

AgTech Is Taking Root in Specialty Crops

According to the 2023 AgTech Trends research study, specialty crops* agribusinesses are overwhelmingly positive about adopting AgTech solutions like AI and predictive analytics to help their businesses thrive amid increasing climate, labor, inflation and supply chain challenges.

AgTech budgets are increasing.

Top investments:

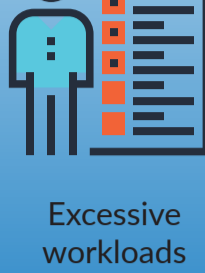
- Precision agriculture solutions
- Yield prediction
- On-farm robotics/autonomous systems

Specialty crops teams are fighting an uphill battle both on-farm and off-farm using legacy methods

Top 3 Stressors for specialty crops agribusinesses



Increasing costs



Excessive workloads



Not enough time/juggling competing demands

Currently, on-farm data is being collected by

(Respondents were able to select all that apply.)



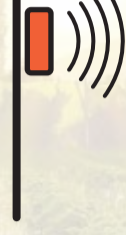
Machinery

64.5%



Apps in the field

60%



Sensors

55%

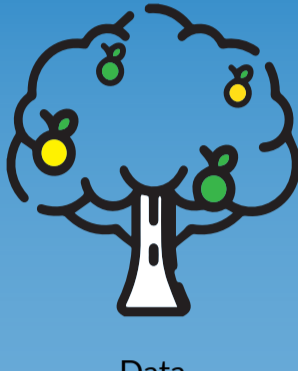
93%

of specialty crops agribusinesses find it challenging to use data to improve on-farm activities

Top 3 Challenges with on-farm data that's being collected



Incomplete data collections



Data inconsistencies



Difficulty accessing or deriving value from data

Not only are people using many different applications, but their data is scattered, and **they're spending excessive time on data analytics**

11+
HOURS PER WEEK

to collect, collate and analyze data for **77%** of respondents

16+
HOURS PER WEEK

to collect, collate and analyze data for **25%** of respondents

Despite all this work, yield predictions are consistently inaccurate



60% believe their yield predictions are not accurate or only somewhat accurate based on the data available to them

Climate change is an exacerbating factor



70% report climate change is decreasing their yields or making them highly unpredictable

The future of agriculture: specialty crops agribusinesses believe AgTech can help them and they are overwhelmingly positive about advanced technologies

80.7%

agree that using real-time data and AI can improve yield outcomes at lower cost per unit

The vast majority of respondents agree (**98.7%**) that advanced data analytics is important to the future of agriculture.

This is an important evolution because **more than half of specialty crops** already rely primarily on their on-farm data to guide growing.



Over 80%

believe AI can improve data analysis and the accuracy of yield prediction and estimation



3 out of 4

say AI will help them accomplish complicated data analysis at scale



75%

say inflation is a top factor driving AgTech adoption at their company



95.5%

believe that digital transformation will drastically change their jobs as they know it from now into the next decade

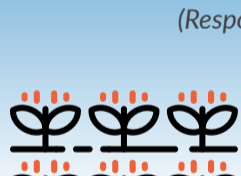
AgTech procurement and budgets are increasing to solve pressing challenges faced by specialty crops agribusinesses

66%

say their company's budget for AgTech will increase in the next 12 months

Companies have identified an initiative or have established budget for

(Respondents were able to select all that apply.)



Precision crop management

64.4%



Improving irrigation

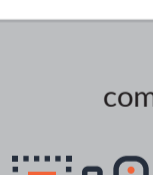
59.7%



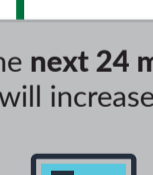
Yield prediction

55.2%

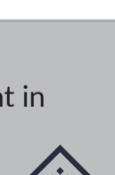
In the next 24 months, companies will increase investment in



Precision agriculture tools



Farm management software



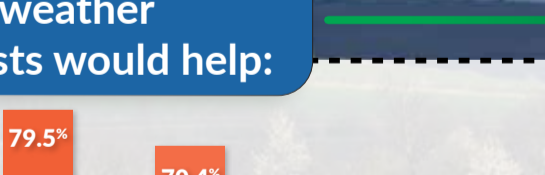
Data consolidation

97%

would find it valuable to have one place to access all the data and apps needed to do their jobs

Improved yield prediction delivers value by reducing costs through better planning and helps growing teams adjust on-farm practices to improve yields and get better supply chain return on what is grown

Better weather forecasts would help:



Increase crop quality

Reduce crop waste

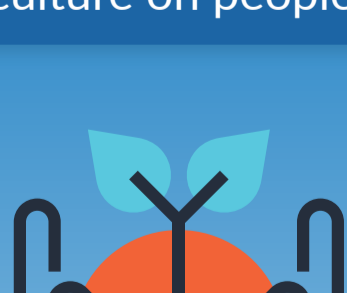
Increase quantity of yield

Reduce cost of on-farm activities

96.8%

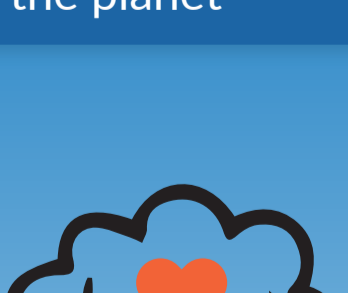
would find it valuable to make harvest predictions more frequently with more granularity

Specialty crops companies are ahead of the curve on sustainability initiatives to improve the impacts of agriculture on people and the planet



77%

currently have one or more sustainability initiatives in place



40%

report that sustainability is a core corporate value



85%

say their sustainability initiatives are effective at meeting their objectives



The AgTech Trends 2023 independent research study surveyed 621 individuals working in specialty crops in the agribusiness sector.

For more information: www.theyield.com

*USDA definition of specialty crops: fruits and vegetables, tree nuts, dried fruits and horticulture and nursery crops, including floriculture... that are cultivated either for sale or for subsistence.