

Modernize your Supply Chain with Smart, Connected Analytics



Connecting the enterprise through data.

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INTRODUCTION

Companies across all major manufacturing sectors are struggling to balance costs with increased expectations to deliver quickly and accurately. They must manage these pressures within the complex landscape of hundreds or thousands of supply chain partners, located all over the world, with disparate systems and data. Improving the performance of a complex global supply chain depends on information. For the information to be effective, it needs to be smart and connected.

Modern supply chain analytics will facilitate collaboration beyond the four walls of the business and across the entire ecosystem of partners and suppliers. Automated advanced analytics, to anticipate trends and make recommendations, need to be factored into decision making, and shared visibility of data enables the global supply base to work as a highly orchestrated business network.



SMART: Decision makers need to be able to analyze trends, performance and events without relying on IT. The data must also be up-to-date and consistent across the value chain, so that the consequences of updates in one process or region are accurately reflected across the ecosystem. Advanced analytics, such as predictive algorithms, scoring, and trend identification, should be automated so that decision makers can bring business context to data analysis techniques, without relying on data scientists who lack understanding of the business problem.



CONNECTED: Different parts of the supply chain require different sets of data to make decisions, but eventually the decisions connect. And while individual teams analyze granular information to make decisions minute-by-minute, ultimately, executive management needs an enterprise view with rolled-up KPIs to see how the business is doing overall. A connected supply chain eliminates separate P&L reports by region, product, or factory. A connected dashboard can provide a unified view with drill-down into the problem areas and anomalies.



SMART SUPPLY CHAIN: DATA IN CONTEXT AND ANALYTICS THAT DRIVE VALUE

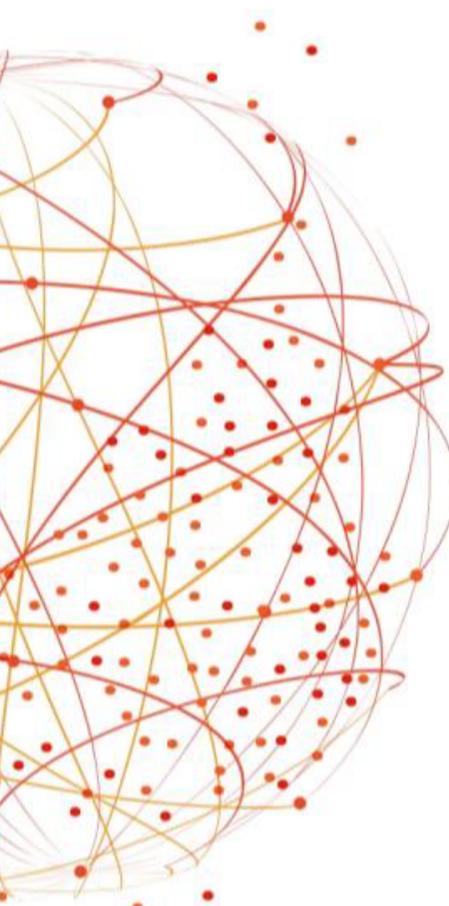
What companies do should be simple. They design and produce goods or services and provide them to customers for more money than it took to produce them. However, behind this simple equation lies a mass of complicated challenges and players that depend on information.

Supply chain professionals look at how their companies source and manage inventory – raw ingredients, components for assembly, or finished products for resale – and organize the process of distributing goods to customers. Sales and marketing professionals, on the other hand, examine the market and define optimal product positioning to drive demand at the best possible price. Supply and demand are two sides of the same coin, but the levers for value creation are different.

To satisfy both ends of the equation and maintain margins, the teams must share data in context. For example, with smart analytics, marketers can estimate demand levels for product sales based on engagement with campaigns. If these estimates are much higher (or much lower) than inventory availability, both teams can take steps to meet demand by adjusting production requirements and customer expectations.

Companies can only achieve this capability with advanced analytics. In the case of an inventory shortage, a smart supply chain will prioritize the most profitable customers with the highest lifetime value and consider a substitute product for the next tier of customers. Sales and operations planning then adjusts dynamically to drive the most profitable scenarios, with the customer service team in the loop for high-touch communications where necessary. These algorithms need to be managed (and adjusted) with automated machine learning to enable supply chain analysts to make up-to-date decisions programmatically.

CONNECTED SUPPLY CHAIN: COMPANY AND SUPPLIER DATA IN ONE VIEW



In addition to being smart, a supply chain must be connected, so that decisions aren't made in isolation. A connected approach represents a shift toward more collaboration, both inside and outside the organization, to achieve commonly defined goals. Instead of maximizing one departmental KPI – e.g., production throughput, which may then lead to excess inventory – priorities across the business can be balanced profitably by monitoring the relationship between inventory, product availability, and demand. For example, a strategic sourcing team is most concerned with material availability and costs, while the operations planning team manages finished goods production to a specified forecast. But neither team should work in a vacuum. The overall goal would be to support customer demand at the lowest possible cost and work within constraints to adjust. For example, if the recipe for a product requires a large amount of a commodity good that can be swapped out when costs fluctuate, the sourcing team should consider that scenario in purchasing and spot buys.

Connecting with those outside the company – such as external suppliers and customers – can improve forecast accuracy, product availability and time-to-delivery by putting everyone on the same plan, with visibility into hiccups. Embedding analytics in an external portal for suppliers or customers creates an automatic and visual mechanism for sharing up-to-date data with consistent metrics. This connected approach may change negotiation tactics, with more focus on transparency. Instead of negotiating by taking a fixed position, share your interests to reach a model that enables both parties to be successful. Then monitor progress in a common dashboard. Processes may need to be measured differently, and teams inside and outside the business may have to collaborate more than they're accustomed to, but the connected use of analytics will ultimately support value creation across the ecosystem.



SMART & CONNECTED: SUPPLY CHAIN AS A STRATEGIC ASSET FOR SALES

In an age of global presence, local demand, personalized offers, and omni-channels, businesses must consider the end-to-end experience with their product, no longer viewing sales and supply chain as front vs. back-end of operations. The supply chain must be treated as a strategic asset crucial to achieving sell-through visibility, promotion success, sales, and, ultimately, customer satisfaction to drive repeat buys.

However, the challenge of aligning sales and supply chain is compounded by multi-channel distribution and disparate systems. For companies with multiple business units or regional operations, achieving even a single view of the customer across channels is a massive reconciliation exercise. Efforts to achieve a meaningful understanding of the customer can be futile.

By using data sources from both business functions, and providing visibility across both, it becomes possible to gain a unified view of the customer experience, pre- and post-sale. For example, both teams should be able to answer the following questions:

- Where is demand greatest and in what regions?
- What sales were booked at the end of quarter that need to be fulfilled?
- What sales are close to closing, so we can plan availability on high-demand items?
- How does customer satisfaction affect future buying behavior?
- Do customers interacting with post-sale support and supply teams provide repeat business?

Analytics on these patterns can help both teams achieve their objectives and enable management to understand how individual decisions across the business relate.

EXAMPLE OF A SMART AND CONNECTED SUPPLY CHAIN.

With smart and connected data, SunnyD drives value across the ecosystem.

Marketing & Transportation

Analytic Insight: Understand promotional impact on transportation schedules

Value: Maintain fill rates with reduced reliance on expedited shipping **saved 7% on transportation.**



Sales & Fulfillment

Analytic Insight: Understand store-level inventory and changes in real time

Value: Dashboards highlight low stock and thresholds; Sunny D can replenish supply "just-in-time," **increased customer offer uptake (sales) by 2%.**



Forecast & Production

Analytic Insight: Order & fulfillment process improvement and forecast visibility

Value: Adjust production schedules at plants to **reduced overtime costs at plants by 90%.**



Inventory & Accounting

Analytic Insight: Better inventory visibility and record accuracy reduced need for reconciliations

Value: Accounting department **reduced by 50%**, and accounting team meets its 48-hour deadline to close out the books.

Supported 18% overall profitability increase.



CIO Metrics reported in CIO Magazine, "How Sunny Delight juices up sales with cloud-based analytics." Sept 14, 2015

