

HCI and the Older Population

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Workshop website: http://www.computing.dundee.ac.uk/projects/kit/British_HCI_2005/Workshop.asp

ABSTRACT

This paper describes a workshop on HCI and the older population, which will provide a forum for the presentation of current work and a platform for discussing key challenges in this area. HCI issues for older people are extremely important in the light of the rapidly ageing population in developed countries and the potential offered by computerised technology, a potential that can only be fulfilled if the technology can be used effectively by its target user group. In particular, the workshop will focus on questions of the identity of the older population and what makes this group distinct (or not) from the rest of the population. With the rise of approaches such as inclusive design that seek to design for as wide a group as possible, it is important to examine the place of designing specifically for the older population. This workshop aims to build up and support the community in this area, encouraging communication and addressing key issues together.

1. TOPIC

The proportion of older people in developed countries is rapidly increasing [1]. At the same time the use of computerised technology in such countries is becoming more and more a part of everyday life. It is therefore increasingly important to consider how the design of such technology can meet the needs, wants and requirements of this important user group.

What is more, many older people have substantial amounts of disposable income and are not particularly averse to using new technologies, if those technologies are appropriately designed and introduced (e.g., [2]). The older population therefore presents a sizeable market opportunity for the IT industry. In addition, the increasing proportion of older people will lead to a significant increase in the numbers needing support for daily activities and in those needing long term care. Technology presents one important avenue for providing such support.

However, this technology is only going to be effective if it meets actual needs or desires in appropriate ways and can be used effectively. The development of such technology therefore needs to be carried out within the context of HCI and HCI issues.

However, HCI for the older population faces some particular challenges. Compared with younger user groups, it is argued that older people often have different needs and wants when it comes to technology, requiring different types of applications and devices. Ageing is also often associated with changes in sight, hearing, mobility and other abilities, which could affect an older person's technology use. In addition, older people often come from different backgrounds and experience than typical user groups, which may affect their expertise with and approach to items of technology.

This workshop aims to build up and support the community in the area of HCI for older people, providing a forum for important issues to be discussed, promoting discussion of HCI for the older population on a wider level and drawing together an often scattered research community. It builds on previous popular workshops held at HCI 2002 and HCI 2004 [3,4].

1.1 Specific Themes

We will discuss some specific themes within HCI for older people, focusing on questions of the identity of the older population and what makes this group distinct (or not) from the rest of the population. Differences, such as those described above, may be less significant than similarities and it may be the case that simply designing well for the population as a whole will produce good designs for older people too. With the rise of such inclusive design approaches that seek to design for as wide a group as possible, it is important to examine the place of designing specifically for the older population. We need to address questions such as:

Can we identify key characteristics of the older population that set it apart from other groups? What are they and how do they impact on design?

Is designing for older people different from designing for the population as a whole? If so, how? Are there different methods that should be used, different methodology that should be followed or adaptations that should be made to existing methods?

Do inclusive design approaches produce effective products for older people? How far can they go? Is there a point where a different approach is needed? If so, what should this approach be?

How can older people's needs be considered most effectively within an inclusive design framework?

Can themes and ideas from inclusive design be incorporated effectively when designing for older people in particular?

2. PROCEDURE

2.1 Advance Participation

We will ask those interested in attending the workshop to submit short papers (2 pages) on their work so that these can be circulated in advance of the meeting and published afterwards as a set of proceedings. This will enable attendees to gain a picture of each other's research in advance of the meeting and will also provide a record of the workshop for other interested parties.

2.2 Programme

The programme for the day is likely to be as follows:

Ice-breaker: We will start with a short ice-breaker event (20-30 mins) to encourage the group to mix and get to know each other on an informal basis.

Design Workshop: We will then break into smaller groups, each of which will be asked to design a product and build a simple (probably paper) prototype of it. Each group will use a different design approach to allow these methods to be compared in the discussion afterwards. Invited older participants will be available to contribute to the design process. Afterwards, the groups will share their resultant designs with the rest of the workshop. This session will last for about 2 hours altogether.

Discussion Groups 1: New small groups will be formed, each incorporating a mix of people who tried different approaches to the design problem. These groups will discuss the designs, the approaches used and their advantages and disadvantages. Key issues and questions will be noted to feed into the discussion later in the day. About 30 minutes will be allocated for these groups.

Keynote 1: The afternoon session will be opened by a short keynote address from a member or members of the older population, describing their experiences with technology and their views on its design.

Keynote 2: A second keynote will discuss the methodology and practical implications of inclusive design for designing technology for older people. This is likely to be given by Roger Coleman, Professor of Inclusive Design at the Royal College of Art and Co-director of the Helen Hamlyn Research Centre, a centre for inclusive design, set up in 1999 to alert designers and industry to the far-reaching implications of a rapidly changing society. The keynotes will take about 40 minutes altogether.

Poster and demo session: An hour-long poster and demo session will allow participants an opportunity to present and discuss their work and hear about other research in the area. All participants who have submitted a paper will be invited to display a poster and we are keen for those who have developed products and prototypes to show them to the rest of the group. Members of the older population will be on hand to provide feedback if requested.

Discussion Groups 2: A second set of discussion groups, lasting around 45 minutes, will look at questions and issues related to the themes of the workshop in greater detail. To facilitate this discussion, each group will be given specific questions or tasks to look at.

Report Back: About 30 minutes will be allocated for the groups to report back on their discussions, summarising their key points and conclusions.

Wrap-up: As a group as a whole, we will look back on the workshop and try to extract key points from the discussions, focusing on what work needs to be done in this area and how to follow up the workshop. Before finishing, the organisers will sum-up the findings of the day and we hope that the group will go out for a social activity in the evening as a further step towards building a community.

2.3 After the Workshop

The submitted papers will be published in a dedicated proceedings in electronic and printed form and possibly also as a technical report. Further communication between participants will be encouraged via an e-mail forum. Following on from the example of the previous workshops in this series, we also hope to publish a journal special issue with submissions solicited from workshop attendees.

REFERENCES

- [1] U.S. Census Bureau (2004) International Data Base (IDB). <http://www.census.gov/ipc/www/idbnew.html>, updated Sep 2004.
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- [3] Brewster, S. and Zajicek, M. (eds.) (2002) A New Research Agenda for Older Adults, Workshop at HCI 2002, London, 3 Sep 2002 (<http://www.dcs.gla.ac.uk/~stephen/workshops/utopia>).
- [4] Goodman, J. and Brewster, S. (eds.) (2004) HCI and the Older Population, Workshop at HCI 2004, Leeds, UK, 7 Sep 2004 (<http://www.dcs.gla.ac.uk/utopia/workshop/hciworkshop04.html>).