

ASSISTIVE TECHNOLOGIES INDUSTRY MAPPING AND OPPORTUNITIES PROJECT

Information Session – 3 April 2014 National Wine Centre, The University of Adelaide

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Assistive Technologies for the aged and disabled

Today's information session:

- 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
- Assistive Technologies Mapping and Opportunities Project seeking your input
 - Discussion paper: Assisting Transition: Assistive Technologies Opportunities in an Industrial Transformation in South Australia











Why are we here?

- 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
- Medical Technology market is over US \$300 billion annually (proxy guide)
- Focus for industry policy in many EU countries, Japan and US
 - Much less so in Australia this needs to change











What we want from today's session

- Provide information on possible areas of interest and opportunity
- Arouse your interest in the area
- Get an idea of your company's possible interest and intent
- Through this, start identifying potential opportunities and possible company leads
- Get your commitment to participating in subsequent stages of the project

"The purposes of this workshop are to arouse industry interest by informing, identifying company intent, and commencing opportunity identification. By starting to identify possible proximate opportunities, as well as company leads, the workshop will commence the development of the Demand/Supply/Capability matrix and follow up industry development leads."

This initiative – a collaboration of DMITRE, WISeR, the Stretton Centre and Fraunhofer.











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

Trolleys, walking frames, beds, hoists, hygiene items, electric wheelchairs and scooters, and home modifications

Complex AT

Electronic magnifying devices, prosthetics, cognitive software, AT for visual impairment, augmented and alternative communication, domestic robots and personal emergency response systems











Discussion Paper: Assisting Transition: Assistive Technologies Opportunities and Industrial Transformation in South Australia

- Where are the demand trends and technology taking Assistive Technologies?
- Are Assistive Technologies a good diversification opportunity for SA manufacturers?
- What are the capabilities we need to build on?
- What does the transition to these product/market segments look like to an SME?
- What do care providers and users of AT look for?
 - How do they decide what to buy and from whom?
 - Can we shape the market by bringing them together with manufacturers and researchers?
 - How can we leverage public procurement, like the UK?
- What is the Assistive Technologies Mapping and Opportunities Project?
- Demand/Supply/Capability matrix











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.

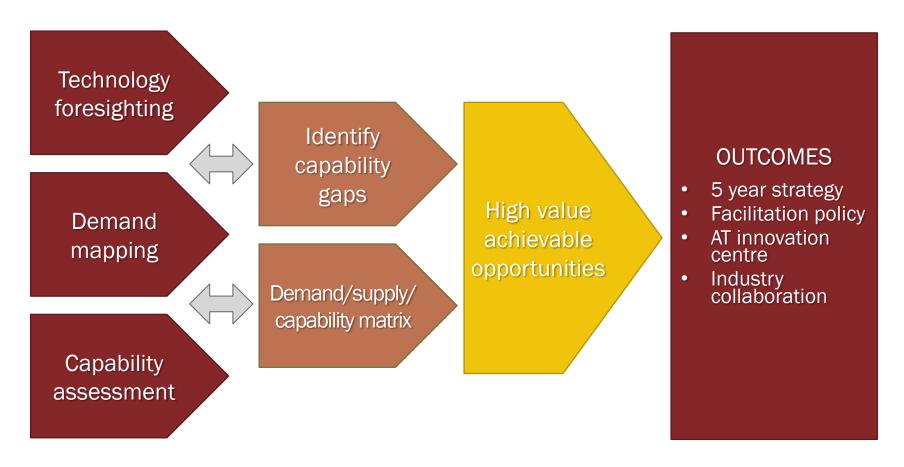








Assistive Technologies Mapping and Opportunities Project













Project Partners

- Australian Workplace Innovation and Social Research Centre (WISeR)/Stretton Centre
- Department of Manufacturing, Innovation, Trade, Resources and Energy (DMITRE)
- Fraunhofer Gesellschaft

Seeking support from

- Manufacturers
- Care providers
- Researchers











Project Stages

- Stage 1:
 - Commence demand mapping and technology fore sighting
 - Dialogue with manufacturers, industry associations and importers
 - Test ideas and hypotheses
 - This information session
- Stage 2:
 - Refine demand mapping down to product level preliminary product/market opportunities
 - Analyse characteristics and competitiveness of local companies
 - Intermediate results to later industry workshop
- Stage 3:
 - Demand/Supply/Capability matrix gives firm robust targets
 - Policy/strategy advice and framework
- Completion:
 - September-October 2014.











