

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



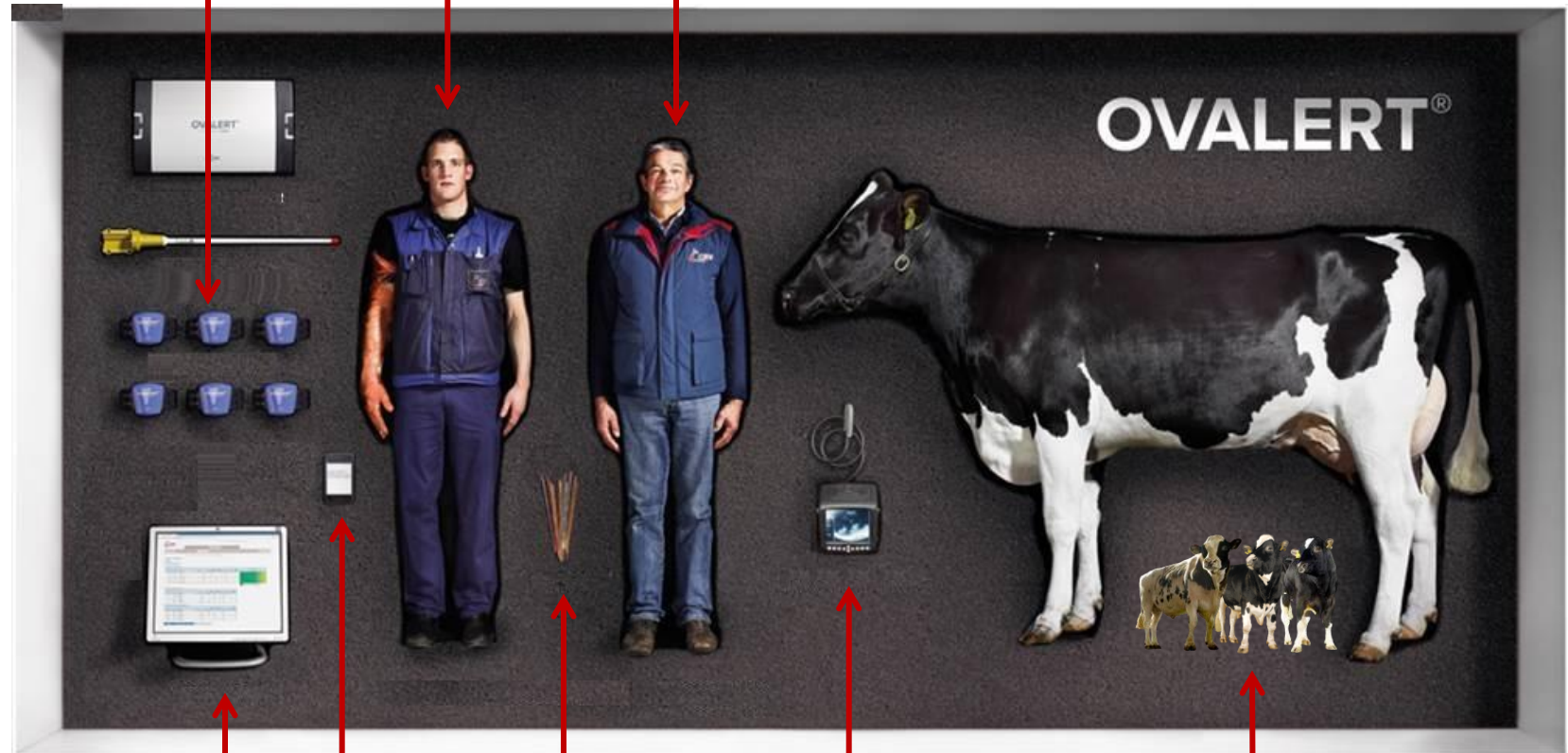
1. Ovalert®

- 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



Management software

Text msg

Semen

Pregnancy check

Mating advice

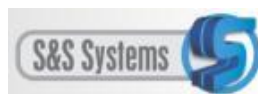
2. SmartDairyFarming Project (2011-2014)

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



Universiteit Utrecht



SmartDairyFarming Project: results

Improved sensor technology

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

Decision support

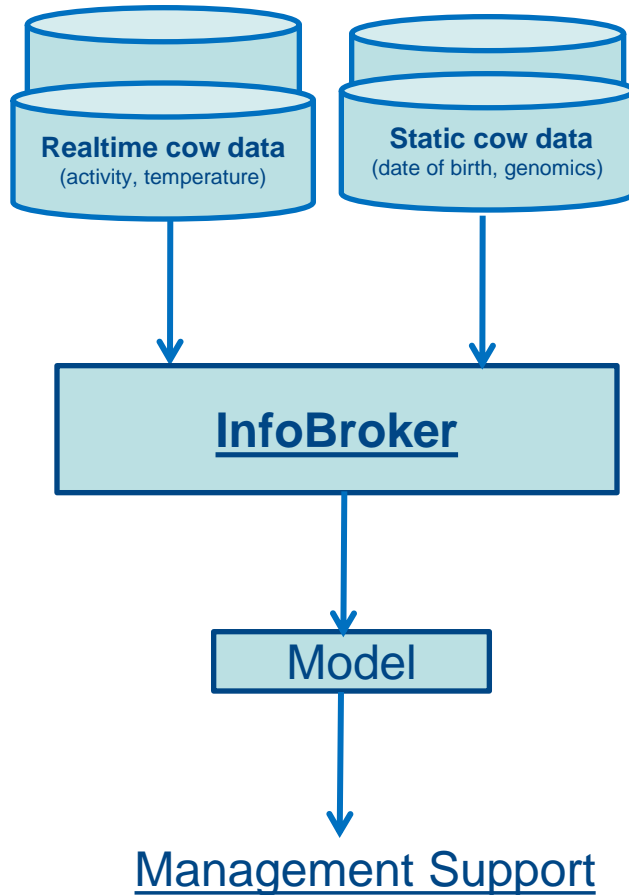
- improved standard operating procedures (SOPs)

New concept infrastructure PLF data production chain

- InfoBroker



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

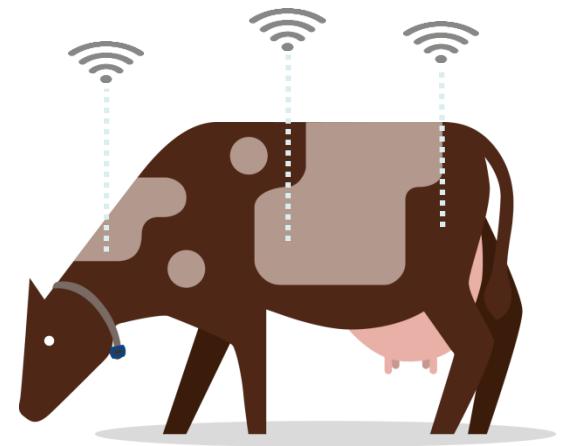
PLF creates value to current and future herd management

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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