

Consumer & Retail Practice

Into the fast lane: How to master the omnichannel supply chain

Consumer-product and retail companies looking to jump into the fast lane of modern shopping will need to overhaul their operations to master the seven building blocks of an effective omnichannel supply chain.

by Claudia Graf, Tim Lange, Andreas Seyfert, and Noortje van der Wijden



Omnichannel shopping has become the new normal for almost all consumer products and is likely to remain so for the foreseeable future. Through omnichannel shopping, consumers can shop across multiple sales channels—online using their laptop or phone, in physical brick-and-mortar stores, or at wholesale stores—while benefiting from a seamless, holistic consumer experience. This new normal has important implications for consumer-product companies, including direct-to-consumer businesses such as retail, grocery, and consumer-packaged-goods companies. To survive, these companies must accept the challenge of delivering a great consumer experience across sales channels and shape their supply chains accordingly. Most companies' supply chains predate omnichannel, however, and layering the newly required capabilities on top of legacy systems can be difficult. Organizations need to undertake broader and deeper transformations to meet rising consumer expectations in consumer experience, individualization, and delivery speed, while keeping delivery costs under control.

Our experience in working with consumer-product and retail companies across categories, including grocery, suggests that organizations looking to

master omnichannel supply chain excellence should focus on seven key building blocks. These building blocks—which cover strategy, information flow, the physical flow of products, process automation, and last-mile delivery—are the principal subject of this article.

The challenge is significant, but consumer-product companies that respond effectively to the changing market environment have an opportunity to gain an advantage over their peers. Players that fail to make this shift will struggle to remain competitive.

The importance of omnichannel: E-commerce is booming, but physical stores remain important

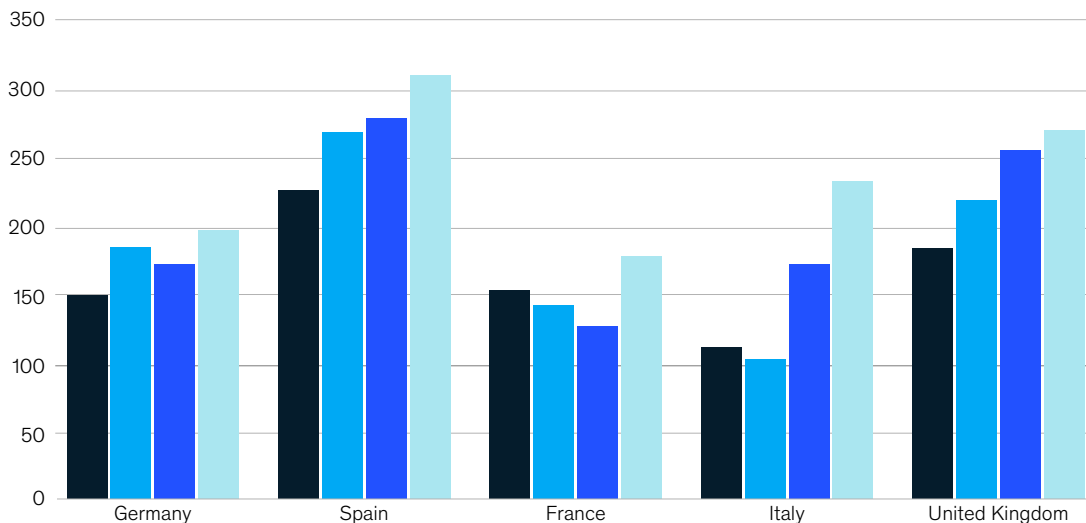
E-commerce was booming even before the pandemic, and the COVID-19 crisis has increased the pace of growth (Exhibit 1). This shift does not necessarily spell the end of brick-and-mortar stores, however. Forward-thinking consumer-product companies have been using their stores to educate consumers on product offerings, reinforce their brands' positioning, and support e-commerce sales. Despite the pandemic, for example, Nike opened a 26,000-square-foot flagship store in

Exhibit 1

Retail sales online or via mail order grew quickly in 2020.

Index of first month for each quarter in 2020 for five European countries, 2015 = 100, retail sales via mail order or the internet

■ January 2020 ■ April 2020 ■ July 2020 ■ October 2020



Paris that features a “digitally empowered” end-to-end consumer experience.¹ Prepandemic research found that opening a new location increases traffic to a retailer’s website by 37 percent in the following quarter.² This complementarity is why it is vital for consumer-product companies to invest in—and master—omnichannel supply chains that can deliver a great consumer experience across multiple channels.

The seven building blocks of omnichannel supply chain excellence

Most companies will need to fundamentally transform their supply chains to deliver omnichannel excellence, but the effort will be worthwhile. The remainder of this article lays out the seven essential

building blocks for the omnichannel supply chain of the future (Exhibit 2).³

The first and most important building block is a customer-centric supply chain strategy. This building block is followed by three strategic supply chain elements—the network and ecosystem of the future, operating model, and digitization and process automation—and also three key supply chain processes—end-to-end planning and information flow, omnichannel fulfillment through node⁴ operations, and omnichannel fulfillment through transportation. Consumer-product companies looking to master omnichannel excellence should ask themselves some key questions (see sidebar, “Essential questions

¹ Sheena Butler-Young, “Why Nike opened a sprawling Paris flagship in the middle of a pandemic,” *Footwear News*, July 29, 2020, footwearnews.com.

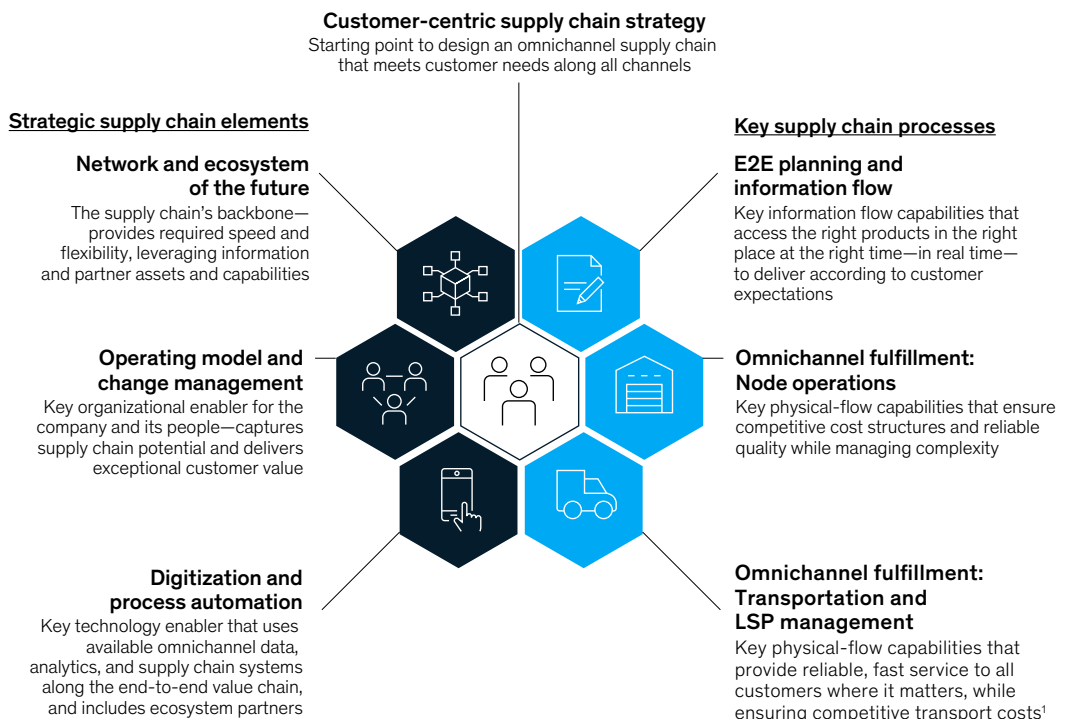
² “Physical stores key to retail success, study finds,” International Council of Shopping Centers, October 15, 2018, icsc.com.

³ While the focus of this article is on supply chains, a complete omnichannel operational overhaul would also include an examination of the upstream value chain (sourcing, product development, and production), particularly if e-commerce is a large share of the business.

⁴ A node is any location that can store and ship products. This could be a shop, a warehouse, or even a pop-up venue.

Exhibit 2

The seven key building blocks of future omnichannel supply chains combine best practices with digital innovation.



¹Logistics service provider.

Essential questions for each of the building blocks of omnichannel excellence

Consumer-centric supply chain strategy

- How many supply chain segments are required to deliver the supply chain mission, and what is the objective of each?
- What is the customer offering across different segments, and how can we differentiate ourselves from competitors?
- How can we tailor the assortment to a retailer or to a channel?
- What are the key supply chain risks, and how can we best prepare for disruptions?

Network and supply chain ecosystem of the future

- What is the physical flow of goods through the network? What is the impact of different product–supply speed models?

- How are suppliers managed and integrated to support an agile upstream supply chain that responds quickly to changes?

- Is the distribution network designed for each channel individually, or would an omnichannel network be beneficial? What is the right composition of distribution centers (DCs), new node types, and partner locations?

- How can inventory be shared across channels? Does each channel have its own inventory?

- What are key areas for customer collaboration that could improve information exchange and product flow along the value chain?

End-to-end planning and information flow

- What are the different demand signals in the omnichannel environment, and

how can they be captured to predict demand potential through advanced analytics? How can we combine them into an end-to-end (E2E) marketplace perspective?

- What is the optimal inventory level at each stage of the value chain? How can we actively manage inventory to increase availability and keep cash requirements under control?

- How can we best synchronize the product supply with customer demand in stores, in DCs, and with partners?

- How can we align the different organizational entities and plans at key milestones? How can we manage trade-offs and locate and prioritize customers, channels, and orders?

- How can we ensure real-time visibility and accessibility of inventory across all channels and locations?

for each of the building blocks of omnichannel excellence”).

Consumer-centric supply chain strategy

Being truly consumer centric—meeting customer needs across all channels and grounding all decisions in deep understanding of the consumer—is a widely held objective, but it is difficult to achieve. Common pitfalls include a failure to listen to consumers and a one-size-fits-all supply chain, which leads to a lack of differentiation of services and, consequently, higher costs.

First, companies need to be absolutely clear about which consumer segments they aim to serve. Most companies understandably want to deliver a great service to all potential consumers, but resources are limited; companies need to decide which consumer

segments matter most so that they can focus their resources on the most important targets.

After they have identified their target segments (ideally through cross-functional decision making), omnichannel players need to figure out what to deliver to each of these segments. This decision will, in turn, determine how many supply chain segments they need.

For example, a leading global sportswear player has implemented a state-of-the-art supply chain strategy, clearly differentiating among individual segments and defining distinct supply chains for each segment. The company’s most prestigious segment is premium consumers in cities such as London, Berlin, or Paris. These consumers are offered a premium service, which includes a two-

Essential questions for each of the building blocks of omnichannel excellence (continued)

Omnichannel fulfillment: Node operations

- How can we achieve warehouse excellence in a more complex environment?

- How can we manage returns in an efficient and effective way?

- How can we enable the whole downstream supply chain for omnichannel and optimize in-store layout and processes to enable local fulfillment while providing a great customer experience?

Omnichannel fulfillment: Transportation and logistics-service-providers management

- What do we need to manage transport operations efficiently in an increasingly demanding world? How do we keep transport cost under control and create end-to-end transparency of product flows?

- What are the right logistics partners for the different supply chain segments? How do we get competitive rates and services?

Operating model and change management

- How do we design supply chain processes to support omnichannel optimization? How can digital innovation be integrated in the process design?

- How can we adjust the organizational structure to capture cross-channel benefits and make change happen?

- Which additional skills are needed to enable the future organization? How can we best address the cultural change toward omnichannel behavior?

- How should performance of the E2E supply chain be measured? How can we incorporate the omnichannel dimension, measuring the joint

performance rather than individual channels?

Digitization and process automation

- What software and other tools are needed to enable the omnichannel supply chain?

- How can we capture data and use them along the value chain? How are legacy systems integrated? How do we integrate into an ecosystem with our partners?

- How can we contextualize data to conduct relevant analyses? Are operational data consolidated and accessible to the right decision makers?

- How can we employ advanced digital tools such as robotic-process automation, blockchain, and the Internet of Things to enable omnichannel optimization?

hour delivery window on special items, and early access to newly launched products. The supply chain for this segment is therefore focused on fast delivery and reliability. Consumers living in rural areas cannot access the same benefits; the supply chain of this segment has a much stronger focus on efficiency, and standard delivery times are two or three days.

Network and supply chain ecosystem of the future

The shift to omnichannel is forcing consumer-product companies to rethink the supply chain ecosystem they are operating in. As described in a previous article,⁵ players need to choose the right

combination of distribution centers (DCs), new node types, and partners to deliver their consumer-service aspirations within each channel.

The supply chain ecosystem should be an end-to-end collaboration involving all stakeholders, from suppliers to consumers. Companies are only able to deliver on ever-changing consumer requirements if information is shared along the entire value chain, and if all network assets and capabilities are fully leveraged. One example of the importance of collaboration is the growing demand for late customization;⁶ suppliers produce a “blank sample,”

⁵ Manik Aryapadi, Ashutosh Dekhne, Wolfgang Fleischer, Claudia Graf, and Tim Lange, “Supply chain of the future: Key principles in building an omnichannel distribution network,” January 15, 2020, McKinsey.com.

⁶ Late customization refers to customer requests for customization as part of an online order; for example, by requesting a specific color or inscription.

which is stored as inventory and customized shortly before delivery.

Collaboration is also a great driver of innovation. For example, consumer expectations have forced consumer-product companies to move from simply shipping products from a warehouse or distribution center to more innovative fulfillment options, such as shipping directly from production facilities or dark stores.⁷

Another example of retail partner-driven innovation is “inventory sharing,” as pioneered by Adidas and Zalando, a European e-commerce platform.⁸ The two companies have adopted a partnership model that involves a shared pool of products; if a specific Adidas product is unavailable at Zalando, the consumer is automatically redirected to the Adidas website. Alternatively, Zalando may deliver products ordered on the Adidas website in order to decrease lead times.

End-to-end planning and information flow

The shift to omnichannel involves an increase in operational complexity; omnichannel operations involve multiple sales channels, multiple network nodes, and a decentralized inventory. Meanwhile, customers expect to be able to access the right products in the right places and in real time. Therefore, omnichannel operations require thoughtful end-to-end planning, which requires significant changes to three key elements:

- **Forecasting** should be done by market and product group and then disaggregated to channel level. The overall forecast, for example, would predict the total volume of sports shoes to be sold in London. This total number would then be disaggregated into those sports shoes the company expects to sell in stores, through e-commerce, and through other channels. Finally, the forecast needs to take into account omnichannel effects such as cross-channel cannibalization; for example, customers who

have a great e-commerce experience may stop purchasing items in stores.

- **Inventory** should not be dedicated to one channel; companies should have cross-channel inventory pools. Algorithms—which should take into account factors such as forecast demand, the accuracy of past forecasts, lead times, and lead-time reliability—should define optimum inventory levels at each node in the supply chain, including in DCs and stores and with partners. Inventory levels should then be actively managed to maximize cross-channel availability and optimize cash flow. Consumers should have real-time visibility into inventory, and orders should be fulfilled efficiently through continuously reoptimized allocation across all channels and locations.
- **Information flow** should be seamless among functions, channels, and systems. Players aiming for a truly omnichannel supply chain need to fully digitize cross-channel planning processes and tools, but they can choose whether to start this on one channel or to digitize and move to an omnichannel supply chain simultaneously.

Omnichannel fulfillment: Node operations

The shift in volume from in-store purchases to e-commerce forces consumer-product companies to reevaluate their fulfillment networks,⁹ which are integral to their supply chains. Omnichannel players need to build key capabilities regarding the flow of products to make sure they achieve competitive costs and reliable quality while managing the complexity of omnichannel operations.

Companies looking to add e-commerce offerings to their offline business often add the operations of the new channel to the existing supply chain without sufficient consideration of the new channel's distinct requirements. The physical flow of e-commerce products, for example, is very different from the flow of products within a distribution

⁷ Dark stores are large retail facilities that resemble conventional stores but are not open to the public. They are used to hold stock and to fulfill online orders via delivery or click and collect.

⁸ “Multi-channel pilot in Paris: Zalando delivers same-day for adidas.fr,” Zalando, August 19, 2019, zalando.com.

⁹ “Supply chain of the future,” January 15, 2020.

center. E-commerce buyers generally expect very short lead times, while cost is more important than speed in the shipping of seasonal stock to the DC of a wholesaler. Stores, DCs, and e-commerce also have different units of measurement; DCs typically think in terms of full truckloads or pallets, while e-commerce is primarily concerned with individual units.

A supply chain that is purpose-built for omnichannel will take into account the varying channel requirements. Warehouse automation is a good option¹⁰ and can improve speed, quality, and efficiency.

Cross-channel operations should be organized to maximize the value-capturing potential of each channel, including traditional brick-and-mortar stores. In an ideal omnichannel consumer experience, different points of sale are fully connected and integrated. Today's consumers expect a seamless shopping experience across channels, such as click-and-collect services that allow them to order online and pick up in a store. This expectation means that consumer-product companies also need to reassess in-store processes and layouts to ensure a great consumer experience if both online and offline consumers are served in the same store.

Omnichannel fulfillment: Transportation and LSP management

Transportation and the management of logistics-service providers (LSP) are also significantly more complex for companies with multiple channels to serve, due to the different requirements of each channel. The orders of brick-and-mortar consumer-product companies can generally be booked in advance and delivered by truck. E-commerce services, on the other hand, must process a high number of individual orders at short notice using transportation modes such as couriers or postal services. Omnichannel players need to ensure that they can provide reliable, fast service to all customers while ensuring competitive transport costs.

Success requires organizations to identify the right logistics partners for each segment of the supply

chain. Omnichannel players need partners who can deliver small shipments quickly, reliably, and relatively inexpensively, but they likely also need partners that can deliver specialized services, such as "try at home" or electronics installation. Organizations need to carefully source and manage these numerous partners to keep costs down and ensure a consistently high quality of service.

Last mile is generally the most costly transportation segment. Success in this segment requires efficient IT systems, local fulfillment networks, and carefully chosen third-party logistics partnerships. Players need to find solutions that meet consumer expectations on service and lead time, while also offering full transparency about, and control over, costs. These solutions may include leveraging preexisting brick-and-mortar stores or using nontraditional approaches such as bicycle deliveries or local couriers.

To facilitate the supply chain transformation detailed above, and to ensure that each stage runs smoothly, companies also need to invest in two additional supply chain setup elements. These are the focus of the final two sections of this article.

Operating model and change management

To realize the full benefits of omnichannel, companies must undertake a full transformation of their operating models,¹¹ including a redesign of processes, structures, mindsets, capabilities, and performance management. This building block is key to ensuring that the company—and its people—can capture the full potential of the supply chain and deliver exceptional customer value.

As a first step, players need a cross-channel omnichannel team; without such a team, it is very difficult to break down siloed thinking and operations. Consider inventory management when demand exceeds supply or capacity, for example. To ensure good consumer service and enable profit-optimizing inventory allocation, players need one person or team to take ownership of all inventory across channels. The full team also needs to be trained—and given incentives—to optimize for the company as a whole, rather than for any individual channel.

¹⁰Ashutosh Dekhne, Greg Hastings, John Murnane, and Florian Neuhaus, "Automation in logistics: Big opportunity, bigger uncertainty," April 24, 2019, McKinsey.com.

¹¹ibid.

In addition, companies need to be structured in a way that enables intense collaboration with value-chain partners. Assigning clear end-to-end responsibility—from supplier to consumer to the omnichannel team—is an effective way to do this. A leading apparel and footwear player, for example, has set up “city teams” that are responsible for everything from supply management to cross-channel inventory management.

Many companies assume that a full transformation of their operating model will be highly complex, so they tend to apply incremental improvements rather than launching a full overhaul. Ultimately, this approach will not be sufficient to deliver on the opportunity of omnichannel. Instead, companies can simplify their operating-model transformation by taking an agile approach, which breaks the process down into manageable chunks. This process involves built-in test phases and many opportunities to learn and improve.

Digitization and process automation

As this article has demonstrated, technology and effective data-and-analytics strategies that incorporate the right partners are key enablers of an

omnichannel supply chain. Players need to ensure that they have the software and tools to capture the requisite data and, crucially, to leverage it.

Rising consumer expectations are pushing consumer-product companies to digitize and automate. The demand for same- or next-day delivery is increasing, for example, at the same time that orders are increasing in both volume and complexity. To meet these expectations, organizations need order-management processes with a high degree of automation and digitization across order capture and sourcing. Digitization and automation are also needed to enable the required instant updates on order status.

Seamless integration of systems and planning tools across channels is also crucial, both to meet consumer expectations and to facilitate management and decision making. For consumers, cross-channel system integration is essential to provide real-time information on product availability and delivery times. For companies, effective cross-channel decision making requires the integration of planning tools with real-time simulation capabilities, especially in situations of scarcity.

Rising consumer expectations are pushing consumer-product companies and retail players to digitize and automate.

The implementation of digitization and automation strategies must be holistic. Separately managed initiatives often add up to less than the sum of their parts and are not sufficient to deliver the required step change in consumer service. But it is equally vital to remember that simply adding smart analytics and automation will not be enough—a fully redesigned operating model is necessary to drive these changes through and deliver omnichannel excellence.

Starting the omnichannel journey

Mastering omnichannel to become a best-in-class player is clearly a significant undertaking, and there is no one-size-fits-all approach to prioritizing. However, a "crawl, walk, run" approach can be an effective way to undertake, and then complete, the omnichannel journey (Exhibit 3).

The aim of aspiring omnichannel players—those at the "crawl" stage of the journey—should be to get the basics right. Above all, it is crucial to

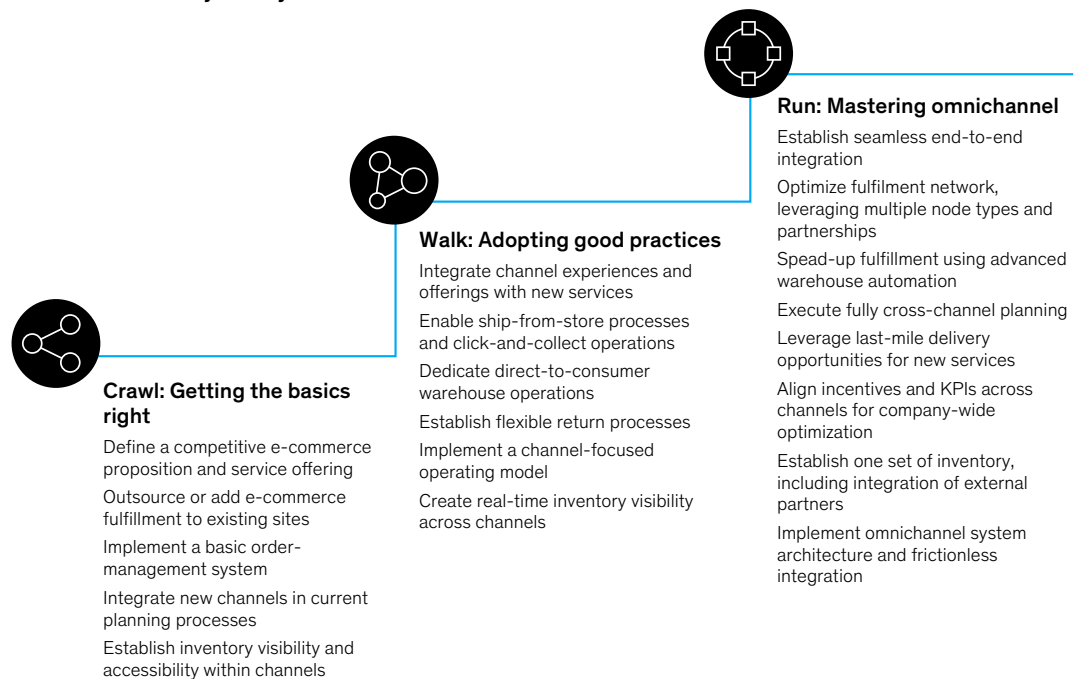
define a competitive service proposition regarding the omnichannel journey; companies need to be clear on key issues such as which services to offer and their key differentiating factors. Once players have mastered the basics, they should shift focus to adopting omnichannel best practices and then—finally—to developing distinctive omnichannel offerings. At the end of this process, the operating model will work seamlessly to align incentives and key performance indicators (KPIs) to avoid competition for limited resources. This approach ensures that the various channels are complementary, which is the driving principle of omnichannel.

Consumer-product companies looking to define a starting point for their omnichannel transformation will need a structured maturity assessment on each of the seven building blocks. This assessment will also be instrumental in defining a road map and developing initiatives that address the areas with the potential to add the highest value. The

Exhibit 3

Companies can benefit by using a 'crawl, walk, run' strategy.

The omnichannel journey



final step before implementing the road map is to develop an effective governance model and powerful change story.

Companies that want to deliver a great consumer experience across multiple sales channels will need to comprehensively rethink many of their traditional supply chain approaches, especially in these

times of economic uncertainty. The challenge is considerable, but so is the opportunity—companies that get the seven building blocks of omnichannel right will grow their consumer base and build a compelling, long-term competitive advantage.

Claudia Graf is a consultant in McKinsey's Vienna office, **Tim Lange** is a partner in the Cologne office, **Andreas Seyfert** is a senior expert in the Berlin office, and **Noortje van der Wijden** is a consultant in the Amsterdam office.

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