ONLINE FORM DESIGN:
OLDER ADULTS' ACCESS TO HOUSING AND WELFARE SERVICES

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ABSTRACT

Access to local authority housing and welfare services is commonly achieved through the completion of paper forms. As the aging population increases, so too will the demand for such services. However, current paper forms may disadvantage older adults through current means of form access, completion and submission. Here, the position is offered that online forms may benefit the older adult by overcoming many difficulties associated with paper forms. These benefits may be further extended to service providers outside of the local authority domain. This paper summarises an exploratory investigation into online form design for older adults, detailing summary observations recorded during user requirement and user evaluation design phases.

Keywords

1. INTRODUCTION

A rapid increase in the aging population [1] is likely to create greater demands on housing and welfare services. For many older adults, access to these services is critical for their continued well-being. The older adult's first point of access to these services is commonly through the completion of forms, issued by service providers, to determine the older adult's eligibility. However, due to cognitive, manual dexterity and motor impairments, often presented as a product of the natural aging process, traditional paper-based forms may disadvantage the older adult's successful application for these services. With the observed growth in the aging population, rapid uptake of internet technologies by older adults is predicted [see 2]. Thus, although highlighted briefly by form designers in the past [see 3] consideration of online form design for older adults' is a timely topic for investigation. This paper promotes the use of online forms to assist older adults when requesting housing and welfare services. In this investigation, the example of a housing and council tax benefit form issued by a local authority is used to determine a) the difficulties experienced by older adults when completing a paper form to directly inform the design of an online prototype, b) the key design features for an online version of this form and c) user evaluation of an online prototype. In conclusion, this paper offers design recommendations that will support older adults' online form access, completion and submission activities.

2. IDENTIFYING FORM DESIGN CHALLENGES

To establish difficulties experienced when completing paper forms and to determine the key design features for an online version of a local authority housing benefit and council tax benefit claim form eight older adults (aged 60+), all possessing internet experience, were consulted via semi-structured interviews. During the interview they were requested to complete the form, with explicit instructions to communicate their thoughts while conducting the task. Following this activity, the older adults were presented with a number of topics for discussion, detailing computer use, internet activities and experiences of online forms. By doing so, it was hoped that the strengths and weaknesses of paper form design and current online form design would be elicited to directly inform the design of the prototype online housing benefit and council tax benefit claim form.

2.1 Summary observations:

Key comments made about the paper forms related to form length and question complexity. This led to questions being avoided or incorrectly answered (both actions ultimately leading to the form being returned by the service provider). The interviewees suggested that more information relevant to each question should be provided next to the question, rather than returning to a previous page. Establishing which answer box was associated with each question often created confusion. One interviewee noted that pension and banking details were required to complete the form and suggested that this information could have been presented at an early stage to avoid disruption while they found the additional documentation. Another interviewee wanted to know why she was providing details regarding her deceased husband. Clearly the form had not expressed adequately that, in this case, such details were unnecessary. In addition, many of the interviewees were assisted by carers and relatives when completing and submitting forms. Online forms were responded to positively although it was acknowledged that more could be done to assist the older user.

3. KEY DESIGN FEATURES

From the user requirement capture, 5 key design features (general and online specific) were identified and are summarised below:

Form layout and question structure: Extra spacing between questions and between answer boxes is suggested to overcome identified difficulties. Simplification of question structure is also suggested to avoid creating excessive demands on the older adults cognitive load.

Completing questions: Pop-up messages and hyperlinks appearing next to the appropriate question are suggested to serve as a help function to further clarify or simplify a question and its completion. In addition, information sources required to complete the form, for example, pension details, should be presented at the beginning of the form to avoid delay

Data entry: By using keyboard and mouse devices handwriting legibility difficulties due to declines in manual dexterity are overcome. This is likely to reduce the need for the issuing organisation to return the documents for correction. In addition, by employing a data entry validation system, any obvious data entry errors of omissions can be identified prior to form submission, again reducing the need for the form to be returned and corrected.

Form personalisation: To avoid answering unnecessary questions, the online form should be 'personalised' based on the data entered by the user. For example, when marital status is entered and the user is a widow, no questions relating to the user's deceased spouse should be presented.

Online form submission: Submitting the form online will avoid the difficulties associated with posting/delivering the form and/or arranging for a carer to post/deliver the form. Online form submission will be of great benefit to those presenting mobility deficits. In addition, online submission of the form may lead to a quicker processing time achieved by the issuing organisation.

4. PROTOTYPE DESIGN & EVALUATION

Driven by the key design features identified and existing internet usability guidelines, a prototype online housing and council tax benefit form was produced using Macromedia Dreamweaver™. To evaluate this prototype, the eight older adults involved during the user requirement capture were employed. An interview technique was employed that allowed the interviewee to explore the prototype, followed by questions to elicit the strengths and weaknesses of the prototype design. The interviewees were informed that an honest opinion was required and not one that may flatter the researcher.

4.1 Summary observations

It was observed that all interviewees found the online form easy to complete. Information relating to the alternative sources of information that the interviewee would need (e.g. pension details) was welcomed and considered 'time-saving'. The layout of the online form was also positively evaluated and supported by comments such as "…it's easy to know which box goes with which question". Simplifying the question structure also assisted with the form completion process as did the use of hyperlinks to provide clarification or simplification of the question. The interviewee who had previously offered details regarding her deceased husband was happy to find that her marital status as a 'widow' yielded no further questions relating to her husband. Thus by personalising the form this eliminated previously experienced confusion.

Observed weaknesses related directly to the use of input devices and navigational techniques. Difficulties using a mouse may be due to limited experience, overcome by increased use or an assistive input device. Scrolling difficulties may be overcome through the use of the page down button (as witnessed here) or through the implementation of more pages. However, the latter may cause user frustration and/or fatigue due to increased form length.

5. DESIGN RECOMMENDATIONS & FUTURE RESEARCH

Although this study focussed on the design and development of a local authority form, few comments were made regarding form specific topics. Therefore, the design techniques used here, such as pop-up messages and hyperlinks and form personalisation, may be directly translated to alternative online forms, such as banking and purchase forms. Future research should further consider and extend the design considerations presented here to validate the design techniques for alternative welfare, housing, social and financial service domains.

6. REFERENCES

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