Agriculture 4.0: The way forward for the ag. machinery industry in Europe

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The voice of Agricultural Machinery manufacturers in Europe

1. **4,500 manufacturers**
   From a handful of large multinationals to multiple SMEs

2. **450 machine types**
   From tractors & combine harvesters to plant protection equipment and precision seed drill

3. **€26 billion annual turnover & 260,000 people employed**
   Including 125,000 in related distribution and service areas

4. **10 national associations**
Challenges in agriculture

Share of farm managers aged 55 years or more
Responses

Mechanization

**FOCUS:** Maximum output through maximized input

Smart - precision technology

**FOCUS:** Maximum output through optimized input

Make the connection

**FOCUS:** plant optimized treatment / traceability over the food chain
higher INSIGHT
decide accordingly
and act appropriately

Agriculture 4.0
thematic network focusing on the dissemination of Smart Farming Technologies (SFT) in Europe, backed up by EIP-AGRI and funded by the Horizon 2020 programme.
https://smart-akis.com/SFCPPortal/#/app-h/dashboard
DIGITAL FARMING – what is needed?

Trust / willingness to share data
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Data communication infrastructure
Data communication technologies

Volume / Speed / distance
DIGITAL FARMING – what is needed?

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Seamless data transfer - interoperability
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Ensuring machine safety and security - liability
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Preparing the future for autonomous vehicles
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**Supported by Artificial intelligence**

- Analysing satellite images
- Trainable anomaly Detection and Diagnostics
- Assessing crop-soil health
- Predictive analytics
- Early warning systems
- In-field monitoring
- Trained use of hyperspectral imaging, spectroscopy or 3D mapping
- Process decision support systems
- Plant-by-plant decisions
- Robot training
- Use of swarms
- Full fleet control