

Paper, Forest Products & Packaging Practice

How the packaging industry can navigate the coronavirus pandemic

The industry is a key player as consumers and other sectors adapt to the COVID-19 outbreak. Here is a three-step plan that can help packaging companies through the crisis.

by David Feber, Oskar Lingqvist, and Daniel Nordigården



As the coronavirus outbreak has spread and its humanitarian impact has grown, industries that help provide for essential needs, such as getting food and required supplies safely to consumers, are increasingly affected. With food packaging being the packaging industry's largest area of activity, the \$900 billion per year worldwide industry is on the front lines. The coronavirus crisis has already led to some of the sharpest declines in recent times in demand for certain types of packaging while accelerating growth for others—such as packaging for e-commerce shipments that are emerging as lifelines in this new world. Such changes are presenting many packaging companies with a new set of challenges. In this article, we present a three-step plan to help them navigate through the crisis.

Packaging demand is expected to move through three phases during the outbreak

We expect that the impact of the coronavirus crisis on the packaging industry will be mixed—and this pattern has already been playing out in countries such as China and South Korea, which have been the first to confront the pandemic. Demand will rise sharply for packaging for groceries, healthcare products, and e-commerce transportation. At the same time, demand for industrial, luxury, and some B2B-transport packaging could decline. The impact on packaging players will depend on their portfolios and exposures to different regions, end uses for packaging, and substrates (Exhibit 1). As the pandemic tightens its grip on other regions,

Exhibit 1

The COVID-19 impact on packaging players will likely be mixed, depending on converters' portfolio position.

Change in expected US consumer spend per category, not exhaustive, net intent¹

■ Increase ■ Stay the same ■ Decrease

Impact on packaging substrate, not exhaustive		
Groceries	+14	● Flexible, rigid plastics and corrugated grocery packaging
At-home entertainment	+3	● Corrugated and protective packaging
Household supplies	+1	● Plastic bottles and metal aerosols
Snacks	-7	● Flexible films (eg, oriented polypropylene)
Personal-care products	-11	● Tubes, bottles, jars, and caps/closures
Takeout/delivery	-22	● Food-service packaging (eg, plastic, paper)
Alcohol	-23	● Metal and glass bottles
Consumer electronics	-36	● Corrugated and protective packaging
Skin care and makeup	-38	● Plastics, tubes, glass, and jars
Footwear	-47	● Corrugated and microflute packaging and cartons
Apparel	-50	● Corrugated and microflute packaging and cartons
Jewelry	-53	● Folding cartons and paper boxes
Out-of-home entertainment	-63	● Food-service packaging

¹Net intent calculated by subtracting the % of respondents stating they expect to decrease spending from the % of respondents stating they expect to increase spending; n=1,402, sampled and weighted to match US general population aged ≥18 years. Question: Over the next 2 weeks, do you expect that you will spend more, about the same, or less money on these categories than usual?

Source: McKinsey M&S COVID-19 US Consumer Pulse Survey, Mar 16–17, 2020

packaging demand in those regions is likely to move through three phases.

Phase one is the period of initial shock, which typically lasts at least four weeks but can extend for much longer. Changing consumer sentiment¹ translates to cutbacks in a number of categories, reducing demand for certain types of packaging. The immediate demand shocks to the packaging industry are less drastic than for sectors such as travel and hospitality, but they could be substantial in several areas:

— **Industrial, bulk, and transportation packaging.**

Demand for this type of packaging is closely linked to the trend in GDP and the level of industrial activity, so the sharp decline related to COVID-19 leads to a reduction in packaging demand. However, some of this is being offset by industrial customers stockpiling purchases of intermediate bulk containers and drums, which causes a temporary spike in demand. At the same time, several segments—such as packaging for the food and pharmaceutical industries—continue to see robust demand. High growth in demand for corrugated packaging for e-commerce and grocery deliveries is also offsetting some demand lost elsewhere with industrial customers.

— **Consumer packaging.**

Demand is likely to shift drastically in the food area as the pandemic shuts down restaurants and food-service outlets. Consumers will thus continue to move to grocery purchases, for which packaging demand will rise. Consumers' wishes to stockpile and their panic purchases of food, beverages, and home-care necessities have accentuated this trend. But demand for nonfood and premium-good packaging is being hit as stores are required to close and as consumers start to cut back on their spending.

— **Healthcare packaging.** Demand will rise across different healthcare-packaging types and related substrates, including flexible blister foils, pumps, closures, and rigid plastics. Similarly, demand will rise for packaging used in dietary supplements, such as vitamins, and for essential supplies, such as allergy medication, that consumers will need in a lockdown situation.

The packaging industry also needs to be ready for second-order effects triggered by the COVID-19 crisis. As crude-oil prices have fallen (partly because of the pandemic's effect on demand), the cost of oil-based raw materials, such as plastic resins for the packaging industry, is likely to fall. The strengthening of the US dollar has improved the relative competitiveness of packaging-raw-material makers based elsewhere. At the same time, border closures are leading to challenges for companies with extended supply chains and those that rely on teams to be able to move internationally to overhaul equipment. These developments spell a period of high uncertainty for many areas of packaging demand and different packaging substrates. The unpredictability of how government actions to mitigate the adverse economic effects of the pandemic might play out further clouds the outlook.

Phase two covers the period when countries and regions bring the pandemic under control. The length of this period is, of course, uncertain, and it is realistic to consider a number of scenarios for its duration, from a few quarters to longer than one year.² Reduced household disposable income and weakened corporate balance sheets are expected to lower demand across most end-use segments for packaging, with the exception of healthcare and certain food categories.

During this phase, we expect certain consumer behaviors, such as stockpiling, will slow while others, such as grocery purchases via e-commerce,

¹ "Survey: US consumer sentiment during the coronavirus crisis," April 2020, McKinsey.com.

² Kevin Buehler, Arvind Govindarajan, Ezra Greenberg, Martin Hirt, Susan Lund, and Sven Smit, "Safeguarding our lives and our livelihoods: The imperative of our time," March 2020, McKinsey.com.

The speed of packaging players' recovery will be differentiated largely by segment, depending on the degree of disruption among the segment's customers and challenge to different players' supply chains.

will accelerate. Key implications for packaging include nongrocery retail likely coming to a near halt, demand for low-cost private-label goods likely increasing, and demand for high-end packaging likely declining. The fight to defeat COVID-19 could also start to affect packaging choices, favoring packaging designs and substrates that demonstrably address hygiene and consumer-safety concerns—for example, those that minimize the possibility of the virus's survival on the packaging surface.

Packaging players also need to ready themselves for other developments. Depending on the severity and duration of the crisis, lower household disposable income and weakened corporate balance sheets at the companies that are the customers of the packaging industry could result in significant pressure to reduce selling prices and costs along the whole packaging-industry value chain. Companies need to prepare for scenarios under which small and medium-size enterprises and heavily indebted companies could end up bankrupt—events that could sweep away customers, subsuppliers, and printers. In our view, the severity and duration of phase two will be highly dependent on governments' actions to mitigate adverse economic effects.

Phase three is the rebound, in which we expect to see packaging demand gradually return. Some sectors, such as packaging for food service, should see a rapid rebound of demand. For others, the rebound is likely to be slower, as consumers are likely to be more hesitant to return to luxury products, travel, and the hospitality industry. Consumers' purchasing behavior could stay soft as businesses emerge only weakly from the crisis and employment levels suffer.³ The speed of packaging players' recovery will be differentiated largely by segment, depending on the degree of disruption among the segment's customers and challenge to different players' supply chains.

How will COVID-19 affect the industry's megatrend drivers?

The COVID-19 crisis is likely to alter some of the megatrends at work in packaging⁴ (Exhibit 2). Consumers across the globe are going to be increasingly inclined to buy their products through different channels from those they used before the pandemic, leading to a strong acceleration of e-commerce shipments and other home-delivery services. US consumers are changing their behavior in the light of the crisis: research suggests they intend to double their spend

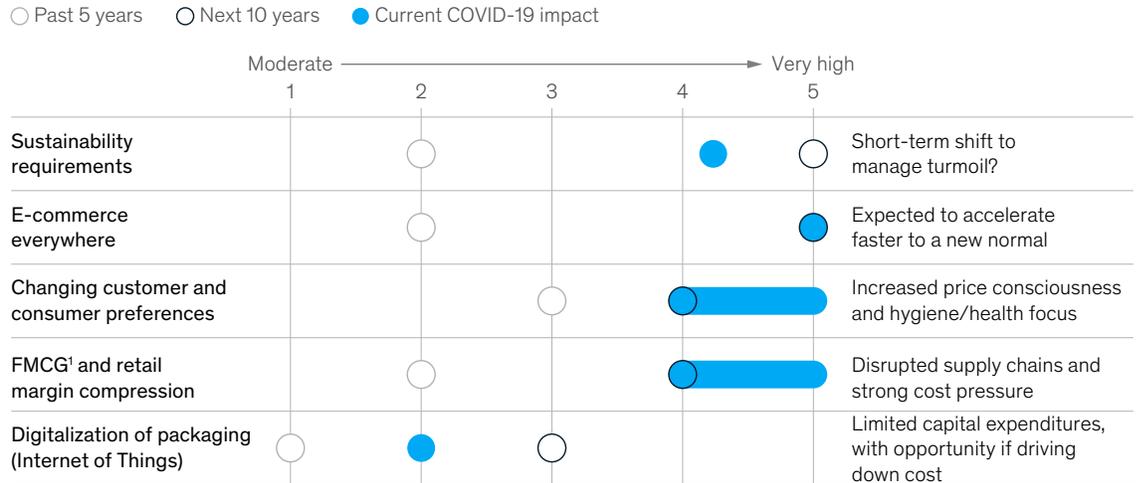
³ See Matt Craven, Linda Liu, Mihir Mysore, Shubham Singhal, Sven Smit, and Matt Wilson, "COVID-19: Implications for business," March 2020, McKinsey.com.

⁴ Including sustainability, cost pressure, e-commerce, digitization in general, and shifting consumer preferences. For more, see David Feber, Daniel Nordigården, and Shekhar Varanasi, "Winning with new models in packaging," May 2019, McKinsey.com.

Exhibit 2

Packaging megatrends are changing with the COVID-19 crisis.

Observed and expected impact of trends on packaging industry, scale 1–5



¹Fast-moving consumer goods.

at online-only grocery stores.⁵ A similar pattern has been seen in China: online sales of fresh food by a large online retailer grew more than 200 percent during a ten-day period in late January 2020 compared with the same period in 2019, with sales of meat and vegetables increasing more than 400 percent.⁶ Cost pressures on the packaging industry are also expected to increase, with its customers under strong pressure, consumers becoming even more price sensitive, and packaging converters needing to win a sufficient volume of orders to keep their plants well utilized.

How will the sustainability agenda that has become an important issue for the packaging industry be affected by COVID-19? It seems likely that concerns about hygiene and food safety in the context of the pandemic might become a higher priority while the

sustainability performance of different packaging substrates could become a lower priority—at least for the short term. Because of the pandemic, there is a new appreciation by consumers and industries of the hygiene advantages plastic packaging can offer that seems to be outweighing concerns about recyclability and plastic-waste leakage into the environment.⁷ For example, a global coffeehouse chain is temporarily banning reusable cups amid the outbreak. At the same time, in the current state of emergency and concerns about virus-contaminated surfaces, numerous cities and retailers around the world are putting off the introduction of bring-your-own-bag measures and suspending recycling services for both residential and commercial customers. Some recycling contractors have also suspended services because of inadequate staffing.⁸

⁵ McKinsey Marketing & Sales COVID-19 US Pulse Survey, conducted March 19 to March 22, 2020, of 1,502 respondents, sampled and balanced to match US general population aged 18 years and older.

⁶ *JD.com corporate blog*, "How Chinese are spending during the coronavirus outbreak," blog entry by Yuchuan Wang, February 8, 2020, jdcorporateblog.com.

⁷ Peter Berg, David Feber, Anna Granskog, Daniel Nordigården, and Suku Ponkshe, "The drive toward sustainability in packaging—beyond the quick wins," January 2020, McKinsey.com.

⁸ Leslie Kaufman, "Plastics had been falling out of favor. Then came the virus," *Bloomberg*, March 15, 2020, bloomberg.com.

The open question is, whether this reevaluation by consumers of the trade-offs between hygiene, safety, and sustainability performance marks a permanent shift, or whether sustainability performance could reemerge as a source of competitive advantage that could help some packaging players as they come out of the crisis—particularly if they take such trade-offs into account? A resourceful packaging company might be able to help both customers and consumers if it found a cost-effective and sustainable substrate on which the novel coronavirus has minimal viability. There is plenty of room for improvement: a recent study showed that the virus's survival rates varied from 24 to 72 hours on different packaging substrates, with the longest being on plastic and stainless steel.⁹ Packaging players could also consider using temporary spare capacity in plants to scale their pipelines of new, more sustainable packaging materials for end-use segments in which demand is still high.

Actions for packaging companies to consider

Leaders of packaging companies could consider a three-part response to the crisis.

Part one: Navigate the now

As a first action, a packaging player can create a crisis-response nerve center that can steer the organization and serve as the core information source.¹⁰ The center can manage risks and responses and align all stakeholders. A key priority should be to support and protect employees' health. Besides that being arguably a moral responsibility of an employer, it is also a pragmatic first line of response to maintain an enterprise's ability to function at all.

Acting on this top priority can happen in several areas. The company can monitor health risks and communicate about them through updates on its intranet, postings at the entrance to its sites, and

regular conduct training on how to handle them. It can also provide personal protective equipment, including masks, gloves, and hand sanitizers, and can regularly clean its buildings. It can also implement targeted processes and policies that include checklists, new travel and meeting guidelines, and the splitting of teams into shifts when operationally possible.

The company can also review its production footprint and what it will need to ensure that it can keep running by creating country-specific plans and clear checklists for plants. Related to this is the need to screen the supply chain to understand the risk of disruptions—such as dependence on a single supplier source for raw materials or on printers that might close—and then take actions to address anticipated disruptions and shortages.

Once the top priorities to maintain health and operations have been dealt with, a leadership team can set about understanding how consumer sentiment may be evolving—for example, to an acceleration in e-commerce shopping and higher-than-previous demand for grocery packaging—and how that could make some shifts necessary in its portfolio of packaging offerings. Based on that assessment, a leadership team can review its operating model to evaluate its packaging-production flexibility. For example, it can take steps to understand where demand will be temporarily high and assess its ability to shift production appropriately to fulfill new demand patterns. At the same time, the leadership team can evaluate what it needs to do to ensure the company's financial health by identifying and mitigating risks of declining demand from certain segments and by monitoring raw-material-pricing indexes closely to protect its margins.

Part two: Plan for the comeback

Leadership teams in packaging companies should build a recovery strategy that will include a mix of financial resilience, operational plans (such as

⁹ "New coronavirus stable for hours on surfaces," National Institutes of Health, March 17, 2020, nih.gov.

¹⁰ Mihir Mysore and Ophelia Usher, "Responding to the coronavirus: The minimum viable nerve center," March 2020, McKinsey.com.

restarting operations at packaging plants that it might have had to temporarily close and assessing future market-demand potential), and strategic customer-focused moves (such as understanding the impact of COVID-19 on particular customers' packaging-substrate choices).

Companies can take steps to identify packaging categories that are likely to return to strong levels of demand. They can also consider the supply-chain requirements and production planning—including addressing the footprint and rebalancing supply—that they will need to cope with that return. They can also look out for new pockets of growth potential with different packaging end uses and different substrates. Last, companies can review the packaging product designs and associated capabilities that they would need to manage new trends in consumer sentiment and requirements, such as safety, health concerns, and more e-commerce.

Based on those assessments, leadership teams can sharpen their companies' value propositions to deliver on the next normal in demand. Such propositions could include the ability to adapt packaging designs best to the needs of

e-commerce while simultaneously adhering to consumer preferences and, at the same time, always delivering greater cost efficiency.

Part three: Shape the next normal

Packaging-company leadership teams should assess which shifts are getting under way in customer and consumer sentiment and which behaviors may stick after the crisis—for example, hygiene requirements, e-commerce, and resurgent concerns about sustainability. They can also consider rethinking their business portfolios so that they can ensure the stable cash flows and healthy balance sheets that can protect their companies.

Steps that packaging companies can take to this end can include narrowing the range of substrates they currently use. They can also extend to evaluating acquisition opportunities of assets in the market that could strengthen their business. And finally, companies need to make a regular practice of the kind of vigilance that served them well at the start of the crisis: thinking through the network implications for their plants and supply chains and the potential risks related to single sources of raw materials and packaging components.

David Feber is a partner in McKinsey's Detroit office, where **Daniel Nordigården** is an associate partner; **Oskar Lingqvist** is a senior partner in the Stockholm office.

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