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Forecasting & Agility Drive APS Vision for Supply Chain Efficiencies

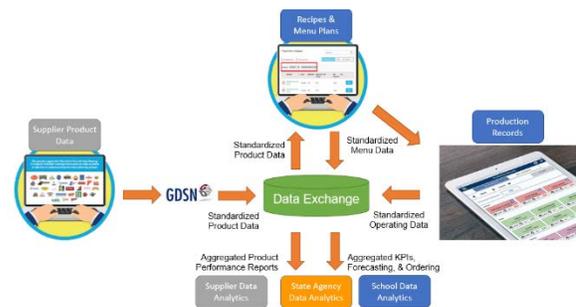
Courtesy of Aurora Public Schools



A chance meeting at the 2019 GS1 Connect conference led to an innovative supply chain project at Aurora Public Schools (“APS”), a large suburban district near Denver, Colorado. Shannon Solomon, Child Nutrition Director at APS, attended GS1 Connect looking for ways to use technology to streamline her district’s operational performance, knowing the possibilities from her previous experience as a restaurant operator. Chip Goodman, CEO of inTEAM Associates, was also at the conference building relationships for the industry-wide K-12 Data Sharing & Analytics Initiative that was bringing GS1’s Global Data Synchronization Network (“GDSN”) into the K-12 supply chain through inTEAM’s USDA-approved menu compliance and production records software. That meeting led to a unique public/private partnership to re-engineer the forecasting and procurement business processes used in K-12 to leverage GDSN and its standardized product information. In GDSN, every manufacturer’s product has a unique product code, called a Global Trade Identification Number or GTIN, which contains hundreds of attributes like ingredients, nutrients, allergens, and child nutrition program credit.

Three years ago, when Goodman began working with the K-12 Data Sharing & Analytics Initiative, he quickly discovered that the various supply chain stakeholders didn’t speak a common language which limited the sharing and implementation of best practices across school districts and food suppliers. The

Initiative eventually defined data standards and protocols to keep supply chain stakeholders up to date and led to the creation of Data Exchange, a consolidated and standardized product database containing over sixty thousand items from hundreds of suppliers. Products within Data Exchange contain nutrients, allergens, and child nutrition meal pattern credits, and is searchable by any K-12 menu compliance software platform. Concurrently, Goodman updated inTEAM’s CNCentral software to integrate its menu planning, forecasting, and production records functionality with Data Exchange.



Solomon and Goodman recognized the opportunity to fundamentally transform K-12 procurement using standardized product data from GDSN and menu-driven forecasted quantities built from Data Exchange. As inTEAM and APS started working together, inTEAM found thoughtful business practices already in place including (a) a prime distributor contract which added considerable purchasing power to a local

co-op purchasing group comprised of nearby smaller districts, (b) built in flexibility with the prime contract for APS to negotiate purchases outside that framework, (c) solid supplier and broker relationships driving ad hoc "opportunistic" purchases directly from manufacturers, and (d) thoughtful integration for both brown box and further processed USDA Foods if, and when, donated foods can be scheduled into the supply chain.

In addition to the broader procurement enhancements, inTEAM also identified other important opportunities, with the primary one being the inability to share specific product data across different supply chain systems. USDA-compliant menu plans were built by Solomon's staff in one software application, but these menu plans were disconnected from the software used to generate forecasts and maintain perpetual inventory. The separate systems were driving inefficiencies in APS' operations and inTEAM's integrated software would improve ordering accuracy, reduce the time her staff spent entering data, and better integrate the flow of USDA Foods into the main supply chain forecasts. Additionally, Goodman and Solomon recognized the opportunity to create a competitive electronic marketplace leveraging CNCentral's forecasting module where ad hoc purchases could be used to take advantage of local produce and other small businesses who could become APS suppliers.

When COVID-19 struck in March 2020, APS and other schools were forced to quickly adapt to new types of meals being served while also managing severe supply chain disruptions. Overnight, school nutrition programs nationwide began serving grab and go meals as well as "meal kits" with breakfast, lunch, and suppers all combined. Cafeterias were shut down, but schools continued to serve meals using new delivery methods such as curbside and even bus delivery. As APS contemplates reopening in August, the new normal will include all types of "contactless" service, social distancing, and some classroom feeding.

Distributors have also struggled due to COVID-19 and are looking more critically at their K-12 lines of business. Unique products for the K-12 segment with historically poor estimates of usage were exacerbated by COVID-19, and they are beginning to demand guarantees with defined quantities of specific products and adequate lead time for change orders.

Solomon and Goodman's shared vision at GS1 for procurement is the perfect solution with a more tightly integrated menu planning and forecasting process that relies on standardized products leveraging GDSN. The old way with out-of-date generic specifications is no longer viable to assure either competitive pricing or adequate quality. Even when specific brands and vendor product codes are specified in the procurement bid, the ingredients of those products are regularly changed. Specs are often out of date by the time a procurement is issued and awarded, and suppliers often substitute whatever they have on hand.

Using GTINs and other standardized product codes like USDA's proprietary WBSCM, a universal language can be applied to procurement. APS and inTEAM envision using GTINs and their associated GDSN attributes as the product specification in competitive procurement bids and forecasted year-long menu plans for more accurate estimated quantities. In order to meet federal standards for competitive procurement, APS will also permit suppliers to propose or equal alternative GTINs and allow submissions for pre-award comparative analysis by GDSN attribute. Once again, the common language of GDSN data sharing standards make that process very efficient for both the suppliers and APS.

As a new normal takes shape, APS and inTEAM are poised to lead by example, helping to drive industry wide transformation.

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