



Inclusive Design and Assistive Technologies for an Ageing Population

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Ageing populations and Inclusive Design

How to sustain and support an ageing population presents a tough challenge for any society. One challenge is the requirement to design for a much broader range of needs and capabilities in every aspect of daily life and 'inclusive design', ('universal' design (UD) in Japan), is a concept that seeks to allow as many people as possible, regardless of their physical, sensory or cognitive capabilities to utilize products, services, interfaces and environments.

Research and Methods

Japan has the most rapidly ageing population in the world. The focus of this research, was to understand how Japan approached the creation of products that are 'inclusive'. This involved consultations with designers, engineers, businesses, and end-users, examination of products and a review of company literature and papers.



Toyota Raum



Toyota Porte



Tu-Ka S mobile phone

Observations

Major manufacturers such as Toyota and Panasonic have showrooms devoted to their 'universal' products. Toyota has launched new compact family cars - the Raum (2003) and the Porte (2004): its designers have succeeded in producing vehicles that are highly flexible, accommodating a broad range of lifestyle options, where ease of access and versatility are key to their success. In the area of consumer electronics, designs such as e.g. KDDI's Tu-Ka S mobile offer welcome 'accessible' interfaces.

Publications

Macdonald, A.S. 2006. Approaches to universal design in Japanese technological industries. *Journal of Gerontechnology* 5 (4), Eindhoven. (*in press*).

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