Case Study

Land O'Lakes, Inc.

Using GS1 Standards and EDI make reductions in labor and increases in order accuracy as sweet as butter

Challenge

Keeping a vast logistics network on the same page takes seamless coordination and timely, accurate information. A global agricultural co-operative, Land O'Lakes, Inc. operates approximately 80 plants and 70 warehouses and distribution centers along with managing about 20 third-party warehouses—all where hundreds of products are manufactured, stored, and shipped.

Solution

Within its animal nutrition division, Land O'Lakes is implementing the use of electronic data interchange (EDI) transactions along with Advance Ship Notices (ASNs), following the lead of its dairy division that has been using ASNs for nearly a decade. Each ASN includes GS1 Standards like the Global Trade Item Number® (GTIN®) and Serial Shipping Container Code (SSCC) to uniquely identify each product on each pallet, included in the pending shipment.

Benefits

Land O'Lakes has reported a reduction in labor by up to 25 percent, a reduction in EDI-related errors from 11 percent to one percent, and an increase of 10 percent to a near perfect 99 percent in order accuracy.

"The ASN delivers. More customers are becoming ASN-driven, so our warehouses are placing a greater priority on implementing it. After all, any time you can ease processes and reduce labor time, there's enthusiasm."

Michele Werrline
Logistics Business Analyst
Land O'Lakes, Inc.

Milking Standards for Efficiencies

If you said Land O'Lakes to virtually any consumer in the United States, he or she would instantly reply "butter!"

But the fact is Land O'Lakes is a global farmer-owned cooperative with almost 4,000 members—dairy and ag producers and agricultural retailers. With $13 billion in gross revenues in 2016 and 10,000 employees, Land O'Lakes controls its eponymous brand, the Purina feed brand for livestock and lifestyle in the U.S., and the WinField United brand, a provider of agricultural inputs and insights.

Land O'Lakes relies on EDI transactions to help facilitate shipping and receiving activities and operations across the broad scope of both production plants as well as third-party warehouses. Michele Werrline, logistics business analyst, along with her colleagues, manages two of the company's three warehousing divisions—the animal nutrition and consumer dairy foods divisions. The team also coordinates with third-party warehouses that receive, store, and ship on behalf of Land O'Lakes.

ASN Drives the Process

As each shipment departs from the shipping origin, Land O' Lakes sends an ASN to allow recipients to plan for its arrival and validate the shipment's contents once it has arrived. The company has been using ASNs in over a dozen of its facilities in the dairy division for nearly a decade and is now implementing it in a half-dozen locations in the animal nutrition division.

To help simplify and improve operations, the Land O'Lakes customer requires the GTIN, lot number, manufacturer name, expiry date, and pallet identification number as part of the ASN. Land O'Lakes uses the Serial Shipping Container Code on its pallets, which contains all GTINs included on the pallet. By using the GTIN and SSCC, Land O'Lakes helps ensure that all product detail is included and can be easily shared electronically, enabling significant efficiencies between trading partners.

When implementing the ASN, Land O'Lakes took a phased approach to generate the SSCC at the point of manufacture and then validate this information before exchanging it with warehouses. "The SSCC is our core driver, the one standard we rely upon heavily in the ASN-driven process since it improves accuracy throughout the order-to-cash process," Werrline says.

> "I think our third-party warehouses and customers would tell you that the benefit they find the most enticing is the ability to use the ASN to automate their accounts payable and accounts receivable processes."

Michele Werrline
Logistics Business Analyst, O'Lakes, Inc.

As Smooth as Butter

The benefits for Land O'Lakes' internal operations as well as those of its third-party warehouses include the added efficiencies that arrive with the ASN.

When a shipment arrives, the recipient scans the SSCC-encoded barcode into the local Warehouse Management System (WMS), using a radio frequency (RF) handheld or fork truck-mounted receiver. This requires no manual data entry—an important benefit for those working in cooler, super chill, and freezer environments who are wearing gloves that make data entry clumsy and error prone. The "pre-populated" information in the system provided by the ASN is easily "matched" to the actual products received via the scan, thus validating the accuracy of what products were received compared to what products were ordered.

"Our colleagues are very quickly embracing the changes delivered by the ASN at the local level within an individual plant," Werrline says. "And more important, they are identifying the benefits of having the additional data."

The ASN also provides them with the actual amounts to compare to their original purchase orders. If an order was placed for 500 units, for example, but Land O'Lakes is only able to deliver 450, the warehouse can adjust its downstream operations to account for the shortfall even before the shipment arrives.

Benefits also extend throughout the order-to-cash process to invoicing. "I think our third-party warehouses and customers would tell you that the benefit they find the most enticing is the ability to use the ASN to automate their accounts payable and accounts receivable processes," Werrline says.

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Measureable Results

Having seen the benefits elsewhere in the company, the few facilities that are not using the ASN process are eager to do so.

"The ASN delivers," Werrline says simply. "More customers are becoming ASN-driven, so our warehouses are placing a greater priority on implementing it. After all, any time you can ease processes and reduce time and labor, there's enthusiasm."

Over a 30-day period, a total of 3,100 ASNs were distributed, 22 percent went directly to customers, while the remaining 78 percent remained within Land O'Lakes' internal network of supply chain partners.

In the Land O'Lakes supply chain network, the use of the ASN has resulted in significant labor savings: the time it takes to scan a pallet and verify its contents electronically rather than having to manually key in item numbers, lot numbers, and expirations has improved productivity by up to 25 percent.

"Accuracy is just as important, especially when you are talking about food products for both humans and animals," Werrline notes. "We've taken EDI-related transaction errors based on bad data from 11 percent down to one percent. At the same time, order accuracy has increased by 10 percent to 99 percent accurate."

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Lessons Learned

Werrline has advice for those embarking and managing a similar initiative.

"It's a matter of not only understanding your process, but truly understanding your data: what's being sourced and where is it being sourced from. Software solutions like ERP, WMS and others—they all provide similar data. Deciding where best to source data from is paramount to the integrity of your output."

Werrline continues, "A really important piece is to make sure there is complete alignment with every team and function being impacted, during implementation and for ongoing data governance across the organization."

To do this, Land O'Lakes relies heavily on its RACI charts: who is responsible, accountable, consulted, and informed.

The cooperative communicates broadly and comprehensively with cross-functional conversations to determine how to accomplish a goal, who approves process changes, who rolls it out to the facilities to execute changes, when to involve IT, and other critical internal exchanges of information and decision points.

Werrline suggests not getting hung up on the time spent on the implementation to define, design, build, and deliver. "All of that is going to take time, but the results are so much greater than the time you'll spend and you will reap those benefits for years to come."

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And Werrline thinks encouraging others to adopt GS1 Standards—starting with the GTIN and SSCC—as part of transactions in the order-to-cash process brings value to everyone. "We realized a lot of benefits being in time, in efficiencies, and in accuracy."

Implementing ASNs based on GS1 Standards helps strengthen cooperation within the Land O'Lakes cooperative, by fostering a common language that helps bring crops to fruition, dairy products to consumer tables and feeds for herds through today's farmers.

Land O'Lakes Benefits from ASN Implementation

25% Reduction in Labor

1% Error Rate Down from 11%

99% Order Accuracy Increase of 10%

About the Companies

About Land O'Lakes

Land O'Lakes, Inc., one of America's premier agribusiness and food companies, is a member-owned cooperative with industry-leading operations that span the spectrum from agricultural production to consumer foods. With 2016 annual sales of $13 billion, Land O'Lakes is one of the nation's largest cooperatives, ranking 215 on the Fortune 500. Building on a legacy of more than 95 years of operation, Land O'Lakes today operates some of the most respected brands in agribusiness and food production including LAND O LAKES® Dairy Foods, Purina Animal Nutrition and WinField® United and Land O'Lakes SUSTAIN™. The company does business in all 50 states and more than 60 countries. Land O'Lakes, Inc. corporate headquarters are located in Arden Hills, Minn. www.landolakesinc.com

About the GS1 US Retail Grocery Initiative

The GS1 US Retail Grocery Initiative is a voluntary collaborative industry effort seeking to address current industry challenges to improve product information and images, data quality, supply chain visibility, and operational efficiencies. This structured Initiative for retail grocery aims to enable stakeholders to focus on the most important industry problems, streamline resources, and drive adoption and implementation of the industry-defined solutions leveraging GS1 Standards. www.GS1US.org/industries/retail-grocery/gs1-us-retail-grocery-initiative

About GS1 US

GS1 US, a member of GS1® global, is a not-for-profit information standards organization that facilitates industry collaboration to improve supply chain visibility and efficiency through the use of GS1 Standards, the most widely-used supply chain standards system in the world. Nearly 300,000 businesses in 25 industries rely on GS1 US for trading partner collaboration that optimizes their supply chains, drives cost performance and revenue growth while also enabling regulatory compliance. They achieve these benefits through solutions based on GS1 global unique numbering and identification systems, barcodes, Electronic Product Code-based RFID, data synchronization, and electronic information exchange. GS1 US also manages the United Nations Standard Products and Services Code® (UNSPSC®). www.gs1us.org

Learn More

For more information about the GS1 US Retail Grocery Initiative, visit www.gs1us.org/retailgrocery or contact retailgrocery@gs1us.org.