

Digitally Augmented Reminders At Home

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Aims/ Motivation

Given the ageing population, and limited health and social care budgets, it is important to investigate the use of technology for supporting or enabling care at home. Assistive technologies can potentially increase the health and well being of the older person and allow them to remain at home independently for longer. The aim of this project was to investigate how older users might benefit from augmenting household objects with digital messages using a smart pen.

The LiveScribe digital pen has audio input and output and can be used with specially designed dot patterned paper to label everyday household items with augmented messages or reminders on what that item is or how it should be used.



www.livescribe.com

Developing Prototypes

5 prototypes were created based on how the digital pen could be used in the home environment :

Photo Address Book –

An address book with photographs representing the person and associated audio recordings to aid the user's memory.

"Tell Me About" Labels –

note paper that can be written on and a recorded message associated with that note placed around the home to remind user how to use items.

Pill Box –

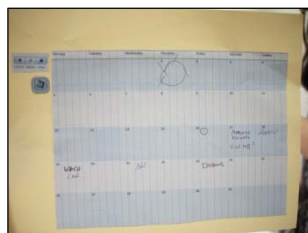
a pill box with digital labels can allow users to have instructions or descriptions for medication associated with a given time of day.

Calendar –

allows users to annotate paper calendar with additional information through the audio associated with the text on the specified date.

Labeled Remote -

TV remote labeled with text and audio instructions to aid those who find using technology difficult.



Focus Group

To evaluate the prototypes a focus group was held with participants 65+. All 5 prototypes were discussed and distributed, allowing the participants to interact with the digital pen and paper. Feedback was given on how useful they thought they could be to themselves or others.



The most popular demo was the calendar, 80% said they would find it "very useful". Many participants liked how they could draw a diagram or symbol with associated audio and need not have the whole appointment description.

The "Tell Me About" labels were also popular with the group, when demonstrating these they were impressed that they were a "talking post-it", a product they could relate to and understand the use for.

The reaction of the group was generally that personalised messages would be favored, although there were some instances where preset would be the best option for example when instructions are being given as in the remote control prototype.

Future Work

A user evaluation in the home environment is now being carried out. The "Tell Me About" Labels were chosen to be fully implemented and tested with end users to learn what items elderly people would like to label in reality and what types of labeling system they use.

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