



The Global Language of Business



## Case Study

# Ecolab

## Taking a Clean Approach to Spotless Product Data

### Challenge

Achieving high quality product data was no small undertaking for Ecolab. As a company focused on cleaning solutions, Ecolab has a wide diversity of products and programs, serving three million customer locations in 40 industries. Creating an effective data governance framework for consolidating dozens of data repositories was only the first step in making sure Ecolab's product data was complete and "clean."

### Solution

By adopting GS1 Standards a decade ago, Ecolab laid the foundation for efficiencies throughout its supply chain—from its own manufacturing facilities to distributors, and on to end-users. The company uniquely identifies most of its products with Global Trade Item Numbers (GTINs) and exchanges product data attributes with customers over the Global Data Synchronization Network™ (GDSN®).

To keep pace with customer data demands, Ecolab participates in industry groups and initiatives GS1 US® offers, including the Foodservice GS1 US Standards Initiative and the GS1 US Retail Grocery Initiative.

Ecolab has developed its own internal training program for people who work with GS1 Standards-driven processes, mirroring the training offered by GS1 US. The company is also a regular participant at GS1 Connect conferences and serves on the GS1 Connect Community Advisory Board.

### Benefits

GS1 Standards have helped Ecolab streamline its data exchange process with customers, strengthen its relationships, and eliminate time-consuming, manual data entry.

As more customers have requested GS1 Standards-based trade, Ecolab has not only stayed at the forefront of its industry with its data governance program, but even landed significant new business by being prepared to share standardized data with a large account.

With an overall 68 percent improvement in data quality from 2017 to 2018, Ecolab customers have benefited from the initiative as well. With GS1 Standards and quality data, they can more efficiently manage Ecolab deliveries and inventory and can readily access safety and regulatory information.

 **68%** improvement in data quality from 2017-2018

## A Decade of Data

Ecolab epitomizes diversification. As an industry leader for cleaning solutions, Ecolab and its 11 divisions serve a wide range of industries, providing both products and professional programs to keep customers' premises and products clean and safe.

Driven by requests from foodservice and healthcare customers, Ecolab implemented GS1 Standards a decade ago. A growing number of Ecolab customers were requesting product information, making it a requisite of doing business with them.

"At the time, customers were asking for product dimensions and brand name data," says Regan Van Tassel, commercial digital solutions platform manager at Ecolab. "Today, it's more about images and robust information around instructions, safety sheets, and regulatory data."

"There was a lot of work during the initial stages just accessing the information," Van Tassel adds. "We had so many different databases that it took us quite a while to get the correct data consolidated and into the GDSN."

### Pillar 1: Data Governance Process

"We really wanted to make sure that we had built-in governance around product data, and the structure around how to assign a GTIN."

Regan Van Tassel, Commercial Digital Solutions Platform Manager, Ecolab



From the beginning, Ecolab's data governance program had executive support at the highest level. "Our executive leadership sees the benefits firsthand," Van Tassel says. Data inaccuracies can have significant negative impact on shipping and logistics, inventory management, sales and forecasting, revenue—virtually everything within the modern supply chain.

Almost immediately upon implementing GS1 Standards, Ecolab moved to publish its data in the Global Data Synchronization Network or GDSN. Once Ecolab collected all of the information based on the GS1-recommended format, the company has managed the quality of its data, using GDSN error reporting tools. "We really wanted to make sure that we had built-in governance around our product data, and the structure around how to assign a GTIN," explains Van Tassel.

### Proactive Data Management

Each division has its own division product publication specialists (DPPs) who are the recipients of the initial error reports being generated by the GDSN.

"When we first went live, it was kind of like a firehose," Van Tassel recalls. "All of our data came at these DPPs and there were so many problems and errors that it became overwhelming and difficult to focus on what was important."

"Then, about three years ago, we decided to be more proactive versus reactive. We built into our internal systems additional error reporting, so we could mitigate any issues before they became problems in the GDSN."

## Assessing and Prioritizing Data Quality

How many data errors per product (GTIN)?

How many products (GTINs) have data errors?

What is the nature of the errors?



Fixing 1 issue, corrects up to 300 errors

GTIN X 10 errors X 1 customer = 10 issues

GTIN X 2 errors X 15 customers = 30 issues

Higher Priority

Ecolab started looking at its product data in a variety of ways. How many data errors are there per products, how many products have data errors, what is the nature of the errors? Information was broken down by division.

"A big lesson for us when implementing our data governance program: Focus on the whole view versus just pieces so you can wrap your arms around the opportunities for improvement."

Ecolab found that it was better to examine GTINs from the perspective of those that impacted the most customers rather than the most errors. For example, a GTIN with 10 errors may have been published to just one customer. Instead, focus placed on a GTIN that had just two errors but touched 15 customers proved to have the most impact.

Ecolab also built a very tightly controlled system internally to assign GTINs, with a select group of people having access to the system. Today, Ecolab's business partners involved with labeling can directly access the product information they need for labeling items, cases or pallets.

"We now have one data quality scorecard that we produce and distribute a couple of times a month. That helps us to track our progress and see where we're making improvements and where we need to focus more attention," Van Tassel says.

"It's made a big difference for us in terms of knowing where to target our time and where we're going to have the most impact. By integrating the various error reports, we found that by fixing one issue, we could correct up to 300 errors."

“At one point in the process, it was taking us up to 15 days to be able to publish data to a customer at their request. With our data governance program, we now provide customers with same-day publications. And for new data requests, we’re able to make changes within weeks versus months, as it was before.”

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## Pillar 2: Education & Training Protocol

“We put forth a big effort to hold meetings and town halls and actively promote GS1 Standards, educating our employees.”

Regan Van Tassel, Commercial Digital Solutions Platform Manager, Ecolab



## A Boost to the Bottom Line

Ecolab found that increased visibility for the program, and the recognition for all involved in it, had a significant impact on data quality improvement.

“We put forth a big effort to hold meetings and town halls and actively promote GS1 Standards, educating our employees on what we were doing and the importance of it,” Van Tassel says.

“In the course of our meetings and marketing, we were able to sell the data governance program based on the efficiencies we were gaining internally by automating all of the data gathering and minimizing the time we spent fixing errors,” Van Tassel explains.

A pivotal event illustrated the point of gaining competitive advantage with GS1 Standards.

“We had a big win for the business. We were able to obtain a new, very large customer account because we were participating in the GDSN and were able to supply them with all of the data they wanted. The customer switched from our competitor because they were looking for a trading partner that had GS1 Standards and GDSN information at their fingertips. Winning that account really helped to sell the program internally and get more enthusiasm behind it from our business partners.”

## Information and Image Management

Van Tassel and her colleagues regularly assemble the DPPs from foodservice, a couple of different healthcare teams, and individuals from the largest division – called the institutional division – to discuss how to correct errors with the data tied to their divisions, as well as implement measures to prevent future errors.

Currently, Ecolab is implementing a Product Information Management (PIM) system that will manage product data across divisions in a single repository, feeding into internal- and external-facing platforms for universal content consumption by customers, distributors, and internal departments globally.

The PIM system will be integrated with a digital asset management system to store images and marketing assets, replacing manual spreadsheets and databases in an effort to improve data quality and efficiency across the network. As a business-to-business company, Ecolab did not customarily take pictures of products when they came off the manufacturing line. But more and more, Ecolab distributors want to display product images on their own webpages to sell more.

“With the advent of e-commerce, GS1 Standards and traceability, it’s become critical to our customers to have images and other forms of digital data from us,” says Van Tassel. “It’s a primary focus to make sure we have visually strong images and multiple images for each of our products. We have created a new commercial digital solutions department within the past year. This is to help facilitate standardization of images and data requirements so we can scale globally.”

“We will be ready in the first phase to send data to GDSN through the PIM system, greatly simplifying the the complex publication process that we use to transform and publish the data now,” adds Van Tassel.

## Auditing Product Data for Validation

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### Pillar 3: Attribute Audit

“The audit compares the most recent information shared about a product with its physical attributes.”

Regan Van Tassel, Commercial Digital Solutions Platform Manager, Ecolab



With an multi-prong approach to data quality based on the principles of the GS1 US National Data Quality Program, Ecolab has achieved an overall 68 percent improvement in data quality between 2017 and 2018. This includes reducing the number of GTINs with errors by 18.5 percent and ongoing improvements in trading partner scorecarding results.

Once Ecolab has completed its PIM implementation, it plans to repeat a GS1 US audit of its product attribute data that had been done a few years ago. “The audit compares the most recent information shared about a product with its physical attributes,” Van Tassel says. “We want to pursue data quality certification with GS1 US. We’re ready. For our customers, we’ll continue to make doing business with Ecolab an efficient and clean one...with standardized, quality data.”

## About the Organizations



### About Ecolab

Ecolab is the global leader in water, hygiene and energy technologies and services. Around the world businesses in foodservice, food processing, hospitality, healthcare, industrial, and oil and gas markets use Ecolab products and services to keep their environment clean and safe, operate efficiently and achieve sustainability goals. [www.ecolab.com](http://www.ecolab.com)



### About the Foodservice GS1 US Standards Initiative

The [Foodservice GS1 US Standards Initiative](#) represents a broad cross section of industry trading partners. Today over 125 manufacturers, distributors, brokers, operators, industry associations, government agencies, logistics, and technology providers are participating members in initiative activities focused on improving transparency, operational efficiencies, traceability, and food safety with GS1 Standards.



### 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 help 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.

### GS1 US National Data Quality Program

The GS1 US National Data Quality Program provides organizations with a comprehensive approach to data quality that encompasses validating a Data Governance Process exists within an organization to support the creation and maintenance of product data based on GS1 Standards; confirming that proper Education and Training protocols on GS1 Standards are present within an organization for creating and maintaining accurate product data; and conducting regular Attribute Audits that audit, verify and compare product attributes to most recently shared data to enable trading partners to have confidence that the data shared is accurate, complete and timely. [www.gs1us.org/dataquality](http://www.gs1us.org/dataquality).



### About GS1 US

GS1 US®, a member of GS1® global, is a not-for-profit information standards organization that facilitates industry collaboration to help 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](http://www.gs1us.org)

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