

Digital platforms addressing data sharing, federation and interoperability

The smart agriculture case

Net Futures 2017 - Industrial internet and the rise of cross-cutting digital platforms

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Digital Industrial Platforms: what do we mean?

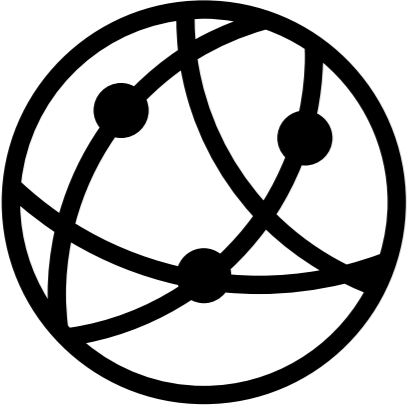
Platforms are understood as:*

- Narrow sense: *“multi-sided market gateways creating value by enabling interactions between several groups of economic actors”*
- *“Digital platforms are like operating systems that integrate different technologies and various applications and services”*
- Broad sense: *“agreements on functions and interfaces between industry players that create markets and market opportunities leading to ecosystems and standards”. This encompasses platforms (in the narrow sense) together with reference architectures, interaction protocols, and interoperability frameworks.*

* DEI strategy (1st and 2nd DEI WG2 reports)

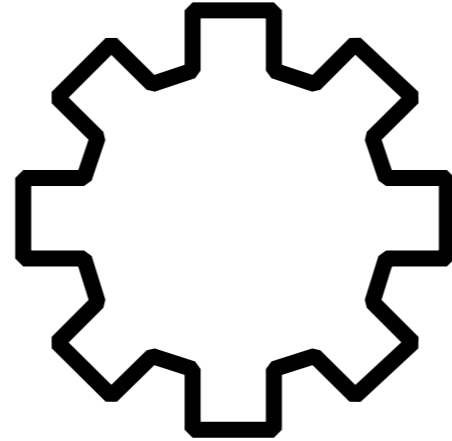


Digital Industrial Platforms: why so important?



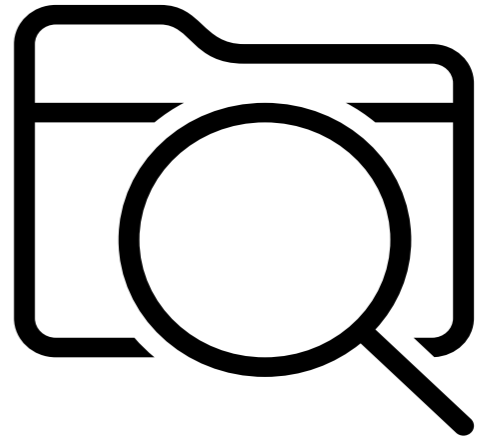
Community

Connecting users
Marketplaces



Infraestructure

Integrating systems
Third party applications



Data

Accessibility
Relevance

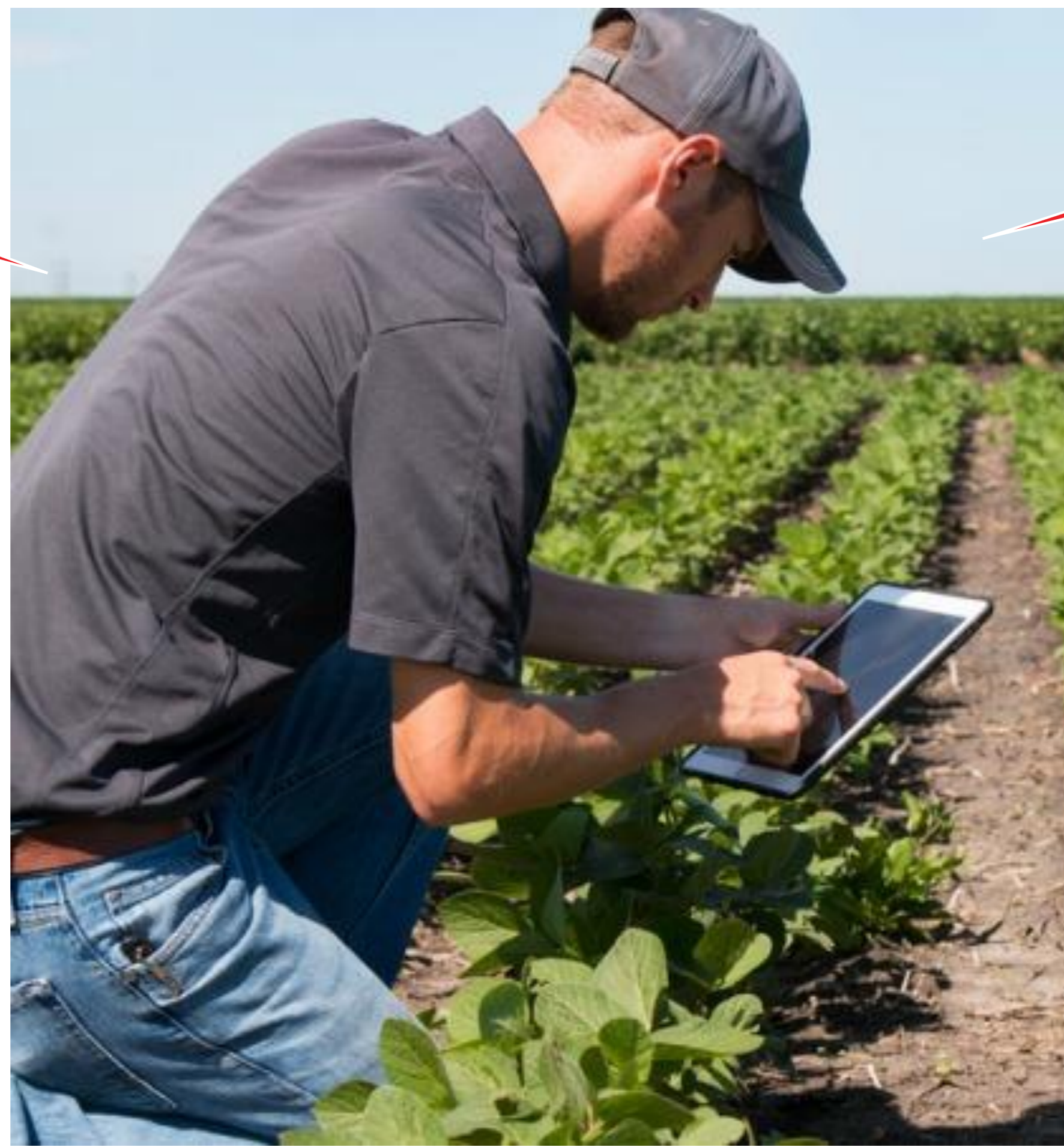


A case study: smart agriculture

Vision Digital agriculture platforms for global optimization of farmers' operations: greater efficiencies, reducing environmental impact, increasing sustainability

Farmer-centric

- Not limited to large farms – platforms must support diverse needs
- No vendor lock-in
- Increasing the choices farmers can make between suppliers of the new technologies
- Make sure that systems link to each other.



Data-centric

Creating value and services from data

- Farmers generate and consume huge amounts of data
- Data/information should be fully exploited
- Connection with the whole value chain, new business models
- Great opportunity: sharing of data amongst farmers



Main issues and gaps in smart agriculture

Interoperability and standardisation

Connecting machinery and sensors (technical systems can not be linked up)

Innterconecting existing platforms

Platforms open to all farmers/vendors, Open API

Data management and sharing

Access to data, control, security, privacy, liability, trust in the platforms

Prove value/effectiveness

Ensure that farmers get value from data

Data/information/knowledge remain un-used

Decision-support systems

Benchmarking



Image source: Bayer

