Weaving your supply web
Ways to make merchandising and supply chain integration a reality
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THE RETAIL LANDSCAPE HAS DRAMATICALLY CHANGED OVER THE PAST FIVE YEARS. Many of the old retail paradigms which have held true for decades are now antiquated and not meeting the new customer expectations that have evolved with the rapid advancement of the digital age across all facets of retail.

This evolution has permeated virtually every vertical and channel of the retail value chain and has driven the need for significant advancements in both the technology that retailers leverage and the way retailers must now work internally to stay ahead of the ever-changing retail customer. We will focus our discussion on ways in which the supply chain and merchandising organizations should evolve to create a more encompassing view of the customer, anticipate their needs for today and tomorrow, and create an ecosystem of processes and technology to enable an effective customer-centric experience.
Weaving your supply web

Ways to make merchandising and supply chain integration a reality

Many retailers have dreamed for years about integrating merchandising with the supply chain. The potential advantages are numerous—accelerated speed to market, reduced need for markdowns, more (and more profitable) sales—but for years, there was one problem: For a variety of reasons, it couldn’t be done. Insufficient data stood in the way. Even for the information retailers did have, technology hadn’t yet advanced enough to gather it into a holistic view. Beyond that, organizational silos and internal incentives had often been constructed in ways that limited retailers’ capacity to communicate and cooperate.

Now the technology has caught up with the vision. A few companies are taking advantage of some of the opportunities opened by the new digital tools, but many have been unable to make full merchandising-supply chain integration a reality. One roadblock has been the cost of retrofitting entire systems. Another has been the cultural and organizational challenge of integrating the two silos. But the biggest challenge of all may be a lack of best practices to follow. The merchandising-supply chain integration playbook is still unwritten: Now more than ever, even companies with world-class retail supply chains have the opportunity to more effectively operate their supply chain in an agile, digital way.

For now, many retailers continue to use their old delivery models most of the time, making flow and inventory stocking decisions in isolation, then forwarding them to logistics and distribution to determine the execution. But agile innovation, a compressed drawing-board-to-shelf cycle, multichannel ordering, a reliance on external sourcing for experiential shopping offerings, and ever-changing customer demands are pushing their legacy supply systems and processes to the breaking point. Eventually, these pressures could prompt retailers to accept the challenge of merchandising-supply chain integration.

Digitizing the supply network

So where should you start?

Transforming a complex, entrenched supply chain that may have served a company well for decades is a serious undertaking. Full integration involves building capabilities in four areas:

- Integrated digital network
  - A digital network capability that links products and customers to suppliers and manufacturers
- Operating model
  - Empowerment with shared accountability and incentives
- Partner alliances and partner ecosystem
  - Partnerships or acquisitions with third-party service providers and technology companies
- Physical network
  - An infrastructure for flexibility and rapid response, facilitating real-time decision-making

Operating model

A collaborative, fully empowered organization with shared accountability and incentives

In most enterprises, a good place to begin a merchandising-supply chain integration is with a review of the organizational structures to confirm that managers’ roles enable collaboration and then reconfiguring the management structure needed to support it. In addition, changes in managers’ incentives can give managers in both merchandising and the supply chain incentives to collaborate. They can benefit from metrics that reward overall sales, profitability, and inventory effectiveness, as well as transparent plans and forecasts. This new way of working can be enabled with a new cross-functional manager: the digital network planner (DNP). The DNP can perform the traditional merchandise planning, logistics planning, and store allocation function while managing the flow of inventory across the enterprise and taking advantage of the total consumer demand forecast, lead time visibility, and cost transparency.

An integrated digital network

A virtual network that links products and customers to suppliers and manufacturers

The foundation of an integrated capability should be a virtual platform that can help connect your internal and external supply chain and merchandising systems with relevant customer insights pulled in from various nodes of your supply chain. This data-rich network helps generate real-time customer insights, enabling appropriate decision-making to minimize lost sales and customers—particularly once you have built control towers that integrate predictive and prescriptive data analytics, enabling faster and more accurate responses.

Physical network

An infrastructure built for flexibility and rapid response to replenishment strategies

Companies can enhance or replace legacy supply chain systems, physical distribution sites, and delivery capabilities to prepare for a more transparent and more flexible supply chain. The enhancements can include processes driven by advanced machine learning technology, such as prescriptive data analytics, artificial intelligence, or robotic process automation. Virtual workplaces and digital collaboration can also be integrated into the new integrated network.

Partner alliances and partner ecosystem

Partnerships or acquisitions with third-party service providers and technology companies

As companies form their strategy for supply chain integration, key decisions on whether to rely on in-house capabilities or to work with an external partner(s) should be considered. The key factors should include the long-term cost of ownership, acquisition and retaining of talent, and technological flexibility to tackle both the problems of today and of the next 10 years. Choose carefully: These decisions will affect your speed to market and general business agility.
How can these capabilities help unlock transformation opportunities?

How can you get there?

As a retailer creates an integrated merchandising and supply chain capability, they have the opportunity to unlock a variety of new opportunities that can potentially make the company more efficient and profitable while providing additional value to its customers. Here’s what retailers can do to help build it:

**Operating model**

**Involving your executives.** Such a large-scale transformation of processes and organization requires the highest level of executive commitment. Only when the organization agrees on the level of investment, time, and resources required can the change be sustainable and generate timely results.

**Picking the right KPIs and metrics.** Measuring and tracking joint performance with strategic KPIs enables joint accountability that can lead to a more optimized assortment range, availability, efficient supply chain service, and an improved customer experience across all channels.

**Making every project a joint project.** Consumer demand is in a constant state of change. These changes, when not understood across the entire retail value chain, can lead to sub-optimized decisions and, when it occurs frequently across multiple business lines, can contribute to transformation fatigue across the organization. Buyers should consult supply chain managers for joint ownership of the larger system when developing their plans and forecasts. Additionally, they should focus less on demand by channel than on total consumer demand as the planning process shifts from seasonal and periodic efforts to a constant, iterative flow.

**Reviewing your hiring model.** Much of today’s workforce is looking for multiple experiences, bite-size projects, and new opportunities to grow. With the rapid advancement of technology and customer demand, the workforce playbook is shifting to a more flexible way of working (flexible hours, ability to work remotely, etc.). This approach can require new recruiting strategies to help identify the right candidates, revamped engagement models to help remote associates feel connected to the larger organization, and supporting technology to enable more efficient collaboration.

**An integrated digital network**

**Optimizing based on the value of service and speed to your customers.** Particularly in this omnichannel world, it’s important to decide what level of service to provide to which customers through which channel, then make inventory, pricing, and delivery option decisions based on that understanding. The system’s ability to recalculate forecasts on the fly, triangulating historic data against current downstream data such as POS, weather and social media, in tandem with pattern recognition and predictive analytics to improve forecast accuracy and understand the tradeoffs of replenishment responses, opens up a new level of thoughtful planning.

**Building your virtual warehouse.** The rise of multiple supply chain channels will potentially decrease the overall productivity of inventory. Having a single cross-channel view of inventory gives the entire organization the ability to calculate the most cost-effective fulfillment mode for any item stocked or shipped.
Physical network

Pooling inventory closer to customers in urban and suburban markets. As multihour delivery to both online customers and rapid store replenishment become table stakes, the deployment of inventory could move to the front of the line in the “supply chain challenge” list. Deploying inventory from distribution centers to mini-hubs or dark stores closer to customers will help enable retailers to better meet the needs of the customer. Nimble inventory deployment techniques can free more backroom space for showroom presentation. With increased visibility and transparency, rapid analytics capabilities, and improved demand sensing and prediction, the retail physical network can even become a material competitive advantage.

As customer expectations for delivery times shrink, Best Buy has complemented its traditional regional distribution centers with smaller-footprint, highly automated metro e-commerce centers. Home Depot made a similar move to open 170 “market delivery operation centers” to offer deliveries of big and bulky items same-day or next-day to 90 percent of the United States.

Packaging merchandise in a multichannel-ready way. Inventory should be packaged so it can be sent to customers from any channel. Providing channel-ready and allocated merchandise from the manufacturers and/or vendors also helps reduce lead times and create cross-dock efficient flows in distribution centers. Changes in how products are produced, packed (singles versus prepacks), and physically prepped such as polybag or ticketing should all be driven from an integrated planning perspective.

Sports apparel company Adidas offers customization of its shoes through its new “Speedfactories.” The new factories, which ship shoes in customer-ready packaging, dramatically slash the time between custom orders and delivery to four to five business days.

Partner alliances and partner ecosystem

Integrating the sourcing for innovative experiences. Experiences are an important part of retail now, but many supply chains are struggling to support customers’ constant appetite for novelty. To manage the cost side of the equation effectively while enabling the innovation required by the marketing and merchandising teams, integrated planning is key. Every day, a new offering by retailers (such as gourmet markets, cafes, or nail shops) hits the street and requires integration into the larger supply system to keep replenishment costs down.

Whole Foods offers not only groceries, but cooking classes, a wine tasting bar, and in-store masseuses. Lululemon boasts in-store yoga. REI invites its customers to try out gear on their rock-climbing walls.

Keeping up with emerging sales channels. The desire to shop anytime, anywhere, and for anything has created a niche service industry. Aligning or acquiring such capabilities may need to be part of your digital playbook to respond to new competition or drive costs out of the operations to invest in a more agile marketplace.

Shopify acquired warehouse automation and robotics firm 6 River Systems to add cloud-based software and collaborative mobile robots to move packages around the warehouse. In a customer-facing opportunity, Stitch Fix acquired the intellectual property and technology from Finery, a platform that scans online shopping receipts to build a virtual wardrobe that lets shoppers assemble outfit options and keep track of the garments they own.

Integrated planning enables you to see and proactively operate across the network, collaborate at the appropriate time with your suppliers and customers, and use all the data and analytics in the ecosystem to identify the most appropriate channel to meet or exceed your customers’ needs.
Integrated planning is the future

Enhanced customer experience
Digital contact with customers has already created new opportunities for retailers to order merchandise that aligns more closely with what customers want to buy and craft a shopping experience that best fills their needs. Additionally, integrated planning can increase speed to market. When merchandise gets to the rack or shelf sooner, it may be less likely to need to be marked down later. Better communication between sales and the supply chain can minimize the movement(s) of goods that don’t end with a sale.

Optimized and efficient product flow
With the introduction of a digital capability, there could be a significant reduction of “surprises” that slow down transportation, deploying inventory where it is not needed. As improved inventory decisions are made, sales may increase, opportunities for cost savings can be presented, and customer experience can be enhanced. The digital supply chain can enable more informed decisions about product flow based on the cost-to-serve of the category and channel.

Smarter inventory management
The digital supply chain can drive benefits for a retailer’s partners as well. Better insight, when shared appropriately, can help lead to better decisions: Integrating vendors into the supply chain facilitates demand-driven, just-in-time replenishment of inventory. As smarter inventory management capabilities are introduced into the digital supply chain, the likelihood of orphan, poor-performing, and higher-performing SKUs can be made more visible to the inventory manager. The sooner you have this visibility, the sooner you could weed out underperforming SKUs.

Improved capital performance
The digital supply chain can provide insight and actionable recommendations in ways that were seldom possible in the past. Better understanding inventory positions and visibility to the costs of past and future moves can help enable the modern supply chain manager to follow every item, every step of the way. The entire organization can ultimately gain a clearer sense not only of the true profitability of every item, but also, ultimately, the profitability of every customer.

And this phase is only the beginning. The digital supply chain continues to learn from every order, which means that over time, your entire supply chain—not just individual links in the chain—can continue to see improvement and provide insights across the entire organization’s value chain.
Moving forward

Developing a more integrated way of working across the enterprise entails a significant amount of cultural change. This shift requires executive support, a long-term vision, and, often, plans vetted by industry experts. As you begin your journey to an integrated supply chain, consider the following:

• Make sure that all digital supply chain projects have representation from all functional areas, and at the leadership level, to build executable solutions for the integrated capabilities of the future.

• Understand that the journey to a digital supply chain involves significant structural changes. Silos can generally impede organization-wide accountability and controls and make it difficult to introduce a true end-to-end integrated value chain.

• Establish a digital network planning steering group from all parts of the organization to guide the organizational design and development. This team should have the responsibility of identifying and influencing immediate opportunities while designing the future state.

• Encourage cross-functional interconnectedness to blend skill sets within the workforce to ultimately help build new behaviors, break silos, and rapidly innovate and accelerate new solutions. Highly skilled professionals are vital to an effective supply chain, but skilled and adaptable talent is imperative to execute at the right time for an effective digital supply chain.

• It is important not only to picture the future integrated supply chain clearly, but also to understand the present. Having a baseline of current KPIs is a critical part of development. When you understand which elements are delivering value across the organization and which elements are underperforming, you will be able to develop a thoughtful long-term strategy.

After careful assessment of the strategic options and their impact on the culture and organization, it’s time to be decisive. A significant roadblock to most journeys is taking the first step. Pick an area of your supply chain and get started...today!
Living the integrated life

MERCHANDISING–SUPPLY CHAIN INTEGRATION
A digital supply network of the future

DIGITAL NETWORK PLANNING

Excited customer
Create seamless customer engagement from inspiration to service

Prospective customer
Create seamless customer engagement from inspiration to service

Dynamic fulfillment
Boost customer service through new levels of speed and agility

Intelligent supply
Track and trace inventory and build analytics pod for integrated suppliers

Smart operations
Unlock new efficiencies with a more connected, agile, and proactive facility

Synchronized planning
Flow products based on AI-enabled demand sensing

Digital product development
Optimize product life cycle management with advanced digital tactics

DIGITAL CORE

MERCHANDISING ROLE

SUPPLY CHAIN ROLE

Supplier

Merchandise

Supply chain

Assortment strategy

Returns

Assortment planning

Merchandise

Vendor performance

Display

Merchandise

Finalize targets

In-store

Merchandise

Inventory and channel flow plans

Finalize

Outbound

Merchandise

Product profitability assessment

Finalize

Distribution center

Merchandise

Performance

Finalize

Inbound transportation

Merchandise

Planning

Finalize

Digital

Network

Planning

Finalize

Management

Digital

Network

Management

Finalize
Imagine the supply web of 2025

An integrated merchandising-supply chain system is led by a digital network planning team, composed of representatives from merchandising, sourcing, planning, distribution, transportation, and stores. The network planners are supported by the value chain team, who oversee this integrated platform together and separately as each of the team members coordinate their respective functions or departments and discuss broader issues together to enable well-informed decisions.

In this new era, the supply chain group plays a key role (inside right of the circle) in the upstream merchandise-focused processes (outside right of the circle) from “Assortment strategy and financial plan” to “Finalize targets.” The integrated and informed value chain teams of the future will look at the entire impact of supply chain, merchandising, and store operations decisions. For example:

• Style-level costing uses cost modeling, scenario planning, and collaboration with vendors and merchandising teams that consider production capacity earlier in the cycle while building the cost model.

• All channel-level plans and corporate budget targets are in a single platform to facilitate visibility and reconciliation of the key metrics across the organization. The plan-versus-actual mystery can be solved.

• An integrated digital network provides access to improved product stratification by location and channel, allowing each SKU or style’s contribution to be understood at a location level. This data enables automated merchandising processes, real-time collaboration with channels, and sourcing to manage line structure and key metrics.

• Real-time changes in demand and inventory feeds dynamically reroute receipts to locations in need and/or expand fulfillment capacity with vendors or pop-up locations at short notice.

• Integrated real-time demand forecast and cost estimate projections are used to identify profitability of store or customer returns.
MERCHANDISE AND SUPPLY CHAIN COLLABORATION

Key capabilities can be enabled by increasing collaboration between merchandise and supply chain functions.

**Promotions and pricing strategy**
Promotional decisions based on standard SLAs and supply chain cost

**Directional unit plans**
Assortment decisions made at a total cost of ownership level and with complete view of the financial impacts

**Tiering and localization**
Product tiering based on localization analysis for initial allocations

**Returns management**
Allocation of returns into available-to-promise (ATP) based on dynamic demand forecast to maximize profitability and standardized processing of returns

**Replenish floor**
Integration of merchandise sales pattern with promotion, pricing, markdown, and returns performance

**Managing inventory in season**
Near-real-time open-to-buy (OTB) targets for building relevant promotion or markdown programs by integrating cross plans

**Assortment strategy**
Adjust supplier base and merchandising decision based on real-time supply chain costing optimization

**Inventory management**
Optimal safety stocks defined based on inventory optimization logic that considers product attributes, demand forecast, seasonal, promotional, etc.

**Factory and supplier**
Collaboration with supplier for vendor-managed inventory based on real-time demand patterns

**RMA creation and approval**
Integrated demand forecast to identify profitability of returns of bulky products

**New channels such as pickup and delivery**

**KEY:**

- **ME**: Merchandise
- **SC**: Supply chain
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