It's all about data! Opportunities in the agri-food value chain

The ongoing digital transformation leads to new ways of producing, new products and new business models for the agri-food sector. The industry 4.0 wave offers significant opportunities and challenges for the agri-food value chain. This is even more important in the current situation, as the industry and the primary sector need to respond to the challenges arising from the COVID-19 pandemic and use all means available not only to recover from the damages caused, but also to become more competitive, sustainable, and further increase food safety.

In order to tackle these challenges, reliable and correct data, across the food value chain are needed. Capturing, processing and analysing data are at the core of every digitalisation process. Furthermore, data have to be collected and shared from farm to fork, across the value chain.

This digital shift is not an evident hurdle to tackle and requests the necessary investments, trainings and support, especially for farmers and SMEs.

<u>EIT Food</u>, the <u>'Smart Sensors 4 Agri-food' Partnership</u> and the INNOSUP-01 project <u>S3FOOD</u> are there to support you every step of the way, providing demonstrations and trainings at their living labs, creating trust, matching companies, showcasing real life use cases, etc.

The digital shift wave is here! Take your surfboard and join us! Are you in for the ride?

Mark the 25th and 26th of November '21 in your agenda! Register here!

Practicalities:

- Hybrid event
- Venue:

 ILVO Plant Caritasstraat 39
 9090 Melle (Belgium)

Programme:

Day 1:	25 th of November - hybrid
8h30	Registration and welcome coffee (physical attendees)
9h20	Check in online participants
9h30	Welcome
9h40	Why data is the new oil and what are the opportunities (and hurdles) for the agri-food sector
	 Data and digital traceability at EIT Food - <i>Martine van Veelen, Director EIT Food CLC West</i> Smart Sensors 4 Agri-Food: A partnership facilitating the digitalization of the agri-food industry - <i>Veerle Rijckaert, Flanders' FOOD</i> S3FOOD: Concrete support for SMEs to take the next step in their digital journey - <i>Veerle De Graef, Flanders' FOOD</i>
10h40	Coffee break + networking
11h00	Session 1: Data collection and data platforms for the primary sector
	Living Lab video pitches
	Agriculture living labs at ILVO – Simon Cool, ILVO Aguaculture – Agrifood Croatia
	 Living Lab 3 – to be confirmed

	Company presentations
	 DjustConnect: Making data sharing safe and efficient, with respect for farmer and horticulturist – <i>Bart Minne, ILVO</i> The WatchITgrow data platform and how the entire agricultural sector benefits from digitization – <i>Jürgen Decloedt, VITO & Christophe Vermeulen, Belgapom</i> LINKDAPA: Nudging wheat farmers towards greater adoption of more sustainable farming through precision agriculture - <i>Alistair Murdoch / Professor of Weed Science, University of Reading (UK)</i> <i>APIC: Development of technologies based on robotization and artificial intelligence to automate, optimize and diagnose plant crops in a completely controlled environment ('plant factories') - Olivier Debauche, GDTech</i>
12h30	Lunch
13h30	Session 2: Data collection, data management and data infrastructures for the food processing industry
	Living Lab video pitches
	 ASINCAR Food 4.0 Living Lab: A multifunctional place for supporting the digital transformation of Food SMEs, <i>Roberto Morán Ramallal, ASINCAR Agri-food Cluster of Asturias</i> The Smart EOODEACTORY: Where food meets IT - Dr. Andrea Davis & Prof. DrIng.
	 Stefan Witte, Smart FOODFACTORY and smartFoodTechnologyOWL IoT & Data Innovation Lab @ ELTE - Adam Tarcsi, Eotvos Lorand University, Faculty of Informatics
	• FoodTechBrainport: Without waste, healthy food for everyone - Dirk Van Ledden, FoodTechBrainport
	Company presentations
	 DT-OptiDry: Digital twin for optimisation of manufacturing processes in agri-food companies - <i>Olaya Muñoz Azcarate, UPintelligence</i> BBISQCUIT: Better Biscuits using Intelligent Software and Cameras for Quality Control Using Innovative Technology – <i>Leo Borms, La Confiance & David Verstraeten, Yazzoom</i> SAFETRACK: Demonstration of a crossover food safety and yield monitorisation platform - <i>Alvaro Dosil, CEO, Triple Alpha</i> DigiEresh: Turping data into savings – <i>Maarten Hertog, MeBioS, KUL Leuven</i>
14h45	Session 3: Data further downstream - at the retailer, food service and the consumer – and data in the value chain
	Living Lab video pitches
	 Smart Gastronomy lab: Living Lab dedicated to gastronomy, food trends and healthier food - Dr Dorothée Goffin Manager SGI
	• LABe Digital Gastronomy Lab: A place for open-ended innovation in which to rethink and co-create the gastronomy of the future in digital terms - <i>Erich Eichstetter, LABe Digital Gastronomy Lab</i>
	 Supermarket of the future – Andrea Pertegato, Coop Italia Frami Food Lab at Seinäjoki University of Applied Sciences - Karri Kallio, Markus Ojala and Ilkka Latomäki, SeAMK (Seinäjoki University of Applied Sciences, Faculty of Food and Agriculture)
	Company presentations
	 SmartWithFood: The personalised food coach - Ignace De Nollin, SmartWithFood FRIENDS: Reduce Food Waste - Food Retail Increases end of Date Sales that Reduces Food Waste Smart Bakery 4.0: Smart forecasts to cut bakery waste. Klass Evite. Rel/kerij Evite
401-00	• Smart bakery 4.0. Smart forecasts to cut bakery waste - Maas Fuite, bakkerij Fuite
16h00	BREAK + get ready for guided tour

16h30 Demo and guided tour at the living labs (choice to be indicated in registration form)

Food Pilot (www.foodpilot.be) is the living lab of ILVO and Flanders' FOOD. The aim is to help companies, labs, authorities, etc. with challenges in agri-food, such as improving food products or production processes and trouble shooting. The Food Pilot has more than 50 semi-industrial production machines for testing new recipes or production techniques. In addition, several of the machines are equipped with sensors and provide the possibility to gather data on the processes and product parameters.

The ILVO Living Lab Agri-food Technology (<u>https://www.agrifoodtechnology.be/</u>) helps companies and sectors with engineering agri-food processes. Mechanization and digitalization are often the key. The objective is to improve a range of processes within horticulture, arable farming, livestock farming and food processing, making them more sustainable and more efficient. During the demo, the possibilities of hyperspectral imaging and robotics for crop quality analyses and control will be demonstrated.

17h00 Network reception

Day 2: 2	26 th of November - online
9h20	Check in online participants
9h30	Welcome
9h40	Introduction on funding possibilities and other financing channels
	 Horizon Europe and Digital Europe: What's in it for you - Veerle Rijckaert, Flanders' FOOD Funding opportunities at EIT Food - Ilario Ingravallo, Programme Manager Innovation at EIT Food European Programs & funding: update and approach. Grants, intelligence, partnerships, networking, what else? - Philippe Vanrie, Ecosystemix
11h00	Online matchmaking using conversation starter

Read more page for Living lab pitches

11h00	Session 1: Data collection and data platforms for the primary sector
	Video pitch: Agriculture living labs ILVO
	The ILVO Living Lab Agrifood Technology helps companies and sectors with engineering agri-food processes. Mechanization and digitalization are often the key. The objective is to improve a range of processes within horticulture, arable farming, livestock farming and food processing, making them more sustainable and more efficient. During the demo, the possibilities of hyperspectral imaging and robotics for crop quality analyses and control will be demonstrated.
	Simon Cool, ILVO
	Video pitch: Aquaculture – Agrifood Croatia
	Video pitch: Living Lab 3
	To be confirmed
13h30	Session 2: Data collection, data management and data infrastructures for the food processing industry

	video pitch. ASINCAR Food 4.0 Living Lab. A multifunctional place for supporting the digital
	transformation of food SMEs
	ASINCAR Food Pilot Plant is an area of ca. 500 m ² that reproduces the environment of a common food SME, including the different areas, equipment and working flows. Within the industry 4.0 paradigm, this site could be used for multiple activities supporting the digital path of food industries, as training, awareness activities, co-design of digital solutions, validation-prototyping-upscaling of technologies, tech transfer workshops or investment feasibility. The pilot plant already possesses a relevant digital infrastructure, including advanced sensors (NIR, hyperspectral), basic sensors, as well as an ERP and a IoT framework. Multiple digital applications for addressing key food challenges (food safety, quality, process control, traceability, resource efficiency) are implemented. <i>Roberto Morán Ramallal, EU Project Manager, ASINCAR Agrifood Cluster of Asturias</i>
	Video pitch: The Smart FOODFACTORY: Where Food Meets IT
	The Smart FOODFACTORY is designed as living lab for smart food processing. It offers project rooms for R&D and coworking spaces. Training and meeting areas are also planned, providing space for technical and transfer events. The Living Lab is currently under construction and will start operations in summer 2022.
	smartFoodTechnology ^{OWL} at the OWL University of Applied Sciences and Arts
	Video pitch: IoT & Data Innovation Lab @ ELTE
	As a part of the Hungarian Digital Demonstration Experimental Living Lab Network the IoT & Data Innovation Lab is a proof-of-concept ready living lab environment to develop and validate ideas. The Lab focuses on AgriTech, FoodTech and MedTech projects, offering technical (IoT, data analytics and AI development), business support and incubation services for students, professors, researchers and industrial partners.
	Adam Tarcsi, Researcher, Eotvos Lorand University, Faculty of Informatics, IoT & Data Innovation Lab
	FoodTechBrainport: Without waste, healthy food for everyone
	With our network of technology providers, food processing companies and knowledge and research institutions, we work on a future proof food industry. We connect the food processing industry to innovative technologies, talent, research and funding.
	Dirk Van Ledden, <u>Food TechBrainport</u>
14h45	Session 3: Data further downstream - at the retailer, food service and the consumer – and data in the value chain
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Andrea Pertegato, Coop Italia
Video pitch: Frami Food Lab at Seinäjoki University of Applied Sciences:
Frami Food Labs brings together the whole food system from field to fork and grain to tap. Grain analysis, chemical assays to food production and testing restaurant/kitchen.
Karri Kallio, Markus Ojala, Ilkka Latomäki, SeAMK (Seinäjoki University of Applied Sciences, Faculty of Food and Agriculture)

Read more page for company testimonials

11h00	Session 1: Data collection and data platforms for the primary sector
	DjustConnect: Safe and efficient data sharing, with respect for farmers and horticulturists.
	The DjustConnect platform makes it possible for everyone in the agri-food chain to gain correct access to her/his available data. By feeding smart applications with data, administration becomes easier and advice tools become better.
	Bart Minne, Business Developer, ILVO
	The WatchITgrow data platform and how the entire agricultural sector benefits from digitization
	WatchlTgrow is an online platform to support growers to monitor arable crops and vegetables in view of increasing yields, both qualitatively and quantitatively. WatchlTgrow uses various types of data starting with satellite data combined with e.g. weather data, soil data, IoT data and field data provided by the grower. These data will be combined using new technologies such as big data analytics and machine learning to provide growers with more timely and personalized advice.
	Jürgen Decloedt, VITO & Christophe Vermeulen, Belgapom
	LINKDAPA: Nudging wheat farmers towards greater adoption of more sustainable farming through precision agriculture
	LINKDAPA uses multiple data sources to co-create with farmers and their advisers, crop management zones for an easy-to-use precision agriculture (PA) software platform. Algorithms are being developed predicting (i) variability within individual fields in the potential yield and quality of wheat, (ii) probabilities that yield/quality in different parts of each field exceed farmer-specified thresholds, and (iii) in 2022, reduction in negative environmental impacts such as greenhouse gas emissions likely to be achieved by adopting precision fertiliser application. The project has explored farmers' willingness to pay and end-user confidence, with a view to the EIT Food Rising Star, Agricolus SRL, commercialising the software platform in Italy, Germany and the UK. <i>Alistair Murdoch, Professor of Weed Science, University of Reading</i>
	APIC: Development of technologies based on robotization and artificial intelligence to automate, optimize and diagnose plant crops in a completely controlled environment ('plant factories'). Such optimization will be achieved through the combination of innovative techniques for the morphological, physiological and chemical imaging of crops.
	Olivier Debauche, GDTech
13h30	Session 2: Data collection, data management and data infrastructures for the food processing industry
	S3FOOD voucher project DT-OptiDry (ES): Digital twin for optimisation of manufacturing processes in agri-food companies The project DT-OptiDry is dedicated to the development and validation of a Digital Twin (DT) for the maturation process in cured-smoked products. Through the development of Machine Learning models, the Digital Twin aims at the optimization of environmental parameters of the smoking process in order to reduce energy consumption, improve

	parameters required for each desired final product. The project was executed in collaboration with Embutidos Maybe, a traditional sausages producer.
	Olaya Muñoz Azcarate, Director of 5.0 Bioengineering for Agrifood, UPintelligence
	S3FOOD voucher project BBISQCUIT (BE): Better Biscuits using Intelligent Software and Cameras for Quality Control Using Innovative Technology
	The BBISQCUIT project combines the expertise of artisanal cookie bakery La Confiance, AI-based software company for industry Yazzoom and oven builder Goldstream. The objective of the project is to build an automatic control of the oven settings based on computer vision and using adaptive control methods to respond to variations in environment, recipe and ingredients. Overall, this will lead to less waste and energy consumption and higher quality.
	David Verstraeten, Engineering manager, Yazzoom
	S3FOOD voucher project SAFETRACK (ES) - demonstration of a crossover food safety and yield monitorisation platform
	Validation of a transversal monitoring and data analysis platform for the tuna processing value chain. Based on purchasing conditions and IoT sensing of freezing and logistic conditions, it is possible to model the factors affecting process efficiency (shrinkage) and prescribe best practices.
	Alvaro Dosli, CEO, Triple Alpria
	DigiFresh will implement digital twins to facilitate chain management for reducing losses of fruit and vegetables.
	Maarten Hertog, MeBioS, KU Leuven
14h45	Session 3: Data further downstream - at the retailer, food service and the consumer – and data in the value chain
	SmartWithFood – The personalised food coach
	<u>SmartWithFood</u> – The personalised food coach In order to empower consumers to make the right choices, we as a sector need to provide maximum transparency and this in a relevant way. SmartWithFood helps to make healthier choices and serves as a bridge between the food industry and the consumer, in a transparent and scientifically based manner. <i>Ignace De Nolin, CEO, SmartWithFood</i>
	<u>SmartWithFood – The personalised food coach</u> In order to empower consumers to make the right choices, we as a sector need to provide maximum transparency and this in a relevant way. SmartWithFood helps to make healthier choices and serves as a bridge between the food industry and the consumer, in a transparent and scientifically based manner. <i>Ignace De Nolin, CEO, SmartWithFood</i> <u>FRIENDS: Reduce Food Waste - Food Retail Increases end of Date Sales that Reduces</u>
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Sponsors:



Logos to be added:







This project has received funding from the European Union's H2020 research and innovation programme under grant agreement No. 824769-S3FOOD.



Funded by the European Union







Het draait allemaal om data! Kansen voor de voedingswaardeketen.

De doorgedreven digitalisering van de agrovoedingssector leidt tot nieuwe manieren van produceren, nieuwe producten en nieuwe bedrijfsmodellen. Deze industrie 4.0 golf zorgt voor een pak kansen, maar even goed uitdagingen voor deze sector. In de nasleep van de COVID-19 pandemie blijkt eens te meer dat bedrijven flexibel moeten zijn en alle beschikbare middelen best aangrijpen, niet alleen om te herstellen van de opgelopen schade, maar ook om competitiever en duurzamer te worden.

Om deze uitdagingen aan te kunnen gaan, zijn betrouwbare en correcte data nodig en dit in alle schakels van de voedselwaardeketen. Capteren, verwerken en analyseren van data vormt de kern van elk digitaliseringsproces. Bovendien moeten data in de hele waardeketen, van boer tot bord, worden verzameld en gedeeld.

Deze digitale omwenteling is geen evidentie en meesurfen op deze digitale golf en de vruchten er van plukken, vraagt de nodige investeringen, opleiding en ondersteuning, vooral voor landbouwers en KMO's.

<u>EIT Food</u>, het <u>Smart Sensors 4 Agri-food</u> Partnership en het INNOSUP-01 project <u>S3FOOD</u> zijn er om u bij elke stap te ondersteunen, door demonstraties en opleidingen in hun pilootinfrastructuren aan te bieden, bedrijven aan elkaar te linken, hands-on praktijkvoorbeelden aan te reiken, enz.

Dus schrijf je in en laat je inspireren! Ben je klaar voor de rit?

Noteer alvast 25 en 26 november '21 in uw agenda. Schrijf hier in

Praktisch:

- Hybride event
- Event locatie:
 - ILVO Plant Caritasstraat 39 9090 Melle (B)

Programma: idem Engelse versie (zie boven)

Sponsors:



Toe te voegen logo's:





