



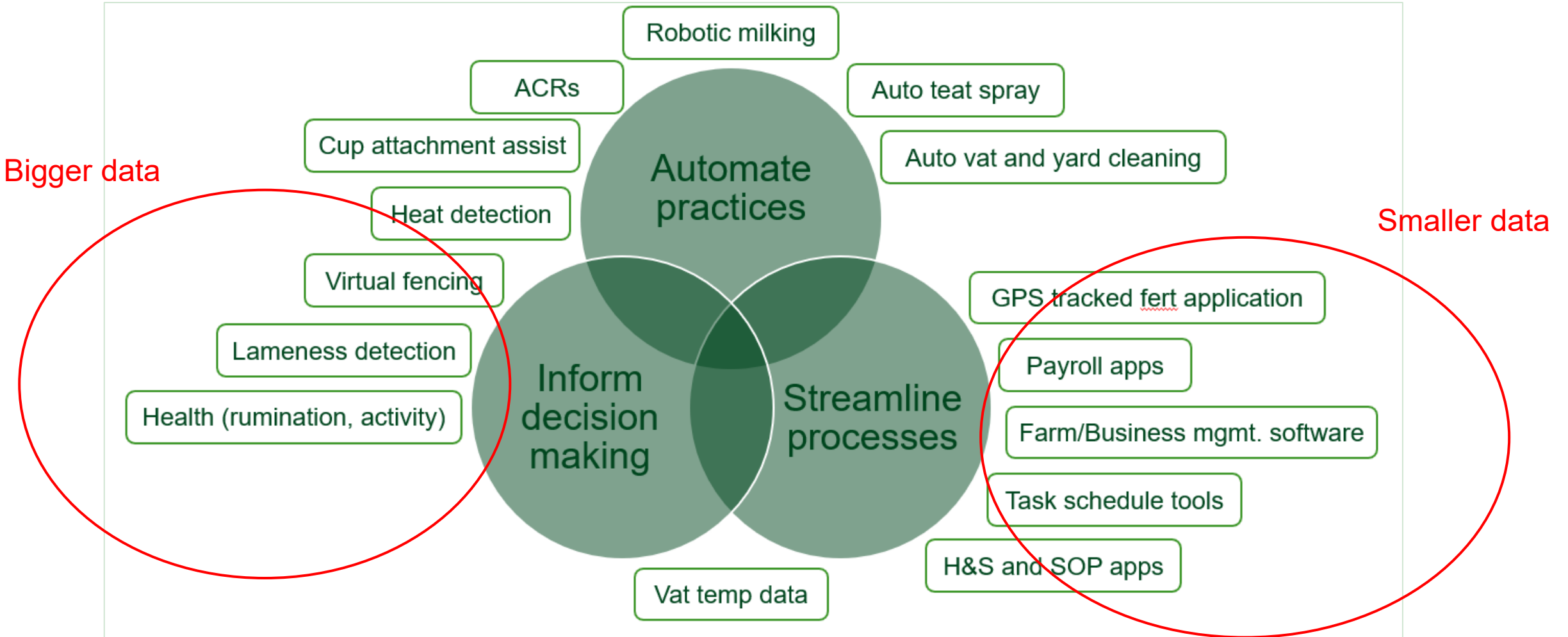
# Advisory capability and business models in a digital and AI- enabled future

Callum Eastwood

25 November 2025



# Range of tech and data sources



~2005...



Contents lists available at SciVerse ScienceDirect

Agricultural Systems

journal homepage: [www.elsevier.com/locate/agsy](http://www.elsevier.com/locate/agsy)



Networks of practice for co-construction of agricultural decision support systems:  
Case studies of precision dairy farms in Australia

C.R. Eastwood<sup>a,\*</sup>, D.F. Chapman<sup>b</sup>, M.S. Paine<sup>c</sup>

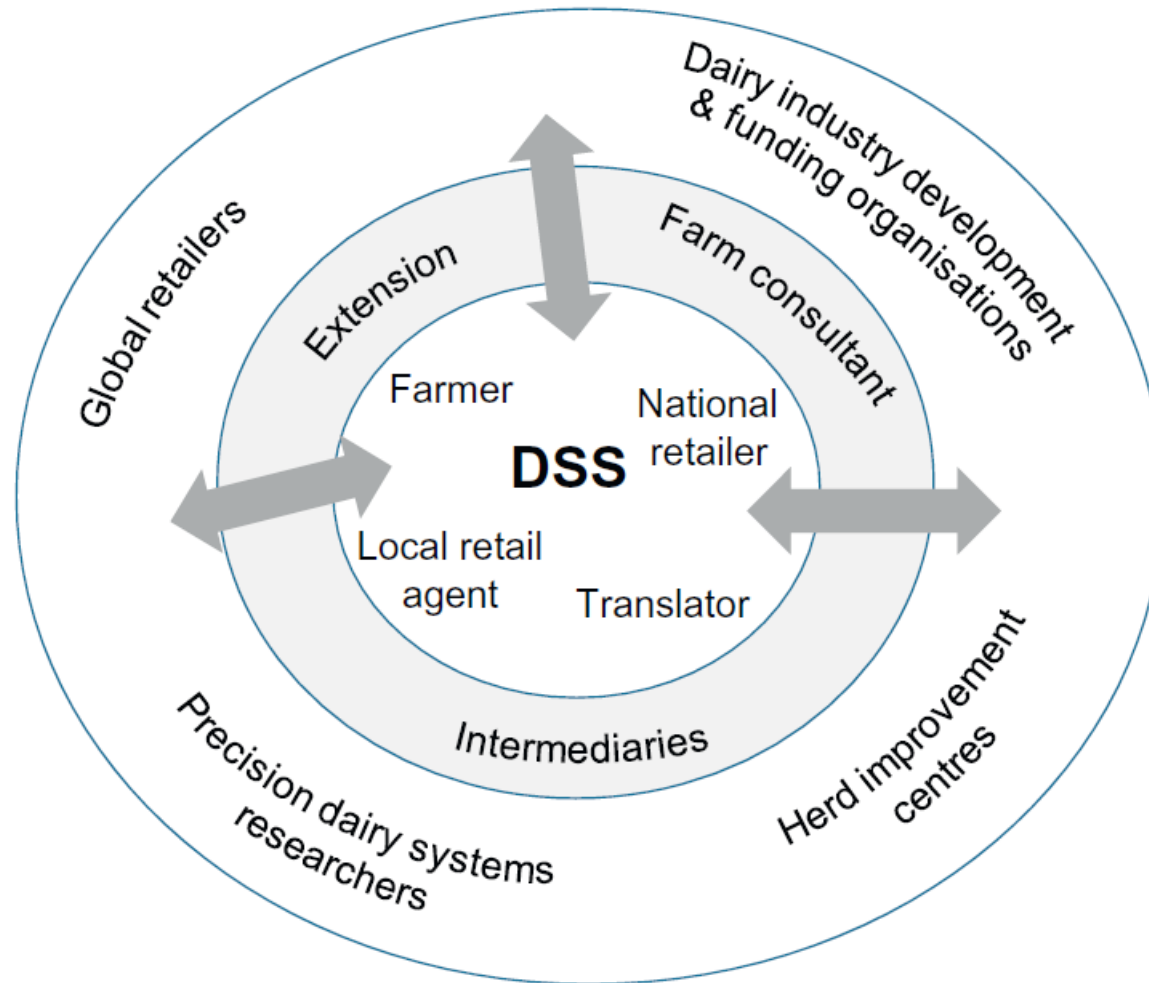


Fig. 1. Positioning actors in an improved precision dairy network of practice.

~2010

## Getting the most out of advanced farm management technologies: roles of technology suppliers and dairy industry organisations in supporting precision dairy farmers

C. R. Eastwood<sup>A,B,C</sup>, J. G. Jago<sup>B</sup>, J. P. Edwards<sup>B</sup> and J. K. Burke<sup>B</sup>

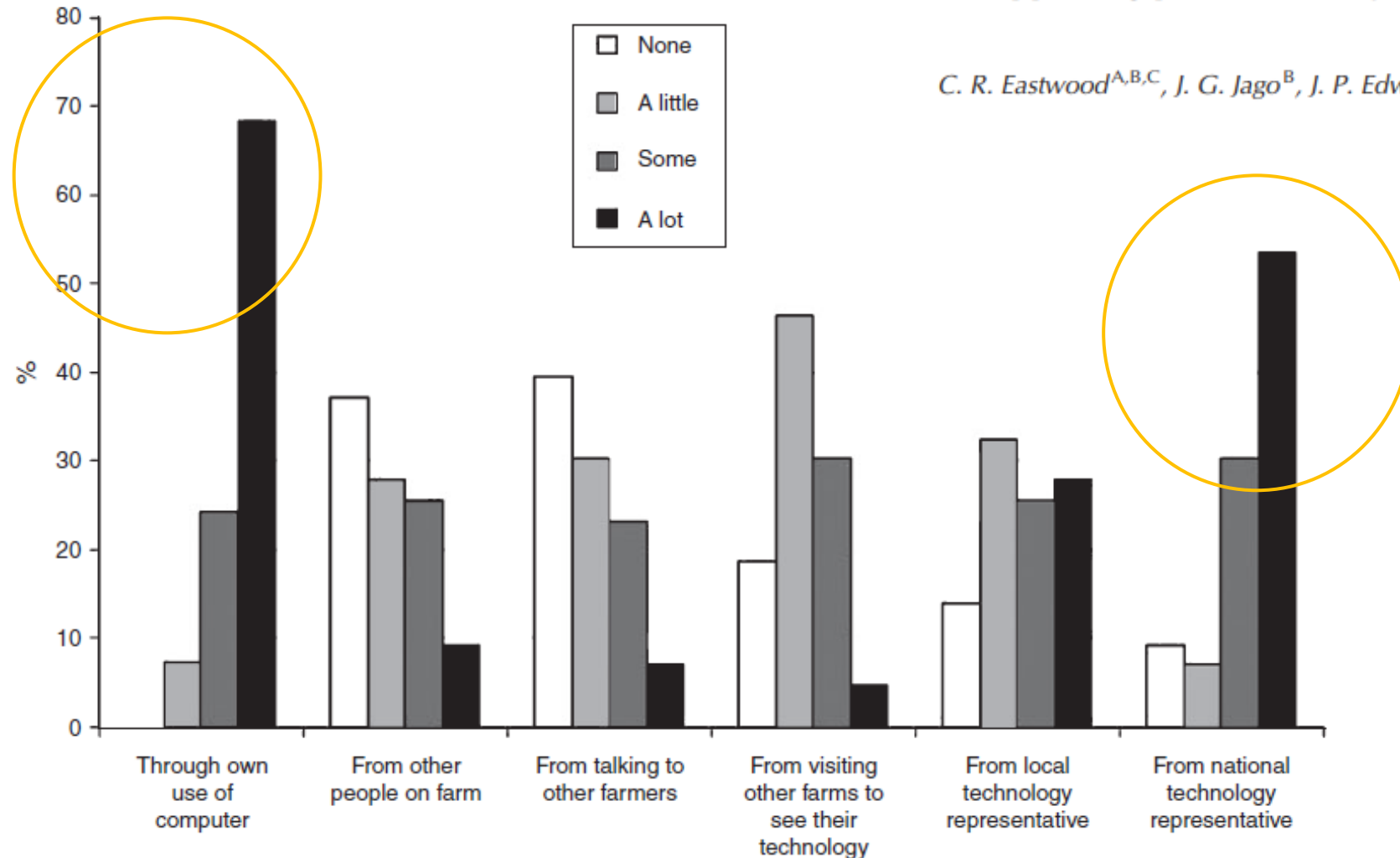


Fig. 2. Responses to statements about how farmers learnt to use precision technologies (% of all respondents).

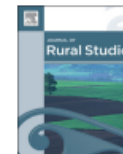
~2015



Contents lists available at ScienceDirect

Journal of Rural Studies

journal homepage: [www.elsevier.com/locate/jrurstud](http://www.elsevier.com/locate/jrurstud)



27 words

Dynamics and distribution of public and private research and extension roles for technological innovation and diffusion: Case studies of the implementation and adaptation of precision farming technologies

C. Eastwood <sup>a, b, \*</sup>, L. Klerkx <sup>c</sup>, R. Nettle <sup>a</sup>

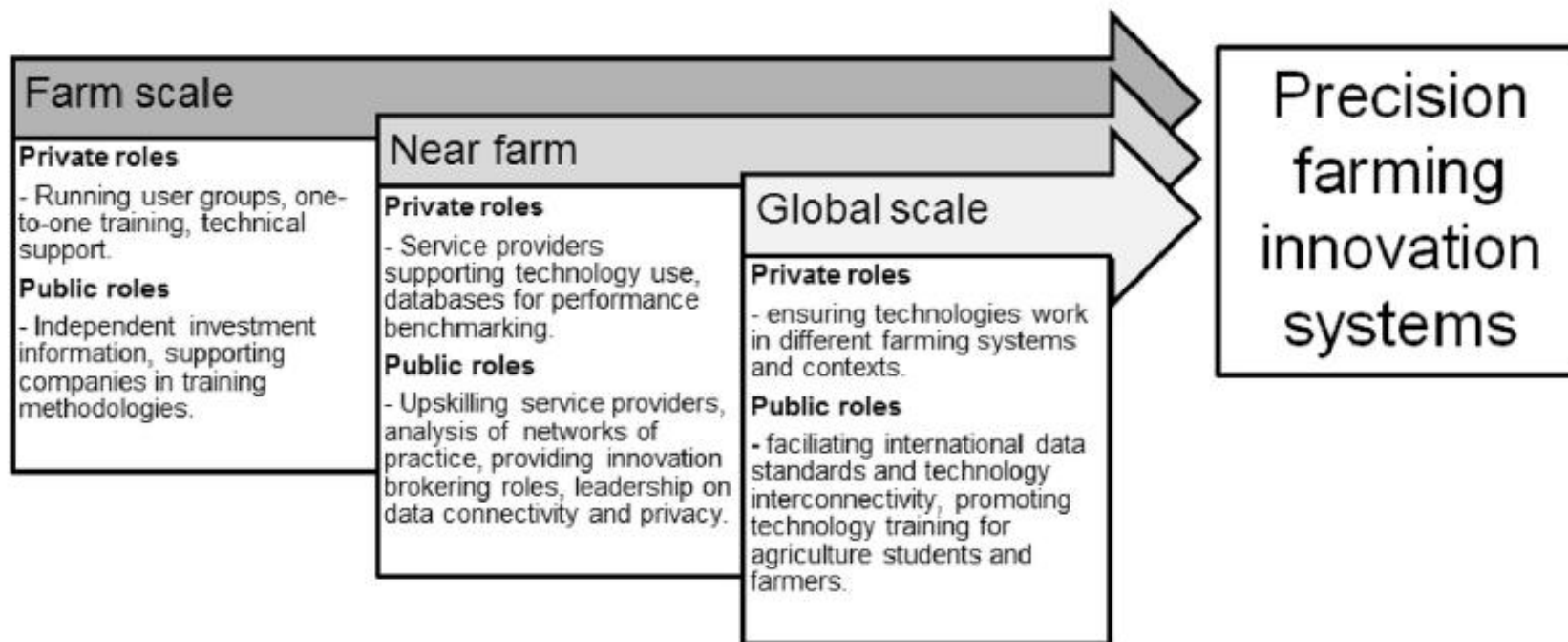


Fig. 4. Public and private roles in supporting precision farming at farm, near farm, and global scales.

~2017



Contents lists available at ScienceDirect

NJAS - Wageningen Journal of Life Sciences

journal homepage: [www.elsevier.com/locate/njas](http://www.elsevier.com/locate/njas)



Research paper

Making sense in the cloud: Farm advisory services in a smart farming future

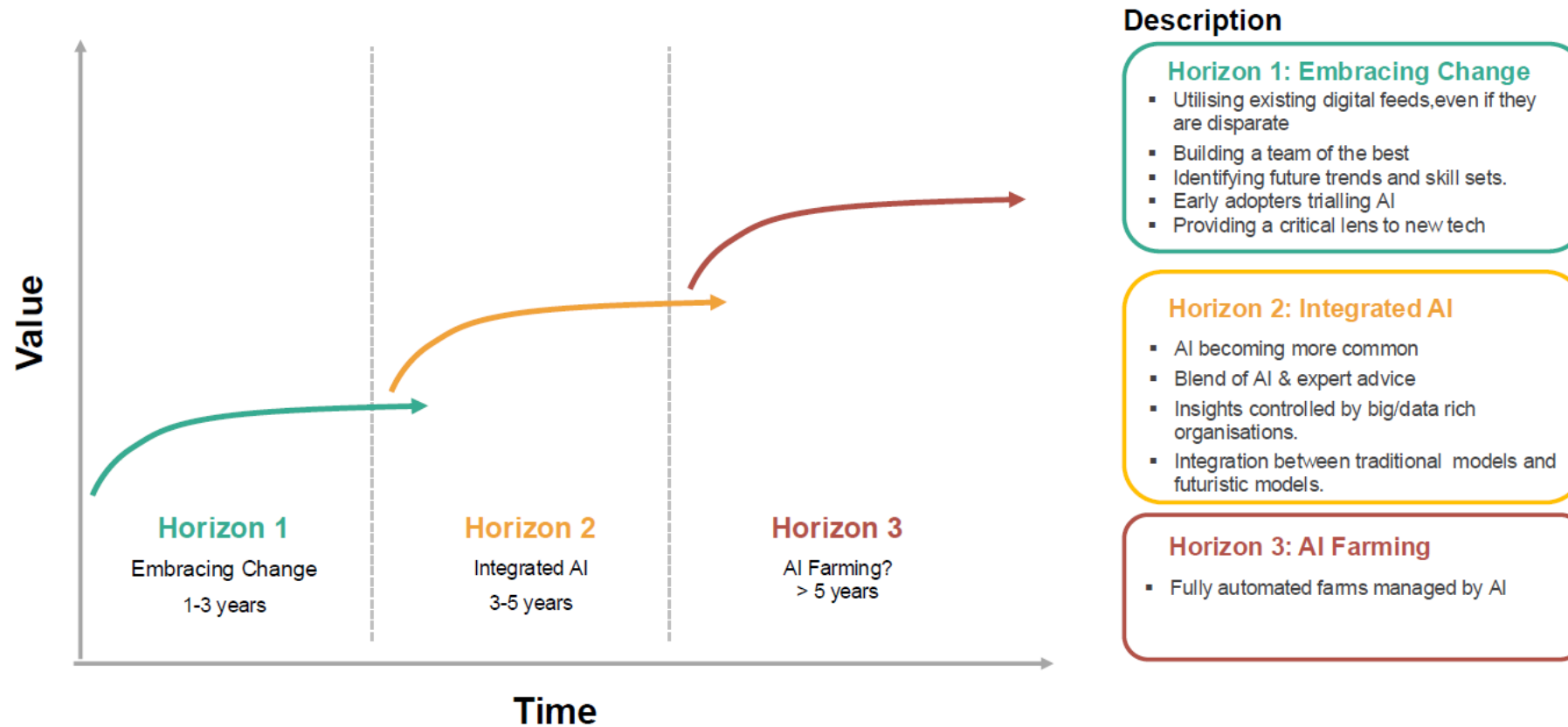
Callum Eastwood<sup>a,\*</sup>, Margaret Ayre<sup>b</sup>, Ruth Nettle<sup>b</sup>, Brian Dela Rue<sup>a</sup>



- Found advisors positioning themselves in a **data analysis role**
- **Expert users** of software tools.
- Combining their knowledge of farming contexts with the data collected via smart technologies in a **hybrid knowledge**.
- A role in **acting as a sensemaker** between farm system and digital tools
- Further research on the impact of **increasing remote interactions** (e.g. via video calling) on the farmer-advisory relationship
- Emerging roles for **technology suppliers** as specialist advisors at the technology and farm management interface
- Focus on **back-office** services helping farmers **interpret data**

# ~2025 - The Artificial Intelligence era

## The future of rural advisory



# Current DairyNZ work – Data leveraging farms

## Co-designing GenAI farmer practices (perrin ag)

The Opportunities of  
Artificial Intelligence  
for New Zealand Dairy  
Farmers

Report prepared for  
DairyNZ

Report prepared by  
Perrin Ag Consultants Ltd  
29 October 2025



## DairyNZ digital skills in dairy farmer advisory networks (Scarlatti)

- **Desk research:** Review existing literature and initiatives on digital skills in advisory roles
- **Advisor interviews:** Conduct 30-minute interviews with ~10 advisors in different roles to identify key themes and inform / test survey design.
- **Survey development:** Design, pilot, and refine the main survey instrument.
- **AI-enabled module:** Respondents can interact with an AI agent instead of typing responses.
- **Survey delivery**

# Future advisory sector skills & business models

James Allen  
CEO of AgFirst

- Reduced data collection time = increased efficiency
- Use of big data sets to gain (automated) deeper insights
- Our role evolves from data analysis to recommendations and encouraging behaviour change

Editorial: On-farm implementation of transformative technologies and practices for sustainability transitions in agriculture

Callum R. Eastwood<sup>1\*</sup>, John Paul Edwards<sup>1</sup>, Julie Ingram<sup>2</sup>, Margaret Ayre<sup>3</sup>, Simon Fielke<sup>4</sup> and Alan Renwick<sup>5,6</sup>

Nettle et al

- Digiwork, or the work of integrating social, material and symbolic practices in smart farming
- Increased workload to develop skills
- Where does role of upskilling advisor lie?
- Will smaller advisory firms keep pace?

Digiwork: how agriculture 4.0 is changing work for farm advisers

Ruth Nettle<sup>1\*</sup>, Julie Ingram<sup>2</sup> and Margaret Ayre<sup>1</sup>

<sup>1</sup>School of Agriculture, Food and Ecosystem Sciences, The University of Melbourne, Parkville, VIC, Australia, <sup>2</sup>Countryside and Community Research Institute, University of Gloucestershire, Cheltenham, United Kingdom



**Ngā mihi nui**  
**Thank you**

*Dairynz* 