Executive Overview

Global Data Synchronization Distributor Interview Results

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Table of Contents

Project Overview ...................................................................................................3
Importance of Proper Item Introduction and Maintenance ...............................4
  Commonly Asked Questions ............................................................................4
  Item Introduction and Maintenance ..............................................................5
    Item Introduction and Maintenance Challenges ........................................5
    Item Introduction and Maintenance Recommendations ..........................6
Receipt of Shipments ............................................................................................7
Invoice Accuracy ....................................................................................................8
Product Visibility ....................................................................................................8
Out-of-Stocks .........................................................................................................9
Infrastructure Challenges to Data Quality & Synchronization ............................9
  Organizational Focus to Item Information ......................................................9
Multiple Copies of Product Information ............................................................10
New Suppliers, Mergers and Acquisitions .........................................................10
Distributor Current Perceptions .........................................................................11
GDS New Realities ...............................................................................................11
Recommendations ...............................................................................................13
  Industry Education and Standards .................................................................13
Organizational Changes .....................................................................................14
Data Synchronization Pilot with Key Industry Participants ...............................14

Table of Charts

Distributor Internally and Externally Frequently Asked Questions ...................4
New Product / Item Introduction Challenges ...................................................6
New Product Item Introduction Recommendations ........................................6
The Foundation for More Accurate Business Processes ....................................13
Project Overview

In August of 2006, the National Beer Wholesalers Association (NBWA) with the assistance of the Beer Industry Electronic Commerce Coalition (BIECC) contracted 1SYNC, the leading implementer of supply chain data synchronization, to conduct a Beer Industry Readiness Assessment in regards to GDS. The objective of this engagement was to support the proactive planning of GDS solutions by evaluating beer suppliers, importers, distributors, and retailers regarding logistics, item and price/promotion data collection, invoicing, and other relevant business processes, and to provide a prescriptive implementation roadmap that may be used for a Beer Industry GDS pilot.

An important step in this process was to assess the level of understanding of GDS by suppliers, distributors, and retailers in the beer industry. In addition to an electronic technology capabilities survey given to all NBWA members, it was determined that additional information would be acquired through one-on-one interviews with over twenty small, medium, and large suppliers, importers, distributors, and retailers. Those retailers participating in the assessment have active GDS programs underway with other product categories. These interviews were utilized to gather the current state of business processes and practices, and to solicit feedback on recommending future improvements to bring qualitative and quantitative benefits to those in every tier of the supply chain. Post interview, all references to the participant’s name and organization were removed from the shared project documents.

This document will explain the participants’ responses in four key areas.

1. The importance of item information being introduced correctly and then being maintained efficiently
2. The business process benefits that expect to be recognized from utilizing GDS
3. The infrastructure challenges to be faced while implementing GDS
4. Recommendations for moving forward with GDS

By reviewing these four key areas, we will be able to judge the industry’s readiness to moving forward with GDS.
Importance of Proper Item Introduction and Maintenance

Distributors act as both retailer and supplier in regard to item introduction and maintenance. A distributor must first gather and process a robust set of information about the items they sell. This usually means working with a number of suppliers. They must then provide a large amount of information regarding these items to the retailers they service. Their success is based in a large measure on how well they can master the acquisition and dissemination of accurate and timely item and price/promotion data.

Commonly Asked Questions

To illustrate the importance of item and price/promotion information to the distributors, we can evaluate the common discussions held between them and their trading partners. When distributors considered the most frequently asked questions by their trading partners, they responded that the most common questions were in regard to product prices, discounts, and deals; product availability; UPC numbering; current inventory on hand; and package descriptions and sizes. (See Chart 1 below.)

<table>
<thead>
<tr>
<th>Distributor Internally and Externally Frequently Asked Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FAQs about New Product/Item</strong></td>
</tr>
<tr>
<td><strong>Pricing/Discounts/Deals</strong></td>
</tr>
<tr>
<td><strong>Availability</strong></td>
</tr>
<tr>
<td><strong>Package Description/Sizes</strong></td>
</tr>
<tr>
<td><strong>Current Inventory</strong></td>
</tr>
<tr>
<td><strong>UPC/Varied Length UPC’s</strong></td>
</tr>
</tbody>
</table>

**Chart 1**

Note: A complete list of the frequently asked questions can be found in the Distributor Interview Summary.
In order to efficiently answer questions from their retailers, a distributor’s personnel must know the products they offer at all levels. Therefore, it is important for the distributor to have a single version of their item information as well as a way to provide and track retailer specific price and promotion information. To better understand how this information flows into and out of the distributor, we will review their current item introduction and maintenance business processes.

**Item Introduction and Maintenance**

The process of new item introduction varies significantly among the interviewed distributors. There are several common ‘documents,’ such as sell sheets, produced for submission to the retailers. Also, many indicated that they go to supplier web sites to retrieve information about the items they will offer. Maintenance of item and price/promotion information is a manual process at many of the distributors that were interviewed.

**Item Introduction and Maintenance Challenges**

The interview results indicate that almost all the major challenges that distributors noted can be corrected with data synchronization. The most frequently mentioned challenges are lack of (or inaccurate) information from the supplier, incorrect weight or no weight information required for calculating shipping costs, and multiple formats/systems used to retrieve new item information and UPC errors (i.e., same UPC for various packaging of the same product). (See Chart 2 below.) Additionally, distributors were faced with poor communication with their trading partners, inaccurate information in the retailer’s store systems (causing back door receiving problems), and varying requirements for collecting item information from suppliers and providing item information to retailers. Every supplier and retailer had their own system or method through which to share item information leading a distributor to continually maintain several methods of first receiving and then disseminating item information.
New Product / Item Introduction Challenges

![Chart 2](image)

Note: A complete list of challenges can be found in the Distributor Interview Summary.

**Item Introduction and Maintenance Recommendations**

The most common recommendations for improvement in this area included over 50% of the distributors recognizing data synchronization or related standardized automated technology as the way to improve the new item process. In addition, over 38% mentioned common Electronic Data Interchange (EDI) or a three-tier digital information system. (See Chart 3 below.) The remaining recommendations included a centralized website, improved information from the supplier, better communication, and a strong supplier to lead a synchronization initiative.

**New Product Item Introduction Recommendations**

![Chart 3](image)

Chart 3
It appears that almost every recommendation contributes to the business case for GDS in the Beer Industry. The distributors appear to know that they need to get involved not only to satisfy retailer mandates, but also to improve their own internal business processes. This information also further supports the business case for the distributor tier in that both suppliers and retailers will need the distributors to be involved to support them in the near future.

**Business Process Benefits from GDS**

During our interviews with the distributors, we were able to explore several business processes that require quality item information. We reviewed the distributors’ processes, challenges, and recommendations in the areas of item shipments, item invoicing, item visibility, and item out-of-stocks to see if GDS would provide improvement to these key operational processes. While there are many different ways to address these opportunities, a foundation of high quality item information reduces the amount of time chasing errors and allows trading partners to spend more time on business collaboration tasks such as sales, forecasting, and business development.

**Receipt of Shipments**

The challenges facing distributors when shipping and receiving items centered on retail deliveries. There were fewer responses concerning the warehouse receipts from the suppliers. Distributors do not appear to have common processes for shipping and receiving products. Some of the major challenges offered by the respondents included product refusal because of data accuracy issues, manual process requiring more setup with slow receiving, friction between distributors and retailers, and the retailers wanting information directly from the suppliers.

There were two top recommendations from distributors on how to improve to flow of product shipments to retailers. These were (1) the implementation of a standard Advance Shipment Notice (ASN) over a Public Data Network (PDN), and (2) the implementation of GDS, EDI documents, and Electronic Funds Transfer (EFT). Other notable recommendations were Warehouse Management Systems (WMS)/Pick Systems/Road Net and Radio Frequency Identification (RFID).

GDS benefits the distributor by improving the logistics of delivery and process automation by ensuring correct item information is available to drive WMS and future RFID-based systems. GDS will also reduce the chances of product shipments being refused at retailer stores by ensuring that product and price/promotion information in their Direct Store Delivery (DSD) systems is correct. To quote one distributor, “Only technology improvements will reduce distributor cost.” The responses to questions regarding warehouse operations clearly showed that the distributors are looking for technology answers to improve their performance in the area of shipment receipts and deliveries.
Invoice Accuracy

Business processes for invoicing and collections vary with each distributor interviewed, and within a distributor’s organization these processes also vary by retailer in many cases. One commonality in the business processes is that the majority of the information shared with retailers involves manual processes for invoice discrepancy notification and adjustment.

When distributors were asked to comment on the most frequent invoice accuracy challenges, the most frequent distributor response (at 75%) was manual process/more setup/slow changes/human error. The second largest response, at 50%, was delayed payment due to inaccurate invoices. The remaining responses focused on multiple business processes having an impact on invoice accuracy. As described by the distributors, examples of these error-filled processes included having to place customer orders on the wrong truck, hand picking errors at the distributor, and driver math errors on credit and other calculations. A complete list of challenges can be found in the Distributor Interview Summary.

The most frequent recommendation provided by the distributors to improve invoicing accuracy (at 25%), is GDS and EDI. GDS helps reduce invoicing errors by establishing the current or effective price and promotion status of an item. Additionally, GDS should allow you to send notification of price changes that can be implemented using effective dating.

Product Visibility

There is not a common process for product visibility across the distributors interviewed. The biggest challenge facing the distributors is “periodic loss of visibility” due to various factors. Twenty-five percent of the participants said their process was “manual and time consuming.” Additional answers ranged from issues with imports and customs, to suppliers with “poor technology” and “suppliers getting them the product too late to meet retail launches.” Several mentioned pricing issues, such as chain pressures to standardize pricing/promotions, and state pricing laws.

Recommendations for improvement focused on four areas. The areas of focus were RFID, automation of market surveys, automated load tracking by suppliers, and real time up to date inventory within the beer industry supply chain.

GDS can contribute to product visibility by clearing up the challenges resulting from inaccurate or incomplete item information. This allows for clean information to be used when reporting inventory positions and tracking item movement through the supply chain.
Out-of-Stocks

Although the distributors listed a variety of issues regarding minimization of Out-of-Stocks (OOS), their obvious main challenge (at 68%) in this area is “supplier production schedule issues.” Specifically, these “issues” include limited and not entirely reliable production, orders cut without notice, not enough of high-demand products, and infrequent production of products. Three other challenges noted by distributors (all three tying at 25%) are poor communication with suppliers and retailers, too many products with not enough shelf space, and the requirement to constantly monitor inventory with the supplier and retailer. Other challenges that were commented upon include lack of effective communication and the lack of collaborative systems.

Understanding the issues above, the participants shared recommendations for improving retail OOS issues. These recommendations include the improvement of supplier production processes by automating the input from distributors into product production plans, retailers heeding the advice of the distributor sales teams when ordering product, improving the digital exchange of inventory information with suppliers and retailers, developing better sales forecasting systems, and overall better communication with suppliers and retailers on production for promotions.

GDS can support those recommendations and address OOS challenges by providing synchronized item information and ensuring that the proper UPC numbers are correctly stored in each tier of the three tier distribution.

Infrastructure Challenges to Data Quality & Synchronization

Our interviews revealed that there are no consistent business processes for communicating item and price/promotion information within the distributor network to and from the other tiers of the supply chain. Many of the processes are manual and result in more time being spent in the setup and maintenance of product information than they thought necessary. Additionally, the information is not being received and updated in a timely manner. This causes delays in using the correct product information in invoices and logistical documents. When an organization uses poor product information in their computer systems, this results in more errors, and therefore more cost.

Four areas were explored from an infrastructure perspective as we analyzed the answers to our interview questions. Each area plays a key part in understanding the infrastructure challenges in the areas of data quality and synchronization.

Organizational Focus to Item Information

As previously mentioned, many of the business processes used by distributors to support the exchange of item and price/promotion information are manual processes. They indicate that, in many cases, too many people are involved in
Managing this information. With too many people administering master item information, changes are often made in one department without understanding the effect it will have on other operations in other departments.

Participants also mentioned how the lack of industry standards and common business processes and systems being used within the beer industry supply chain would provide challenges when implementing GDS. Without clear examples of how the three-tier model should function in a GDS environment, each distributor is addressing their business needs as completely as possible.

When asked how these challenges can be addressed, the distributors suggested developing a complete product master file that is managed by product information management (PIM) software. This would help them consolidate the various manual processes being used today in maintaining item and price/promotion information as well as reduce the number of people needed to maintain item information. The adoption of GDS would provide the foundation for collaboration and more uniform industry processes.

Multiple Copies of Product Information

Distributors are challenged by the amount of redundant product information in their current information systems. In some cases they do not have a single view of a product master file. Most have separate product files with information that is relevant to departmental needs (e.g., Marketing, Sales, Distribution, and Accounting). The maintenance of these files is accomplished through paper driven, manual processes. The nature of this organizational setup causes the process to be costly, time consuming, and error prone, and critical product information often finds its way to the other tiers in the supply chain via emails, faxes, and phone calls.

Suggestions put forward by the distributors include implementing a single point of control for product master item data management with links between the suppliers, distributors, and retailers. These links have to be automated and collaborative between the trading partners. The governance for these systems and processes is provided by a set of industry standards.

New Suppliers, Mergers and Acquisitions

The challenges faced by distributors when adding new product lines to their operations revolve around the lack of information provided by the previous supplier or brand owner. They also are challenged by the retailers’ lack of knowledge of the distributor and brand distribution rights. Mergers and acquisitions are normally negotiated confidentially, so very little notice is normally given to incorporate business operations. Another observation is that every transaction is different, so there is currently very little commonality between events.
Suggestions for improvement included the development of a common three-tier repository for item and pricing information leveraging GDS, EDI, and EXtensible Markup Language (XML) to keep it current. Again, when mergers and acquisitions occur there could be more uniform processes with systems to provide collaboration between the parties after the event.

Distributor Current Perceptions
There are several perceptions regarding GDS that were shared during the interviews. Some of the distributors share a concern around the security of the data. Small distributors perceive that GDS requires a large investment in both dollars and resources for a low initial return on investment. Some are concerned with the timing of their investment in GDS when the retailers and suppliers are not ready to send or receive their information. However, all of the distributors think that eventually their product shipments will be refused at the receiving door if they do not participate in GDS.

The ideas offered by distributors to address their current GDS perceptions were as follows: ensuring the development of industry standards with enabling technology; introducing working models for the three-tier beer distribution network; providing solid leadership within the industry; more collaboration and communication among brewers, importers, distributors and retailers; and finally, cost effective solutions for small, medium, and large companies.

GDS New Realities
Investments in people, processes, and technology will be required by all members of the beer industry supply chain in order to correctly implement GDS. The GDS model has matured over the last five years with many retailers adopting it as the standard way to clearly communicate item and price/promotion information. As the model has matured, growing competition among GDS solution and Data Pool providers, as well as clearer standards around price/promotion transactions, have addressed many of the cost concerns raised by the distributors.

The GDS communication model ensures only the appropriate trading partner receives the item and price/promotion information. This is achieved through the use of a unique Global Location Number (GLN) assigned and managed by GDSN, Inc. to each business entity participating in the network.

A successful implementation of GDS will benefit the distributors by improving data integrity of their most important business transactions, thus reducing overall operating costs. Whether it involves improvement in order accuracy and product shipments by having the correct weights and measures synchronized in the supply chain, increasing the visibility of the correct products moving through the supply chain, or reducing the out-of-stocks experienced by the customer at the point of sale, distributors will directly benefit from the implementation of GDS.
Distributors will also benefit through increased efficiency in their core operational infrastructure by having clear responsibilities for developing and communicating product and price/promotion information to their trading partners and eliminating the multiple copies of product information found in their information systems. This increased efficiency will allow them to better handle the new acquisition of product brands and general mergers and acquisitions, which are common in the beer industry.
Recommendations

The interview approach used for this study allowed us to identify key challenges and pain points of the distributors in several operational areas. These areas were selected for their reliance on quality product information and thereby possibly benefiting from the implementation of GDS. Additionally, the interviewees were asked for recommendations on how to address the key operational challenges. A summary of their recommendations have been grouped into three areas.

Industry Education and Standards

The distributors clearly see the need for further education on the importance of high quality product and price/promotion information within the beer industry. Clear understanding of GDS benefits for distributors will help them improve their handling of product information within their companies and with their trading partners. Common standards for creating and maintaining product information within the beer industry will ensure that there is a solid foundation to build and share value added business transactions, as reflected in Chart 4 below.

The Foundation for More Accurate Business Processes

![Diagram](chart4)

The educational opportunities currently facing beer distributors have been overcome in several other industries by focusing on business process changes that simplify the flow of product and price/promotion information.
Organizational Changes
Distributors commented that too many people are involved with the acquisition and maintenance of item information. This adds cost, time, and opportunities for errors. These same issues are repeated in companies where there are multiple item repositories and databases supporting their current business processes. Implementing a single item master file supported by product information management software is the primary recommendation offered to automate item maintenance.

Many companies in other industries have now established dedicated product information departments that focus on trading partner information exchange. These departments have clear roles and responsibilities controlling the flow of information into and out of the companies to ensure they are meeting their trading partners’ needs. The departments are also responsible for understanding the current and emerging industry standards that govern the movement of product and price/promotion information. Distributors can follow lessons learned from other industries and tailor them to their specific operational needs.

Data Synchronization Pilot with Key Industry Participants
The beer industry would benefit by moving forward in the development of a shared, high level approach toward implementing GDS. This plan should be developed in conjunction with major retailers, distributors, brewers, importers, and solution providers to increase awareness of the industry’s commitment to improve the flow of key item and price/promotion information.

By working together, the beer industry can ensure they are realizing the largest benefit possible in the short term while building a solid foundation to enable new and existing value added electronic transactions. Creating a high level implementation approach will also provide a benchmark for monitoring the progress of key pilot projects – sharing successes and setbacks – as the beer industry embarks on its efforts to implement GDS.

To summarize, the first step would be to educate the industry on the current standards put in place and to develop any additional standards that may be needed. The second step would be to institute the organizational changes within your company in order to make GDS a success as well as a priority. The final step would be to implement a pilot with all levels of the supply chain and companies of all sizes to prove that GDS will work for the industry overall. In closing, this study has shown that the critical business issues that are causing an ineffective and inefficient supply chain in the beer industry today can be solved through the use of the GDS. Through the three recommendations above the industry can successfully implement GDS and begin to recognize the benefits.