Dot Foods
Leading by Example

Global Data Synchronization Network® (GDSN®) proves unmatched value for Dot Foods and its trading partners.

ABOUT THE GDSN

The Global Data Synchronization Network is a virtual network enabling trading partners to connect and share product information in a common format and with a consistent set of product attributes. It is a global network that comprises data pool providers and solution providers who are certified annually to ensure compliance to GS1 global standards around the world.

Introduction

Driving unneeded costs out of the supply chain, enhancing product information for customers and improving food safety and traceability are among the top priorities the foodservice industry is seeking to address. To effectively deal with these priorities in a diverse and expansive industry, 55 founding member manufacturers, distributors and operators have worked together to develop a common, yet voluntary, timeline for adoption of GS1 global standards for company identification, product identification and product description.

These founding members formed the Foodservice GS1 US Standards Initiative, which is open to all foodservice companies and is endorsed by the International Foodservice Manufacturers Association (IFMA), International Foodservice Distributors Association (IFDA), National Restaurant Association (NRA) and GS1 Canada. The Initiative focuses on achieving complete and accurate data exchange through the GS1 Global Data Synchronization Network® (GDSN®).

The Initiative's founding members have also funded the *GS1 US Team for Foodservice* to help guide and counsel companies taking action. *"We pledge to support foodservice with world-class implementation guidance, as we've done for 20 other industries, including the retail food industry,"* confirms Bob Carpenter, CEO of GS1 US. *"The foodservice companies voluntarily adopting GS1 standards along a common timeline is a powerful testament to their commitment."*

One committed early adopter is Dot Foods, Inc.

Seizing the Opportunity

Founding and governance team member of the Initiative, Dot Foods, Inc. (Dot) is taking the lead in implementing GS1 standards-based data integrity and data exchange practices.

Since 1960, Dot Foods has delivered food products from manufacturers to distributors across the United States. As an innovator in the foodservice industry, Dot first developed the redistribution concept, and today delivers to its customers over 83,000 quality products from 500 manufacturers – the largest selection in the industry.

Due to inaccurate and incomplete product data, Dot Foods estimated an annualized $1.5 million impact on its bottom line.

An active supporter of data synchronization of product information, Dot has been working with its suppliers for more than a decade to receive product information electronically using the EDI 888 Item Maintenance Transaction Set. In spite of its efforts, Dot has not achieved the desired goals for widespread adoption and complete and accurate data – and estimates its own annualized expense for inaccurate data to be $1.5 million.

To validate whether GDSN adoption would work in the foodservice industry, and whether it would be superior to EDI, Dot invited four of its manufacturers – Kellogg's®, Kraft Foods, PepsiCo and Tyson Foods – to each participate in a data synchronization pilot using the GDSN. (These manufacturers already use GDSN for their retail businesses.) Two manufacturers were already trading item information electronically through EDI and two were not.

Conducting the Pilot

Dot Foods understood that, in recent years, the retail grocery and mass merchandise sectors had been synchronizing quality data with its manufacturers, leading to broad participation and significant supply-chain efficiencies. This successful example provided Dot another reason for investing its time and resources in the pilot.

The objectives for the GDSN pilot included:

• Analyze the quality of the data provided via the GDSN compared to the quality of data in Dot's Item Master file.

• Include an assessment by Dot Foods and each of the manufacturers about the potential business benefits and challenges of using the GDSN.

The pilot commenced with each manufacturer supplying Dot Foods with product-item data through the GDSN. Dot utilized the GDSN-certified GS1 US 1SYNC™ Data Pool to synchronize data with each manufacturer and Aligntrac Solutions, Inc., a GDSN-certified solution partner to bridge the GDSN data and processes into Dot Foods' EDI-based environment.

Because each manufacturer was "ready and able" to supply product-item data that was already loaded in its GDSN systems, the pilot was performed using each manufacturer's respective production environment. Once the manufacturer's data was received, an

evaluation was performed comparing this GDSN data to the data held in Dot's Item Master file.

During the pilot, the scope was expanded to include each manufacturer's entire Dot catalog of items and required data attributes for a "complete" implementation. Each manufacturer continued to follow its existing production processes and procedures; yet, in some cases, a manufacturer's GDSN-based production process wasn't ready for all product attributes that Dot required (such as "kosher"and "storage temperature"). To resolve this issue, both Aligntrac and 1SYNC provided the ability for the manufacturer to upload additional attributes, using a spreadsheet tool, to "top off" the GDSN data provided to Dot Foods.

CHALLENGES

• There are a few attributes that are still being tailored for foodservice by the Initiative Working Group in time for full roadmap roll-out.

• Data cleansing and overall data integrity are critical; simply sending bad data faster is not beneficial.

• Publishing data is not the sole priority; manufacturers need to keep data updated. If they publish once through GDSN, yet don't update it as changes occur, few benefits are achieved.

Findings and Benefits

Dot Foods and each of its manufacturers summarized the pilot's findings based on their original objectives.

Quality of data. After continuously examining any data discrepancies, Dot and each manufacturer summarized the sources of errors. An analysis showed that the data provided by each manufacturer would, in turn, significantly improve Dot's data quality. For example, a close examination of the discrepancies revealed the lack of standardized attribute definitions. Some manufacturers defined "shelf life" as "product life from production" while others defined it as "guaranteed shelf life on arrival." The lack of attribute updates as products changed was also a major cause of discrepancies.

Ease of implementation. Dot faced no significant challenges during the pilot. The company was able to leverage existing processes to receive GDSN data. Dot found that a portion of each manufacturer's items was immediately ready since it had been previously loaded into the GDSN when working with other sectors. However, each manufacturer required some additional time to input the remaining foodservice-specific items.

As a result, Dot plans to enhance its processes to gain early advantage for synchronizing with additional suppliers at a product-line, or even at an item-line level. Furthermore, the pilot's successful data audit processes and engagement sequence can be replicated and fine-tuned during Dot's production roll-out.

Each manufacturer was able to leverage its existing GDSN data infrastructure and data quality processes and practices to quickly and easily publish data. And, as needed, each provided the required additional attributes with the help of the data pools and/or solution providers. In spite of the short notice when the scope was expanded during the pilot, each manufacturer was able to fulfill a

SUMMARY OF DATA DISCREPANCIES		
Attribute	Manufacturer Attribute Discrepancies	Dot Foods Attribute Discrepancies
Shelf Life	13	660
Pack	6	119
Size	51	351
Dimensions	6	209
Weight	19	206
TI/HI	22	152

Over 3,480 items were synchronized by Dot and its manufacturers. The pilot revealed two major sources of attribute discrepancies: the lack of standardized attribute definitions and limited attribute updates as products changed.

large percentage of items carried by Dot, ranging from 61 percent to 100 percent fulfilled.

Benefits for the business. The pilot demonstrated for Dot that it is ready for data synchronization via the GDSN and that the GDSN will help significantly reduce costs due to inaccurate product data. The pilot proved that the GDSN can provide for all data attributes required by Dot Foods; and with its emphasis on standardized attribute definitions, implementing the GDSN could help Dot and its manufacturers reduce costs.

The pilot also highlighted some areas for immediate business benefits: discontinued products in Dot's system and products for which Dot had incorrect product identification numbers.

Benefits for the industry. The following benefits identified during item data synchronization are also predicted to extend to trading partners in the foodservice industry that voluntarily choose to adopt and implement GS1 standards and the GDSN:

- Foodservice trading partners can leverage the work already completed by manufacturers in implementing standards-based data synchronization for the grocery retail and mass merchandise channels.

- Manufacturers can benefit from the GDSN through the same efficiencies, reductions in errors, and potential sales gains as Dot will benefit.

- The Foodservice GS1 US Standards Initiative Roadmap addresses requirements for attributes and timelines, yet also allows Dot Foods to move ahead faster with those manufacturers that are ready – either sooner or with additional attributes from later phases of the roadmap.

- Founding member manufacturers have expressed support for GDSN as a way to streamline their data management processes by providing one to many of their customers with a common set of attributes in a standard GS1 format – and updating and setting up new items once – to get to "one source of the truth" about their products. Dot Foods anticipates that the power of GDSN will continue to grow in line with adoption, as thousands of companies review the same data.

Pilot Conclusions

The pilot was successful in addressing its objectives. Now, Dot Foods is leading efforts to bring standard product-identification and item-description information. The company is sharing information electronically through the GDSN so that there is "one source of the truth" originating from manufacturing companies regarding every product in the foodservice supply chain.

The final analysis of the discrepancy reports revealed a substantial percentage of incorrect item information resided in the Dot catalog, and standardized data management processes would ensure that manufacturers eliminate any errors in their data input to GDSN.

The pilot provided some immediate gains from manufacturers identifying discontinued products in Dot's system and from highlighting products where Dot had incorrect GS1 Global Trade Item Number® identifiers for products. Identifying discontinued items was an early benefit. One manufacturer reported almost 10 percent of the items in Dot's Item Master file were discontinued. These discontinued items can be a source of customer dissatisfaction and lost sales when customers select products that are no longer available.

It became immediately clear that there was a gap in populating the Dot Foods' item records, affecting Dot's goal of feeding an existing production process. Specifically, there was a requirement for some of the Phase I Foodservice Attribute definitions that were being

"We were probably doing more EDI updating of item information than anyone in the industry, and now, we realize that even though EDI is much better than manual data entry, it doesn't have built-in checks and balances like the GDSN does."

– Dick Tracy, Vice President, Customer Development, Dot Foods, Inc.

reviewed as the pilot began. Without these specific attributes, the Dot Foods' system would not be able to accept the data. These attributes included "shelf life," "manufacturer part number," "kosher" and "inner pack."

It is important to note that all of Dot's attribute requirements are met by the GDSN.

At the end of the pilot, Dot Foods was completely synchronized with one manufacturer and well on the way to completion with the others. Many of the manufacturers prepared and loaded a significant number of foodservice products into GDSN within the pilot timeframes and are continuing efforts to load their entire foodservice product lines.

Dot Foods and each manufacturer independently agreed there was significantly less confusion in the manufacturer-redistributor relationship when they are speaking the same language with GS1 standards and by using the GDSN, as opposed to the silo-like operations in the past.

Dot also realized that there is a definitive difference between its current EDI Item Maintenance process and the GDSN

process. The information that Dot receives through the GDSN-based process is more accurate and possesses data integrity due to validations that are embedded within the GDSN process today. In addition, because manufacturers voluntarily publish in one standard format to the GDSN, errors can be trapped and remediated more efficiently since all customers are reviewing the same version of the data. This improved efficiency from one-to-many publishing is expected to grow with associated expansion of GDSN adoption.

"Dot Foods is an important partner of Tyson's, and we were thrilled to participate in the GDSN pilot with them. It was an important step in our eyes to help validate the difference between EDI product information sharing and GDSN data synchronization. Even though we have been long-time supporters of GS1 and GDSN, the pilot exceeded our expectations for providing more consistent, robust product information."

– Lela Tripp, Senior Enterprise Strategic Architect, Tyson Foods, Inc.

The results proved to be a success, both qualitatively and quantitatively:

- Through the GDSN, Dot discovered discrepancies in the six attributes in 28 percent and 42 percent of data on items from two manufacturers who were communicating to Dot through EDI before the pilot; and 32 to 82 percent discrepancies in data accuracy for those manufacturers with whom Dot had not synchronized data before the pilot.

- The process was collaborative. Dot and each manufacturer worked together to trap errors and improve business processes, and they identified critical knowledge that can be shared with Initiative members. In fact, manufacturers encouraged other manufacturers to start sooner than expected to use the GDSN process to trap errors while they prepare for full roll-out.

- The data transfer process highlighted previously unknown issues among long-time trading partners. For example, one manufacturer showed some products as "refrigerated," whereas Dot showed the same products as "frozen." Also, the same manufacturer provided pallet configurations based on its physical warehouse, whereas Dot showed the configurations based on its own warehouse. These examples and others helped to identify areas for future decision-making.

- Each manufacturer predicted that the use of GDSN to update product information would eliminate sales involvement in the product set-up process, improving accuracy and increasing sales time with customers. This has been estimated by one manufacturer to average 2½ hours per week, which is equivalent to more than three weeks of additional sales time each year per sales person.

"I believe the biggest message to industry is that distributors don't realize how ugly their data is. We always thought we were on top of data accuracy, but the majority [of data] was manually brought in and updated; we had awful information on things as critical as dimensions of a case. The manufacturer-supplied data in the pilot that showed the core attributes in our system was incorrect 80 percent of the time, and that was jaw-dropping for me."

– Dick Tracy, Vice President, Customer Development, Dot Foods, Inc.

Key Learnings

Dot Foods and the four manufacturers learned a great deal from the pilot – both in terms of addressing Dot's goals for the pilot and providing recommendations to share with the foodservice industry.

1 **Immediate benefits can be realized from the adoption of GS1 standards and the GDSN.** Manufacturers, distributors and operators alike can benefit with improved operational efficiencies and potential sales gains.

2 **Foodservice GDSN implementation can leverage retail synchronization efforts.** Manufacturers that have already implemented GS1 standards through the GDSN on the retail food side of their businesses can leverage that completed work, with some modifications, to roll-out to their foodservice customers, helping them to "get up and running" relatively quickly.

3 **A common approach is achievable.** By voluntarily using the Foodservice GS1 US Roadmap to accurate data, individual companies can achieve a common, standards-based approach that meets and harmonizes with their requirements. Working through the Foodservice GS1 US Standards Initiative, members of the foodservice industry can take action now to voluntarily adopt a common timeline of GS1 global standards for company identification, product identification and product description. Through adoption of GS1 standards and the GDSN, companies can achieve "one source of the truth" about their products.

Dot Foods will continue to take the lead in the foodservice industry by becoming the first foodservice distributor to engage voluntarily in data synchronization via the GDSN and by following the Initiative's Foodservice GS1 US Roadmap. The company will continue to share its GDSN experiences with other foodservice companies for the benefit of the entire industry.

"As a founding member and governance member of the Foodservice GS1 US Standards Initiative, Tyson looks forward to helping educate foodservice companies throughout the supply chain on the benefits of standards adoption like those we found in the Dot pilot."

– Bernard Leonard, Group Vice President Food Service, Tyson Foods, Inc.

"*PepsiCo Foodservice is committed to working with our partners in the foodservice industry to provide clean and accurate data to enable the trading process through the global data synchronization network. We have, and will continue to dedicate resources to work both internally to provide accurate data to our trading partners, and with GS1 US to assist in defining the needs of the foodservice industry and working to insure adoption across the industry.*"

– Tom Reynolds, Vice President of Foodservice,
Field Sales, PepsiCo

CONTACT US

Foodservice GS1 US Standards Initiative

GS1 US offers foodservice manufacturers, distributors, and operators a range of solutions when synchronizing data and improving data quality. To learn more about how GS1 US can help your organization synchronize data for business benefits, contact your GS1 US account manager or the GS1 US Customer Service Team at +1 937.435.3870 or visit **www.gs1us.org/foodservice**.

ABOUT ALIGNTRAC SOLUTIONS

Aligntrac's Sync/PDI™ platform allows sell-side companies to organize, cleanse and synchronize their product information and buy-side organizations to quickly implement the automated flow of item/catalogue information. Sync/PDI™ is a full-featured solution that was designed with ease of use in mind. It features sophisticated data validation, several integration options and many end-user searching and reporting capabilities. Aligntrac is a certified 1SYNC™ Solution Partner and the Sync/PDI™ solution supports the current 1SYNC Data Pool. To learn more, visit **www.aligntrac.com**.

ABOUT GS1 US™

GS1 US is a not-for-profit organization dedicated to the adoption and implementation of standards-based, global supply chain solutions, helping more than 200,000 businesses maximize the speed and visibility of goods moving around the world. These solutions, including barcode management, data synchronization, the Electronic Product Code (EPC), business processes, XML standards, and EDI transaction sets, are based on standards of the GS1 System used by more than 1 million companies worldwide. GS1 US operates the subsidiaries and brands 1SYNC™, EPCglobal US™, GS1 Healthcare US and RosettaNet. To learn more, visit **www.gs1us.org**.