BIME and its work for and with people with dementia.

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The Kitchen of the Future

William Heath Robinson
... for and with people with dementia.
Technology for People with Dementia

“Can technology usefully support people with dementia at home, enhancing independence and quality of life?”
Enabling Smart House Systems

Care staff or outside help

Computer

Communications System

Sensors

Support devices
Design Philosophy

• Technology that:
  - Acts like a carer.
  - Intervenes early to prevent a disaster.
  - Supports the independence of a person with dementia.
  - Does not unnecessarily intrude into everyday life.
BIME’s work in the field

• Gloucester Smart House Project
  - Technology demonstrator
  - Equipped with integrated smart house systems.

• ENABLE project
  - Evaluating stand-alone technology for people with dementia in 5 European countries.
  - Measured impact on quality of life using DQoL.
  - Learned about working with people with dementia in their homes.

• Deptford & Bristol Flats
  - Extra care developments with permanent or intermediate care tenants.
  - Flats containing integrated smart house systems to support people with dementia.

• Independent Project
  - Technology development with the aim of improving quality of life through enabling participation in enjoyable activities.
Installed Systems

- **Cooker Monitor**
  - Detects smoke, alerts the tenant with a voice message, turns off the cooker, calls for help.

- **“Cooker Hot” sign**
  - Indicates if the cooker is hot (independent of whether it is switched on).
Installed Systems

• Night-time lighting
  - Detects the tenant leaving his bed at night using a bed occupancy sensor
  - Turns on his bedroom and bathroom lights using EIB
  - Turns on additional room lights if he moves around the flat
  - Reminds him to return to bed if he stays up for more than a configurable time.
Installed Systems

• ‘Wander’ reminder and alert
  - Detects the tenant approaching the front door.
  - Reminds him of the time of day and suggests he returns to bed using voice messaging.
  - Calls for help if he leaves the flat using warden call system.

• Smart taps
  - Turn themselves off after a configurable time delay, but remain useable.
Technology For People with Dementia

- Dementia is a disability that can be mitigated with technology.
- People with dementia can use technology if it is designed appropriately.
- People with dementia can contribute to the design and evaluation of technology.
- Technology can support independence and improve the quality of life of people with dementia.
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