narrowing the digital divide with the help of mobile connectivity

The previous chapters have demonstrated the scale of the digital divide, the complexity of trying to address it, and how mobile connectivity is contributing to digital inclusion. The following recommendations will help to ensure that mobile connectivity can help to narrow the digital divide still further:

- UK Government to update national digital inclusion **strategy.** As the Institute for Public Policy Research has identified, there is no policy 'ownership' of digital inclusion, meaning a lack of coordination at national, regional and local level.²² The Government last produced a digital inclusion strategy in 2014, which it explains as digital inclusion being a consequence of a crosscutting issue that sits across multiple departments, and instead it, "...works with the rest of government to ensure departments take digitally excluded people into consideration when delivering public services".23 But a new digital inclusion strategy could include explicit targets. For example, Andy Burnham as Mayor of Greater Manchester committed to "equip all under-25s, over-75s and disabled people with the skills, connectivity and technology to get online."24 It could also include minimum expectations of what Whitehall departments need to consider in respect of digital exclusion and public services, as well as incorporating the subsequent recommendations.
- Enable investment to keep the cost of mobile competitively priced. The most important role that MNOs play in encouraging digital inclusion is providing and investing in the expansion of a high quality and economical mobile network. In 2021, MNOs invested £2bn in capital investment to improve their networks.²⁵ Any policy interventions to improve digital inclusivity must not come at the cost of making it harder to invest in the UK mobile network. The investment capability of the UK's mobile operators is challenged by declining average revenue per user (ARPU), meaning the Government needs to implement a framework to narrow the investment gap and incentivise activity. This can be supported by implementing the Wireless Infrastructure Strategy so as to improve the investment case for building mobile connectivity. This should include reform of the Net Neutrality regulations to make it easier and more sustainable to offer low cost packages to the most digitally excluded.

- Promote the use of accessible and mobilefriendly websites. With 71% of smartphone users saying that it is more difficult to complete a form on a phone than a laptop,26 there is scope to make websites more accessible to mobile phone users, as well as those people less familiar with the internet. This can be done both by setting standards for public bodies (three of the top 10 websites in the UK are public sector or publicly funded: the BBC, UK Government, and NHS 9th)²⁷ and by setting standards for the private sector.
- Use public services to promote digital inclusion. Public services both have significant contact points with the vast majority of digitally excluded people, and a motivation to get them online so they can better access that public service. Ways of utilising public services include Local Authorities acting as a "front door" to digital services (as suggested by the Local Government Association),²⁸ social prescribing (as suggested by NHS Digital),29 training through Job Centres (as suggested by the IPPR),³⁰ and libraries offering internet access and support in getting online (as suggested by the London Office of Technology and Innovation).31
- UK Government centrally funded Digital Champions across all local authorities. These are senior roles with political support created to coordinate digital policy and work with industry to smooth the way for the deployment of digital infrastructure. They would have a role in the following: extolling the benefits of digital connectivity; raising awareness; educating internally and externally about how the technology can be utilised and for what purposes; set up outreach programmes, or Community Champions, to target the digitally excluded and provide relevant assistance.



Endnotes

- Ofcom, March 2022, Digital Exclusion Review, https://www.ofcom.org.uk/__data/assets/pdf_file/0022/234364/digital-exclusion-review-2022.pdf
- Ofcom, March 2022, Digital Exclusion Review, 2 https://www.ofcom.org.uk/__data/assets/pdf_file/0022/234364/digital-exclusion-review-2022.pdf
- ONS, April 2021, Internet users, UK: 2020, 3 https://www.ons.gov.uk/businessindustryandtrade/itandinternetindustry/bulletins/internetusers/2020
- NHS Digital Website, accessed 21/04/23, https://digital.nhs.uk/about-nhs-digital/corporate-information-and-documents/digital-inclusion/ what-digital-inclusion-is#people-likely-to-be-digitally-excluded
- Ofcom, March 2022, Digital Exclusion Review, https://www.ofcom.org.uk/__data/assets/pdf_file/0022/234364/digital-exclusion-review-2022.pdf
- NHS Digital, July 2019, Digital Inclusion Guide for health and social care 6
- UK Parliament, December 2020, Covid-19 and the digital divide, https://post.parliament.uk/covid-19-and-the-digital-divide/ 7
- 8 ONS, March 2019, Exploring the UK's digital divide, https://www.ons.gov.uk/peoplepopulationandcommunity/householdcharacteristics/ homeinternetandsocial media usage/articles/exploring the uks digital divide/2019-03-04
- Good Things Foundation, Digital Nation 2022 - $\underline{https://www.goodthingsfoundation.org/wp-content/uploads/2022/10/DigitalNation 2022_Web_GoodThings.pdf. A state of the following and th$
- ONS, March 2019, Exploring the UK's digital divide, https://www.ons.gov.uk/peoplepopulationandcommunity/householdcharacteristics/ 10 homeinternetandsocialmediausage/articles/exploringtheuksdigitaldivide/2019-03-04
- Ability.Net, Accessed 23.04.23, How to use a smart speaker to make a home more accessible for disabled people, https://abilitynet.org.uk/factsheets/how-use-smart-speaker-make-home-more-accessible-disabled-people
- Ofcom, December 2022, Smart speakers research with the public, https://www.ofcom.org.uk/__data/assets/pdf_file/0022/249142/Smart-speakers-research.pdf
- 13 British Council Blog, accessed 23/04/23, How can technology help us meet the needs of ageing society?, https://www.britishcouncil.org/anyone-anywhere/explore/communities-connections/technology-ageing-society
- University of Hull, What are the digital trends that are being adopted around the world? https://online.hull.ac.uk/blog/digital-learning-the-future-of-education
- Ofcom, June 2022, Online Nation 2022, https://www.ofcom.org.uk/_ _data/assets/pdf_file/0023/238361/online-nation-2022-report.pdf
- Ability.Net, Accessed 23.04.23, How to use a smart speaker to make a home more accessible for disabled people, https://abilitynet.org.uk/factsheets/how-use-smart-speaker-make-home-more-accessible-disabled-people
- LGA. November 2021, Tackling the digital divide. 17 https://www.local.gov.uk/parliament/briefings-and-responses/tackling-digital-divide-house-commons-4-november-2021
- Ofcom, December 2022, Connected Nations 2022, https://www.ofcom.org.uk/__data/assets/pdf_file/0034/249289/connected-nations-uk-report.pdf
- Parliamentary Question, May 2023, https://questions-statements.parliament.uk/written-questions/detail/2023-04-28/183239 19
- 20 Ibid
- 21 The Office for National Statistics' Living Costs and Food Survey asks a sample of households about their weekly spending patterns. The survey asks about communications expenditure - this includes spending on mobile phones and access to mobile networks, but also "combined communications packages" that includes some mobile spending (such as bundles of expenditure). Within this context, it is possible to show how combined communications packages contributes to overall household spending (but with the caveat that combined spending on mobile will be lower than the total)
- 22 IPPR, September 2021, Addressing digital inclusion in North East England, https://www.ippr.org/files/2021-09/north-east-digital-exclusion-september21.pdf
- 23 Parliamentary Question, May 2022, Computers: Older people, https://questions-statements.parliament.uk/written-questions/detail/2022-05-19/5449
- GMCA press release. May 2021, Mayor of Greater Manchester announces bold ambition to help get residents online. $\underline{https://www.greater manchester-ca.gov.uk/news/mayor-of-greater-manchester-announces-ambitions-to-help-get-residents-online/linear-conditions-to-help-get-residents-online/linear-conditions-to-help-get-residents-online/linear-conditions-to-help-get-residents-online/linear-conditions-to-help-get-residents-onlinear-conditions-to-help-get-residents-onlinear-conditions-to-help-get-residents-onlinear-conditions-to-help-get-residents-onlinear-conditions-to-help-get-residents-onlinear-conditions-to-help-get-residents-onlinear-conditions-to-help-get-residents-onlinear-conditions-to-help-get-residents-onlinear-conditions-to-help-get-residents-onlinear-conditions-to-help-get-residents-onlinear-conditions-to-help-get-residents-onlinear-conditions-to-help-get-residents-onlinear-conditions-to-help-get-residents-onlinear-conditions-to-help-get-residents-onlinear-conditions-to-help-get-residents-onlinear-conditions-onlinear-c$
- Ofcom December 2022, Connected Nations, https://www.ofcom.org.uk/__data/assets/pdf_file/0034/249289/connected-nations-uk-report.pdf
- Ofcom, March 2022, Adults' Media Use and Attitudes Report 2022, $\underline{https://www.ofcom.org.uk/_data/assets/pdf_file/0020/234362/adults-media-use-and-attitudes-report-2022.pdf_file/0020/234362/adults-media-use-and-attitudes-report-2022.pdf_file/0020/234362/adults-media-use-and-attitudes-report-2022.pdf_file/0020/234362/adults-media-use-and-attitudes-report-2022.pdf_file/0020/234362/adults-media-use-and-attitudes-report-2022.pdf_file/0020/234362/adults-media-use-and-attitudes-report-2022.pdf_file/0020/234362/adults-media-use-and-attitudes-report-2022.pdf_file/0020/234362/adults-media-use-and-attitudes-report-2022.pdf_file/0020/234362/adults-media-use-and-attitudes-report-2022.pdf_file/0020/234362/adults-media-use-and-attitudes-report-2022.pdf_file/0020/234362/adults-media-use-and-attitudes-report-2022.pdf_file/0020/234362/adults-media-use-and-attitudes-report-2022.pdf_file/0020/234362/adults-media-use-and-attitudes-report-2022.pdf_file/0020/234362/adults-media-use-and-attitudes-report-2022.pdf_file/0020/234362/adults-media-use-and-attitudes-report-2022.pdf_file/0020/234362/adults-media-use-and-attitudes-report-2022.pdf_file/0020/234362/adults-media-use-and-attitudes-and-$
- 27 Ofcom, June 2022, Online Nation 2022, https://www.ofcom.org.uk/_data/assets/pdf_file/0023/238361/online-nation-2022-report.pdf
- 28 LGA, November 2021, Tackling the digital divide, https://www.local.gov.uk/parliament/briefings-and-responses/tackling-digital-divide-house-commons-4-november-2021
- NHS Digital, accessed 24/04/23, How we can support Digital Inclusion, https://digital.nhs.uk/about-nhs-digital/corporate-information-and-documents/digital-inclusion/supporting-digital-inclusion-locally
- IPPR, September 2021, Addressing digital inclusion in North East England, https://www.ippr.org/files/2021-09/north-east-digital-exclusion-september21.pdf
- 31 LOTI, 2022, Digital inclusion in London, https://loti.london/wp-content/uploads/2022/02/LOTI-Digital Inclusion_Report.pdf



