

UAVs in Agriculture

Perceptions, Prospects, and “Probably Not”

Research Question

What is the perception of unmanned aerial vehicles (UAVs) in the farming community?

Findings

Equipment Investment

Maintenance and upkeep can represent a significant investment of a farmer's time, and this must be taken into account for any new equipment acquired.

Familiarity and Opinions

Despite being uncertain of current offerings, farmers and cooperatives were clear about the features they would like to see.

“It’s pretty cool! I’m not sure how I would use it in my operation yet.”

Cooperative Involvement

The combination of cooperatives staying up to date on the latest technology, their unique relationships with farmers, and the cost benefits of offering precision agriculture as a service makes them an ideal candidate to introduce and promote UAV technology.

“We got people that rely on us, 100% through-and-through to bring the technology to them, how to use them, what to do with the data”

Views on Government Regulation

The undefined state of legislation is slowing or halting agricultural investment in UAVs. Stakeholders are supportive of some regulation but fear too much restriction.

“I would have to see the FAA take over the drones. I’ve heard enough to know that’s the last thing they need.”

Experimental Design

We used an ethnographic field study through interviews of three farmers and two cooperatives. A Grounded Theory analysis of interviews with stakeholders was used to identify UAV trends, impressions, and interest.



Conclusions

Investing in a UAV is a significant decision for farmers and cooperatives alike.

It is influenced heavily by uncertainty about both future government regulations and ROI.

Nevertheless, demand for this technology is growing with cooperatives poised to be at the forefront.