The Food and Beverage supply chain today must be instantly responsive to consumer demand. This impacts everything from the store shelf back to the farm field. JDA for Food & Beverage enables companies to leverage integrated business planning and execution to create better quality plans for profitable, consumer-connected supply chains.
The Shelf-Connected Supply Chain

The consumer is now firmly in control of the buying process for the consumer goods and retail industries. To respond, older “push” based supply chain practices are being supplanted by more responsive, demand-driven supply chain operations. These new “sense and respond” supply chains must be flexible and agile to react to fast-changing consumer preferences while also reducing costs and complying with ever-increasing regulations, especially within the food and beverage industry. This requires shelf-connected planning and optimization capabilities with real-time analytics to provide insights on demand shifts that enable fast, profitable responses.

The five key challenges food and beverage companies face in today’s market are:

- The empowered consumer
- Localization of assortments to the individual store planogram
- Growth in mature and emerging markets
- Volatile input costs
- Food safety and brand protection

To address these challenges profitably, food and beverage companies must forego the organizational and technology silos that have limited efficiency, agility and responsiveness in the past. Instead, they must implement integrated business planning and execution processes and technologies that enable alignment and optimization globally while delivering segmented, market-specific solutions on a regional and local basis.

Challenge: The Empowered Consumer

The consumer is now firmly in control of the marketplace and they are dictating what companies must provide and how they will provide it. They want variety and selection, including locally produced foods, ethnic specialties, and healthy alternatives. They expect freshness, quality and safety. These preferences can vary by geographic region, economic level, ethnic and racial heritage, and many other market demographics.

Responding to this diversity is a major challenge for food and beverage companies—and an opportunity. Those who can understand consumer demand and agilely respond with the right products in the right places at the right times, will have a significant advantage in the marketplace.

“The JDA solutions paid for themselves within weeks of going live—we recouped a 100 percent return on investment within 12 months. JDA’s system can handle our sizable business volume. Our users are now empowered with expanded workflows, control and accuracy that previously were not possible.”

Erik Novaes de Almeida Silva, transportation and project manager, Ambev
“JDA has helped us gain a competitive advantage through proactively planning our capacity, shaping our demand, and understanding the seasonality of our business….we exceeded our first year project savings by 75%.”

Dean Lisenby
Director of Demand and Supply Planning,
Butterball, LLC

Solution: The Shelf-Connected Supply Chain

What consumers choose to eat and drink can vary significantly by market demographic and time of year. Food and beverage operations more closely reflect a series of “sense and respond” loops connected to their respective consumer segments at the shelf level – and increasingly, through online and mobile channels. Many companies today are stuck in the old paradigm of forecasting and replenishment based on warehouse shipment data. Some of the more mature companies that attempt to extend their visibility to the retail shelf and use POS data are challenged by the complexity and scalability of the system used to plan and analyze the data. The rest are still struggling to align and synchronize the expectations from various functions in the company, including supply chain, marketing, sales and category management.

The Shelf-Connected Supply Chain is a continuous process of sensing and responding to demand based on shelf-driven insights and data. Real-world constraints, supply chain maturity, and integrated planning and analytics solutions can impact how well companies can achieve the Shelf-Connected Supply Chain.

JDA is well-positioned to solve these challenges. JDA eight offers a scalable platform that can plan and optimize supply chains from the shelf to manufacturing. It includes integrated capabilities that help companies develop shelf-driven, time-phased consumption and order forecasts, connect supply chain and category management functions, reduce out-of-stocks, increase shelf-productivity and collaboratively align business plans with retailer partners.

- **Integrated Planning, Optimization and Analytics** –The JDA eight integrated planning, optimization and analytics platform uses POS data to create accurate demand forecasts that drive timely replenishment execution. By integrating POS data, forecasting and replenishment with sophisticated optimization algorithms and analytics, shelf-level out-of-stock occurrences are greatly reduced, as are over-stocks and waste. As the underlying platform for JDA for Food and Beverage, JDA eight provides centralized data management, a single, intuitive user experience (UX) and context-aware, configurable workflows based on roles and tasks. The easily configurable UX and workflows make employees more productive and provide greater agility in responding to changing consumer demand.
• **Collaborative Shelf Planning and Analytics (CSPA)** – JDA Collaborative Shelf Planning and Analytics helps manufacturers and retailers collaborate on order forecasts, promotions, assortments and replenishment tactics based on store-level consumption forecasts, inventory positions and planograms. It also allows manufacturers and retailers to develop joint business scenarios, identify persistent shelf-related issues and perform root-cause analysis.

• **Pricing and Promotions** – With the volatility of food input costs and the price sensitivity of consumer purchase decisions, it is critical that food and beverage companies collaborate with customers on pricing and promotions. JDA price and promotion optimization solutions provide the flexibility to collaboratively set price levels and schedule promotions to optimize results for both parties.

**Challenge: Localization of Assortments to the Individual Store Planogram**

One key aspect of the empowered consumer is that brick and mortar stores must tailor their assortments to local consumer preferences to a degree not seen before. Yet with limited retail space, increasingly hard-to-please consumers and inventory registering among the most expensive assets, this goal can be difficult to achieve. To succeed in today’s incredibly competitive, consumer-driven market, retailers, wholesalers and food manufacturers must accurately pinpoint consumer behavior and profitably satisfy demand. In pursuit of this goal they must be prepared to support their retail customers with space planning and category management capabilities that maximize the effectiveness of shelf space within each local store or store cluster.

**Solution: Space Planning and Category Management**

JDA Space and Category Management solutions help manufacturers develop localized assortments and translate them into store-specific planograms that respect merchandising rules, store-specific sales patterns and store fixture constraints. With a single powerful relational database, JDA Space and Category Management integrates store level data with market intelligence to cluster stores based on true localized demand, optimizes assortments using industry best practices, supports company-specific workflows, and efficiently manages image-based floor plans and planograms – combining the key components necessary for a winning merchandise strategy.

You’ll gain a competitive edge as you deliver better assortments, execute better floor plans and planograms, and ultimately, increase sales of the right products at higher margins. You’ll also maximize inventory ROI by significantly reducing carrying costs, stock-outs and excess inventory. And by achieving insightful, consumer-centric merchandising, you will fulfill the ultimate goal of optimized cluster- and store-specific category and assortment management.

“*Our space methodology paired with JDA Planogram Generator optimizes days of supply and increases inventory turns on an item-by-item basis, which results in a reduction in excess inventory and a boost in cash flow for the retailer. We can also reset our retail customers’ planograms twice a year or more, which many of our competitors just can’t handle.*”

John William, Director, Category Management, Dr. Pepper Snapple Group
The Benefits of the Shelf-Connected Supply Chain

- Collaborative, consensus-based demand forecasts are more accurate
- Constraint-based “sense and respond” planning loops create achievable plans
- Configurable workflows drive productivity and agility
- In-line analytics continuously measure the health of the supply chain
- Optimizes pricing, promotions and assortments by segment and customer
- Customer and store-specific planograms
- Cloud deployable for agility and flexibility

Goya Foods Spices Up Supply Chain Performance

Founded in 1936, Goya Foods, Inc. is America’s largest Hispanic-owned food company, and has established itself as the leader in Latin American food and condiments. Goya manufactures, packages and distributes over 1,600 high-quality food products from the Caribbean, Mexico, and Central and South America.

Goya Foods was experiencing significant growth, but was having a hard time maintaining service levels and competitive advantage because many processes within their direct to store fulfillment operations were manual. To increase efficiency and service, Goya wanted an automated and integrated demand sensing and fulfillment process. Goya selected JDA Demand and Fulfillment to achieve these goals.

“With JDA Demand and Fulfillment we saw something that would provide us with the most benefit in the shortest amount of time,” says Peter Unanue, executive vice president of operations and logistics for Goya Foods. “The ROI worked out very, very favorably.”

With the help of JDA systems, Goya Foods was able to:

- Achieve record service levels of 98 percent
- Increase planner productivity by 700 percent
- Reduce out-of-stocks to just 2 percent without increasing inventory levels
Challenge: Managing Growth

To survive and keep shareholders happy in today’s competitive environment, companies must continue to grow. But with market maturity and depressed economic conditions in North America and Europe, many companies are looking to emerging markets for growth. Success in emerging markets is challenging, however, because each market has differing tastes, cultural norms, infrastructures, price points and degrees of distribution sophistication. Food and beverage companies must carefully segment their inventory plans and supply chain execution by market in order to maximize market penetration and revenue while ensuring supply chain operations support acceptable margins.

Even within domestic operations, segmentation by markets is important for growth and competitive positioning. Consumer tastes in one region or neighborhood may be quite different than in another. Handling replenishment for grocery chains may be different than for food service customers. Food companies must be able to analyze and segment supply chain operations to be responsive to each market’s consumer demand.

At the same time, the complexity of serving global markets and managing segmentation puts great strains on organizations to coordinate plans and execution in order to reduce needless redundancy, duplication of effort and waste. Integrated business planning is required to synchronize operations and control costs so that acceptable margins can be achieved in each segment and for the business as a whole.

Solution: Integrated Business Planning and Segmentation

The key to controlling and leveraging highly segmented supply chain operations is to deploy integrated business planning processes and solutions to harmonize operations, reduce redundancy and better balance supply and demand across all markets. JDA’s integrated business planning solution consists of sophisticated sales and operations planning (S&OP) teamed with flexible segmentation capabilities and real-time analytics to coordinate and control growth strategies across all markets.

• **Sales & Operations Planning (S&OP)** – JDA offers an integrated business planning solution built on an S&OP foundation that helps executives keep up with the pace of their business, proactively identify gaps between budget, plan and execution, determine corrective actions to address the gaps, and make sure all functions reporting to them, including sales, marketing, finance, supply chain and product development, are aligned. JDA’s integrated business planning solution provides an executive dashboard, process orchestration, comprehensive analytics, scenario management and financial reconciliation capabilities.

• **Segmentation** – Companies are moving away from one-size-fits-all supply chains given the new business complexity, expansion to emerging markets and ever changing consumer preferences and expectations. JDA solutions help companies to define, configure, monitor, execute and adjust multiple supply chain segments on one integrated platform.

• **In-line Analytics** – The importance of in-line, predictive analytics within the JDA platform cannot be overstated. By embedding analytics within supply chain operations, JDA creates a 24/7 health monitoring system for your supply chain. The in-line analytics sense, alert and react to changes and disruptions as they occur in each market segment and each supply chain function. This provides both visibility to current operations and forecasts for future opportunities and risks to dynamically manage the supply chain at the speed of today’s consumer-driven marketplace.
Benefits of Integrated Business Planning and Segmentation

• Eliminate the “Bullwhip Effect” with a single, collaborative forecast
• Segment markets for profitable growth
• Reduce input, manufacturing and logistics costs globally
• Optimize inventory levels and improve service for each market segment
• Real-time monitoring and adjustment of supply chain operations

“Emerging markets present huge opportunities but come with unique characteristics and challenges due to the constant thrust for business growth, volatile demand and low maturity of supply chain processes,” said Mike Burkett, research vice president at Gartner. “The ability to plan demand better is a tremendous advantage, as accurate demand plans help supply chain leaders align end-to-end supply chains correctly, and forecast predictable outcomes and profitable responses to demand.”

– Supply Chain Strategies for Emerging Markets, MHI Solutions, July 17, 2013
**Challenge: Volatility of Input Costs**

For a variety of reasons, commodity input costs have become more volatile in recent years, and thus, harder to forecast. This creates uncertainty and margin risk that strains supply chain operations. While there isn’t much companies can do to dampen the volatility of these external factors, there is a lot that can be done internally to better plan for input requirements and reduce the risk of commodity cost volatility.

**Solution: Integrated Planning and Execution**

Reducing the impact of input volatility begins with properly planning for short-term and long-term requirements so you can make smart buying decisions. JDA for Food and Beverage offers an integrated, industry-leading planning and execution solution that optimizes the end-to-end supply chain to reduce costs, offset the risk of commodity price volatility, and better position you to control margin.

Key capabilities include:

- **Time-phased, Collaborative Planning** – By enabling collaboration with customers and suppliers on long-term, time-phased inventory and promotion plans, JDA for Food and Beverage helps all supply chain partners to better tailor their operations to meet expected demand. The “bullwhip effect” of demand variation is greatly reduced, so less input material and goods are needed at each phase of the supply chain, resulting in reduced inventory levels and costs at each node. The entire supply network is thus more efficient and impacted less by input volatility.

- **Integrated Demand and Labor Planning** – Inventory and labor are the two largest supply chain costs for most companies. Since inventory and the labor are so closely intertwined, it just makes sense to plan the two together. By using a single, demand-based forecast for inventory and labor planning, JDA enables better synchronization of inventory and labor across the supply network, creating new opportunities to drive value and reduce costs.

- **Improved Distribution Strategies** – There are two ways to reduce inventory levels and costs within warehouses and distribution centers—by making operations more efficient and by adopting new strategies to streamline operations. JDA for Food and Beverage allows companies to do both.

  JDA Warehouse Management makes warehouse and DC operations more efficient by computer-directed task management and task interleaving. Each worker is automatically assigned the most productive next task based on order priorities, proximity to the inventory, and the equipment used by, and certifications of, the worker. This efficiency can be further enhanced through the use of RF or RFID devices, voice and pick-to-light automation, and integration with material handling systems.

  “JDA’s products provided clear financial and operating results while improving our capability and capacity. A lot of people talk about collaboration but we’re actually doing it and we certainly would not be as successful without the help of JDA Software.”

  Brett Frankenberg
  director of supply chain planning,
  Coca-Cola Bottling Co. Consolidated
JDA Warehouse Management also supports new strategies for distribution operations such as put-to-store, flow-through and cross-docking, as well as work order processing for value-added services. These strategies reduce storage requirements resulting in reduced inventory levels, handling and carrying costs.

- **Labor Productivity** – While improved distribution operations and strategies reduce the need for labor, you will want to make the labor that is required as productive as possible. JDA Warehouse Labor Management improves labor scheduling to better match labor resources to demand, and improves productivity by ensuring all tasks are performed in the most efficient, safe and error-free method possible. JDA industrial engineers help develop the most efficient work methods and engineered standards for each task. The system monitors adherence to these standards and keeps supervisors apprised in real-time when productivity drops or work falls behind schedule so they can take immediate corrective action.

- **Transportation Management** – The volatility of fuel costs has impacted all modes of transportation, causing companies to rethink transportation strategies. JDA’s transportation suite optimizes all modes of transportation to ensure lowest cost modes, routes and carriers are used that meet delivery commitments. The system optimizes everything from global multi-leg, multi-modal shipments to local multi-stop fleet routing. And transportation management is fully integrated with warehouse and labor management to synchronize operations based on priorities and constraints. As a result, all supply chain operations are more coordinated and efficient, reducing costs and the impact of volatility.

The Benefits of Improved Planning and Execution

- Reduces inventory levels and costs
- Lessens impact of input cost volatility
- Keeps inventory and labor synchronized
- Improves DC efficiency and productivity
- Reduces labor costs
- Reduces transportation spend
**Challenge: Food Safety and Brand Protection**

With ever-increasing government regulation and heightened public awareness due to highly publicized recalls, food safety and brand protection are top of mind for every food and beverage executive. Although compliance with regulations can be onerous, the real issues are the potential costs of recalls and the damage they can cause to your brand. Therefore, companies must gain visibility and control over their supply chains from the farm field to the store shelf and into the hands of consumers.

The challenge is that the “one up/one back” traceability required by regulations provides only very limited visibility to what are often complex supply networks. When a contaminant is discovered, tracing the lineage back through the network one step at a time is time-consuming and the chain of traceability is easily broken if one node in the chain does not have adequate records. As a result, manufacturers are often forced to pull all product from shelves rather than just the impacted lot. This is both expensive and damaging to the brand.

**Solution: JDA Track & Trace**

JDA Track & Trace is a cloud-based solution providing continuous, time-sensitive visibility and electronic chain of custody control over the food and beverage supply network from the farm field to the store shelf. It enables all supply chain partners to enter detailed product, lot and shipment information in real-time to create a “glass pipeline” that provides visibility to everything in the supply network. It also provides tools to simultaneously interact with all network partners when actions are necessary. This visibility and interaction increases control and responsiveness while mitigating risk. JDA Track & Trace is comprised of several capabilities, including:

- **Global Inventory Visibility** – Through the cloud network, food and beverage companies have real-time access to product, lot and shipment information from all supply chain partners simultaneously. Not only is this important for traceability and brand protection, it allows the network to reduce inventory levels because visibility to what is happening throughout the network means less safety stock is needed at each node. Operations are streamlined across the network resulting in lower costs and increased shelf life for perishables.

- **EDI Support** – You may have EDI networks in place with large suppliers and customers. JDA Track & Trace can accept EDI transactions from these networks while receiving cloud-based EDI-syntax transactions from other suppliers and customers. The system accepts, translates and normalizes transactions from all sources to create a single picture of network inventory and activity.

- **QA/Recall** – Quality assurance testing of food products and ingredients is becoming more critical, especially as more items are sourced internationally. But holding lots until QA testing is complete slows the supply chain and decreases shelf life. JDA Track & Trace has QA/hold capabilities that allow inventory to be put on multi-level virtual holds anywhere in the network without physically detaining in-network shipments. This speeds movement of inventory through the network while ensuring no items on hold will be delivered to customers. In case of a recall, the multi-level hold capability can lock down suspected lots while the traceability functionality enables rapid detection of the source. In collaboration with customers, holds on suspected products can be extended to POS systems so tainted goods are not sold to consumers.

- **Freshness** – Freshness is a key selling point for consumers, while food companies want extended shelf life. The execution capabilities of JDA for Food and Beverage help meet both needs through faster cycle times, product
rotation routines, and fresh item management functionality. Fresh item management is especially helpful when working with food service operations because it enables menu-based, time-specific ordering and preparation of perishable items.

The Benefits of the Shelf-Connected Supply Chain

- Creates a real-time “glass pipeline” across the supply network
- Reduced inventory levels
- Increased shelf-life for perishables
- Rapid traceability from the customer back to the farm field
- Multi-level virtual holds across the network
- Improved freshness with less spoilage and waste

Creating the Shelf-Connected Supply Chain

By using integrated business planning and execution to agilely respond to the empowered consumer, protecting your customers and your brand with cloud-based network visibility and QA/recall capabilities, mitigating volatile input costs with integrated and improved supply chain planning and execution systems, and supporting growth with collaborative, shelf-connected demand sensing, segmentation and planning strategies, food and beverage companies can create consumer-connected supply chains that better serve the customer, support profitable growth and protect their brand.

Though the rewards for creating a consumer-connected supply chain are substantial, it is not a simple journey. Many food and beverage companies lack the in-house expertise and resources to define the best future state for their business, analyze what needs to be done to get there, create the journey map to guide the process, evaluate technology options, and manage the end-to-end process. JDA Strategic Services can provide this expertise based on decades of helping many leading food and beverage companies to make this journey. These transformative projects are completed in less time with greater return on investment with the help of JDA expertise.
“The high degree of collaboration between Hershey, JDA and a number of Hershey’s core supply chain partners was the real key to the success of the project. The team put the time and effort in up front to ensure the processes and tools met our long-term and immediate needs, generated immediate cost savings, were scalable and easily expandable to additional partners and enabled an environment for continuous improvement.”

Jeff Rose
senior applications manager,
The Hershey Company

Deploy JDA for Food & Beverage via JDA Cloud Services

Protect your JDA software investment and increase business agility by having JDA experts manage, monitor and maintain your JDA solutions. JDA Cloud Services reduces your implementation time and risk while enabling you to quickly and easily deploy new functionality to keep pace with your changing business needs. With your software running in the cloud and upgrades included in your service, you will benefit from solutions that are optimized for your specific business requirements to help ensure that you achieve and sustain a long-term return on your investment.

About JDA Software Group, Inc.

JDA® Software Group, Inc., The Supply Chain Company®, offers the broadest portfolio of supply chain, retail merchandising, store operations and all-channel commerce solutions to help companies manage the flow of goods from raw materials to finished products and into the hands of consumers. JDA’s deep industry expertise and innovative cloud platform help companies optimize inventory, labor and customer service levels. As a result, JDA solutions have become the standard for the world’s leading retailers, manufacturers and distributors.