



Farm Market iD uses RedPoint Data Management™ to streamline operations, manage billions of farm field crop records, and develop new data-based product offerings to meet key challenges facing the U.S. agriculture industry.

Overview

Each year the U.S. agriculture market contributes over \$800 billion in economic value to the economy, and this contribution is growing. At the same time the industry is being asked to produce more food, it's faced with less available farmland, challenging weather, increased government regulation, new trade restrictions, and modulating commodity prices.

This situation has given rise to "precision agriculture," often referred to as "precision ag," an approach to site-specific crop management that employs historical and observational data to develop strategies for optimizing field yields and farming practices. Underpinning this are significant investments in new technologies, advanced data science and the Internet of Things. At the forefront of the movement toward "precision ag" is Farm Market iD, an organization that specializes in delivering detailed, accurate, fact-based information and services for the U.S. agriculture market.

Farm Market iD manages trillions of data points covering farms and farmers at the field level and variables such as weather, soils, crops, etc. It processes this data at tremendous speed with updates based on current weather conditions, satellite imagery and vegetative conditions. As a result, the company is able to provide unique insights to agribusiness customers.

Farm Market iD relies on the data integration and data quality capabilities provided by RedPoint Global's Data Management product, which received the highest score in both the Data Integration and Operational/Transactional Data Quality Use Case categories in Gartner's Critical Capabilities for Data Quality Tools Report¹. RedPoint not only helps Farm Market iD automate its data blending and workflow, it is the foundation for developing new products for Farm Market iD's customers.

About Farm Market iD

Data is revolutionizing the way farming is being done and Farm Market iD is poised to take advantage of that transformation like no other company in the market. Since 1973, the Westmont, Illinois-based company has been an essential resource for any organization with ties to U.S. agriculture. Unparalleled in its depth and robustness, the Farm Market iD

FARM MARKET ID OBJECTIVES

- Use data as a competitive advantage in delivering information solutions and services to the agricultural market.
- Become a leader in fulfilling the unique data needs of the emerging 'precision ag' customer.
- Continue to grow and expertly manage its proprietary database of U.S. farmland and timberland.

FARM MARKET ID RESULTS

- New data-based products to meet demands of the agriculture market, including precision ag customers.
- Faster time-to-market with new products.
- Ability to rapidly include and employ new data assets in its proprietary database.
- Greatly improved workflow efficiency.

proprietary, fact-based database aggregates government records and proprietary data sources. Its extensive agri-marketing geospatial data is used by virtually every major agricultural company.

For the agriculture industry, the ability to analyze future markets and navigate the shifting landscape requires market intelligence never before available. The company's database covers 877 million acres of farmland, timberland and more, plus more than 1.4 billion head of livestock. It harvests the most reliable and richest data available, providing the deepest agricultural marketing information for the industry. Farm Market iD is a leading innovator in creating insights in how to increase the knowledge – and the yield – of the 400+ million acres of productive farmland in the U.S.

The company works with a wide range of clients, including major crop protection, nutrient, seed, farm equipment, financial services, and direct marketing companies. In addition, Farm Market iD offers trend analysis and enhanced marketing capabilities, which are used by clients in a wide variety of business applications, ranging from advertising, research, and promotion to development of marketing intelligence and sales strategies.

The Challenges

Delivering data products and services for the “precision ag” market requires large amounts of disparate data focused on very small segments of a farm field. “The old way was to say, ‘That’s a 1,000 acre field.’ The imminent future of precision ag is to view farm land as 6-inch by 6-inch sections because you need to farm with that degree of precision to maximize productivity and profitability,” explains Rao. “You might put a different seed variety here versus there. You may irrigate one part differently than another. By applying data science, it is now possible to more than double a farm’s output.

“This type of innovation is disruptive. It will help us outpace productivity gains made over the last three decades from genetic, biological and chemical advancements which are now seeing diminishing returns.”

To deliver the insights the precision ag market requires, Farm Market iD depends on a proprietary database that brings many types and sources of data together. This includes over 870 million acres of fields mapped with the geospatial coordinates and linked to the people who own and farm the land, the soils, the weather, the satellite imagery, water tables, irrigation, yield data, etc.

“When you have many different files of this magnitude to bring together, process and harness, you are talking numbers in the quintillions and beyond,” says Rao. “There really was no other platform that had both the capability, processing and scale to handle what we need to do.”

“We’re looking at more than 100 million farm field crop records in any given growing season,” explains Damon Horst, Farm Market iD’s CIO. “Those are shape files linked to imagery files that tell you what crop is growing where and on how many acres. Those, in turn, link back to about four million growers, two million of which are active, and then we multiply the data out by 25 years.”

“It’s great to have a lot of data, but if you can’t access it, organize it, or update it, it’s of no use. If we can’t put it to application, we can’t actually help our clients – or ourselves,” says Horst.

“The last couple of years, there has been a great deal of focus on Big Data, but it’s an area where the agriculture industry has been lagging. We believe there is a lot of opportunity in using Big Data to support the precision ag movement, but capitalizing on the value this data can deliver to our clients is a big challenge.”

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Steve Rao, CEO, Farm Market iD

The Solution

Farm Market iD CEO Steve Rao discovered the benefits of RedPoint Global at his previous company, a leading marketing services provider with a strong presence in the automotive and financial services industries. "We had the data and great ideas for the kind of insights we could produce for customers, but our product development process wasn't fast enough," he recalls. "RedPoint provided data management software that gave us a real business advantage."

Rao and his team tested competing applications and the disparity in combined capabilities and processing speed was compelling. The team evaluated four products narrowing the field to RedPoint and Alteryx. What made the decision easy was that Alteryx processed address hygiene at two-to-three million records an hour, while RedPoint Data Management performed out of the box at throughput speeds that were more than 15 to 20 times faster.

RedPoint's ability to process structured and unstructured data means that Farm Market iD can "layer" all types of information on top of its databases to deliver an exceptional level of information and insight to its customers.

"We can provide an imagery layer in which you can determine the crop identity – corn, soy, wheat, or cotton – based on an infrared signature that we get from satellites," Horst explains. "We can also determine crop density based on that infrared. Now you know what crop it is and how dense the vegetation is within that given area."

Using RedPoint, the company can also integrate climate information, elevation data, hail storm and tornado tracking information to its database. The result is greater depth of information for precision ag customers.

To streamline processing this data – or any data that comes from a client, Farm Market iD relies on RedPoint Data Management's broad and deep capabilities – ETL, address standardization, geospatial coding, name/address parsing, persistent key management, golden record creation, lights out automation, all at unparalleled processing speed and scalability.

The Results

Using RedPoint has freed Rao and his team from the data flow mechanics, leaving more time for strategy, creative ideation and product development. "RedPoint allows us to bring in all the data, process it, index it, integrate it, and connect to third party FTP sites. It even sends alerts that tell us if a process stopped and why," he says.

Because of its ease of use, scalability, and performance, "RedPoint has become a product development tool for us," say Rao. "We can come up with all kinds of ideas based on things that our customers would like to have -- and with RedPoint, we're able to develop and deliver them in record time. Whereas before we were limited by human and IT resources now we are only limited by our imagination, which is freeing."

One of the product ideas Farm Market iD is embarking upon is an Ag Alerts service to notify retailers, manufacturers, bankers, and others when a farm field changes hands, experiences a severe weather event or where there has been a recent vegetative anomaly on the crop planted. This will require processing its 877 million acres and four million contacts against a variety of timely events.

RedPoint has also positively impacted the company's operations. "The great value in RedPoint to me is time savings," Horst says. "RedPoint Data Management allows me to have everything

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Damon Horst, CIO, Farm Market iD

under one application umbrella. If we're doing SQL work, the SQL code can run directly within RedPoint. If we're doing FTP site work, we don't have to write custom external code. When we get new data in, we can just work through it in RedPoint. We never have to jump from one tool to another. Everything is in RedPoint."

The automation features are also a huge difference-maker for the company. As Horst explains, "One of my favorite things about RedPoint is if we have an ongoing, recurring process, we can just program it and forget about it. If a process does stop, we can customize the message that can be routed to anyone on any device to tell us where it stopped and why. It really cuts down on the time spent because we can quickly key into exactly what happened. If a file doesn't show up like it's supposed to, RedPoint will email all the parties involved to say, essentially, 'Hey, the data's not here. What's going on?' And we can quickly respond."

With RedPoint, Farm Market iD has a greater ability to explore possibilities and product opportunities. New products can be developed and delivered rapidly and cost-effectively without interfering with the normal course of business. As a result, RedPoint's integrated capabilities, processing speeds and lights-out operations are helping Farm Market iD to use data to change the agriculture industry. ■

About RedPoint Global Inc.

RedPoint Global provides market-leading data management and customer engagement technology that empowers organizations to optimize customer value and deliver their brand promise with high contextual relevance across all touchpoints. The RedPoint Customer Engagement Hub™, underpinned by the RedPoint Customer Data Platform™, delivers a unified view of each customer, in-line analytics to determine next-best actions, and intelligent orchestration to personalize engagement across the enterprise. Leading companies of all sizes trust RedPoint Global to power their customer engagement strategy and drive profitable revenue growth. For more information, visit www.redpointglobal.com or email contact.us@redpointglobal.com.

¹Gartner, Critical Capabilities for Data Quality Tools, Ted Friedman, Saul Judah, 18 December 2015



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