

Where is Smart Agri Heading in the Australian Horticulture Industry

Dr Anthony Kachenko
R&D Team Leader
December 2016

HIA's vision

Through innovation,
HIA strives to increase
the **productivity,**
farm gate profitability and
global competitiveness of
Australia's horticulture
industries.



Meet Lindsay - Mr Average

- Male
- >53 years
- Progressively aging
- Smaller farm size
- Downsizing
- Consolidation
- \$100 K annual output
- 30% of farms
- 6% of farm output
- Lower productivity?



Meet Ed – Mr Innovator

- Male
- In 40's
- Larger farm size
- \$400K annual output
- 25% of farms
- 75% of total output
- Receptive of innovation

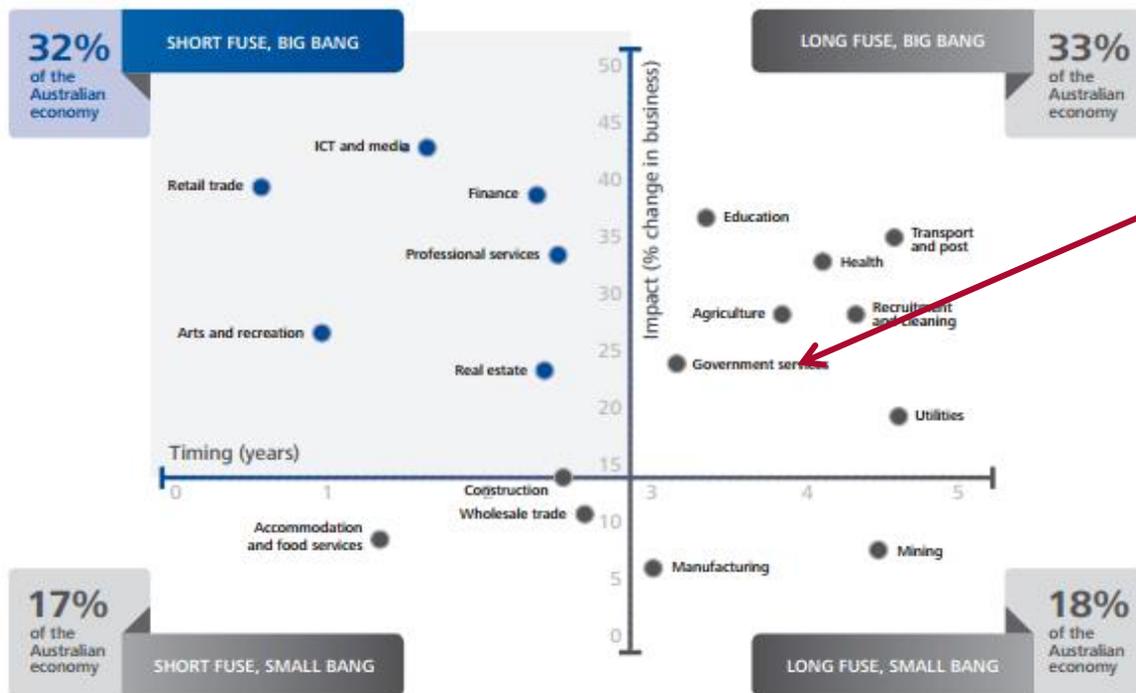


Investing in the Future



Digital Disruption

Figure 1: Deloitte's Digital Disruption Map



Significant disruption over a longer timeframe

Source: Adapted from Deloitte Touche Tohmatsu. (2012). Digital disruption Short fuse, big bang? - Deloitte.

Big Data and Advanced Analytics

- Barriers and opportunities
 - High need for innovation, particularly with data inputs on farm
 - Optimise farm operations to measure, monitor and manage
 - Increase value chain transparency by forecasting and real time information
 - Step up downstream operations to address ‘plate to paddock’
 - Tackle infrastructure challenges and postharvest needs
 - Anticipate waste and value add to drive new markets

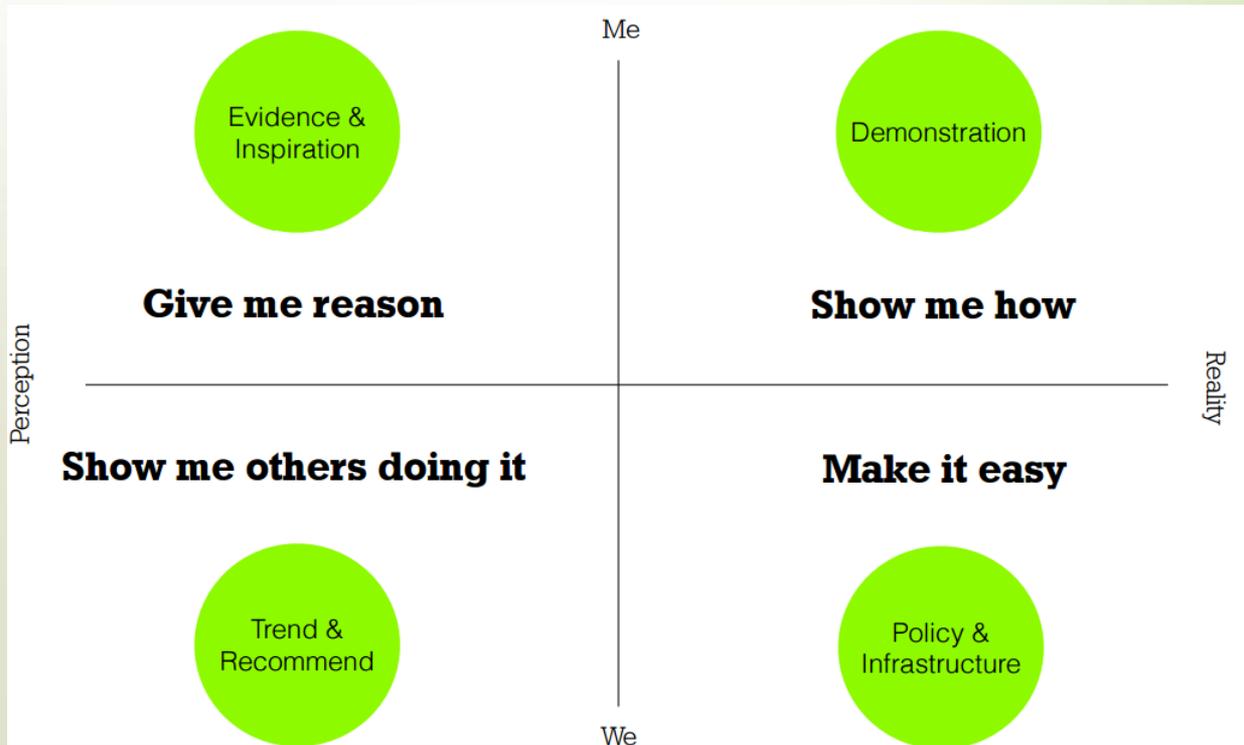
Collective Impact to Drive Change

Five conditions that exist to produce true alignment and meaningful change

Common agenda across organizations	Mutually reinforcing actions brings more collective attention and effort into an initiative.
Shared measurement	Sharing results on a common platform ensures efforts are aligned, accountable and meaningful.
Mutually reinforcing activities that build synergy	Stakeholders take on differentiated activities that build on and reinforce the work of each other.
Continuous communication	Ongoing dialogue and transparency builds common motivation, common vocabulary and co-learning.
Backbone support organizations that foster the synergy	Enables focus, synergy and collaboration between sectors.

Source: Adapted from Kania, J., & Kramer, M. (2011). Collective impact. Stanford Social Innovation Review, 9(1), 36-41.

Make it Easy



Source: Republic of Everyone, Personal Communications.

The Road Ahead

1. **Begin at the end** – engage key members of the value chain to understand the issues
2. **Don't reinvent the wheel** – build on what we know
3. Implement a **collective impact framework** to address future needs
4. **Collaborate** to innovate
5. **Clear value proposition** and a **demonstrable ROI**
6. Invest in **development and extension** to bring industry along – change the culture and inspire for tomorrow
7. **Engage with the community** to drive interest and allay misconceptions
8. **Build capacity** through curriculum enhancement across all levels

Thank you

An aerial photograph of a vast agricultural field. The foreground and middle ground are dominated by rows of lush green crops, likely a vegetable or fruit plantation, planted in neat, parallel lines. The field is bordered by a dark, tilled strip of soil. In the background, there are rolling hills, some bare trees, and a few white buildings, possibly farm structures. The sky is filled with heavy, grey clouds, suggesting an overcast day.

Contact:

Phone: 02 8295 2343

Mobile: 0429 221 443

Email: anthony.kachenko@horticulture.com.au