FAST TRACKING DEVELOPMENT OF AG-TECH
**World Economic Forum Twelve**

Figure 4: Combinations of 4IR technologies can enable innovation to solve challenges faced in food systems

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<th>Changing the shape of demand</th>
<th>Promoting value chain linkages</th>
<th>Creating effective production systems</th>
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<td>ALTERNATIVE PROTEINS</td>
<td>BIG DATA AND ADVANCED ANALYTICS FOR INSURANCE</td>
<td>BLOCKCHAIN ENABLED TRACEABILITY</td>
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<td>MOBILE SERVICE DELIVERY</td>
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<td>IOT FOR SUPPLY CHAIN TRANSPARENCY AND TRACEABILITY</td>
<td>GENE-EDITING FOR MULTI-TRAIT SEED IMPROVEMENTS</td>
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<td>BIOLOGICAL-BASED CROP PROTECTION AND MICRONUTRIENTS FOR SOIL MANAGEMENT</td>
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<td>OFF-GRID RENEWABLE ENERGY GENERATION AND STORAGE FOR ACCESS TO ELECTRICITY</td>
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NSW DPI

NSW DPI Key Stats

- **Largest rural R&D provider in Australia**
- **Portfolio of $500M** of R&D projects
- **25 research stations** and **13,000 ha** trial sites
- **650 scientific and technical staff**

Globally, the NSW DPI has been benchmarked in the top 1% of research organisations in agriculture, plant and animal sciences.
NSW DPI

Research & Development
- Scientific Capability
- Partnerships
- Co-investment

Collaboration environment
- Centralised Incubator
- Industry DPI Researchers
- Universities Qualified facilitators

Pre Seed Funding
- For research and development
- DPI R&D Future Fund Commercial Partners

Commercialisation
- Investment ready business
- IP Secured, clear business plan, staff appointed

Industry uptake
- Connected to Industry
- Start ups backed by venture capital, existing companies
Who is in the middle?

- **Connected Operator**: MH, KT, NW
- **Networked**: FR, SG, DW, WN
- **Commercial and Connected**: N+S, JPH, CP
- **In the farm business**: BM, N+K, G+S, VM
- **Isolated**: NS, PP, DC
- **Solo Operator**:
Implications and Opportunities

Productivity
Profitability
Technology
Practices
Water

Connectivity => Opportunity

Consumers
Provenance
Technology
Cost
The Story
With thanks to the
Department of Primary Industries
and the
Global Ag Tech Ecosystem