Machine builder AVR turns potato harvesting into a smart and transparent process

06 February 2023, 16:18

Pieter Beyl

Thanks to agricultural machine builder AVR potato harvesting is not only optimised, but also a transparent process, as collecting and sharing data is necessary to deal with the challenges in agriculture, for farmers as well as their customers. AVR Connect is the company's digital platform that enables the collection, analysis and sharing of data related to the cultivation of potatoes.

This case is one of the 15 smart product examples we have compiled for you in the Smart Product Inspirator

Discover all 15 examples

AVR is a full line machine builder for optimal potato harvesting. The company manufactures a complete range of machinery to support soil cultivation, planting, harvesting and crop handling activities of professional farmers.

Why this smart product

Digitalisation is also affecting the agricultural sector. Farmers are required to report more on what they do with the land and crops, and the farmers' customers - supermarkets - require more information on the origins of their food products. Collecting and sharing data is necessary to deal with the challenges in agriculture. AVR wants to play a leading role in this transformation.

Value for the customer

AVR Connect is AVR's digital platform that enables the collection, analysis and sharing of data related to the cultivation of potatoes. The data is collected from sensorised and connected machinery and supports a variety of applications that help optimise farming operations. Farmers can optimise their yields and reduce their costs, because they can apply fertiliser and spray in a very targeted way. Dealers can optimise their service due to the availability of machine data and, if a problem occurs, fix it very quickly.

Technology behind smart product AVR Connect

Every AVR machine can be equipped with an IoT hardware module that collects data from the onboard GPS, sensors and machine controller and transmits this data via a cellular connection to a cloud-based IoT platform. The IoT platform is the backbone of a variety of applications, such as real-time monitoring, geofencing, remote diagnostics and field management. Data can also be exchanged with other platforms and applications through an API. AVR has developed the embedded software in-house that runs on off-the-shelf hardware modules. For setting up the cloud architecture and developing the different applications the company collaborates with an external ICT partner.

Capturing revenue

AVR wants to grow further by helping its customers with digital offerings. At the same time the collected data allows AVR to improve its machinery and to tackle emerging needs in the agricultural sector. Access to the AVR Connect platform is offered through a subscription. The IoT hardware is standard in the newest machines and optional or retrofittable for other machinery.

Next steps

There are three directions in which AVR is currently expanding its offering: originally launched for the newest harvester, AVR Connect is being made available on other machine models, such as planters and other harvesters. New features are also under development for the different stakeholders (dealers, farmers), based on customer feedback. Finally, AVR continues to explore data sharing opportunities and new data-driven applications across the food value chain.

Smart Product Scenarios

To enhance your chances of success and guide your smart product innovation, Sirris offers you practical tools and guidelines. Our **Smart Product Inspirator** provides you with a framework for identifying valuable smart product ideas based on the 5 most common scenarios and 15 smart product examples illustrating these scenarios. With these carefully analysed scenarios we help you uncover the potential for success . The key scenarios for AVR Connect are: '**Digital platform**' and '**Digital data access**'.

Authors

Pieter Beyl