Building omnichannel excellence

Raj Kumar, Tim Lange, and Patrik Silen

As consumers move more of their shopping online, consumer-goods companies need to meet service and efficiency challenges across multiple channels. That calls for a new approach to the supply chain.

Competition in the consumer-goods sector has always been intense. Today, that competition is coming from a host of new directions. Retailers face competition from companies that used be their suppliers as consumer brands open dedicated retail chains and online direct-sales offerings. Consumer-packaged-goods (CPG) companies, in turn, face competition from retailers' growing private-label product offerings. And both retailers and CPG companies face competition from online superstores, such as US-based Amazon or Europe's Zalando, which offer vast ranges of products, inspiring customer experiences, personalization, ever faster delivery, quick returns, and more.

Fighting on so many fronts is taking its toll on the sector. Companies are creating new offerings in response to new threats and emerging opportunities. All too often, however, these piecemeal offerings cost a lot and produce little additional value, grinding profit margins down.

Most consumer companies recognize that the core of the problem—and of the solution—lies in the supply chain. That's why omnichannel has become such a potent buzzword in the industry. But while plenty of companies are striving to create an omnichannel supply capability, few have succeeded. When we asked a group of senior CPG executives in Europe about their organization's approach to omnichannel, 80 percent said they had efforts under way, but less than 25 percent believed they were on the right track. They also agreed that building the right supplychain capabilities seems to be the most difficult part.

In our work with leading CPG players around the world, we've identified five distinguishing features that characterize successful omnichannel projects: they are intensely *cross-functional* efforts, they are the product of a clear and focused

omnichannel strategy based on key insights about customers, they require a custom-designed **supply-chain network**, they build—or acquire—**new supply-chain capabilities**, and they have a **transition plan** in place that encourages and allows the organization to test, learn, and adjust quickly.

Critically, the companies that are doing omnichannel well don't pick and choose from these characteristics—they have all five. The reason all five are critical starts with an understanding of how omnichannel became such an urgent priority for CPG companies.

Supply-chain requirements are rising fast

Last year, McKinsey asked 3,000 Americans about buying consumer packaged goods online. More than 40 percent of them had done so in the previous six months, and twice that number had gone online to do research, even if they had eventually bought their item from a store.

In the United States, online sales are growing 15 percent a year, against just 1.5 percent for overall retail sales. Last year, online sales accounted for 7.3 percent of total retail sales. The fastest growth of all is in omnichannel retailing—where retailers let customers buy something online and then pick it up in store, for example, or have it delivered from their local store. This sector is growing between 40 and 70 percent a year. Customers tend to order more when they buy online—up to four times as much as when they buy from a single-channel retailer. And when customers collect online orders in stores, they often make additional purchases while they are there.

This transformation in retailing is happening all the faster because new entrants are piling in and disrupting the market, dismaying incumbents and delighting customers. Amazon, the biggest disrupter of them all, became one of the top ten largest retailers in the United States in 2014, and it is already the number one retailer in many categories. Compared with conventional retailers, Amazon offers a much larger assortment, lower prices, more useful reviews, personalized recommendations, faster delivery, and better service—and as a result it gets better customer-satisfaction scores.

Keeping up is hard. Attempting to serve more channels in a seamless way puts a lot of pressure on the supply chain, especially when combined with rising customer expectations of speed, convenience, and service. Companies that have spent the past 20 years trimming their operations to become more efficient must now rethink their whole approach. And it's not just the physical setup that needs to change, but how an organization thinks about—and manages—its business. That calls for far-reaching changes to forecasting, inventory polices, and order-management processes.

This need for new approaches and solutions extends to CPG players, too. Many are already exploring new ways to reach their customers, such as P&G's online direct-to-consumer subscription business for its Tide PODS detergent product. But CPG companies also need to support their retailer customers in new ways: their own success depends the ability of the retailers to grow and excel in today's competitive environment. And retailers will increasingly prefer to partner with the CPG companies that are the most willing to support them in their efforts.

1. Cross-functional collaboration

The omnichannel supply chain might be better termed the *omnifunctional* supply chain. To make business decisions that drive value for the whole company, and not just for individual pieces within the organization, a company needs to look at its business and operations from an integrated perspective. All the important stakeholders need to be part of this journey.

To do that, successful companies set up cross-functional teams right from the beginning of the omnichannel journey, and they keep them in place all the way from strategy definition to implementation. They give teams the resources and authority to make quick decisions and drive progress. The functions represented will typically include marketing, customer service, supply-chain finance, brick-and-mortar store operations, strategic planning, e-commerce, and IT.

If companies attempt to run their omnichannel efforts as a collection of independent offerings, they risk making decisions without understanding the implications for the supply chain and the impact on costs. Implementation will be hard, too, since there won't be one team that can speak with authority and credibility to the entire organization.

2. Omnichannel strategy

The second must-have is a go-to-market and service strategy that defines which channels the company will serve and which services it wants to offer consumers online, offer in its own brick-and-mortar stores, and offer to its wholesale and retail customers. This strategy must be clearly segmented, with definitions for each channel, customer group, product category, and location. The strategy must also define what the organization does not want to offer.

A strong strategy also requires a deep understanding of customer preferences, habits, and motivations. That takes real work. Especially for CPG companies, the term customer has two explicit meanings: the wholesaler or retailer that is usually their direct customer, and the end consumer. Companies need to gather detailed, holistic insights into their customers' behavior and the underlying drivers. To be

truly customer centric, CPG companies must understand how they can help their customers. In order to do that, they need to collect insights for each target customer segment (B2B and B2C) and category, at each stage of the purchasing funnel. And they need to understand that the things that encourage people to buy a product one time are not always the same things that drive customer loyalty.

Without the right strategy in place, companies risk jeopardizing their omnichannel efforts by making one or more of three common mistakes. First, they may offer things their customers don't really want, and forget about things they do want. For example, not every e-commerce customer wants same-day or next-day delivery. Many care more about convenience; others want the lowest shipping charges. Some retail chains will require high flexibility of supply, while others want the cheapest price and are willing to reduce their service requirements in order to obtain it. If an organization doesn't recognize these differences, it may end up spending a lot of money without making its customers any happier. Second, companies may not understand the benefits of improved services and how to provide a profitable value proposition. Unless companies understand how the costs and potential sales benefits of offerings in different segments compare, they have to make resource-allocation decisions based on gut feelings, and they may end up scattering resources that should have been targeted as part of a segmented strategy. Finally, they may not understand how things are moving. Where will the hot spots of the future be? Where are growth and new ideas coming from? Strategy has to be flexible and forward looking, not just fitted to the present.

3. Supply-chain network

The third must-have for omnichannel success is an optimized supply-chain network. Getting that right requires a company to decide where to position inventory and how products should flow from the factory to the customer. They also need to decide which parts of the supply chain they should own and run themselves, where it makes sense to partner with other organizations, and who those partners should be.

The supply-chain-network strategy needs to reflect the DNA of the company: it should be tailored for each individual segment of the go-to-market and service strategy. One size does not fit all for the supply chain in an omnichannel market. A poorly set up network will prevent a company from achieving the required service levels, push up distribution costs, and erode profits.

Why is this hard? Because companies can't apply the same thinking used in traditional network design to the omnichannel world. If an organization focuses too much on minimizing costs and boosting efficiency, it risks creating networks that can't meet customer-service expectations.

Similarly, companies used to running huge centralized distribution centers (DCs) designed to handle large orders with long lead times can overlook alternative concepts that allow them to position inventory closer to market or to offer new direct-to-consumer flows. Omnichannel networks often require new approaches, such as city service centers, dark stores, or collaboration with retail customers and third-party logistics providers.

Finally, companies may mistakenly believe that they can find and apply a standard best-in-class solution that suits every company in the marketplace. In practice, good omnichannel supply networks are always made to measure. A company cannot copy a successful solution from another player without recognizing the unique circumstances that shaped it. For example, many players started ship-from-store offerings, but many of them learned the hard way that this new service upset their walk-in customers and was more costly than other delivery concepts, especially when applied at scale.

To avoid these traps, companies need to take a broader perspective. Exhibit 1 shows the five elements that shape an effective network strategy.



Segmentation must lie at the core of any future supply-chain-network strategy. A segmented supply chain starts with the customer and with the related channel-, product-, and location-based service strategy, and combines it with product characteristics such as value and volatility. Once the segments are defined, all supply-chain elements—such as the network, flows, and capabilities—will be designed to

fulfill the requirements of each specific segment. Other sectors have made extensive use of supply-chain segmentation to deliver the right supply-chain performance at reasonable cost. In the electronics sector, for example, HP Inc. has segmented its supply chain into "no touch," "low touch," and "high value and solutions" segments, in order to meet every customer's requirements, from cost effective to highly responsive.

Optimizing internal lead times might seem like an obvious way to reduce overall lead time, but only a few companies actually do it. Typical opportunities include faster order-to-release processes, shorter internal planning cycles, and eliminating buffers from physical processes. One company applied a range of simple changes to reduce its internal lead time by two-thirds. From the customer perspective, that ten-hour reduction meant products arrived a day faster than before.

Network structure is the heart of supply-chain strategy, as it defines the nodes and flows that connect the manufacturer with the customer. Nodes are worth particular attention right now, because many new models are appearing. That's because above all, omnichannel networks have to be faster than ever in accommodating new demands, such as when delivering direct to consumers, or helping retailers fulfil same-day delivery promises without adding huge inventory. The traditional setup of regional or central distribution centers just can't provide the speed the market demands. Few companies—with the exception of one or two e-commerce giants—have enough volume to extend their own DC network, so they need to find new ways to move faster. Faster transport, via air freight or point to point, is an alternative for next-day delivery, albeit an expensive one. The only way to achieve same-day delivery is by putting inventory closer to market—which makes next-day delivery cheaper as well. Several models have emerged for positioning inventory close to market (Exhibit 2).

None of these archetypes is the perfect solution for every company. They need to be carefully tailored to the individual omnichannel strategy, the existing DC and store network, and the organization's capabilities.

Another opportunity to put inventory close to market is vertical or horizontal *collaboration*: drawing on inventory from suppliers, wholesale and retail customers, or other retailers. All market players need to shorten lead times, but it's not feasible or efficient for them all to build their own infrastructure in every major city. That's why successful companies have started to collaborate. Collaboration is an especially important opportunity for CPG companies within the omnichannel environment, even if they don't operate their own direct-to-consumer business. By enabling retail customers to excel and grow with new services such as access to broader assortments, drop shipments, flexibility of promotion volumes, or high-speed

Exhibit 2	A number of models have emerged for positioning inventory close to market.		
	Associated flows	Assortment	Main purpose
Central distribution center (DC)	E-commerce: ship to customer Replenishment to stores Replenishment to wholesale customers	■ All SKUs	Central stocking pointEfficient processesEconomies of scale
Regional or national DC	E-commerce: ship to customer Replenishment to stores Replenishment to wholesale customers	■ Fast-moving SKUs ■ Partially long-tail SKUs (different strategies possible)	■ Balance between speed and scale for fast-moving SKUs
City service center or dark store ¹	E-commerce: ship to customer Out-of-stock delivery to hub or spoke stores Replenishment of stores (potentially)	 Maximum 8,000–10,000 SKUs Typically SKUs requiring higher service level (A items, promotions) 	Enables same-day and next-da delivery for key areas or cities Out-of-stock responsiveness Short replenishment lead time for key SKUs
Hub store	Walk-in customer E-commerce: ship from store Replenishment of spoke stores	Displayed SKUs (typically more than in spoke stores) Key additional e-commerce SKUs	Enables same-day and next-da delivery for key areas or cities Short replenishment lead time for key SKUs Serves traditional walk-in customers
Spoke store	■ Walk-in customer ■ E-commerce: ship from store	■ Displayed SKUs that are sold in store	Enables same-day and next-day delivery for key areas or cities Serves traditional walk-in customers

¹ Includes extended backrooms of stores as long as they have some kind of warehouse-management process in place.

replenishment, they can participate in customers' success and drive revenue and profit up. Examples include Amazon and P&G sharing facilities, and Zalando and Adidas Group sharing inventory. Retailer Nordstrom has connected some of its suppliers to its e-commerce website, allowing direct delivery of long-tail products from the supplier to the end consumer. With this collaboration, Nordstrom can offer a much wider range of products without stocking them, while the suppliers can access more customers and sell more products than before.

Collaboration leads perfectly into the next supply-chain question: should a given element in the supply chain be run *in-house or outsourced*? And how does a company find the right outsourcing partner? Leading companies are moving in both directions. Logistics-service providers have been taking on the management

of important parts of many supply chains for years, and their offerings continue to evolve. But some companies are also deciding to take back control of more supply-chain assets. Notable examples include Nike, which just opened its own distribution center of the future, and Amazon and Argos, which have started to build their own last-mile delivery fleets.

The next important element is *disruptive technology*. The Internet of Things, 3-D printing, big data, advanced robotics, and virtual or augmented reality will fundamentally change the way CPG companies think about production and external product supply. New technology will drastically change the economics of low-cost country sourcing, for example. Near-shoring and local production might become dominant again in many mature markets, drastically cutting reaction times and boosting flexibility. This trend is already under way. Adidas recently announced that it is opening a factory in Europe, and before long, 3-D printers will enable high-quality, cheap production in store or at home. Disruptive technologies will also help companies with operations in mature markets to increase efficiency, speed, and flexibility. As an example, reduced setup times will ease short-term changes in production volumes and more frequent changeovers, allowing companies to react faster to demand changes caused by promotions and similar events. A more detailed perspective on disruptive technology is described in the article "Breakthrough technologies fundamentally change the game (page 27)."

4. Supply-chain capabilities

The fourth must-have for omnichannel success is the next generation of the supply chain capabilities. The capabilities required to run a segmented omnichannel supply chain are significantly different from those that have served many companies well in the past. Some capabilities have evolved over time to reflect the new environment, but many—such as advanced analytics in planning or distributed order management—just did not exist under older models, and they have to be built from scratch. In our experience, many of the most vital capabilities, such as forecasting, supply and inventory planning, and multinodal order management, are the ones that are least developed. Worse, many players don't know which capabilities they really need.

For example, many CPG companies have little experience in the use of insights from emerging data sources (for instance, e-commerce websites or social media) or consumer-flow analysis to gain insights into consumer preferences. And if they do gain such insights, they often struggle to translate them into improved supply-chain performance (for example, through dynamic pricing, demand shaping, or demand sensing).

Similarly, physical supply-chain processes such as warehousing and transportation are often not fast or flexible enough to cope with the large numbers of smaller orders that

omnichannel requires. Stores don't have the processes for in-store fulfillment and the underlying operating model is unclear. The result is high costs and unhappy customers.

Capabilities are more than just systems or software. Companies also need to transform processes and enable people to operate efficiently in the omnichannel world. McKinsey research and observations in the field show that successful companies have mastered six core capabilities to run their segmented omnichannel supply chains.

Analyzing consumer and product flows. This might seem a straightforward requirement, but few companies really create benefit from it. Some are struggling to ask the right questions, others are not using the data at all. Consumer and product-flow analytics includes basic elements, such as understanding cost-to-serve expenses for different service levels combined with an estimation of the benefits. It also includes demand shaping through dynamic pricing and a deep understanding of the underlying drivers of consumer behavior.

Real-time inventory visibility. In a decentralized network, a company needs to be able to see inventory across channels, and potentially across companies, so that it knows where products are available and how fast it can get them to customers. New software solutions aim to integrate the business processes, systems, and stock files across companies to eliminate inefficiencies and maximize sales. Combined with a strong distributed **order-management** system to determine the optimum node from which each order should be fulfilled, such systems make inventory more accessible. And that means better service, more sales, and lower costs.

In a decentralized network with many nodes, it is essential to put the right inventory in the right place at the right time. Without this ability, companies must choose between high inventory levels—and the associated high storage costs and high risk of obsolescence—or stock-outs and disappointed customers. Best-in-class *planning and inventory management* uses advanced analytics and machine learning to predict point-of-sale demand per SKU for specific stores, or specific zip codes, by day and sometimes even by hour. Combined with quick, smart replenishment processes for stores and DCs, this reduces the stock required for individual nodes by enabling a sort of just-in-time delivery.

Planning isn't just about software and systems. As important as having the right tools is having the right people, ones with a broad understanding of the integrated marketplace and supply chain. Systems can help get the best out a company's people—for example, by automating basic tasks and allowing people to concentrate on managing exceptions and optimizing the system as a whole.

Efficient and rapid node and store operations have become increasingly critical, but companies also have to make trade-offs among speed, cost, and flexibility. Warehouse automation using robotics and automatic guided vehicles can help, but the right level of automation and the complexity of flows will depend on parameters such as order size and number per carton. This can be easy to get wrong. One European retailer built a new automated e-commerce DC with highly complex systems and flows. As key parameters changed during the implementation, the DC struggled to achieve the foreseen volumes, which led to a steep sales decline in the most important season of the year.

Transport optimization is another increasingly important capability. Omnichannel supply chains will involve many more flows from manufacturer to the consumer, via multiple routes, in more decentralized networks, and with a large number of nodes. They may involve more partners and more services, too, such as drop shipments from suppliers to the end customer.

Industry leaders have also started to make use of additional sources of information to actively optimize routing of their vehicles. United Parcel Service, for example, uses traffic information to change delivery routes to optimize vehicle utilization and schedule compliance. Other companies run daily e-auctions to find the cheapest provider for certain delivery services.

The last, and often forgotten, capability is the right **operating model**. A company's operating model means more than the design of its organization. It also includes performance management, incentives, responsibilities, and decision rights. If these elements aren't aligned with the wider goals of the business, it will have a hard time moving in the right direction. At one major retailer, for example, responsibility for e-commerce order fulfillment from DCs and from stores was allocated to different departments with different incentives. As a result, the process and resource allocation for in-store fulfillment was so poor that every order fulfilled from the store cost substantially more, making the process extremely expensive and unattractive.

5. Transition plan

Last, companies need to get the transition right. In such a fast-changing environment, companies need to be quick and flexible during the implementation of the new segmented supply chains. They also need to change their approach and mind-set. Transition in the world of omnichannel requires an iterative approach, with frequent, rapid changes and adjustments. That requires all the traditional skills of project implementation and change management, with the addition of three key elements.

Implement smaller pieces. Large transformations, taking several years before new concepts can be implemented with a big bang, don't work in a fast-changing environment: their impact might come too late to deliver its promised benefits. That does not mean that companies should not have a bigger plan for the whole transformation; it means that they need to learn to implement smaller pieces quickly without waiting until everything is ready.

Test and learn. Companies should use pilots and experiments, to test and refine the strategy and concepts on a small scale before rolling them out across the entire organization. This includes new service offerings to the consumer as well as supplychain capabilities and concepts. While testing in a small setting, companies learn quickly, learn how to operate the new capabilities, and learn if the new concepts really enable the aspired business value.

Change the mind-set of the organization. An agile, flexible, and fast-changing supply chain requires a new organizational mind-set. It will require big companies to think and act more like start-ups, which have new ideas; it will require companies to try new ideas in a small context, to see if they work. Companies must encourage people to try new things, allow for mistakes, and be prepared for some experiments and pilots to fail. There will always be trade-offs among speed, stability, and resources, but finding the right balance will have a huge impact on the success of companies in an omnichannel environment.

For consumer-goods companies, omnichannel isn't one thing, but many. The most successful examples today differ widely in their scope, design, and execution. What these companies share is a commitment and willingness to address each of the five key elements described in this article.

1 Procter & Gamble launches direct-to-consumer subscription business," Business Insider, July 26, 2016, businessinsider.com.

Raj Kumar is a partner in McKinsey's New Jersey office, **Tim Lange** is an associate partner in the Cologne office, and **Patrik Silen** is a partner in the London office.

Copyright © 2016 McKinsey & Company. All rights reserved.