

Precision farming has been around since the '90s to help farmers monitor their yields. Nowadays, the game has changed quite a bit as companies compete to innovate new products for farmers in the digital age.

One agricultural technology company recognized that farming practices weren't optimizing data to make decisions that could make a big impact. With years worth of aggregated data, farmers didn't know exactly what to do with it.

[Farmers Edge](#) decided to use this information to help farmers make critical decisions. This meant that everything from the needs of the soil to deciding when and where to harvest and plant could be backed up by accurate information. Not only would decisions then transform into evidenced moves that farmers could feel good about,

Kris Kinnaird comes from a family of farmers and has used the company's technology himself in the field. The product marketing manager of Farmers Edge, he told us about how he has seen the company grow from its small-town Manitoba roots to a global company.



The only thing he wishes, he said, was that he was older so that he could see what Farmers Edge was like in its early stages. Thankfully, his older brother also works for the company and can paint a picture for him. This close-knit atmosphere is what the Canada based agricultural company highlighted in its interview with FreshFruitPortal.com.

Farmers Edge operates over 85 programs across Canada, Australia, the U.S., Ukraine, Brazil and Russia, it "manages risk and maximizes profitability" globally.

A rapidly growing global company, Farmers Edge thinks of itself as part of the "agricultural revolution", providing agronomists with digital solutions.

What, exactly, does precision farming mean?

After its founding in 2005, the Farmers Edge launched its smart solutions platform in 2014.

Kinnaird told us that this included its installation of weather stations. Unlike other precision farming technology companies, Farmers Edge installs weather stations, maintains them and replaces any damaged parts, free of charge.

This comes in handy. For example, if a farmer has "two blocks of land that are 15, 20 miles apart, having that weather station" means that equipment can operate on that land.

So, "instead of driving the miles to get there in the first place," the farmer can just look at data from their weather station. This, it says, equals "efficiency and savings, over and over again".

It's integrated weather is central to the company's operations.

"I don't know of any other digital agriculture company in the world that has such a large weather network," said Kinnaird.

Extensive data on weather and patterns give farmers access to shared information that helps them make quick, informed decisions. Rather than "gut decisions" farmers now have a platform that helps them choose in a way that is well informed. From an easy to use FarmCommand app, farmers can gauge how and where to plant.

This maximizes yields and makes sure that farmers aren't using seed and fertilizer unnecessarily on spots that don't need it. Kinnaird explained exactly how this works. Variable-rate technology generates information that informs farmers how to differentially plant across their land.

So many different variables at play

"As a farmer, I wouldn't want to treat every single field the same. Soil texture can be different. There are so many different variables at play," said Kinnaird.

To confront this challenge, the technology manages areas within different fields with satellite information through measuring elevation and analyzing yield maps. This both gives a historical record of past yields and updates, in real-time, current soil conditions. That way, farmers can best address their yield goals in those areas.

"We treat those areas differently by finding the nutrients below the surface in each spot and providing recommendations for fertilizers and seeds based upon yield goals."

To do so, an application is downloaded on to farm equipment. As farmers drive across their

fields, they collect data on nutrients and make sure that more nutrients are being placed in areas that actually need them. That way "we make sure that we're not over-applying", detailed Kinnaird.

Along with this technology, satellite imagery provides farmers with predictive power. High frequency, high-resolution images give farmers detailed reports of their land every week. This mapping provides insight into the in-season health of crops. It also allows farmers to automatically detect potential problem areas before they emerge.

By streamlining the process, the company's products come together to monitor crops, soil and weather patterns. Some packages even provide profit maps that integrate harvest data with crop costs.

Tough competition

When asked about competition in the field, Kinnaird explained that its "boots on the ground" model gives it an edge on other farm management companies.

While competitors from Silicon Valley might have similarly advanced tech, Farmers Edge prides itself on providing on-the-ground support, maintenance and advice. Starting from the perspective of the farmer as an agronomy company first, it says it is better equipped to provide solutions to people

Farm management amidst changing times for farmers

With more farmers taking advantage of insurance as weather increasingly complicates things, the tech company says it's "leaning toward the insurance and lending game in 2020".

It plans to ensure that its data sets serve farmers to demonstrate that its farmers are eligible for lending opportunities. Integrating its unique data set for insurance purposes will allow farmers to make banking and agronomic decisions all in the same place.

"Statistics show that a farmer who is working with a precision company produces better yields. If a farmer is with Farmers Edge, compared to a different farmer who isn't, they should be available to get lower interest rates, faster returns," explained Kinnaird.

Or, a company that is looking to finance a farm can use that information to pinpoint the "best producer possible". Beyond that, the company's tech can aid with tracking changing weather conditions.

Kinnaird went on to say that "having data, historically shown, is huge" and provides farmers with benchmarking reports. Such reports can be useful for planning for upcoming years, whether the weather will be unfavorable or not.

ROI makes precision farming attractive

To keep up in the industry of farm management is no easy feat. They tell us that, with technology, "it happens so quickly". So, companies constantly have to see what the "new big topic" is. To do that, Farmers Edge is "constantly changing and working on new products to improve customer experience".

In such an ever-changing atmosphere, the company says it wants to keep its focus on the customer. Since its inception, the centrality it has placed on the farmer has been its strongest selling point.

Apart from the changing nature of the work, Kinnaird said that initially, uptake of the products was a difficult hurdle to overcome. He made a comparison to farmers accepting auto-steer technology.

"There are always additional costs to upgrade equipment and there's always an investment in those upgrades," he explained. The return on investment makes precision farming attractive, he added.

With "a good chance that it'll reduce inputs, increase yields and improve plant health" digital farm management became convincing enough to farmers across the world.

Looking forward, Farmers Edge seeks to ensure quality in its data set and keep expanding. Who's to say what new things could emerge for the industry as technology evolves.