

Sus-IT – Sustaining IT use by older people to promote autonomy and independence

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The rationale for the project - why is this research needed?

Growing numbers of older people are now using computers and the Internet for a wide variety of purposes and are enjoying the benefits of being digitally engaged. However evidence suggests that some older people do not, or cannot, sustain their IT use. As yet there has been little research to understand the factors which could lead to such 'digital disengagement'. The aims of Sus-IT have been to address this gap by generating new knowledge and understanding of the challenges facing older computer users, how these challenges affect their ability and motivation to continue using their computers, and what can be done to help older people to remain digitally engaged.

Approach to the research

To address these complex sociotechnical research questions successfully requires knowledge and expertise from a range of disciplines and perspectives. The project has been structured into a number of different workpackages, each of which has involved teams of researchers with complementary skills and from different disciplines, who have focussed on a particular aspect of the research problem. Our multidisciplinary research consortium comprises 22 researchers from eight UK universities, with expertise in participatory and user-centred design, psychology, gerontology, sociology, computer and information science, human-computer interaction, and learning technologies.

Older people themselves have been central to the research – more than 1000 older people from diverse backgrounds across the UK have participated in our project in some way. Key research users (e.g. organisations representing older people and those providing services and products to be used by older people) have also been included as collaborators in the research. The project has been guided by an Advisory Group and supported by a number of external consultants.

To achieve the project objectives, partners have applied an innovative combination of methods, tools and techniques with the aim of engaging older people and enabling them to shape and participate in the research. Methods and techniques used have included a survey of digital engagement, problem-solving sessions and workshops, co-design 'sandpits', interactive forum theatre, and testing and evaluation of software and product concepts developed on the project.

Key findings from our research

The Sus-IT digital engagement survey has involved approximately 750 participants aged over 50 from across the UK. Findings show that many older people are frequent users of a range of digital devices, including the computer/laptop, mobile phone, tablets and eBook readers. A large proportion of respondents report using a computer every day or several times a week. Survey results also show that although small numbers of participants use a tablet or a mobile phone to access the internet, a very high percentage of those that do use their device every day or several times a week to access the internet.

The most frequent challenges reported by older computer users were:

- a lack of technical skills/knowledge to do specific tasks or to solve problems when they occur;
- understanding technical 'jargon';
- remembering things – for example passwords, or all the steps in a process;
- physical difficulties – for example using the mouse or keyboard, or seeing the screen;
- not knowing how to deal with computer security, especially how to deal with/prevent unwanted content such as viruses, pop-ups and spam.

We found that older people value very highly the benefits and independence that computer use gives them, and they are often exceptionally tenacious in trying to remain digitally connected – persisting in the face of many obstacles such as those listed above, and often without awareness or use of existing aids to accessibility. When disengagement occurs it is often a gradual process, rather than a single event, and usually results from a combination of factors – particularly changes in physical ability, memory, support, and/or technology problems/changes. The availability of help and support is of paramount importance to sustaining connection. More than a quarter of respondents said that support from other people was the most important thing helping them to use computers effectively. Help and support is mostly gained informally from family and friends - formal learning and support provision is very varied and 'patchy' across the UK.

Outputs from our research

Our research has generated new understanding of the needs of and challenges faced by older computer users, and of potential solutions. Key outputs include:

- a conceptual model of the risks to sustaining digital engagement for older people (see Briefing Paper 1 for more details);
- an innovative suite of tools, methods and guidance for working collaboratively, participatively and ethically with older people in research and in the design and development of ICT-based products and services (see Briefing Papers 2 and 3 for more details) ;
- an 'adaptivity framework' which has been applied to develop prototype software that helps to address problems encountered by people experiencing age-related changes in vision, dexterity and memory (see Briefing Paper 4 for more details);
- a design catalogue of 40 product concepts aimed at the ICT industry to stimulate new product development for the older market (see Briefing Paper 4 for more details);
- a user-generated strategy for provision of sustainable, community-based ICT learning and support for older people and a blueprint for design and implementation of such centres, with exemplars (see Briefing Paper 5 for more details).

Over 50 publications have been produced by the project team which document these outputs.

Policy implications and future impact

The issues surrounding sustaining digital inclusion in older age are multi-faceted and complex – however addressing these will have significant benefits not only for older people but also for the economy and society. The range of potential solutions is diverse, with implications for ICT policy and strategies, as well as the design and delivery of ICT based services and products. Adoption of the solutions requires a coordinated change management approach involving a wide range of stakeholders. To promulgate the outcomes from Sus-IT and to achieve their implementation, project members are working with key players responsible for the delivery of government services and policy, commercial and third sector organisations and developers of software, equipment and ICT based products and services. A forward programme is underway as part of KT-EQUAL (a programme which aims to ensure that the results of extensive research are translated into real, tangible benefits for older people themselves).