Digital Innovation & Prevention / Early Intervention

Presentation to the Productivity Commission

December 2016
Agenda

1. Digital innovation

2. Prevention & early intervention
**Digital Innovation - Links**

Digital Innovation

Digital for Small and Medium Enterprises

Digital for Government

Start Up Economy
We are facing a technology change singularity

- Historic point in the maturing of multiple technologies
- Feeding into each other and combining with globalisation to accelerate change
- The result will be a technology change singularity over the coming decades
- Visible major disruptions already emerging – eg Amazon, Uber, Airbnb, etc
- Emerging disruptions – eg banking, education, health
- Government is not immune
- Threats and opportunities for Australia
We need to focus as a nation on building our innovation eco-system

Venture Capital

• Over the last 10 years, the US has spent $285b in VC versus $4.5b in Australia with key gaps across the ecosystem

Research & Development

• Over 50% of Business R&D is concentrated in physical capital industries and we lag in our ability to commercialise

Education

• STEM course completions have fallen from 22% to 16% (2002 to 2012) whilst our Asian neighbours increase (52% in Singapore 2012)
Digital Innovation benefits

In 2024...

- Reduce Australia’s estimated Federal Budget deficit by $6 billion
- Contribute an additional 1.5% to Australia’s GDP

In 2034...

- Potential for up to $136 billion GDP increase created by a thriving innovation ecosystem
- 540,000 new jobs could be created
Role for Government?

• Be the creator of innovation opportunities
• Shore the skill base
• Incentivise innovation
• Put digital and citizen first
**Digital Innovation**

**SMEs**
- PwC estimates $49.2 billion of untapped economic potential (NPV, 10 years)
- 53% rural and regional

**Government**
- Actions to build innovation Ecosystem

**Regulation**
- Design thinking NCP style review
  - More targeted than NCP
Agenda

1. Digital innovation

2. Prevention & early intervention
In April 2016, PwC & the Centre for Social Impact launched a report on Australia’s social purpose market:

- **Over $510 bn** is spent each year on health, education, social security & housing
- Governments contribute 80% (55% by the Commonwealth)
- 7 key areas that can yield productivity gains emerged, including prevention / early intervention

**Hypothesis: there is massive underinvestment in prevention & early intervention**
Prevention / early intervention vs Acute

Victorian Royal Commission into Family Violence:

- **227 recommendations**
- **3 ‘prevention’ category recommendations**

South Australian Child Protection Systems Royal Commission:

- **260 recommendations**
- **5 prevention / early intervention recommendations**
**Political economy**

**Reform narrative**
- Prevention is better than cure
- Early childhood & children
- Less institutional barriers
- Economic case
- Budget repair

**Barriers**
- Longer term nature of benefits
- $ away from frontline services
- Lack of confidence in execution & delivery of benefits

- Primary – before there is a problem
- Secondary – early warning signs
- Tertiary – better managing chronic states
**Early childhood**

- Early childhood is an opportunity to influence health, education & employment outcomes later in life

- PwC’s 2014 report demonstrated the potential benefits of quality education and care to the Australian economy:

<table>
<thead>
<tr>
<th>Benefits of increased female workforce participation</th>
<th>Benefits for children receiving a quality education and care program</th>
<th>Benefits of increased participation of vulnerable children</th>
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<td>$6.0 bn cumulative to 2050, or $3.7 bn in NPV terms</td>
<td>$10.3 bn cumulative to 2050, or $3.0 bn in NPV terms</td>
<td>$13.3 bn cumulative to 2050, or $2.7 bn in NPV terms</td>
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*In NPV terms*
Obesity

- Australian prevalence has increased 47% between 1995 and 2011-12
- Associated risk factor for a range of diseases eg CVD, musculoskeletal disease, mental health issues, diabetes, cancer etc.

- PwC report for Obesity Australia projected obesity would cost Australia $88 bn over 10 years
- Suite of prevention & interventions has potential benefits of $2.1 bn over 10 years
**Domestic violence**

- **Half of all women** experience violence, abuse or stalking from age 15+
- PwC report estimated violence against women **costs Australia $21.7 bn a year**

- **Potential lifetime benefits** of reducing violence against women:
  - >$35.6 m from community mobilisation programs
  - >$2.2 bn from individual & direct participation programs
Actions

Early Childhood
- Finish the reforms COAG started

COAG Reform Package (or Sectoral?)
- Tailored to each jurisdiction
- Pooled funding / governance
- Outcome focussed incentives
- Transparent measurement
  - Agile implementation
  - Include place based

Access
Quality
System Design
Place based
Health
Justice
Human Services