people know HOW
Unlocking Your Ideas

Regulating Connectivity

An analysis of domestic and international approaches

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Abstract

Scottish charity People Know How work to support people struggling with data poverty and social exclusion through their Reconnect service, as well as supporting the Scottish Government with their Connecting Scotland scheme by running the helpline.

With data poverty highlighted by the coronavirus pandemic, People Know How organised a cross-sectoral event during the first lockdown to encourage collaborative discussion around digital inclusion, social isolation and generally, data poverty. 'Connect Four: Digital Inclusion' led to People Know How's event report, forming the foundation for their Connectivity Now campaign which identifies and promotes three key action points for all sectors to champion in order to target data poverty.

This research report discusses action point one – Regulating Connectivity – drawing attention to the issue of affordable data and analysing both domestic and international approaches that exist to address unaffordable data or digital exclusion more generally. This research is useful for both People Know How to help develop their existing and future projects, and for key policy actors as it offers an analysis of current and past policy measures to suggest how regulated connectivity could be practically delivered in Scotland or the UK. The research argues that while current Scottish and UK wide policy measures acknowledge the issue with unaffordable tariffs, they do not fully commit to addressing it. It promotes further commitment to solving the issue by suggesting an approach similar to that of Mexico and Finland which would target digital exclusion goals more accurately.

What is data poverty?

The coronavirus crisis has led to an increased reliance on online resources. This has not only exposed the gaps in connectivity that already existed but has also exacerbated them by removing the face-to-face contact that digitally excluded individuals relied upon. Public spaces with Wi-Fi connection were closed; vital public services were moved online; and the entire education system moved online alongside online working, therefore increasing the data demands of households across the globe. The crisis has highlighted that now more than ever the issue of data poverty has to be addressed.

An individual, household or community that is experiencing 'Data poverty' is unable to 'afford sufficient private and secure mobile or broadband data to meet their essential needs' (Nesta, 2020: 16). The impact of data poverty will be greater on those who have higher data needs, for example, an individual who is unemployed and looking for work will have high data demands as 95% of job advertisements are now online (Brown. A, 2016). This ultimately limits opportunity for affected households, and thus, contributes to the continuous poverty cycle. The data demands of such households would further increase if they had children who need internet access for education: in this instance, the children may be unable to advance their academic potential and as a result, data poverty can be a key contributing factor of the attainment gap. Therefore, data poverty is not a stand-alone issue: it is a complex and multi-faceted issue, interlinked with other experiences of poverty and thus, exacerbates the impact that it – as a whole - has on individuals and communities.

It is estimated that around 1 in 7 Scottish adults are experiencing data poverty and 1.9 million households in the UK are without internet access (Good Things Foundation, 2021, Nesta, 2020). While there are some groups that are more vulnerable to experiencing data poverty than others, few sections of society are immune: 24% of those who are unemployed, 18% of those who work less than 30 hours a week and 13% of other groups including employed, students, retired and those unable to work have struggled to support their data needs (Ofcom, 2021, Nesta, 2021). Therefore, a commitment to addressing data poverty in the Scotland and the UK would benefit all of society.

There are multiple dimensions to data poverty, which when they occur, heighten the impact that it has on the household. These include affordability, lack of tariff choice, lack of infrastructure, privacy and security issues, lack of access to an appropriate amount of data to meet individual needs, usability issues and lack of basic digital literacy skills which hinder the individuals understanding of the online world, and as a result, are excluded from it (Nesta, 2020: 15). When these barriers co-occur the impact that data poverty can have on an individual's life becomes more severe. This then begins to illustrate the reality of data poverty for households across the country: high rates for internet tariffs mean opting for low-rate tariffs options which do not provide enough data support the entire household's data needs, or restrictive mobile data options but these often incur high costs for exceeding data allowances which exacerbates poverty even further (BBC, 2021). The issue of data poverty therefore does not only concern the ability to afford data; but rather the ability to afford sufficient data to support a household's holistic development.

The affordability issue and the poverty premium

Framing the issue

19% of households in Ofcom's latest affordability study expressed that they were having affordability issues with communications services since the beginning of the pandemic (Ofcom, 2020: 4). This encouraged people to make changes to their services, by either cutting back, reducing spending on other items to maintain their internet provision, cancelling a service because they could no longer afford it, or missing payments entirely (Ofcom, 2020: 5) Unfortunately, some households that were struggling with their finances had to begin making changes to their payment method (taking out loans, using overdrafts or borrowing), or missed payments entirely (Ofcom, 2020: 5). This highlights the validity of the unaffordable data issue as consumers are sacrificing spending on other services to maintain data provision and verifies its position as a basic utility in modern society. It also raises concern over high tariff costs which are encouraging struggling consumers to seek alternative payment methods leading to the accumulation of debt.

Making internet provision more accessible and affordable for consumers would provide vast benefits for households across the country, removing the need for harsh prioritisation decisions like 'dinner versus data', keeping them connected and avoiding social isolation; and it would also have a substantial benefit to the wider economy as we recover from the pandemic. (Nesta, 2020).

What is the 'poverty premium'?

As this report will focus on the issue of affordability, it is important to understand the poverty premium to gain a full insight into affordability issues in both a UK and Scottish context.

The 'poverty premium' is the issue that poorer people are required to pay more for essential goods and services. Often, this is as a result having poor digital literacy skills, or lack of internet access which hinders their ability to conduct sufficient research to find the best rates for essential services (Evans. L, 2018). 49% of people in Scotland have had difficulties in researching for the best price for either mobile or broadband data with only half of people interviewed in Nesta's research saying that they knew how to search for the best deals (Nesta, 2021). In some instances, the extra expense of the poverty premium can be as much as £1,190 for low-income households, therefore addressing this issue can mean a substantial increase to the finances of deprived households, which will have far reaching effects (Evans. L, 2018). Addressing the poverty premium is crucial because it deepens the effect of poverty in low-income households.

This is why People Know How's Connectivity Now campaign is calling for the regulation of connectivity in Scotland: viewing connectivity as a basic utility; regulating the telecoms market to simplify internet package tariffs and increasing accessibility of packages aimed at low-income households would collectively address affordability concerns (People Know How, 2021). This would not only oblige internet service providers to offer low-rate tariffs, but also ensure they actively promote these packages to make them more accessible for those struggling with the barriers

associated with digital literacy skills, helping to remove 'affordability' as a core contributor to the data poverty issue in Scotland. This would mobilise a substantial proportion of the impoverished population into the job market, improving their mental and physical health, and aiding the economic recovery of Scotland in a post-coronavirus context.

Domestic approaches

UK Government strategies

When we begin to talk about UK wide and Scottish digital strategies, it is important to consider how these inter-relate, if at all, and more importantly, how these relate to Scotland. While telecoms are a reserved power for Westminster parliament, the Scottish digital strategy, as I will discuss, does suggest that Holyrood has some remit over broadband/ digital powers. Alongside this, with a title that includes 'UK' within it, the UK digital strategy implies that it holds across all of the devolved nations as well, so while I have mentioned both UK and Scottish strategies, the issue of who actually can legislate for specific issues is one of great complexity.

The UK's most recent Digital Strategy - published in March 2017 - expressed a commitment to 'create a world-leading digital economy that works for everyone' (UK Gov, 2017). The strategy is comprised of seven key aims: building on digital infrastructure in the UK; giving everyone access to digital skills; advancing the appeal of Britain as a place to start a digital business; aiding every British business in becoming a digital business; increasing safety measures around working and living online; 'maintaining the UK government as a world leader in serving its citizens online' and 'unlocking the power of data in the UK economy improving public confidence in its use' (UK Gov, 2017). There are encouraging elements to the strategy, in particular those that address digital literacy skills as this has been identified as a key contributor to the poverty premium and digital exclusion, however, there is a notable absence of the affordability question.

The absence of affordability considerations is an apparent step in the wrong direction with regards to making internet access more affordable for households struggling with data poverty, as the previous strategy at minimum mentioned that affordability was a barrier to digital inclusion. While the 2014 strategy did notice that the cost of going online was a barrier to digital inclusion it did not formally construct an action point to address it. To justify, the strategy comments, 'As prices of internet-enabled technology fall (in particular smart phones), cost is likely to be less of a barrier in the future. Tesco and Argos (amongst others) are selling low-cost tablet computers promoting affordable ways to access the internet.' (UK Gov, 2014). As highlighted by the work of People Know How in their Computer Delivery project, access to a device does not mean access to data: around 15% of the initial 180 people who were first offered a computer through the project pilot had to decline due to lack of internet access at home (People Know How, 2020). People Know How's Computer Delivery project has so far delivered over 2,000 devices to those in need as of August 2021 (People Know How, 2021). This demonstrates that while the UK Government had acknowledged the affordability concerns surrounding access to devices, they have not considered the cost of data and thus, the reduction in device prices will not make going online more affordable when internet tariff prices remain high.

Three years on from the 2014 strategy, and there is no mention of the affordability issue in the updated strategy, despite it remaining a predominant contributor to data poverty and digital exclusion (UK Gov, 2017). The UK Government's predictions that cost would become less of a prevailing factor have since been incorrect: while they would have been unable to predict a pandemic that magnified the gaps in connectivity, they failed to act on the existing affordability issues that were already there.

Scottish Government strategies

The Scottish Government's revisited digital inclusion strategy, 'A changing nation: how Scotland will thrive in a digital world' was published in March 2021 after a consultation that organisations including People Know How contributed to. The strategy uses encouraging language such as, 'leaving no one behind' and making sure that Scotland 'brings the most vulnerable with it, and make sure that they have the skills, secure connectivity and devices required to fully participation in our nation', which implies that the Scottish government commits to the issue of affordability more comprehensively than the 2014 UK strategy (Scottish Gov, 2021). The Scottish Government hopes to improve the digital health of 23,000 people, developing their online skills and giving training to better their chances at job security or combatting social isolation through the 'Connecting Scotland' programme (Scottish Gov, 2021).

The Connecting Scotland programme was developed in light of coronavirus, and offers help and support to low-income households by gifting devices like iPads and Chromebooks to target groups, alongside two years of unlimited data (Scottish Gov, 2021). Developed in three phases, the programme began by offering support and 20GB of data per month for two years to those who were at extreme risk of isolation due to coronavirus because they were shielding or the higher risk of severe illness group (Connecting Scotland, 2021). Phase two then increased this provision to unlimited data each month, and moved onto support households with children and care leavers up to the age of twenty-six, and phase three which was launched at the beginning of June aims to remove barriers related to digital exclusion for unemployed young people and adults aged over sixteen (Connecting Scotland, 2021).

The programme effectively addresses digital exclusion that stems from digital literacy and affordability issues, but there are some limitations to its success. While two years of unlimited data provides an individual with a significant amount of time to participate fully in the job search, the financial stability of the household is not guaranteed after two years of support. Two years may be enough time to secure a job, but it also is enough time to lose one, or secure a zero hours or low paid job rather than one which would allow them to fully support their needs. The programme is still in the early stages of implementation and therefore, the effects of its withdrawal – should that happen, cannot be discussed. However, the programme was developed in response to the coronavirus pandemic, and this proposes the issue of whether it would continue once the pandemic is considered to be officially over, practical and political ramifications removed from the question.

Aside from the uncertainty around how long the programme would be in operation for, the application process does not provide support for everyone in the target groups. In order to find applicants, the programme collaborates with local councils, public and third sector organisations who are working with the target groups who can refer individuals that have

been identified as being at risk of social isolation (Connecting Scotland, 2021). The reliance on being referred by an organisation means that households who are experiencing data poverty but are not involved with any organisation that could refer them, could be at risk of slipping through the net and are unable to benefit from the programme.

The Connecting Scotland programme provides an encouraging start to beginning to address the issue of providing affordable data in Scotland. As a temporary solution, it provides low income or unemployed households with significant time to explore and participate fully in the job search process, giving them the opportunity to develop their digital confidence and skills. In the long term however, it does not address the issue of expensive and hard to access internet tariffs. If the government wishes to avoid holding internet service providers under obligation to provide low-cost tariffs, programmes like Connecting Scotland would need to be expanded and accessible for all experiencing data poverty to address affordability concerns more holistically.

Other devolved nation approaches

Like Scotland, both Northern Ireland and Wales have also developed and implemented their own digital strategies. In Northern Ireland, their 'Digital Transformation Strategy', published for 2017-2021 seems to be more ideologically lined to the UK strategy. The aim of the strategy is to provide better public services, and 'transform how Government works, by leveraging digital methods and innovative technologies to make lives better', with the overall aim of having more connected citizens, connected business, a digital government and a digital society (NI Government, 2017: 14, 15). It is important to note that when the Northern Irish government mentions better connected citizens, the concern is with regards to creating public services which citizens are in control of with 'a range integrated services available across the public sector' (NI Government, 2017: 15). Here, this implies that the focus of the digital strategy is more on the economic gains of a digital society, and shows the strategy was not created to tackle data poverty specifically, or at least partially.

In Wales however, their 'Delivering Digital Inclusion' strategy is much more encouraging. In 2016, the strategy gave recognition to the issue of poor digital literacy skills and the idea that data poverty is linked to poverty more generally (Welsh Government, 2016). With a vision to 'ensure everyone who wants to be online can get online...to fully benefit from the opportunities the internet and other digital technologies offer', it seems as though the Welsh approach is much more in line with tackling the issue of unaffordable data (Welsh Government, 2016: 9).

BT's Shared Wi-Fi Solutions with Glasgow Housing Association

Scotland has the potential to develop innovative digital inclusion strategies and initiatives as exemplified by BT's Shared Wi-Fi solutions project with Glasgow Housing Association (GHA) in 2014. As well as addressing Connectivity Now's call for regulated connectivity, the BT project in partnership with GHA also ties into the second action point: linking connectivity to shared spaces (People Know How, 2021).

The programme was piloted in a tower block in Knightswood, Glasgow that was owned

by GHA, and was said to be among the first of its kind in Europe (BT Group, 2013). Tenants were able to access Wi-Fi for two years through a shared network, provided by BT, with GHA paying for monthly costs and installation fees. The scheme addressed the affordability issue directly as it removed the barriers of credit checks and extra costs for installation which as a result, produced impressive statistics (Scoxton. A, 2014). One in ten tenants managed to secure a job during the two years, while a third secured interviews after applying to jobs online. The scheme was able to address the poverty premium as tenants found they could save £200 by shopping online and were able to remove travel costs for day-to-day activities, freeing up finances to be spent on other essential services (Brown. A, 2016).

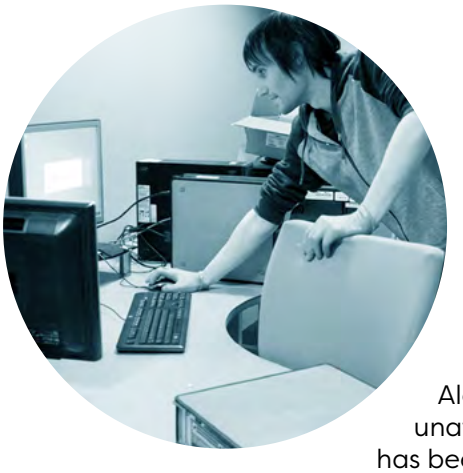
One tenant, Peter Bevan was able to find secure employment as a bus driver after three years of unemployment. In an article by the Daily Record, he commented, 'At my age, there aren't many opportunities. Without that internet access, I wouldn't have found a job...I felt I was in a state of limbo, but this scheme has changed everything...I now feel I have a future with opportunities at my fingertips. I also have my self-respect back as I'm earning and contributing to society again.' (Brown. A, 2016). Bevan's comments reinforce the importance of addressing unaffordable data tariffs: it not only opens up job opportunities for the unemployed, but it reconnects the elderly with their families, allows students to advance their academic potential, and provides widespread benefits for the wider economy as more people are entering the workforce with more skills than before.

Unfortunately, the GHA and BT scheme was only piloted in 2014 and there has been no implementation of similar schemes since. If Scotland was to reintroduce it, the initiative would need to be on a national level across most, if not all local authorities and housing associations in order to produce the transformative change, illustrated through Bevan's experience, on the scale needed to help tackle data poverty in Scotland.

Low-cost internet tariffs

At the forefront of the digital inclusion and data poverty debate, is the increasing demand for obligatory low-cost internet tariff packages. Currently, very few Internet Service Providers (ISPs) offer low-cost solutions for households on low incomes, and organisations such as Ofcom and Nesta, alongside People Know How, are calling for the government to make it compulsory.

BT currently offer a 'Basic tariff and broadband' package for customers on income-based benefits and have announced that they will be launching a 'Home Essentials' plan for those on low incomes at £15 a month to replace the original basic package (Lekarski. P, 2021). The new tariff will offer an average download speed of 36MB and 700 minutes of calls, at less than half of the price of the cheapest equivalent package you can currently get from BT (Lekarski. P, 2021). Although this seems like welcome news, Martin Lewis, founder of Money Saving Expert has expressed concerns with the removal of BT's Basic option for new customers, in place of the new tariff. He stresses that the removal of the cheapest 'phone only' and 'non-fibre broadband and line package' now forces prices up for customers who don't want broadband (Lewis. M, 2021). Customers who were unable to afford the basic BT package already, will be now even further away from being able to afford a basic broadband tariff. Aside from the cost, the basic broadband



tariffs tend to be very slow and very restrictive: the current BT basic package offers only 15GB of monthly data coverage. In 2018, Ofcom estimated that the average UK fixed broadband use was around 240GB per month, therefore, a 15GB internet package is insufficient for the average UK household – especially in a world where reliance on the internet is increasing (Heath. M, 2020).

Alongside the issue of low-cost packages being often unaffordable and certainly insufficient, the success of the plans has been hindered by their poor up-take statistics. It is estimated that only 40,000 households in the UK have taken advantage of lost-cost tariffs like those offered by BT, which represents around 0.15% of all UK homes, and around 1% of those in receipt of out of work benefits (Linn. E, 2021). This is as a result of low levels of promotion of the cheaper tariffs, therefore making them harder to reach for households without internet access or who have poor digital literacy skills. For this reason, current low-cost tariffs are barely providing support for low-income households struggling to afford sufficient data.

This idea is well explained by some of the concerns raised during People Know How's Connect Four: Digital Inclusion event. Nigel Gallear, who coordinates the Computer Delivery project commented, 'They are always marketing a faster fibre connection which costs 20 or 30 pounds a month... but we know also that under the surface they do offer concessionary services to people, but they just don't advertise them. So it feels like there should be a requirement for them to publish and make it very visible and very very accessible. So, for example, of all the schemes the BT offer, there is a value one that is 10 pounds a month for unlimited data, now not a lot of people know about that and actually if you look on their website, it's very hard to find...The whole thing makes it quite difficult. I think making things easier for people, making things more transparent, is something we've found can help.' (People Know How, 2020).

Making it compulsory for ISP's to provide and promote their low-cost internet tariffs - this would remove digital literacy and affordability barriers for low-income households. Despite increasing demand, there has been no formal commitment to addressing this in the current government's agenda. Instead, the UK government are pursing voluntary action rather than regulation; encouraging ISP's to offer and promote low-cost tariffs as opposed to making it a legal obligation for them to do so (Jackson. M, 2021). It is important to consider how this would work practically to understand the reality of making low-cost tariffs mandatory: broadband and mobile provision businesses tend to have low profit margins and therefore, incentivising them to voluntarily introduce low-cost tariffs is difficult (Jackson. M, 2021). Instead, governments could seek to subsidise the cost of internet packages and therefore provide a motivation for ISP's to permanently introduce low-cost packages. Practically, the UK government has the ability to enforce this in Scotland as all regulation and legislative powers for telecommunications remains reserved to Westminster (Proctor. D, 2020). For Scotland to pursue this policy change - without a change to devolved powers, the government could seek to subsidise the cost of internet tariffs for low-income households as discussed above.

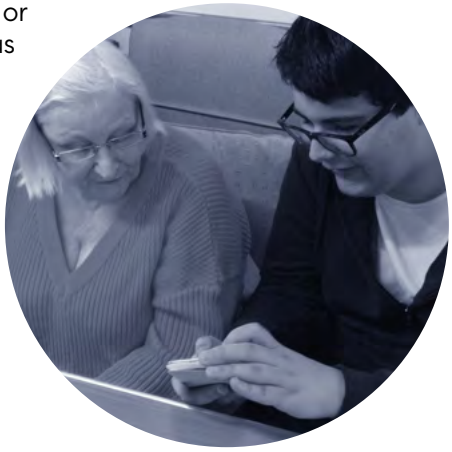
International approaches

People Know How's Connectivity Now campaign calls for an ideological and practical change in the way that society views the provision of internet access: to view internet

provision as a human right in the same way as water, electricity or shelter. The United Nations General Assembly have taken encouraging steps already by declaring internet access a human right, but it has not gone far enough (Barry. J, 2021). The resolution passed in 2016 is non-binding, meaning that the obligation to provide internet access is considered as soft law. In other words, governments are not vulnerable to significant legal penalties for non-compliance (Barry. J, 2021). On paper, the resolution seems like a radical declaration, but it focusses more upon the obligation for governments not to 'take away' internet provision, as opposed to holding them accountable for providing it to those who do not have access currently (Barry. J, 2021). At the time of the declaration, numerous countries had agreed to uphold the resolution, but despite this, there remains millions of people without internet access globally. Therefore, without any real legal incentives for governments to provide internet access for their citizens, governments must face the implications of connectivity on poverty as a whole, and become motivated by the extensive social and economic benefits that expanding internet provision to all can have for achieving their domestic goals.

The ideological shift

To demonstrate a serious commitment to making internet access affordable and inclusive for all, an approach similar to Mexico or Finland would be encouraged to improve Scotland's position as a policy innovator.



In 2010, Finland became the first country in the world to declare broadband a 'legal right' and by 2015 had promised to connect everyone to a '100Mbps connection' (BBC, 2010). At the time of implementation, it was believed that up to 96% of the population was already online, leaving only 4,000 homes offline (BBC, 2010). Comparatively, at the same time, the UK internet penetration was at around 73%, which demonstrates that the UK needed an approach like Finland's arguably more than Finland did (BBC, 2010). While expressing an explicit commitment to providing every Finnish citizen with internet access, the Finnish government also implemented free WI-FI hotspots across Helsinki, leaving citizens never too far away from connectivity (Mirani. L, 2015). Although this policy was primarily introduced to address the lack of infrastructure which created sections of society that were digitally excluded, it demonstrated a radical change in the way that internet provision was to be viewed in Finland.

In 2013, Mexico formally amended their constitution to include the guarantee of universal internet access (Este. J, 2018). In this sense, Mexico is unique in holding its government directly accountable for providing internet access to all its citizens in the same way as it would for food or water. The Mexican government has illustrated their commitment to making internet access more affordable and accessible for all with their 'National Digital Strategy' which aimed to address the 'digital divide' (Barry. J, 2021; Este. J, 2018). Recognising that poverty and internet access are inter-related, the government implemented schemes including provision of internet access for schools and community centres and subsidies for lower income residents to obtain access at home as part of the wider objective to meet poverty reduction targets (Barry. J, 2021; Este. J, 2018). With internet access still low in the rural south of Mexico, the government created 7,200 computing hubs with free access to Wi-Fi and instructors to help citizens develop their digital skills (Este. J, 2018).

What can Scotland learn from international approaches?

Inevitably, Mexico, Finland and Scotland have different contexts and limitations which will fundamentally impact on their ability, or necessity to implement the approaches discussed in the previous sections: what is possible across all boundaries though is the ideological shift that Finland and Mexico represent.

Practically, shifting internet provision towards government responsibility would look different in Scotland than it would in Mexico or Finland. This is primarily because of the lack of a formal, codified constitution to officially amend: in the UK, we can amend the constitution by simply passing a bill through Westminster Parliament. Therefore, this would be necessary if the UK government were to commit to fully holding themselves as responsible for internet provision across the whole of the UK. Alternatively, in Scotland, although we cannot formally amend the constitutional arrangements for the whole of the UK, we could in theory show a serious commitment to making internet provision (or at least more affordable internet provision) the responsibility of the Scottish government by again passing a bill through Holyrood Parliament.

Political debates aside, if the Scottish government wishes to commit itself to addressing data poverty in Scotland, it could. As Scotland does not have full remit over telecoms powers, it would need to engage in a collaborative effort with Westminster parliament for the issue to be addressed across the board. We are already seeing encouraging policy changes as an immediate crisis response to the coronavirus pandemic with the Digital Inclusion Strategy and Connecting Scotland programme. While there is room for improvement and expansion, this already demonstrates that Scotland is beginning to change how it views internet access as a human right. The GHA shared Wi-Fi solutions scheme placed Scotland on the map as one of the first in Europe to trial such a scheme, yet we have seen no revisit to the policy.

Scotland has the potential to implement creative and innovative digital inclusion policies within the remit that it has, and if it does so, it will have a vast and deep impact upon those who need it the most. Governments may commit to radical broadband policy in developing countries which are still grappling with trying to provide sufficient infrastructure to bring basic internet to communities: In Scotland, although most of the country has the infrastructure to access internet, the issue now is affordability and, in this sense, would benefit from placing affordable internet at the centre of the agenda as we recover from the pandemic.

A digitally inclusive society can only be delivered when internet provision is affordable for everyone, and once we address this, it will have transformative effects for the most isolated and deprived in our society. Having access to affordable internet means mobilising more unemployed people into the workforce by upskilling and making the job-hunting process more accessible; connecting families together; enhancing the academic and social potential of children and young people and allowing households across the country to connect and grow every area of their lives.

Through analysing the past and present policies that Scotland has implemented as a method of improving the affordability and accessibility of internet, it is clear to see that we already view internet access as more than a luxury. The approaches we have already

adopted need to be expanded, revisited and developed on a national scale, across all local authorities to produce the transformative social and economic change that Scotland is hoping for. What Scotland needs now is a grand gesture to demonstrate that it is seriously committed to providing internet access for all citizens with the same level of governmental responsibility as there is with other basic human rights.

By supporting People Know How's Connectivity Now campaign, this would be a practical way to demonstrate a serious commitment to addressing data poverty in Scotland. The campaign is a call to action for policy makers, but rather than simply raising awareness for the issue of data poverty, it proposes practical policy solutions to begin to tackle it.

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