Supporting Digital Engagement

Final Report to Sheffield City Council

Institute of Cultural Capital, Liverpool
Communication and Computing Research Centre, Sheffield

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Executive Summary

• Digital exclusion is an element of contemporary social exclusion whereby citizens have no access or limited access to the Internet and where they lack the skills or resources to make full use of online systems and services

• Both nationally and locally in Sheffield social housing tenants are more likely than other community members to be digitally excluded

• National and local policies are now orientated towards “digital by default” approaches to the provision of services

• Digital by default assumes that online interaction will be the primary method for undertaking transactions with government both locally and nationally

• Digital transactions have the potential to make savings of the order of £5 to £10 per transaction as compared to face-to-face or telephone transactions

• Digital by default has the potential to directly impact those who make extensive use of local and national services – especially those in social housing, on lower incomes and in marginalised communities

• Older social housing residents are more likely to be fully digitally excluded (have no access at home or elsewhere) than younger residents

• Even those social housing residents with access are likely to be low or “narrow” users of the Internet

• Those social housing residents currently off-line indicate that they are not motivated to get on online to develop digital skills

• A failure of social housing residents to take up digital government services will prevent the major cost savings of digital by default from being realised

• Research has demonstrated substantive quantifiable educational, financial, cultural, civic, and health benefits are derived by citizens with Internet access and digital skills

• Research in the UK and the work of this project in Sheffield has identified three levels of digital inclusion/ exclusion to which policy has to respond

• Engagement with community groups, and external partners has identified five areas of work needed to develop a strong digital inclusion strategy for Sheffield City Council:

  • Branding and leadership
  • Access
  • Engagement and training
  • Policy support
  • Service design

• Practical intervention strategies suggested by residents included:

  • Community Wi-Fi
  • Community broadband
  • Access to low cost devices
  • Pop-up or mobile “UK online centres”
  • Mobile rather than office based SCC staff
  • Better mobile applications
  • Online chat based web support
  • More use of SMS or email to communicate
  • A “face-book like page/account” for a tenants interactions with services
  • User centred and community co-design of services
  • Leadership and branding
  • Forced channel shift
  • Sheffield City Council as a Community ISP
  • Don’t engage in digital by default – but better by digital

• Solutions rejected by tenants included:

  • Free laptops
  • Set top boxes/smart TVs
  • Public kiosks
  • Mobile apps for all services

• The project identified that community preferences for interventions and the potential effectiveness of interventions were not always aligned

• The project concluded that SCC needed to develop a clear digital inclusion policy that addresses the five areas of work and the engages with seven core strategic elements:

  • Evidence based and tenant supported interventions
  • Proactive support and “triage” of digital exclusion for non-users and hard to reach groups
  • Location and community appropriate access and training “one-stop-shops”
  • Mapping resources regionally and locally
  • Collaborative networks
  • Specific support for key social groups
  • Data use and risk management

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1. Introduction

This collaborative project was funded by the Economic and Social Research Council (ESRC) Knowledge Exchange programme, Sheffield Homes (SH), Sheffield City Council (SCC)[1] and was conducted by collaborative team with staff from Sheffield Homes, Sheffield Hallam and Liverpool Universities. The project sought to examine and understand digital exclusion and develop potential interventions to support inclusion. The project was designed to support SCC/SH in addressing a well-defined and pressing policy need to increase digital engagement among social housing tenants. The project was also designed to apply learning from recent academic research[2] in the areas of digital inclusion, digital engagement and user centred software and service design.

At the close of the project it is hoped that a significant knowledge base has been developed between partners that will support current and future interventions and policy decisions. Such support opens up the possibility of addressing reductions in service resources through online provision, and the possibility of joining up services across functions to therefore maintain quality of front line delivery.

1.1 Aims

The primary aim of the project was to exchange knowledge between the academic partners and SCC/SH. Within this the project included specific goals for the various partners.

1.2 Sheffield City Council (Social Housing)

• Inform SCC/SH digital and digital inclusion strategies

• Inform SCC/SH to adapt to and anticipate the digital landscape now and up to 5 years time

• Provide a knowledge base to allow SCC/SH to be proactive, not reactive, to technology and policy changes

• To understand the details of digital exclusion in target Sheffield social housing communities

• To allow learning to be applied from the project outside the initial communities engaged by the work

1.3 Academic (C3RI[3] and ICC[4])

The project had three principal academic aims supported by the ESRC funding.

• First, support for the end users, both in the public sector and community members, in meeting digital engagement targets.

• Second, the embedding of this knowledge base within SCC, SH and the target communities.

• Third, an opportunity for the academic partner to gain greater knowledge of the specific context of social housing, access to data and technologies, and develop closer working relationships with end users.

This project was designed from the outset to have potential impact on three end user groups:

• SCC and SH - and more broadly through dissemination of the outcomes to other public sector organisations facing similar challenges.

• Residents and users of SCC social and housing services - and more broadly through dissemination of the outcomes to other communities facing similar challenges.

• Other academic and public sector organisations undertaking or developing similar engagements - through providing a case study in the inter-disciplinary application and co-production of social science knowledge with end users.

1.4 Scope

The scope of this project – considered a digital inclusion pilot project within SCC/SH – was not to provide a complete solution to issues of digital inclusion in SCC supported communities. Such a project would require a far higher level of resources and much longer time frame. Rather the scope of the project was to identify issues, explore potential solutions and collate an evidence base from the pilot work, academia, and from other projects in the region and elsewhere. This information then provides an evidence base from which SCC/SH can develop policy and practice.

1.5 Collaboration

The project linked a strong academic knowledge base with a clearly identified issue facing SH and SCC. Academic support came from a team initially based at the Cultural, Communication and Computing Research Institute (C3RI) at Sheffield Hallam University, and later also the Institute of Cultural Capital (ICC) in Liverpool. The academic lead was Prof. Yates who was the Director of the C3RI and during the project moved to be Director of the ICC. Other key academic team members included Dr. John Kirby, Dr. Eleanor Lockley, and Dr. Kerry McSeveny. Prior to and during the project the C3RI had a broad working relationship with the SCC/SH in the area of regional development with regard to the CDI sector. This relationship was built upon joint engagement with the South Yorkshire Digital Region initiative, and the “Local Enterprise Partnership – CDI Sector Group”. The SCC/SH team included Jon Lovibond, Jane Lyon and Peter Brown. Engagement with SCC/SH staff included key interactions with Mark Cowley, Kev Hewitt and Sharron Cadd (North West Area Office – Stannington) and Claire Lane, Rachel Dawson and Lee Storey (North Area Office – Parson Cross). Engagement with the Tenants and Residents Association (TARA) and other community representatives included Stephan Chapman, Michael Burns and Christine Naylor in Stannington and Janet Bagshaw and Colleen McGrath in Parson Cross. Important additional support was provided by UK Online (now the Tinder Foundation) both the national leads Helen Milner, Kevin McLean and Natalie Thorpe as well as through Maxine Bowler and James Richardson of the Heeley Development Trust and the UK Online Centre at Southey library near Parson Cross. Towards the close of the project the Sheffield team met and engaged with their equivalents in the “GO ON Its Liverpool” Steering Group.

The project had a board that included the following people over the time of the project:

• Jon Lovibond – Chair (Sheffield Homes / Sheffield City Council)

• Simon Richards (Sheffield Homes / Sheffield City Council)

• Ken Smith (Sheffield Homes / Sheffield City Council)

• Jane Lyon (Sheffield Homes / Sheffield City Council)

• Peter Brown (Sheffield Homes / Sheffield City Council)

• Michael Bowles (Sheffield City Council)

• Julie Bullen (Sheffield City Council)

• Liam Conneely (Sheffield City Council)

• Mark Whitworth (Sheffield City Council)

• Fayzeh Mohamed (Sheffield City Council)

• Paul Green (Sheffield City Council)

• Nigel Corcoran (Sheffield City Council)

• Helen Milner (UKOnline / Tinder Foundation)

• Natalie Thorpe (UKOnline / Tinder Foundation)

• Kevin McLean (UKOnline / Tinder Foundation)

• Charlotte Wheat (UKOnline / Tinder Foundation)

• Simeon Yates (Sheffield Hallam University)

• John Kirby (Sheffield Hallam University)

1.5.1 Funding

The Economic and Social Research Council (ESRC), Sheffield Homes, Sheffield City Council and Sheffield Hallam University jointly funded this project. It was conducted as an ESRC Knowledge Exchange project, the general aim of which is to promote engagement between the academic researchers and non-academic partners in the wider community. Knowledge Exchange projects are “match funded” by the ESRC with the other half of the funding being provided by the non-academic partner either in the form of direct financial contribution or in kind through the provision of staff time, use of facilities etc. On top of this Knowledge Exchange funding, Sheffield Hallam University was able to make cash contribution from its HEFCE funded Leading Transformational Change project. The breakdown of these sources of funding is shown in the following table:

Organisation	Type	Description of Contribution	Amount
Sheffield Homes	Cash	Housing Revenue Account	£30,000
Sheffield Homes	In-kind	Staff time, use of facilities etc.	£20,000
Sheffield City Council	In-kind	Staff time, use of facilities etc.	£10,000
ESRC	Cash	Research Grant	£60,000
Sheffield Hallam University	Cash	Leading Transformational Change	£10,000
		Total	**£130,000**

1 The original project was developed with Sheffield Homes, Sheffield City Council’s arms length housing organisation working to Sheffield City Council. During the project Sheffield Homes management agreement came to an end and staff were transferred back to Sheffield City Council.

2 This prior work was funded by the ESRC, EPSRC, AHRC and EU Framework 7

3 Cultural, Communication and Computing Research Institute, Sheffield Hallam University

4 Institute of Cultural Capital, University of Liverpool and Liverpool John Moores University

2. Context

2.1 Digital and social exclusion

Over the last 20 years successive governments and the European Union have argued the case for the major social, economic, cultural, community and political participation benefits of getting the majority of citizens online[5]. As a result a number of studies, plans, assessments and programmes have been proposed and developed over this period. Some of the main benefits identified in such studies are:

• Educational benefits and therefore potential increased job potential experienced by those who acquire Internet at home. This is claimed to be equivalent to one grade at GCSE for children in Internet enabled households as compared to their peers without access.

• Support for the transition to employment being improved for those who engage with online tools and facilities. This is associated with claims of minimum increased earnings over a lifetime of more than £12,000 per person for those currently unemployed as compared to their peers.

• A greater earning potential for all people with good ICT skills of 3% to 10% as compared to their peers.

• A Price Waterhouse Cooper report for government[6] claims that the total potential economic benefit of getting everyone in the UK online is in excess of £22bn.

Yet the majority of the UK and International academic research repeatedly finds major levels of digital exclusion and inequality. This is patently obvious on an international level with only around 30% of the world population online and with the highest levels of access (over 60%) predominantly in Western societies. In the UK the focus has shifted from a late 1990s agenda of providing access, through one of education and training and now more recently to one of speeding up of the roll out of superfast broadband. The focus on education and training in current government policy has been substantially reduced. This has lead to a heavy reliance on charity, third sector, local government and private provision to address the skills gap.

2.2 Digital exclusion in the UK

According to Ofcom's 2013 Communication Market Report, 72% of households have fixed broadband connections to the Internet – the same as in 2012. When new mobile Internet connections are taken into account there has been a very small increase in total Internet connections from 79% to 80% since 2011. The slowing of Internet take-up in recent years has resulted in the digital divide being described as "narrower" but "deeper" as the 20% of the UK population currently not online represent those who are now least likely to engage with such technology. This lack of engagement is particularly pronounced in the most marginalized groups (socio-economic group DE[7]) where Internet take-up is only 62%, leaving one third of this group without access at home, work or though a mobile device. On top of this, a large proportion of this group without access also does not intend to get the Internet within the short term (next 12 months). Consequently, up to 35%, of people in socio-economic group DE are likely to remain fully digitally excluded for the foreseeable future.

In addition to the 20% of the population who do not use the Internet, in 2013 Ofcom describe an estimated 18% of those online as "Narrow" users – this represents about 15% of the population. Narrow users are less confident about using the Internet and have greater security and privacy concerns. Consequently, Narrow users are much less likely to use the Internet for financial transactions such as banking, paying bills or government services. In fact, half of all Narrow users engage in just two of Ofcom's 18 categories of online activity - email and personal information. As result despite the majority Ofcom's Narrow users having access at home and making some use of the Internet it would be erroneous to conclude they are "digitally included". This limited engagement with the Internet, makes Narrow users effectively digitally excluded. People from socio-economic group DE are more likely to be "Narrow" users.

Therefore around 35% of the population do not have access or are limited users of the Internet with a large proportion of this group being from socio-economic group DE; of whom the majority indicate that they will remain fully digitally excluded or limited Internet users for the foreseeable future. At the same time socio-economic group DE will constitute the overwhelming majority of those affected by the government's welfare reforms, are very likely to be social housing tenants and will be directly affected by the "Digital by Default" agenda (see section 2.4).

5 (2008) Digital Inclusion: An Analysis of Social Disadvantage and the Information Society Department for Communities and Local Government; (2010) EU commission (2010a) http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52010DC0245R(01):EN:NOT; (2011) European Commission. Digital Agenda for Europe: Annual Progress Report 2011 http://ec.europa.eu/information_society/digital-agenda/documents/dae_annual_report_2011.pdf; (2011) European Commission. Working Paper: Digital Agenda Scoreboard http://ec.europa.eu/information_society/digital-agenda/scoreboard/docs/scoreboard.pdf; http://ec.europa.eu/information_society/digital-agenda/scoreboard/countries/index_en.htm; (2010b) European Commission, European Digital Competitiveness report 2010 http://ec.europa.eu/information_society/digital-agenda/documents/edcr.pdf; Department for Business, Innovation and Skills (2010). National Plan for Digital Participation; ONS, Internet Access Quarterly Update 2011 Q3 (2011) http://www.ons.gov.uk/ons/dcp171766_242415.pdf; Ofcom (2011) UK Adult's Media Literacy http://stakeholders.ofcom.org.uk/binaries/research/media-literacy/media-lit11/Adults.pdf

6 http://www.parliamentandinternet.org.uk/uploads/Final_report.pdf

7 The British National Readership Survey Social Grade classification has been in use since the 1960s and has the following definitions: A High managerial, administrative or professional; B Intermediate managerial, administrative or professional; C1 Supervisory, clerical and junior managerial, administrative or professional; Skilled manual workers 21; D Semi and unskilled manual workers; E unemployed with state benefits only.

As a result it is the most socio-economically disadvantaged groups are generally also those who are experiencing the most acute and potentially chronic[8] digital disadvantages. It has been recognised that digital exclusion is currently a key element of broader social exclusion and that digital exclusion issues are strongly linked to other areas of social policy. In our work over the last five years in South Yorkshire we have identified key links with:

• Financial inclusion – the "poverty premium" paid through a lack of access. Digital exclusion prevents access to the potential savings of online transactions and purchases. These include fuel bills; insurance; Internet shopping; and travel savings. Engagement with digital financial processes also brings the financial education derived form such things as online banking.

• Cultural inclusion – the exclusion from mainstream society and culture that has an ever-growing digital component. This might be digital media use for entertainment, but also news access, interaction with media, interaction with community and national interest groups, access to political institutions. It also includes the potential use of digital media to foster cultural inclusion through sharing of multi-cultural information and media, as well as providing routes to community identity making and exchange for minority or marginalised groups.

• Civic participation – many routes to civic participation, from knowledge of local and national government, to local and national community engagement as well as news sources are also moving online. There are many claims in academic literature and media coverage that argue for the participatory potential of digital media. A lack of access might disconnect already marginalised groups from local and national civic life.

• Health and well-being – again many health service delivery modes as well as health information are now provided online. There is growing evidence that access to such information and services has a direct benefit on individuals and communities. Digital exclusion may therefore add to health inequalities.

• Education – as has already been access to the Internet appears to provide positive educational outcomes. Separate from the direct impact on school performance for children, broader Internet access and use can provide and support skills developments across all groups in society.

2.3 Digital exclusion, inclusion and impacts of austerity

Providers of social and community services in the public and third sector currently face major constraints on available funding. This reduction in funding has implications for all elements of their business activity. In order to minimise the impact of this reduction on front line services many organisations are seeking to move administrative functions online. Following the models of many major private service providers (such as insurance brokers, travel agencies, and utility providers) public agencies are offering online web based solutions to managing transactions with end users. For example paying rent or booking repairs for social housing. There are two identified reasons for this shift. First, the cost of an individual online transaction (39 pence) is significantly less than the cost of a call centre transaction (£3.21) and far less than the cost of a face-to-face transaction (£8.23). Moving a greater number of transactions online therefore has the potential to create major savings and reduce the impact of funding reductions on front-line service delivery. Second, online provision has the capacity to provide new services, or to link up services which may not be possible at present.

There are, though, a number of potential issues with this approach:

1. Digital technology solutions, such as online payments and service bookings, are proposed as routes to major cost savings in and of themselves. Such proposals are noted within policy statements at EU, national and local level. They are therefore being provided and promoted by the major IT suppliers to public and third sector bodies as "invest to save" solutions.

2. The major users of social and community services include the bulk of citizens who are currently digitally excluded or disadvantaged. These groups include older people, black and minority ethnic communities, people with disabilities, carers, unemployed and young people not in employment education or training.

3. Moving services "online" to lower costs and maintain services therefore has the perverse potential of further disadvantaging these groups in their access to those very services. Any lack of uptake of digital services for any reason by members of these groups and communities may also limit the financial impact of any technology implemnetations.

4. A number of technical solutions to digital exclusion of this nature are now being offered to the public sector, especially in the context of social housing. These include such things as "set-top box" technologies for use with a digital TV, local area Wi-Fi and subsidised wireless access. Some proposed solutions involve using the savings from moving services online to subsidise the costs of these technical interventions.

8 We would like to distinguish between acute and chronic digital exclusion. The first has the potential to be transitory – and can be addressed with short-term interventions to provide access or skills. The second represents a situation where the exclusion is unlikely to be fixed by shorter-term measures.

5. Such technical interventions do not in the main take into account the cultural, community and personal factors that are the basis for the existing digital exclusion of individuals and social groups.

6. Importantly many of the technical solutions to providing online services, or for providing routes to digital engagement, have been developed without end user input. Such solutions also tend to ignore the fact that the roots of digital exclusion are predominantly socio-economic and cultural and not just technical.

It remains the case that many public sector and third sector groups will be moving services online and that many of their business plans are predicated upon forecast cost savings in order to meet funding reductions. A consequence of reduced funding is the restriction of available budget to assess potential solutions or to access any external knowledge base. Solutions are therefore needed that will make use of available knowledge to support cost reductions, maintain service and address the issues of digital inclusion/engagement. This project is an example of a joint collaboration between academic social science research and public services designed to meet this challenge. The goals of the project were therefore to have appreciable impact on both the public sector and the actual end user communities.

In the remainder of this report we will explore the specific details of this form of exclusion both nationally and in the specific context of four Sheffield social housing communities. We will also consider potential interventions suggested and developed through interaction with these communities. However before doing this we need to understand digital inclusion in the context of current national and local policy.

2.4 Policy

2.4.1 Digital by Default

Digital by default – that is citizens directly using digital systems rather than primarily paper or people based systems for the vast majority of transactional work – is written into a large proportion of the current governments approach to service delivery. Though the current definition in Government Digital Service documentations is:

“By digital by default, we mean digital services that are so straightforward and convenient that all those who can use them will choose to do so whilst those who can’t are not excluded.”

The Government ICT Strategy (March 2011) and Strategic Implementation Plan (October 2011) make this clear. These documents discuss the government’s plans to reduce costs and to develop a common ICT infrastructure for government. They also consider how the use of ICT can deliver change to the manner in which such services are delivered. There are also additional strategy statements on Cloud computing for government, types of devices to be used by government staff and clients, and ensuring “Green” ICT. These proposals were followed by the launch of the Government Digital Strategy in November 2012. The cabinet office additionally provided a Design Manual and Digital-by-Default Service Standard in April 2013. At the core of all these documents is a claim that the government will achieve over £1 billion of annual savings by making a considerable number of transactions digital.

The 2011 Government Shared Services statement is focused on making savings in back office services through standardising processes as well as better data collection and collation. The government was provided additional recommendations in this area in 2012 with the Read Review of Management Information in Government.

2.4.2 Open data

A further step in this debate Internationally and Nationally is the role of “Open Data”. Open data in the context of government involves the open sharing (in standard formats) of non-personal data and information held by all departments to better support policy and practice. In government this has led to the 2012 The Open Data White Paper, the launch of the Open Data Institute, and the signing of a G8 Charter on Open Data in 2013. The white papers stated goals are to: create transparency in government practices; open up public data for economic and commercial benefit; and develop greater trust in public data and sharing of data around government. In practical terms issues of the use of public sector data were addressed in the 2013 Shakespeare Review of Public Sector Information. This was discussed along with the 2013 Information Economy Strategy. As with the general arguments for open data, the review and strategy called for a national data strategy and the continued digital transformation of public services.

2.4.3 Universal Credit

A major national policy change that has direct implications for issues of digital inclusion is Universal Credit. Separate from the social policy claims for implementing this policy change and the likely impact of the implementation, much of the organisation and costing of Universal Credit has been based on a digital by default approach. This will most likely impact the majority of the users of government services who are in marginalized communities and groups, especially those in social housing. As will be noted below, a large proportion of social housing tenants are effectively off line. In the case of Universal credit 12m people will be affected - the majority in such communities. The proposal currently assumes 80% online interaction and service use, yet the DWP has noted that 50% of likely users do not have personal access to the Internet.

2.5 Sheffield policies for digital services

These national and international policies and discussions are reflected in a set of organisational and service design principles that have been adopted by Sheffield City Council. Two of the key elements of these design principles are detailed below.

Better by Digital

Services will be available digitally as the first choice. Better does not mean by default- services will work with people who are digitally excluded to address this inequality.

Services will exploit new ways of delivering services so customers choose the digital option because it provides a better experience and is the lowest cost delivery channel.

Services will adopt digital technologies for internal working practices, provide on-line self service options and reduce the need for paper by using central document management and workflow.

Services will develop their approach to digital services to ensure they are brought to market faster and improve the service offered

Services will recognize and support customers who are digitally excluded to help them achieve the same outcomes as others in the city.

Services will have website information designed around the customer that is accessible to all, easy to use, intuitive and consistent

Open and accessible data

Services will turn data into information and intelligence, which can be used in decision making and to design services. This information will be ‘open’ unless there are legal reasons why it shouldn’t be.

Services will obtain the information they need from customers at the earliest opportunity and only ask for it once.

Services will make our public information easily accessible (using open system standards) to enable information sharing and greater opportunity for analysis and intelligence (open data principles)

Services will share data and information with other departments and partners where consent is provided and it is legally permissible.

Services will use existing information and data we hold about customers, making use of this rather than starting from scratch and designing systems to recreate the information.

Services will take reasonable precautions to prevent unauthorised access to, and disclosure of, sensitive information

Services will keep customer information safe and adhere to national standards in information sharing

Services will use data analysis, forecasting and graphical/visual presentation of information to provide meaningful business insight

3. Challenges and opportunities

The situation, both national and in Sheffield, sets up key challenges and opportunities that interventions will need to address. The opportunities have been discussed above and are repeatedly emphasized in the government and key stakeholder documents; these can be summarized as follows:

• Moving appropriate transactions online to make major savings on transaction costs

• Better use of data about clients and citizens to produce efficiency savings or increase effectiveness

• Developing digital services that enhance or replace and improve current service delivery

• Meet expectations of digitally engaged citizens

• Improvements in educational, financial, cultural, civic, and health inclusion and outcomes for digitally engaged citizens and their families

The challenges are:

• The majority of local government service users are already in socially excluded or economically marginalised groups, and are likely to therefore be digitally excluded

• If local government service users do not go online savings will not be made

• In the context of austerity balancing "investments to save" though IT infrastructure for services against investment in service delivery is socially, politically, and organisationally complex

• Service delivery via digital media is unlikely to be major motivator for non-users to go online, therefore development of access and support interventions need to highlight the social, financial and educational benefits of internet use to citizens and tenants

• Maximising the potential of digital media has the potential to create unintended impacts on vulnerable citizens and tenants from which they will need to be protected

• Digital systems will need to be developed for users who may have limited access and skills compared to those for whom technology providers normally develop services

4. Project

This section describes the project undertaken in Sheffield. It details the methodology employed by the project, the findings from the surveys and interactions with the communities and compares these to national trends. It concludes with a 'model' of the different user groups and the form of policy interventions needed.

4.1 Methodology

The project had 7 elements:

1. Identification of target communities for the project work (see section 4.1.1)

2. Survey of community members (see sections 4.1.2; 4.2; 4.3; 4.5)

3. Workshops with community members, TARA representatives (see sections 4.1.3; 4.5)

4. Engagement with local providers of digital inclusion services (see sections 5.1; 5.3)

5. Out reach to other organizations and groups (see sections 5.1; 5.3)

6. Engagement with council services and departments (see sections 5.1; 5.4)

7. Pilot interventions in target areas (see section 6)

4.1.1 Selection of community groups

Four community groups were identified for the project. SCC/SH provided access to the relevant social, economic and community data that was used to support the selection of and to help understand the target communities. The selection was driven by the following key social variables:

• Age of tenants – national data indicate that older people on low incomes are more likely to be digitally excluded – see section 2.1

• Young people – though it is often assumed that young people have strong ICT skills this is not in fact the case, also patterns of internet access indicate that young people on low incomes have marginal internet access compared to the national average – see section 2.1

• Young families – Internet access has been demonstrated to be of considerable value in supporting families and also the educational chances of young people

• Types of housing – different forms of housing (ranch style, detached or semi-detached, tower block etc.) provide opportunities and constraints on types of technological intervention.

The following four groups/areas were then selected:

• Older people, "Ranch Style" housing in Hall Park Stannington

• Mixed age group, Tower Blocks at Deer Park Stannington

• Young parents under 25 with family, semi-detached housing Parson Cross

• Young people under 25 without family, one bedroom flats / semi-detached housing Parson Cross

4.1.2 Community survey

The data held by SCC/SH on clients in these areas was used to develop a representative random sample of clients in each area. Response rates to both face-to-face and telephone contact proved to be around 50%. In order to gain a large enough sample the team were forced to oversample by over 50%. The team in consultation with service staff and tenant representatives developed a survey of Internet use and attitudes. The survey addressed a number of the already documented reasons for digital exclusion including:

• Financial – to what extent are the experienced levels of digital exclusion a function of economic factors

• Technical – to what extent are the experienced levels of digital exclusion a function of access to, knowledge, or lack of experience of technologies

• Attitudes – to what extent are levels of digital exclusion, or of lack of engagement a product of attitudes to ICT in general or to specific technologies, for example online service provision

• Social – what types of service do community members engage with, to what extent do these engagements serve other social, economic, community or personal functions? For example do they form part of weekly social routines for their users?

• Acceptance – which areas of service provision would meet greater or lesser resistance to being moved online?

4.1.3 Community workshops

The initial findings from this data were explored with partners and community members selected from the questionnaire interviewees. These focus groups explored the detail and lived reality of the survey data but also explored opinions about likely effective or preferred interventions to support digital inclusion.

Examples that were explored included:

• Community based training and support – potentially delivered through formal and informal networks

• Community based communication and public engagement events – end user focused events to support moves towards attitude change with regard to the use of online services

• Community based ICT resources – such as enhancement of local facilities or times and methods of access (e.g. in schools, local UK-Online Centres etc.)

• Community based technology solutions – such as installation of building wide Wi-Fi in tower blocks, or subsidised set-top box provision in housing/low-rise stock

• Personalised ICT solutions – provision of smart phone or app based solutions

The details of the interventions selected and their implementation are presented in sections 5 and 6.

4.1.4 Follow-up and additional engagements

The effectiveness of the survey work and interventions for digital exclusion and engagement issues were addressed during and just following the intervention period. This was predominantly done through on-going conversation and interaction with participants at interventions, and on-going discussions with UK Online and SCC staff as local and national policy agendas developed during the project. The following sections provide details of the main survey and workshop findings and their relationship to national trends.

4.2 Accessing digital technology and services

The majority of data on national levels of access to digital media comes from Ofcom and the Office for National Statistics (ONs). Recent (early 2013) data from Ofcom provide the following picture:

• The number of fixed broadband connections continued to grow, with 21.9 million UK residential and SME fixed broadband connections (4.6% more than there had been a year previously). A lot of this growth was in the newer "Fibre to the X" connections – where fibre optic cable goes to the street cabinet, or building. For example BT or TalkTalk provision over 30 Megabits per second (MB/s) that offer TV and other services – often using BT Infinity technology. Interestingly though mobile use was still growing slowly compared to the previous year (up about 1%) the number of mobile broadband subscribers continued to fall, down 2% on the previous year.

• There has been a significant increase in the self-reported volume of Internet use since 2011 with average of just under 17 hours per week.

• 50% of UK adults now use a mobile phone to go online. With 54% of the population owning a smartphone and 80% of smartphone users going online. This means less than 45% of the population has access to smartphone based mobile Internet access.

• Smartphone users are more likely to carry out a variety of online activities, at least weekly, compared both to non-smartphone users, and to smartphone users in 2011. The most significant increases in use are for location based services (maps and directions); doing email and photo messages.

• 16% of people now use a tablet computer of some kind.

• 16% of people now make use of a games console.

Do you or does anyone in your household have access to the internet at home through a computer, laptop or netbook?	Other Housing	Social Housing Resident	Overall National position
Yes – have access and use at home	77%	56%	72%
Yes – have access, but don't use at home	5%	6%	6%
No	18%	37%	22%
Don't know	0%	1%	0%

Table 1: Ofcom Data 2013 (analysis by ICC)

• On average, UK adult Internet users report visiting 19 websites a week.

• Older users are now the main cause of growth in social networking use.

• 72% of those with a social networking profile claim to visit social networking websites at least daily. Half claim to visit sites more than once a day, with just under one in ten (9%) visiting more than ten times a day.

• 'Narrow' users still account for 20% all Internet users, these are people who only use up to 6 of the 18 types of online activity in the Ofcom survey.

• One in seven UK adults do not have the Internet at home and do not intend to get access in the next 12 months. This level of non-use is unchanged since 2011 (15% in both 2011 and 2012). The reasons most often cited for not intending to get the internet continue to be 'lack of interest' (85%), followed by cost (23%) and not having a computer (19%).

• Both Narrow and recent new users make much less use of the internet, have higher security concerns, and tend to work with very fixed sets of WWW sites or internet services, as compared to established users.

Given the focus on Sheffield a further interrogation of the data reveals that social housing tenants remain a far more digitally excluded group. As the date in Table 1 from the 2013 OfCom data indicates, 72% of all households use the Internet at home. In social housing groups this is 55%. Importantly 37% of social housing tenants do not use the Internet at all, either at home or elsewhere, as compared to 18% of those in other forms of housing. This makes social housing tenants one of the social groups with the highest levels of absolute digital exclusion.

4.2.1 In Sheffield

There are no dedicated surveys similar to the Ofcom survey for regions such as Sheffield. The Ofcom data are based on a national survey of around 2000 people and breaking down the data to an area such as Sheffield produces very few individual respondents. For the broad Yorkshire and Humber region the data are:

Do you or does anyone in your household have access to the internet at home through a computer, laptop or netbook?	Other Housing	Social Housing Resident	Overall National position
Yes – have access and use at home	71%	56%	71%
Yes – have access, but don't use at home	1%	6%	3%
No, do not have internet access at home through a PC/ laptop/ netbook	22%	38%	26%

Table 2: Ofcom Data for Yorkshire 2013 (analysis by ICC)

From our own surveys of tenants[9] in Stannington and Parson Cross a very similar pattern emerges. Overall we find that 30% of residents don't currently use the Internet, but with notable differences between Parson Cross and Stannington. In Parson Cross 18% do not currently use the Internet, but in Stannington this figure is 45%. From this we can see that the levels of access to the Internet in Sheffield communities are comparable to those nationally and within Yorkshire as whole in terms of access.

As can be seen in Figure 1 the key difference between the target groups in Stannington and Parson Cross was that of age with the Parson Cross sample being under 30 years old and the Stannington sample predominantly older. Again looking at the national picture we see a similar pattern with younger social housing tenants having higher levels of access.

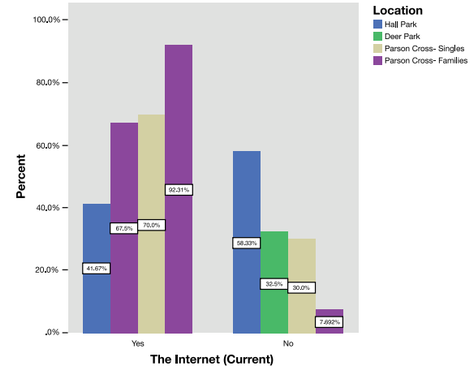


Figure 1: Access to the Internet in Stannington and Parson Cross areas

Social Housing Clients Only	Do you or does anyone in your household have access to the internet at home through a computer, laptop or netbook?		
	Three Age Catagories		
	35-54	35-54	35-54
Yes - have access and use at home	79.5%	66.1%	30.6%
Yes - have access, but don't use at home	4.1%	6.3%	7.6%
No, do not have internet access at home through a PC/ laptop/ netbook	16.4%	26.8%	60.0%
Don't know	0.0%	0.8%	1.8%

Table 3: Internet access by age (analysis of OfCom data by ICC)

9 Our sample data include a larger proportion number of non-respondents than the OfCom data and we have small population sizes for each community, which leads to likely errors of 7.6% as compared to Ofcom of 2.3%.

4.2.2 Using digital technologies and services

Separate from access there is the issue of levels of use. Ofcom also use a measure of narrow users being those who use less than a third of the types of Internet service they survey. In our own work we have developed a more robust measure of overall use of digital services that takes into account both the range of uses and the amount of use. When we look at national levels on this measure, use by social housing tenants is statistically significantly below the national norm (see Figure 2 – for advice on reading the figure see section 9). Again nationally, as with access, younger social housing tenants make greater use of the Internet than older residents.

We surveyed in Sheffield a shorter list of services than that of Ofcom – focusing on 12 main services, but a pattern of "narrow use" is again prevalent in both areas. There was an average of 4 types of use per resident (one third of the possible total) across all areas. Though there are statistically significant differences between Stannington with less than 2 on average and Parson Cross with 6.

This pattern broadly matches the Ofcom data where average use levels in social housing areas are within the definitions of "narrow users" (between 4 and 5 uses) compared to other types of housing with an average over 6. In both cases nationally and within Sheffield even where social housing clients have internet access the levels of use remain below average for older tenants, and no better than average for younger tenants. In the national case younger people make almost twice as much use of the Internet as the average user. This makes social housing clients, even those with access, far more limited users than the national norm.

The average results from Sheffield are broadly inline with the national picture of social housing tenants having lower levels of Internet access, and lower levels of Internet use than other citizens. But within the data on Sheffield there is notable variation and some groups are closer to national averages, but not significantly better than these averages, except in the case of one or two individual "outliers" with high levels of use.

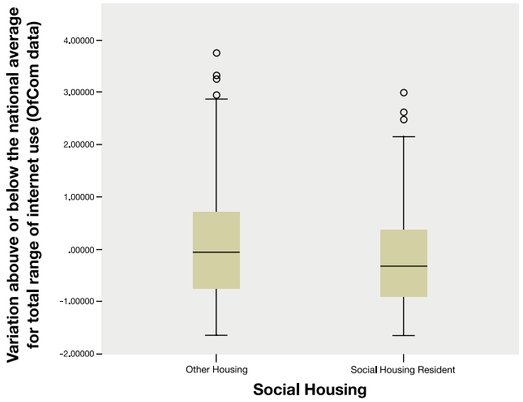


Figure 2: Narrow users in Ofcom data

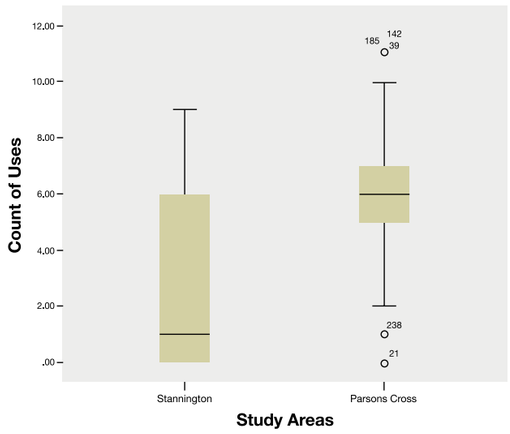


Figure 3: Narrow users in Sheffield Area

4.2.3 Conclusions

Key findings:

• Levels of access to and use of the Internet in Sheffield Social Housing areas are comparable to national averages.

• About 50% of social housing households do not have Internet access at home, and 30% have no access at home or elsewhere.

• Younger people and younger families are more likely to have access similar to national averages (80% of homes).

• Where social housing tenants have Internet access (both nationally and in Sheffield) overall levels of use of the Internet are below the national average.

• Younger people and younger families with access make more use than other social housing tenants but even so their levels of use are close to but not greater than the national average.

We therefore have some key findings upon which to base potential interventions:

• Not all social housing clients face the same issues with regard to digital exclusion.

• Older tenants tend not to currently have access to the Internet at home.

• Younger tenants are more likely to have access.

• Older tenants tend to be limited or "narrow" users if they have access.

• Younger tenants tend to be "narrow" to average users if they have access.

Interventions to support moving tenants online or to support greater use of the Internet need to take these factors into account. As noted in section 2 there are two major social policy goals behind supporting digital inclusion. First, there are the well-defined social, educational, employment and personal benefits of being digitally literate. Second, there are the cost saving and service delivery benefits of moving services online. Interventions therefore need to focus on two levels of action. First, solutions need to provide access, or support access, for the largest number of social housing clients as possible. Second, any solutions also need to include measures that encourage and develop the range of use by those with access.

4.3 Attitudes to Internet access and use

In moving social housing clients online we therefore need to address two attitudinal aspects in regard to Internet use. First, we need to understand the attitudes of those not online to gaining access or relevant skills. Second, we need to understand which types of use or skills development existing users need to make greater use of the access they currently have. For those without access the main reason for not getting the Internet remains a lack of interest.

When analysed by age, cost is the major factor for people under 30 but a lack of interest or perceived relevance remain the main reasons for those over 30. This pattern holds for social housing tenants as well as those in other forms of housing. The result holds for Sheffield tenants with majority of both Parson Cross and Stannington tenants who do not have access showing little interest in knowing more about the Internet.

When we look at the types of use that is made of the Internet then we find that Social Housing tenants make limited use of banking or government services online. Social housing tenants are almost 3 times less likely to use such services than the average.

In the case of the Sheffield social housing tenants we find that they too rarely access banking or government service averaging 2.3 on a potential maximum score of 14 for levels of Internet banking and government service use; with a slightly higher use in Parson Cross than Stannington. Nationally we find that social housing tenants are not interested in online banking or government online services, and it is certainly not a major driver to uptake of the Internet. When we look at attitudes to the use of such services in the Sheffield study we find that interest in such services is again low, less than 4 on a potential maximum score of 14; with no statistical difference between the areas.

When we look at the individual potential interactions with local government in the Sheffield data we find that across all respondents there is little interest in using or learning about using local or national online services. On average the only activities scores above 2 on a scale of 1 to 5 are getting correspondence by email. In this case the difference is due to a greater interest by those online in Parson Cross. All other types of interaction score on average below 2.

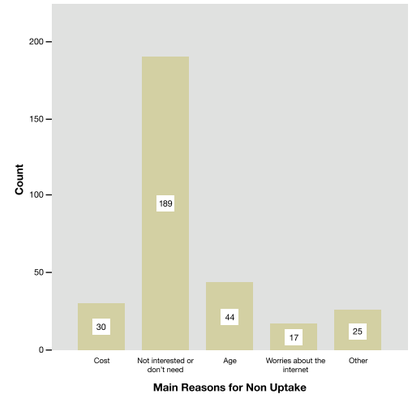


Figure 4: Main reason for lack of Internet access at home (OfCom)

Current Internet access	Want to know more about the Internet	Study Areas	
		Stannington	Parson Cross
Yes	Yes	60%	10%
	No	40%	90%
No	Yes	21%	8%
	No	**79%**	**92%**

Table 4: Learning more about the internet

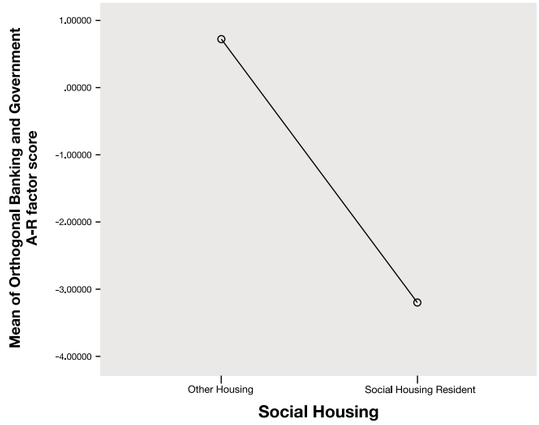


Figure 5: Making use of government services and online banking

The underlying factors for this lack of interest in and use of online banking and government services by social housing tenants is of course key to the challenges faced by a "digital by default" agenda and we will discuss this further in sections 5 and 6. From the workshops conducted the following issues were raised in relation to such online services:

• Lack of knowledge – tenants did not know about some online services

• Lack of need – did not need online accounts or statements as they used paper based record keeping

• Poor usability – experience of systems being poor or not user friendly

• Fear of fraud – fear of fraud or crime via Internet financial transactions gained mainly from media coverage

• Limited potential interaction – online systems could not deal with the multiple issues and conflicting demands being made on limited incomes

• Preference for phone or face-to-face interaction

4.3.1 Conclusions

Key findings:

• Like their national counterparts those social housing tenants currently off-line cite lack of interest or relevance as the main reasons for not getting access or training.

• As with the national picture use of online banking and government services by Sheffield social housing tenants is low.

• Interest in making use of government and banking services is low, even for those already online, and certainly cannot act as a motivator in and of itself to get access or training.

This sets a key challenge for local government, as the primary barriers to overcome are attitudes to the Internet in general and to the use of online government and banking services in specific. To help residents to gain either the social and personal benefits or to see the potential costs and efficiency savings of online transactions any interventions will need to address these less tangible barriers.

4.4 Community engagement and interventions

These results paint quite a negative picture of the situation with regards to access, use and attitudes. To understand this and to look at potential positive solutions the project undertook workshops with all four-target community groups, a group of TARA representatives and a follow up workshop around service issues in Parson Cross. In these workshops we were able to explore further issues of attitudes to service delivery and also to develop community focused intervention solutions.

The workshop attendees were self-selecting. In the case of community members there were a greater proportion of those with current Internet access who expressed a preference to attending. In the case of the TARA representatives these were defined by an active community role.

	Agreement to attend workshop	
	Yes	No
Current Internet user	76.9%	59.6%
Not an Internet user	23.1%	40.4%

Table 5: Attendance to the workshops

Those willing to attend the workshops also had statistically higher interest in learning more about Internet services, including banking and government services. This makes the workshops likely to over represent the opinions of those with a more positive attitude to Internet use.

4.4.1 Tenant workshops - understanding attitudes

Many negative attitudes to Internet use in general appeared to stem from known and well-established roots, these included:

• A lack of awareness of what content and services the Internet can provide (Stannington)

• A fear of the complexity and challenge of using the Internet (Stannington)

• Concerns over the costs of access (Stannington and Parson Cross)

• Fears over internet content and cybercrime/identity theft often derived from media coverage (Stannington)

Negative attitudes to online service provision were based on a number of factors:

• Negative attitudes to current service provision (Stannington and Parson Cross)

• Fears over losing current face-to-face or telephone support (Stannington and Parson Cross)

• A strong preference for the immediacy to telephone or face-to-face provision (Stannington and Parson Cross)

A strong theme that came out in all the workshops was a belief or desire for local government and housing services to be joined up, and often an assumption that information provided to one service could and should be shared. For some workshop attendees separate "apps" for services appeared to imply for some respondents a breaking up of service, and the making of service provision far less flexible than that being delivered through phone or personal interaction.

It was clear that personal interaction was preferred, as tenants would often have multiple issues (rent, repairs, antisocial behaviour) that they could direct through one telephone or face-to-face interaction. The vast majority of respondents argued that the personal contact provided an element of socio-emotional support, and trust in likely outcomes, that online interactions lacked. Respondents talked positively about online systems they had found advantageous (choice based lettings was the only and often cited example) but were not positive about other systems such as Universal Job Match or repair booking apps. In reviewing the discussions the research team concluded that it was the lack of a feeling of having "passed on" the responsibility for addressing an issue to an individual within the housing or social services that underpinned negative attitudes to or reluctance to use Internet based services. A phone call provided an instant sense of assurance that action would be taken and involved confirmation by an SCC/SH employee of a time, a date, a location, or a record of the needed actions or resolutions.

In all the workshops there was a strong engagement with the potential social, economic, personal and service delivery benefits of the Internet. Importantly the attendees at the workshops appeared to engage with and understand the range of potential benefits for themselves of being online. The participants also understood and discussed at length the service delivery cost savings of Internet transactions.

In the Stannington workshops those present expressed considerable empathy for and understanding of those who did not currently have access, use or show interest in the Internet. Importantly they argued strongly for the maintenance of non-digital solutions for this group.

Again in Stannington some workshop members described complex relationships between older tenants and family members with regard to Internet use. Much of this was anecdotal description of others circumstances but was consistent. In some cases family provided both technology and support, setting up the Internet and technology for older family members and helping them to use it. More often, and even where technology was in the tenants home, they acted as proxy-users undertaking transactions online for the relative. This could even be remotely such as doing online shopping orders. Others actively discouraged uptake and use by older tenants as this would add a further support burden to the family, and sought to undertake such necessary proxy-transactions they could accommodate. Overall the workshops were positive and did consider the best solutions for supporting digital inclusion in the specific community.

4.4.2 Conclusions

Key findings:

• Negative attitudes to access and use stem predominantly from a lack of knowledge, prior experience as well as anecdotal and media coverage of negative issues with regard to the Internet.

• Some tenants also noted that forms of passive "negative" attitudes to getting access or to future use ("its not for me") come from complex relations with family members who actively undertook proxy use or sought to limit the additional support burden of a relative trying to use digital media.

• Major motivators for going online were personal and social:

  • Contacting distant relatives and friends (Stannington and Parson Cross)

  • Social media (especially Facebook) (Stannington tower blocks and Parson Cross)

  • Hobbies and information seeking (Stannington)

  • Educational support for children (Parson Cross)

  • Work and work seeking (Stannington tower block and Parson Cross)

• Channel choice (Internet/Phone/Face-to-face) was predominantly driven by the need for tenants to get social and emotional support and by the passing of responsibility instantly to a service team.

• Usability of existing Internet based services was factor in use – useable reactive systems (choice based lettings) were used whereas other services deemed to be harder to use or less responsive drove tenants back towards phone or face-to-face channels.

• Tenants were very able to engage with a discussion of service delivery redesign that took into account both the benefits of the Internet, cost savings and the need for support and reassurance of clients during transactions.

Any interventions and service redesigns therefore have to take into account these concerns, motivators and usability issues.

4.5 A model to help understand users

From both the Sheffield and Ofcom data we can identify three broad groups with different relationships to and engagements with the Internet. These three variables, of user commitment and engagement and access, define a 'grid' of different user groups whose needs in terms of intervention and support vary greatly. These are presented in Tables 6 to 10. The ultimate goal might be to move as many citizens to the top-left of this table. In truth the realities of such things as cost, education, technology change, aging, health and disability mean that a notable proportion of the population will remain in the lower right-hand of the grid. In the context of a digital-by-default policy agenda there will remain a requirement for interventions to support those citizens who find themselves in the more excluded contexts.

Range of Internet Use and access	Above average with home access	Below average with home access	Narrow use with home or local access	None, but potential home or local access	No access
Regularly committed users	Heavily Digitally Engaged	Digitally Engaged			
Occasional users		Open to greater engagement	Excluded but online		
Proxy or non-users			Resistant and very excluded users	Rejecters	Hard to reach

Table 6: A model of the different forms of digital inclusion and exclusion

If we consider the Social Housing Tenants in Sheffield and map these onto this table we can identify key groups from the survey work (Table 7).

Range of Internet Use and access	Above average with home access	Below average with home access	Narrow use with home or local access	None, but potential home or local access	No access
Regularly committed users	N/A	Some residents in Parson Cross			
Occasional users		Residents Parson Cross	Residents in both Parson Cross and Stannington		
Proxy or non-users			Resistant and very excluded users	Residents in Stannington	Vulnerable residents in both locations

Table 7: Applying the model to Stannington and Parson Cross

We can therefore view the table as defining areas of acute (needing one off or specific support) and chronic (needing long term support) digital exclusion (Table 8).

Range of Internet Use and access	Above average with home access	Below average with home access	Narrow use with home or local access	None, but potential home or local access	No access
Regularly committed users		Potential points of acute support need			
Occasional users		Acute support needs	Acute support needs		
Proxy or non-users			Some acute support needs Some chronic support needs	Chronic support needs	Chronic support needs

Table 8: Acute and chronic digital inclusion support needs

The goal of digital inclusion strategies is therefore to move as many citizens or residents to top left of this table, and to provide appropriate support to those who for what ever reason remain in the lower right (Table 9).

Range of Internet Use and access	Above average with home access	Below average with home access	Narrow use with home or local access	None, but potential home or local access	No access
Regularly committed users	Heavily Digitally Engaged	Digitally Engaged			
Occasional users		Open to greater engagement	Excluded but online		
Proxy or non-users			Resistant and very excluded users	Rejecters	Hard to reach

Table 9: Routes to digital inclusion

Interventions therefore need to match the contexts identified by location on the table. Looked at another way the table defines policy responses (Table 10).

Policy intervention		Above average with home access	Below average with home access	Narrow use with home or local access	Narrow use with home or local access	No access
Limited policy intervention needed	Appropriate information and communication about services	No intervention needed	Appropriate advanced training or support			
Some policy intervention needed	Appropriate deployment of existing educational and access resources		Additional training and support	Improved local or home access with additional training		
Extensive and targeted policy intervention needed	Targeted policy based responses for identified communities and groups			Motivators to go online (social media, online supping, education, task specific) Improved local or home access with basic training	Motivators to go online (social media, online supping, education, task specific) Improved local or home access with basic training	Specialized and potentially personalized support in home.

Table 10: Policy intervention levels and types by form of inclusion/exclusion

In the following sections we will us this “model” represented by the table in order to indicate which elements of the proposed interventions, policies or issues affect which groups. For example indicates a solution primarily affecting groups with narrow use, potential to gain access and no access

	Policy need	Above average	Below average	Narrow	Potential	No access
Committed users	Limited					
Occasional users	Some					
Proxy/ non-users	Extensive					

Table 11: Indication of which groups are affected by a policy

5. Intervention suggestions and actions

From the workshops, interactions with stakeholders, prior work and the national and local data, the project identified a number of routes to encourage or support access, engagement, potential service improvements and savings. We have grouped these under the headings of:

- Branding and leadership
- Access
- Engagement and training
- Policy support
- Service design

5.1 Branding and leadership

	Policy need	Above average	Below average	Narrow	Potential	No access
Committed users	Limited					
Occasional users	Some		■	■	■	
Proxy/ non-users	Extensive		■	■	■	■

A key conclusion reached by the research team is that any substantive programme of work to counter digital exclusion needs to have profile within the target locations, communities or region. The programme also needs clear institutional backing at the highest level within relevant organisations. This conclusion comes from the examination of the work of other substantial digital inclusion facing groups and organisations both National/ Regional (e.g. Tinder Foundation, GO ON its Liverpool, Barnsley's Joining the DOTS programme), and local (Southey Online Centre; Toxteth and Granby Development Trust, Access Space). Looking the range of responses to this issue across many urban areas and communities in the UK it was and is very much the case that:

- Digital exclusion was a problem that *belonged* to all parts of the organisation but was *owned* by no one in the organisation.

Branding the interventions or set of interventions as a programme in some manner provided potential clients and service providers with a sense of ownership, involvement, scale and purpose and ultimately helped to form a sense of identity. Solutions to leadership included having executive level leads for digital inclusion (e.g. Barnsley up until 2013) or through creating a network of organisations and department representatives who met regularly (GO ON its Liverpool). This leadership needed to be visible in making clear the importance of digital exclusion across the organisation. *Most importantly a clearly led and backed collaborative network with a branded programme will have both sustainability and resilience in response to both policy and technology changes.*

5.2 Access

	Policy need	Above average	Below average	Narrow	Potential	No access
Committed users	Limited					
Occasional users	Some			■		
Proxy/ non-users	Extensive			■	■	

Local or hyper-local access and support – this may be permanent, or pop-up access. Tenants and the research team identified the lack of provision very close to need in all Sheffield social housing areas. For example the closest access points for the Stannington cohort were the Library or in Hillsborough - both of which were nearly 1km away. Access was effectively a bus ride away for any resident with mobility concerns, and neither location was available solely for the local residents. In Parson Cross a number of hub locations provided extensive support, for example Southey Library and the UK Online Centre within the building. But again for many residents this was a bus ride away. It is important to note that for many Parson Cross residents to use the bus to access such a hub on a daily basis would incur a cost of around £15 per week, or £55 per month. This is equivalent to a high quality broadband package from a supplier such as TalkTalk or PlusNet, half of this cost would cover a basic package from the same suppliers. Though ensuring that hubs are on key bus routes is a key requirement, having them adjacent to other facilities such as shops, housing service support, job centres and similar resources would ensure that access to Internet services would not increase existing transport costs.

Tenants also noted that information on local locations with access, free Wi-Fi, training and support was not easily available, and was often only to be ironically found online. Therefore local agencies keeping an up to date registry and map of resources, regularly distributed would support tenants in being able to access Internet resources more regularly and easily.

Task specific access was also raised as an important requirement. As policy changes come into force, for example the recent move to online Universal Job Match, there is a need to provision local access with support to ensure tenants can utilise Internet resources for that specific task. This may be a key intervention point to provide further support for broader Internet training.

The situation of tenants with disabilities, illness or other circumstances that limit their ability to access the Internet outside the home was discussed in all workshops. Many tenants felt that the Internet could be of great benefit to such community members but that costs, training and usability by the disabled or unwell person may provide barriers. Mobile Internet support by relevant social, housing or health workers was seen as a potential solution.

Costs of access, especially in the light of benefit cuts and new costs such as the "Bedroom Tax" were also discussed. In many cases, especially younger tenants who moved home more regularly, landline based Internet access was prohibitively expensive. Often this would include costs of installing a new BT line, equipment such as modems, and long contracts of 12 to 24 months. This total cost can be over £200 for installation; though these costs are variable. Any landline solution will be in addition to costs for mobile phones. As a result a number of tenants have taken out smart phone contracts which is a single device solution for phone and Internet access. Another option has been Mi-Fi devices – 3G based Wi-Fi hubs for homes – often in a bundled package with a number of mobile phones or smart phones. Such packages are of the order of £40+ per month and often have monthly data usage limits, but do not have installation costs.

Given that a key benefit of higher Internet based council service use was a cost saving to the council, a strongly argued suggestion from both the Parson Cross group and the TARA representatives was for community Internet provision. Both community Wi-Fi and low cost broadband for all tenants (in their homes) were suggested, with costs recouped in a small additional utility cost in the rent paid by tenants. It was also suggested that for those households online through such provision there would be a requirement to undertake a core set of service interactions online.

5.3 Engagement and training

	Policy need	Above average	Below average	Narrow	Potential	No access
Committed users	Limited					
Occasional users	Some		■	■		
Proxy/ non-users	Extensive			■	■	

The need to support tenants in gaining and developing the skills necessary to use the Internet was clearly evident - especially for the older groups. Providing such support has become a major challenge for all local government organisations. With the removal of major government funding for such training, the fact the majority of those in need are not in education, and the issues of access and location identified above, no one organisation is likely to be able to meet all the needs of those currently digitally excluded. The key principles for such training and support that have been identified both by this study and extensive prior work by UK Online/Tinder Foundation are:

1. Tailor content to need – training has to engage the range of existing skills (if any) and the motivations for getting online.

2. Tailor delivery to users preferred format – for example some users may prefer a small social event (tea and biscuits and a chat), others may want it to be part of existing contexts (book club or community event), others may prefer a more structured 'educational' format.

3. Location,– training delivery needs to be local to need, therefore needs to utilise resources and facilities accessed by users such as libraries, schools, community centres, TARA offices, Internet cafes, doctors surgeries, shops, etc.

4. Utilise points of contact and need – often policy changes, new technologies or wider social events can drive potential users to seek training (e.g. Universal Job Match) these can be used as routes to broader training and engagement.

5. Map, collate and communicate training opportunities – multiple organisations will likely provide a variety of training in any one community, this information needs to be collated and communicated to residents.

6. Collaborate – networked collaboration is key as there are limited centralised local or national funds to deliver training, branding and coordinating this through a major organisation such as a local council or local programme (see branding and leadership in section 5.1) can help maximise the potential of a network.

7. Try not to reinvent the wheel – lots of training on IT use is already well developed, and may even be well developed for a target community, work with local education (universities, colleges and schools), with local charities and national groups (such as UK Online/Tinder Foundation) to re-use already tested materials.

8. Train the trainers – where possible develop a network of people able to offer support locally in the locations identified in 3 above, collaborate to develop this set of digital engagement workers, making such resources 'mobile' may provide a flexible solution for the hard to reach groups.

5.4 Policy support

	Policy need	Above average	Below average	Narrow	Potential	No access
Committed users	Limited	■	■			
Occasional users	Some		■	■		
Proxy/ non-users	Extensive			■	■	■

Policy in the organisations looking to engage with digital-by-default has to be structured and organised with the challenges of digital exclusion in mind. To this end the experience on this project has been that, despite best efforts, very often local, regional and national policies can be either disconnected, "running on parallel tracks" or at times in contradiction. Very often policy changes or new technologies that impact either digital by default implementations, local communities, or service delivery can be quite disruptive of on-going efforts to address digital exclusion. The maintenance of a collaborative network can provide a robust route to information and awareness of ongoing developments as well as potential responses. For example a good understanding of DWP plans and developments might allow local providers to "gear up" for additional demand on training resources such changes might bring. Major resources for understanding the impacts of actual or potential changes are citizens and tenants themselves. In the course of this project work both tenants and TARA representatives were able to articulate clear and well thought through understandings of their own and SCC's challenges in the face of government policy, and to propose solutions.

A key part of policy support has to be better use of data held by SCC on tenants and communities. Far greater demographic and behavioural data about tenants is held by local government – as compared to that say collected in Ofcom surveys. Utilising this data can help to with such things as:

• better identifying those in need of support

• defining the specific needs of communities

• modelling potential impacts, savings and outcomes of interventions

• evaluating impact of interventions.

5.5 Service design

	Policy need	Above average	Below average	Narrow	Potential	No access
Committed users	Limited					
Occasional users	Some					
Proxy/ non-users	Extensive					

It is a simple fact that if technologies, software, webs sites and service are poorly designed or presented then users will default to other methods of interaction. The challenge facing many local and national government departments making the move towards digital by default where likely users fall in the lower-right corner of Table 6, is one of appropriate and effective service design. We would argue that a major resource for such work is the citizens, clients and other 3rd sector support groups affected by the services changes. Taking such a 'co-design' approach to service change has the potential to ensure user engagement with final service and any attendant technology. Co-design approaches can help community-based organisations deliver better services, as recipients become equal partners. However, prior research has discovered that the level of understanding of co-design among local not-for-profit organisations was highly variable, but that most organisations have the right mind-set for adopting co-design as they tend to be client and stakeholder focused. We would argue that local government and larger social housing providers could take a lead on utilizing this approach and work with partner organisations to achieve linked user focused and co-designed implementations of services..

5.6 Mobile devices and broadband technology changes

	Policy need	Above average	Below average	Narrow	Potential	No access
Committed users	Limited					
Occasional users	Some					
Proxy/ non-users	Extensive					

Throughout a number of current policy, media and project discussions the role of mobile media (smart phones, tablet computers and similar devices) has been emphasised as a possible route to greater digital inclusion. Though we believe that in the longer term digital services will need to be available through such devices we would caution against this a major focus in the shorter term. As the Ofcom data indicate the relative numbers of people accessing the Internet via such devices is still much lower than that through laptops or PCs. Our own analysis of the Ofcom data on the use of such devices indicates a very high correlation between high levels of Internet use and use of mobile Internet. Also social housing clients use mobile Internet almost five times less than the national average even if they have access. It is still the case that the user experience on mobile devices is more restricted than that on laptops and PCs, though this may change.

Having said this we noted a higher level of mobile device use among the younger cohorts in our Sheffield study. Though a growing number had smart phones, contract types and data allowances appeared anecdotally from the workshops to be very limited or expensive. It was also unclear as to what extent the respondents were aware of or able to make full use of the features on the devices. In all the workshops respondents raised concerns about the quality of user experience on mobile devices; especially in the case of two respondents for whom this was their only form of access to the Internet.

The important finding was the lack of fixed line access for many younger respondents. Given the combined costs of a fixed line and mobile phone many residents had selected to only use a mobile phone. As noted above the costs of installing a fixed telephone line for broadband access can be prohibitive and contracts can also be restrictive if tenants are likely to move. In contrast many older tenants had fixed lines and therefore the marginal costs of taking up broadband would be less. It is possible that the lack of a fixed line for younger tenants is a function of life stages, in most cases these tenants are under 35, and older tenants may have more stable life circumstances. It needs to be monitored if this is the case, or that a growing number of social housing tenants will shift to mobile only telecommunications to manage costs.

5.7 Conclusions

Under pinning these areas we have identified six principles that need to support the thinking behind interventions so as to secure the benefits of digital services, and protect vulnerable citizens.

1. Provide support for both citizens and local government staff in the best use of digital media

• It is not just citizens and social housing tenants who may need support in maximising the skills needed to use or support others in using digital media.

2. Maintain support for and robustly advertise and communicate with residents about hyper-local delivery of digital access and training in communities (e.g. work of UK Online/Tinder Foundation)

• Large scale national programmes are unlikely to return and therefore the burden of training and access support is likely to fall on local resources such as libraries, UK Online centres, Job centres, Citizens Advice, Social Housing Providers, local council and housing access points (e.g. First Point) and other 3rd sector groups. The implication of digital-by-default may be to squeeze resources and reduce costs for local or national government transactions but then at the same time "push up the balloon" of cost and support elsewhere in the broad set of social support services. To reduce the impact of this a key action for all services impacted by these changes has to be the identification of citizens and clients who can more easily be moved toward the top-left of Table 6, so as to reduce dependence on these local services.

3. Be cognisant of user needs and include them in service design to ensure that the whole "service delivery system" – IT, data, buildings, and people – meets the needs of all stakeholders.

• A true user centred and agile approach to the design of all aspects of service delivery can be a major ask, and often requires major process re-engineering on the behalf of organisations. This cannot simply be about a "good interface" or mobile apps, it has to be about understanding the role that contact with local and housing services is more than simply transactional. If service redesign can capture the key benefits of a phone call or face-to-face interaction for those citizens and tenants who can use digital services then uptake and use is likely to rise. The challenge here is that many other forms of digital experience, from Facebook to iPhones provide such a strong user experience that expectations of citizens for online service quality and function may be very high. Not engaging in such user focused development of all aspects of the service runs the risk of failed IT implementations.

4. Make proactive and "thought through" choices rather than – knee jerk financial ones – about which services move online and how.

• There needs to be a thought through plan about which services to switch and when and which public services "that do not need face-to-face" this needs to be based upon a good understanding of the target audiences and also of the support that some audience groups may need.

5. Make full use of available data and start collecting digital inclusion and exclusion relevant data about tenants and customers.

• Decisions about service design and delivery and the impacts of these on tenants can be supported with high quality analysis of existing and future data sets that may include data collected from digital interactions and transactions. Making data available for use by citizens and communities may also help iin providing new and novel insights, new applications and help in communicating policy decisions.

6. Do not assume that mobile devices are the solution in and of themselves, but using such devices to make services mobile may be a key principle.

• As mobile devices and smart phones increase their reach form the more affluent elements of the society it will be necessary to ensure services work on all platforms. Uptake of such devices remains low in social housing areas. A better use for such devices might be their use by SCC/SH staff to take digital services out to the most vulnerable and least mobile client groups. Allowing for the benefits of digital service delivery without the need to lose a key face-to-face element for these clients.

We would add to these our prior recommendations from our previous work in South Yorkshire – the "Seven C's" of:

• Connection

• Confidence

• Content

• Capability

• Co-ordination

• Collaboration

• Continuity

Which are detailed in the reports at: http://www.shu.ac.uk/research/c3ri/sites/clients.theworkshop.co.uk/files/SurfingTheSevenCs.pdf

6 Intervention suggestions from tenants

In the course of our work with tenants in workshops, discussions with TARA representatives and follow up conversations, the following ideas were suggested as interventions, we have split them into six categories. These are comments and proposals from tenants, not all workshop attendees agreed on potential solutions and some opinions are potentially contradictory or indicate a rejection of current government policies.

6.1 Access provision

	Policy need	Above average	Below average	Narrow	Potential	No access
Committed users	Limited					
Occasional users	Some		■	■		
Proxy/ non-users	Extensive			■	■	■

• Community Wi-Fi

• Community broadband

These suggestions mainly came from community active tenants such as TARA representatives. A simple argument was made that if services went online then provision of minimum access should be something provided by SCC/ SH or government.

This might be in local community centres or for each tenant. There was an expectation that there would be a cost as with other utilities (it was assumed to be less than £10 per month). The argument was also made that once access was provided "forced channel shift" would be tolerated if not liked

	Policy need	Above average	Below average	Narrow	Potential	No access
Committed users	Limited					
Occasional users	Some			■		
Proxy/ non-users	Extensive			■	■	

• Access to low cost devices

A number of tenants were aware that reconditioned and refurbished equipment could be purchased from charity and social enterprise organisations in a number of locations. Other suggestions included SCC making old and replaced equipment available to local organisations.

Concerns were raised that providing devices at no cost would lead to some tenants placing little value on them and failing to use them for SCC service or "useful" purposes. Either a small charge or requirements to first undertake training were suggested ways of giving value to the device.

	Policy need	Above average	Below average	Narrow	Potential	No access
Committed users	Limited					
Occasional users	Some		■	■		
Proxy/ non-users	Extensive			■	■	

• Pop-up or mobile "UK online centres"

"Pop-up" provision of access at regular times or places was suggested. For example a mobile team able to set up impromptu training sessions in a community location. Another suggestion was regular access to computers and the internet in a community location, with the equipment either locally stored or regularly provided.

6.2 Hard to reach groups

	Policy need	Above average	Below average	Narrow	Potential	No access
Committed users	Limited					
Occasional users	Some					
Proxy/ non-users	Extensive			■	■	■

• Mobile rather than office based SCC staff

The suggestion was made that SCC should make use of mobile technologies to undertake outreach to residents, especially the most vulnerable and least likely to engage with digital media.

The model would be one of SCC staff undertaking digital interactions for the tenant in their home via mobile devices. The benefit being that transactions remain digital and the SH/SCC staff could look for opportunities to engage and support the tenant with possible training and access – or clearly identify the tenant as being unlikely or unable to make use of digital services.

6.3 Context relevant training and support

	Policy need	Above average	Below average	Narrow	Potential	No access
Committed users	Limited					
Occasional users	Some			■		
Proxy/ non-users	Extensive			■	■	

• Computer clubs

• Jobs clubs

• Integration into social or community groups/events

The idea of a computer club – semi-tenant run, supported (e.g. by a local charity or social action group) – that provided a safe sociable non-evaluative context to learn IT skills was popular, especially with older tenants.

Other suggestions included "Job Clubs" for those dealing with Universal Job Match. This type of provision matched similar models already in use by local organisations such as Southey Development Forum and Heeley Development Trust. Experience following the implementation of such support clearly indicates the importance of well-developed appropriate and proactive advertising and communication of such activity to the community.

6.4 Digital service design

	Policy need	Above average	Below average	Narrow	Potential	No access
Committed users	Limited	■	■			
Occasional users	Some		■	■		
Proxy/ non-users	Extensive					

• Better mobile applications

• Online chat based web support

• More use of SMS or email to communicate

• A "face-book like page/account" for a tenants interactions with services

All of these suggestions came out in discussions of medium to longer term strategies that SCC might undertake.

The suggestions mainly came from younger tenants, those already Internet active and TARA representatives. In many respects the suggestions reflected a belief that if such service can be provided in commercial IT contexts why could the council not provide similar quality in its digital services. Examples from mobile phone use, service support for technology at home and social media use were cited. Existing digital services were criticised for lack of usability and lack of integration.

	Policy need	Above average	Below average	Narrow	Potential	No access
Committed users	Limited	■	■			
Occasional users	Some		■	■		
Proxy/ non-users	Extensive			■	■	■

• User centred and community co-design of services

Many of the workshop attendees expressed an interest in helping to design potential digital services and provided many suggestions. As part of a proactive engagement, substantive co-design of services could ensure the long-term viability of digital by default services for tenants.

6.5 Policy

• Leadership and branding

• Forced channel shift

• Sheffield City Council as a Community ISP

• Don't engage in digital by default

With regard to policy a range of suggestions were made. These went from the "don't engage in the digital by default agenda" through to draconian suggestions for forced channel shift. Not engaging with the digital by default agenda is of course not possible. Forced channel shift, effectively making digital the only route outside of exceptions circumstances, was seen by some tenants as viable. Such changes would though be contingent on certain criteria; these included such things as council provided access, to high quality digital services. Clear leadership of the digital by default agenda was a requirement coming from TARA representatives.

6.6 Rejected solutions

It is interesting to note that a number of potential interventions were not discussed, or where deemed inappropriate by tenants. Importantly these are solutions being supported at the moment both regionally and nationally. The fact that a small group of tenants who attended workshops rejected these does not mean that they should not be considered, but it does raise questions of their viability in these communities.

• Free laptops

As noted with regard to accessing cheap IT devices, the suggestion was that giving away technology would be a short term fix for a specific group and would not lead to long term behaviour change or engagement. Comments were made that much of the equipment would likely be sold or "abused" in some manner.

• Set top boxes/smart TVs

These were seen as a gimmick solution. Those with existing access understood that this was a much more limited solution than laptops or stand-alone PCs. Others felt that such technologies would most likely be targeted at some of the harder to reach groups and that usability would be a major factor. It was noted that smart TV solutions assumed Internet connectivity. The rapidity of technology change and the issue of making a very public device (the TV in the sitting room) one for undertaking personal transactions were also seen as key risks and reasons for such solutions be used or sustainable in the long term.

• Public kiosks

Though a number of tenants discussed using such devices in such places as First Point or the Job Centre they felt that they were only useable for short focused transactions. Any more complex activity involving paperwork or interaction with family, colleagues or professionals was best conducted in more private circumstances.

• Mobile apps for all services

Tenants with experience of mobile apps felt this would be a very useful solution for those already IT literate and active. They did not see them as appropriate for all tenants. One issue raised by multiple apps was the "fragmentation" of services. Tenants raised concerns that they were often surprised at the lack of cross service knowledge and information exchange. A driver for phone call and face-to-face interaction was the need to feel both socio-emotional support but also a belief (rightly or wrongly) in joined up service management across SCC/SH functions. Separate app development without coordination of data exchange and joint infrastructure could lead to a greater feeling of disconnection between SCC/SH functions. Such an experience could drive communication and transactions back toward face-to-face and phone based services.

6.7 Effectiveness

• Community preferences vs. effectiveness of interventions

Though having community buy in is key to making interventions effective, not all preferences expressed by community members in workshops may prove effective. The workshops were a self-selected small sample of a larger group who may not share the same views. When making decisions on interventions the balance between community preferences, policy requirements, resources and prior track record/knowledge about the planned intervention all need to be taken into account.

6.8 Implementation

As part of the project we worked with Heeley Development Trust to implement activities in the communities that had supported the project.

6.8.1 Stannington (Hall Park)

	Policy need	Above average	Below average	Narrow	Potential	No access
Committed users	Limited					
Occasional users	Some			■		
Proxy/ non-users	Extensive			■	■	■

The profile of the Stannington Hall Park community was strongly in the lower-left of out three groups model. We therefore needed an appropriate intervention to those needs. After consultation at the workshop we set up a "pop-up" computer club based on the training packages provided by UK Online/Tinder foundation. The club has run now for 6 months and is open to all residents in Hall Park or Deer Park. The project provided Wi-Fi to the local community centre and equipment for the club on a weekly basis. This equipment and Internet access is now available for at least the next year.

The computer club has highlighted some key issues for other organisations wanting to set up local support of this kind:

• Often those who want to attend interventions will have very different motivations for learning to use computers and the Internet. Sessions must take a flexible approach with a balance between a clear structure and a relaxed approach to learning.

• A range of learners at different levels means that learning programmes need to reach a broad audience with different needs.

• A clear strategy for the future of the group in order to provide people with a clear idea about their commitment to the sessions and to the group.

• Long-term sustainability requires some responsibility and ownership from embedded local organisations or community members.

• The social motivations – meeting people, recreation, enjoyment – of attendee mustn't be forgotten therefore provision of space and facilities to support interaction other than ICT learning need to be provided (tea and coffee!).

• Continuity in the people delivering the sessions – trainers need to know who has been attending the session and what they have already been learning. This not only builds a social rapport but it is also useful in terms of understanding the groups and individuals progress.

6.8.2 Parson Cross and Stannington (Deer Park)

	Policy need	Above average	Below average	Narrow	Potential	No access
Committed users	Limited		■			
Occasional users	Some		■	■		
Proxy/ non-users	Extensive			■	■	

Here the communities were closer to the centre of the table. The interventions therefore tried to meet requirements from these groups. They included:

• Job Clubs – skills needed to work with Universal Job Match and similar services

• Further feedback and workshop on service design

• Mapping the availability of access and training – though this became a city wide project

6.8.3 Job Club (Stannington and Parson Cross)

During the workshop session with tower block tenants, it was highlighted that local provision would be extremely helpful as a number of the support locations to access Universal Job Match were a bus ride away. This was further exacerbated in Stannington due to the imminent library closure. This was the main focal point for younger tenants to search for jobs. Going to the local shopping areas meant paying for a bus so access to systems locally would be welcomed. We set up a two-hour session once per week for people to make use of the services within the local community centre. However we found that the tenants who attended did not want help with getting online at home or with general it training, nor with the specific training for government services (they had already had this). Rather they wanted assistance with literacy skills, in particular ensuring that their CV was effective as well as help with spelling and grammar in job applications. This fits with anecdotal findings from Citizens Advice centres and UK Online Centres in the GO ON Its Liverpool network. Here there have been pilot projects for Universal Credit and other DWP systems. Again attendees were looking for problem specific training, be that It or literacy, and not wider online skills. Though this is clearly an opportunity to engage citizens with training opportunities this may need to be managed carefully to meet immediate (acute) and possibly non-digital needs and longer term (chronic) issues.

• The following key issues should be considered by anyone setting up a local intervention of this kind:

• Advertising is key to improving attendance – despite this service being requested in the workshops attendance was low. Development of such services needs to be in partnership with the organisations that are likely to create demand – such as Job Centre Plus and the DWP.

• Having a flexible approach to the demands and needs of the tenants is important – very focused provision such as this brings the digital inclusion and engagement as a secondary element to a specific pressing need that had a digital element (such as filing in an online form). These primary and acute needs must be met first or the chance to engage in a programme of work to develop broader digital skills will be lost.

• The additional skills support that may be required along with access, include, literacy, numeracy, as well as understanding the government services available to this group.

• Continuity in the people delivering the sessions – as with the computer club trainers need to know who has been attending the session and what they have already been learning. This not only builds a social rapport but is also useful in terms of understanding the groups and individuals progress.

6.8.4 Service design (Parson Cross)

During the workshop at Parson Cross, the workshop with the TARA representatives and at a follow up session at Parson Cross tenants discussed the role of digital media in service delivery and design. In particular highlighted what they believed to be a successful online service that "cuts out the middle man". This was the SCC/SH choice based lettings system that is web based. Additional pressure was on tenants to look at moving as a result of the "bedroom tax". Some of the key features included the responsiveness of the system, ease of browsing compared to paper based systems, and feeling of control over the process. Importantly this feeling of some empowerment and responsiveness met the needs for "socio-emotional" support during the process. This was bout the only current SCC/SH or government ICT system they encountered which garnered praise. The majority of others were deemed to lack usability, user 'friendliness, timeliness and most important responsiveness or regular feedback.

Within these discussions the issue of a lack of cross SCC/SH and government integration was raised. Those with current digital access noted that they could manage Facebook, Google, Twitter accounts etc. form one set of data. They could use Facebook to log into other services or share data already entered. Why this could not be the case with government services was a question raised by a number of younger respondents. Interestingly older tenants raised issues of data security. This may reflect a change I attitudes to privacy. It was erroneously claimed recently that in social media and online we are "public by default and private by choice" but that in older media forms (that included email) we are "private by default and public by choice". These are not though technology led behaviours and may reflect cultural change alongside and partly supported by changes in media use. In future it may be the case that service users will expect government to already be able to access a defined set of publicly available data about them.

A concrete suggestion was hat that council tenants could have a central but private profile which they could access on the council website. This profile would allow them to update and verify their own and their family's (e.g. children's) information. It may also allow them to undertake transactions such as bill payments and calling on repairs services. This "Council Facebook Page" would be based on their personal information and circumstances, the system could select the appropriate links to services which they would need such as schools, housing and so forth. As with Facebook the data held could be used to pre-complete forms and applications. A "wall" or conversation space could keep them updated with on-going queries or interactions.

7. Core elements of an implementation “tool kit”

From our research it is clear that there is no one single solution to the issue of digital exclusion. The data from our work in Stannington and Parson Cross makes clear that social housing tenants differ in access and skills from the national averages, often having far less access. Yet there is great variation in this group in terms of access and skills that is in part a function of age and education but not solely. It is also the case that social housing clients face very different challenges at various points in their lives. These challenges put them in different relationships with a variety of national government services as well as local, from benefits to health and from education to housing.

It must be accepted that digital inclusion levels may not reach the levels of current written literacy for some time to come. The current economic downturn and government austerity programmes have further eroded support systems for digital inclusion. At the same time constant technological change can radically upset current process and thinking. It is therefore necessary for local authorities to develop intervention solutions that can address such a context.

The research has therefore identified a number of actions that form a tool kit for the council to consider when addressing the specific challenges faced by specific communities. Some of these ideas mesh with government policy statements (See section 1) while others respond to the potentially faulty assumptions and failings with regard to realities of practice that such policies contain. We have identified seven core elements needed in planning out potential strategies or interventions. These elements are:

- Evidence based and tenant supported interventions
- Proactive support and “triage” of digital exclusion for non-users and hard to reach groups
- Location and community appropriate access and training “one-stop-shops”
- Mapping resources regionally and locally
- Collaborative networks
- Specific support for key social groups
- Data use and risk management (see section 5.7)

7.1 Local intervention options

All of the interventions suggested by the tenants in our study are viable and have been tried in a variety of locations and communities in the UK and elsewhere. In each case the appropriateness of the solution is likely to depend on local circumstance. We would argue that all of the following have found success and an evidence base in a number of cases:

- Community Wi-Fi or broadband access
- Access to low cost devices
- Pop-up or mobile “UK online centres”
- Mobile rather than office based SCC staff
- Context relevant training and support (Computer Clubs/ Job clubs)
- User centred and community co-design of services
- Digital service design

7.2 Mobile teams and “triage”

One of our joint developments formed the basis of the unsuccessful Digital Deal bid but which Sheffield City Council is now putting into practice.

This approach is based up supporting a digital team with mobile technologies who can go out to community members. A core part of their role is to “triage” digital inclusion and access issues. By this we mean an assessment of which of the local resources, training opportunities, or support best fit the needs of the tenant. At one extreme you may have tenants with considerable health and support needs such that their personal use of a computer for such things as benefits claims would be impossible. Here the digital team can assess both a chronic and acute need for practical and personal support using online services. For example though completing relevant online forms in person with the client. At another extreme one might find a client with personal access and skills but a reluctance to use online council services. The role of the team here is to provide pointers to the appropriate further support to get on online and they would not expect to require a repeat visit.

This is now being implemented with support from Sheffield Hallam University. The primary aim of the project is to create a mobile Digital Outreach Service (DOS) to work intensively with whole households identified as digitally, financially and socially excluded between October 2013 and April 2014.

The project will aim to work collaboratively with the Successful Tenancies Pilots to assess their digital needs within the project pilot areas. They will offer low level digital one-to-one support where appropriate and can be resourced and then refer to Heeley Development Trust who will be the key vehicle for supporting the digital training needs of the whole household. This support will be tailored to each household and could include more intensive one-to-one training and support, setting up drop-in and pop up sessions in the local community.

7.3 One stop shops

The most consistent finding is the need for training and access to be local to tenants or the areas they frequent as part of their daily routines. This provides both convenience and reduces costs associated with travel and therefore accessing training. In the discussions we identified two models for this provision though respondents did not explicitly articulate these:

- Hubs
- Hyper-local/Pop-up resources

7.3.1 Hubs

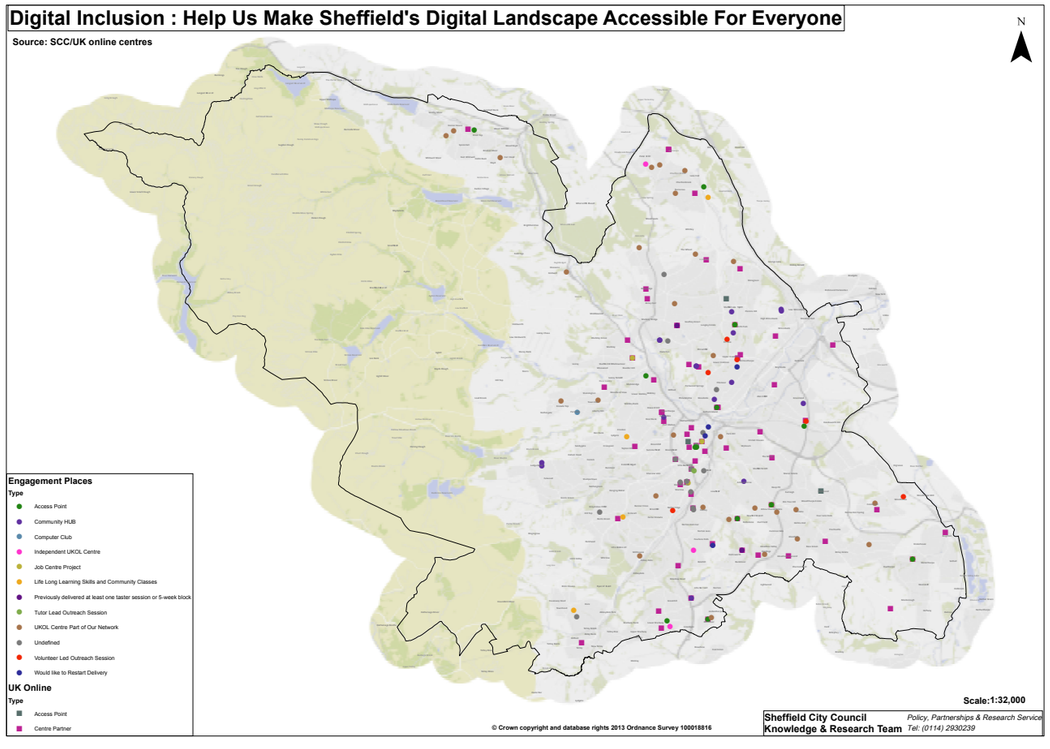
We view hubs as being locations where a variety of services may be based – library, job centres, housing office etc. – but where access to both IT resources and training are provided. This both limits travel costs and time for citizens and tenants but also can allow tenants to access services (e.g. job centre or housing office) and local resources. This could be an element of community library or digital outreach provision.

7.3.2 Hyper local

We view these as being much more focused smaller scale resources. For example a pop-up computer club or a digital outreach worker in a tower block or a job club would be typical examples.

7.4 Mapping access

As noted above in making use of existing resources is key to local delivery. One the major challenges facing any organisation attempting to do this is maintaining a register of such resources and their locations. Here the digital technology may again help allow for GIS systems to map and display the locations and types of resources. Such digital resources maps could be made available to citizens and clients to allow them an opportunity to make best use of local facilities from public Wi-Fi to joining job clubs, computer clubs or availing of local training opportunities. An initial map of Sheffield resources has been developed by the project.



7.5 Collaborative networks

Section 5 above has argued for the importance of leadership, branding and collaborative action. Local government is well placed to both monitor and work with the breadth of community based groups and organisations providing support services, as well as major national groups such as UK Online/Tinder Foundation. Maintaining a map of resources also provides the data and contacts to maintain an active network of local provision that can worked with to deliver as comprehensive a support network as possible

7.6 Specific support for key social groups

It remains the case that those in need of greatest support in getting online are the over 60s. It has been claimed that this need will decrease over time as people with current digital skills age. This my be the case, but in fact it is a combination of age (over 60), social class (predominantly DE and low income), education (a lack of Further or Higher Education) which includes issues of literacy, that determine those with the lowest levels of digital access, skills and motivation. In our study many older residents had used computers (often MSDOS or Windows 3 based) as well as bespoke technology (engineering systems) in their work prior to retirement. Many of these skills and the knowledge had not transferred to the far more dynamic and media based forms of WWW and other contemporary Internet systems. Rapid technology change is unlikely to cease in the near future. As a result there remains the probability that this combination of age, class, wealth, education and skills with current technology is likely to leave a small but significant group of older people digitally excluded for some time to come.

A key part of any digital inclusion tool kit has to be an awareness of how this interplay of social and technical factors is being articulated for different social groups. In addition to older people there are others who may face similar challenges. Migrant communities from areas of the world where IT access is low (only 30% of the world is online), residents with disabilities, residents with limited Internet access die location (rural groups), residents moving out from institutional settings with limited Internet access (prison, psychiatric care).

8. Conclusion

The main conclusions from this study can be summarised as follows:

- The need for a city or city region wide coordinated strategy to address digital inclusion and exclusion in SCC/SH social housing contexts
- The requirement that the strategy take cognisance of the three main groups of users:
    - Committed users
    - Occasional users
    - Proxy/non-users
- The strategy needs to focus on:
    - Branding and leadership
    - Access
    - Engagement and training
    - Policy support
    - Service design
- The core elements of the strategy need to be:
    - Evidence based and tenant supported interventions
    - Proactive support and “triage” of digital exclusion for non-users and hard to reach groups
    - Location and community appropriate access and training “one-stop-shops”
    - Mapping resources regionally and locally
    - Collaborative networks
    - Specific support for key social groups
    - Data use and risk management

There are potential risk and costs in any such strategy and the outcomes may be variable – especially as those citizens who are currently digitally excluded now include a large proportion of those deemed to be “hard to reach” or who we have described as having “chronic support needs”. To not act therefore runs the considerable risk of further socially, economically and culturally excluding already marginalised communities, whilst at the same time failing the gain the cost savings, efficiency gains and service improvements that digital technologies could support.

9. Appendix: How to read graphs

Differences between groups and areas have been shown as box plots. Please see the diagram below for an explanation of how to read the plots.