

## CASE STUDY

# The Kroger Company: Transforming the Product Data Management Landscape

## Executive Summary

### Challenge

Evolving consumer expectations, e-commerce and regulatory requirements are driving the demand for more information about products. Organizations are gearing up to address this demand by developing the ability to provide the right information at the right time. The foundation for enabling this capability is quality data.

The Kroger Company has recognized this challenge and is leading the industry in delivering quality product data. This recognition is driving the ever expanding demand for data attribution requirements that is transforming the retail industry. Kroger believes that the accountability for accurate and complete product information lies with the Brand Owners providing the needed information electronically into the Kroger enterprise.

### Solution

To meet this demand, The Kroger Company has implemented 1WorldSync's industry solutions of Product Introduction and Data Accuracy Scorecard. These tools, combined, provide Kroger the ability to streamline data capture and ensure its data are of high quality.

1WorldSync Product Introduction facilitates efficient collaboration between

the supplier and data recipient and aligns to a standard approach for item setup. Kroger's instance of Product Introduction is the Vendor Item Portal (VIP) which seamlessly integrates Global Data Synchronization Network (GDSN™) data with Kroger specific data into one consolidated channel. In conjunction with VIP, Kroger is also leveraging 1WorldSync's Data Accuracy Scorecard (DAS) to ensure alignment between data sourced from VIP and existing data supporting Kroger's operational systems.

Throughout this implementation, 1WorldSync has leveraged its industry experience and best practices to provide additional services that include education and training, Global Product Classification (GPC) mapping, community enablement, and program management that has ensured the all-around success of the initiative.

### Benefits

The implementation of 1WorldSync solutions of VIP and DAS has enabled Kroger to collaborate more effectively with its vendors to collect, validate and maintain product data. The combination of good quality GDSN and Kroger specific data is enabling Kroger to more efficiently manage internal functions including



*Evolving consumer expectations, e-commerce and regulatory requirements are driving the demand for more information about products.*

category management, procurement, logistics, and regulatory compliance – ultimately all in support of increasing customer satisfaction. Kroger suppliers are also realizing benefits through a consolidated point of entry for all product data, up-front data validation and real-time feedback on new products.

### Industry Evolution

The traditional methods of shopping are rapidly evolving. Today's interconnected world allows the consumers to adapt faster than organizations by actively leveraging emerging tools like social media and mobile applications in their shopping experience. Consumers are focusing their attention from local convenience with limited choice to data-driven decisions without geographical and time-based boundaries.

As part of this trend, consumers expect accurate, complete, and relevant product data – anytime, anywhere – as an enabler in enriching their shopping experience. As a result, conventional challenges long existing in the “Business to Business” (B2B) environment are now further complicated with the addition of new challenges presented by the emerging “Business to Consumer” (B2C) trends.

The majority of retailers face the following data challenges today:

- Ability to obtain product information from brand owners involving thousands of data attributes
- Inefficient manual data entry and error resolution
- Inconsistent data governance practices leading to poor data quality
- Ability to meet industry initiatives such as US Foodservice Initiative and EU 1169 regulation

- Inefficient and/or inaccurate derivation of internal attributes

To meet these challenges retailers need to develop a comprehensive strategy addressing the need to source, manage and aggregate accurate and complete product data. Addressing these challenges requires a fundamental shift in focus to view product data as a strategic asset. Technology can support this transition, but retailers must also address the business process and change management challenges necessary to manage and govern product data.

This case study presents how Kroger, with support from 1WorldSync, is addressing these challenges and positioning itself at the forefront of an initiative that is transforming the industry.

### Kroger's First Step – Program Mercury

Kroger is pursuing up to 6,000 attributes (approximately 150 per product) from their suppliers across hundreds of product categories in its portfolio. For Kroger one of the key drivers for increasing the attribute requirements is the need to provide additional information to consumers such as nutritional, allergen, ingredient and sustainability information. They needed to develop a strategy and establish a mechanism to collect this data, accurately derive internal attributes such as tax, food stamp and hazard attributes and syndicate it to internal downstream systems.

Program Mercury is a multi-year, multi-phase initiative building the foundation for Kroger to meet both consumer and store needs. This program touches every aspect of Kroger's supply chain, from suppliers and manufactures to end customers on the retail store front.

*Organizations are gearing up to address this demand by developing the ability to provide the right information at the right time. The foundation for enabling this capability is quality data.*

*1WorldSync's solution offerings for Product Risk & Compliance allow global businesses to simplify and manage the process of exchanging and managing product risk information, certificates and documentation, across trading partner communities around the world.*



Within Kroger's Master Data Management (MDM) efforts, Product Data Management is a key component which incorporates systems and process upgrades that started in 2012 and will span over several years. Kroger's MDM solution leverages the benefits of global standards (GDSN) and acts as a central repository of all product data which feeds business critical downstream systems.

Product data management is providing Kroger opportunities to optimize data capture, enable efficiencies within existing Kroger business processes, and improve overall data governance. Through GDSN suppliers provide and own product data as a single source of truth for all retailers and data quality/integrity is maintained with conformance to global standards.

**Benefits to consumers:**

- Informed decision making
- Fewer out of stocks
- Faster check-out
- Enhanced e-commerce experience

**Benefits to Kroger:**

- Faster item introduction into retail and e-commerce channels
- Improved accuracy of internally derived product attributes
- Better vendor collaboration on data and item setup
- Receipt of all supplier product data from one source
- Increased compliance to legal / regulatory requirements

**Benefits to Kroger's suppliers:**

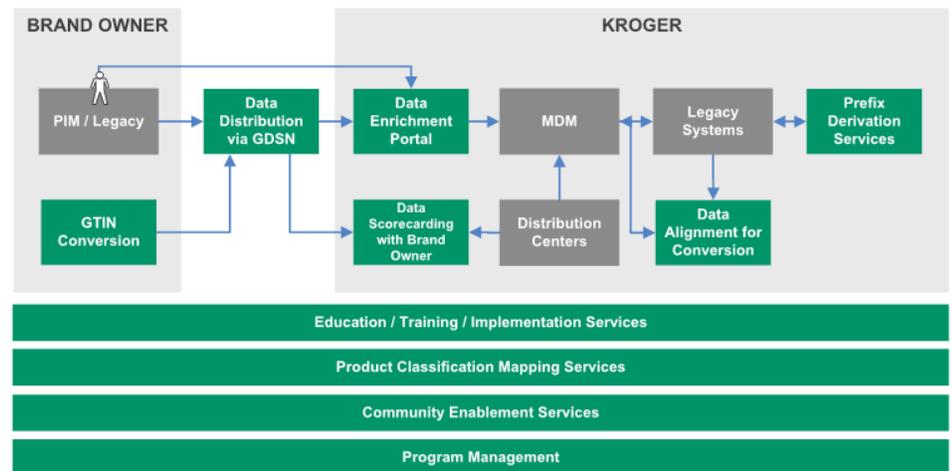
- Streamlined processes for faster speed-to-market
- Easy to use tool that only asks for attributes relevant to the product
- Immediate data validation ensuring data requirements are met prior to submission
- Enhanced ability to focus on customers and sales

**Moving Forward – Engaging 1Worldsync**

As Kroger embarked on this journey, the right supplier engagement strategy was crucial to source the additional product data and to ensure supplier buy-in and commitment to the initiative. To handle this significant effort Kroger engaged 1WorldSync, the largest GDSN

certified data pool, due to 1WorldSync's extensive background in implementing GS1 standards, enabling thousands of suppliers, and its overall Product Data Management expertise.

An illustration of the 1WorldSync solution set for Kroger is present below.



This 1WorldSync solution set provides the following benefits to Kroger and its suppliers:

- Method to enrich, supplement and aggregate GDSN product data
- Standardized capabilities to collect data from non-GDSN suppliers
- Industry accepted data cleansing tool set (DAS)
- Industry leadership and experience for supplier enablement

The main components of the 1WorldSync solution set include data collection, data alignment, and professional services. These are presented in the following sections.

### Data Collection

A key step for Kroger was to enable their vendors with an efficient capability to provide required product attributes. This was addressed through a two-pronged approach of utilizing the GDSN to collect standard core attributes and the **Vendor Item Portal (VIP)** to collect Kroger specific data.

### GLOBAL DATA SYNCHRONIZATION NETWORK

GDSN is Kroger's preferred method for accepting product data from suppliers. Kroger strives to meet their data needs via GDSN's standard attributes, including Global Product Classification (GPC) attributes. Leveraging its extensive GDSN expertise, 1WorldSync supports Kroger in mapping GDSN attributes to their data model. This includes evaluation of GDSN business definitions, technical specifications, and valid values to determine suitability of those attributes for Kroger's business requirements. In addition, 1WorldSync facilitates the discussions with Global Standards Management Process (GSMP) to have

Kroger specific attributes adopted by GDSN. These attributes will not only help Kroger, but can also be leveraged by other organizations to benefit the retail industry as a whole.

### VENDOR ITEM PORTAL

As data is published by a supplier to Kroger via GDSN, the product information flows into the VIP which enables entry of Kroger specific top-off data. The top off data includes additional attributes required by Kroger that are currently not included in GDSN. Product data that originated in GDSN cannot be modified within VIP. Allowing modifications of item information at the data source is crucial to maintain the overall data integrity.

The top-off attributes required by Kroger for GDSN suppliers includes item level and hierarchy level attributes. Suppliers that do not use GDSN complete the entire item setup in VIP. Data entry within VIP can be manually entered or uploaded via an Excel spreadsheet. The Global Product Classification (GPC) and other product attributes are used to classify items into Kroger's internal product taxonomy referred to as 'class'. **Only attributes relevant to the product's class are displayed to the user.** This contextual view greatly simplifies the data entry process for Kroger's suppliers.

Once all required item attributes are populated, VIP validates the data based on Kroger's pre-defined business requirements. Only items with all required attributes which have been validated are then submitted to Kroger. At any point in time, suppliers can track the status of their products within the VIP. Standard GDSN messaging is exchanged between Kroger and suppliers. Upon successful item submission, Kroger sends appropriate Catalog Item Confirmation (CIC) messages of Accept / Review / Synchronized / Reject to the suppliers.

*1WorldSync's Omni-Channel Commerce solution delivers rich and trusted product content, including digital assets – to engage customers and consumers regardless of location or medium.*



## Data Alignment Via Data Accuracy Scorecard

Fundamentally, the 1WorldSync Data Accuracy Scorecard (DAS) provides visibility to differences between vendor provided data and other data sources. For data discrepancies out of set tolerances, DAS highlights the differences, provides various views, scores results and communicates data issues to suppliers for resolution.

Successful migration of data from Kroger's legacy systems to their new MDM was critical to ongoing store operations for products currently sold by Kroger. Kroger leveraged DAS to ensure alignment between existing data feeding their business critical operational systems and the data now sourced from the supplier via GDSN and VIP. DAS is the vehicle used to:

- Confirm that all active items in distribution at Kroger are accounted for in the new platform, Kroger's MDM. For missing MDM items, vendors are notified to take action and ensure there is no disruption to Kroger's business during implementation.
- Align attributes for matched items. If the attributes do not match between what the vendor submitted and Kroger's values for existing items in distribution, Kroger determines the source of the discrepancy and communicates vendor data issues to vendors.
- Verify brand names. Brand name is a critical piece of information used to create shelf tags, receipt descriptors, assign price families, etc. DAS provides the ability to assess the accuracy and consistency of the vendor provided brand names.

The screenshot shows the 1WorldSync Product Introduction web application. The browser title is "1WorldSync Product Introduction". The page header includes "Welcome Kroger Training | Username: tkenney@1sync.org" and navigation links for "Select Organization", "Select Retailer", "Select Role", "Help", "Contact Us", and "Log Out". The main navigation bar features "Home", "Products", "Spreadsheet", "Message Center", "Reports", and "My Account". The "Home" section is active, displaying "My Queues" with links for "Ready To List", "Assigned To Me (0)", "In Process - Supplier", "In Process - Corp Brands Review", "In Process - Retailer", and "In Process - All". A "Portal-Entered Items" box contains "Create Item" and "View Entered Items" links. Below is the "My Messages" section, showing two alerts from 2014-08-01 and 2014-07-31 regarding Corporate Brands items. At the bottom, there are two sidebars: "1WorldSync Links" with links to "Check Digit Calculator", "GTIN Allocation Rules", "1SYNC Item Management Application", "Data Accuracy Scorecard Application", and "Data Driver Application"; and "Kroger Training" with links to "Register for training on VIP", "Register for VIP Q&A Session", "Listen to a VIP GDSN Training Webinar", and "Listen to a DAS Training Webinar".

## 1WorldSync Professional Support Services

### COMMUNITY ENABLEMENT

With such a large impact, a well-planned and communicated rollout strategy to the supplier community was critical. 1WorldSync leveraged their years of experience and proven methodology to customize a plan for Kroger. The plan started with a supplier analysis to determine not only how many suppliers Kroger has in each product class but also if the suppliers utilize GDSN.

The next step was to come up with a communication strategy to reach out to the supplier community regarding Program Mercury and what it would mean for the suppliers. To track and measure success, communication activities are measured and evaluated for effectiveness throughout implementation.

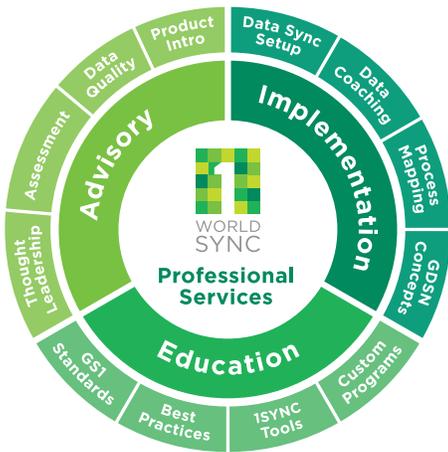
### EDUCATION & TRAINING

1WorldSync worked closely with Kroger to develop a training program that would support the suppliers as they had to learn this new process for submitting their items to Kroger.

A variety of media is used to educate Kroger suppliers, including written documentation and quick sheets, short videos on critical topics and live training and troubleshooting sessions.

### ADDITIONAL VALUE-ADDED SERVICES

- **GPC MAPPING:** Leveraging Global Product Classification to align items to recipient-specific classifications.
- **GTIN CONVERSION:** Supporting retailers in preparing their legacy systems to support GTINs and associated product hierarchies.
- **PREFIX DERIVATION:** Identification of GS1 Company Prefixes from UPCs in order to uniquely identify the brand owner.
- **PROGRAM MANAGEMENT:** Providing the discipline of planning, organizing and controlling resources during data management transformation.
- **IMPLEMENTATION SERVICES:** Guidance on the usage of GDSN and Production Introduction based on years of expertise.



## Conclusion

Satisfying consumers' growing appetite for timely and accurate information about the products they buy as well as regulatory compliance are significant challenges facing the industry today. Kroger is addressing these challenges by driving existing, new and complex data requirements directly from brand owners through the implementation of more robust PDM capabilities. 1WorldSync, the industry leader in PDM, is facilitating this transformation and growth with the implementation of scalable tools and community support. Through the 1WorldSync tools of VIP and DAS Kroger is seeing improvements today in processing new products and an increase in data quality, while collecting significantly more data. In addition, 1WorldSync's professional services will continue to be on the frontlines of this industry transformation initiative by providing community recognized leadership and support. Overall the benefits to Kroger's customers are more and better quality information which has put Kroger in front to meeting current and future customer demands.

## About Kroger Company

Kroger serves customers in 2,640 supermarkets and multi-department stores in 34 states and the District of Columbia under two dozen local banner names including Kroger, City Market, Dillons, Food 4 Less, Fred Meyer, Fry's, Harris Teeter, Jay C, King Soopers, QFC, Ralphs and Smith's. The company also operates 786 convenience stores, 320 fine jewelry stores, 1,240 supermarket fuel centers and 38 food processing plants in the U.S.

## About 1WorldSync

With more than 15,000 customers across 50 countries, 1WorldSync is the industry leader in global product data management and data pool solutions certified for the GS1 Global Data Standardization Network™ (GDSN®). 1WorldSync solutions and services allow companies to share trusted product information with one another and with consumers, driving business and convenience for everyone, all around the world. 1WorldSync is a joint venture of GS1 Germany and GS1 US, which are member organizations of GS1, the organization that develops global standards for identifying, capturing, and sharing product information. [www.1WorldSync.com](http://www.1WorldSync.com)



Connect With Us:



© 1WorldSync 2014



CONNECTING TRUSTED PRODUCT DATA EVERYWHERE

1WorldSync  
1009 Lenox Drive, Suite 202, Lawrenceville, NJ 08648 USA  
T +1 866 280 4013 F +1 609 620 1200 E [info@1worldsync.com](mailto:info@1worldsync.com)  
[1worldsync.com](http://1worldsync.com)