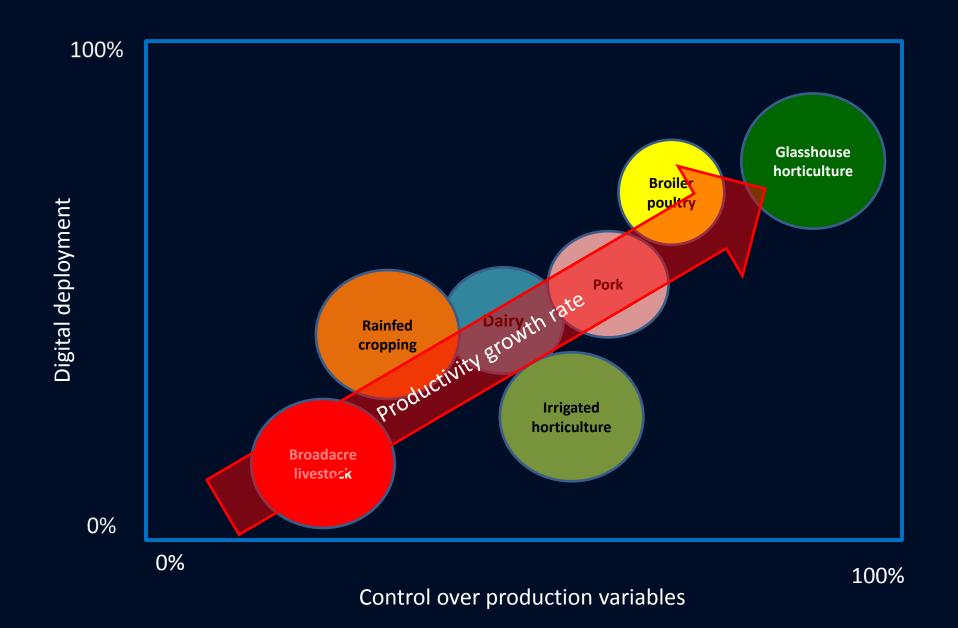
# Positioning broadacre livestock industries to capitalise on digital opportunities Mick Keogh, Australian Farm Institute



• **Digital agriculture** is agriculture which relies on detailed digital information about a wide range of production variables which are utilised to guide production decisions.

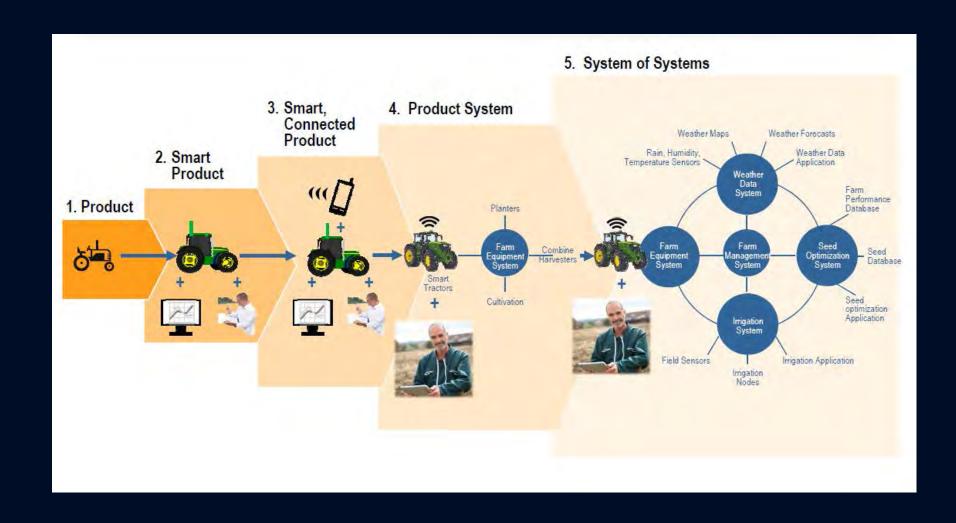
• **Big Data** is data whose scale, diversity, and complexity require new architecture, techniques, algorithms, and analytics to manage it and extract value and hidden knowledge from it.







## Progression of US digital agriculture





## Can Australian livestock industries follow?

- US systems developed on the back of;
  - High density rainfall and climate data
  - Very high resolution national soil maps
  - Extensive public GPS and mobile phone network
  - Monoculture high input crop (corn)

 A large and competitive market for software applications, funded by the private sector.



## 1. Development of "Australian digital agriculture forum"

- bring together science, production, IT, telecommunications, software developers, technology providers, investors
- focus on industry-wide issues of common benefit
- facilitate network development and collaboration



2. Industry agreement on two key principles

- "Ownership of data" (Control over data use)

- Open access data protocols



#### 3. Establish Farm Data Ombudsman

Oversee data privacy standards

Establish data use categories

Audit or assess compliance with industry standards



4. Role of government

 provision of and access to climate and soil data (are there public/private models?)

- mobile phone and internet access



5. Role of public research agencies and RDCs

- Open access to research trial data

- Integration of public databases with private applications

- Public-sector agencies should not be involved in the development of user interfaces.



6. Future industry information flows and extension systems.

Digital applications represent a substantial change in the way industry participants access information and acquire knowledge.

Fundamental rethink of extension models – including the role of the private sector.



#### DILEMMA -

The more Australian farmers collect and freely share production data, the more likely it is that digital agriculture will deliver productivity gains ...

... in the <u>future</u>.

# Corporate Supporters



































#### Corporate Partners:



































