# Harnessing Technology for Dementia: Prevention, Early Detection, and Supportive Care

1 Dementia Prevention and Caring

Possible to explore various technological interventions for dementia prevention and care. It examines the effectiveness of digital interventions in delaying dementia onset, the use of AI and machine learning for early diagnosis, and the ethical considerations of monitoring technologies. Additionally, it investigates how assistive technologies can enhance the quality of life for dementia patients and caregivers, and the role of cognitive training apps in maintaining cognitive function in older adults at risk of dementia.

### Intergenerational Bonding: Leveraging Technology for Shared Growth

Social and Emotional SupportBenefits to Ageing PeopleBenefits to Younger Children

Possible to explore how technology can foster intergenerational relationships between ageing people and younger children, focusing on enhancing social and emotional support, improving digital literacy and mental well-being for older adults, and providing educational and cultural benefits to young children. The research examines how digital platforms and communication tools can reduce loneliness and provide mutual support, while also helping older adults stay updated with technological trends and younger children learn valuable life lessons and develop empathy.

## Technology-Driven Social Inclusion for Seniors: Addressing Isolation and Enhancing Well-being

3 Social Inclusion

May focus on the critical role of technology in promoting social connections and improving the quality of life for older adults. This research explores how various digital tools and platforms, including social networking sites, virtual reality (VR), augmented reality (AR), lifelong learning programs, and community services, can be leveraged to reduce feelings of loneliness and social isolation among seniors. addresses the barriers to technology adoption among older adults and explores solutions to enhance digital literacy and accessibility. The ultimate goal is to harness innovative technological solutions to enhance social inclusion, ensuring that seniors remain connected, engaged, and supported in their communities, thereby improving their overall happiness and health.

# Smart Home, Assistive Technology, IoT, etc. Support Independent Living

4 Ageing in Place

How the integration of advanced technologies to enable older adults to live independently and safely in their own homes or community housing. Possible to deploy smart home systems that incorporate Internet of Things (IoT) devices, such as sensors, smart thermostats, and automated lighting, to enhance the daily living environment. Assistive technologies, including wearable health monitors, fall detection systems, and voice-activated assistants, are examined for their role in providing real-time health monitoring and emergency assistance. The ultimate goal is to create a seamless and supportive living environment that adapts to the needs of seniors, ensuring they can maintain their independence and quality of life.

### **General Technologies for Ageing**

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Identify the critical aspects of integrating technology to enhance the lives of older adults. Key areas include identifying the factors that influence the adoption of new technologies by the elderly, and how user-centered design can improve the usability and accessibility of these technologies. The telehealth services on managing chronic diseases in older adults and how robotics and automation can support their daily activities. Additionally, what are the necessary policies and regulations to ensure the safe and ethical use of technologies for ageing populations. The goal is to provide insights that will drive the development and implementation of effective technological solutions to improve the quality of life for seniors.