Digit - Episode 2: The danger of making assumptions about digital equality

Speakers: Professor Chris Forde, Dr Becky Faith and Kevin Hernandez

[00:00:00] **Chris:** Welcome to the research and innovation podcast with the Digit Data Observatory. This series is presented in conjunction with the Digital futures at Work research centre, Digit, supported by the Economic and Social Research Council. I'm Chris Forde and I'm professor of employment studies in Leeds University Business School, and I'm deputy director of the digit research centre.

Last time I spoke with Dr Emma Russell about the Digit data observatory and some of the blogs and content that are appearing on the data observatory. And today I'm really pleased to be joined by Kevin Hernandez, Research Officer, and Becky Faith, Research Fellow at the Institute of Development Studies, which is an independent research institute based at the University of Sussex.

Welcome to both of you to this podcast.

[00:00:49] **Becky:** Hi

[00:00:49] **Kevin:** Hi Chris.

[00:00:50] **Chris:** And Kevin and Becky are the co-authors of the first Digit data commentary published by Digit earlier this year, providing an analysis into digital exclusion. And in this podcast, we're going to discuss some of the key issues around what digital exclusion is and why this is of interest, and how digital exclusion is measured in their research in this area.

So Becky, the focus of your data commentary is on this idea of digital exclusion. Why is this issue of interest and what motivated you both to look at this area?

[00:01:19] **Becky:** So, thanks, Chris. So since the pandemic, I think it's been all too easy to assume that because a lot of services from healthcare to education, to job seeking moved online, that this was a smooth transition - that everyone was equally able to access all these services. But actually, what we as researchers in digital inequalities came to find through our research through the research track four at the digit centre, was that actually it confirmed a lot of what we already knew about digital inequalities, that people's lack of access to digital tools, their lack of digital skills, make existing inequalities worse.

So if your health isn't great, if you are struggling to afford kind of basic connectivity, then you will really be put a disadvantage, particularly during the pandemic, when everything moved online. And this issue of digital exclusion, isn't it a new area of either of policy concern or of academic interest, and that people have been researching this issue for over 20 years, but one of the most urgent things we see happening during the pandemic is this dangerous assumption that, okay, everybody's online now, everyone's got a smartphone. And so this data commentary is intended to kind of bring attention to the real kind of worrying statistics behind those assumptions.

[00:02:44] **Chris:** Thank you. So it's not just about lack of, you know, ability to access the internet. And how many people have got access or haven't got access. It's also about barriers to access and,

and the sort of difficulties that particular groups might have in, in being digitally included. Is that right?

[00:03:03] **Becky:** Yeah, exactly. And I think Kevin will go on and talk a bit more about those barriers in a minute, but we've all got people in our lives, who we are providing some kind of digital support for whether it's elderly relatives who can't get access to a GPs appointment because they can't use a complicated online booking system ,or experiences of those of us who were home-schooling during the pandemic, of knowing that people were having to kind of share devices in households so their kids could get education.

And from our own research as well, which we carried out during the pandemic, we know that people were really struggling, especially people from kind of marginalized communities, those in low-income groups, to be able to kind of just afford.

The devices and the, for the data they needed to get online, but I'm sure Kevin has more to say about the particular barriers that are in place once people actually even have devices.

[00:03:58] **Chris:** Okay, thank you very much. So Kevin just moving on to that, one of the key arguments you put forward in the data commentary relates to the limitations of current evidence. So there are some large-scale surveys I understand around digital exclusion. What do we know about digital exclusion from these surveys and in what ways are they limited or don't tell us the full story perhaps.

[00:04:20] **Kevin:** So I would say that it's kind of a mixed picture when it comes to the evidence that these surveys are providing. They're very good at some things, but then they're lacking in other things. So in terms of what they're very good at, they're very good at giving us this kind of binary understanding of who has at least some very basic access to the internet. They're good at getting at a multitude of barriers that may limit the small number of people that they suggest are offline. So these are just like, you know, the barriers that non-users face. So they're very good at giving us that kind of data.

And they're also good at giving us data about the frequency of use that, like how often people use the internet, although they, they do measure these, or they do collect data on this, these stats are not really promoted in their headline, so they kind of get lost. So, for example, Ofcom looks at the hours that people spend online. And, and when you look into this data, it kind of shows that 12% of people who are labelled as internet users report using the internet less than once a week. And I don't think many of us would actually count someone who uses the internet so infrequently as an internet user.

And then ONS looks at the number of days that people go online and using these metrics, 11% of people reported not using the internet at least every day. So also, we wouldn't normally think of somebody who doesn't use the internet almost every day as an internet user. So, so that's quite interesting. But those stats kind of get lost when you just say that people who've used the internet in the last three months, or the people who use any device to go online are internet users.

And they're really good at asking questions regarding digital skills, although they can probably get a bit deeper, and ask more detailed questions about digital skills, but at least digital skills is something that is on their radar. And they're actually quite good at disaggregating data. So they're good at collecting data for different demographic groups and then saying like, you know, this, this group is

online more than this one or this group is online more frequently than this other group. So they're quite good at that.

What they're not so good at is collecting data on barriers that people might face once they're actually online. So once somebody is online, they almost kind of assume that, you know, that's a done deal, that this person is now an internet user, and can take full advantage of everything that's available online.

And they can, any kind of digital service delivery is going to be now accessible quite easily and seamlessly. And when you start looking at the digital inequalities literature, it's, that's not really close to the truth. That decades of the digital inequality literature has shown that the digital inequalities are kind of a multidimensional issue.

So you can't just expect someone to be online and then be able to take full advantage of the internet. So things like cost and affordability, they're only seen as a barrier that limits nonusers. But in reality, you know, people might actually be using less data than they otherwise would because they can't afford more data.

So they might be on a two-gigabyte mobile plan. When in reality they would like an unlimited or a 20-gigabyte mobile plan to be able to do the things that they would otherwise do online if they had more money. Similarly, like, there's no questions about internet speeds and whether people actually have internet speeds at home that are fast enough to even stream a video on or that the bandwidth is enough to support the entire family being online at once, or to support everybody in the household to be online.

And this, this is like when you're maybe just browsing the web, slow internet might be okay. But once you want to do more data-intensive activities like streaming videos or other digital contents, this can be quite challenging, especially now, in days when cloud gaming is really beginning to take off.

And, you know, the metaverse is something that people keep speaking about. And if you look at like virtual reality or augmented reality or mixed reality, those things are gonna require a lot more bandwidth and a lot more higher speeds than some people might have access to. But no questions are really being asked about speed.

And also it kind of just assumes that once somebody is online, they're just an internet user and people might, people don't fluctuate between being a user and a non-user. So in reality, when you look at the digital divide literature and the digital inequality literature, there are many examples of studies that have shown that some people might actually be an internet user one month, for them the next month they might not able be able to afford it, or they might have like broken their phone or something. And they might now become internet nonuser or that might actually happen at even smaller intervals of time. So somebody might go from being an internet user during the day to being a non-user when they go to a rural area, whatever places they travel quite frequently.

So it's kind of just treating everybody as the same when in reality they're not, and also not issues about what type of device the person has, are not really looked into. So it kind of just assumes that if I have a smartphone or if I have a PC or if I have both, we're all the same, but in reality, you know, certain things are really easy to do on a smartphone, certain things are easier to do on the laptop. I

wouldn't really want to do my work on a smartphone. I wouldn't want to do some research and writing on a smartphone, for example. But they're just treated as the same.

And then other things about phones, whether they're broken, whether they're out of date. So, one thing that people don't really notice quite often is that a lot of the cheaper phones are only supported by the manufacturer for like two or three years, which means that after two or three years, they stop getting system updates, they stop getting security updates. So there's actually a lot of people out there that are, are vulnerable to like security hacks or like this kind of thing, because they have older devices or sub-par devices and that's not really being looked into.

So, and then one last thing I wanna point out is that that don't really look into whether someone actually needs help to do the, to do online activities. So it might be that, you know, I'm able to use the internet for WhatsApp and checking email and other, like, really basic things but then I might need help for more advanced activities and maybe I need help to fill out a form. Maybe I need help to set up the email - maybe I'm able to use the email, but to set up the email, I might actually need help. Maybe I need help to download an app, and this might vary from person to person, but it's something that's not really being captured by the statistics at the moment.

Everybody's just treated as one and the same, doesn't really matter what they can and cannot do online.

[00:10:33] **Chris:** That's really interesting. I mean, you've pointed there through a whole range of ways in which the existing data sort of presents things in quite a simplistic way. Binary notions of being included or excluded. Doesn't really delve down into differences across groups changes in variations, in people's access over time.

And the different ways that people maybe included or excluded using different technologies and the use of these technologies for different tasks. I think in your answer there you hinted at quite a lot of possible questions that might be asked to find out in a more nuanced way about barriers and digital exclusion. Would this involve some different methodologies and different approaches to looking at this?

So these large-scale surveys tend to have standardized questions asked on a relatively infrequent basis through large-scale surveys. Are there other ways of looking at this? How, how might we understand this in a more nuanced way to get to delve down and find out a bit more about the nature of digital exclusion and to address some of the issues that you've pointed to?

[00:11:48] **Kevin:** Yeah, I would say that what needs to probably change is the questions that are being asked more, more than anything else. So I think they kind of have to probably update and look into what it means to be connected today. Cuz cuz maybe, perhaps like looking at these binary notions, would've been quite useful in the past when maybe the internet was kind of this novel thing where it didn’t really affect our everyday lives, but today especially as the pandemic kind of accelerated service delivery being more and more requiring people to be using the internet, to like, be able to access services. So today and age is not just about whether I can be able to use the internet once every three months.

It has real implications whether I'm able to stay continuously online or not. And what I can do online and what I can't do online and how fast my internet is and how fast it's not, because it's not just

about, you know, accessing services. It's also about being able to do your work and even being able to just consume content as well.

A lot more content is now available online and where, and then this is also like, I think a part of the story that people quite miss, cuz we keep focusing more on like productive activities and what productive activities people can do online. But in reality, we're all just, we're, we're human. And we also want to just, you know, there is leisure in our lives and you're kind of limiting the amount of leisure that people can or leisure activities that people can participate in if they can't take full advantage of the internet.

Also to say that that doesn't mean that everybody wants to be online. And this is something that is also not being asked in the surveys. So it kind of just assumes that being online is a positive thing, but there might actually be people who are being forced to be online prematurely. Because one thing that I would say is that these, these kind of figures and these stats, they kind of go on and they take a life of their own. And they create these kind of meta-narratives about the levels of connectivity in the UK and other places.

So, and they get, they keep getting recycled by the media and civil society and advocacy groups. And we kind of perpetuate this, this narrative about the UK being extremely connected. Then these stats are then used to make evidence-based decisions by governments and private companies and civil society and others about how to deliver services and spread information.

And it makes it sound like, you know, implementing a digital service has a potential to reach almost everyone in the country and that digital by default, and digital only will actually be good at reaching almost everybody. And that almost nobody will experience challenges in accessing digital solutions.

So it's important that we get the narrative, right. And that we add a bit more nuance to these stats if we want to make sure, like, these realities reflect the realities of everyone and these narratives. So, so that the advocacy organizations like academia, the media, are then able to accurately report the situations of those who might not be as connected and who might not be able to fully participate in a rapid digitizing society. Otherwise we'll just get a situation where these services and other things that people may value are being digitized too quickly. And then people are being excluded or being left behind as a result.

[00:15:07] **Becky:** Just to add in the research work that we've done as part of a research track four at the Digit centre, throughout the pandemic, we were finding that local authorities and voluntary sector groups, community groups working with job seekers, were surprised by the extent of digital exclusion and by these underlying factors, especially around cost.

And we've just been doing a new piece of work on digital poverty, which we're publishing a policy brief on shortly funded by the British Academy and using data from this, from our ESRC work as well. And these, all these issues around speed, in particular, that there are social tariffs that people can access, which are listed helpfully on the Ofcom website, but they're actually really slow, they give you quite a limited amount of data, quite low speeds.

So they're actually not functional for a lot of people who might be wanting to do Zoom calls or working a lot online, and also this issue around people rationing data and kind of rationing their sort of data use. And so I think we need more evidence which gets into the nuance. And I think I, I have

to say, I think we are really lucky with the kind of rich data that we get from the ONS and the Ofcom studies.

But as, as Kevin was saying, it's this risk of these kind of zombie statistics earlier - 95% of people are online in the UK so it's fine to digitize your parking service or anything to do with healthcare. So those policy assumptions are really, really dangerous actually, these assumptions that, “oh yeah, everybody's online and everyone, everyone can afford to have unlimited data to stream whatever content at home”.

I think they risk creating exclusionary impact in policy, as Kevin was saying,

[00:16:53] **Chris:** Thank you. And just a final question - is there a geographical dimension to this as well? Is this something you've looked at - that the sort of differences across different areas in terms of barriers and exclusion and to what extent is that picked up in the surveys? Or through alternative approaches to understanding this?

[00:17:14] **Becky:** So there is within the existing ONS and Ofcom data, some kind of regional-level data. So top-level, regional-level data, but actually what I think local authorities need and what policymakers need is more granular data. And we've seen some really interesting approaches through The London Office of Technology and Innovation and other organizations using kind of demographic data to kind of plot predictors of digital exclusions.

So saying, “okay, if you're part of a certain community doing kind of mapping exercises like that”. And I think that can be really useful for local authorities and saying, okay, picking up. Okay. In this particular sort of geographical area of a city, there's definitely a need for more kind of service provision, but I think any more kind of demographic and more geographic classification within existing digital inclusion data would be really, really useful.

But as I said, we don't want to, because I think we are really lucky in this country to have the nationally available longitudinal data-sets that we do have. And we, as researchers who work in international contexts, we also really rely on data-sets like the international telecommunications unions connectivity indices, and things like that, where you can see trends over 10, 15 years are really, really useful. So what I think we're arguing for is more kind of nuanced understanding and more kind of granular approaches to understanding digital exclusion, which were informed by kind of the rich qualitative research that's been going on in this space for many years.

[00:18:44] **Chris:** That's great. Thank you. So we've talked a bit about existing data sets and your research in this area. What else is needed, if anything, to understand digital exclusion or inclusion in a better way?

[00:18:57] **Kevin:** So I would say that one thing that may be needed from these surveys is to have, like, new headline figures that they use. And the one I would propose is something like, something like a fully connected autonomous internet user, and this, this would include people who are online and that don't face additional barriers once they are online and are able to stay continuously connected.

And this would give us a better idea of exactly, you know, how ubiquitous the internet really is and how many people are actually fully connected rather than just saying “There are 95% of people in

the UK that are internet users" because they used the internet at least once in the last three months. I think that "once in the last three months" figure doesn't really tell us much.

And then on the other side of the same coin, there should probably be a figure about the number of people who are connected but continue to face barriers. Or who are seen to be connected, but at a disadvantage, because then this, this would allow us to see, you know, who might need additional help once they are online.

And I think this is what's missing at the moment. We're not really getting any figures for people who might be online, but may actually need some help to overcome some barriers.

[00:20:04] **Chris:** Thanks very much, Kevin. I'd like to thank both Kevin and Becky for a really interesting discussion today, looking at digital exclusion.

[00:20:11] **Kevin:** Thank you very much for having us.

[00:20:12] **Becky:** Thank you.

[00:20:14] **Chris:** If you want to find out more detail on this please do look at the episode notes where you'll find further details and some links to resources. Thanks very much for listening to this research and innovation podcast.