GDSN Pilot Project Report
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1 EXECUTIVE SUMMARY

BACKGROUND

For several years manufacturers and retailers in a host of industries around the world have begun implementing an emerging technology for transmitting standardized information through the supply chain. Known as Global Data Synchronization (GDS), it offers tremendous potential benefits to trading partners at all stages of the supply chain, not least of which is guaranteeing that the right product information is being transmitted to the right partners at the right time with the right price.

In an effort to realize the benefits this system offers trading partners in all three tiers of the beer industry, and to test the capabilities of the technology as it stands today, the beer industry and some of the nations’ leading beer retailers came together to test the Global Data Synchronization Network® (GDSN®.)

PILOT PROJECT PARTICIPANTS

MillerCoors, Anheuser-Busch, Inc., and New Belgium Brewing represented the brewers. SUPERVALU, The Army Air Force Exchange Service (AAFES) and ExxonMobil represented the retailers. SUPERVALU and AAFES participated in item synchronization. ExxonMobil and AAFES participated in price and promotion synchronization. Reyes Holdings (Gate City Beverage Distributors, Premium Distributors of Virginia), and M Price Distributing represented the distributors. The 1SYNC Data Pool participated as the GDSN certified source data pool. 1SYNC’s Item Management (IM) and Price & Promotion Management (PM) solutions were used for connecting to the GDSN.

Results

The pilot project showed that the GDSN has the infrastructure to support item synchronization in the beer industry, and indicated a strong need of support for additional functionality such as Item Authorization and Party Synchronization. Each of the brewers were able to synchronize their item data and received confirmations on how that data is used by retailers to assist with their business processes. Going forward the industry will need to decide how item data will flow through the network. Brewers will be the owners of the item who enter the data into the network; however there remains a question on whether they will publish the item information all the way down to the retailer or whether brewers will publish only to distributors who will then pass the item information to the retailers. Distributors are usually seen as the suppliers of record in the backend systems. Today, many GDSN retailers can hold one version of an item, so they request receipt from only one source. Not all distributors provide that item. Price data is received on a supplier-by-supplier basis. In the beer industry, this pricing will come from the distributors who sell directly to the retail trading partners.

Several scenarios were tested during the price and promotion synchronization portion of the pilot project. Testing showed that distributors and brewers were technically able to move front line pricing data through the GDSN but did not achieve full integration of that information. This is needed to fully verify capability between trading partners. Brewers and distributors did not utilize the machine-to-machine method, XML, for supplying the data. Instead, they utilized the manual online and spreadsheet tools provided by 1SYNC for data loading. Participants in the pilot project found the manual pricing tool a greater challenge than existing pricing mechanisms they have in place. Although the suppliers provided the data in one format, GDSN, the participating retailers received the data in different formats. One retailer took the GDSN Price message and the other retailer had the data converted to an EDI Price file. Additionally, trading partners at all levels will need to evaluate and where necessary adjust their backend systems to ensure they adhere to the global standards of the GDSN.
The pilot served as a great opportunity for deeper learning and understanding of the standard and its implementation for all participants. A number of business and technological processes were validated throughout the pilot and several barriers to widespread adoption of item and price synchronization in the three tier distribution system of the beer industry were identified. Pilot project participants as well as other interested parties will need to continue working with standards and consumer product goods (CPG) industry groups to gather best practices and recommendations that will assist with adoption.

Industry Association

In early 2005, retailer mandate letters calling for participation in Global Data Synchronization were brought to the attention of the National Beer Wholesalers Association (NBWA.) Currently, similar letters continue to be sent to suppliers by retailers. Seeing this was a new technology unfamiliar to most of its members, NBWA decided to become active with the issue. In the beginning, NBWA along with Beer Industry Electronic Commerce Coalition (BIECC) sponsored education seminars and published a white paper about data synchronization designed to educate beer distributors about the issue.

In August of 2006, NBWA along with the BIECC contracted 1SYNC to conduct a Beer Industry Readiness Assessment in regards to Global Data Synchronization. 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 project.

The assessment revealed common challenges to all participants on multiple levels of the beer industry. These were found in the areas of Proper Item Introduction (manual processes, additional set-up, inaccurate item information, poor communication with trading partners, and inconsistent management of product supply), business processes (receipt of shipments, invoice accuracy, product visibility, out-of-stocks), and the lack of standardization among all parties.

NBWA’s goal in being involved with data synchronization is to demonstrate the value that beer distributors provide in the supply chain to both suppliers and retailers. At the same time, it is important to NBWA that the GDSN model is proven to be compatible with the American Beer Distribution System and that adoption of data synchronization is sufficiently widespread enough so that GDSN would be valuable to suppliers, distributors, and retailers in the beer industry. Today, distributors exchange data with retailers in a host of different ways. A mass adoption of data synchronization by trading partners would provide many perceived benefits to beer distributors by eliminating many of the manual data exchange practices and timing issues that take place today.

The American beer industry has a unique and regulated system of distribution. Beer is brewed by domestic brewers or imported into the country by licensed importers. These brewers and importers then sell their beer to licensed distributors. The distributors are then responsible for selling the beer to only licensed retailers throughout the country in a Direct-Store-Delivery (DSD) model. Additionally, because of the unique attributes of beer, each state has the ability to regulate the supply chain through numerous pricing and chain of custody laws. The direct delivery and payment at the store level and the variety of laws and regulations surrounding beer distribution present a number of challenges to the emerging GDS technology.

NBWA will remain active in data synchronization on behalf of America’s Beer Distributors and will work with the standards industry to ensure the three-tier Direct-Store-Delivery model of distribution can function within the GDSN. In addition, NBWA will work with its members in terms of GDSN education and training and also as a participant on their behalf in the on-going dialog with industry partners in the development of this technology.
2 PILOT PROJECT OBJECTIVES & SCOPE

Objectives

- To test the GDSN Item and Price message within the multi-tiered beer industry supply chain.
- To define three-tier support for item and price synchronization at the store level.
- To review the GDSN pricing specifications to determine if they support all of the various beer industry pricing scenarios.
- To test GDSN Item and Price Synchronization to determine the level of support available today through the GDSN standard to meet the needs of the beer industry.
- To share guidelines with implementing data synchronization in the beer industry.
- To confirm if retailers are capable of handling and working with item and GDSN price data for the beer industry.
- To build benchmarks for a roadmap to help drive adoption of data and price synchronization in the industry in the future.

Scope

- Pilot project consisted testing of GDSN Item and Price Messaging within the three-tier model of the American Beer Distribution System.
- Pilot project partnerships were established to ensure efficiencies for testing scenarios exchanged.
- Price synchronization scenarios were created and agreed.
- Training on 1SYNC tools for data synchronization was completed. Testing was done in a non-production environment, except as indicated.
2.1 Participants

- Industry Association
  - National Beer Wholesalers Association

- Data Pool
  - 1SYNC

- Brewers
  - Anheuser-Busch, Inc.
  - MillerCoors Brewing Company
  - New Belgium Brewing Company

- Retailers
  - AAFES
  - ExxonMobil
  - SUPERVALU

- Distributors
  - Reyes Holdings
    - Gate City Beverage Distributors
    - Premium Distributors of Virginia
  - M. Price Distributing Company

Special thanks to the following companies for their time and energy in helping with this pilot project:

- Vermont Information Processing
- GXS
- Schenck Company
- Firestone Walker Brewing Company
- Beer Industry Electronic Commerce Coalition (BIECC)
- Wal-Mart
2.2 How The Global Data Synchronization Network Works

- The Global Data Synchronization Network (GDSN) is an interconnected network of data pools and a global registry, the GS1 Global Registry®, that enable suppliers, distributors, and retailers to exchange standardized supply chain data with their trading partners.

- The GDSN ensures that the data flowing through the network between trading partners is accurate and compliant with GS1 global standards.

- The GS1 Global Location Numbers (GLNs) and GS1 Global Trade Item Numbers® (GTINs®) are the building blocks for the GDSN to identify products and locations.

- The GDSN consists of 24 mandatory product attributes that support the registration of products in the GS1 Global Registry and basic product information transactions. Additional product attributes may be selected by trading partners as well optional attributes for that specific industry sector, such as “percent alcohol” in the beer industry.

- Data pools store the product data that is sent to approved Data Pool subscribers. They ensure that the data is valid with GS1 Global Standards, collect product information, and register the data with the GS1 Global Registry with GS1 Business Message Standards that use Extensible Markup Language (XML). XML is also the language used to exchange item information in the GDSN.

A supply side participant (in this case a brewer or distributor) will upload their data to their GDSN certified data pool and to the GS1 Global Registry. A demand side participant will send a subscription request to their GDSN certified data pool. The supplier then authorizes the data pool to publish their data to the demand side participant. The demand side participant then sends a confirmation message to the supply side participant indicating their ability to receive and process the data, and furthermore indicating whether they wish to continue to receive product updates for the given product. The graphics listed on this page seven and eight show how item synchronization works with a distributor acting as a recipient or sender of data:
How Does the GDSN Support the 3-Tier Model?

Distributor or Brewer acts as the Data Source

1. Load Data
2. Register Data
3. Subscription Request
4. Publish Data
5. Recipient Confirmation

The Distributor plays the role of Data Source or Supplier/Seller

For price data, a supply side participant (in this case the distributor) will provide pricing information to their GDSN certified data pool. This information includes all information about the cost of a product as will be reflected on the invoice. Note that because price information is trading partner specific, nothing is registered to the GS1 Global Registry. The data is synchronized to the demand side participant through their data pool. The demand side participant is then required to respond to all price data (confirmation message), providing a status back to the supply side participant of their ability to receive and approve the price information. An illustration is listed below:
2.3 Pilot Project Details

Tools
The NBWA item and price synchronization pilot project utilized existing 1SYNC solutions to support this initiative.

IM: Item Management

• 1SYNCs Item Management (IM) module is a GS1 standards-compliant global master repository for item information. It is 1SYNCs data pool solution for GDSN item synchronization.

• IM supports core item attributes, target market attributes and vertical specific values
  • IM supports synchronization for specialized verticals such as Direct-Store-Delivery (DSD), Hardlines, and Private Label

• IM Data Exchange Formats:
  • Pilot project suppliers accessed the IM solution using 1SYNC’s web based application (Graphical User Interface or “GUI”)
  • Other loading options were an Excel-based spreadsheet and machine-to-machine messaging

PM: Price & Promotion Management

• 1SYNCs Price & Promotion Management (PM) is the 1SYNC GDSN certified Data Pool solution for price synchronization. This module provides tools for the exchange of price data as well as ensuring data is validated and adheres to the GDSN standard.

• Price synchronization is built upon item synchronization. The model assumes products have been synchronized before pricing of those products is exchanged. PM is a key add-on solution to the Item Management solution.

PM Data Exchange Formats:

• In this particular pilot project only a manual spreadsheet method was used to transmit pricing data. The pilot participants indicated this process should be improved for better ease-of-use. However, the pilot participants also recommended use of an automated method for widespread adoption to become a reality.

• Users will see much greater benefits when utilizing full machine-to-machine access through XML.

• PM OUTPUTS:
  • Price information is supplied to a retailer via machine to machine messaging. This message is exchanged with the retailer’s data pool or direct to a 1SYNC retailer.
**Scenarios**

Pilot project participants agreed to a sampling of scenarios most common in the industry. Each of these scenarios was attempted and met with various levels of success. Please read the Evaluation section to see how each of these scenarios played out. These scenarios included:

- **Item Synchronization Scenarios**
  - **Publish Items**
  - **Retailer Response on Items**
    - Accept
    - Review
    - Synchronize
    - Reject
  - **Modify & Synchronize Items**
    - Ongoing maintenance and exchange of product information
  - **Correct & Synchronize Items**
    - Notifying trading partners when an update to a key attribute is made.
  - **Publication Delete & Unlink**
    - Removing product information
  - **Republication**
    - Re-synchronizing information about a product

- **Price and Promotion Synchronization Scenarios**
  - **Establish Relationship – vendor/retailer relationship**
    - This identifies the main parameters of the trading partner relationship. Establishes the trading partner themselves through the use of GLNs as well as through any other identifiers the trading partners may require, a relationship was established for each vendor. The relationship also establishes other information such as the currency for the relationship, the trade channel, and the target market (country).
  - **Establish Base Price**
    - The vendor’s list price to the retailer was established and tested. This is the cost to the retailer, absent of any allowances or charges and is a future dated cost.
  - **Modify List Price**
    - The list price that was established was then changed. The price change was for a future effective date.
• **Add a Promotional Price – Cents off**
  
  o **Allowances were tested, according to the scenarios listed below**
    - Receive a specific amount off case of one product.
    - Receive a specific amount off multiple products.
    - Receive a specific amount off a case of one product if you purchase 20 cases of one product
    - Receive a specific amount off multiple products if you purchase 20 cases or a combination of multiple products.
  
• **Modify Allowances**
  
  o The established allowances are then modified. Changes include a change to the amount, change to the start date or change to the purchase criteria.
3 EVALUATION

3.1 Pilot Project Lessons Learned

**Item Synchronization**

**Item Load and Publish**

Each of the brewers was able to publish item information to each of the retailers and gain an understanding of their process flows and how they use the data within their business processes. The suppliers loaded their products via the 1SYNC Item Management tool and published with their trading partners through the 1SYNC Data Pool. The retailers sent confirmations (Accepts/Synchronize) back to the brewers.

<table>
<thead>
<tr>
<th>Brewer</th>
<th>AAFES</th>
<th>SUPERVALU</th>
</tr>
</thead>
<tbody>
<tr>
<td>MillerCoors</td>
<td>Item Synchronization Complete</td>
<td>Item Synchronization Complete</td>
</tr>
<tr>
<td>Anheuser-Busch Inc.</td>
<td>Item Synchronization Complete</td>
<td>Item Synchronization Complete</td>
</tr>
<tr>
<td>New Belgium Brewing Company</td>
<td>Item Synchronization Complete</td>
<td>Item Synchronization Complete</td>
</tr>
</tbody>
</table>

MillerCoors published and transmitted data to SUPERVALU and was able to understand the choreography of their process around publications of new items, and changes or corrections to items.

One question that arose throughout this pilot was how item information should flow through the three tiers in this business model. It was agreed that the brewers are best suited to enter and publish item information, but the question of whether brewers should publish only to their distributors or all the way down directly to retailers remains. This decision will need to be made prior to widespread adoption of data synchronization throughout the industry.

**Multi-Source**

A critical issue for wider adoption will be ownership for synchronizing item information (this may also analogous with the term "Full Truck.") An example from the pilot project was the following:

Anheuser-Busch, Inc. and MillerCoors both acted as the Brand Owner for a scenario in which they both added the same item information for a third party supplier under their respective GLN’s. The end result was that their item attributes were not the same due to many discrepancies in their item entry methods. This test was done to demonstrate a case were a brand owner is not a subscriber into the GDSN but their items need to be entered into the network. In this scenario, there is a real concern over who would then enter the brand owners’ item product data. If distributors decide to enter item information via proxy there is a possibility of duplicative GTINs entered by different distributors in different territories for the same item and the chance of a lot of bad data flowing through the network. The GDSN has approved multi-source functionality. The 1SYNC data pool offers a tool called Brand Identity in which brand owners are able to lock down attributes and as additional users enter the same
items, they are validated against the brand owner specified attributes. If there are discrepancies, the items are rejected and they must go back to the brand owner to receive the specifications for those items. This ensures that this proliferation of bad data is stopped at the source. This functionality was not tested during the pilot. Brewers and distributors will need to leverage this GDSN functionality to alleviate these data entry issues.

Looking to the future, the industry will need to establish a best practice for entering item information of products from suppliers that are not part of the network, whether it’s a single proxy distributor, a third party information provider or a chosen brewer.

**Response Messaging**

Another lesson learned was that the retailers may send different responses on their confirmations. Some may use only “Accept” on new Items, some may use “Synchronize” and some may use both.

**Seasonal Items**

Another question addressed in this pilot dealt with the registering of seasonal beer items. Today many brewers reuse the same bar codes on seasonal products they offer. GDSN Rules indicate that seasonal items can be loaded under a single GTIN, but the GTIN name cannot change with the seasons, so something generic must be used. If a product is to be called out by name or if it will be in the market at the same time as another seasonal item, then unique GTINs will be needed.

**Item Authorization**

In order to control permissions for a product to be sold (or delivered) at a specific location a process known as Item Authorization should be deployed. Item Authorization will allow partners to agree on this authorization and can be triggered by either trading partner depending on the buying and selling relationship. This process will facilitate the linkage of who can deliver a product to a store and who will be paid for the product. Item Authorization is critical for use within the existing three tier model of the industry.

**Additional Lessons**

Synchronizing non-beer items such as kegs, tubs, pallets and deposits was another issue addressed in this pilot project. Possible recommendations include creating GTINs specifically for these items or adding these items as a components pricing information during the price synchronization process. Participants recognized that they could utilize GS1 standards to manage these assets.
Price and Promotion Synchronization

The findings showed that the brewers and distributors were able to test their price data under the scenarios described in section 3.1.

Price Publication Pairings

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<thead>
<tr>
<th>Brewer</th>
<th>ExxonMobil</th>
<th>AAFES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anheuser-Busch/M. Price Distributing</td>
<td>* *Front Line Pricing Transmitted</td>
<td>* *Front Line Pricing Transmitted</td>
</tr>
<tr>
<td>MillerCoors/Gate City Beverage Distributing</td>
<td>* *Front Line Pricing Transmitted</td>
<td>* *Front Line Pricing Transmitted</td>
</tr>
<tr>
<td>New Belgium Brewing/Gate City Beverage</td>
<td>* *Front Line Pricing Transmitted</td>
<td>* *Front Line Pricing Transmitted</td>
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** Several scenarios were tested during the price and promotion synchronization portion of the pilot project. Testing showed that distributors and brewers were able to move front line pricing and promotional data through the GDSN network but did not achieve full integration of that information.

**Front Line Pricing Data – also refers to Base Price. The vendor’s list price to the retailer was established and tested. This is the cost to the retailer, absent of any allowances or charges

GDSN Price Format Changes

The community recognizes that many programs for price exchange are already in place today. The GDSN provides a comprehensive model for addressing the various needs of trading partners, allowing for an overlying standard to meet all business practices. Trading partners will still need to reconcile which requirements adhere to their business model and for their relationships. The pilot participants believe that data pools can play a role in helping alleviate some of the management of data based on these varying requirements.

The pilot proved that in the end, the broad capabilities of the GDSN price message did allow for the relevant price information to be exchanged. However, trading partners found that they still needed to work within the requirements of the retailer’s and / or industry’s various requirements. The findings revealed that specific attribute requirements may vary between retailers thus creating more management of data and manual processes for distributors. For widespread adoption to become a reality the pilot participants agree standards should be agreed upon across all trading partners for pricing data, otherwise trading partners or data pool providers will need to manipulate data differently for each retail partner, a practice that could be challenging with hundreds or thousands of retailers participating.

In this pilot, parties (distributors and brewers) entering pricing data elected to input the data into spreadsheets. The retailers received the data in both GDSN XML and traditional EDI formats. While this method technically worked, it did not provide the time or efficiency savings to distributors that GDSN machine-to-machine ideally will, therefore the preference for brewers and distributors will be an automated solution in which parties load the information and retailers pull the specific information they need.
Party Synchronization

Another issue that this pilot realized during price synchronization testing was the implementation of party synchronization. Party synchronization allows for a standard definition of and distribution method for exchanging location information using GLNs as the basis. Party synchronization is important in that it establishes the various entities and associated roles within a trading partner’s organization using standard based definitions and exchanges that information, allowing this foundational information to be defined and understood before related item and price information refers to that same GLN information.

Promotion Testing

Over the course of the pilot project multiple price promotion scenarios were tested by brewers or distributors entering promotional pricing data into a spreadsheet and uploading the information to 1SYNC. This allowed the system to be tested on the capabilities of reading and executing multiple promotion scenarios. It also allowed trading partners to communicate this information and ensure the various scenarios for this industry are supported. However, because full end-to-end testing was not accomplished in this pilot, the full rationalization of the data was not achieved.

Pricing Conclusion

The pilot project showed that price synchronization is not as mature in its implementation as item synchronization. While item synchronization through the GDSN is prevalent today, price synchronization is newer in its availability. The pilot participants agreed that price synchronization must be able to integrate with the business process for supplying and approving price information between trading partners. Furthermore, full back-end system support by trading partners is required in order for the information to be fully utilized and understood.

While this pilot project was not the first ever GDSN pricing pilot it was the first pricing pilot that was done in the DSD three tier beer industry model. This presented a host of new challenges to all parties involved, including retailers who had to assess whether their backend systems were capable of accepting and using the pricing data at the store level. This also represented the first time that pricing was tested in the beer industry through the GDSN. It is important to note that each state regulates the sale and distribution of alcohol differently and some state pricing laws may affect the process of price synchronization in the GDSN. Going forward before price synchronization becomes a widely adopted business process individual state laws and regulations will need to be researched and addressed to ensure all processes conducted are done so legally.
4 NEXT STEPS

4.1 Recommendations for Continued Engagement

Associations, pilot project participants and other interested parties seeking to continue the progression of the alcohol beverage industry towards data synchronization implementation have multiple options looking forward.

- Obtain up to date information about the GDSN and GS1 standards at: [www.gs1.org/productssolutions/gdsn](http://www.gs1.org/productssolutions/gdsn)
- Within the GDSN, Global Location Numbers (GLNs) are the primary method for identifying trading partners. Looking to the future, in order to achieve industry-wide adoption of GDSN, the beer industry would require more than 5,000 GLNs at the brewer and distributor level in addition to more than 500,000 GLNs at the retail level. The implementation, usage, and allocation of GLN’s will be critical for the industry and will require additional research and discussion. For those companies who need information about company prefixes and Global Location Numbers (GLNs), go to: [www.gs1us.org](http://www.gs1us.org).
- Stay involved with future pilots, standards bodies, conferences, and seminars that affect the industry so you can influence the direction and ensure industry need is represented. Information about these can be found from a variety of sources such as data pool and industry reference websites.
- Communicate with your trading partners to make sure you understand all of the data requirements and plans for future implementations.
- Develop an internal team and include representation from multiple departments. This requires input and execution from sales, finance, marketing, merchandising, and information technology. It is also tremendously important to obtain buy in and support from the leadership and management of the company.
- Communicate your data synchronization strategy and implementation plans to all impacted areas of your organization.
- Have company personnel attend educational forums, meetings, or seminars on the topic. The largest supply chain meeting of the year that focuses on this subject is the annual U Connect Conference. Information on U Connect can be found at: [www.uconnectevent.org](http://www.uconnectevent.org).
- Within your own company ensure that your data is accurate and correct. For the system to work to its potential the data entered in to the system must be standardized and accurate. GS1 has a publication titled, “GTIN Allocation Rules”, and “GDSN Package Measurement Rules” which can assist individuals responsible for entering item information.
4.2 Industry Opportunities

Below are a few recommendations which came out of this pilot project for next steps which can be taken by beer industry groups such as NBWA, the Beer Industry Electronic Commerce Coalition (BIECC) or other interested industry organizations.

- **Global Production Classification (GPC)**
  - It is up to the industry to determine if the values in the current GPC list meet industry needs. If changes should be made there is a process for submitting change requests to get values added or changed. Becoming active in this group is a priority going forward.

- **Party Synchronization**
  - The ability for authorized third parties who sell and distribute products on behalf of suppliers to exchange location or product information with trading partners is essential to the three tier distribution model of the beer industry. Working with data pool providers and the GDSN community to implement this standard is a requirement prior to widespread adoption data synchronization in the beer industry. The beer industry can also learn from other 3-tier distributors who are utilizing the GDSN today in the U.S.

- **Item Authorization**
  - Agreement between trading partners of the authorized party to sell (or deliver) product at specific locations. The Beer Industry needs to participate in the GDSN to help build an Item Authorization standard that meets the needs of the 3-tier model.

- **Involvement and Participation of Beer Industry Solution Providers**
  - Today, nearly every beer distributor in the country works with a Route Accounting System (RAS) provider to manage their warehouse, deliveries, sales and routing. Distributors rely on these solution providers for most of the business they conduct. If data synchronization is ever going to be widely adopted within this industry these RAS vendors must be actively engaged in the technology and the GDSN must operate with and not separate from these programs. This pilot sought to include several of these companies but the amount of work for them to build a solution was too great for a limited pilot project. In the future these companies must again be at the table and be able to provide a solution that will work for distributors.

- **Full Truck**
  - America’s beer distributors deliver a wide variety of brands from many different suppliers, both foreign and domestic, to their retail customers. It is unlikely to believe that all of these different suppliers will have their products registered in the early stages of data synchronization implementation. However, for distributors and perhaps especially retailers to see the full benefits of data synchronization the full complement of items delivered to a retailer or “full truck” must be synced. Failure to have a full truck synced would not eliminate old data exchange methods for item information transfer and could result in multiple invoices for a single delivery, one reflecting GDSN products and one for items not synched. Finding a full truck solution for trading partners is a priority for the future. The beer industry will work with other 3-tier beverage manufacturers to gain understanding as to how they are managing this with their retail trading partners today within the GDSN.
5 CONCLUSION

The growth of Global Data Synchronization has been substantial over the past several years. More and more suppliers and retailers are realizing the benefits of standardized data being exchanged in real time through a network that all parties can understand. Perhaps one of the last great challenges of this technology is functioning within the Direct-Store-Delivery (DSD) business model and more specifically to this pilot project, the three tier distribution system of the beer industry. Several retailers who are pioneers in this technology have targeted different supplier segments for participation in data synchronization. Current adoption of GDSN, beyond this pilot, is limited to several brand owners publishing item data which is being synchronized with a few retailers. Throughout this pilot project many aspects of the GDSN functionality within the beer distribution system were confirmed and proven to work. However, several challenges were also identified in the system, primarily with Price Synchronization, which need to be addressed before the beer industry can move forward.

This pilot project has provided a great deal of education to all parties involved. Next steps have been identified and no remaining obstacles appear to be unsolvable. With the continued development of the technology and the addressing of several outstanding issues it is safe to say that Global Data Synchronization is a technology that will work for the beer industry in the future.

About 1SYNC:

1SYNC is a certified data pool in the Global Data Synchronization Network (GDSN.) 1SYNC offers a range of data synchronization services that eliminate costly errors, increase supply chain efficiencies, improve collaborative business practices, and promote the advancement of next-generation technologies, such as the Electronic Product Code (EPC). For more information visit www.1SYNC.org.

About GS1 US:

GS1 US is a member organization of GS1 that assists over 250,000 US based companies with standards and services that uniquely identify products, locations, assets, and services anywhere in the world. The data and processes used to facilitate a healthy, efficient supply chain gain the benefit of standardization, synchronization, classification, and coordination among trading partners. For more information visit www.gs1us.org.