## Profiling older adults for understanding their technology adoption

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Purpose Previous research studies conducted within AAL Programme show light on the intriguing phenomenon of technology adoption through emphasizing the high heterogeneity of older adults in needs, preferences, and expectations, when compared to other younger groups. The decline which comes with ageing, largely varies: a person aged 60 shows a similar state of health as a person aged 70 or even 80. The functional capacity, which factors in the physical, psychological, and social variables is intimately related with the technology adoption, but there is large variance within the age group in relation to the functional capacity (Raed et al, 2023; Bae et al, 2020). Therefore, we need to reiterate two key matters in understanding the relation of older adults with technology. A) Older adults are a very heterogeneous population, way more diverse than the younger cohorts. B) There are transitions between categories as the ageing process means to pass from one category to another, from successfully ageing into normal ageing and/ or pathological ageing, the reverse process being exceptional. Method The research was undertaken in the frame of the EU project AAL4AII (AAL2021-8-164-CP), between 2022 and 2024. We have employed interviews (n=71), and participative observation with older adults from Portugal, Denmark, Switzerland, and Romania. The experiences from these studies suggest that this approach helped to democratically engage the elderly as end-user and identify acceptance issues. To build a solid profiling, we have overlapped 2 approaches: Gerontographics (Moschis, 2019) and Elderpersonas (Heredia et al, 2017). Both support the prediction of consumer behaviour and go beyond the trite understanding that age per se (chronological ageing) determine ageing process and behavioural intention, which would lead to technology usage. Results and Discussion We have profiled 5 groups of older adults who manifest different characteristics which determine the type of technology they would adopt. Those successfully aging are adopters of universal technologies and reluctant to assistive technology. They are active young (and more rarely old) older adults who are psychologically well. As defined by Heredia et al (2023), they do not have any serious illness, feel younger than they are. 'Independency', 'social contacts' and 'feeling useful' score very high to them. Maintaining physical and mental health is very important to them. Health is seen as key to ageing at home and preserving independency. Much emphasis is put on mental health. They can give advice on how to stay healthy and talk about their hobbies and friends. Those successfully aging are rather stressed about monitoring and prefer not to trade their privacy for safety. That is more because they do not perceive themselves 'being at risk'. Those in transition from successfully aging are merely their own caregivers physically well but psychologically less well as anxiety for their own safety/ losing independency/ death anxiety increases. They are interested to use monitoring at home (i.e. the A4A Solution) in an active way: monitoring their decline- acting based on the reports provided. They have some technological familiarity and are not stressed about the effort to learn. Active older adults wanted to see their own data and use it to their benefit. For those in normal aging, the importance of health fade and the importance of well-being increases. Social contacts tend to refrain either to family or, if that is not present for one reason or another, the social life is refrained to very few acquaintances. Maintaining a stability of the disease is important to them. The disease stability is seen as key to ageing at home and preserving independency. Emphasis is put on maintaining physical capabilities. They talk about their habits and families. Anxiety, and stress for their safety increases. Older adults in normal aging are more anxious and stressed compared to those successfully aging. More independent one is, more interested is in controlling/ handling the device. Pathological aging and in transition to pathological aging are driven by their next of kin or professional care providers into the acceptance of technology. Social Influence is a key factor in technology adoption of the older adults pathologically aging. We confirm that once age advances, the focus is on improving/ preserving well-being rather than health (alone) and, therefore, the A4A Solution would answer to the 'acknowledge need' of those to whom health declines and well-being increases, as acknowledge in the categories above mentioned.

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