ASSISTIVE TECHNOLOGIES INDUSTRY MAPPING AND OPPORTUNITIES PROJECT

Industry briefing session #2
Department of State Development
Tuesday 28 October 2014

WISeR
Informing Decisions

Assistive Technologies Mapping & Opportunities Project

- Project set out in: *Assisting Transition: Assistive Technologies Opportunities and Industrial Transformation in South Australia*
  - *AVAILABLE AT* www.adelaide.edu.au/wiser/research/innovation/
- **Pinpoint high value opportunities for SA firms in assistive technologies**
- Australian and global demand in the coming decades
- The supply side: what capabilities do local companies need to be competitive producers and suppliers of this technology?
  - Characteristics of 'new manufacturing'
  - How we make the transition
- 'Market shaping': what end-users and purchasers look for
  - Can we bring purchasers, users, manufacturers and researchers closer?
- Existing support programs and possible new initiatives

Why assistive technologies?

- Urgent need to diversify our manufacturing
  - Otherwise key knowledge intensive capabilities and activities lost forever
  - Time is tight
- Assistive Technology is growing as an economic driver (increasing demand, increasing diversity and sophistication of products)
- Population ageing in much of the advanced world
  - 65-85's to double in Australia; 85 + to quadruple
  - By 2050, cost of health care will have doubled
- Disability rates rise with ageing
- Australian policies reflect this growth
  - Living Longer, Living Better; Consumer Directed Care
  - Disability care Australia, and National Disability Support Scheme
- Focus for industry policy in many EU countries, Japan and US
  - Much less so in Australia – this needs to change
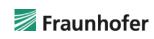
What are assistive technologies?

- Devices, software and intelligent systems that enable individuals to perform tasks they would not otherwise be unable to, because of age or disability, or technologies that increase the ease and safety with which tasks can be performed.

- Range from simple, to medium complexity to high complexity.

Simple AT	Complex AT
Trolleys, walking frames, beds, hoists, hygiene items, electric wheelchairs and scooters, and home modifications	Electronic magnifying devices, prosthetics, cognitive software, AT for visual impairment, augmented and alternative communication, domestic robots and personal emergency response systems

Assistive Technologies - A Good Fit for SA?

- Less reliance on low costs and long production runs
- High levels of customisation, short production runs and exhibiting high variability and high value
  - 'New manufacturing'
- Use of new materials that are both light and strong, such as titanium, where the state can build competitive advantage
- Broadly aligns with SA's existing strengths, many inherited from the auto industry, including:
  - Process engineering skills
  - Materials science and technology expertise
  - Automation and control technology
  - Electronics and miniaturization
  - Digital content, sensing and simulation
  - High tooling skills, injection moulding, etc.
- High service content and customisation, favouring local provision.

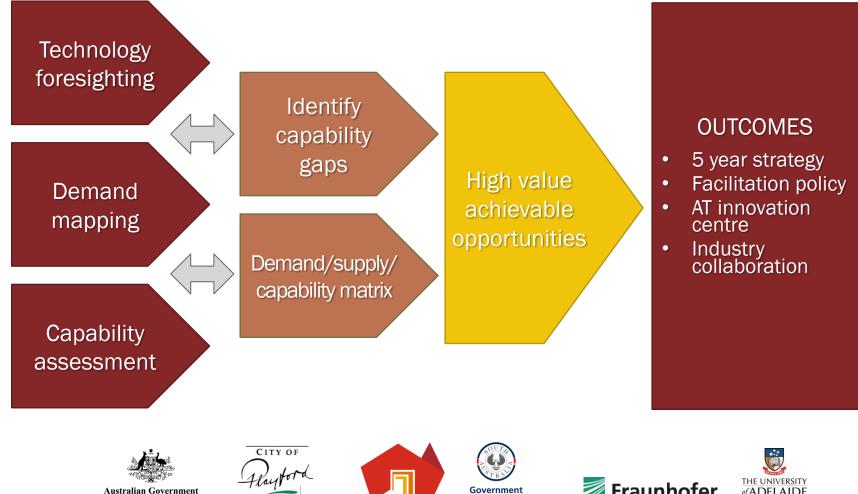# Assistive Technologies Mapping and Opportunities Project

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Demand-side drivers and characteristics for AT

Frank Wagner

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Demand from the Care Sector
Andrew Stoll, ECH

Questions and comments

- Supply side – understand the capabilities and capability gaps of our companies.

- What do companies need to do to be competitive in assistive technologies?

- Company capability survey soon.

Frank Wagner

Colin Taylor, Lance Hill Design Centre

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Existing research and extension programs

Support Programs

- Dermot Cussen

- Manager, Manufacturing, Department of State Development

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Questions?

ASSISTIVE TECHNOLOGIES
INDUSTRY MAPPING AND OPPORTUNITIES
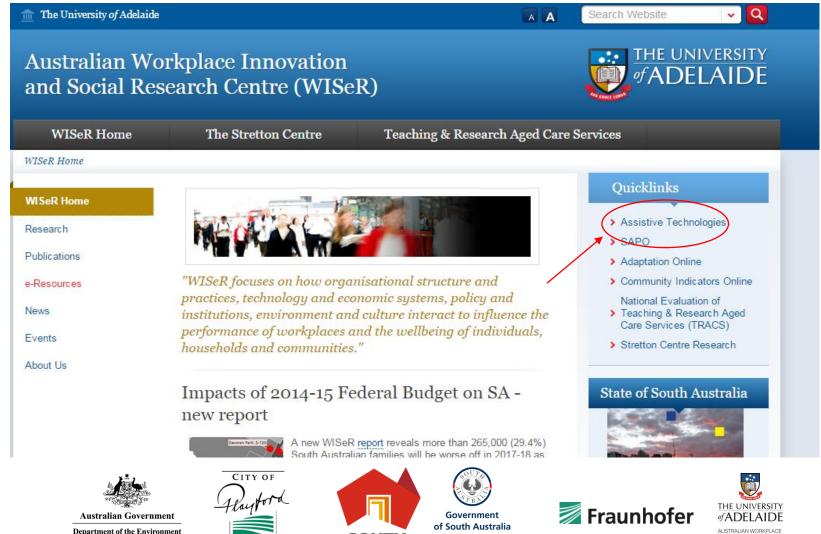PROJECT

Next steps

Next Steps and Close

- Refining demand mapping and technology fore sighting
  - Includes interviews with care organizations and other purchasers of assistive technologies
- Assess companies capabilities/readiness
  - Company survey soon, plus some face to face interviews
- Test propositions through an Industry Reference Group
- Prepare
  - Matrix of high value opportunities
  - Policy/strategy advice and framework
  - Final report with recommendations
- Completion:
  - Q 1 2015.

Workshop documents on WISeR website

www.adelaide.edu.au/wiser/research/innovation/