



AgGateway Case Studies

Ceres Solutions Cooperative Improves Seed Department Management

Background

 Ceres Solutions Cooperative is an agricultural retail supplier headquartered in Crawfordsville, Indiana. Ceres supplies seed, agronomy products, seed treatment, precision farming solutions, custom application, and energy needs to customers in 13 western Indiana counties.



• The coop implemented electronic connectivity ("eConnectivity") solutions, including barcoding, in four regional seed facilities in 2014, and has been refining and improving these systems since that time.

Challenges

Ceres put the eConnectivity solutions in place in order to:

- Better manage its seed business
- Replace a barcode system that was being phased out
- Build in additional efficiencies across the business.

Solution

Ceres joined AgGateway's Seed Connectivity II Project in 2012. Importantly, Ceres invited its accounting software provider to partner with them within the AgGateway project. The AgGateway project focused on using industry standards in communicating data between the retailer and its manufacturer partners. These standards include unique identifiers stored in **AgGateway's Ag Industry Identification System (AGIIS)**.

Using **AGIIS** allowed Ceres to send electronic ship notices for receiving product into its system, electronically load pricing from the manufacturer to its system, communicate invoicing and communicate orders. It will eventually allow Ceres to implement license lookup and direct ordering from the coop's internal system.

For hardware in its warehouses, Ceres chose a commercial, rugged 10" tablet with built-in barcode reader, Wi-Fi and Bluetooth, using Windows-based software. Ceres worked closely with its software provider to define specific functions and needs.

Key Points

- Reduced shrink from nearly 2% to 0.06%; Initial investment of about \$25,000 comes out to per unit cost of \$0.025 per unit annually.
- Improved accuracy; compliance with manufacturer reporting requirements.
- Better customer service; more responsive and accurate, and more accurate and timely invoicing.
- Reduced administrative costs - by half an employee, saves on average \$0.083/unit.
- Real time inventory and transparency between locations. "We know instantly what our true warehouse inventory is."
- Better inventory control and traceability by tracking lot numbers throughout the system; Deliveries more efficient coop can stage seed prior to delivery.
- Pricing transparency, including retail price and all discounts promised or given to customers.

"The result has been a definite improvement to our business. Seed department profitability is now contributing significantly to our company's bottom line.... We have seen a returnon-investment as high as 50 to 1 annually, just due to reducing shrink. It only takes about 10-to-12 bags of seed corn lost in a year to pay for the technology."

- Randy Fry, Data Process and Information Systems Manager

Results

Ceres has seen a marked improvement to its business. "Seed department profitability is now contributing significantly to our company's bottom line," says Randy Fry, Ceres Data Process and Information Systems Manager. "We have made great strides in better managing our seed business using the combined software and barcode system. Our customer service has improved because we can be more responsive and accurate. We can invoice customers more quickly and accurately."

The system allows Ceres to view a grower order "exactly as it is in our system" on the tablet, Fry says. Ceres uses a built-in reader to capture the barcode from the container for dispatch to complete the transaction. The transaction is captured in the system as a completed work order and is ready to invoice. The system also flags discrepancies between what is in the order versus what is being scanned, and also if the product dispatched is in inventory.

Shrink has been dramatically reduced. Also, reporting is more accurate, which keeps Ceres compliant with manufacturer reporting requirements. With less data entry, Ceres has been able to reduce administrative cost by half an employee. Because it now has real-time inventory, Ceres's inventory management and order management has improved.



"We now know instantly what our true warehouse inventory is. We have transparency between locations so any hub manager can see where they can find needed seed," Fry says.

Inventory control is also improved by tracking lot numbers throughout the system. In the event of a seed recall, Ceres can locate the seed, whether in a warehouse or

on a farm. Ceres can stage seed prior to delivery either at the hub or at a remote warehouse, so it is more efficient in its deliveries. And pricing transparency is achieved by tracking retail price and all discounts promised or given to customers. "Communicating with our partners our discretionary spend has been a big plus," Fry says.

By implementing industry standards through AgGateway's AGIIS directory, Ceres used those identifiers to easily build a barcode system that was incorporated into its accounting system.

Future Plans

Ceres plans to add modules to its system for direct ordering, license lookup and electronic invoicing. It also plans to synchronize and connect its customer subset through AGIIS so all partners will have the most current customer demographics. Ceres looks forward to the point when all of its manufacturers will implement barcodes on their products, which will allow all companies to maximize the benefits of connectivity. Ceres also plans to study the return on investment of implementing a warehouse inventory program to track products inside its warehouses.

Ceres is working with its technology partners to explore how it can implement eConnectivity in other areas of the company to increase efficiencies and profitability.

About AgGateway

AgGateway is a non-profit organization dedicated to the expanded use of information to maximize efficiency and productivity, promoting and enabling the industry's transition to digital agriculture. www.AgGateway.org