Keeping older adults 'connected': Some public policy implications of the quest for digital inclusion with reference to Canada and England

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Introduction

Economies around the world are becoming increasingly reliant on electronic structures and services – the success of which depends on citizens being competent with conducting their day-to-day activities using the Internet. Using the Internet enables people to access an ever-increasing range of information, goods, services, entertainment/leisure, educational and social networking opportunities. The Internet forms part of the array of Information and Communications Technologies (ICTs),which include telephony, cable, satellite and radio, as well as digital technologies such as computers, information networks and software available to people (Damodaran and Olphert, 2006, p.6).

For a number of years there has been a growing commitment to the online delivery of public services in a number of advanced capitalist economies, including the UK. For the move to the online delivery of public services to be successful it is dependent on citizens developing a level of competency in using ICTs that enables them to sustain Internet use, including their online access to public services (Lindsay et al, 2008; Sinclair and Bramley, 2011). The strategy for the online delivery of public services has been accompanied by a push to reduce the 'digital divide', that is those who have access to ICTs and those who do not. The digital divide has tended to be viewed as dichotomous; one is either connected or not connected (Selwyn, 2004, 345). But recent studies have presented a more nuanced understanding of the divide, because the sustainability of ICT use is critical to understanding the digital divide (ibid; Rice and Katz, 2003).

A number of factors have been found to be associated with low retention rates of Internet use, ranging from socioeconomic status to health. Katz and Aspden (1998) reported that Internet non-sustainers were younger, poorer and less well educated than were sustainers. Surprisingly, they reported that teenaged users appeared especially likely to be non-sustainers. Recently, we showed that individuals reporting at least one activity limitation (e.g., mobility impairment or chronic pain) were more likely than those without limitations to have given up using the Internet (Young et al., 2011).

In this paper I draw on research funded in the UK by the New Dynamics of Ageing Programme (NDA), and in Canada by the Canadian Institutes for Health Research (CIHR), which has focused on ways in which older adults can be helped to continue to use ICTs. Much previous research has focused on the differences between those who have access to the Internet and those who do not (Light 2001; Selwyn 2002; Selwyn 2004; Warf 2001), which is a global issue (Chakraborty and Bosman 2005; Alicar 2011). While long-term adoption of Internet use provides an important indicator of online engagement, little is known about the factors that support sustained use and those that discourage it. Our research is designed to fill this gap in the literature. Sustainability of Internet use we argue represents another disparity, since there are barriers to its use that go beyond issues of access. In this paper I critically reflect on the implications of the commitment to Egovernment on older adults (aged over 50 years) and sustaining Internet use. After this introduction the paper is divided into 3 further sections. Section two presents the academic and policy context. This is followed by the findings of the Sus-IT project. The final section presents some concluding comments.

Academic and Policy Context

In this section I examine the changing policy context for increasing the number of people accessing the Internet and the delivery of public services online in England, followed by a review academic research.

In England there has been a sustained commitment first under the various New Labour administrations (1997-2010) and now with the Coalition Government (2010-to date) to E-government. E-government has been central to the reform and modernisation agenda for public services, and this strategy concerned services whether delivered nationally or more locally (Birch et al, 2003; DTI, 2005). Directgov, the government's portal for online public services was launched in 2004, and by 2005 75% of Government services were available online (DTI 2005 p 19). Writing in 2005 Paul Foley and colleagues commented that the focus was on modernising government via delivery and service outputs, rather than considering what might be most useful for users, including the digitally excluded.

Under New Labour there was investment in a network of online centres (DTI 2005, 18), and the Digital Challenge (DC10) competition which resulted in a collaborative body of ten local authorities (including Sunderland in North East England) and their partners dedicated to unravelling social inclusion issues by promoting the effective roll-out of technology-based initiatives (http://www.sunderland.gov.uk/index.aspx?articleid=2687). DC10 had a local focus, with projects and initiatives developed and delivered through partnerships of public, private and community sector organisations, all driven by local needs. The perspective of the users of technology was embedded into projects and initiatives supported by DC10.

Upon taking power in 2010, the Coalition Government undertook a strategic review of E-government, and as a result of that review responsibility for it moved from the Department of Work and Pensions to the Cabinet Office, so it has moved to the heart of Government. Directgov is now overseen by the Efficiency Board, and the Government Digital Service (GDS). The vision of GDS remains one of transformation in the way people access government information by using digital technology to deliver services. In 2010, it was reported that Directgov received up to 29 million visits a month, and that in 2011 the number was 31 million. In February 2012, the new Gov.uk website was launched, and it can be used to access a range of services from taxing cars, to search for jobs, and to find out about benefits (http://www.direct.gov.uk/en/index.htm accessed February 2nd 2012).

Directgov's move to the Cabinet Office also signifies the fact that the online delivery of public services is also seen as a vehicle for making efficiency savings. Speaking in 2011, Cabinet Office Minister Francis Maude said the Coalition was, 'determined to offer world class digital products that meet people's needs and offer better value for taxpayers' money' (http://digital.cabinetoffice.gov.uk/2011/12/08/new-home-for-gds/).

The agenda to make public services digital by default is heavily influenced by the UK Digital Champion Martha Lane Fox (http://www.cabinetoffice.gov.uk/resource-library/directgov-2010-and-beyond-revolution-not-evolution). Lane Fox was appointed in 2010 and she feels that moving to digital services is essential for government to save money, to realise social benefits, and to move out of the current economic situation. Ultimately she argues this would mean shutting down other more traditional and more expensive ways of accessing government services, such over the telephone or in writing (http://www.publicservice.co.uk/feature_story.asp?id=18706). She is working specifically on initiatives such as the Race Online 2012 campaign, the transformation of Directgov as well as sitting on the Efficiency Board which oversees the Coalition Government's efficiency and reform programme. Her 'mission' is to get as many of the 10 million adults who have not used the Internet to do so (ibid). In addition to Race Online across England UK online currently coordinates a network of network of 3,800 community based UK online centres that amongst other things help people get online and make the most of online life (http://www.ukonlinecentres.com/centresearch/?gclid=CJK_k-jZ-q4CFWwntAodezipwg). These

centres have a local focus, and rely on the commitment of volunteers to help others integrate technology into their lives.

With reference to academic debates, Manuel Castells (2001, p. 247) has argued that ICTs exacerbate existing cleavages to existing sources of inequality and social exclusion. Cyber space can act as an annex of social space, consolidating and reinforcing social practices and cultural norms, and as such digital exclusion can represent a dimension of social exclusion.

In recent academic work it has been reported that providing ICT access alone is not always enough to bridge the digital divide as social capital (such as skills and education) is also needed to engage with technology (Lindsay et al 2007). This view is echoed by Sinclair and Bramley (2011) who have emphasised the ways in which technology is socially embedded in the tasks of everyday life. In a similar vein Shove and Pantzar (2005) argue that artefacts and forms of competence only have meaning and effect when integrated into practice, and that it is through the integrative work of 'doing' that elements are made animate, sustained and reproduced. When that stops 'fossilisation' sets in. In their study of ICT use (mobile phone and the Internet) in two contrasting communities in Newcastle upon Tyne Crang and Graham (2005) found that for some people ICT use was 'episodic' while for others ICTs had become integrated into everyday life, their use was 'pervasive'.

As part of the ESRC E-Society programme in the UK Lindsay et al (2008) worked with 108 older adults who were provided with free home computers and a one year broadband subscription. Half the sample received ICT support in the form of 'facilitated learning' while the other half received no support. Their study found that many participants first needed to overcome their fear of the technology before they could learn how to use it effectively. Significant differences were recorded between those who received ICT support and those who did not six months after being involved in the project. Over half of those who received ICT help subsequently searched for information online on public authority websites, compared with 28.3% of those who had not received help (ibid, 326). They concluded that older adults first needed some form of encouragement and then a compelling proposition linked to their own lives to help overcome their fear of turning a computer on and going online (ibid, 323). In 2009, the UK senior's charity, Age Concern/Help the Aged commissioned Opinion Leader to explore the barriers and enablers to reducing digital exclusion, and they reported that improving online access by older people could be tackled by such things as awareness raising, training, ongoing help and subsidies.

Sustaining Internet use

In the remaining part of this paper I draw on work which was funded under the British New Dynamics of Ageing Research Programme (NDA, http://www.newdynamics.group.shef.ac.uk/) and the 2009 Canadian Institutes of Health Research-Institute of Aging (CIHR). We draw on research conducted as a part of the Sus-IT Research Project (Grant Number RES-353-25-0008), led by Leela Damodaran and Wendy Olphert at Loughborough University, UK (Olphert and Damodaran, 2009) and the Canadian Institutes of Health Research-Institute of Aging (Funding Reference Number CUK 103282). Teams in the UK and Canada are exploring the barriers and facilitators to digital engagement by adults aged over 50 years (who can represent up to three generations of the population). The particular focus of the project is on understanding the problems and circumstances which might cause people to 'disengage' or give up using those ICTs, such as computers, the Internet and mobile phones, and ways of helping older people engage and stay engaged with digital technologies as they age.

As part of the Sus-IT project in the UK we are working interactively with community groups, largely in the English Midlands. We are undertaking a suite of activities including the delivery of a questionnaire based survey of digital engagement; a survey, which in recognition of the NDA programme's participatory ethos, aims to involve and empower our research participants (Hardill and Olphert, in press). The purpose of the survey therefore is to stimulate debate and engage older adults with our research agenda, rather than to gather a statistically representative sample. We

chose to focus on a range of ICTs and applications that were already part of everyday life (such as digital televisions and mobile phones) as well as computers and the Internet, in order to interest and be relevant to a wide range of participants. And rather than foregrounding the technology we have focused on in what ways the technology is used for everyday tasks, and the challenges this poses.

With one East Midlands local authority, with low levels of digital engagement, we worked with public service providers and community groups to look at ways of increasing the number of older adults accessing public services online. [1]Working with 125 older adults we asked to what extent they accessed public services online, and only a minority (15 %, 16) recorded that they were confident in for example accessing health services online (such as booking a hospital/doctors appointment), a further eight (7.7%) were not confident, while 33.3 % (35) had no desire to access services online, but a sizeable minority, 30 (28.6%) wished they could do so.

With a subset of these participants we have undertaken qualitative life history interviews to understand more holistically their ICT use (including using the Internet to access services) and the barriers to sustaining digital engagement. For ICTs to be part of the architecture of everyday life users need to develop a level of confidence to regularly access information and advice online for a number of aspects of everyday life. We have built on the work of Shove and Pantzar (2005) and Crang and Graham (2005) (reported above) to develop a framework for understanding the ICT use of older adults through their scale of implication in everyday life. The framework includes:

- *Pervasive use* (confident ICT users; ICTs used daily forming an integral part of the architecture of everyday life; networked PCs/lap tops used to undertake a wide range of everyday tasks; such as for communicating with other people [via Skype/email]; as a source of information; for organising everyday life, including searching for information and services; in some cases mobile phones are used to access the Internet);
- *Episodic use* (sporadic use of ICTs, while some said they 'coped' using them, others were 'scared' of using them; ICTs not 'always on'; limited range of applications used);
- *Fossilisation* (episodic ICT usage declines to complete cessation).

As the particular focus of Sus-IT is on understanding the problems and circumstances which might cause people to 'disengage' or give up using the Internet and ICTs, *fossilisation* captures the process by which ICT usage, for a variety of reasons, declines, to the point of complete cessation (Damodaran and Olphert, 2010). We first draw on three indicative case studies to illustrate the challenges of engaging with ICTs, including the Internet and sustaining this engagement, with particular reference to accessing public services.

Ken (67 years) is a retired professional worker, who used ICTs as part of his paid job, and they have long been part of his everyday life. He now volunteers as an IT tutor with a local community group, who run structured IT classes. When he was interviewed in 2010 he recorded the positive impact ICTs have on his daily life, he values in particular his laptop and an iPhone, which he uses for various tasks, including searching for information. The iPhone allows him to access information when outside the home. For Ken looking for information online is a natural task, an obvious first step. Technology doesn't scare Ken indeed, 'technology exercises your brain cells...I do see my friends becoming older, sit [sic] at home watching daytime TV and they are capable of doing more... I have learnt a lot of things [using technology], developing my knowledge, which links in with keeping my brain active'. Ken shares his IT skills and confidence with others, and demonstrates how everyday life can be enriched by ICTs; indeed he provides examples of how cost savings can be made by using the Internet.

Betty's (83 years) husband died a few years ago, and she lives independently in the house they retired to. Her brother and sister have also died recently, but a niece lives close by, whom she visits

[1] This was facilitated by levering extra funds as part of the ESRC Festival of Social Science 2010.

weekly. She tries to get out of the house every day, and attends a number of groups, including the Over 50 Forum and various Church groups, which she attends with friends. At the time of her first interview Betty's only daughter lived 200 miles away, but she then moved abroad because of her husband's work. Over the time we have worked with Betty she has integrated technology into her life much more, and this was prompted by an incident that happened in winter 2010-11. She was meeting a friend in London and they missed each other at a large railway station. She had her mobile phone with her, but couldn't remember her friend's phone number nor could she remember how to find her friend's phone number in the mobile phone address book. Although she eventually sought help in accessing the number in the meantime her worried friend had called the police, who in turn contacted Betty's family. The incident made her realise that ICTs are useful.

After the railway station incident Betty asked her niece, whom she meets weekly, to teach her how to use it. As she has problems remembering things she has written down simple instructions and practices every day. At the time of her interview (February 2011) she had begun getting help from her niece, and by April 2011 she had become more confident and adept in accessing her mobile phone address book, and had begun sending and receiving texts. In the summer of 2011 her daughter moved abroad, and Betty was given an ipad, and again with one-to-one support she has gained sufficient confidence to communicate with her daughter in Hong Kong. She finds the layout of the ipad very comfortable, and while she remains an episodic mobile phone and ipad user, following one-to-one support and practice, she has gained confidence, and ICTs have become more embedded in her everyday life. Betty sees the utility of ICTs, but she needed one-to-one support to gain the confidence to use them independently. Through the ipad she thinks she can be more adventurous including searching for information, even public services.

In contrast Anne is a 90 year old widow, who despite declining health and mobility, still lives independently, albeit with the support of carers. Anne retired when she was 70 after a long career as a chiropodist. Her only son lives about 30 miles away, but rarely visits. Anne is very lonely as she has few visitors apart from her carers, cleaner and hairdresser, so she is a member of a number of community groups, which she makes herself attend so that she has regular social contact. She managed to keep driving until the winter 2010-11. She has found giving up the car really hard as she has lost some her independence, the ability to move outside the home without the help of others. During 2011 with the help of a local charity Anne attended a computer course and has been given a computer. She desperately wants to use the Internet to access information, especially checking out what offers are available at the local supermarket so she can give her carer a shopping list that includes the latest offers. But she is struggling to remember how to use the computer, combined with problems pressing the right keys because her hands shake. No one who calls to see her has the skills to help her use her computer, yet with support her life could be enriched, and she would end her digital exclusion. The challenges that Anne is facing in engaging with technology we have examined quantitatively as part of the Sus-IT work programme in Canada.

In Canada, we have examined the characteristics of non-sustaining Internet users who reported at least one activity limitation to the 2006 Canadian census (Young et al, 2011). Non-sustainers are past users who have not used the Internet during the last 12 months. We analysed data from the respondents of the 2006 Participation and Activity Limitation Survey (PALS 2006) using descriptive analyses. PALS 2006 surveyed adult Canadians with at least one activity limitation. The demographic and clinical profiles of those who had given up using the Internet (non-sustainers) was compared to that of people who had continued using the Internet (sustainers). While nearly half of all respondents reported having used the Internet in the past, 9.8% of those had not used it in the past 12 months and were designated 'non-sustainers'.

Individuals who were older (60+ years of age; 44.4%), were in the lowest income category (53.8%), and lived in rural communities (28.1%) were over-represented in the non-sustainer group compared to those who had sustained Internet usage. The most commonly reported limitations were pain (68.8%), mobility (67.5%), and agility (58.3%), although overall the Internet usage and dropout rate

were not markedly different between conditions. More than one-third of non-sustainers reported taking five or more prescribed medication on a daily basis, compared to less than one-quarter of sustainers. We concluded that compared to the general population, a high percentage of people with activity limitations report they have not sustained their Internet usage. While the clinical profile of this group is not markedly different from those who continue to use the Internet, non-sustainers are more likely to be older, have less income and live in a rural community. In the following section we discuss the implications of the E-government agenda for these non-sustainer older adults.

Discussion

In this paper I have focused on some of the implications of the E-government policy agenda in England, especially the push for online access to public services with specific reference to older adults. For the move to the online delivery of public services to be successful it is dependent on digitally excluded citizens getting online and those who are already Internet users crucially staying connected and maintaining a level of competency in using ICTs that sustains their Internet use. Schemes like Race Online are important to get people connected, equally important is the recognition that Egovernment is dependent on citizens sustaining their use of the Internet to access information, advice and services.

National strategies and campaigns are important is raising the issue, such as Race Online, but when it comes to supporting people to sustain ICT use, and access services this happens locally, and requires one-to-one support, from family and friends or local drop in centres. Such support is essential to embed ICTs - including the Internet - into the practices of everyday life. Local drop in centres involve partnership working between the statutory and non-statutory sector, and local residents as volunteers (Hardill and Dwyer, 2011). In Newcastle upon Tyne, for example, the Quality of Life partnership, which involves the Elders Council, local charities and the statutory sector are prioritising digital inclusion. They are supporting a range of initiatives include a weekly Computer Drop In for older people at the Central Library, which is run by a team of volunteers from the senior's charity AgeUK Newcastle as well as working with an Apple store to run older people's workshop. But at the local level the social capital (skills, education, ICT capacities and capabilities) required to support others engaging with technology is variable.

On its website, Industry Canada highlights why access to broadband Internet services is also a key part of the infrastructure to support E-government, 'Broadband internet access is viewed as essential infrastructure for participating in today's economy, as it enables citizens, businesses and institutions to access information, services and opportunities that could otherwise be out of reach' (Industry Canada, 2011). In the UK a similar message is being given (http://discuss.bis.gov.uk/bduk/) but the recent announcement in the Budget (March 2012) by the Chancellor of the Exchequer concerning improving broadband delivery focuses on key urban areas (such as Birmingham, Bristol, Leeds and Bradford, Newcastle and Manchester and the UK's four capitals, London, Cardiff, Edinburgh and Belfast) will receive ultra-fast broadband funding is focusing delivery in urban as opposed to other urban area or rural areas across the UK (http://www.cable.co.uk/news/budget-confirms-ten-cities-set-for-ultra-fast-broadband-cash-801323663/). The higher speeds available in broadband provide a wholly more satisfactory user experience than dial-up. Over time as the data transfer associated with web pages increases we should expect an increase in frustration with Internet use via dialup or lower-speed broadband.

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References

Age Concern/Help the Aged (2009) *Introducing another World: older people and digital inclusion A report of qualitative research on the barriers and enablers to tackling digital exclusion in later life* London, Age Concern/Help the Aged

Alicar, A. (2011) Exploring the Aspects of the Digital Divide in a Developing Country. Issues in *Informing Science and Information Technology* 8: 231-234.

Birch, D. (2003) *Local e-Government: A survey of local authorities* Office of the Deputy Prime Minister: London

Canadian Radio-television and Telecommunications Commission. 2011. Broadband Report. Ottawa, Ontario: Canadian Radio-television and Telecommunications Commission.

Castells, M. (2001) *The rise of the network society: networks and identity* Blackwell, Oxford.

Chakraborty, J. and M. M. Bosman (2005) Measuring the Digital Divide in the United States: Race, Income, and Personal Computer Ownership. *The Professional Geographer 57* (3): 395-410.

Crang, M. and Graham, S.D.N. (2005) Multispeed cities and the logistics of living in the Information Age Project report ESRC Swindon accessed 24 April 2011 Durham Research online (http://dro.dur.ac.uk)

Damodaran, L. and Olphert C. W. (2006) *Informing Digital Futures: Strategies for Citizen Engagement*, Springer, Dordrecht.

Damodaran, L. and Olphert, C.W. (2010) *Sustaining Digital Engagement: Some Emerging Issues***.** Procedings of Digital Futures 2010, Nottingham. 10-12 October 2010. Available at: https://www.horizon.ac.uk/images/stories/f50-Damodaran.pdf

DTI (2005) *Connecting the UK:the Digital Strategy* HMSO, London

Foley, P., Alfonso, X., Fisher, J. and Bradbrook, J. (2005) *eGovernment: reaching socially excluded groups?* London, Idea report 9/5

Hardill, I. and Dwyer, P. (2011)Growing old in rural England: some challenges of delivering village services in the mixed economy of welfare paper *Journal of Social Policy,* 40,1,157-72

Hardill, I. and Olphert, W. (in press) Staying connected: Exploring mobile phone use amongst older adults in the UK *Geoforum*

Industry Canada. Broadband Canada: Connecting Rural Canadian. 2011; Available at: http://www.ic.gc.ca/eic/site/719.nsf/eng/home. Accessed April 1, 2011.

Katz, J.E., Aspden, P. (1998) Internet dropouts in the USA: The invisible group. *Telecommunications Policy* 22(4/5):327-339.

Light, J. (2001) Rethinking the Digital Divide. *Harvard Educational Review* 71 (4): 709-734.

Lindsay, S., Smith, S., and Bellaby, P. (2008) can informal e-learning and peer support help bridge the digital divide? *Social Policy and Society* 7:3, 319-30

Selwyn, N. (2002) 'E-Stablishing' an Inclusive Society? Technology, Social Exclusion and UK Government Policy Making. *Journal of Social Policy* 31 (01): 1-20.

Selwyn, N. (2004) Reconsidering political and popular understandings of the digital divide. *New Media and Society*, 6,3, 341-62

Shove, E. and Pantzar, M. (2005) Fossilisation *Ethnologia Europaea - Journal of European Ethnology,* **35**, 59-63.

Sinclair, S. and Bramley, G. (2011) Beyond Virtual Inclusion – Communications Inclusion and Digital Divisions *Social Policy and Society*, 10 1-11

Warf, B. (2001) Segueways into Cyberspace: Multiple Geographies of the Digital Divide. *Environment and Planning B: Planning and Design* 28: 3-19.