



Incorporating data innovations requires ability to change

The current disruptive potato market requires a focus on future opportunities. In addition to the terrible events in Eastern Europe, I see that society and politics are pursuing their own agendas, for example the Food to Fork themes. What's more, the sector needs to be increasingly sustainable in the use of production resources and there is a shortage of professional workers in the primary sector. I am convinced that it is necessary for the market to adopt new techniques that are still unknown to many now. Three years ago, our company, GEO4A, was founded to monitor potato plots using earth observation and in-situ data. With these services, we support the potato value chain in the field of business operations, such as production, quality and logistics.

From personal experience, but also by measuring, we know better than most how erratic the potato crop can be during the growing season. This is normal for a natural product, but on the other hand causes stress in the business processes if it does not go as expected. In order to keep a grip on the growth development during the growing season, there are currently possibilities with Earth Observation models to optimise the cultivation processes. This requires rethinking and letting go of the beaten track by integrating digital solutions instead of manual deployment. In addition to measuring crop growth, we also develop qualitative services such as recognising varieties at plot level and determining the vitality of seed potatoes. We can also determine the maturity of the French-fry potato in order to be able to predict the baking quality already during growth. These change processes require time and focus, but create many opportunities to make the chain more sustainable and future-proof. Data and Artificial Intelligence play an essential role in this process. The collected data, transformed in our models into valuable information, strengthens the potato chain. It helps to improve



processes at the agronomic and operational levels, as well as financially related activities. However, incorporating innovations requires the ability to change from the stakeholders in the value chain of the potato, from grower to consumer.

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