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#### AGRICULTURE 4.0 AND RURAL DEVELOPMENT

Management tools to support farmers decision-making







## **IMPACT OF DIGITAL TECH**

- Decisions informed by information better decisions
- Greater control and precision
- Better use of labour
- Evidence for consumers, regulators
- Farmer: Save money or save time?



## **CONCEPTUAL FRAMEWORK**

Measure

• Sensors, weights, observations

IoT

Capture

• Getting data from sensor into a structured database

Integrate

• Combine the databases to add value

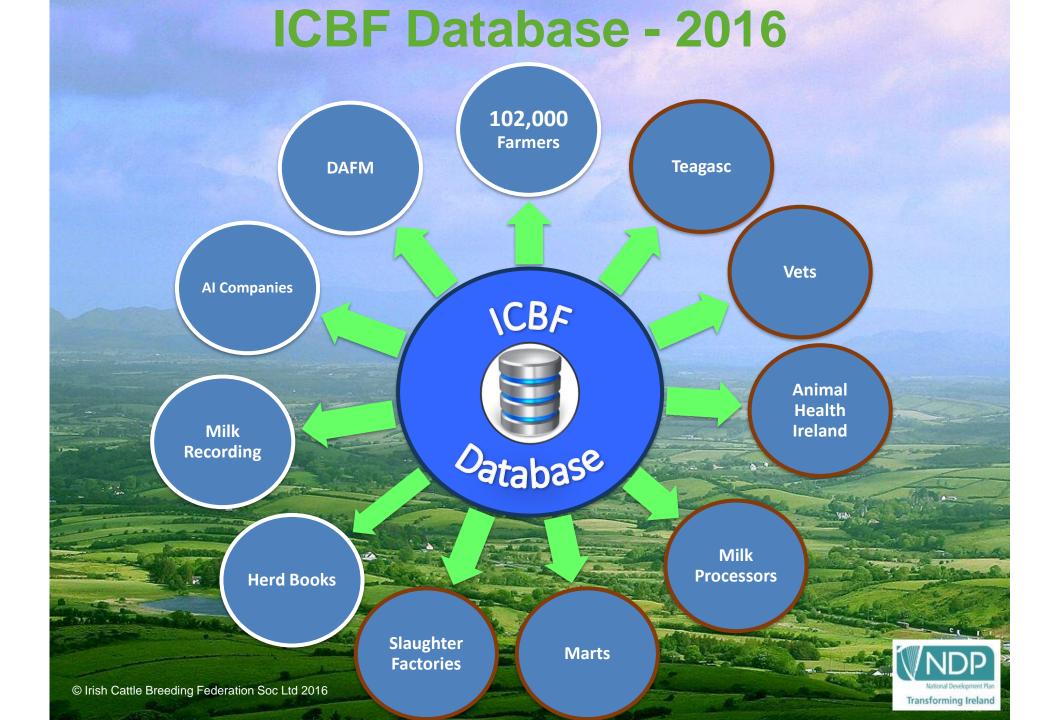
• Big data

Analyse

• Data analytics to turn data into useable information

Deliver

• Create a Decision Support System



# How is data recorded by farmers?

- ICBF web site
- ICBF.com



- DAFM web site
- Farm software companies
- **Animal Events Sheets**
- Text Messages
- Handhelds:















### Concluding remarks

- Co-design approach needed
- Farmer: Does solution save/make me money or save me time?
- Advisor: Can this technology help in decisions and target farm advice?
- Data capture still a high effort part of process
- High Speed Broadband must be prioritised.
- Data ownership must develop and maintain trust regulation and best practice
- Public/private relations important Digital Innovation Hubs