Digital Transformation in the ag Industry
Paris, June 18th 2014

Elmar Groiss, Head of Information Management
BASF Crop Protection
Average wheat yield
Germany 1850 - 2012

Yield level increased over the last 160 years

Source: Metz Rainer, 2005; proplanta.de
Fast adoption of digital technologies is the key yield and productivity driver for farmers
Crop Protection 2020 Strategy & Vision
Bringing sustainable and innovative solutions to agriculture and farmers

Solutions are the foundation for success

IT is an essential part, no longer an enabler

Farmer Needs, Innovation and Business Excellence are the main focus areas for IT
Digital Transformation
Why is it so important for the ag industry and us?

- Digital Transformation is an essential part of our 2020 Strategy → Solutions for Farmers
- Our top in class crop protection products cannot be digitalized, but can be enriched with valuable information and knowledge
- Building on our key strength and skills
- We are already very successful innovating in (digital) silos → connecting digital silos is the next step

Sustainable and Innovative solutions for Farmers
Digital Transformation in combination with BigData is the driver for new Business Models

- We are integrating and analyzing BASF’s insight/expertise + Partner Data + Open available Data to foster research, innovation and creativity
- We are focusing investments for example on precision farming and track & trace projects, to combine local, social, mobile and sensor capabilities
- We are filling the internal skill gaps in order to sustain the digital transformation

Customer Experience

Social Media

Mobile

Sensors
Standards are key in the (digital) World

Agricultural Examples

- Tyre Distance
- Three point Hitch
- Hydraulics
- Isobus

Data Standards
Open Data are next in line

BASF Crop Protection is actively working in standardization organizations (AgGateway, CRYSTAL, ...)

Source: John Deere, Wikipedia,
Top Priority for BASF Crop Protection
Data Privacy / Data Security / IT Security

Key Question to be answered: „What is in it for Farmers?“

1. Data belongs to the person or company who creates or collects the data → we respect core competencies and rights of the owners

2. Country specific laws will be respected

3. Best in Class technologies and Best Practices will be adopted and used

4. Transparency is Key
The Agricultural Information Technology Initiative (agIT) will enable farmers to make the right decisions based on integrated data and mobile access.

**Benefit:** Farmers will get support to maximize their results in the agronomic, commercial and emotional dimensions of farming.

Farmers will be supported in all dimensions of farming.

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**Grower needs**

- **Agronomic:** How to increase yields sustainably
- **Commercial:** How to run farm enterprise successfully
- **Emotional:** How growers see themselves in society

**Strategic pillars**

- **Grow Smarter**
- **Market Smarter**
- **Live Smarter**

"It's a holistic solution that will give farmers exactly the support they need for effective decision-making where and when needed."

Dr. Matthias Nachtmann, Project Lead agIT, BASF Crop Protection
Example
Track & Trace

- Introduction of digital serialization
- Documentation of the product flow from production through the distribution channel to the end user
- Helps to manage selected recalls efficiently, provide information and combat product piracy
- Process optimization to create transparency and traceability

Track & Trace enables a digital documentation of the product flow
The Chemical Company