Let’s Spend Some Time Together: Exploring the Out-of-Box Experience of Technology for Older Adults

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ABSTRACT

Designing technology for older people has traditionally focused on compensating for the decline in abilities that occurs with ageing. The research described in this paper followed a more holistic approach, focusing on the broader user experience of technology in the home environment. Specifically, this research was concerned with the very first interactions with a new product known as the Out-of-Box Experience (OoBE): how older people acquire their technology, how they unpack it, and how they set it up. This paper describes two exploratory studies that used a design ethnography approach to build a rich picture of the OoBE of new technology for older adults. The findings indicate that older people experience varying benefits from the involvement of other people during the OoBE of new technology. Lastly, the paper discusses the value of social interaction in this context and offer recommendations on the design of the OoBE of technology to engage older adults.

KEYWORDS
Co-Experience, Inclusive Design, Older Adults, Out-of-Box Experience, Technology, User Experience

INTRODUCTION

The growing ubiquity and capability of technology has fundamentally changed the way we work, the way we form and maintain relationships, and the way we manage our everyday lives. This central role of technology, experienced today and envisaged for the future, is fuelling a concerted effort to achieve widespread digital participation. Given that older adults represent the fastest growing demographic worldwide, this effort has largely focused on making technology appropriate for the ageing population.

Addressing this challenge within the HCI community has traditionally been dominated by a focus on the characteristics that set this age group apart from younger generations, such as the decline in...
their abilities and their inexperience with technology. While this body of work has contributed to establishing a baseline for technology that is accessible and usable for older people, in recent years there has been a noticeable departure from such reductionist approaches (e.g. Lindley et al., 2008; Rogers et al., 2014; Sun et al., 2014). In a review of the literature, Durick et al. (2013) stress the importance of understanding the lived experiences of older people over designing interactive devices that compensate for the assumed needs of this user group. This approach offers a promising pathway to more meaningful and inclusive designs for older people.

With evidence that many of the difficulties that older people experience with computers relate to complicated documentation, too much jargon, and inadequate support for inexperienced users (Goodman et al., 2003; Lindsay et al., 2012), it seems opportune to better understand these initial experiences of technology. User experience design increasingly considers user needs across multiple touchpoints, including discovering, ordering and installation of technology (McCarthy & Wright, 2004). The recent growth of service design as an academic discipline and professional practice reflects this trend (Zomerdijk & Voss, 2010; Sangiorgi & Prendiville, 2014). The research described in this paper was concerned with gaining a contextual understanding of older adults’ initial experiences with new technology, which include acquisition, unpacking, set-up, assistance, and first use. This phase, known as the Out-of-Box Experience (OoBE), is critical because it can determine users’ acceptance of a new product (McMurtrey, 2001; Gilbert et al., 2005; Serif & Ghinea, 2005) and negatively influence how they perceive manufacturers and service providers (Fouts, 2000; Kowalski 2001).

This paper details two qualitative user studies. The first study aimed to investigate older adults’ initial experiences with new technology, using an adaptation of the Technology Biography method (Blythe et al., 2002). Findings from this study indicated that other people were often involved in some or all of the stages of participants’ OoBEs. The second study evolved in response to the need to further explore the desire for social interaction during product interaction, and used a combination of cultural probes (Gaver et al., 1999) and semi-structured interviews with a smaller subset of participants from the first study. The research presented in this paper extends HCI research on older people and technology by providing new insights about the context of their OoBEs. By drawing on the combined findings of these studies, the paper provides recommendations to guide the design of OoBEs that support and engage older people to use new technology.

RELATED WORK

Improving technology use by older adults has been approached from different perspectives and, consequently, there are various points of view across the literature. HCI research has been criticised for focusing too narrowly on understanding the barriers experienced by older people regarding technology adoption and use, which has contributed to a stereotyped view that people over a certain age are afraid or unable to use technology (Lindley et al., 2008; Rogers et al., 2014; Sun et al., 2014). In reality, older adults’ computer use is influenced by a combination of factors that relate to the person, their behaviour, and the environment (Wagner et al., 2010). For instance, research has focused on the effect of cognitive abilities, attitudinal variables such as self-efficacy and computer anxiety (Czaja et al., 2006), and socio-economic factors such as income and the availability of broadband (McMurtrey et al., 2012). It is important to recognise that older adults are as diverse as any other age group, even though ageing is likely to increase differentiation due to changes in abilities and the effect of life experience (Fisk et al., 2004).

The reasons given by older adults for not taking up technology are varied and complex. Research has found that many people who reported problems using a computer attributed them to complexity and jargon, rather than physical difficulties (Goodman et al., 2003; Morris et al., 2007). This view is echoed by Czaja et al. (2006) who identified the increased complexity of systems and technical manuals as constraints on the adoption of new technology. However, there is evidence to suggest that older individuals are willing to invest in using new technology provided the outcomes are perceived
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