ASSISTIVE TECHNOLOGIES
INDUSTRY MAPPING AND OPPORTUNITIES
PROJECT

Industry briefing session #2
Department of State Development
Tuesday 28 October 2014
Assistive Technologies Mapping & Opportunities Project

- Project set out in: *Assisting Transition: Assistive Technologies Opportunities and Industrial Transformation in South Australia*

- 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.

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

- Technology foresighting
- Demand mapping
- Capability assessment

Identify capability gaps
Demand/supply/capability matrix
High value achievable opportunities

OUTCOMES
- 5 year strategy
- Facilitation policy
- AT innovation centre
- Industry collaboration

Partners:
Australian Government
Department of the Environment
City of Playford
Government of South Australia
Department of State Development
Fraunhofer
Demand-side drivers and characteristics for AT
Frank Wagner
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
Existing research and extension programs
Support Programs

- Dermot Cussen
- Manager, Manufacturing, Department of State Development
Questions?
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

[Link to WISeR website]

Australian Workplace Innovation and Social Research Centre (WISeR)

"WISeR focuses on how organisational structure and practices, technology and economic systems, policy and institutions, environment and culture interact to influence the performance of workplaces and the wellbeing of individuals, households and communities."

Impacts of 2014-15 Federal Budget on SA - new report

A new WISeR report reveals more than 265,000 (29.4%) South Australian families will be worse off in 2017-18 as