

OPP: APPLICATION FIELDS & INNOVATIVE TECHNOLOGIES

Digital platform for improving older adults' quality of life in today's super-aging society

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Purpose Digital platforms have recently been used in a variety of occasions and are considered an effective way for everyone to stay connected with society. Expanded digital spaces will enable older adults to participate in many communities without the need for moving to different places and without being restricted by human's body limitations. In there, older adults will be able to actively participate in activities of society leveraging their knowledge and take the initiative in acquiring new knowledge, thereby contribute to society, and improve their own quality of life there. In reality, however, the use of digital technology by older adults has been slow to take off (MIC of Japan, 2021). In our previous study, we showed that one of the factors preventing older adults from utilizing IT is the difficulty in drawing proper mental models of digital services because of the complex and diverse information access methods these days (Yoko Nameki et al, 2022). It is expected that accurately understanding the characteristics of older adults and providing simple and easy-to-understand representation models taking it into consideration will lead to the depiction of appropriate mental models and promote the use of IT by older adults. Another important factor is their motivation, without which any services might not be used. Therefore, we also examine through experimental observations, older adults' motivation for using digital services and discuss the digital platforms for improving the quality of life of older adults. **Method** We conducted survey interviews and field experiments in order to investigate what it means to be easy to use for older adults. Our case studies conducted with several older adults confirmed that providing a user interface, using voice and the metaverse, that simplifies their mental models can promote digital device usage and encourage their participation into the digital community (Yoko Nameki et al, 2023). The field experiments' result showed that older adults require more consideration and continuous support than general users of digital services. On the other hand, services that are easy to use for older adults will also be easy to use for many others, including not only older adults but also people with disabilities, people with low IT literacy. **Results and Discussion** We propose human-centered information technology, specifically ambient computing, as a method to realize digital collaboration platform where older adults can utilize information technologies without stress, access necessary information, and communicate with each other. Ambient computing could enable older adults to participate in digital communities without continuous human support to use digital services. If local community activities can be digitized by ambient computing and expanded into a virtual space, the way older adults interact with their local community will change dramatically. Within such a digital community, older adults will not only be able to reduce restrictions due to their IT literacy or declining physical capabilities but also they can join community activities as a contributor with appropriate motivation.

References

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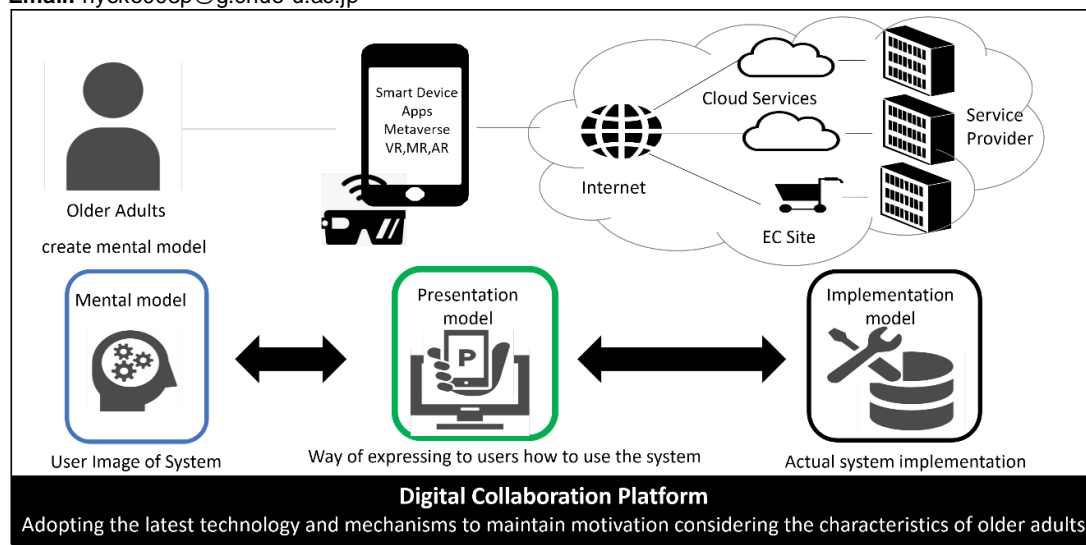


Figure 1. Overview of the proposal