Precision Livestock Farming:
opportunities for herd management

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CRV

Cooperative herd improvement organisation

- genetics
- management information
- services

Focus on herd management

- Good herd management is key
- CRV helps farmers with solutions to improve herd performance
- How can Precision Livestock Farming create value?

Examples to create value for farmers

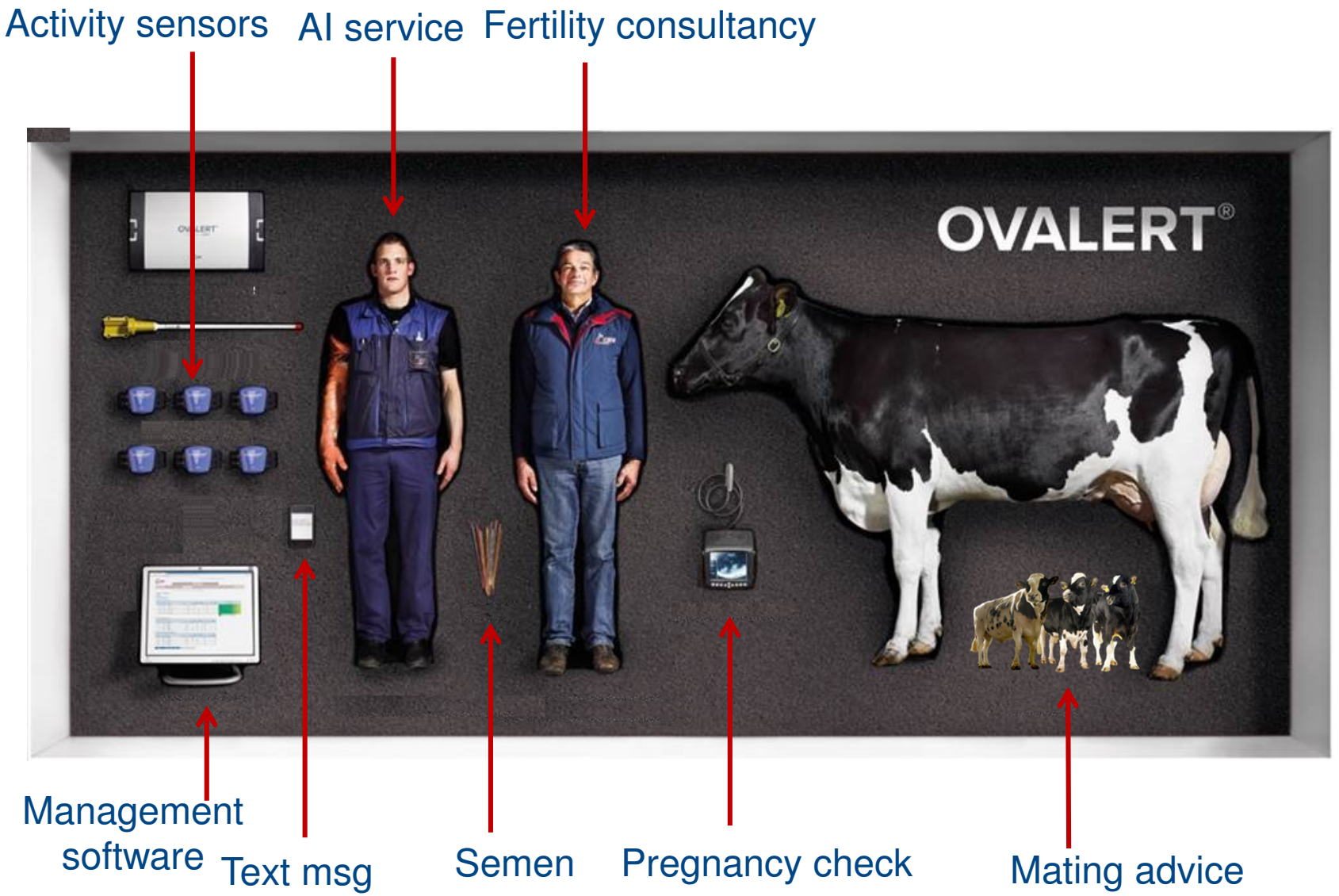
1. Ovalert concept
   using mature PLF technique within a total solution concept

2. SmartDairyFarming project
   creating synergy and new innovations in production chain

1. Ovalert®

- Focus on fertility management
- Reliable heat detection based on activity data
- Ovalert is an integrated fertility solution
  - partners provide sensor technology
  - CRV provides information, genetics and fertility services

Ovalert®


Activity sensors
AI service
Fertility consultancy
OVALERT®
Management software
Text msg
Semen
Pregnancy check
Mating advice

2. SmartDairyFarming Project (2011-2014)

Main objective

support farmers with their main herd management processes (young stock rearing, fertility and transition)

Large consortium

- 3 large farmer cooperatives
- 7 SME companies
- universities, research institutes, agricultural colleges
- 7 commercial dairy farms

SmartDairyFarming Project: results

Improved sensor technology

- improved bolus to record rumen pH
- validation of body weight recording and activity sensors

Decision support

- improved standard operating procedures (SOPs)

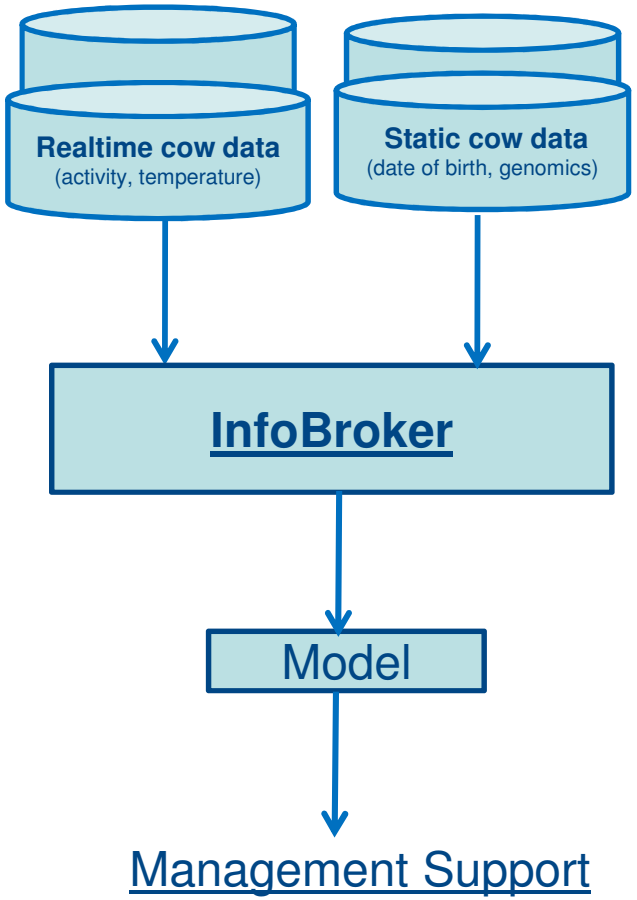
New concept infrastructure PLF data production chain

- InfoBroker

SmartDairyFarming

CRV

InfoBroker concept



- Aim: facilitate linking and using data
- Platform for data providers and users
- A broker:
  - connects to data stored externally
  - no central database
- Current size:
  - 7 dairy farms / 1500 animals
  - 20 sensors / 10 providers
    (milk yield, activity, body weight)
- Managed by nonprofit organisation
- Business model
  - fixed fee (connections)
  - variable fee (pay-per-view)

Challenges

Technical challenges

- new applications for more complex processes
- use genomic data: e.g. cow-specific feeding
- exploitation of big data

Commercial challenges

- closed *vs* open data platforms
- data ownership and privacy
- business models

Conclusions

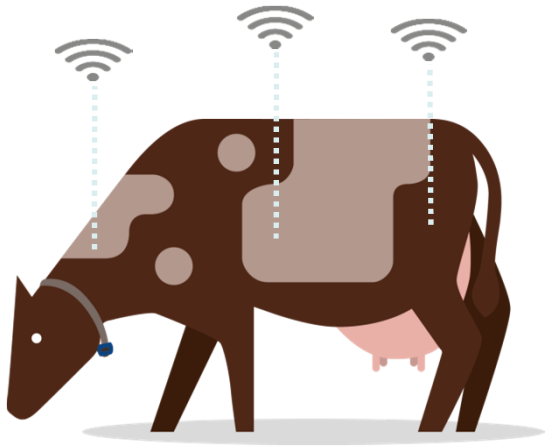
PLF creates value to current and future herd management

Implementation of PLF technology depends on

- value proposition (stand-alone *vs* total solution)
- collaboration at chain level

Further innovations will benefit from

- stronger focus on farmers' needs
- new techniques to analyse data
- exploration of new business models data



Thank you for your attention!

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