S21 -

The role of User-Centred Design (UCD) in support of Ageing in place: assistive devices, social platforms, service UCD and robotics to enhance wellbeing for older adults

Symposium Abstract

Within the UK and all developed countries, our ageing populations represent an unprecedented, though predicted, demographic change. Our success in extending life expectancy presents us with increased demands for health and social care, within the context of severe financial constraints – a so called 'wicked problem'. UCD offers an intrinsic people-centred approach and the ability to bring together multidisciplinary perspectives necessary to frame and develop potential solutions to this type of difficult and complex problem. UCD methodology enables stakeholders' alignment, requirements elicitation, inclusive participation and creative thinking. The symposium will focus on discussing how a UCD approach to social and technological innovation may offer real life solutions to improve the quality of life of older adults in their home, for mobility, for social connection and friendships. This symposium aims to bring to the fore UCD interventions made to improve the wellbeing of those who are ageing, with the intent to highlight research methodologies that would benefit other non-UCD researchers. In addition, the participation of older adults in the design research will demonstrate how ageing could become an asset when considering services, systems and products' improvement. The symposium brings together a number of contributions that range from product, to system and technology development; the common thread being the involvement of the older adults as participants or co-designers.

S21.1 -

Community led-care to promote and sustain independent ageing: a co-designed and co-produced scheme

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Abstract

There has been an increasing reduction in social care funds to support independent living for older adults (NHS Digital 2016). In parallel, few residential care facilities have gone burst as funds received from local authorities have been unable to cover the real costs of residential care. Older adults, when still mobile and independent, prefer to live in their home and to stay in their community as familiar physical and social contexts represent security and comfort (Després et al. 2005). Informal care often is the only form of care older adults can access, and this makes a huge contribution to the total care provided to older adults in the UK (Buckner et al 2015). The care and support provided by family and friends varies from mental and psychological help to personal hygiene and financial management. In informal care the regulations applicable to safeguard older adults and to uphold the quality of care are weaved. In this complex circumstances Give&Take Care (G&TC), a Community Interest Company (CIC) incorporated in 2015, has sought the opportunity to innovate and deliver care that is user-centred and co-

produced (Spinelli 2017). G&TC started as a timebank, but it is evolving to become a more inclusive social lab that enable participation, skills development and community cohesion. The paper presents how G&TC is positioned against other community-based initiatives, the design thinking approach taken to support the evolution of the CIC and the learning so far gathered after 40 months of experimentation in four community nationally.

S21.2 -
An introduction to User Centred Design

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Abstract

User Centred Design (UCD), is a person-centred approach in which a range of tools (eg. visualizations, form models, and story boards) help participants fully engage in the development of a new product, software or service. The process begins with a 'Design brief' which documents information about the end user requirements. The development team will then engage directly with end users and stakeholders to develop a 'Design Specification' documenting the essential requirements. It contains critical constraints, essential and 'nice to have' requirements and is used as a reference when assessing the output of subsequent stages.

The 'Concept design' phase focuses on ideas generation with the end users and stakeholder, often using concept illustrations and physical mockups. The process is iterative with concepts being adapted and modified in response to the user feedback. Several potential solutions may be developed in parallel, until a product emerges that most closely matches the design specification.

Prototypes are then manufactured for detailed user testing and trials. These should integrate all the functionality and appearance as closely as possible to the final product. There are issues around how to measure the effectiveness of the designs with vulnerable user groups, for how long and whether a to use a laboratory, home, or simulated environment. Real-life environments are generally best and, when working with people with cognitive disabilities, this is generally in their own home However, this is balanced by the practical problems of introducing prototype technology into an uncontrolled environment.

S21.3 -
Development of a client-centred prompting tool for supporting everyday activities in individuals with mild to moderate levels of cognitive impairment due to dementia

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