Others

Beyond access: Age-inclusive design and deployment of digital technologies D Balasubramaniam, J Williamson, R K Selva Kumar, Y Farag, G Narra, F Thomson and K M Boyd. *Gerontechnology* 25(s)

Purpose Digital technologies have the potential to improve access to essential services, counteract age-related challenges, reduce social isolation, and enhance the autonomy of older adults. However, these technologies must be designed, developed and deployed to be accessible and inclusive to the target demographic to achieve the anticipated benefits. As population ageing [1] is observed in many parts of the world, digitalised services become the norm, the digital landscape becomes more heterogeneous, and assistive technologies become more powerful, the digital exclusion of many older adults becomes a more urgent problem to solve. Literature suggests that factors such as the lack of access to digital devices and infrastructure, and lower digital literacy and motivation can contribute to such exclusion [2]. The aims of the work presented in this abstract were to explore in greater depth the barriers and enablers to digital technology adoption by older adults in our local community and to investigate the causes of some of the barriers so that suitable mitigations can be identified. **Method** We conducted semi-structured interviews with 35 older adults (aged 55+) in the community, either individually or in small groups, between summer 2023 and summer 2025 to better understand their views and experiences of digital technologies, as well as perceived barriers and enablers to technology adoption. This format allowed us to gather richer responses within a consistent framework, with older adults focusing on issues that mattered to them most and highlighting underlying beliefs and concerns. Transcripts of data from the interviews were qualitatively analysed using Work Activity Affinity Diagrams [3] and thematic analysis [4] to derive themes to serve as the foundation for further research and impact work on addressing the barriers. **Results and discussion** Many older adults who took part in our studies felt left behind by technological advances and digital service provision. In the context of our studies, the first level of digital divide, namely the lack of access to digital devices and infrastructure, was not considered a significant barrier. However, a lack of confidence in digital skills including the fear of making mistakes and being scammed, and the lack of motivation to adopt potentially useful digital technologies appear to play a significant part in older adults being digitally excluded. These issues are exacerbated by factors such as the need for continuous learning due to fast-changing digital technologies, lack of consideration of age-related physical and cognitive challenges during the design and deployment stages of technology development, lack of age-friendly introduction to digital technologies, unavailability of on-demand support for technology use, and the othering experienced by older users when they seek help. On the other hand, social and familial connections and the reassurance provided by tangible resources and human contact appear to have a positive effect. Based on these findings, our current research focuses on producing recommendations for technology designers and service providers and finding scalable solutions to supporting older adults in improving their digital literacy and confidence.

References
1. United Nations Department of Economic and Social Affairs. World Population Prospects 2024. [online]. United Nations: New York; 2024 [accessed 30 November 2025]. Available from: https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/undesa_pd_2024_wpp_2024_advance_unedited_0.pdf.
2. Friemel, TN. The digital divide has grown old: Determinants of a digital divide among seniors. New Media & Society. 2016; 18(2): 313–331. Available from: https://doi.org/10.1177/1461444814538648
3. Hartson, R, Pyla, PS. The UX book: Agile UX design for a quality user experience. Morgan Kaufmann; 2019.
4. Braun, V, Clarke, V. Using thematic analysis in psychology. Qualitative Research in Psychology. 2006; 3(2): 77–101. Available from: https://doi.org/10.1191/1478088706qp063oa