

The Role of Social Intermediaries in Digital Inclusion: The Case of Social Housing

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Abstract

Access to digital technologies is now seen as a ‘necessity’ of life by many (Fahmy 2012). Yet, despite policies to improve access in the UK, such as the National Plan for Digital Participation (BIS:DCLG 2008c) and government initiatives such as ‘Race Online’ and ‘Go On’, there are still around seven million people who have never accessed the internet (ONS 2013). The ‘digital divide’ goes beyond simple access and also refers to digital literacy, as regular and sophisticated use is required to fully utilise the potential of digital technologies. Evidence suggests that those experiencing social exclusion in some form tend to fall on the wrong side of the digital divide (Helsper 2008). Proportionally, the most excluded are older adults, the disabled and those in social classes C2DE (National Audit Office, 2013). The need to respond to the further marginalisation of socially-excluded populations has been given added urgency with the trend towards online delivery of public services, evident in the push towards ‘Digital by Default’ (Cabinet Office 2012). This trend is in danger of ignoring the millions not yet online, or who cannot make efficient use of online services. Consequently, several commentators have argued there is a crucial role for ‘trusted intermediaries’ – those close to excluded populations – to add an additional layer of support for digital inclusion. This paper explores how social housing providers are addressing digital inclusion. Social housing providers host a disproportionate number of people on low income, those with

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disabilities and older adults (i.e. the most digitally-excluded citizens). Social housing providers are actively positioning themselves as ‘one stop shops’ which can directly support or signpost to other services. Our research draws on several strands but at its heart is an in-depth case study carried out over the 2012 with a social housing provider which sought to improve its clients’ access and use of what Wigfield and colleagues term ‘digital participation services’ (Wigfield et al 2012). Drawing upon this case study as well as a range of policy and academic sources and interviews with industry experts, we conclude by reflecting on the potential role of social housing organisations as intermediaries for realising the goals of the digital inclusion agenda.

1 Introduction

Interest in promoting digital and online communications has never been greater, as more private and public services are delivered electronically, and as social media becomes a crucial tool for staying in touch with family and friends. Recent work by PSE (Fahmy, 2012) suggests that the public increasingly sees access to certain digital technologies is seen as a ‘necessity’ of life in the current age. Widespread access to digital technologies is increasingly seen as important, but so too is ‘digital literacy’, which is required to fully utilise the technology. Several commentators have drawn attention to the need to address this two-fold digital divide (Helsper, 2008; CEC, 2010). Evidence suggests that those already experiencing some form of social exclusion tend to fall on the wrong side of these digital divides (Helsper, 2008). Proportionately the most excluded are the elderly, the disabled and the poor, those in social classes C2DE (National Audit Office, 2013). A number of commentators have argued that the digital becomes a key tool for employment, for accessing services and for keeping in contact digital exclusion reinforces other forms of social exclusion (BIS: DCLG, 2010).

Overcoming digital exclusion has been part of UK and European social policy for the past 15 years or so. In the UK, the first Blair government established a Social Exclusion Task Force which produced several reports on digital inclusion (see, for example, Cabinet Office, 2000). Subsequently, the Department for Communities and Local Government (CLG) commissioned several studies which sought to bring a communities perspective to bear, focusing on groups with multiple problems (see, for example, DCLG, 2008a; 2008b). This resulted in a national consultation (DCLG, 2008c) and eventually a National Plan for Digital Participation (BIS:DCLG, 2010). In 2009 the Labour's government appointed a 'Digital Champion' to run *RaceOnline*, which sought to encourage the, then, 10 million people who had never been on-line to adopt digital technology. The Champion and her team was charged with influencing organisations to commit to digital participation, encouraging participation at grass roots, raising awareness of the importance of digital participation and advising the government on its provision of public services (Cap Gemini, 2012). This initiative has continued under the Coalition, though with a change of name to *Go On*. Other national initiatives developed by Labour, including UK Online Centres, which provided support for community-based centres, many of which had grown organically over the years, continue to be supported by the Coalition. A range of digital inclusion initiatives have also been developed by local and regional authorities and training providers, often co-funded by the European Social Fund or by central government.

Despite this plethora of initiatives over the past decade or so, there are still around 7 million people who have never accessed the internet and gaps in the regularity and sophistication of use amongst those on line (ONS, 2013). It is argued that without further action to address the problem the already socially excluded will be further marginalised (Race Online, 2011). The need to digitally include more people has been given added urgency by the trend towards on-line delivery of public services. The UK Coalition's Digital Strategy (GDS), with its strapline

'Digital by Default' has recently set targets for government services to be delivered on-line. The goal here is to improve services and reduce costs, particularly in the current period of austerity (Cabinet Office, 2012). A recent report by the NAO (National Audit Office, 2013), however, argues that the strategy is in danger of ignoring the several million people who are not yet online or who cannot make efficient use of online services, those on the wrong side of the 'digital divide'.

As part of the continuing push for digital inclusion, several commentators have argued that there is a crucial role for 'trusted intermediaries' to take a greater role in increasing digital inclusion. For example, Tom Wright, the Chief Executive of Age UK has suggested that "*third sector organisations can play a crucial role in encouraging and supporting take-up*" of digital technologies (Race Online 2011). This can be seen as part of a wider shift towards encouraging third sector and community organisations to offer more innovative and integrative social welfare support. Arguably, in the context of digital inclusion, one such trusted intermediary is the Social Housing Sector. It is this sector which is the focus of this report. There are three main reasons for this focus. First, social housing hosts a disproportionate number of those on low income, those with disabilities and the elderly, that is to say those generally considered to be risk of *social* exclusion. Second, it hosts a disproportionate number of those not on-line, i.e., those who of the *digitally* excluded citizens: in 2008 over seventy per cent of those living in social housing were not on-line (Office of National Statistics, 2008). Third, both the government and the sector argue that it could and should play a larger role in the overcoming digital exclusion (HM Government, 2008). The sector itself has acknowledged that digital inclusion should form part of its 'social purpose' mandate; a *Digital by Default* Action Plan has been developed by the sector together with RaceOnline (RaceOnline, 2011) and a number of initiatives are underway. For example, the sector is estimated to have invested around £6million on IT centres over five years, as

well as spending money on IT learning and digital inclusion initiatives (National Housing Federation, 2012).

This paper draws on an empirical study by the authors exploring how the social housing sector is addressing digital inclusion. Social housing is a broad sector and different organisations offering different services. Some see themselves only as landlords, pure and simple. Others position themselves as providers of additional services, such as social and health care or training, or as ‘one stop shops’ which can signpost such services. Our research suggests that some social housing organisations are actively positioning themselves in the latter camp in response to changes in the welfare and social services landscapes, particularly the trend towards contracting out of public services and emergence of a ‘quasi-market’ through growth in personalised budgets. It is these organisations which are extending their service which our research focused on. In terms of technology the paper focuses on ‘social technologies’ and what Wigfield et al (2012) call digital participation services, that is services which “seek to improve the lived experience of people in home and close to home settings, helping to underpin and maintain social networks and enriching lives in order to reduce social isolation”. Our focus is therefore not on telehealth or telecare services as generally understood, though we do seek out potential links when considering more holistic approaches to funding digital participation services.

Our research draws on a range of policy and academic sources, interviews with industry experts and policy-makers. Here we mainly focus on the findings of an in-depth case study of a pilot undertaken by social housing provider in the North East of England. In the following section we describe the pilot and outline the key findings concerning digital inclusion. We then reflect on some of the factors which may impede up-take and sustained use of digital

technologies by social housing tenants. Finally we consider how the social housing sector might further develop its role in this process.

2 Social Housing Organisations Supporting Digital Inclusion: A case study of older clients with life-limiting conditions

In this section we report the findings of an intervention carried out by a housing association in North East England. The pilot was designed to support older clients with life-limiting illnesses. The pilot involved providing notional personal budgets to clients. One of the aims of the pilot was to develop a more person-centred approach to the provision of goods and services. A funded project worker was appointed to assist clients in making choices (where required) and in sourcing the products and services. A range of goods and services could be selected and there was a strong demand for common household goods such as cookers, washing machines and fridges; and also for low-value, consumable items such as bed linen and towels. Such expenditure is not unexpected given the health circumstances and relatively low income of those who took part. However, there was also a high uptake of digital technologies, which was unexpected by the organisation and by ourselves, and ran contrary to statistics on digital participation of older adults and those living in social housing. It is this aspect of the pilot which on which this report focuses. Our research involved interviews and focus groups with managers, the project worker, support workers and clients over a period of a year. We sought the opinion and experiences of clients as to how digital technologies were supporting their wellbeing at home. We also explored with managers and staff how technologies could be further integrated into the service delivery process and what more the organisation could do to support digital inclusion.

2.1 The Client Experience

Sixty-three people took part in the pilot service. The majority of participants (64%) lived in areas ranked in the top 20% most deprived lower super output areas according to the Index of Multiple Deprivation in 2010. The majority of participants were over 55 years old, though some younger people with life limiting illnesses who were referred to the pilot by partner health organisations also took part in the pilot service. Men and women participated in equal numbers. The majority of participants in the pilot service had been diagnosed with various forms of cancer (lung cancer, breast cancer, bowel cancer, stomach cancer, brain tumour, throat cancer, skin cancer, and bone cancer). Other participants were living with one or more life-limiting health conditions including heart disease, arthritis, spinal conditions, epilepsy, kidney failure, liver disease, diabetes. In the qualitative element of the research, we focused on participants over 55 years old currently living in social housing, undertaking two focus groups (with 14 older adults in total) and eight individual interviews with participants of the pilot service.

Twenty-five (40%) of the pilot service participants chose digital technologies, suggesting cost barriers are disguising considerable unmet demand. The notional ‘personal budget’ helped draw out this demand, as well allowing the social housing provider to better understand wider client needs and aspirations.² The study population was relatively small so we must be careful in our interpretations, but the level of uptake, and the enthusiasm of users, perhaps indicates that, once purchase cost impediments are removed, and with support in purchasing appropriate equipment, social housing clients may be more inclined to perceive the benefits of digital technologies for enhancing their wellbeing at home than the statistics would

² We are unable to speculate on how client behaviour might alter if the financial limit of the personal budget or eligibility criteria were different.

suggest. This is important because the literature often focuses on ‘lack of interest’ rather than cost barriers, but the two are clearly related.

Analysis of the personal budget spending for all 63 clients who took part in the pilot showed that:

- a broad range of consumer digital technologies were purchased, including laptops, notebooks, tablets and digital cameras.
- many clients opted for smaller, portable devices
- many clients opted for more intuitive technologies, with attractive design features, such as touch-screen tablets, particularly following demonstration.
- there was no discernible difference in the uptake of digital technologies between younger and older participants.

A variety of technologies were requested, including iPads; laptops, desk-tops, e-readers, digital cameras, mixed and mobile phones and so on. As the Pilot proceeded, a preference emerged for some more recent technology products such as the iPad. It is not clear what factors lie behind the trend, though our research suggests clients found these easier to operate, more portable, and had a more attractive user-interface.

During our focus groups and interview discussions, positive and negative reflections were presented by clients. Positive impacts of new technologies included:

- enhanced interaction with family at a distance;
- enhanced contact with carers;
- links into new communities of interest, or communities of interest from which people had withdrawn due to health circumstances;
- improved engagement in new or old hobbies;

- new skills and reinvigoration of lapsed ones

The following paragraphs give some flavour of the benefits of clients who chose digital technologies. One participant, Sylvia, opted to receive an iPad. Sylvia's daughter bought a hand-rest for the device, which took the weight off her arthritic wrists. Sylvia is now learning to use email, Skype and 'face-time' on the device. She described how her world had opened up, and she was better able to retain and enhance skills which she felt were disappearing:

I was completely forgetting how to spell, so I don't write letters. But I found with that [touching iPad] when she showed me how to – it started working my brain. My brain started working. And I'm typing.

Sylvia described how surprised she was at how easy she is picking up how to use the device:

I've seen them. But I never thought I could use one. I never, ever thought I could.

Sylvia is aware of possibilities for online shopping, demonstrated by her grandson, but for now she is comfortable using the device to browse for ideas and prices, and make her purchases offline. One future use of having email access she can foresee is the enhanced ability to complain to service providers, the local council and so on as this could be done instantly.

In one case, it was the principal carer who received most benefit from the introduction of digital technology into the home. A participant with dementia was being cared for at home by her husband, and this was having a detrimental impact on his own wellbeing. Providing a laptop and mobile phone allowed him to expand his social networks and find quiet time on his own. Previously he would get books from charity shops to read when his wife was in a quiet mood. Now he is involved in playing games online, which provides opportunities for interaction and distraction during the day. Similarly, a participant who was recovering from

surgery to remove a brain tumour described how the provision of a laptop through the pilot service enabled her teenage niece (her informal live-in carer) to spend more time with her in the evenings, as she was now able to complete her homework at home instead of the local library. The potential roles of unpaid carers in using technology to actively assist is are explored further in sections 2 and 3 of this report.

Whilst most participants were unfamiliar with digital technologies at the outset, Charlie who has prostate cancer, was already a keen computer user. He requested a laptop and an iPad during the pilot to engage in a range of activities to support him at home. He preferred not to shop online, except for one-off purchases such as travel tickets. He used his devices mainly for entertainment and pursuing hobbies, the weight and portability of each determining where in the house they were used.

This one [iPad] is handy, because if I get tired, which I quite often do, I go and lie on my bed, open this up, do what I want to do, I mean, you can watch films, there's music on here. There's all sorts of escapisms.

A number of participants used the budget to purchase mobile phones and top-up credit. Many older clients' have carers and support networks who have paid work commitments elsewhere, so mobile phones were regarded as a useful way to keep in touch in case of emergencies. Having the ability to make calls and text family members gave many clients more confidence to go out, and was important for providing reassurance to family carers. One focus group participant commented:

Since my grandson started fitting I am never without it – I even sleep with it, its goes everywhere with me.

Mobile phones were usually cheaper and easier to budget for than fixed lines as unlike fixed there was no rental tariff to inflate the costs of purchase and use. In many cases, the budget was used to provide top-up credits to facilitate ongoing mobile phone use, as having the weekly income to support its use was difficult or prohibitive for many clients.

As with similar studies, we found some clients were reluctant to consider using digital technologies, even the most basic devices. This may be due to a lack of awareness, interest or motivation. This can be exacerbated for those experiencing poor fine-motor skills or ill-health. Negative or less positive attitudes towards digital technologies included:

- preference for face-to-face communication and encounters
- lack of interest and/or knowledge of the potential of the technology
- lack of skills and appearing to look ‘stupid’
- unwanted visits to use devices from younger family members
- fear of ‘lock-in’ for certain products
- fear of scams, phishing and other online dangers, particularly shopping online

Although it is important analytically to unpack these factors, they are best often seen as facets of the same problem. Skills can only be developed if there is some initial interest, and fear and trust issues can only be overcome by use. As Bland and Dutton point to a Catch-22 situation:

“Nonusers will only understand the benefits of the Internet by using it, but since they perceive serious problems they are unlikely to start. If they do not start they will never experience its benefits.” (Blank and Dutton, 2012: 149)

There is a distinction to be made between those with no experience of digital technologies and ‘ex-users’. Some clients already owned PCs and mobile phones but had stopped using them for various reasons, or did not use them to their full potential. It should not simply be assumed that these individuals have made the ‘wrong’ choice as the ‘techno-enthusiasts’ might argue. There are ethical choices to be made whether to attempt to persuade these people back on line. And strategies will need to take into account the users experience when considering how to persuade them on-line.

2.2 Identifying Barriers to Uptake and Use of Digital Technologies

As part of the study we sought to get a better understanding of the issues which housing organisations and clients face in the current climate. This involved discussion with strategic managers, front-line staff as well as clients. In this section we consider some of the issues which might be emerged from our research which might limit the social housing sector’s contribution to promoting digital inclusion.

Skills and competencies

The first potential barrier to uptake and sustained use of the digital technologies we identified in our research is a lack of appropriate skills amongst clients. The problem of a digital skills deficit amongst poorer and older adults is widely identified in the literature and is not surprising (e.g., Helsper, 2008; CEC, 2010). One key question for social housing organisations seeking to increase digital activity is how to support clients to develop skills to get online and stay online. This will partly be about sign-posting clients to existing digital training providers. However, in the context of housebound clients and those who cannot travel any distance, alternative approaches may be required. Ultimately, however, social housing associations may need to play a more central role if they wish to optimise the use of

digital technology in their organisational strategies and client-based services. This is likely to be an on-going process over the coming years involving up-skilling clients, and paid and unpaid carers and enrolling digitally literate volunteers.

Training existing personnel to assist older adults in this area will be crucial. In our research, we found a mixed picture regarding the skills and DT-competencies of the workforce. Project support workers appeared to be comfortable retrieving information online and using social media. These skills and knowledges are perhaps most valuable when assisting clients find appropriate benefits or health advice, or when suggesting ways clients might reduce social isolation. In order to replicate the skill-set possessed by some workers involved in the pilot, careful consideration during recruitment to and training for these roles is needed. Developing a digitally skilled workforce could also benefit wider organisational efficiency, for instance in recording client details in real-time. Increasingly, in the era of social media, staff will be familiar with technology. Furthermore, many are likely to bring their own technology to work (BOYD) but a set of protocols may be required to 'formalise' the technology skills being developed (often outside the workplace) and to integrate personal technologies into organisational systems. The new skills will need to be integrated with existing pastoral and communication skills.

The Skills for Care Work Development Strategy (2011: p16) outlines the nature of these skills:

- Assessing the benefits of technological support to promote autonomy.
- Offering appropriate guidance to enable people to gain access to information relating to assistive technologies as and when they want it.

- Enabling people who use services, carers and people in their circles of support to understand assistive technology and ensuring they are enabled to use it with confidence.
- Social networking to support local leaders and providers to use web-based applications to engage with the public and the communities they serve.
- Supporting the use of social media.
- Learning and sharing of knowledge through technology, using e-learning resources as part of continuing professional development.

Policymakers have recently acknowledged that not everyone will get online in the foreseeable future and have coined the term ‘assisted digital’³, to express the view that such people can be assisted to access on-line services by digitally literate intermediaries in their support circles. A recent study by the UK’s National Audit Office (2013) suggests that 48 per cent of those who choose not to use the internet already receive help from friends and family with internet access. There is limited research regarding unpaid carers and ICT. A recent study for Pew Internet (Fox and Brenner, 2012) in the US showed that the internet was “a key information and communications resource” for care-givers. That report suggests that care-givers are much more likely than non-carers to seek out information relating to health and contend that they are providing ‘second-degree access’ to care-receivers. Our case study also indicates that there is a potential role for unpaid carers, in care-receivers accessing the sorts of services referred to above. Unpaid care-givers could also build on their expertise and the affordances of digital media to help improve the well-being of care-receivers, for example, using on-line resources in exploring hobbies and pastimes and in encouraging or fleshing out reminiscence.

³ The idea of ‘assisted digital’ has become a key element of the Coalition’s Digital by Default strategy. See, for example, <http://digital.cabinetoffice.gov.uk/category/assisted-digital/>

We need to be careful, however, as not all informal carers will be digitally literate. Indeed, a recent study by Stephanie Carretero and colleagues (2013) at the Institute of Prospective Technology Studies (IPTS), based on a cross-Europe study, suggests that more work would need to be done to draw this cohort into digital care envelope:

“Deployment and use of technological services for informal carers is still limited, mainly due to users' low digital skills, the lack of demonstrated business cases, and the poor evidence of the impact and sustainability of these services.” (Carretero, et al, 2013)⁴

A complementary approach might be to bring in ‘digital champion’ volunteers, but such volunteers may also require some training to support older adults in their home environments. Greater attention to online security and safety may also be required, since older adults’ unfamiliarity with the technology, together with the prevalence and sophistication of scams can lead to understandable concerns among vulnerable adults.

Financial barriers

A second issue is that financing the capital and running costs of acquiring digital technology and getting online can be prohibitive. Much has been made of the decline in technology costs over the years, but for those on low incomes, anything other than basic technologies may remain prohibitively expensive. The pilot which we consider here overcame this capital cost issue through providing notional personalised budgets, which effectively gave discretionary spend for clients. This approach is unlikely to be sustainable in the longer run. There are alternative ways to address the capital costs issue. There are already a number of schemes in existence to provide devices in the home at reduced costs (for example, see ‘Get Online@Home’ (Entwhistle 2012) as part of the Government’s ‘Go-On’ programme. This

⁴ The report can be downloaded at <http://www.carerplusproject.eu/carict-can-technology-based-services-support-long-term-care-challenges-in-home-care/>

scheme offers PCs and laptops at reduced prices. There may also be opportunities to link with local businesses, the civil service and other large third sector organisations to approach for procuring recyclable equipment. The question of recurring expenditure to support digital technologies is more problematic, though falling costs of accessing basic services may help here. We suggest how this issue might be ameliorated in section 3 of this report.

As well as the direct financial barriers, we found barriers relating to how (many) social housing clients related to the wider financial eco-system. Although our interviews suggested that many older clients were skilled in managing their limited finances, and were ‘financially literate’ in the ‘pre-digital’ context, there was concern about entering the on-line finance world. From the perspective of the clients there was an understandable fear of moving away from tried and tested money management strategies. There was also a trust issue, for some this was based on negative experiences of the banking system. As was pointed out by one carer, whereas administrative mistakes, such as delays in transferring funds (with associated charges) are an inconvenience for many of those living from hand-to-mouth they may be devastating. More broadly, participation in the digital ecosystems requires other assets, such as personal identification and accreditation (e.g., bank details, credit cards) to enable online transactions. As the project worker pointed out, however:

“The majority of our clients don’t have bank accounts, and one of the issues we have as an organisation is just collecting the rents...they haven’t got passports, they haven’t a form of ID, and the ID is actually quite important because that is what leads you onto getting other things”.

So there is a lack of engagement with financial system increasingly used by the majority of people. Even when on-line, keeping abreast of relatively new, complex and evolving financial management arrangements, such as direct debits and card security, can also pose

barriers. These issues are relevant to the wider older population more generally, but particularly relevant to those living in deprived areas of our cities and countryside. The increase in data-profiling, including the ‘red-lining’ of individuals and communities may give further pause to those unconvinced about the digital. Furthermore, the apparent savings to be made from being online⁵ may not be realistic for many social housing clients, since average savings imply average spend.

Constructing support infrastructures

Research shows that some of those who adopt digital technology subsequently give it up. Others do not move up the ladder in terms of sophistication of use. This may be through informed choice, but it may also be because it is too difficult to realise the benefits. Support from organisations such as housing associations may prevent ‘involuntary cessation’. A crucial factor in uptake and use in the intervention reported on here was the presence of a pilot support worker who provided awareness raising, demonstration, support and encouragement, as well as sourcing requested items. An additional benefit to this interaction was increased understanding of the needs and issues facing clients.

In the current financial climate, however, such support may prove difficult to resource. Furthermore, adoption of technology relies largely on context and setting: here family is important both in encouraging, supporting and dissuading. Organisations need to consider the wider support circumstances of individual clients when seeking to encourage adoption. Building capacity within the clients’ existing circle of support, or attracting new digitally-competent volunteers, may help to alleviate long-term pressure on front-line personnel to provide ongoing technology support. This latter suggestion may be overoptimistic if conducted by social housing organisations alone. Partnering with relevant organisations, such

⁵ See, for example, Race Online 2012

as Go On⁶ and UK Digital Centres⁷ might be useful for building additional capacity, and in signposting training opportunities, marketing material and so on. Some housing organisations are already developing networks of volunteers. For example, Peabody recruit young volunteers from local colleges to provide hands-on training for older residents, and are recruiting ‘digital champions’ (Race Online, 2011). With careful planning, such an approach can allay the concerns of some older adults that young people would go too fast and not appreciate the issues they face. Regardless of who is enrolled in these support processes, there will be significant training and protocol issues to overcome in social housing if digital technology-use is to be expanded and adoption *and use* of digital technologies by clients is to be further promoted.

Connectivity

One issue which emerged in our research was broadband connectivity to the home. The problem is most pronounced in rural areas, but evidence suggests that poorer urban areas are not fully covered. Research by Mason Analyses (2010) and by OFCOM (2012) shows that there is a deficit in some of the poorer areas of our cities. This latter point was stressed in our research, with sufficient and stable broadband connectivity not being available to allow the sorts of processes needed to optimise consumer and business technologies. The Coalition is spending around £1bn on various broadband projects, with further matched funding from local authorities and the private sector. It would be unfortunate if those most digitally excluded do not benefit from this investment. Better connectivity could potentially benefit social housing clients directly, but also help overcome some of the techno-organisational issues which impact negatively on service delivery. Proactive engagement with these organisations particularly around current broadband roll-out initiatives should be undertaken

⁶ <http://www.go-on-uk.org/>

⁷ <http://www.ukonlinecentres.com/>

either at the level of individual institutions and/or by umbrella organisations. Crucially, it is important that housing associations, and other third sector organisations, work closely with local government officials to consider ways in which broadband can be brought to deprived communities as part of such initiatives. Again it may be useful to consider what can be learnt from experiences elsewhere. For example, Peabody undertook a three year *Wi-Fi* pilot covering 800 residents in Fulham and Hammersmith (Race Online 2011).

3 Social Housing Strategies for Embracing Digital Inclusion

In this short report we have focussed on the Social Housing Sector as an actor in the process of ameliorating digital exclusion. This is in recognition that social housing hosts a disproportionately large number of the digitally excluded, a population which is characterised by low incomes and other social disadvantages. We have focused on the elderly, as the age cohort which is statistically most digitally excluded. And we have drawn mainly on a case study of a pilot project which, *inter alia*, supported social housing clients to get online. The pilot focussed on a particular sub-set of clients, those with life-limiting conditions. Several of the issues, which emerged from our research, however, may be relevant to the wider social housing sector and to a wider client base. In this section we draw these lessons together and suggest a ‘systems level’ approach to the problem, which would involve integrating the digital inclusion problem with the wider technological and social innovation practices.

Inclusive Digital Strategies

As in most sectors of the economy, digital technologies are becoming increasingly central to organisational and work practices in social housing: their use ranges from mobile technology for workers in the field, to Customer Relations Management Systems (CRM) to communicate with internal and external stakeholders, to telecare and telehealth applications. The ‘digital by

default' agenda, together with pressure for cost-cutting will increase the imperative for social housing organisations to accelerate technology-adoption and to engage their clients in the process. There is a need, therefore, for social housing organisations to build digital strategies which incorporate all activities and which include a foresight element. We do not attempt to cover all potential components of that strategy here, but to focus on a key lesson from our study, that social housing providers should incorporate both the front-line staff and clients in such strategies. Only by doing so will they be able to achieve the three inter-related goals of ameliorating digital inclusion, providing the digital skills required for a modern workforce, and creating opportunities to create 'integrated systems' to help optimise historical and future investment. This is not a straightforward process and strategies will need to keep pace with changes in technological development and also leave space to accommodate 'everyday tactics' through which workers and clients adapt the technologies to suit their own purposes.

Our research to date has been concerned with 'digital participation services' (Yeandle and Fry, 2010, but strategists clearly need consider how these services could be integrated into the wider organisational restructuring around technology. So, for example, if we consider the nascent trends in health and care towards self-monitoring by people living at home, we notice that this requires the integration of consumer-friendly technologies health/care providers digital infrastructure, whether directly or 'in the cloud'. As the capital and running costs of personal technologies fall it might be sensible for providers to meet the marginal costs of providing clients with consumer technologies, and gain synergies by 'piggy-backing' on costly telehealth and telecare systems.. So, for example, self-monitoring 'apps' could be loaded onto tablets or mobile devices, games designed to stimulate. This may be an approach which saves costs for social housing organisations, but benefits both care and health providers as well as clients. In an era of increasingly fragmented welfare service delivery, however, cooperation across organisations will often be required to achieve economies of

scale and scope. As it stands, however, there is some way to go to overcome organisational and service silos. For example, telehealth is currently run by local health authorities with health practitioners carrying out assessments, whilst in telecare assessments are carried out on behalf of local authorities. Evaluation tends to be in terms of hospital beds saved rather than quality of life in the home.

In our study we focused principally on clients living in their own individual homes. However, many social housing providers will have several forms of provision, which may range from single tenancies, sheltered housing, including extra-care settings, and other forms of communal living, including care homes. In sheltered housing and care home contexts more collective approaches may be effective. This could be at the level of negotiating broadband to the premises or investing in centralised computing facilities. In these more communal settings there may be opportunities for ‘knowledge transfer’ and co-assistance from fellow tenants. There are a number of issues which would need to be considered. For example, how does communal provision play out in the emerging era of personalised budgets; does the provision of technology, particularly network technology change the contractual relationship between housing provider and client; and in the age of individualised, personal and portable technology is access to collective and perhaps soon to be outmoded equipment (such as the personal computer) good enough?

Strategy should, of course, be evidence based. Strategising requires research, knowledge transfer and application of knowledge to the particular circumstances of an organisation. There is now a wide body of research and practice on which to draw, both in the social housing realm and beyond.⁸ Most immediately the National Housing Federation hosts a web-

⁸ For example, a range of studies were undertaken by the last Labour Government’s Social Exclusion Unit available at <http://www.webarchive.org.uk/ukwa/target/135122/source/subject>

site⁹ which builds on the *Digital by Default* Report and Action Plan. The same site also provides a hub for conversations between social housing professionals.¹⁰ Research is also being carried out in to cognate sectors such as tele-care and tele-health are carrying out research. Technology providers recently signed the ‘3 million lives Concordat’ with the Department of Health (2012) “to enhance the lives of three million people and to reduce the cost burden on acute care”. A number of pilot or mainstreamed projects are underway which utilise digital technologies, including social media for the benefit of clients. the European level, healthy and active ageing is one of the main pillars of the EU Digital Agenda and Ageing Well and Assisted living will be core themes in Europe 2020. Large scale EU studies such as IPTS’s 2010 study also pull together knowledge on what can be done with digital technology in this field and some of the barriers to doing so (Yeandle and Fry, 2010). A number of case studies, and distilled experience are available from sites such as ‘Ageing well in the Information Society’ best practice portal.¹¹ These might be sources of learning, partnership, and, indeed, funding.

These plans, of course need to be translated into practice. Here leadership and dedicated resource will be required. It would be advisable to a digital inclusion officer (or team) at the appropriate level to work with partners, carers and so on. This person or team could also work with the organisational management to consider how development at the client level can be translated into more efficient and more cost-effective e-service delivery. Some organisations have already done this.

Client Engagement and Co-Production of Service Design

Engaging client-users in any digital inclusion project should be undertaken from the beginning, including the design phase. Consideration should also be given to an eco-group

⁹ http://www.housing.org.uk/policy/social_inclusion/digital_inclusion.aspx

¹⁰ <http://digitalhousinghub.ning.com/>

¹¹ http://ec.europa.eu/information_society/activities/einclusion/policy/ageing/action_plan/index_en.htm

approach which draws in ‘circles of support’. It cannot be assumed that all clients will have the same support networks. In the current challenging environment it would be sensible to scope out existing local volunteers, drawing on the notion of ‘digital champions’ developed by Go On, though careful consideration would have to be given as to the location and manner of volunteer-client interaction.

We argue that a key strength of the social housing pilot service we explored was the enriched interaction between front-line staff and clients. This allowed the client voice to be heard and enabled greater organisation responsiveness to articulated demand. As a recent Joseph Rowntree Foundation report stresses: “*putting older people at the centre of service design and delivery helps to improve outcomes*” (Clark, 2011).¹² Recent work by Age Concern UK (Mauger et al, 2010) and NESTA (Khan, 2013) also emphasises the role(s) of users and citizens in generating new ideas and processes when innovating for an older population. We suggest that for any organisation seeking to intervene in these issues, early and continued interaction is necessary in order to benchmark and monitor the acquisition of skills, knowledge and interest in digital technologies. It allows early identification of potential barriers that individual clients face, and also their shared concerns. One theme which emerged during our research was security in the home. Such an issue might be a focal point around which technology could be introduced and built upon: an ‘electronic neighbourhood watch scheme’ could form the basis of community linkages for example.

Taking Account of Clients’ ‘Circles of Support’

Focusing *exclusively* on individual clients who may be at risk of social exclusion is often at the expense of considering the complexities of social and economic relationships in which they are embedded, and which influence their capacities and dependencies. Individuals are engaged in varying relations of dependence with others. We suggest that an appropriate

¹² Available at: <http://www.jrf.org.uk/publications/local-authorities-better-outcomes-older-people>

strategy would be to follow an *eco-group* approach, which goes beyond individual clients' needs and skills to recognise the attributes of the various support networks within which they are embedded. These can include support and mutual inter-dependencies among family and friends, and for the most isolated or vulnerable, can involve intensive support by a social housing or other welfare organisation.

As such, a lack of personal digital skills is not necessarily problematic for effective digital inclusion, as 'warm experts' (Bakardjieva (2005:99) can be called upon. These may be more knowledgeable and skilled family members, neighbours or trusted intermediaries who can provide support and advice to older adults who do not themselves have the motivation and confidence to use technology. These 'warm experts' may already use particular technologies and it *may* be sensible to draw on their experience. If the expert is a family member, this in itself may stimulate interest in digital learning. Within policy, it is increasingly being recognised that for many people 'assisted digital access' of this sort will continue to be required for some time to come.¹³ As we have pointed out above, however, recent research suggests that many unpaid carers lack digital skills. Furthermore, the durability, size and capabilities of a clients' social network must be considered. Some older adults experience social isolation, and even for those with strong social ties, their network may not possess the technological competencies or motivations to support digital engagement. In addition, family can be seen as intrusive by some older people, so care needs to be taken when navigating these processes. Given these caveats, it is nevertheless important to stress how 'circles of support' are important to effectively harnessing the potential of choice and control in social care.

¹³ The idea of 'assisted digital' has become a key element of the Coalition's Digital by Default strategy. See, for example, <http://digital.cabinetoffice.gov.uk/category/assisted-digital/>

There is also the question of whether circles of support can be extended through digital technologies themselves. As our research interviews suggest, once people are comfortable using the technology, they can reinforce existing relationships and build new ones. This could include on-line circles of support providing assistance with basic support navigating technology, warning of phishing scams, etc., but also broader support. Such support networks usually grow organically, but social housing providers might consider how these might be accelerated.

Cross-Sectoral and Inter-Sectoral Partnership working

As it should be clear from the previous sections of this report, we regard it as crucial for social housing organisations which want seriously to address digital exclusion amongst their clients to draw on other actors already addressing these issues and was clear from our research that partnership that in the context of austerity and cuts, partnership working will be crucial for social housing organisations are to play a role of supporting older adults use digital technologies to support their continued wellbeing at home. Partnerships should be built upon and knowledge exchanged specifically around the potential of digital technology to enhance social housing services, and to equip clients with digital skills that are becoming increasingly important in our society. We have already mentioned a number of potential partners (both formal and informal), such as other care and housing organisations, major technology providers and national Government initiatives such as Go-On Line, UK On-Line. At the local level, there are a number of potential partners, most obviously local authorities and PCTs, but also local units of Age UK, U3A and, of course, locally-based Universities. Other local resources such as public libraries which have long played a role in supporting digital take-up, should not be forgotten. A recent study by Pask and Wilkie (2011) suggests that:

“the access and support available at the local library could be extended through partnerships and collaborative working to include elderly, housebound people in their own homes.”

Working in joined up ways within organisations, let alone between organisations, is of course not unproblematic any arena. And a growing body of research has shown that the effective introduction of digital technologies within and across organisations requires deep organisational and cultural change (Brynjolfson and Saunders, 2010).

Effective Evaluation

Finally in this section, strategies and actions plans require evaluation. Assessing impacts of digital technology initiatives is notoriously difficult when we move beyond measuring the level of take up of equipment, numbers of users and so on. Future funding for social housing providers is likely to be framed by a requirement to demonstrate effective and positive outcomes derived from greater support activities. A logic model developed by GHK (GHK, 2012) sets out three elements: enabling activities, digital inclusion outcomes and social and economic outcomes. Enabling activities, access, skills and motivation can be measured relatively easily. Digital inclusion outcomes, reach, breadth of use and depth of use, can also be measured. It is much more difficult to measure how these translate into social and economic outcomes. However, we must move beyond the anecdotal to capture impact on concepts such as well-being.

There are now a significant number of studies assessing the impact of tele-health and tele-care. However, these tend to be large-scale and survey-based and methods cannot simply be ‘read across’ to particular case studies. For instance, ‘Whole Systems Demonstrator’ trials were

described as *'the largest randomised control trial of tele-care and tele-health in the world'*¹⁴. The trials sought to reduce A&E visits; emergency admission and mortality rates. This was a longitudinal study limited to three categories of illness, with benchmarking data gathered at the beginning, and updated throughout. Another approach is a large-scale attitude survey, such as that conducted by Beale and colleagues (Beale et al, 2009). They found that about three-fifths of the respondents felt that their current quality of life was either *'a bit better than it used to be'*, or *'much better than it used to be'* compared with the situation before their tele-care service was installed. It is unlikely that these can be replicated in the context which this report is situated. It is possible that evaluation of digital investment (infrastructure, support, savings or increased efficiencies to organisations) might be considered under a broader framework such as the SORI approaches suggested by Fujiwara (2013) amongst others. In the end a mixture of both quantitative and qualitative tools are likely to be required. The key point is evaluation should be built into strategies. Given the limited knowledge in the area of digital inclusion in social housing and the potential difficulties of introducing technologies to (at least some groups of) social housing clients and the complexities of integrating these goals with wider organisational goals, a formative evaluation approach, allowing for several iterations and improvements is likely also to be crucial.

4 Summary and Conclusions

Information and communications technologies are now widespread in advanced economies including the UK. New digital tools and applications are emerging all the time and will continue to do so for the foreseeable future. Increasingly, people need to be able to access and effectively utilise these technologies in order to engage in the economy and society. Organisations in the public and third sectors are increasingly following their private sector

¹⁴ 'Minister welcomes 3millionlives approach' News Release. 3millionlives. Found at: <http://www.medilinkuk.com/news/minister-welcomes-3millionlives-approach> Accessed 12 September 2012

counterparts in seeking to situate digital technologies at the heart of their operations, including in the customer interface, in order to reduce costs and improve services. The acceleration of this trend is signalled by the Coalition government's demand that transactional services become 'digital by default' (Cabinet Office, 2012) and its limiting of access to its new Universal Credit to digital channels¹⁵. However, many people remain disengaged from the digital economy and a digital divide remains. This divide is characterised by differential access to digital technology broadly and to more advanced technologies in particular, but also by different capacities to effectively use these technologies, often referred to as digital literacy. Proportionately, the most excluded are the poor, the disabled and the elderly.

There have recently been several calls for 'trusted intermediaries' to play a greater role in supporting digital inclusion. In this report, we have looked at one such intermediary, social housing, whose clients often experience social exclusion, and who disproportionately find themselves digitally excluded. The sector, as a whole, is aware of the issues and has developed a 'digital by default' plan. As in other sectors, proponents of digital inclusion see it as a means to improve services to clients and to make them more efficient and cost effective. This report draws on interviews with a number of actors who bring a digital perspective to social housing. In particular it draws on an in-depth case study of a pilot which allowed clients to access digital technology and provided a degree of support with adoption. It suggests that intermediate organisations *can* play a role in realising the goals of the digital inclusion agenda, but that intervention will need to be multifaceted and will often be continuous rather than merely a one-off intervention. Further, interventions will need to

¹⁵ See, for example, <http://www.guardian.co.uk/local-government-network/2013/feb/18/councils-prepare-for-universal-credit-contact?CMP=>

involve partnerships, drawing both on clients' personal circles of support and on external organisations who have the wherewithal to realise objectives.

Our research suggests that there is an interest in digital technologies amongst older social housing clients, including those with life-limiting conditions. It also demonstrates that those who adopt the technology experience several benefits in terms of overall well-being, through improving connectivity and helping to overcome social isolation. In the process people develop new skills and interests, and reinvigorate old ones. Interestingly, unpaid carers (friends and family) also reported benefits, either directly or indirectly. As would be expected, however, not all clients are interested in using technologies and it is necessary for 'trusted intermediaries' to consider how they, together with other parts of their clients' circles of support can help provide 'assisted digital'. In the case study we have drawn on here a dedicated support worker was able to help, but any longer term intervention would require a more complex support infrastructure. Further, as we have pointed out in the report, digital technology is linked into complex service production and delivery systems which require accesses to a range of contemporary personal infrastructure, such as bank accounts and credit cards, from which many are excluded (or exclude themselves to avoid financial risk) as a result of personal circumstances. Migrating clients to these systems will not always be easy. Our report suggests that digital inclusion strategies should engage with clients and their circles of support (but being careful not to compromise their client's independence) from the beginning, including in design and take into account accompanying measures required to optimise new technologies. This would include staff and client up-skilling, incorporating technology more fully into everyday care, and developing protocols to do so safely and securely.

Beyond these 'internal partnerships' of provider, client and support networks, other external partnerships should be taken into account when strategizing. As the report points out a lot of accumulated knowledge regarding digital inclusion is already available. Also a range of actors are already involved in the process: these include Age UK, Go-On Line, UK On-Line Centres, but also local libraries and universities. The evidence and experience of these bodies may prove useful. Another issue in strategizing is how to ensure the *quality* of access to digital services. Increasingly this will mean broadband. Coverage is growing, but is not available everywhere, and it is likely to remain relatively costly for many clients. Overcoming this problem is a pressing one and social housing providers will need to enter into dialogue with local authorities, many of whom are developing broadband plans, and private providers to address this issue. Although the costs of broadband are falling, for those on low incomes, they are likely to remain significant. In a collective housing setting this might be addressed through a link to the site accessible to everyone either through a 'wired up' space, or throughout the site, the latter allowing access in personal spaces. A potential issue here is how this collective provision is to be paid for in the emerging era of personalised budgets. Another possibility for paying for these services would be to piggy-back on telehealth and telecare applications, such as monitoring and alarms, which are becoming increasingly complex and capable of collecting more and more nuanced data and thus benefitting from broadband.

All these forms of partnership working require organisational, institutional and cultural change. Thinking first about 'internal partnerships', it is important that technologists responsible for introducing new technologies and applications to an organisation take into account the views of end users and tailor their approaches to users requirements. So, for example, we talked one technology provider which had created a 'user forum' where care

staff contributed to product design. This approach could be extended to users and their families. Turning to 'external partnerships', here the barriers to effective inter-organisational co-working are already well-documented and policy and practice innovations such as personalised budgets and 'patient journeys' have been designed, in part, to overcome this. In theory digital technology could also contribute here. However, as noted in this report telehealth (local health services) and telecare (local authorities) tend to be run by different organisations and with different budget lines and different priorities. To build in yet an additional layer of budgetary complexity, so as to reward other intermediaries, such as social housing organisations may be complex. Furthermore, these interventions tend to be evaluated on health outcomes, notably savings on admissions. New evaluative tools are required to consider how 'digital participation services', which seek to improve the lived experience of people in home and close to home settings, thus potentially helping to underpin and maintain social networks and enriching lives in order to reduce social isolation (Wigfield et al, 2012) need to be developed. Furthermore work is needed to join up participation services with more established areas of telehealth and telecare both functionally and in respect of distribution of rewards across organisations, with efficiency savings and improvement rewards being appropriately apportioned.

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