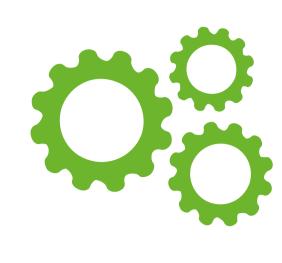




Operational Group

Agricultural business development with intelligent data analytics

Maatalouden liiketoiminnan kehittäminen älykkäällä data-analytiikalla



Practical problem

There is the need for GIS service where farmers can easily see their fields' soil variations and nutrient levels.



Partners

Tampere University; research institute. Pro Agria; advisory and development organisation. In addition, a group of farmers and a harvester company.



Calendar

Start: 01/01/2017 End: 31/12/2019



€395,000

Objectives of the project

The main objective is to create an intelligent GIS service that is able to support data-based decision-making in farms by providing easily accessible data and taking account of particular conditions in farms, such as the type of soil and nutrients. An additional objective is to collect and analyse data from different sources and make prediction algorithms by using neural networks methods of artificial intelligence.

Main activities

Collect many kinds of data from fields. Build GIS service for farmers. Develop data analyses and artificial intelligence based on data from fields.

Expected results

An intelligent GIS service for farmers, where they can upload and download their own field data and browse of those different data layers and also open data sources. Farmers will be able to access data on soil and nutrient variations.

Results so far/first lessons

Data has been collected from various sources; satellites, drones, weather stations, soil scanners and yield sensors in combine harvesters. Intelligent data service has been created, which is based on an open-source project from Oskari community. Prediction models have been made based on neural networks of artificial intelligence.

Who will benefit

Specifically farmers who grow barley, rye and wheat.





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