Smart Dairy Farming 3.0: multiplying innovations on the farmyard

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SMART DAIRY FARMING 3.0: MULTIPLYING INNOVATIONS ON THE FARMYARD

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SMART DAIRY FARMING 3.0: MULTIPLYING INNOVATIONS ON THE FARMYARD

1. SMART DAIRY FARMING IN COOPERATIVE PERSPECTIVE
2. WHY THIS PROJECT?
3. ARCHITECTURE
4. CURRENT STATUS
SMART DAIRY FARMING IN COOPERATIVE PERSPECTIVE
OVERVIEW
DYNAMICS IN THE AGRICULTURAL SECTOR

DECREASE OF DEMAND AND INCREASE OF SUPPLY: IN SEARCH OF A NEW BALANCE

GEOPOLITICAL TENSIONS AND LOW OIL PRICES

FARMERS’ INCOME UNDER PRESSURE AND STRONGLY FLUCTUATING

REGULATIONS CONCERNING PHOSPHATES IN THE NETHERLANDS
DYNAMICS IN THE AGRICULTURAL SECTOR
WHAT CONNECTS US?
DYNAMICS IN THE AGRICULTURAL SECTOR
PRODUCTION OF MILK PER COW PER YEAR

Average production: 8,000 kg per year
Distribution: 5,000 – 11,000 kg per year

Average production during cow’s life: 31,000 kg of milk

Top production during cow’s life: 200,000 kg of milk
FRIESLANDCAMPINA – FOQUS PLANET

SUSTAINABLE DEVELOPMENT: CONTINUOUS IMPROVEMENTS OF RESULTS

- Minimum: 30 points
- Average: 100 points
- Maximum: 210 points

Figure: Foqus Planet FrieslandCampina 2015
DYNAMICS IN THE AGRICULTURAL SECTOR
HOW DO WE MAINTAIN OUR LEAD AS DUTCH DAIRY

Up until now: Focus on growth

Future: Optimisation through agricultural precision

Quality, Sustainability and Transparency
SMART DAIRY FARMING 3.0: WHY?
- VIDEO SDF –

http://smartdairyfarming.nl/en/
SMART DAIRY FARMING 3.0:
GOAL: ACCELERATING INNOVATION ON THE FARM

- LOWERING TOTAL COST OF OWNERSHIP FOR DAIRY FARMERS
- INCREASE EFFICIENCY OF DAIRY CHAIN
- IMPROVING SUSTAINABILITY ACHIEVEMENTS OF DAIRY CHAIN
SMART DAIRY FARMING 3.0:
GOAL: ACCELERATING INNOVATION ON THE FARM

1. Secured data ownership of dairy farmers
   - Farmer is owner of data
   - Agreements with data suppliers about data availability

2. Sharing data through SDF Datahub
   - Stimulate use of sensor data and statistical data through data exchange
   - Farmer authorizes third parties for data use
   - Datahub managed by SDF Foundation
   - Open to third parties use Q4 2017

3. More efficiency and sustainability through applications
   - Applications to increase efficiency on dairy farms
   - E.g. by increasing nutrition efficiency and reducing environmental impact
SMART DAIRY FARMING 3.0: INCENTIVE FOR INNOVATION ON THE FARM

Enterprise:
✓ Efficient
✓ Sustainable
✓ Quality

Decision making information + Data = Increasing efficiency

Knowledge from knowledge institutes + Statistical data and sensor data = Increasing efficiency
SMART DAIRY FARMING 3.0: ARCHITECTURE
Target architecture SDF 3.0 Datahub
Best-of-Breed SDF 3.0
EXAMPLE: FIRST USE CASE SMART DAIRY FARMING
Digital grazing approval

Dutch heritage
Showcase for Dairy industry
License to produce + license to operate
FrieslandCampina is doubling premium for milk from grazing herds
SMART DAIRY FARMING 3.0: CURRENT STATUS
SMART DAIRY FARMING 3.0:
STATUS JUNE 2017

• Program SDF 3.0 launched in March 2016
• First use cases launched early 2017
• Prepare ‘Go live’ for market: Q4 2017

• SDF Foundation is owner ‘infobroker’ SDF 1.0
• SDF Foundation is owner ‘AgriTrust’
• SDF working on architecture and security of data streams through SDF Datahub

• SDF foundation associated with EDI-Circle
• LTO-Nederland new partner (LTO= Dutch Federation of Agriculture and Horticulture, an entrepreneurial and employers’ organisation, 50,000 members)
• Connecting most important data streams within dairy chain

• Formulating ground rules for SDF Datahub and Data usage
• Business Model agreed, cover the costs but no profit maximization
• Foundation for connecting other chain partners
• Software Development of the SDF Datahub by Rovecom and VAA

• Informing chain partners, data suppliers and application suppliers
Farmers are able to authorize third parties to use their data.

Data Suppliers can connect to the Datahub and deliver requested data.

Application suppliers can connect to the Datahub and retrieve requested data.

- Location based aggregated data
- Statistical data
- Online cow data
SMART DAIRY FARMING 3.0: REALISATION & EXPLOITATION SDF DATAHUB

- Activities
- Realisation SDF Datahub
- Q4 2017
- Datahub live
- Realisation SDF Datahub

- Activities
- Execution SDF Datahub

- Exploitation SDF Datahub

March 2016 | Jan 2017 | 1 Jan 2018 | 1 Jan 2019
SmartDairyFarming

www.smartdairyfarming.nl