

ABSTRACT

The use of mobile applications among elderly users, particularly those affected by cerebrovascular accident (CVA), often presents significant challenges, especially in terms of usability and accessibility. This study aims to evaluate the user experience (UX) and accessibility of the Andal Taspen mobile application for retired civil servants with CVA, and to provide redesign recommendations for its user interface based on identified issues. The evaluation was conducted through semi-structured interviews using the think aloud technique, guided by Dieter Rams' good design principles, and contextual inquiry based on the WCAG 2.1 accessibility guidelines, involving eight participants. Initial findings revealed various difficulties, including complex navigation, limited comprehension of text and icons, and features that were not sufficiently inclusive. In response to these findings, a redesign was carried out using the design thinking approach, resulting in a frontend-based prototype that was tested by the same participants. The evaluation of the prototype showed significant improvements in both UX and accessibility. From a UX perspective, there was a notable increase in positive responses, particularly in user-friendly (78.12%), understandable (66.25%), and simple (68.75%) indicators. In terms of accessibility, improvements were observed in the number of participants who reported ease in reading text and recognizing icons (five participants), performing interactions (five participants), understanding instructions (six participants), and using alternative authentication systems (six participants). These results indicate that the redesigned prototype effectively addresses many of the challenges previously experienced by users. The study concludes that the redesign of the Andal Taspen application successfully enhanced the usability and accessibility for elderly users with CVA. With further development, the application has the potential to become a more inclusive and senior-friendly digital service.

Keywords: *User Experience, Accessibility, Elderly with Cerebrovascular Accident (CVA), Design Thinking, Andal Taspen.*