



KEYNOTE SPEAKER

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# AGRICULTURE 4.0 AND RURAL DEVELOPMENT

## **Precision farming**

**PRECISION FARMING**

**Optimization** of resources and production factors in **space and time** using **ICT&E** to **maximize economic returns and reduce risk** in a **sustainable way**



Higher Yield

Lower Environmental Impacts

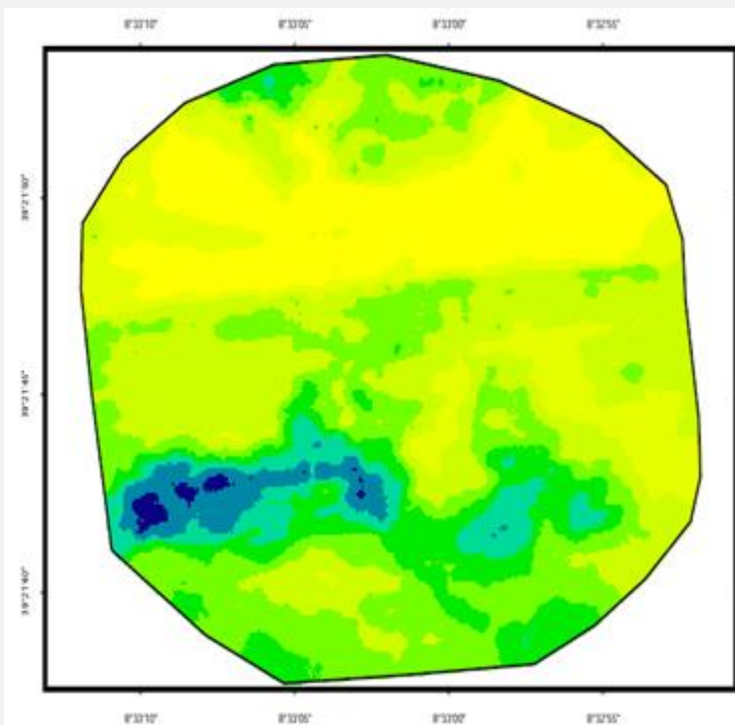
Lower Production Costs

Lower Risks

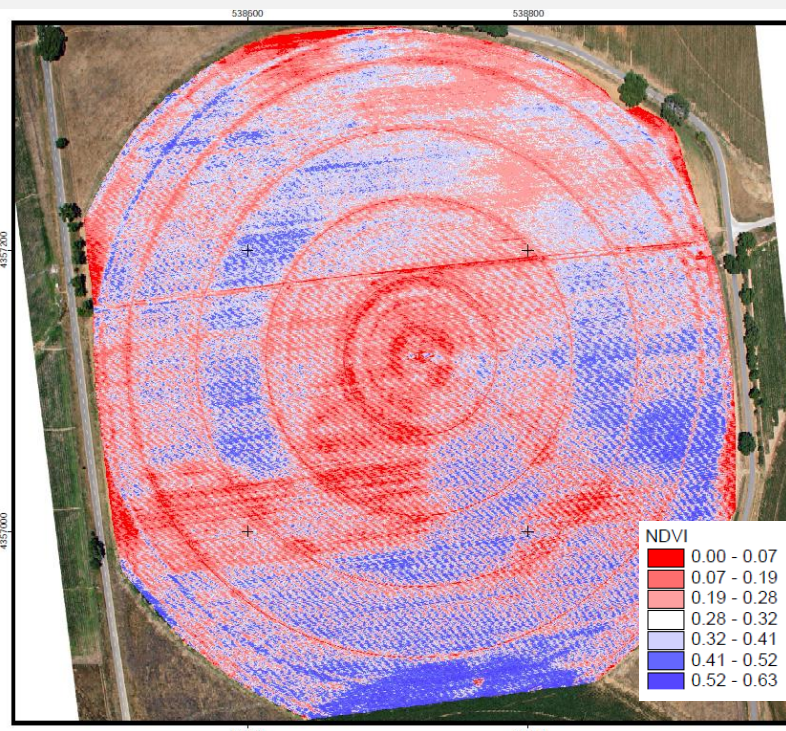


**OPPORTUNITIES  
VARIABILITY IS REAL !!**

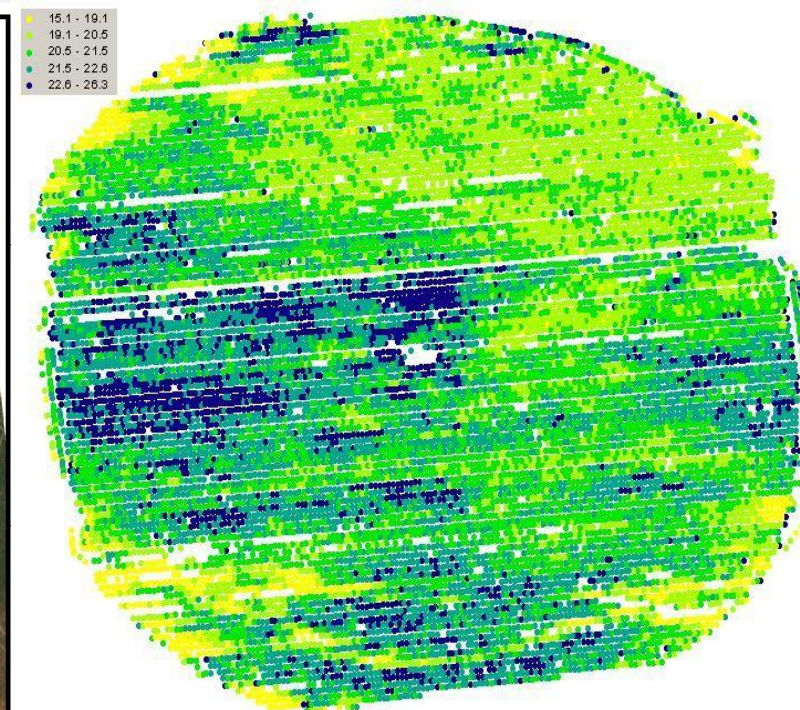
ECa



NDVI



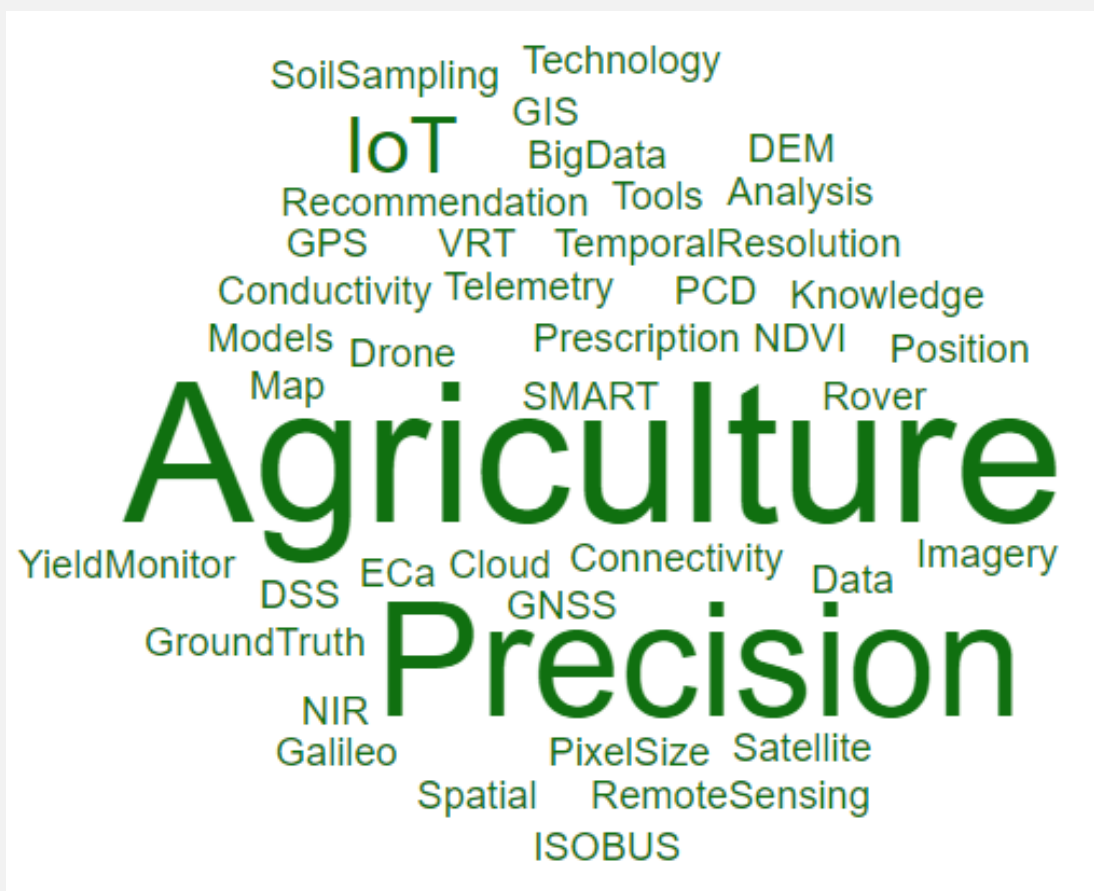
YIELD



NEW CHALLENGES

Resource Use Efficiency

Process Re-engineering



NEW KPI

=

Knowledge  
Intensity

### BOTTLENECKS

- Need for training, **knowledge, technical qualification** (Farmers, Advisor, Graduates, ...)
- “Process Re-engineering” requires **more research** (new sensors, new methods, ...)
- Farmers need better **support from dealers and advisors** (specific knowledge is still scarce)
- Rigorous determination of **breakeven** for the new decision-making processes
- Need for **networking and dissemination** (learning communities)
- Data management and compatibility (**workflows in the digital world**)
- **High-tech vs Low-tech** Precision Farming