Assistive technologies mapping and opportunities project

‘Lessons from local industry (study)’

Prepared by

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Contents

1. Introduction to study
2. Overview of simple, medium and complex assistive technologies (AT)
3. What it looks like
4. Challenges
5. Transition strategies
Introduction to study

• **Overview:** The study set out to identify the readiness of the automotive supplier community to support future assistive technology industries

• **Sample:** Five current South Australian automotive suppliers of varying size, scale, locations, specialisations and ownerships were selected

• **Objective:** The specific intent was to highlight strengths, weaknesses and capability gaps and to understand what gaps need to be closed to enable active participation within a future assistive technologies industry

• **Methodology:** Face-to-face interviews were conducted with CEO’s / senior management of each company which also included factory and facility tours
Simple AT

Definition: Low ‘value add’ opportunity, low margin, labour content and company operating overhead costs erode margin if manufactured locally.

Examples: Trolleys, walking frames, beds, hygiene items, and home modifications.
Medium AT

Definition: Value adding opportunity with additional feature content. Good margins. Good opportunity for automation. Sound materials knowledge and may require access to or generate IP. Labour content and company overheads at full cost don’t impact good margin potential. Requires multiple manufacturing disciplines to succeed.

Examples: Indicators with visual signals, glasses with absorption filters and orthoses.
Complex AT

Definition: Leading edge technology encompassing advanced design, materials, software and hardware with high regulatory and specification requirements. Superior skill in digital and simulation technology. Medical devices and other implantable product requiring a cleanroom environment and in touch with new ground breaking developments. Opportunity for service based businesses.

Examples: Electronic magnifying devices, cognitive software, domestic robots and sensory equipment.
## Assistive Technologies (AT) – Summary of ‘what it looks like’

<table>
<thead>
<tr>
<th>Simple AT</th>
<th>Medium AT</th>
<th>Complex AT</th>
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<tbody>
<tr>
<td></td>
<td>Barriers to entry</td>
<td></td>
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<tr>
<td></td>
<td>Level of transition change</td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>Product value</td>
<td>HIG</td>
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<td>Product margin</td>
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<td>Level of skill/knowledge required i.e. engineering design capability</td>
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<td></td>
<td>Level of competitive advantage (and ability to sustain it)</td>
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Challenges

• Compliance standards and quality certifications i.e. TGA, EC, ISO 13485

• Current capability level of most companies is aligned to the simple AT end

• Accelerated transitions will require acquisition of capabilities through joint ventures, technical partnerships, or mergers and acquisitions

• There are skill gaps i.e. software design capability

• Access to new customers i.e. sales, marketing and distribution capability in AT market

• Investment in prototyping, manufacturing infrastructure and distribution will be required
# Transition Strategy

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Simple AT</th>
<th>Medium AT</th>
<th>Complex AT</th>
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<tbody>
<tr>
<td><strong>Strategy</strong></td>
<td>Local project management, design using local skill and manufacture in low cost country.</td>
<td>Design locally through partnerships and manufacture locally with local JV technical partnerships. Broader industry engagements required i.e. medical device and electronics partnerships.</td>
<td>New company creation and new investment activity. Design locally and internationally. High-level, formal, technical research partnerships, JV’s with local and international partners.</td>
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<td><strong>Timing</strong></td>
<td>Short term</td>
<td>Short to medium term</td>
<td>Medium to long term</td>
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