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Make Your Demand Data Work for You

How a Robust Retailer Data Strategy Can Improve Product Availability and Lower Supply Chain Costs

Most consumer products (CP) manufacturers today are deluged with demand data from their retail customers. And when it comes to how this data arrives from retailers, it's the Wild West out there – some retailers provide basic sales and occasional inventory information weekly, while others provide more extensive information, such as internal sales forecasts and merchandising shelf layouts, on a daily basis.

Unfortunately, many CP manufacturers lack a comprehensive strategy for managing the proliferation of this retailer demand data across their enterprise (see sidebar below). This causes serious challenges, including:

- Multiple “reinventions of the wheel” as customer service, supply chain management, marketing, and other groups all devise different methods to obtain, cleanse, and harmonize the same retailer demand data

- No central knowledge of what retailer demand data the CP manufacturer possesses, who is using it, how reliable it is, how to access it, or why it is valuable
- An ecosystem of disconnected applications and informal processes that functional teams use to alleviate their retailer demand data pain points

This unorganized, ad hoc approach to retailer demand data hinders the benefits CP companies can derive when all groups work from a single version of the truth.

The Solution? A Unified Retailer Demand Data Strategy and an IT Architecture to Support It

Until a CP manufacturer has a strategy in place to centrally handle retailer demand data (see sidebar on the next page), each customer-facing or functional team will continue to create its own policies and procedures for acquiring and dealing with the



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How Many Definitions of Retailer Data Does Your Company Have?

Various groups within a CP company will have different perspectives on what defines retailer data, also referred to as point-of-sale (POS) data:

- *Marketing and sales* view retailer data as detailed activity at the store level, typically focusing on unit and dollar volume
- *Supply chain management* expects a broad set of demand signals that includes warehouse activity, retailer forecasts, promotion schedules, internal sales forecasts, and other signals related to replenishment activity
- *Customer service* focuses on the retailer's key performance indicators (KPIs), including information about out-of-stocks, fill rates, transportation compliance, and purchase-order status

The absence of a common vocabulary is a roadblock to moving forward with a retailer data strategy. The term *retailer demand data* should encompass sales, inventory, forecast, RFID, and other retailer-sourced data in a way that meets the needs of all parties.



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Foundations of a Sound Retailer Demand Data Strategy

How a Little Groundwork Can Lead to Big Benefits

To reap the benefits of a unified approach to retailer demand data, CP manufacturers should look to the following recommendations for implementing a retailer demand data strategy:

- Develop a consistent, cross-team approach for dealing with retailer demand data
- Guide cross-functional teams – made up of sales, marketing, supply chain management, and R&D – on how to address business needs that require retailer demand data
- Establish a single mandate that describes how you value retailer demand data and how to maximize collaboration with each retail customer
- Communicate to retailers what information you need to collaborate effectively and specify what benefit that retailer will derive from the process

By introducing a demand-data feed of actual product consumption into their existing forecasting process, manufacturers can improve forecast accuracy.

data they need. Once a centralized strategy and its supporting information technology architecture are in place, teams can benefit from improvements in the following processes:

- **Demand forecasts:** Multi-retailer, store-level data provides actual point-of-sale information for more accurate forecasts of consumer demand
- **Supply chain performance:** With retail data, replenishment analysts can monitor inventory levels within each retailer's supply chain, as well as within the manufacturer's supply chain
- **Merchandising and retail execution:** Alerts and monitors measure performance at all stores and can identify out-of-stock situations even before they occur
- **Marketing and sales operations:** Retail data gives a deeper understanding of consumer demand so manufacturers can target profitable assortments within a channel and across multiple customers and categories

Let's look at the first two benefits in more detail.

Increase Demand Forecast Accuracy

The ability to improve *demand forecasts* is a major motivator for manufacturers to develop a strategy for obtaining and working with retailer demand data.

Traditionally, demand forecasts stem from a "push-based" approach, which looks at historical shipment volumes from the CP manufacturer to its

retail customers. A demand-driven approach, however, brings the CP manufacturer closer to the "pull" of products out of the store. By introducing a demand-data feed of actual product consumption into their existing forecasting process, manufacturers can improve demand forecast accuracy. Improved forecasts, in turn, translate into reduced factory-to-shelf time for products, as well as lower inventory-carrying costs.

Improve Supply Chain Performance

In the area of *supply chain performance*, CP manufacturers can use retailer demand data to achieve two major objectives:

- **Build an integrated demand and supply chain data view for improved inventory management.** An integrated demand and supply chain data view involves merging existing supply chain data and retailer feeds. Without this single view, there's a natural limit to how much control any party has over its inventory. Currently, most companies store purchase orders, shipment information, plan data, demand and retailer forecasts, retailer inventory counts, and RFID data in different places. Leading companies, however, drive these data silos together so they can understand the root causes of supply chain failure, perform simulations, and solve a myriad of workflow bottlenecks. It is these bottlenecks that negatively impact key performance indicators (KPIs) and bottom-line results on a month-to-month and year-to-year basis.

A Vision for Demand-Driven Processes – The Sky’s the Limit

When companies start thinking about what they can do with a real-time view into retail demand data, the possibilities are endless. CP manufacturers can use retailer demand data to:

- Determine the rate at which customers purchase products, and automate inventory replenishment accordingly
 - Predict when a product is about to go out of stock based on the current rate of sales
 - See a spike in demand, attribute that spike to a particular event that you wouldn’t have known about by only looking at historical data, and immediately react to that demand increase
 - Adjust marketing activities around a new product based on how that product actually fares in retail stores
 - Ship additional products to retail stores where a promotion is successful, and pull back at stores where it’s not
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- **Integrate existing supply chain applications into a demand-driven supply network (DDSN) framework.** Many companies tend to think of DDSN strictly as a transition from a push-based to a pull-driven supply chain environment. But that’s not the sole intent of a DDSN. It’s really about synchronizing supply-side activities with actual demand signals, and using the two pieces of data to make better decisions.

With a strategy in place for integrating retailer demand data into enterprise applications, CP manufacturers can use that information to drive critical business processes in the supply chain area and beyond. But how do CP companies make this transformation and start leveraging retailer demand data? Once you get this information inside the enterprise, how do you make it clean, reliable, and usable? What do you *do* with this granular demand data?

Recommendations for Becoming Demand-Driven

To be demand-driven, you will need to:

1. Invest in a demand signal repository. To be able to cook up all of the innovative recipes that an enterprise can make with retail demand data (see sidebar), you have to start with a clean pot. A demand signal repository (DSR) addresses this precise challenge. It is a single data factory in which real-time, granular, point-of-sale, movement, demographic, synchronized item, and other retailer-provided data sits – and it collects, cleanses, harmonizes, and prioritizes that retailer information.

2. Translate demand signals into actionable information your enterprise can understand.

A major challenge of being demand-driven lies in what we call *demand translation*, the process of taking raw demand data that’s meaningful from the retailer’s point of view and translating it into information that’s harmonized, standardized, and actionable from the manufacturer’s perspective. A key function of the DSR is using supplier-established business rules to translate each retailer’s demand signal into a supplier’s common definition.

3. Design goal-based triggers for when and how to take action on that translated demand data.

For which events or situations do you want to trigger specific actions or responses? What kinds of actions or responses? How often will this criteria change? What kinds of basic reports do the functional users need in order to prioritize their tasks on a weekly or daily basis? These are the types of questions you’ll need to answer before you start to incorporate retailer demand data into your enterprise systems. This is an exception-based, process-driven system, and it’s fundamental to becoming demand-driven. To fight fires most effectively, you have to inform your firefighters (in this case, your replenishment analysts) whether they are racing to extinguish a five-alarm blaze or rescue a cat from a tree.

A demand-driven supply network (DDSN) is a network that circulates demand data (retail activity) to upstream applications and end users. For upstream applications, a DDSN provides visibility into retail store and warehouse activity. For end users, a DDSN provides the accurate, cleansed, and harmonized data needed for effective planning and execution. In both cases, the data consumers can focus on the data itself rather than on how to obtain, cleanse, and maintain it.¹

¹ For more information about the concept of a demand-driven supply network, a term coined by AMR Research, please visit www.amrresearch.com.

Before implementing a retailer demand data strategy, companies need a detailed plan that describes the processes by which retailer demand data will be brought on board, the service-level agreements (SLAs) for the availability of the data to other applications, and the specific goals and scope of the overall effort.

4. Integrate your demand-driven repository and goal-based triggers with your SAP enterprise applications. The value of this translated demand data can only be truly realized when it is seamlessly available to SAP enterprise applications. These applications provide users with the ability to anticipate and avoid out-of-stock conditions, improve forecast accuracy, and optimize replenishment processes. The ultimate result of this scenario is true demand and supply chain synchronization, the Holy Grail that CP manufacturers have been seeking.

The SAP Ecosystem – Enabling a Better Retailer Demand Data Strategy

As we've just noted, one of the key components of a robust retailer demand data strategy lies in integrating the demand signal repository with SAP enterprise applications. The following examples describe the applications and associated business processes that are affected by this integration:

- **Data Synchronization:** SAP NetWeaver Master Data Management (MDM) acts as a filter for master data and its attributes that are brought in from the DSR. This guarantees the accuracy and timeliness for all downstream processes that require this data.
- **Forecasting:** mySAP Supply Chain Management (mySAP SCM) uses the DSR data as input in the forecasting and promotion-planning process to provide a more complete and accurate picture of true demand.
- **Replenishment:** mySAP SCM will also uses DSR data to support a pull-based, demand-driven replenishment process.
- **Analytics:** SAP NetWeaver Business Intelligence (BI) combines enterprise and DSR data to provide a complete set of KPIs for monitoring demand and supply chain performance.

What makes all of this possible is **SAP's enterprise service-oriented architecture** (enterprise SOA). This model allows enterprise applications, such as mySAP SCM, to easily and seamlessly integrate with non-SAP components, such as the Vision Chain Demand Signal Repository. It also provides the flexibility for the technology to support new or changing business processes as they occur, without the lag

time often associated with large-scale IT projects. This is the real power of the SAP ecosystem.

Conclusion

To tame the chaotic rush of demand data that pours in from retailers, CP manufacturers should strategize about how they can use real-time demand signals – and their supporting IT architecture – for more than just understanding what's happening at the store level. By developing a retail demand data strategy, CP manufacturers can increase forecast accuracy, reduce their products' factory-to-shelf time, and lower inventory carrying costs, among other benefits. Even a small improvement in a company's supply chain performance from such a strategy can translate into a significant increase in revenue and margins. ■

Additional Resources

- "Demand-driven supply networks (DDSNs): Benefits, requirements, and the SAP solutions that support them," a session at the *Logistics and Supply Chain Management 2007* conference in Barcelona and Orlando (www.sapscm2007.com)
- www.sap.com/usa/industries/consumer/pdf/BWP_Consumer_Prtds_Strategies.pdf