Rudolf Sollacher

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Main product: Digital Twin Management

Aim: To make food production more transparent and sustainable by giving an overview of the production and logistic processes through digitalisation

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A digital food passport to empower consumers

The project

The idea

The digital twin management system operates on MindSphere, a cloud-based, open IoT system of Siemens. A wide variety of data are bound together in the cloud thanks to a configurable data model, to create a digital twin of the food product and its value chain. Apps allow for data monitoring and sharing with partners, as well as tracking and tracing.

> Down the road, the ambition is to drastically reduce waste and increase sustainability across the whole food production world.

Inspiration

We wanted to enhance food value chain transparency and sustainability. That's how our platform harbouring digital twins of products and their complete production journey came about.

Unique selling points

Our structured data model simplifies monitoring and analysis. Also, data privacy is maintained even when sharing elements with a partner. Third, the track and trace app allows the product to be followed along the entire value chain.

Societal impact

Having a transparent digital food passport at their disposal reassures consumers and is a prerequisite for more demand-driven and resource-efficient production.

EIT Community support

We benefited from lots of useful insights thanks to EIT Food's partners. Workshops and events organised together with EIT Food also facilitated the refining of the solution.

Supported by:

eit Food

Generated funding:
EUR 19 700 000

Challenge:
Food value chain transparency

Partners:
Strauss Group, Givaudan, Fraunhofer, Technical University Munich

The nominee

The beginning

At the end of 2015, Siemens was asked to join the consortium applying to form what was to become EIT Food. I accepted the role of coordinating our contribution because this Innovation Community addresses important challenges for today's society.

Partnerships & Teamwork

As technology provider, it was important for Siemens to partner with food producers Strauss Group and Givaudan to implement a proof of concept. Fraunhofer offered expertise in food production-related research. Technical University Munich set up the digital twin data mode according to relevant standards and norms.

Rewarding moments

It was amazing to see how the uncovered information enabled Strauss to pinpoint weak spots in their production cycle.

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