

C. GEORGIOULAS, T. LINNER, T. BOCK. **A novel MiniOn agent assisted robotic kitchen platform.** *Gerontechnology* 2012;11(2):369; doi:10.4017/gt.2012.11.02.125.00 **Purpose** Elderly people tend to have several minor, or sometimes severe, disabilities, constraining them in performing routine household task. Additionally, they tend to spend much of their day in the kitchen. A typical kitchen arrangement might be adequate for most of us, but the actual arrangement and functionality is critical when it is comes to the ageing adults. This paper deals with a novel robotic kitchen environment specifically designed to assist the elderly. **Method** Demographic change design is concerned with providing design solutions and services for specific population categories. Ageing adults deserve special attention, since this population category requires a different design approach in home¹. A compact and modular approach design is proposed, providing enhanced functionality, information technology services, and the ability to accommodate MiniOn individual robotic agents² to support people while cooking, serving up food, or cleaning. Various kitchen design models were studied in order to arrive at the design of the proposed prototype. Tests were conducted in a real kitchen environment to acquire enough knowledge about the actual problems and limitations ageing adult faces, while performing these daily tasks. **Results & Discussion** The proposed kitchen system comprises a series of robotic actuators and sensors, novel space utilization techniques, and a set of visually guided robotic agents to assist in most of the required kitchen tasks. The performance of such a kitchen environment system, can embrace future design approaches, and provides a major contribution in demographic change design.

References

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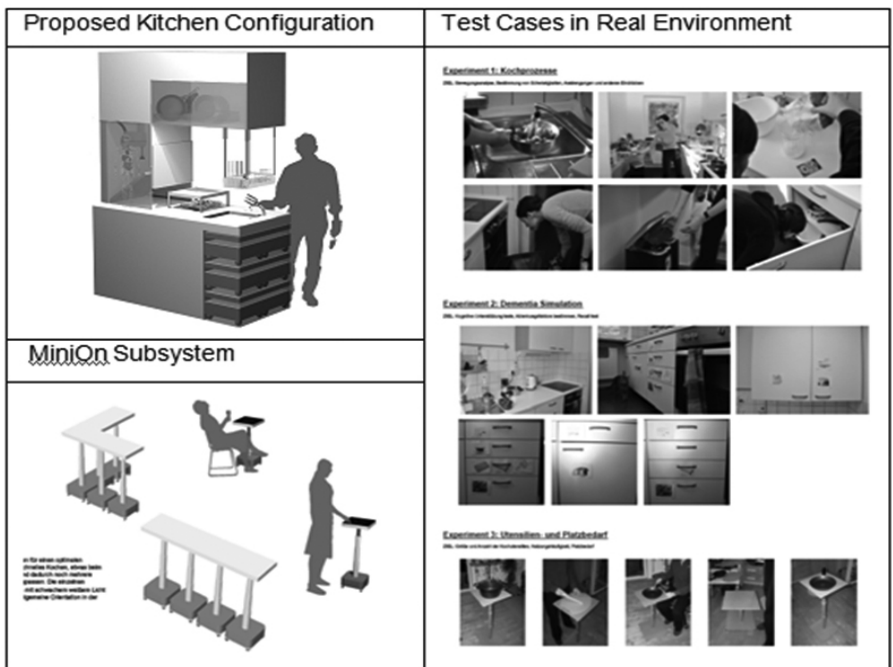


Figure 1 The proposed robotic kitchen platform