



Agriculture Sync Service

SUMMARY

Our partner, a Fortune 500 agriscience company, sells seed to farmers who plant and harvest the crop with tractors produced by many manufacturers. Each tractor houses a computer to instruct it how to plant the seed. The tractor records planting (and other operations) in a manufacturer specific data format on a data card.

The feedback loop between our partner selling seed, recommending how to plant it, and determining the crop harvest yield was clunky; data cards were removed from tractor computers and sent via FTP. Processing the data took hours, and the only way to visualize data was on the notoriously slow laptops carried by the salespeople.

Source Allies developed an application to speed up the feedback process. The app's small hardware component allows farmers to wirelessly instruct their tractors how to plant the seed to achieve the highest yield. Harvest data can then be shared back to the client, being processed in near real-time, so farmers can visualize seed effectiveness via Google Map heat maps generated on demand.

SOLUTION

The app uploads critical field operations and receives prescriptions wirelessly from their phone to the farmers' tractor monitors in real-time. A tile generator component works to compile tractor machine data on-demand into a heat map utilizing the Google Maps API. The mobile app was delivered ahead of schedule with extra budget to spare.

- Tech Stack: Xamarin, AWS, Elasticsearch, Kibana, Google Maps

RESULTS

Realtime

Real-time data visualization vs. 8 hr upload deployment processes and tools

1000+

Global usage with over 1000+ farming operations using app

75%

Eases of use increased data submissions