Barriers to Digital Trade.
The Australian Industry Group began in 1873 as the Metal Trades Employers Association (MTEA)

In February 1970, the Metal Trades Industry Association of Australia (MTIA) came into operation due to the efforts of the industry leaders of the last century

In 1998 MTIA merged with the Australian Chamber of Manufactures to form the Australian Industry Group
Ai Group Today

- Australia’s leading industry organisation
- Representing 60,000 businesses
- Not for profit
- Non partisan / apolitical
- 250+ staff located in 11 offices
Members in these industry sectors

- Manufacturers and engineering companies
- The foundry sector
- ICT (Information and Communications Technology)
- Labour Hire
- Call Centres
- Advanced Manufacturing
- Automotive and Aerospace
- Food and Beverage
- Mining Equipment and Services
- Building Construction
- Transport and Logistics
- Health
- Clean Technology & Waste Management
Source: Ai Group
1st: Mechanization, water power, steam power
2nd: Mass production, assembly line, electricity
3rd: Computer and automation
4th: Cyber Physical Systems
Drivers of change and time to impact on employee skills

TECHNOLOGICAL

- Mobile internet, cloud technology
- Processing power, Big Data
- New energy supplies and technologies
- Internet of Things
- Sharing economy, crowdsourcing
- Robotics, autonomous transport
- Artificial intelligence
- Adv. manufacturing, 3D printing
- Adv. materials, biotechnology

Note: Names of drivers have been abbreviated to ensure legibility.
Table 1: Industry 4.0 Higher Apprenticeship Pathways

- **Entry**
  - School Leavers
  - Apprentices
  - Career Changers

- **Stage 1**
  - Diploma in Applied Technologies (VET)

- **Stage 2**
  - Associate Degree in Applied Technologies (Higher Ed)

- **Destination**
  - Bachelor of Applied Technologies
  - Further Education
  - Employment

- Employment: Engineering Technician
- Employment: Associate Engineer

= Industry 4.0 Higher Apprenticeship Pilot Program
### TOP 10 RISKS TO “DOING BUSINESS IN YOUR COUNTRY” IN 2018*:
GLOBAL, ASIAN REGION AND AUSTRALIA

<table>
<thead>
<tr>
<th>Rank</th>
<th>Global</th>
<th>East Asia &amp; Pacific</th>
<th>Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Unemployment &amp; underemployment</strong></td>
<td><strong>Cyber attacks</strong></td>
<td><strong>Energy price shock</strong></td>
</tr>
<tr>
<td>2</td>
<td><strong>Failure of national governance</strong></td>
<td><strong>Unemployment &amp; underemployment</strong></td>
<td><strong>Cyber attack</strong></td>
</tr>
<tr>
<td>3</td>
<td><strong>Energy price shock</strong></td>
<td><strong>Asset bubble</strong></td>
<td><strong>Asset bubble</strong></td>
</tr>
<tr>
<td>4</td>
<td><strong>Fiscal crises</strong></td>
<td><strong>Energy price shock</strong></td>
<td><strong>Failure of regional and global governance</strong></td>
</tr>
<tr>
<td>5</td>
<td><strong>Cyber attacks</strong></td>
<td><strong>Data fraud or theft</strong></td>
<td><strong>Failure of critical infrastructure</strong></td>
</tr>
<tr>
<td>6</td>
<td><strong>Profound social instability</strong></td>
<td><strong>Failure of national governance</strong></td>
<td><strong>Fiscal crises</strong></td>
</tr>
<tr>
<td>7</td>
<td><strong>Failure of financial mechanism or institution</strong></td>
<td><strong>Failure of regional and global governance</strong></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td><strong>Failure of critical infrastructure</strong></td>
<td><strong>Fiscal crises</strong></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td><strong>Failure of regional and global governance</strong></td>
<td><strong>Failure of critical infrastructure</strong></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td><strong>Terrorist attacks</strong></td>
<td><strong>Man-made environmental catastrophes</strong></td>
<td></td>
</tr>
</tbody>
</table>

* respondents to WEF’s Executive Opinion Survey were asked to select “the five risks that you believe to be of most concern to doing business in your country within the next ten years” from a core list of 30 global risks.

Manufacturing Industry = Digital Industry
Global Risks

- Data Localisation
- Forced Data sharing with governments
  - Political risk / data risk
- Opaque cyber security laws
- Lack of liberalization in financial industry
- Patchwork of poor regulations
GBC calls for international regulatory coherence in digital trade rules

February 25, 2019

- Digital technologies and data are fundamental elements of modern business
- GBC calls for a multilateral approach to digital trade rules
- We advocate for improved Data Stewardship practices to restore consumer confidence
Data Stewardship

- Data as a business model vs data collection in course of business
- Positive impacts of data for the advancement of society, business and government
- Data as a resource, not simply risk to manage