

HELPING OLDER PEOPLE HELP THEMSELVES

Lachimi D Tiwari, Portia File, Peter Astheimer
University of Abertay Dundee
Kydd Building, Bell Street, Dundee, DD11HG, UK
l.tiwari@abertay.ac.uk, p.file@abertay.ac.uk, p.astheimer@abertay.ac.uk

ABSTRACT

Despite having attended computer classes and learning how to use a computer, the older computer user is not adequately equipped with the knowledge to help themselves solve their own computer problems. Help facilities in computer applications are not designed for the older computer user in mind and the teaching process doesn't teach older learners how to fix their computer problems. In this paper we discuss our research in the area of help and the older computer user and share our findings on older computer users trends on using help. Based on our research, we offer a possible alternative for the older computer user looking for help, in the form of an online collaborative help environment.

Keywords

Older people, Learning, Computers, Help

1. INTRODUCTION

The world's population is predicted to age faster in the next 50 years than it has during the past half-century and Europe has been highlighted to be one of the areas where population ageing will be most advanced [9]. This issue has prompted research into ways technology can support and include older people (for example EQUAL Research Network [7] and the UTOPIA Project [8]).

The main area of focus for most of this research has been on adapting interfaces for older computer users (for example [2] and [10]). There are, however other issues older users face when using a computer, one of which is not adequately being able to help themselves when they encounter a problem with the computer.

2. THE OLDER COMPUTER USER NEEDS HELP

Older people are being encouraged to learn how to use computers to enrich their lives [1] and the increase of older computer users is evident with the presence of a Silver Surfers Day [5].

A survey by Goodman et al reports that 48% of computer users over 50 live alone [3]. If older computer users are not equipped to fix their computer problems themselves, they have to turn to external sources of help. Increasingly dispersed family structures mean that support from family members may not be readily available and, even when it is, such dependence on external help reduces the autonomy of the older user [6].

2.1 The application doesn't really Help

Most applications today are equipped with Help documentation to aid users but are only accessible by users who know what they are looking for. How would an older computer user know what to look for if they could not phrase their problem in a way the computer would comprehend? A study by Syme et al shows that experienced older computer users are aware of the Help facility but choose not to use them because of their perceived irrelevance and difficulty, one of which is the use of jargon [6].

2.2 The learning process doesn't cover Help

Older computer users have probably learnt how to use the computer from a local learning centre, college or university. Most of the lessons prescribed cover "proactive" areas of computer use, i.e. "How to do A" or "How to perform B". It is only when problems are encountered in a class that "reactive" areas such as "How to fix A" or "How to correct B" are covered. Most "reactive" knowledge is acquired through time and with experience. As such, this does not equip older computer users with sufficient knowledge to fix the myriad of problems that may arise when using a computer at home in the long term.

3. OLDER USERS : COMMUNICATION & HELP

We conducted an interactive focus group with older computer users, requesting information on their communication, technology and help patterns. We were keen on exploring whom older users wanted to turn to for help but did not and asked participants to complete an activity chart.

3.1 General Results

We invited older computer users from our database of users to attend our workshop. 13 people attended, 11 were females and 2 were males and their ages ranged between 60-80 years. Data was captured using a general questionnaire, activity charts and video-recording focus groups. Salient results are summarised below:

1. Participants were keen to obtain help from someone they knew in the first instance. This would most likely be family and friends and someone they would not mind asking for help from. Users would only turn to Help Lines if their first line of help had failed.

2. Participants wished to be able to solve problems with technology themselves. Participants were disillusioned with customer service help lines due to the high cost, difficulty of explaining their problems in non-technical terms and difficulty of understanding what the customer service advisor was saying.
3. Participants did not consider user manuals to be helpful either and found them complicated and difficult to understand.

4. A HELP & LEARNING INFRASTRUCTURE

Based on the above findings, we conducted further studies into the possibility of combining chat, help and learning functions into a single application. This has led to the creation of a prototype, HelpSuite: A Help & Learning Infrastructure for Older Adults.

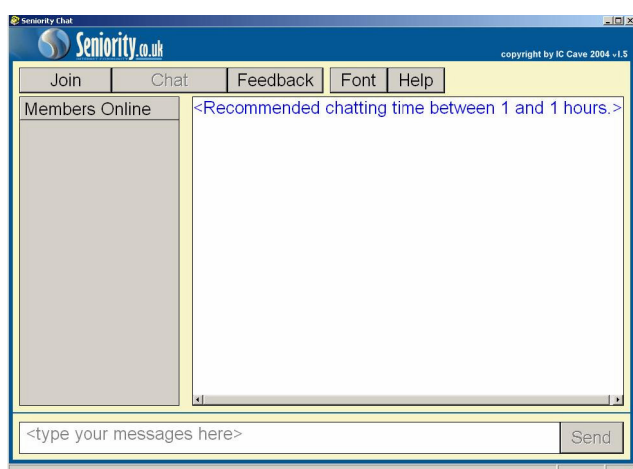


Figure 1. HelpSuite version tested at Seniority website.

This is an online collaborative environment, which has been adapted using Microsoft Netmeeting SDK. This system allows older users to meet online to chat, discuss, share and help solve each other's computer problems. The system's technology also allows users to "share" their computer programs to "show" their helpers what the problem is. Helpers can then choose to talk about the solution or "correct" it for the user.

Initial usability tests with beginner older computer users indicated that buttons and their text were simple to understand once users were aware of the function of the application. The system was also tested at www.seniority.co.uk, a popular web forum for the over 50s.

Seniority user feedback indicated that most users on the forum were intermediate or advanced computer users and were satisfied with the interface but were keen on additional functionality and the ability to customise the interfaces.

5. ACKNOWLEDGEMENTS

This work is funded by the SHEFC UTOPIA project. I would also like to thank everyone who helped us test our prototype.

6. REFERENCES

- [1] Computers & the Internet; Age Concern. http://www.ageconcern.org.uk/AgeConcern/staying_6_3.htm
- [2] Gregor, P., Newell, A.F. and Zajicek, M. Designing for Dynamic Diversity - Interfaces for Older People", in: *ASSETS 2002 (The Fifth International ACM Conference on Assistive Technologies, 8-10 July, Edinburgh, Scotland 2002)* (ed. J. A. Jacko) 151-156.
- [3] Internal UTOPIA Report cited in Syme, A., Dickinson, A., Eisma, R. and Gregor P. Looking for help? Supporting Older Adults' Use of Computer Systems in *Interact*, Zurich, Switzerland, September 2003
- [4] Nielsen, J. Ten Usability Heuristics. http://www.useit.com/papers/heuristic/heuristic_list.html
- [5] Silver Surfer's Day. <http://www.silversurfersday.org>
- [6] Syme, A., Dickinson, A., Eisma, R. and Gregor P. Looking for help? Supporting Older Adults' Use of Computer Systems in *Interact*, Zurich, Switzerland, September 2003
- [7] EQUAL (Extending Quality Life of Older People and Disabled People) Research Network <http://www.fp.rdg.ac.uk/equal/>
- [8] UTOPIA (Usable Technology for Older People: Inclusive & Appropriate) Project. <http://www.computing.dundee.ac.uk/projects/UTOPIA/>
- [9] United Nations Population Division (2002) World Population Prospects: The 2002 Revision: Highlights.
- [10] Worden, A., Walker, N., Bharat, K. and Hudson, S. (1997) Making Computers Easier for Older Adults to Use: Area Cursors and Sticky Icons. In *Proceedings of CHI 97*. New York, ACM. 266-271.