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Prediction Agriculture (P^3A)
Introduction

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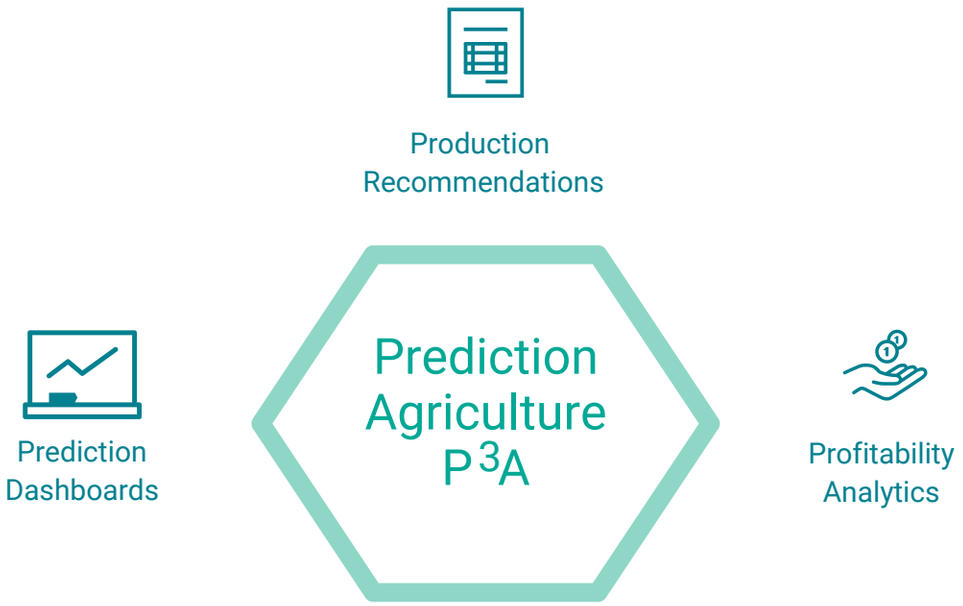
Intelligent platforms to empower small and big farm growers



Agriculture has to adapt to challenging conditions mainly caused by climate change, resource depletion, and feeding needs [1][2]

Technology is key to support this adaptation process. The development of global positioning systems (GPS), high-resolution imagery, and internet of things (IoT) have driven the enhancing of automated, non-invasive, and non-intrusive data collection at large scales. Thus, growers can easily comprehend spatial and temporal variations of crops and generate specialized prescriptions to perform precision agriculture practices.

Precision agriculture seeks to obtain crop insights to sustainably manage available resources (water, fertilizer, pesticides, among others)[3] and detect issues and diseases in the early stages of crops[4]. However, growers still face the challenges of dealing with vast amounts of data [5] and executing agronomic recommendations for inputs at localized levels [6][7][8].

Prediction Agriculture rethinks agriculture practices by continuously integrating predictions, production, and profitability concepts.

Prediction Dashboards

Predictions that help growers get the most benefit from their data to foresee not only crop yield to minimize expenses but also farming impacts to maximize agricultural planning efficiency and environmental sustainability.

Production Recommendations

Production recommendations that help growers achieve integral field management to foresee not only crop variabilities to minimize in-season risks but also localized agronomical practices to maximize agricultural operation efficiency and embrace social sustainability.

Profitability Analytics

Profitability analytics that helps growers manage the correlated dynamics of fields to foresee not only market decisions to minimize enterprise-level financial risks but also field-level decisions to maximize harvest-strategy efficiency and economic sustainability.

Agricultural Value Chain Community

Harvita's prediction agriculture platforms benefit the agricultural value chain, from growing and production to end marketing and consumption. Predictions add data analytics to transform the way agronomical planning is executed. Productions add information about agronomical and managing practices to transform the way end markets and consumers access growing information about the products they buy. Profitability adds field analytics to transform field-level financial planning.

Harvita's Prediction Agriculture concept supports global food security as it promotes a circular development that seeks economic, environmental, and social sustainability for the agricultural chain actors and vulnerable sectors.

Harvita develops prediction agriculture interactive platforms to empower small and big farm growers to pursue differentiated agriculture management in a predictive rather than reactive manner. Thus, growers have rich recommendations and predictions to be a step forward for the next season.

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