

# Loti

## Mapping Digital Exclusion in London

**A toolkit to support the  
understanding, validation and  
replication of the process for  
other local geographies**

Developed by



**GREATERLONDONAUTHORITY**

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## Introduction

### Context

This project set out to tackle digital exclusion (DE) by developing a rich data picture through an innovative interactive demographic map of user needs, highlighting the softer facets of digital exclusion, driving collaboration between communities, internal services and partners to design and deliver evidence-based, tailored initiatives.

#### **This project seeks to:**

- Get a better understanding of the extent of DE and the evolving picture of the needs of those digitally excluded through the use of datasets and persona analysis;
- Map the softer aspects of DE and gather quantitative data on the incidence of structural and behavioural barriers driving these patterns;
- Build a toolkit for DE mapping to support other local authorities in their Digital Inclusion journey;
- Understand the impact of digital support provided during the COVID-19 pandemic through interviews with beneficiaries.

The project has been funded as part of the London Office of Technology and Innovation's (LOTI) COVID Innovation Fund. The five boroughs Westminster, Kensington and Chelsea, Brent, Barnet and Southwark put forward a successful bid, winning £75,000 to work collaboratively on a data solution to develop a better understanding of digital exclusion across London. LOTI have supported the group through the collaboration process and the Greater London Authority (GLA) have brought their Geographic Information System (GIS), data and demography expertise to building the pan-London map on the London DataStore.

The project timeline ran from Feb 2021-July 2021.

## Defining Digital Exclusion

Digital Exclusion is an enormous problem for millions of people in the UK. There is a digital divide affecting up to 12.6 million of the adult UK population who lack basic digital skills. An estimated 5.8 million people have never used the internet at all. This digital skills gap is costing the UK economy an estimated £63 billion a year in lost additional GDP<sup>1</sup>.

Digital Inclusion refers to the activities necessary to ensure that all individuals and communities, including the most disadvantaged, have access to and use of Information and Communication Technologies (ICTs). This includes five elements:

- 1) affordable, robust broadband internet service;
- 2) internet-enabled devices that meet the needs of the user;
- 3) access to digital literacy training;
- 4) quality technical support; and
- 5) applications and online content designed to enable and encourage self-sufficiency, participation and collaboration.

Digital Inclusion must evolve as technology advances, and requires intentional strategies and investment to reduce and eliminate historical, institutional and structural barriers to access and use technology<sup>2</sup>.

It can be argued that Digital Inclusion is now becoming a basic human right in the same way as access to food, shelter and safety are. Being digitally excluded limits participation in many aspects of life including access to more affordable cheaper goods and services, and Council and Government services.

## Purpose of the Toolkit

To tackle digital exclusion, local authorities must effectively understand the complex landscape, differing needs, drivers and barriers both at the top-level of communities and for the individual. Our research has shown that increasingly the remaining areas of high digital inclusion are characterised by multiple personal factors as well as external barriers, which often intertwine and prevent acceleration of Digital Inclusion. Traditionally narrow-focused local solutions, such as accelerating fibre connectivity, distributing devices and digital warriors are now leading to diminishing gains - even in areas of higher levels of exclusion.

This toolkit complements the [Pan-London Digital Exclusion map](#), which is an interactive demographic map of user needs, highlighting the softer facets of digital exclusion. It has been designed to support London boroughs to develop a rich data and evidence-led picture of the varied local landscape of digital exclusion challenges. Drawing insights from this map can support key local authority stakeholders and partners to leverage existing and new innovative initiatives.

In line with LOTI's way of working, the map and toolkit will be iterated over time. It is hoped that the map will be used across London and this toolkit will support other

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<sup>1</sup> Science and Technology Committee., Digital Skills Crisis, House of Commons, 2017.

<sup>2</sup> National Digital Inclusion Alliance

councils to filter and draw insights from the interactive map for the benefit of their locality and residents.

### **Who the Toolkit is for**

This toolkit is intended to help Local authorities through the digital inclusion map get a better understanding of the extent of exclusion in their boroughs so they are able to target and tailor interventions and ensure that they meet the various and sometimes complex digital needs of their communities.

The toolkit also sets out how Local authorities can use local data sets to capture a more granular and borough-specific view of digital exclusion and how to engage with their communities to further understand the softer aspects (needs, barriers, motivation) of exclusion through the persona research and further tailor interventions.

The Covid pandemic also exacerbated the issue and challenged local authorities to work in new and innovative ways, promoting collaboration across services and with external partners. Partners who have come to the fore on this agenda include the Voluntary and Charity Sector (VCS) partners. This toolkit has also been developed with them in mind, to support them to gain a better understanding of the extent of digital exclusion and what support they can provide.

Other partners include the wider public sector, namely health and education. We would hope that the map and toolkit might support NHS organisations at regional or local level, who are seeking out the patterns of digital exclusion to strategically plan for and implement targeted interventions.

## Summary of Research, Best Practice and Evidence Review

This project builds on existing work conducted by Westminster. In the last quarter of 2020, Westminster undertook a needs assessment to establish the extent and nature of digital exclusion in the borough. Initially, this entailed identifying priority groups who were most likely to experience digital exclusion through desk research and interviews with services and stakeholders. 20 persona profiles were developed, subsumed under seven overarching persona groups, based on national/regional insights and validated by services. Westminster and Kensington and Chelsea also produced a first iteration of a digital inclusion map. These incorporate datasets that act as proxies for digital inclusion e.g. low-income families tracker, 'hard to count' index.

However, we felt we needed a greater understanding of the softer aspects of digital exclusion (e.g. the behavioural barriers) therefore we broadened the initial research by looking at sub groups and barriers in more detail. This has engendered a more nuanced and enriched view of user needs, allowing more tailored interventions to be devised moving forward. The following research was conducted:

- Desk research to look at the digital inclusion landscape nationally;
- 16 one hour exploratory qualitative interviews with 16 residents from Barnet, Brent and Southwark within the sub groups: learning disabilities, home learning and unemployment/ low skills;
- Over 800 face to face quantitative surveys of RBKC and WCC residents from the following sub groups: over 60, disabled residents or residents caring for someone with a disability, unemployed residents, and low-income households and;
- Collecting local knowledge from our council services, community networks and research validation with Voluntary and Community Sector (VCS) organisations to get a better understanding of the needs and support available. This was conducted through workshops and collaborative meetings.

## Developing the Pan-London Map for Digital Exclusion

### Introduction

Digital inclusion (DI) yields both social and economic advantages. However, particularly in the context of COVID-19, it has become clear that digital inclusion is a necessity, not merely something that is desirable. Each of its components (skills, connectivity, and accessibility) must be addressed, so that barriers experienced by those with no or low digital engagement are lifted.

The Pan-London Map for Digital Exclusion is a powerful tool and potential starting point for digital inclusion leads and service developers looking to understand and tackle the size and scale of digital inclusion in communities.

The map uses a number of publicly available datasets selected by the project boroughs and compiled by the Greater London Authority (GLA) into the Pan-London Map for Digital Exclusion (see link to datasets in the [Appendix](#)). The map shows common community demographics and characteristics that have been identified through research as the key factors or proxy indicators to the propensity for digital exclusion and inclusion.

The GLA have assembled a Pan-London web map for digital exclusion hosted on their Esri Geographic Information System (GIS) Online platform. The map is interactive and has expandable layers based on the open data sets. By using these data layers, it becomes possible to see the landscape of the local population to better understand where the following 'key groups' are most likely to be located:

- Older people
- Low-income families
- Unemployment
- Disability
- Microbusinesses
- Group of context layers based on previous external research which can act as proxies (including London Output Area Classification and Internet User Classification)

The main strength of the Pan-London map is to provide access to interactive GIS mapping ability for local authorities wanting a quick start and voluntary and community sector (VCS) organisations that have limited in-house mapping capabilities. The map will also provide a Pan-London perspective, allowing boroughs and organisations to compare, contrast and collaborate.

This type of mapping approach is restricted to publicly available datasets and their intrinsic limitations. Best practice is to use the Pan-London map as a base and to combine the datasets made available here with more specific locally available data and local service knowledge. This can either be achieved by downloading the datasets published by the GLA into your local GIS platform.

The Pan-London Map shows the main borough boundaries for context. However, the data can be applied locally; the analysis and reporting can be made more granular depending on the data available e.g. ward level. It should be noted that the GLA Pan-London Digital Exclusion Map is only using high-level aggregated datasets that do not contain any individuals or personal data and this cannot and should not be used for individual or highly localised targeting or profiling.

### Understanding key groups

The Pan-London Digital Exclusion Map includes open source and publicly available datasets that identify key groups likely to be digitally excluded (as identified through the Westminster digital exclusion research). Westminster's research reviewed national and local trends in terms of digital exclusion, together with interviews with key council services and residents to obtain deeper insights as to the key factors and barriers to digital exclusion.

The research identified the following 'key groups' as most having higher propensity to be excluded:

- Older People
- Low Income Families
- Ethnic Communities – *especially Bangladeshi families in low-income households*
- Unemployed
- People with disability or other vulnerabilities (e.g. *mental health issues*)
- Small & Micro businesses - *who may struggle to get their businesses online, or conversely in seeking and obtaining skilled workforce locally as they grow.*

These key groups are also reflective of the general findings from national research of the groups associated with increased digital exclusion, albeit the levels and proportions may vary locally across and within boroughs.

From interviews with communities and services, small & micro businesses (SMBs) were deemed vulnerable to exclusion as the pandemic exacerbated the need for them to go digital and have an online presence. They tend to be less financially resilient than larger corporations and are less likely to have an ecommerce presence. Westminster's map showed that SMBs were also concentrated on areas identified as those having the most potentially digitally excluded residents.

To access Westminster's full research methodology and findings please see the [Appendix](#).

### Datasets used in the mapping

After identifying the key groups, these were then mapped out using the different datasets which showed where these groups were in the borough to be able to target and tailor digital inclusion interventions.

Key open-source datasets included in the map which are available nationally are:

- Census Data – *for key age and population ethnicity demographics (2011). We expect the revised Census 2021 data to become available, from Office for National Statistics (ONS), in early 2022;*

- Broadband Connectivity - *Not-spot / slow-spot data (OfCom);*
- Low Income Families Tracker (ONS) - *this dataset is restricted and accessible on the closed version of the Pan-London map and available to Local Authority users who are registered on the London Data Store;*
- Employment (*Department for Work and Pensions (DWP);*)
- Disabilities - (*Small Area Mental Health Index; Disability Living Allowance (DWP);*)
- Free School Meals (*Department for Education (DfE) and;*)
- Small & Micro Businesses (ONS)

### Access to datasets

Borough GIS teams can access all the datasets used on the public map plus the ONS Hard to Count Index, which we have been permitted to make available to all London Boroughs by creating an account on the [London DataStore](#) and requesting permission. For local authorities with limited GIS capabilities, the GLA can provide password protected versions of the pan-London map with non-public datasets mapped.

To access the datasets used in mapping please see the [Appendix](#).

### Validation

The GLA provided access to the datasets (via private connection in the London Data Store) used in the Pan-London map to the five boroughs involved in the LOTI Digital Inclusion project. This allowed each local authority to download the datasets via GeoPackage or Geodatabase and compare the GLA's datasets to locally available datasets that may not be able to be shared due to data privacy regulations. Through this process, the five boroughs were able to validate the GLA methodology for data included in the Pan-London map.

One shortfall for this data validation was a lack of available and pertinent local datasets that could be used to compare with the GLA data. Most useful local dataset from Westminster's point of view was Lower Income Family Tracker (LIFT) - but not all local authorities have access to this dataset.

### Building a richer borough-specific / local map of digital exclusion

The Pan-London Digital Exclusion Map is a great starting point, which will quickly allow you to start identifying potential areas with needs, and providing an overview of the Pan-London landscape as well as a borough view.

By combining the national open-source data with local data it is possible to better understand which groups are most vulnerable to digital exclusion and where they are in the borough. You may have other datasets locally or internally (either in GIS or in your other systems – which could be brought in when planning and designing for specific interventions to meet specific citizen and community needs).

*“Our understanding of the scale of digital exclusion in Westminster had previously been limited. However, through this local mapping and analysis from Strategy and Intelligence, following the City Survey 2020, has highlighted that there are approximately 17,415 residents aged 16+ who are digitally excluded (do not access the internet at home or at*

*work). The quantitative analysis supports the qualitative research undertaken with frontline services, revealing certain trends in digitally excluded people. It is older people, those in lower socioeconomic households and people with disabilities who are most likely to experience digital exclusion.” - Westminster City Council*

As an example, Westminster also used the additional local or commercially available restricted data sets below to get a richer and more localised view of the extent of digital exclusion in the borough.

- Westminster Annual City Survey (2020);
- Hard-to-County Index (ONS) and;
- Acorn Data (CACI) consumer segmentation data – *note other equivalent datasets such as Mosaic (Experian) could also be used if available locally*

The Pan-London Digital Inclusion Map does not hold any personal data about individuals and therefore does not create any General Data Protection Regulation (GDPR) or other major information governance risks. However, if using data locally, it is important to consider and assess formally, with appropriate Information Governance and Data Protection Officer to understand and mitigate any risk arising around the data being used, the purpose it is being used for - see the section on [Data Ethics](#) for more details.

Below are example datasets that London boroughs can use to get a better understanding of the extent of exclusion locally. Most of these datasets can be derived from council services e.g Strategy and Intelligence Team, Adult Social Care, etc.

|   | Dataset          | Source  | Why   |
|---|------------------|---------|---|
| 1 | Resident surveys | Council | Local knowledge based on borough annual survey that can be linked to the facets of digital exclusion (connectivity, access, skills, motivation and trust) |

|                 |  |                                      |   |
|-----------------|--|--------------------------------------|---|
| <p><b>2</b></p> | <p>Lower Income Family Tracker (LIFT)<br/>- Pension aged residents, Disability and Residents with one or more children</p> |                                      | <p>This layer shows households who receive council tax support or housing benefit (note those in receipt of other benefits are not captured).</p> <p>This allows filtering on groups that were identified as digitally excluded i.e Pensioners, those with Disabilities or those with 1+ children. Whilst we do not know specifically which individual households within this group experiences digital exclusion and its nature, we do know that these demographics are much more likely than average to be digitally excluded.</p> <p>The more detailed spatial resolution of this data can also help to target interventions in specific locations. In special circumstances, it may also be possible to use this data to directly contact individuals who we deem to be most at risk of digital exclusion</p> |
| <p><b>3</b></p> | <p>Ethnicity Data</p>  | <p>ONS Census data (2011)</p>        | <p>Focus on communities who may be potentially more excluded than others</p>  |
| <p><b>4</b></p> | <p>Not Spots – Broadband coverage by Output Area</p>   | <p>Ofcom</p>                         | <p>To identify areas with poor broadband speeds i.e less than 30 Mbits per sec</p>  |
| <p><b>5</b></p> | <p>SME - Percentage of Micro (0-9 employees) of all businesses</p>   | <p>Internal data sets</p>            | <p>Micro to small businesses are considerably more likely to face digital exclusion. They tend to be less financially resilient than larger corporations and are less likely to have an eCommerce presence.</p>   |
| <p><b>6</b></p> | <p>SME - Percentage of Small (10-49 employees) of all businesses</p>   | <p>Internal data sets</p>            | <p>Micro to small businesses are considerably more likely to face digital exclusion. They tend to be less financially resilient than larger corporations and are less likely to have an eCommerce presence.</p>   |
| <p><b>7</b></p> | <p>Internet User Classification</p>  | <p>Consumer Data Research Centre</p> | <p>Open dataset that we used as additional information (or to cross check our findings) on local Internet user habits</p>   |

|           |  |  |  |
|-----------|--|--|--|
| <b>8</b>  | Percent of population over 65 - 2018   | ONS Census data  | This age group was considered - likely to be digitally excluded  |
| <b>9</b>  | Indices of Multiple Deprivation (IMD) 2019   | London Data Store  | This age group was considered - likely to be digitally excluded  |
| <b>10</b> | Disability, Mental Health and Day Services   | Internal dataset   | Location of Services that can be used for future planning and interventions. Also, it aids visual assessment of - the likely catchment area of these resources.          |
| <b>11</b> | Homeless Shelters Outreach Service   | Internal dataset   | Location of Services that can be used for future planning and interventions. Also, it aids visual assessment of - the likely catchment area of these resources.          |
| <b>12</b> | ACORN  | CACI - <a href="https://acorn.caci.co.uk/">https://acorn.caci.co.uk/</a> | Socio demographic data to help narrow down - groups likely to be digitally excluded  |
| <b>13</b> | Population Density (LSOA) - 2018   | ONS  |  |
| <b>14</b> | Housing Estates  | Internal dataset   | To identify locations of Housing Estates for interventions/disseminating information. Also useful to help coordinate projects like negotiating with Broadband suppliers. |
| <b>15</b> | Family hubs, youth clubs, special needs schools, adult education, community organisations, libraries | Internal dataset   | Location of Services that can be used for future planning and interventions. Also, it aids visual assessment of the likely catchment area of these resources.            |

### Limitations of the datasets

As highlighted, the Pan-London datasets are based on high-level open-source data. The datasets were not designed from the perspective of digital inclusion / exclusion, rather they are generic and act as proxies to aspects and characteristics that have been shown to be related to potential digital exclusion barriers, through detailed qualitative research nationally and locally.

It is important to note the risk of using multiple datasets; one of which is double counting by combining different datasets. The result of chosen datasets not allowing for cross-referencing across the three cohorts could result in not revealing where an individual may appear twice e.g. an individual might be both over 60 and living in poverty.

Additionally, some datasets are not up-to-date e.g. ONS population data. This may result in assumptions being made that population distribution had not significantly changed over the past two years.

### **Using the Digital Exclusion Map**

Applying the layers on the map relating to each key group will help to identify where people in these key groups might live in a borough. Combining datasets on the map will give you an indication of the concentration of a number of needs in a specific area.

It is important however to understand that although the map shows approximate locations where the key groups are in the borough. In practice, each key group can have multiple differing combinations of needs and tailored approaches. Therefore, it is important to factor the local needs of each group, as well as specific needs of the individuals within the groups, for an effective digital inclusion programme to deliver accelerated outcomes.

In addition, each key group will also have subgroups and a further tailoring and targeting of support will be needed. For example, over 65s in deprived areas may have different digital exclusion barriers and digital needs from those in more affluent areas in the borough (in terms of connectivity and devices) but may have similar needs in terms of digital skills and building trust. This is where a local understanding of the demographics and characteristics will be very useful in developing tailored interventions.

To understand more about the specific digital exclusion characteristics of people with those needs refer to *Component 2: Persona Validation and New Persona Identification* below (page 14) and the [Appendix](#). Further analysis of the softer aspects of exclusion in terms of barriers and motivation will also be available once the face to face interviews (Phase 2 mapping) with residents is completed.

## Creating the Persona Bank

### Introduction

Personas are archetypes that represent the key traits of a segment of people who are digitally excluded. Persona research is important as it enables us to understand the needs, experiences and barriers to digital exclusion from a person-centered perspective. This knowledge will then be used to develop initiatives to tackle digital exclusion. We have developed a bank of personas which can be used by local authorities and others when developing initiatives for people who are digitally excluded. We suggest that each local authority undergoes a process of persona validation with key service representatives in their council e.g. adult social services, libraries, and/or housing, to determine the extent to which these personas are in line with the customers they are working with. If there are significant differences or there are key personas missing we recommend that new personas are created which reflect specific local populations.

### Why we did this

From the Digital Exclusion Map and the national and local data on digital inclusion (including our City Survey which revealed the extent of digital exclusion in the borough), we had a good understanding of the groups of residents and businesses that digital exclusion affects. What we do not know from this data is how digital exclusion affects people and how they can be helped on their journey towards digital inclusion if that is something that they want to do. Conducting a series of persona interviews (personas are profiles of digitally excluded people that can be used to inform the building and testing of initiatives and systems) was required in order to understand how digital exclusion is experienced and the range of and extent of help required to enable residents to become more digitally included.

### Methodology

In order to identify personas that were relevant to digital exclusion in Westminster, we undertook a four-stage process:

1. We reviewed national, regional and local data to capture identify the demographics, attitudes and behaviours of digitally excluded people against the prevalence of these groups in the borough
2. We created a 'straw man' of personas from the national, regional and local data
3. We shared the 'straw man' personas with our Strategy & Intelligence and Policy teams and refined them using their input
4. We then conducted one to one interviews with internal service representatives e.g. housing, adult social services, children's services and external stakeholders (e.g. voluntary and community sector (VCS) organisations) to get input into these personas and subsequently refined the list of personas

A total of 24 personas were developed from this process and the details of these are outlined in the table below. Due to timing constraints in recruiting participants a

total of 20 persona interviews out of 24 were conducted. The personas with an \* were not conducted. You can view a more detailed step by step process below.

## Step 1 - Stakeholder interviews

Interviews were conducted with 19 services which included children’s and youth services, adult services, employment, education services, regeneration housing, digital connectivity, business service, homeless service, technology manager and public health. The interviews served several purposes:

1. To understand the main types of residents who are affected by digital exclusion
2. To understand the way digital exclusion affects the residents they are in contact with
3. To receive feedback on the straw man proposed digitally excluded personas
4. To understand the initiatives currently underway to help the residents they work with

## Step 2 - Finalising list of personas

Following the interviews, the persona details were updated, and a final list of personas was agreed by councillors and can be seen in the table below.

### Digital Exclusion (DE) Personas

| Persona type  | Rationale   |
|---|---|
| <b>Recipients of services to improve digital inclusion</b>  |   |
| 1. A person from a care home that received an ipad  | <ul style="list-style-type: none"> <li>● To understand the impact of the service on digital inclusion</li> </ul>  |
| 2. A family who received a laptop for their year 10 child   |   |
| 3. Young person attending the Church Street webinars  |   |
| 4. An older person who has been given a tablet and digital skills training (home libraries service when this starts)                    |   |
| <b>Employment and skills</b>  |   |
| 5. Someone who has become unemployed since Covid and lacks confidence using digital services to look for work (aged under 30) *         | <ul style="list-style-type: none"> <li>● 36% of Westminster residents are not in work.</li> <li>● 13.6 million workers in the UK have life digital skills but lack work digital skills</li> </ul>   |
| 6. Someone who has become unemployed since Covid and lacks confidence using digital services to look for work (aged 30-60)              |   |
| 7. Someone who has difficulty speaking English and is unemployed  |   |
| <b>Families</b>   |   |
| 8. A DE single parent family with a child under 5   | <ul style="list-style-type: none"> <li>● 23% of families of DE children in the UK (unskilled and unemployed) do not have access to broadband or internet devices suitable for schoolwork</li> </ul> |
| 9. A DE family with children under 12 that does not have broadband and or suitable internet devices for schoolwork (overcrowding)       |   |
| 10. A DE family with children between 12-19 that does not have broadband and or suitable internet devices for schoolwork (overcrowding) |   |

|   |   |
|---|---|
|   | <ul style="list-style-type: none"> <li>• 10.2% Westminster children in households below 60% median in 2018/19</li> <li>• As of July 2020 there are 20,481 low income residents in the Council's Low-Income Family Tracker</li> <li>• As of early 2020, 4,131 Westminster resident pupils receive FSM</li> <li>• 8.79% of Westminster's population are benefit claimants</li> </ul>                                      |
| <p><b>Homeless person</b></p>   |   |
| <p>11. A rough sleeper with a smartphone but is unable to afford data</p>                             | <ul style="list-style-type: none"> <li>• 15x higher number of rough sleepers than the London borough average</li> <li>• 2757 seen by outreach services in 2019/2020</li> </ul>  |
| <p>12. A family with digital skills in temporary accommodation with no access to WIFI in the home</p> |   |
| <p><b>Disabled person</b></p>   |   |
| <p>13. Disabled person who is digitally excluded and has a sensory impairment</p>                     | <ul style="list-style-type: none"> <li>• There are approx. 930 residents in the borough who receive disability benefits, however the proportion of disabled people will be far higher</li> <li>• In 2019, 2.4% of 16-64 year olds estimated to have a learning disability; 22% of people 65+ estimated to have a limiting long term illness; 4.4% of 18-64 year olds estimated to have a mobility impairment</li> </ul> |
| <p>14. Disabled person who is digitally excluded and has a mobility impairment</p>                    |   |
| <p>15. Someone with a learning disability who has limited digital skills (including their carer)</p>  |   |
| <p>16. Someone who has a mental health issue and has difficulties using digital devices</p>           |   |
| <p><b>Vulnerable people aged 65+</b></p>  |   |
| <p>17. Low income 75+ person (under £11,500 pa) who does not have internet access at home</p>         | <ul style="list-style-type: none"> <li>• 12.5% of population in Westminster is 65+</li> </ul>   |

|  |  |
|--|--|
| 18. Person 70-80 who lives alone and is isolated and has no access to the internet   | <ul style="list-style-type: none"> <li>• 2017 – 10% of 65+ (2,926) supported by social care services</li> <li>• Westminster in worst 30-40% in London for Income Deprivation amongst people 65+</li> <li>• 24% of pensioners in London are living in poverty</li> <li>• Almost 25% of all claimants from low income households in Westminster are 70+</li> </ul>   |
| 19. A person 65-75 who has become more digitally active and confident since Covid  |  |
| 20. A person 75-85 with long term health issues requiring regular GP and hospital appointments   |  |
| Micro and SME businesses   |  |
| 21. A business in a 'not spot' area (less than 30 Mbps download speed) *   | <ul style="list-style-type: none"> <li>• Since COVID-19, many businesses without websites have missed opportunities to trade</li> <li>• Businesses in 'not spot' areas can be compromised in their ability to trade effectively due to poor download speeds.</li> <li>• 84.5% of Westminster's businesses are micro, with 43.46k registered with 0-9 employees</li> <li>• 20,000 properties in Westminster are 'not spots'.</li> </ul> |
| 22. A business who was in a 'not spot' area and now has full fibre connectivity  |  |
| 23. Someone who is starting a business for the first time and has attended a course provided by WCC to help to bring their idea to market. |  |
| 24. A business in Church St with no online presence*   |  |

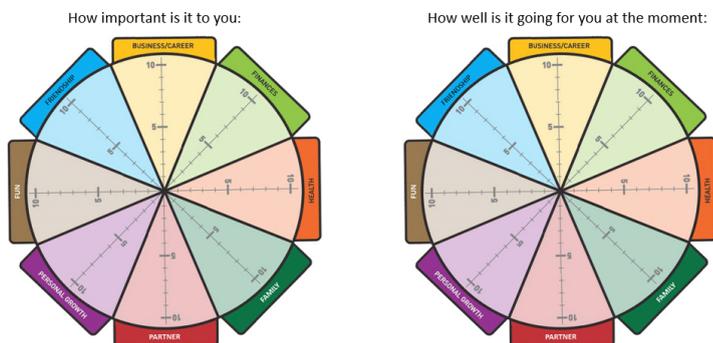
### Step 3 - Recruitment of participants

Participants were recruited via Council services and partner VCS organisations. Professionals working directly with clients who fitted the persona specification asked them if they would be interested in taking part in the research and if so, whether they would be happy to have their details shared with the digital inclusion team. Once we received contact details, we telephoned the participants to arrange an interview and explained the process and objectives of the research as well as briefing them on the pre-task.

### Step 4 - Pre-task and interviews

All participants were sent a pre-task to complete in advance of the interview to get people to think about their lives and how digital could fit into their lives. This consisted of an introduction to the project followed by a wheel of life exercise where participants highlighted the importance of various aspects of life such as community, finances as well as how well they were doing on these issues at the

moment. We also asked participants to review any aspects of their life that they would improve from a list and circle those that applied to them.



Interviews were typically conducted via telephone due to COVID-19 restrictions and the unsuitability of video calling for those who are digitally excluded, although two participants were able to conduct the interview either via Teams or WhatsApp. Ideally these interviews would have been conducted face-to-face. The interviews lasted between 45 minutes to 1 hour. A discussion guide was created to guide the interviews and can be found in the [Appendix](#).

## Incentives

All participants were sent a £20 voucher of their choosing for taking part in the research to compensate them for the time taken to complete the interview.

## Timings

The personas took one month to recruit, one month to conduct interviews and two weeks to produce the report. The persona case study templates took 3-4 additional weeks to develop.

## Step 5 - Analysis of findings

A range of techniques were used to analyse the findings. All of the interviews were recorded, and the main points and quotations placed in a grid with the questions at the top of the grid and the interviews down the side (see image below). This allows for the interviews to be compared and contrasted and themes identified and developed.

## Step 6 - Findings

Personas were created from each of the persona interviews - these can be found in the [Appendix](#). An example of one of the personas is shown below.

**User group:**  
Low-income family

**Persona:**  
Mum with 17year-old

**Bio**  
Lisa is 59, has five adult children and lives with her 17 year old daughter Charlotte\* who has PTSD from witnessing her father abuse Lisa. They had to move to London from Leeds to escape the abuse. Charlotte is studying art at a local college and was given a laptop by the Early Help team a week before the interview. As well as caring for her daughter Lisa also cares for her 92 year old dad who lives in Kent. Lisa is unemployed at the moment and does not feel that she can work due to her caring responsibilities. She is a yoga teacher and would like to practice again once her life becomes more settled. She has a smartphone with giffgaff and she shares data with her daughter who uses it on the laptop.

**Needs & Goals**

- Basic digital skills training to be able to use the internet for basic activities such as completing an online form for the gym
- Develop her yoga practice as she knows that she will need an online and social media presence in order to achieve this
- Help to set up the business and interact digitally with customers

**Frustrations**

- Her main barrier is her negative attitude to the internet and devices that use screens.
- She does not like using screens.
- Lacks the skills to undertake tasks which are more complex than sending emails or basic searching

"We have no choice but to make an effort with technology and use it. I understand it is the way of the world now, but it doesn't necessarily speed up or improve communication"

**Digital Inclusivity**

- Access: ■
- Connectivity: ■
- Digital skills: ■
- Attitude: ■

**Digital skills to be learned**

- Foundation:
- Life:
- Work:

**Behavioural Stage**

1. Pre-contemplation
2. Contemplation ✔
3. Preparation
4. Action
5. Relapse
6. Maintenance

**Lisa**  
Age: 59  
Status: Mum of a 17 year old child who recently received a laptop

Each persona has been assessed on digital inclusivity, the digital skills to be learned and their behavioural stage. For digital inclusivity, we have used a traffic light system whereby green = no significant issues, amber = some difficulty and red = considerable difficulty. We included four key aspects of digital exclusion:

- Access - refers to any issues in acquiring the right digital device for their needs
- Connectivity - relates to the quality of their internet connection
- Digital skills - refers to people's level of digital ability
- Attitude - refers to people's level of desire to become more digitally included

For example in the example persona above, Lisa has a smartphone and laptop so has no access issues. She does not have broadband but has mobile data so she is amber on connectivity. She has low levels of digital skills and is reluctant to become more digitally included which is why she is red for both of these attributes.

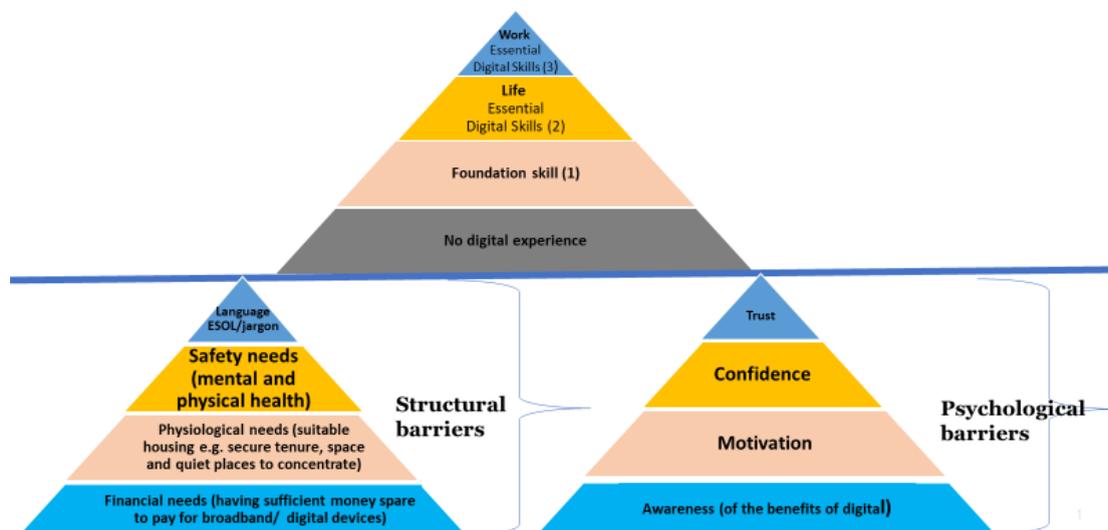
We used the Essential Digital Skills matrix to identify the level of and type of skills that each persona needs to acquire to not be disadvantaged. For example in the persona example above, Lisa needs to acquire both life and work skills.

People tend to be at different stages in terms of changing their behaviour towards digital inclusion. It is important to know where people are on the behaviour change cycle so that appropriate interventions can be developed. There are six stages of the states of change behaviour model:

- Pre-contemplation - is a state of not thinking about digital exclusion
- Contemplation - is thinking about digital exclusion but not doing anything about it
- Preparation - is starting to do something such as looking for a digital skills course
- Action - is doing something positive regarding digital inclusion such as getting broadband or a device
- Relapse - is becoming less digitally included, for example uninstalling broadband or forgetting how to use WhatsApp.
- Maintenance - is maintaining skills to be digitally included

The research findings were written up into a report which can be found in the [Appendix](#).

Before people can begin their digital journey first they need to overcome a range of physical and psychological barriers



## User Persona Validation – Feedback Session (Southwark, Brent & Barnet)

### Purpose

The purpose of this session was to ensure that the user personas created by Westminster City Council (WCC) were consistent with the residents and service users that the departments and teams came across in the different boroughs. The user personas created by WCC were split between the three councils with local workshops undertaken in each of the councils to gain a better understanding of their service users and whether anything could be added.

## User Groups – Validation by borough

### 1. Southwark

#### Focus

Southwark were tasked with validating the following user groups:

- Low Income Families
- People with disabilities
- Beneficiaries of existing digital support

#### Workshop Feedback

The initial workshop was held with internal stakeholders from Education, Libraries, Local Economy, Digital Infrastructure, Children’s Services and Adult Learning.

Following this workshop, we recognised that there was a need to create some more user personas to cover groups relevant to Southwark. These are:

- Adults with low numeracy and literacy groups
- Care Leavers
- People in traveller groups

## Outputs

- Understanding which specific service areas and teams these residents may come into contact with
- Recognising that digitally excluded people can fall into several categories and trying to target interventions in a more holistic way
- Understanding what additional support we can offer them

## 2. Barnet

### Focus

Barnet were tasked with validating the following user groups:

- Homeless
- Unemployed

### Service Engagement Feedback

We engaged with our Barnet Homes team and Rough Sleepers Coordinator, and Skills and Employment teams to test and validate these personas. Broadly, these personas resonated strongly with our services and echoed what they have been seeing firsthand over the past year.

## 3. Brent

### Focus

Brent were tasked with validating the following user groups:

- SMEs
- Vulnerable adults over 65
- Beneficiaries of existing digital support

### Workshop Feedback

We engaged with a variety of internal stakeholders including the Economic Development Officers, the Adult Social Care duty team and members of our Resident Support Fund application team to review and validate these personas. It was agreed that the majority of personas reflected the experience of colleagues where they have been working with the identified user groups.

In addition to the above, we have also created two new persona groups:

- Adults with low numeracy and literacy skills
- Care leavers

The following persona groups will be added in due course:

- Businesses with no existing digital skills
- Traveller Communities
- Adults with multiple disadvantages

Detailed feedback from these sessions alongside additional detail on the process and templates can be found in the [Appendix](#).

## Undertaking Resident Interviews For Digitally Excluded Groups

### Introduction

As part of the wider research, three boroughs (Brent, Barnet and Southwark) decided to commission an external researcher (EY Seren) to develop further understanding of how their residents interact with the digital support services they have been providing in order to assess the impact on the lives of residents, the value of the investment and identify areas for improvement.

### Why we did this

The aim was to hear the voices of three specific resident groups to explore how far the service and support meets their needs:

- a) those with learning disabilities
- b) those with experience of home learning and
- c) residents experiencing unemployment/developing new skills)

The outcome of this research is to inform policy and shape digital inclusion services in the long term (i.e. beyond the crisis context of the pandemic), enabling the right services and support to be provided to residents at the right time.

### How we did this

We approached an external research company called EY Seren with a brief who agreed to interview 16 residents across the three boroughs. The interviews were conducted one to one over telephone (given the nature of digital exclusion) for 60 minutes over a 10 day period. The boroughs were responsible for recruiting the resident participants which was done through recommendations from various services such as day centres and Mencap to ensure participants would be comfortable and suitable for interviewing (given the vulnerability and needs of the groups).

An initial kick off session was held to agree research objectives and proposed outputs with discussion guides (used to prompt the interviewers and moderators) developed by the research team and agreed with all three boroughs. The research team also contacted all participants in advance of the interviews to confirm and record consent alongside answering any questions they might have in advance (consent was reiterated at the beginning of the interviews). The terms on the consent forms were also included in EY Seren's Privacy Notice which is available to view at: [www.ey-seren.com](http://www.ey-seren.com). The interviews were conducted in a flexible manner with participants directed to provide honest opinions throughout and additional topics explored where relevant. Particularly vulnerable residents (e.g. with severe

learning disabilities or where English was a second language) were given additional support from their respective councils where required.

Participants were asked to talk through:

- Their awareness and motivations of digital support
- Their experience of receiving digital support
- Their experience of using digital support/services

The responses were then anonymised, coded and analysed by the research team who presented the agreed outputs and research outcomes to us at the end.

### Summary of research outputs

Through the agreed outputs of the research (a 56 page research report and a summary presentation of the research which you can access in the [Appendix](#)), we gained many valuable insights into the three sub groups:

#### a) Learning disabilities:

- Digital support allowed participants to stay in touch with peers, significantly improving behaviour, mental wellbeing and confidence and comfortability with digital activities  
*Service considerations: Digital support can be a respite provider alongside usual provision e.g. day centres*
- It can be challenging to learn how to use a new device especially keyboards with lots of letters and symbols which can confuse and distract participants'  
*Service considerations: A tablet with a touchscreen may be more intuitive than keyboards/ mouse and consider comprehensive device onboarding support for caregivers (e.g. where they can report technical issues, internet safety)*
- All participants appreciated the digital support provided and would like to continue receiving support post-lockdown  
*Service considerations: Consider continuation and further developing of digital support post-lockdown including device ownership and closer working with day centres*

#### b) Unemployed/ low skills:

- A well functioning device creates a confident learning environment (large enough screen, pre-installed apps) addressing both immediate functional and softer needs (feeling capable in modern society)  
*Service considerations: Consider using emotional benefit-led language during promotion and softer measures of service success including confidence/emotional benefits*
- Chromebooks have easy-to-learn operating systems but Windows is most likely to be used at work and some participants didn't feel fully comfortable using their loaned devices (e.g. conducting online banking)  
*Service considerations: Consider the balance between usability and future workplace applicability alongside the pros and cons of loaned vs given to own*
- Most participants discovered digital support via a support worker or teacher and did not always recognise what "digital support" means

*Service considerations: Focus promotion of digital support via community networks and word of mouth using descriptions of digital activities and benefits vs. “digital support”*

- There wasn't a full understanding of what digital skills training could lead to e.g. the progression after an Excel course

*Service considerations: Keep track of users in the context of career planning/ personal goals e.g. could beneficiaries be upskilled to be digital trainers themselves?*

### **c) Home Learning:**

- Not having suitable device for schooling (e.g. using a smartphone screen, old devices, one device for multiple children) was very challenging and stressful so digital support enabled confidence in learning and socially for both parents and children

*Service considerations: Consider using Chromebooks that are intuitive and enable easy access to Google Classroom*

- The learning resource gap was minimised between disadvantaged and advantaged children as they could access courses outside of school (coding, singing, language) alongside meeting additional needs such as therapy

*Service considerations: Highlight available learning resources provided by the council and other recognised sources in addition*

- Internet addiction, social media and online safety are concerns for parents

*Service considerations: provide internet safety trainings to inform parents and children*

### **Benefits snapshot**

- Improved wellbeing from more social interactions, higher confidence that extended to other aspects of their lives (e.g. being able to use self checkouts as a result) and feeling more like “a part of modern society”
- Respite for caregivers and parents due to digital support enabling more stable home environments
- Extended learning and personal development beyond school lessons, closing the learning gap created by COVID-19
- Delivered against the most common need for digital support: a device fit for purpose, which supported assignment completions on big enough screens, minimised technical difficulties and stress

### **Disclosure**

In carrying out the work and preparing the report, EY Seren have worked solely on the instructions of Brent/ Barnet/ Southwark Councils and for Brent/ Barnet/ Southwark Councils' purposes. The report may not have considered issues relevant to any third parties. Any use such third parties may choose to make of the report is entirely at their own risk and EY Seren shall have no responsibility whatsoever in relation to any such use.

Please refer to the [Appendix](#) for full research outputs, the Show and Tell recording, resources and templates.

## Quantitative Face to Face Surveys Led By RBKC and WCC

### Introduction

A face to face survey was developed based on our persona research and quantitative findings in the first phase/ components of the project. It was designed to target some of the key excluded groups identified from both our local and national research, to better understand the challenges, barriers and potential motivators to becoming digitally included.

### Why we did this

The face to face survey aimed to capture the 'softer' aspects of digital exclusion (DE) not captured by our mapping, particularly challenges and motivators, and to collect data on the incidence of the structural and behavioural barriers to digital inclusion amongst digitally excluded residents. Specifically, based on local estimates derived from national data and research, it allowed us to collect primary data on four key groups of residents at high risk of being digitally excluded:

- Residents over 60
- Disabled residents or residents caring for someone with a disability
- Unemployed residents
- Low-income households

The survey was designed to provide insights that will enable us to better understand our resident audience, more effectively target interventions, ensure efficient use of our resources and ultimately help us to improve the lives of vulnerable people locally.

### How we did this

Following a comprehensive review with the London Office of Technology and Innovation (LOTI), local authority partners and other external stakeholders (including Good Things Foundation and University experts), we developed a 15 minute face to face survey with digitally excluded residents.

The survey included screening questions used to identify digitally excluded residents in the four key demographic groups identified in our earlier phases of research (component 2), with whom a full questionnaire was conducted. Questions covered topics such as current usage of the internet in the household, device ownership, barriers, and perceived benefits of being online. You can find the full questionnaire in the [Appendix](#).

Interviews were conducted by an external agency (Lake Market Research) across Westminster and Kensington and Chelsea over a ~6 week period. Based on our earlier quantitative findings, we estimated that there were ~17,500 digitally excluded residents in WCC and ~12,000 in RBKC. Therefore, to achieve a representative sample, interviewers targeted a minimum of 800 respondents (400 in each borough). A random location sampling approach was used with demographic quotas set for each of the four key vulnerable groups. Using our mapping work, we also provided interviewers with an indication of the output areas where DE residents were more likely to be located.

Interviews were spread across both weekdays and weekends and Lake Market Research supplied interviewers with the relevant safety/personal protective equipment measures. All interviewers used electronic tablets, were pre-screened for eligibility and wore visors, gloves and carried hand sanitisers. Where required, Lake Market Research also provided additional language support to those respondents who needed it, and signed letters on behalf of each of the councils were also provided to alleviate potential concerns.

Following completion of the survey, Lake Market Research will provide the raw data alongside weighted summary statistics and cross-breaks to be analysed internally - more info on analysis to follow once completed.

### **How other local authorities can use this process template**

Other local authorities can use this process to get insights that will enable them to better understand their resident needs, effectively target interventions, ensure efficient use of our resources and ultimately help to improve the lives of vulnerable people locally.

This type of face to face survey will be able to capture the 'softer' aspects of digital exclusion not captured by the mapping, particularly the challenges and motivators, and data on the incidence of the structural and behavioural barriers to digital inclusion amongst digitally excluded residents.

## **Ethics, Governance and Communications**

### **Introduction**

It was important for this project to consider and establish ways of working in relation to ethics, governance and communication to ensure that the project can be transparent, considered trustworthy, and we can be held accountable. We have outlined what we did in order to achieve this.

### **Communication and Engagement**

The London Office of Technology and Innovation (LOTI) works in the open. By doing so, we were able to remain accountable for successful delivery of the agreed deliverables and help others to keep abreast of the latest project updates.

Before going out to spread the word about the project, it was important for us to establish a way of working that would allow us to remain accountable to the project timeline, yet remain flexible enough to adapt to any changes. This included:

- Stand-Ups - we agreed to weekly meetings for the core project team to share key updates on actions assigned. This was our core way of updating each other on project progress in our respective geographies.
- Communication - in line with current regulations, we set up an online community space for the project team to post key messages, ask questions of their peers, share documents and invite comments from others. This was

hosted on Basecamp, and became the core way in which the project team communicated between weekly stand-ups.

- Project Management - LOTI's core mission is to make collaboration easy for local government officers, so we were assigned a member of the LOTI team to have oversight of the project's delivery. This role was instrumental in spotting areas where the team needed a deep dive, and sourcing the relevant resource externally or setting time aside for an in-depth workshop when needed. This role also helps to shape the direction of the project and highlight areas of good practice to share with relevant stakeholders.

Keeping external stakeholders informed about the project progress has helped shape its direction from the outset. As a result of working in the open, we have been able to engage with a broader group of stakeholders and been exposed to complementary work happening across the country. We have done so via:

- LOTI Website - a combination of regular updates via [LOTI's weeknotes](#), and updating the [dedicated project page](#) with key outputs, have allowed us to share incremental changes made, our rationale on decisions taken, and invite critical input along the project journey.
- LOTI Show & Tells - this was an effective way to share the project's progress at key touchpoints and engage with a much broader audience in an interactive way. These sessions were usually limited to no more than 30 minutes, allowing for questions at the end, but challenging the team to articulate the key points in a time-bound setting.
- Social Media - taking advantage of the online community that LOTI has cultivated, we shared invitations to show & tells, key outputs and invitations to contribute to our documents via Twitter, LinkedIn and the Local Government Digital Slack channel. By doing so, we were able to speak directly with the relevant and interested audience, increase the visibility of the project, and connect with experts in different regions doing similar work.

All of which resulted in wider network engagement, as we have been able to engage with and reviewed the work of the Greater Manchester Combined Authority (GMCA) - Digital Exclusion Risk Index, [DERI](#), the West Midlands Combined Authority (WMCA) [Digital Inclusion Map](#) and other VCS stakeholders such as AgeUK London, Good Things Foundation and OpenAge.

Engaging with existing networks has been a vital way for us to communicate what we're working on and learn from peers in other regions.

- Public and Third Sector networks - we engaged with the NHS and other VCS organisations to showcase the ways we were planning on using data to better understand the needs of our residents, and test our thinking. Using the input of subject matter experts, we've refined our outputs to deliver a product that can support boroughs to better target and tailor interventions using the map.
- Internal Boards - we engaged with Digital Boards and Digital inclusion networks, groups and task forces in our councils. This helped us to contextualise the needs expressed by colleagues, refine the final list of deliverables, and validate our thinking iteratively. By attending team meetings, summarising outputs in All Staff and Residents newsletters, we were able to share our expectations and garner interest ahead of the face-to-face surveys.

## Data Ethics and Compliance

### Introduction

As part of creating the Digital Exclusion Map, we have used multiple open-source data sets, as well as data and insights, and a combination of qualitative & quantitative research through surveys and interviews in the field with residents.

This posed the risk that we may be holding personal and or sensitive data which could be covered by various regulations, guidelines, or policies.

It should be noted that this project and its outputs in the way of the Digital Exclusion Map (with its underlying open source high-level aggregated datasets) and the Persona Bank for key groups descriptions (which are anonymised based on multiple feedbacks), do not in themselves contain any personal or sensitive information.

The information from the Quantitative Face to Face Surveys in Kensington & Chelsea, Westminster, and from the Qualitative Resident Interviews for Brent, Barnet and Southwark, were undertaken by external market research companies, Lake Market Research and EY Seren respectively. All organisations follow industry best practice and guidelines for engaging, collecting, processing and handling data. The processed output provided to the boroughs was anonymised and aggregated so that no specific information about individuals was provided. However, during the face-to-face survey, individuals had the opportunity to provide consent to be contacted by the councils for a follow-up. The data collected by the agencies may be held for up to a year in the event of any queries or issues requiring re-analysis of the original summary survey results provided.

The collective project team recognised that, whilst the initial data is for analysis and insight downstream, it may also be used by local authorities and other organisations in planning data inclusion initiatives which often involves dealing with vulnerable residents. These initiatives would involve making decisions on what initiatives are selected and targeted to certain groups or locations. Whilst this in itself may or may not create GDPR or data compliance issues, there could be wider ethical concerns raised. As a result, the project investigated and undertook a data ethics review of the project (considering downstream implications).

It is recommended that authorities and partner organisations take this into consideration and undertake data ethical assessments as well as other key legislative assessments (e.g. Human Rights Compliance assessment (HRCA); and Equalities Act 2010 assessment when undertaking digital inclusion change programmes within communities.

### GDPR assessment

As part of creating the Digital Exclusion Map, we have used multiple open-source datasets, as well as data and insights, and a combination of qualitative and quantitative research through surveys and interviews in the field with residents.

To mitigate risks and concerns we undertook a UK General Data Protection Regulation (UK GDPR), as tailored by the Data Protection Act 2018. We used a Data

Protection Impact Assessment (DPIA) document as the basis of the assessment to assess the project and the types of data used to confirm that there were no significant data compliance risks posed.

### Data ethics

Whilst the subject area of data ethics is not completely new, often organisations may not have organised formal governance and processes to address data ethics and ethical concerns arising from major information technology (IT) and change programmes (over and above the traditional legislative requirements identified above).

There are a number of common UK frameworks which seek to address the increasing and emerging concerns raised by the growth in emerging technologies such as 'Big Data', rich data analytics, personalisation, Artificial Intelligence (AI) including algorithms & automated decision making, as well as multiple surveillance technologies. We explored and evaluated the following:

- [Government Data Services \(GDS\) Data Ethics Framework](#)
- [Open Data Institute \(ODI\) Data Ethics Canvas](#)
- [The ONS & National Statistics Society Data Ethics Framework](#)
- [Centre for Data Ethics and information CDEI](#)

A common factor to all these models is their focus not just on data, but its use and especially any impacts of decision making resulting from the solutions, processes, or the underlying data - in terms of 'Transparency', 'Integrity', and 'Fairness'.

Ultimately, we completed the GDS format questionnaire and summarised it for the initial mapping project and survey work. This work was presented to Brent's newly erected Data Ethics Board (which includes cross-partnership external trained representatives in Information Governance & Data Ethics). The Data Ethics Board members agreed we didn't, as part of the project, create any major risks or concerns. However advised and provided guidance including:

- Considering thresholds in showing and filtering mapping data (e.g. those areas with top 80% proportionately over 65, or the areas up to 20% lowest income etc). In particular it is important when interpreting / extrapolating areas or groups that people on either sides of thresholds (which can be seen as arbitrary) that there is consideration that groups, individuals, or geographic areas are not being unfairly selected or excluded.
- Anonymisation of data; especially in smaller populations could create risks of small cohorts and individuals being indirectly identifiable.
- Automated / Algorithmic decision making; whilst acknowledged as not being a risk or concern to the mapping and survey work to date - the Board recommended that further initiatives should be assessed to ensure decisions are transparent (clearly understandable as to why and how they were arrived at); have integrity (being based on accurate and relevant information on needs and sound judgements); and have fairness (in the way initiatives are devised and deployed - so not unfairly including or excluding those communities or individuals who may have needs however, for example in an area with generally lower levels).

## Governance

The project is governed through the LOTI Innovation Fund comprising the five successful boroughs and a LOTI lead. LOTI's involvement has been to facilitate collaboration between the boroughs and steer the project towards serving Pan-London outcomes through the resources produced.

Individual workstreams were in place to deliver the individual elements of the project and working groups created to deliver specific workstreams of the project e.g. Geographic Information System/ Data Analysts group for the data mapping.

Internal governance is in place within individual local authorities to monitor progress against this project.

## Lessons Learned and Next Steps

### Lessons Learned

There are many lessons we have learned throughout the project and have selected the following in hopes it will support future digital inclusion projects:

- Collaboration is most difficult at the outset
- There are multiple local authorities, central government bodies, and other organisations who have researched digital inclusion - these can add insights but often the reporting style and findings are of limited use in providing background and context. You still need to bring together a local landscape of digital exclusion and needs based on localised data, inputting knowledge and experience of key service uses.
- Engaging council services, partners and community networks early on in the process will help you identify needs, leverage resources and develop a collaborative, sustainable and effective approach in tackling digital inclusion.
- There are very few agreed and standardised definitions and metrics for digital exclusion and inclusion which can make sharing and coordinating more difficult.
- Start recruitment early for resident participants, particularly given the vulnerable nature of the groups, as we had many last minute cancellations
- Ensure any outputs created include both digestible formats (one pagers, summary presentations, toolkits) for easy redistribution purposes alongside full detailed reports.

### Next Steps

- **Westminster:** Inform how we can tailor our interventions further to meet the needs of the key groups and its subsets. Insights from this project will also provide a good foundation as we set up a partnership approach in tackling digital exclusion. It is our aspiration that all our interventions are data/evidence-led in terms of resourcing, targeting and meeting the needs of our residents.
- **Brent:** Inform future business cases, including the launch of a Business support fund for devices and digital skills and the expansion of providing devices for

pupils in Brent. Both of these support funds will exist alongside the existing Digital fund within our Resident Support Fund. The research will also be used to inform the future procurement of devices to meet the various needs of digitally excluded residents.

- **Kensington and Chelsea:** Share this sophisticated understanding of need across our cross-sector digital inclusion partnership to shape the definition of all the projects overseen by the partnership and to inform the Council's investment case.
- **Southwark:** Sharing within Digital Inclusion and Central Digital Skills working groups, external partners (job centres, community groups), informing the targeting and creation of videos for Southwark residents on actions such as how to create a MySouthwark account. In addition, supporting our understanding of how many people are in the different user persona groups and how we can effectively include them.
- **Barnet:** Presenting to our cross-cutting Digital Inclusion Forum and establishing a Task and Finish group off the back of the insights from this project to deliver more targeted digital inclusion support in the borough.
- **Cross borough with LOTI:** As part of LOTI's [Digital Inclusion Innovation Programme](#) (DIIP) LOTI will continue to develop the map with the five project boroughs and welcome any other boroughs and stakeholders who want to join the project. Our focus will be on iterating the map based on the needs of key users. We will begin by understanding the user needs of the other DIIP projects:
  - Device Upcycling
  - Digital Inclusion in Temporary Accommodation
  - Supporting Dementia Carers

In addition, we will determine required functionality based on user needs and iteratively build and test with users on an ongoing basis.

## Appendix

### **(Component 1) GIS Data Mapping methodology and findings for the Map**

- [Inclusion Toolkit - Draft content\\_GIS Data Mapping for DigitalExclusion - Google Docs](#)
- [Digital Exclusion - Exploration of Potential Datasets - Google Sheets](#)

### **(Component 2) Persona frameworks and interview templates**

- [Pan-London Digital Inclusion Personas](#)
- [Discussion Guide From Component 2: Persona Validation and New Persona Identification - Google Docs](#)
- [User Persona Validation - Workshop Feedback from Southwark, Brent and Barnet - Google Docs](#)
- Borough workshops to validate the personas with service users - [Draft email to send to service departments](#)
- [Inclusion Toolkit - Draft content\\_Persona Interview Journey - Google Docs](#)

### **(Component 3) Qualitative “voice of resident” EY Seren research**

- [Full research report and quotes](#)
- [Summary research report presentation](#)
- [One pager summary](#)
- [Example template consent form and script](#)
- [Example discussion guides](#)
- [LOTI Covid Innovation Fund \(Mapping Digital Exclusion in London\) Phase 1 research - show & tell - YouTube](#)

### **(Component 4) Quantitative face to face Lake survey and templates**

- [Digital inclusion F2F questionnaire](#)
- [Lake approach to digital inclusion survey](#)

### **Other resources and toolkits**

- [Croydon and Leeds DI Toolkit](#)

## Contributors

As indicated above, this work is an iterative process and we will continue to adapt our approaches in London boroughs as part of the second phase of this project.

We have benefited enormously from the partnership working inherent to LOTI's Covid Innovation Fund, and are keen to share our learnings and experience with other organisations facing similar challenges.

If you would like further background documentation on any of the work above, or just a chat with any of the teams involved, please don't hesitate to get in touch.

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