User-Centered Development of *AreaAlzheimer:* study case and future perspectives. D. Piromalli, M. A. Cañadas-Romero M. Ivirico, L. Ortiz , M. Sánchez-Valle, M. Suárez-Calvet. *Gerontechnology* 25(s)

Purpose This study presents the systematic development and evaluation of AreaAlzheimer, a digital platform designed to support family caregivers of individuals living with Alzheimer's disease and other dementias. The project adopted a user-centered design methodology, engaging 419 participants across multiple iterative phases to ensure that platform functionalities closely aligned with real-world caregiver needs. **Method** The development process began with an online survey of 210 caregivers and four focus groups with 22 participants, aimed at identifying priority domains of support. Thematic analysis revealed four key areas: informational support (guidance and resources), logistical assistance (time and task management), emotional support (communication and self-care strategies), and social connection (peer networking opportunities). In a second phase, 147 additional participants refined preferences for content and features, providing critical input for technical development. Evaluation of the platform's beta version employed both standardized scales and direct usability testing. Forty caregivers assessed accessibility, usability, and perceived value using the Single Ease Question (SEQ), System Usability Scale (SUS), Perceived Usefulness Scale (PUS), and Behavioural Intention Scale (BIS). Additionally, 19 participants engaged in scenario-based tasks and follow-up group discussions, offering qualitative insights into strengths and areas for improvement. **Results and Discussion** Findings indicated high ratings for accessibility (average score: 4.5/5) and usability (scored 74.3/100, which is above the standard threshold of 68), with most caregivers reporting that AreaAlzheimer facilitated easy access to relevant information and support. Nevertheless, challenges emerged for users with lower digital literacy, highlighting the importance of further interface refinement and adaptive design strategies). Perceived usefulness was rated lower (average score: 3.4/5). The study emphasizes that the active involvement of people living with dementia, in addition to caregivers, enriches the design and evaluation process. Their perspectives help ensure that technological tools are not only functional but also empowering, responsive to cognitive challenges, and respectful of autonomy. Future research will follow a formal scientific protocol to expand participatory digital health solutions for dementia care.

Keywords: Alzheimer's disease, caregiving, digital platform, user-centered design, participatory development

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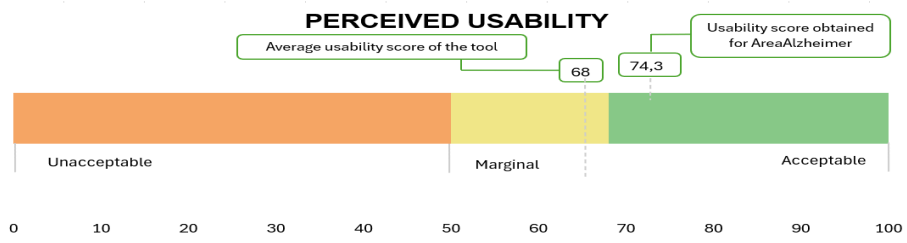

FIGURE 1. PERCEIVED USABILITY RESULTS ACCORDING TO THE SYSTEM USABILITY SCALE (SUS)