

LEVERAGE THE POWER OF DATA

Nils Zehner, Agronomist

Jens Christian Jensen, Agronomist

Agronomy and Farm Solutions

VALTRA

360kg/ha

380kg/ha

400kg/ha

400kg/ha

FUSE
SMART FARMING. SYNCHRONIZED.

**YOUR
WORKING
MACHINE**

LEVERAGE THE POWER OF DATA

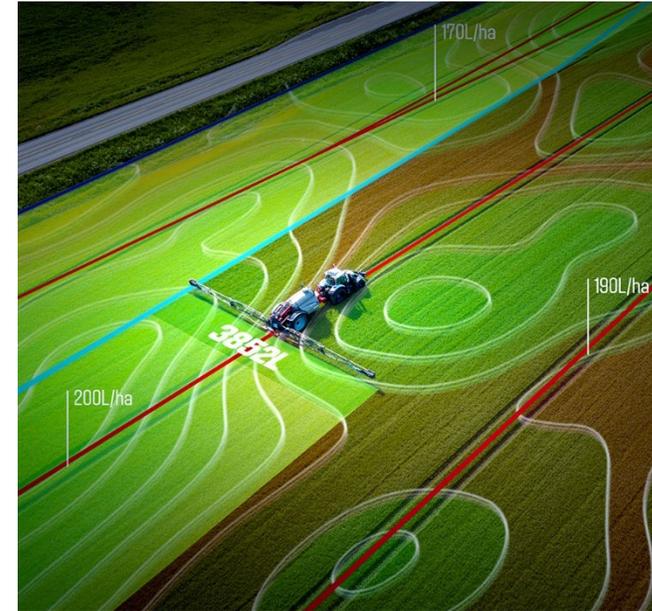
VALTRA



1.
Challenges in practice



2.
Solutions to get started



3.
Field experiences

1. CHALLENGES IN PRACTICE

AROUND DATA
MANAGEMENT

VALTRA



CHALLENGES IN PRACTICE

For many farmers, the possibilities of digital data management are not sufficiently tangible or understandable.

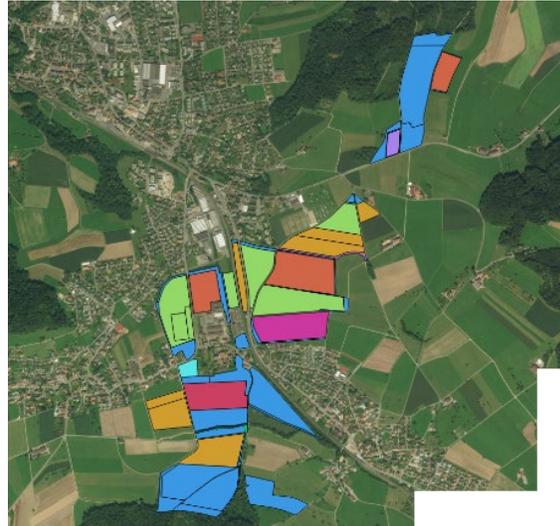
As a practical demonstration farm, the Swiss Future Farm is testing Smart Farming solutions in order to make them visible, tangible and understandable for farmers.

The examples shown are based on experiences at the Swiss Future Farm.



CHALLENGES IN PRACTICE

Balancing between farming operation, family and office work – with increasing administrative effort.



- Multiple recordings
- Operating costs
- Guidelines (federal, state, label...)
- Manpower shortages
- Weather extremes
- Modernization of machinery
- Mixed fleets
- Connecting devices and machines ("the common language is missing")

AIMS AND BENEFITS

Aims and benefits of data management

- Make operational management simple and quick to carry out
- Identify and develop new potential for operations



Efficiency

Cost reduction

Sustainability

Productivity

Profitability

2. SOLUTIONS TO GET STARTED

VALTRA

MACHINE AND AGRONOMY DATA



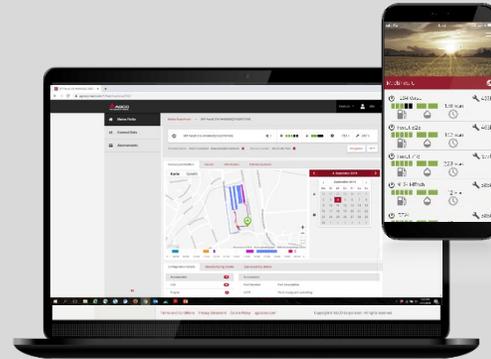
SOLUTIONS TO GET STARTED

VALTRA

Valtra Connect (AGCO Connect) – telemetry system for machine surveillance



Machine with
Connect module



AGCO Connect account &
subscription

Benefits:

- Machine localization
- Operating hours recording
- Machine alarm messages



SOLUTIONS TO GET STARTED

VALTRA

NEXT Machine Management – agronomic software for practice

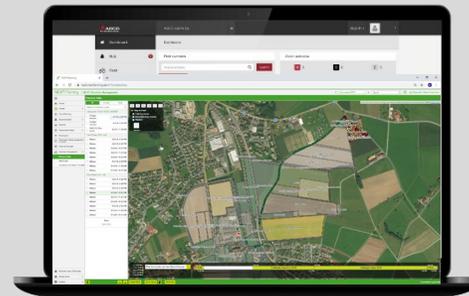


Machine with
TaskDoc subscription



In cooperation with:

FENDT KRONA The Power of Grass KUHN LEMKEN MASSEY FERGUSON POTTINGER RAUHL VALTRON



agrirouter
NEXT Farming-NMM
account & subscription

Benefits:

- Management of field database
- Planning and sending tasks
- Creating prescription maps
- Machine data visualization



3. FIELD EXPERIENCES

DIGITAL DATA MANAGEMENT

VALTRA



EVERYDAY OPERATIONS

VALTRA

WITH VALTRA CONNECT



SWISS FUTURE FARM Future Field **CRIP TOUR**

Einfluss der Saatstärke bei Drillsaat und Einzelkornsäat auf den Ertrag von Raps

FRAGESTELLUNG

- Wie hoch ist der Ertrag bei einer Saatstärke von 100 kg/ha und einer Einzelkornsäatstärke von 100 kg/ha?
- Wie hoch ist der Ertrag bei einer Saatstärke von 100 kg/ha und einer Einzelkornsäatstärke von 150 kg/ha?
- Wie hoch ist der Ertrag bei einer Saatstärke von 100 kg/ha und einer Einzelkornsäatstärke von 200 kg/ha?

VERSUCHSPLAN

Behandlung	Ertrag (t/ha)				
100 kg/ha	10.5	11.2	11.8	12.5	13.2
150 kg/ha	11.2	12.0	12.8	13.5	14.2
200 kg/ha	12.0	12.8	13.5	14.2	15.0

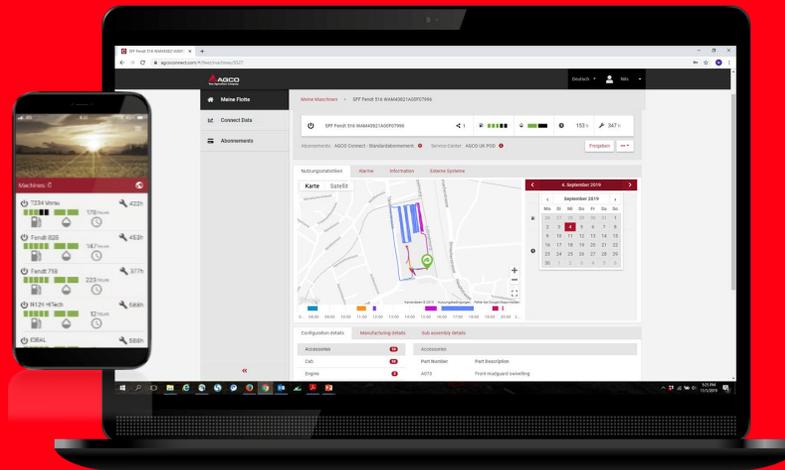
EINGESetzte TECHNOLOGIEN

- GPS-Steuerung der Erntemaschine
- GPS-Steuerung der Pflanzmaschine
- GPS-Steuerung der Düngemaschine

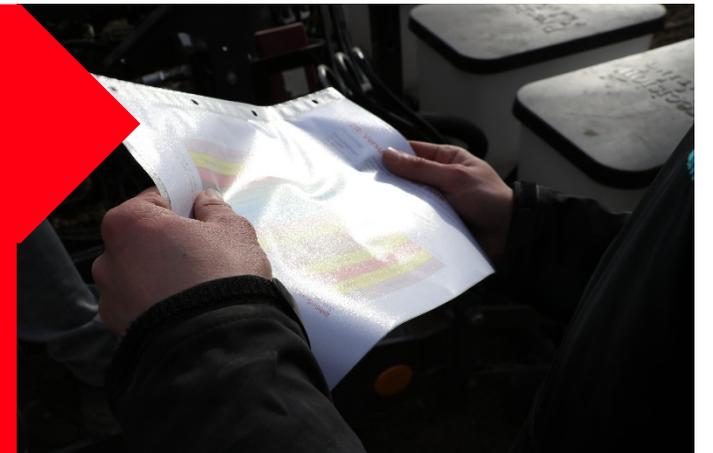
HOLL-RAPS

HOLL-RAPS ist ein Raps, der für die Produktion von Rapsöl und Rapsmehl geeignet ist. Er ist eine Kreuzung aus verschiedenen Rapsarten und hat eine hohe Ertragsleistung. Er ist auch für die Produktion von Rapskörnern geeignet.

Farm managers: insight into the status of work completion / status and location of machines



Farm employees: possibility for diagnosis in case of malfunctions during work execution



EXPERIENCES

VALTRA

WITH NEXT MACHINE MANAGEMENT

The screenshot displays the 'NEXT Farming' web application interface. The browser address bar shows 'mein.nextfarming.de/#/newTask1?anbauds=&navBackTo=home'. The page title is 'NEXT Farming NEXT Crop Planning and documentation'. The interface is divided into several sections:

- Left Sidebar:** Contains navigation options: Home, Create, Task, Prescription map, Wayline, Field, Machine, Crop Planning, Documentation, Reports, Prescription Maps, Fertilization, Waylineconverter powered by PUSE, Wayline Manager, and Machine Management.
- Manage tasks panel:**
 - Procedure / Template: Mineral fertilizing
 - Start time: 3/18/20, 9:00 AM; End time: 3/18/20, 10:00 AM
 - Name of task: Mineral fertilizing Mar 18, 2020
 - Work location, Resources, Steps of tasks table:

Name	Type	Cultivation area (ha)
1 Altkloster 2019 M	Anbau	4.6994
 - Total area (ha): 4.6994
 - Total working hours: 1 h 0 min
 - Status: Planned (In Progress, Done)
 - Progress: 0% (0 from 5)
 - Comment field
- Map:** Aerial view of a field with a blue outline indicating the task area. Labels on the map include '6 Reich 2019', '1 Altkloster 2019 M', and '1 Altkloster Oke 2019'. A sidebar on the right of the map shows 'Information on managing tasks'.

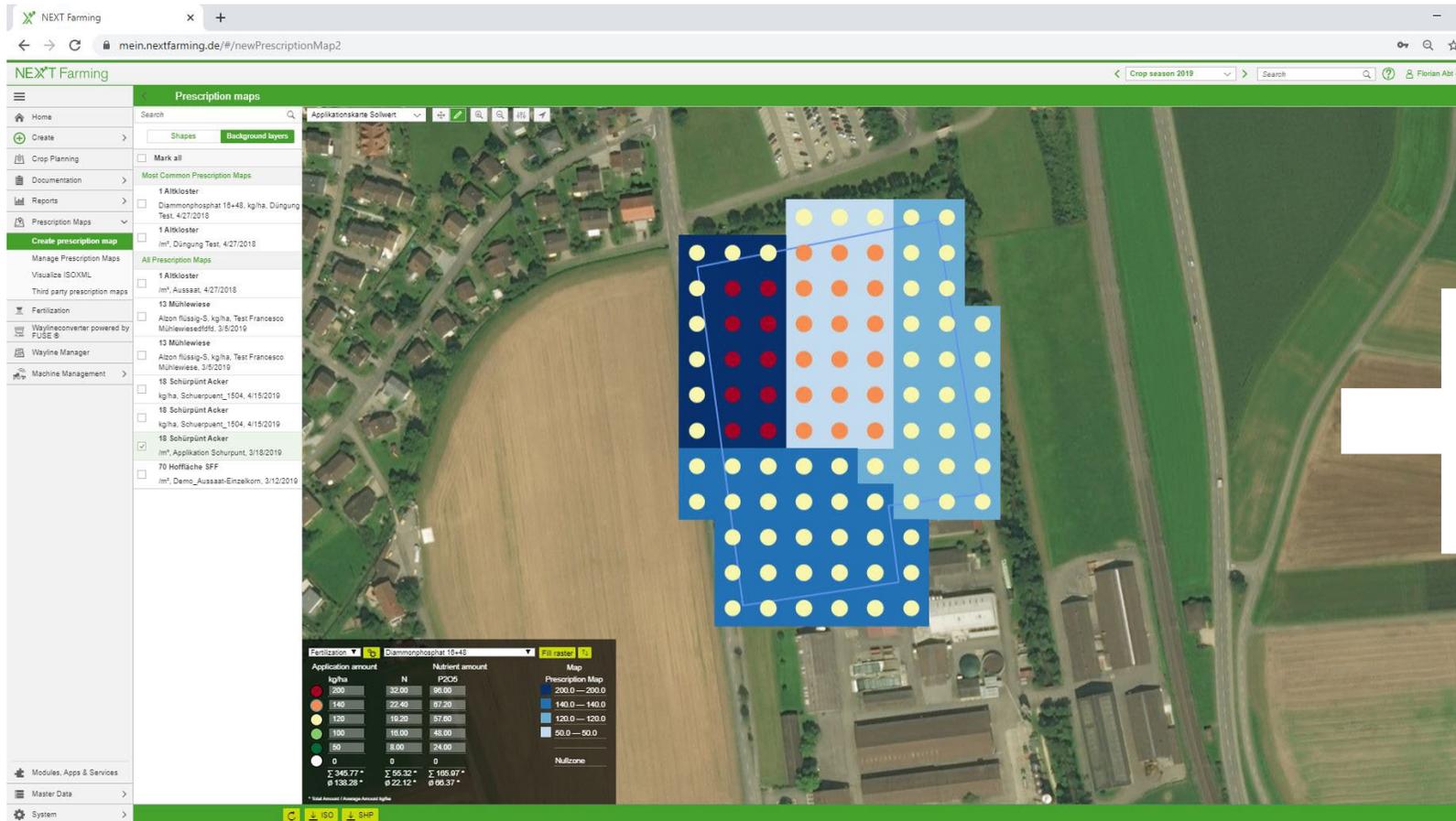
- Simple and clear planning of field operations and tasks
- Reduction of documentation effort



EXPERIENCES

VALTRA

WITH NEXT MACHINE MANAGEMENT

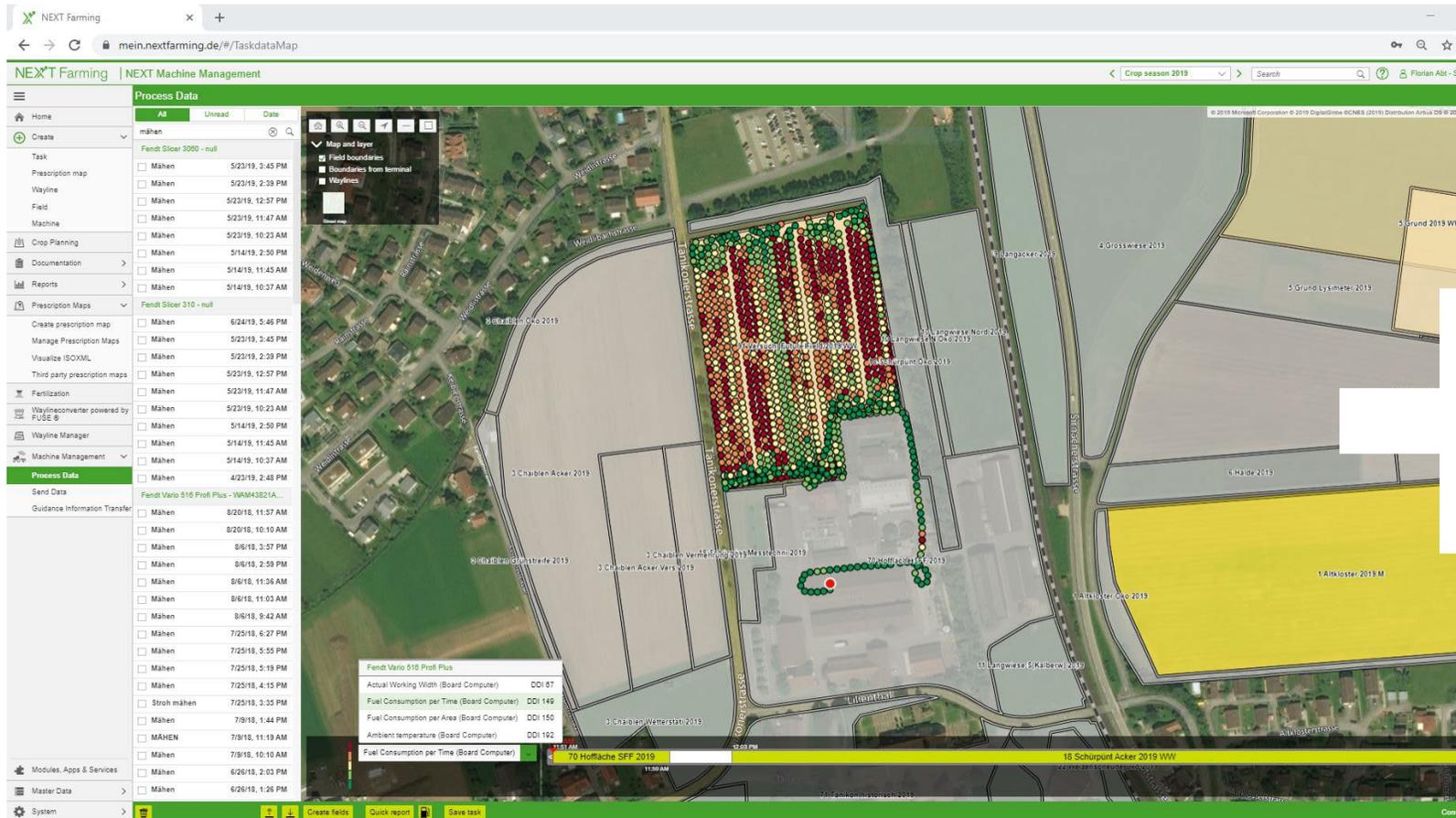


- Quick access to Variable Rate applications and prescriptions
- Identification of savings potentials for inputs



EXPERIENCES

WITH NEXT MACHINE MANAGEMENT



- Precise checking of machine performance
- Improvement of machine settings and area performance



EXPERIENCES

VALTRA

WITH NEXT MACHINE MANAGEMENT

19-11-03T23_48_59.533.pdf

1 / 1

NEXT Machine Management

NEXT Farming

Status Future Farm | Tankon | 8395 Erlenhausen

Recipient farm
First name, Last name
Street and No.
Zip code and City

Track Information
Start: 05/05/19, 11:51 A.M.
End: 05/05/19, 12:55 P.M.
Duration: 1:04 h
Worked Area: 3.81 ha
Created on: 11/03/2019

Quick report: 06_Ernte Ernteschnitt

Machine Data	Agronomic Data
Fendt Vario 516 Profi Plus - Board Computer	
Total area 3.81 ha	Total area per Time 3.59 ha/h
Active Route 7.23 km	Inactive Route 0.00 km
Active Working Time 1.06 h	Inactive Working Time 0.00 h
Total fuel consumption 17.07 l	Total AdBlue Consumption 0.39 l

No ISOBUS devices:
Maehar Fendt Slicer 3060TLKC, Maehar Fendt Slicer 310FZKC



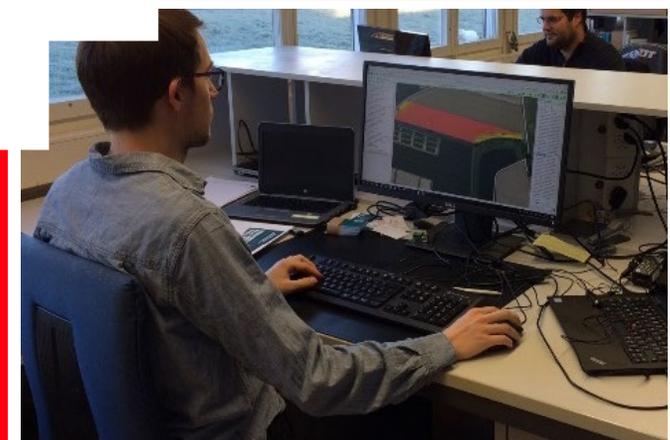
Page 1



- Fast and clear documentation of field operations and tasks



- Shared access for partners, employees and consultants is possible



BENEFITS

OF DIGITAL DATA MANAGEMENT



Efficiency

Cost reduction

Sustainability

Productivity

Profitability



VALTRA



THANK YOU!



AGCO

**YOUR
WORKING
MACHINE**