

# Partnership by Digitalization – Online Solutions for optimal cooperation in the supply chain

Dresden, September 30<sup>th</sup>

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### Nordzucker – Sugar company in north of Europe





## Nordzucker AgriPortal Network of informations





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### Benchmark – Analysis and example of value added

Benchmarking				Historie 🖌	Zurück Vorwärts
Benchmarking Erträge für Anbauer 00/00250 auf SCHLAG: Mutti / ASTO: Fischbeck					
Datenbasis: Kampagne 2004 zurück zur	n Start				
Durchschnittswerte für	RE (t/ha)	ZG (%)	ZE (t/ha)	BZE (t/ha)	GA (%)
SCHLAG: Mutti / ASTO: Fischbeck	10,83	18,079	1,96	1,76	9,77
ASTO: Fischbeck - 00/00250/0	7,71	17,577	1,36	1,22	9,84
NATURRAUM: Östlich der Elbe S-A	4,50	17,791	0,80	0,72	10,09
BETRIEB GP: 00/00250	4,50	17,791	0,80	0,72	10,09
NORDZUCKER:	3,67	5,303	0,19	0,15	8,56





## Nordzucker AgriPortal Medium of the future

- Fast and up to date
- Network of communikation, information, products und finance
- Documentation and traceability
- Farmmanagement for competitive advantage
- Creates an added value

Nordzucker AgriPortal				
Nordzucker AGRI-Portal				





Our target

Creating one logistic system for the whole Nordzucker Group



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# agrilog - involved systems

System	Funktion
NZ - SAP	<ul><li>Leading system Nordzucker</li><li>Provide and manage master data</li></ul>
Agriportal - Nordzucker	<ul><li>Leading system for farmers and contract partners</li><li>Reports</li></ul>
<mark>agri</mark> !og	<ul> <li>Planning for contract partners</li> <li>Communication between NZ and contract partner and between contract partner</li> </ul>
ELSA	<ul> <li>Delivery note system for Loader-Maus and Transporter</li> <li>Sending the delivery note via WiFi from the Loader- Maus to the truck</li> </ul>
farmpilot	<ul> <li>Field data capturing for farmers</li> <li>Farm management system used by contract partners</li> <li>Data capturing on the machine, navigation</li> </ul>



# agrilog - Flow

#### Field data capturing

- April/May
- Support by Nordzucker-Agricenter

#### Information

- All contractors know the status of a field
- Farmers know actual status

#### Field - ELSA

- ELSA gets task data via farmpilot
- Trucks log in via WiFi and get their delivery note

agrilog - Flow

1

5

6

2

4

3

#### **Preliminary-Planning**

- Done by loader contractors
  - Field visits with farmers
- Generate delivery plan for the whole campaign

#### Campaign-Mode

Contractors plan with Agrilog

Tasks are sent to farmpilot
 on the machine device

#### Field - farmpilot

- Machines start and stop tasks with farmpilot
- Connect data (loading amount, GPS location and amount of piles, problems)



### Farmpilot – mobile App

- Working package (daily, some days or weekly) for harvester, Loader-Maus and pile coverer
- Navigation for trucks even on farm tracks
- Machine data capturing
- Documentation







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#### Loader-Maus

#### **ELSA**

🧩 Nordzucker

	LKW-B	eladung	
Auftragsdaten		Verbundene LKW 1	
Auftragsnummer: Landwirt Kdnr.: Landwirtname:	0135 0010017393 Henning Hölscher	LKW H-H12345 Seit 10.08.16 / 10:03:35 im Belademodus	abbreche
Schlagnummer: 150173 Schlagname: Am Baum (1) farmpilotauftrag wechseln	Momentane Ladungsanzahl: Letzte Lieferscheinnr.: Kennzeichen Anhänger: Kennzeichen Anhänger 2: Zulässiges Gesamtgewicht: Leergewicht: Bereits geladen: Noch mögliche Zuladung:	<b>11600033</b> H-B7890 40.0t 14.0t 0.0t 26.0t	
		Fahrername: Telefonnummer:	Willi Rübe
		Transp. GP-Nr: Transporteurname:	

- Screenshot Loader-Maus device
- Loading mode

, Nordzucker

Truck is connected



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### Tasks while development

- Time-Line
  - Development started in 2012
  - Pilot phase in 2014 and 2015
  - Roll out 2016 (60% of beets in Germany)
- Pulling at the same robe
  - Defining a common goal for all parties
- Understanding
  - Speaking the same language does not mean to understand each other
    - Operational persons are not trained to speak and think in IT-structured way and vice versa

- Setback
  - Is not plannable but for sure it will come
- Other participants
  - Keep operationalists in the loop



# Advantages of agrilog

- Transparency for all parties
- Field data capturing only once a year
- Less health risk at the Loader-Maus for truck drivers
- Sustainability and traceability
- Fleet steering for trucks
- Navigation for transporters even on farm tracks
- One logistic system for the Nordzucker-Group



# Road Map agrilog



#### Roll out in Germany, Denmark, Sweden, Finland, Lithuania, Poland and Slovakia over the next years

- Development
- Getting more information field data capturing
- Reporting in Agrilog

# Outlook

- Using Agrilog for carbo lime and hp pulp
- Getting more efficiency with fleet steering



### Conclusion

- The NZ-Agriportal offers to farmers and contractors all the information needed
  - Different sources deliver the shown information
  - Different programs can be entered via the Agriportal
- Develop and run a platform is a never ending job
- The idea of automating as much as possible shrinks the flexibility of the process and of the individual