

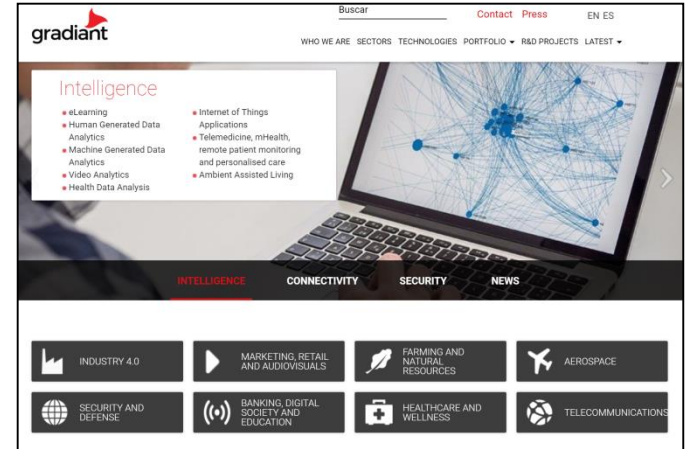
The Alliance on Internet of Things (AIOTI): The potential of digital platforms in agriculture

H2020 SC2 Infoweek 2017 - Digitising agriculture and food value chains

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WG06 AIOTI

About Gradiant

- Private RTO focused on digital technologies based in NW Spain
- +100 staff serving Security, Intelligence and Connectivity technology needs from multinationals to local SMEs
- Promoter of the **Galician agrifood DIH** in joint effort with the Univ. of Santiago de Compostela and with support from the regional government



About AIOTI

- AIOTI WG06 “Smart farming and food security” is already an ecosystem:
 - *More than 50 members: large corporations, SMEs, trade associations, associations of farmers/cooperatives, RTOs, consultants...*
 - Led by:
 - Chair: Luis Pérez Freire (Gradiant)
 - Co-chair: Thomas Engel (John Deere)
 - Scope: smart farming, food safety/traceability, business models
- 4 lines of work:
 - Mapping of smart farming area
 - Networking with farmers and agrifood sector
 - Case studies and tests/pilots
 - Educational training programmes



Some WG06 members during the AIOTI Strategy Workshop held in Toulon, France, 3 May 2017

Platforms: what do we mean?

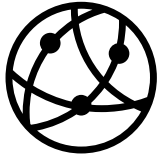
- Platforms are understood as:*
- Narrow sense: *“multi-sided market gateways creating value by enabling interactions between several groups of economic actors”*
- *“Digital platforms are like operating systems that integrate different technologies and various applications and services”*
- Broad sense: *“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)

<https://ec.europa.eu/futurium/en/implementing-digitising-european-industry-actions/report-wg2-digital-industrial-platforms-final>

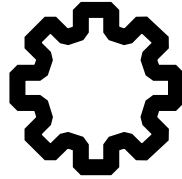


Why are data marketplaces important?



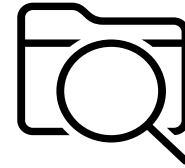
Community

Connecting
users
Marketplaces



Infrastructure

Integrating
systems
Third party
applications



Data

Accessibility
Relevance



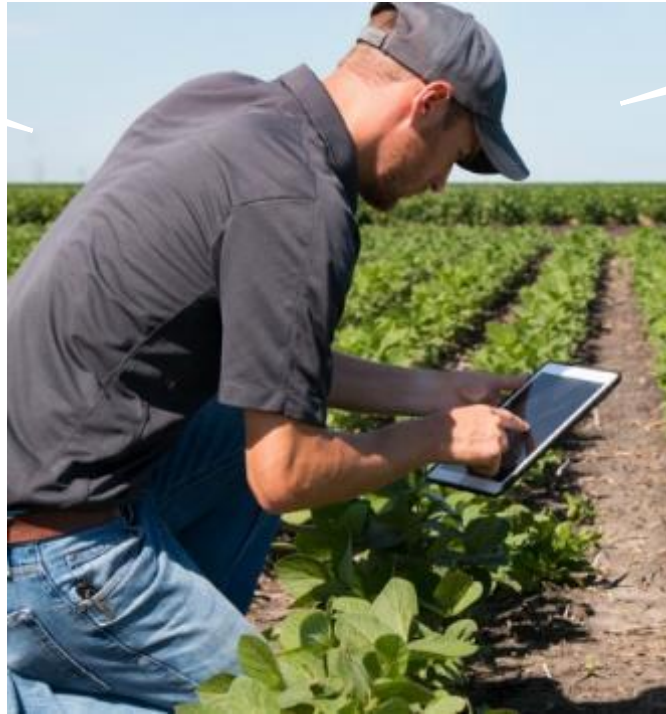
A case study: smart agriculture

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.

Image source: Euractiv



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 cannot be linked up)
- Interconnect existing platforms
- Platforms open to all farmers/vendors. Open APIs

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



Digitising agriculture through platforms

Mainstreaming digital platforms equals

mainstreaming digital agriculture

- Foster a digital ecosystem around platforms and the needs of farmers and the whole value chain
- Attraction of investments. Snowball effect
- Availability of mature solutions



Image source: EIP AGRI

Growth-hacking agriculture

digitisation

Support agriculture DIHs as key catalysts of the digital transformation locally → **AIOTI WG06 position paper**

- Align efforts at EU (CAP 2021-2027), MS and regional levels
- Go for low-hanging fruits first, then expand



Image source: AIOTI WG06

