

AdeptPackaging
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The Impact of COVID-19 on Packaging

Leveraging Contractors to Mitigate Packaging-Related Challenges

An Adept Packaging White Paper

Leveraging Contractors to Mitigate
New Challenges

The Impact of COVID-19 on Packaging

2020 is a year that no one will ever forget. The COVID-19 pandemic has made a world-wide impact, starting with shelter-in-place orders and unprecedented social distancing measures, followed by a slow reopening that still leaves many people unemployed and forces consumers to keep a close eye on their budget.

Even as non-essential businesses reopen, many are still operating with a skeleton staff, and employees who can work remotely continue to operate out of home office environments.

Some of the changes caused by the pandemic will be temporary; others will have a lasting impact. Many companies that have endured lost business are seeking opportunities for cost savings.

Others have experienced an influx in online orders and found that their packaging is not optimized for e-commerce and is not robust enough to withstand the additional touchpoints in that distribution environment.

As companies return to normal operations, many will experience a backlog of work that



was deprioritized during the crisis and new projects spurred by business impacts from the pandemic. As leaders initiate plans for returning to something resembling business as usual, the organizations that fare best will be the ones that manage cash flow by leveraging flexible resources to scale up to tackle short-term needs and look ahead for long-term opportunities.

This paper explores both the immediate and long-term challenges the pandemic presents to packaging departments and offers options that packaging leaders should explore to mitigate those challenges. It focuses on the challenges and opportunities associated with:

- The increased need for e-commerce-ready packaging
- Counterfeiting challenges introduced by a volatile market
- Leveraging packaging as an avenue to cost savings
- Increasing the sustainability of packaging operations
- Leveraging temporary resources to mitigate demand increases and for specific project expertise

COVID-19's Impact on E-commerce

During an unprecedented crisis that created so much uncertainty, many companies have experienced a similarly unprecedented surge in e-commerce sales. Online orders in February [increased 108% year-over-year](#) from 2019. While regular online shoppers have relied more heavily on e-commerce for necessities throughout the pandemic, government-mandated social distancing guidelines also incentivized consumers to shop online for common household goods that they'd normally purchase in a traditional brick-and-mortar setting. In addition, many consumers who did not previously shop online have been introduced to the ease and convenience of e-commerce.

Due to this spike in e-commerce, many companies uncovered weaknesses in their packaging, as it wasn't previously designed for the e-commerce environment. To ensure e-commerce products are delivered safely, companies are now considering the need for a thorough packaging qualification process to ensure parcels reach consumers in satisfactory condition. According to [eMarketer](#), e-commerce damage is estimated to set companies back around \$6 billion per year, with 58% of Americans saying their relationship with the e-retailer would be impacted by damaged product.

As the lessons of COVID-19 make many traditional retailers place more emphasis on e-commerce, they should consider new ways to improve the packaging experience, as consumers experience it as their first impression of the product inside. How the package looks on the outside may impact the brand reputation and the relationship it will create with the company, even if the product itself is not damaged.

The [e-commerce distribution environment](#) is drastically different from the brick-and-mortar environment. An increased reliance on e-commerce for sales means packaging designed with more emphasis placed on protection during shipping and less emphasis on shelf appeal. In a typical retail setting, packaging is handled a minimum of five times, most in palletized or case format, before it reaches the consumer. In an e-commerce setting, the number of times a product's packaging is handled increases drastically. In the distribution system used by Amazon, the largest e-commerce retailer, a typical package is handled a minimum of 20 times before it reaches the consumer.

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year from 2019.

[Source](#)

Packaging certification standards such as [APASS](#), Amazon's certification

program, are now more important for companies who don't already have a strong e-commerce strategy in place. With Amazon labs and many other independent labs for packaging certification unavailable, many of these companies have put testing on hold. Third party consultants provide a valuable asset for package testing that can be done now. While many brands had to adjust quickly to meet increased online shopping demands, investing in a careful audit of e-commerce packaging offers both a short-term cost savings benefit and a long-term benefit to brand reputation.

Combatting Counterfeiting

Even before the COVID-19 pandemic, the global cost of piracy and counterfeiting was estimated to reach [\\$2.3 trillion by 2022](#). The increase in online shopping provides ample opportunity for counterfeiters to find new victims, which makes it imperative for brands to take additional steps to protect their products. Counterfeiting is harmful to a brand's reputation on multiple levels and can pose a serious threat to consumer safety, depending on the type of products being counterfeited. These threats make it important for brands to increase security measures such as serialization and digital tracking that helps to authenticate genuine products and separate them from increasingly convincing fakes, and for brands to create a transparent distribution process where products can be tracked throughout the supply chain. Not all companies have the personnel in place to implement digital security measures, making this another area where flexible resources from outside the company can be deployed to complete a defined-duration project.

Sustainability

Many companies have made huge commitments to improve their sustainability efforts over the next 5-10 years, and sustainable packaging is a major component of those efforts. As e-commerce volume increases, brands can make progress toward meeting their sustainability goals by optimizing their packaging for the e-commerce environment.

Optimization can take many forms, including reducing aesthetic design elements intended to attract customers in brick-and-mortar retail environments and instead prioritizing sustainability. It provides brands with the opportunity to choose biodegradable, [compostable](#) or recyclable materials for their packaging. This means [designing packaging without special inks, coatings and lamination that can limit recyclability](#) and rule out other sustainable methods of disposing of the packaging.

It also means designing packaging with the minimum amount of material needed to protect the product or products inside. Minimizing the amount of material included in the packaging not only reduces waste, but also reduces the costs of materials, transportation and storage.

Increased reliance on online shopping for household goods like shampoo or cleaning products also creates opportunities for brands who make those goods to [incorporate reusable packaging](#). Reusable packaging is a crucial component of the circular

Utilizing an intelligence-lead approach to packaging cost savings, companies can:

- Reduce price volatility for procurement
- Mitigate supply chain risk
- Evaluate supplier performance and options
- Optimize packaging, supply chain and transportation performance
- Significantly cut packaging waste and cost

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Value Optimization

economy and provides a tremendous opportunity for brands to make strides toward their sustainability goals with durable packaging that provides exceptional protection for products.

Though the popularity and value of [single-use packaging](#) is on the rise, reusable packaging startup [Loop saw record sales in early months of the pandemic](#) and plans to expand to many new markets in the U.S. in the coming months. Loop-certified packaging experts can help brands decide if this is a viable option for its products and design packaging that works with Loop's system.

Cost Savings

While certain sectors of the economy benefitted from a boom in e-commerce sales throughout the course of the pandemic, not all companies were so fortunate. For brands hurt by the economic shutdown, identifying opportunities for cost savings is more important than ever before. The impact of COVID-19 on the economy created financial strains for many companies, but it also revealed opportunities for improved efficiency in packaging, packaging lines, logistics and supply chains. A sudden, unexpected spike in demand, as many retailers are experiencing with their e-commerce operations, can force packaging operations to perform at maximum capacity and reveal areas where those operations are not performing up to expectations.

A packaging audit conducted by a knowledgeable efficiency expert can help isolate inefficiencies that may be less apparent during routine business. Among many evaluations made during such an audit, [overall equipment effectiveness \(OEE\)](#) is a valuable way to measure how well the machinery on packaging lines is performing in comparison to its potential.

Many cost savings measures also [double as opportunities to reduce waste and therefore improve sustainability](#). Packaging that is optimized for the e-commerce distribution environment provides thorough protection for products while avoiding overpacking.

Leveraging a [holistic, data-driven approach](#) to packaging cost savings will allow companies to develop should-cost modeling and provide a means to analyze procurement strategies, packaging operations and potential issues in the packaging supply chain to significantly reduce waste and cut costs. Once more efficient

packaging models are identified, an experienced [value optimization expert](#) can be leveraged to optimize the packaging engineering and design and strategically source the packaging for additional, significant cost savings.

The economic impacts of COVID-19 make it essential for many companies to reduce costs wherever they can. Identifying and optimizing packaging and logistics costs allows companies to recoup losses incurred throughout the pandemic, reallocate money that can be used to improve other areas of the business or restart parts of the business that were deprioritized during the crisis. For brands experiencing a boom in their e-commerce business, finding ways to make both their packaging efforts and their packaging spend more efficient can have a significant impact on the bottom line and help prepare long-term plans for potential future outbreaks.

Leveraging Temporary and Remote Resources

While the personal stresses and business hardships brought on by the crisis are indefinite, many companies may experience a need for temporary resources or expertise to mitigate them. Hiring expert contractors and consultants with the right experience to manage defined-duration packaging projects or pick up the short-term spike in work when things return to normal is an ideal way to manage the short-term challenges without adding fulltime employees to the payroll.

Consultants who specialize in optimizing costs can analyze all aspects of packaging operations, including engineering, design, logistics and sourcing, to find quick-hit opportunities for savings or deeper improvements that can provide significant long-term term cost saving opportunities.

In addition to the need for temporary resources, some companies have extended work-from-home orders until at least the end of 2020. As COVID-19 is threatening resurgence, this decision seems plausible. Instead of shutting down projects and waiting it out, many companies are leveraging remote resources to keep projects on track. For example, some packaging projects that can be done remotely include:

- [New packaging design and development](#)
- [Creation, validation and harmonization of packaging documentation](#)
- [Sustainability strategy development and implementation](#)
- [Quality remediation](#)
- [Value optimization for packaging and supply chain](#)
- [Configuration and validation of Level 3 and 4 serialization and traceability solutions](#)
- [Project management of new and ongoing packaging projects](#)

While some packaging projects require engineers to be present in a warehouse, [most projects can be done remotely](#); including the pressing challenges mentioned in this paper. Eliminating the need to shut down operations or put projects on hold can add tremendous benefit to companies willing to think outside the box.

Partnering with Adept Group

As businesses strategize to offset the impact of COVID-19, Adept Packaging can be a valuable resource for cost savings, sustainability, e-commerce, digital solutions and staffing. Our full bench of engineers has a wealth of deep expertise in packaging, while our specialized teams have niche expertise in the areas mentioned above.

With a remote infrastructure, we've continued to support all of our clients throughout the pandemic, keeping their packaging projects on track. We've continued to support implementation of new projects to reduce cost, optimize the supply chain, design and engineer new packaging, and consult and deliver on new challenges that have arisen due to the current climate. Whether you're in need of quick savings or are looking to plan effectively for the long run, our engineers have the experience to help you meet and exceed your objectives.

Resources

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