Australia’s automation opportunity: Reigniting productivity and inclusive income growth

CEDA Presentation
August 2019
I. The pace and quality of economic growth in Australia has declined in the past decade and income growth has collapsed

II. Automation is a key lever to reignite productivity and hence income growth

III. Automation must be carefully managed to mitigate the potential risks to unemployment and income inequality

IV. Australia should aim for a win-win scenario that both maximizes the benefits of automation and shares them equitably
## Decline of economic growth and collapse in income growth in Australia

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<thead>
<tr>
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<th>GDP growth</th>
<th>Income growth</th>
<th>Labour productivity growth</th>
<th>Labour compensation per hour growth</th>
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<tbody>
<tr>
<td><strong>Reduction in real GDP growth rate 1992-07 to 2008-16</strong></td>
<td>-31%</td>
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<td><strong>Reduction in real mean income growth rate 1995-08 to 2008-16</strong></td>
<td>-91%</td>
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<td>-35%</td>
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<tr>
<td><strong>Reduction in labour compensation per hour growth rate 1992-2007 to 2008-2016</strong></td>
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</tbody>
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Key messages

I. The pace and quality of economic growth in Australia has declined in the past decade and income growth has collapsed.

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IV. Australia should aim for a win-win scenario that both maximizes the benefits of automation and shares them equitably.
Automation holds great promise for Australia and could help rekindle economic growth that delivers higher living standards and more choices for everyone.

Impact of automation could be significant

25–46%

Share of existing workforce activities that could be automated by 2030
The opportunity for Australia

50–150%  $170–600 bn  $4–15k

Increase in average annual productivity growth compared to baseline
Additional annual GDP by 2030
Additional annual income per Australian by 2030
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The potential distributional challenges

- Number of people who may need to switch occupational categories by 2030: 1.8-5 mn
- Increase in unemployment rate without additional transitional support programs: +0.3–2.2ppt
- Increase in income inequality without additional retraining programs: +27%
The impact will vary by region

Mid-point automation adoption by 2030, by local government area

- East Pilbara: 31%
- Perth: 21%
- Harvey: 27%
- Port Pirie: 27%
- West Coast: 28%
- Mackay: 27%
- Sydney: 21%
- Penrith: 27%
- Greater Geelong: 25%
Demand for skills will change

Net change in hours worked by skill category, 2016-30, Percent

Physical and manual: -11
Basic cognitive: -2
Higher cognitive: 18
Social and emotional: 43
Technological: 66
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Ten ideas on the way forward

Governments and employers should accelerate automation
- Jump-starting national competition agenda
- Create national mechanisms to drive reform and coordinate change
- Accelerate automation at the organisational level
- Build the organisation of the future with the skills needed to automate

Governments, employers and educators should promote inclusive growth
- Invest in worker retraining within organisations
- Support displaced workers prepare for new roles outside the organisation
- Better align training offerings with needs
- Establish ‘lifetime learning accounts’ for adults
- Invest in individual transitional support
- Optimise re-employment services & pilot innovations