VISION OF THE POTENTIAL DISRUPTIVE IMPACT OF IoT SOLUTIONS ON THE AGRI-FOOD SECTOR

IoT deployment and business challenges for the Agri-Food sector

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A VISION OF THE AGRI-FOOD SECTOR IN 2050 THROUGHOUT THE FULL VALUE CHAIN
IoF2020 SOLUTIONS AND THEIR CURRENT POSITION IN THE DEVELOPMENT CYCLE
IoT SOLUTIONS FOR ARABLE FARMING

- Electrical conductivity scanner detecting clay content and organic matter for conductivity zoning
- Akkerweb platform dashboard for soil mapping
  - Arable farming has 44 deployment sites
  - Interoperability between farm machines and software is bridged
- Crop monitoring dashboard
IoT SOLUTIONS FOR DAIRY FARMING

- IoT for remote calibration support of milk samples to guarantee milk safety and quality
- Radio and TV feature of artificial intelligence in dairy farming
- Connecterra raised additional €4.2m for dairy tech
- Dairy farming has 30 deployment sites around Europe

Outdoor beef cattle tracking has rescued a trapped cow in a nature reserve area
IoT SOLUTIONS FOR FRUIT

- NFC tags for crop monitoring
- IoT sensors
- Installations in Romanazzi farm – weather station under the vineyard canopy

- Fruit Trial has more than 50 deployment sites around Europe
- Wine shipping device (Jodyn Live) test extension to USA & China
- Strong Fruit Trial synergies and collaboration
- EuroPool performs large-scale experimentation in real supply chains
IoT SOLUTIONS FOR VEGETABLES

Sensors located in a growth layer in one of the climate cells at Signify

Software tool interface showing greenhouse climate monitored parameters

- Vegetables Trial has 29 deployment sites around Europe
- Full-controlled farming is operating under regulated conditions
- New crops introduced for weeding machines testing
IoT SOLUTIONS FOR MEAT

- Managed to optimize production, transport & processing of poultry meat
- IK4-TEKNIKER has launched novel transport sensor
- Meat Trial has more than 20 deployment sites

Alerts when the feed intake has dropped under the threshold
IoF2020 DEPLOYMENT SITES OVERVIEW
5 TRIALS - 33 USE CASES

- ARABLE
- FRUITS
- DAIRY
- VEGETABLES
- MEAT
BREAKS AND ACCELERATORS FOR DEVELOPMENT
ACCELERATORS

- Increased awareness for food safety & transparency
- Ease of use and affordability, value-for-money, ROI, novel business models
- Vertical and horizontal integration across value chains, fear-of-missing-out
- Traction with investors

BREAKS

- Interoperability challenges
- Perceived security and privacy risks
- Data ownership issues
- Barriers on global trade of agri-food products
- Rural wireless and broadband coverage
NEXT STEPS

• Exploitation & monetization,
• Actively engaging with end-users,
• Scaling up,
• Global expansion.
THANK YOU

Any questions?

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