

RESEARCH REPORT

THE STATE OF PACKAGING & PALLET OPTIMIZATION

Supply chain disruptions, offsetting inflationary costs, and fluctuating demand has made 2022 the year to focus on packaging and pallet optimization. In this study, we gathered research from more than 450 respondents to understand the state of packaging and pallet optimization and make recommendations to build a more sustainable and efficient future.



specright™



The current status of packaging and pallet optimization

If you're struggling to optimize packaging and palletization, the good news is: you are not alone.

Only 34% of our survey respondents found it very easy to optimize, and 33.5% are really struggling, even though 70% of respondents are using palletization software. Clearly there is a gap between what we want to achieve, and what is happening in practice.

How easy is it to optimize your packaging and palletization?



The need for optimization is only magnified as the Covid-19 pandemic has led to fluctuating demand, global supply chain disruptions fueled by staff shortages, new safety regulations, and the acceleration of ecommerce direct-to-consumer shopping, and the rising inflation rate.

Which makes sense - it's no wonder almost 50% of organizations we

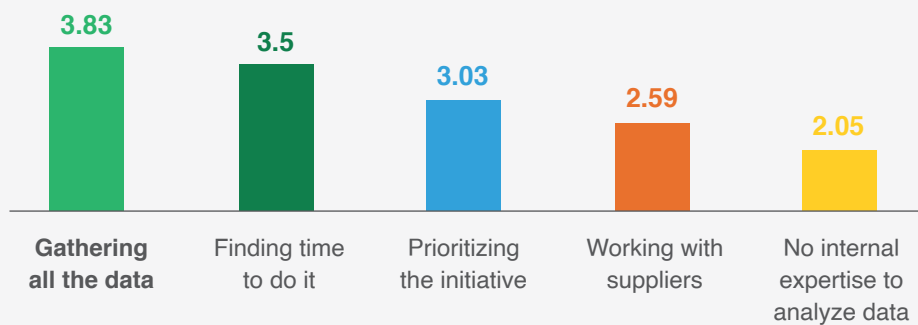
surveyed have an active initiative to improve their packaging and palletization efforts.

In this report, you'll learn about the biggest obstacles packaging and pallet professionals are facing and the best practices being used to overcome them and implement more agile processes for optimization packaging and palletization.

Gathering data is the biggest obstacle to optimization

Collecting the data necessary to inform packaging and pallet optimization efforts is the most significant challenge faced by survey respondents.

Rank the biggest obstacles to optimizing your packaging and palletization, highest to lowest.



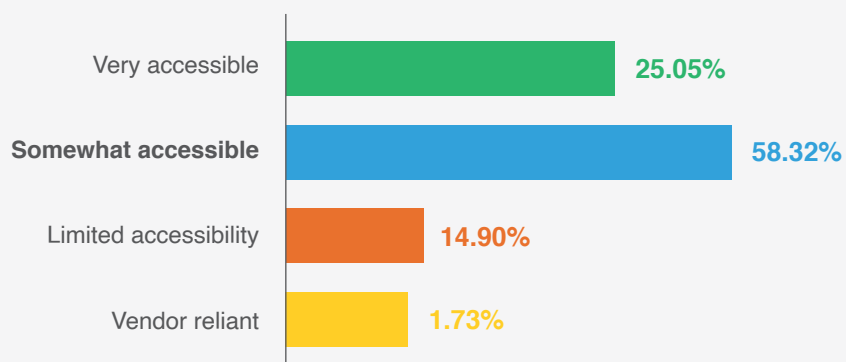
The data required to make product and packaging decisions is typically spread across teams, systems, and spreadsheets.

Information formats vary greatly, creating large amounts of manual work when it comes to processing and achieving actionable insights. The challenge of consolidating data is further complicated by the growing complexity of supplier networks.

Data from both inside and outside of the organization must be collected, normalized and analyzed.

It makes sense why the second biggest obstacle is finding the time to optimize. With data all over the place and varying in structure, it can be a herculean effort to take an optimization from start to finish. Given all of these hurdles, it's not surprising that just 25% of survey respondents report data is very accessible.

How accessible and accurate is the data you need to optimize your packaging and palletization?





How Challenger Brands Can **Break Down Data Silos** to Drive Growth



Wondering how to break down data silos and get the information you need to do your job? Check out this ebook.

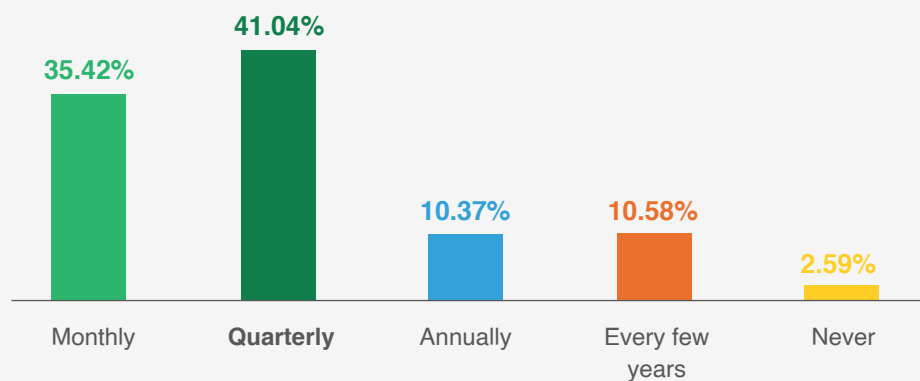
eBook: How Challenger Brands Can Break Down Data Silos to Drive Growth



Optimization frequency lags behind expectations

72.6% of respondents want to optimize packaging and palletization often or very often, but in reality, only 35.4% are optimizing on a monthly basis.

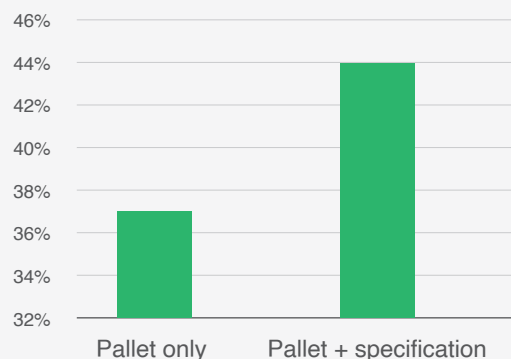
How often do you optimize your packaging and palletization?



Using palletization software templativizes optimization, making it easy to understand what you need to reach different optimization goals. However, without the ability to centralize data with a real-time, single source of truth system, the errors and obstacles surrounding data collection persist.

The percentage of organizations that optimize on a monthly basis increases when we filter for teams that use palletization software in conjunction with a Specification Management system. This combination of tools increases data accessibility, removing one of the major obstacles holding organizations back from optimizing with as much frequency as they want.

Optimization on a monthly basis



+ Specification Management

Collaborate with suppliers in one place. Centralized systems allow suppliers to contribute data reducing lead times, eliminating manual processes, and automating approval processes.

eCommerce top motivator for investing in optimization

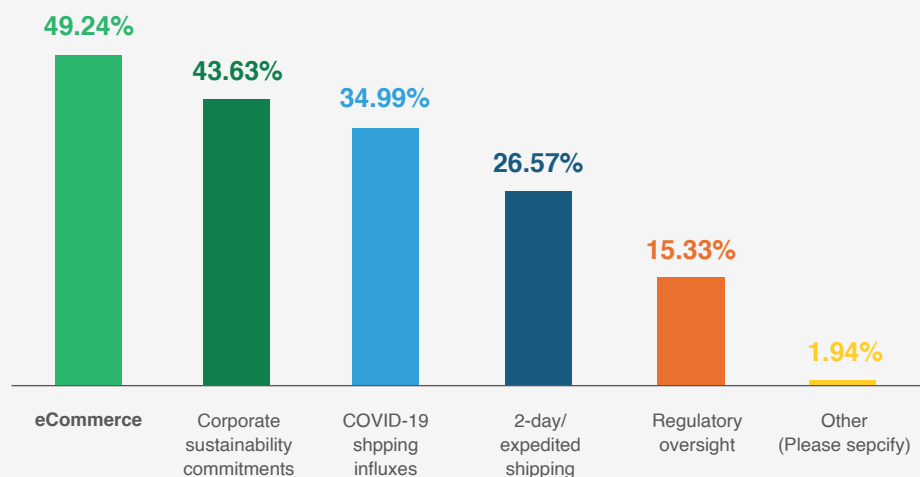
We enter 2022 surrounded by ever-changing forces.

New consumer purchasing patterns are creating fluctuating demand, and distribution methods are more variable than ever before. Products must be packaged for massive trucks, independent Amazon delivery vans, in-store retail shelves, and even drone drop offs or locker pick up. Packaging must take into account highly variable temperatures, vibrations, humidity levels and space limitations.

The complexity grows when we take into account a more global distribution chain, with country specific regulations that must be followed.

The implications of sustainability initiatives, cost reduction, and regulatory mandates are adding pressure to organizations. Today's world is demanding organizations to evolve.

What industry trends are creating a need for packaging optimization at your company?



Cost savings are the top benefit of optimization investments

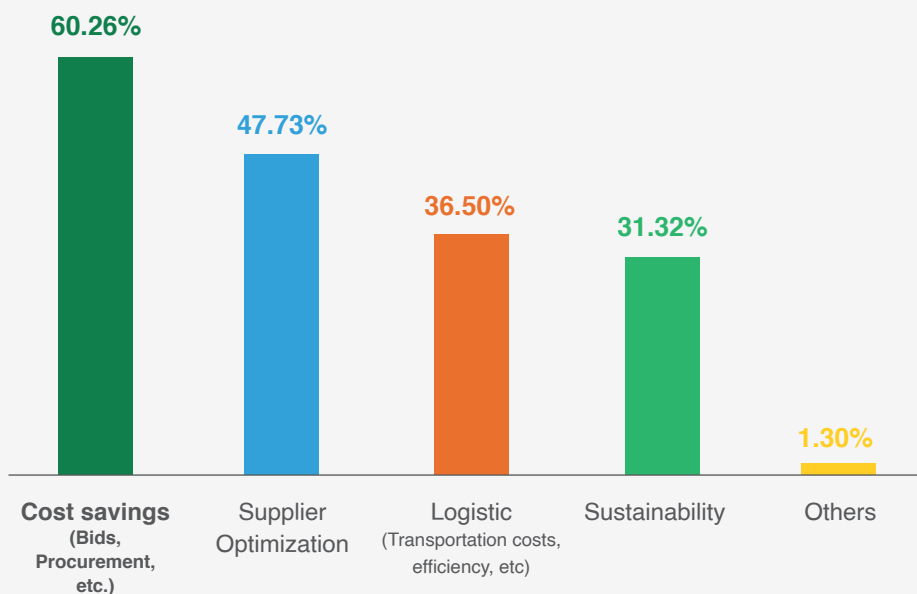
The ROI on packaging and pallet optimization is major, as it influences so many outcomes and KPIs. For example, optimized packaging and pallets can reduce costs associated with material reduction, handling, disposal, transportation, and storage.

DENSO

WATCH THE VIDEO

Learn how automated status changes and triggered alerts eliminated human error at Denso Automotive.

What are the reasons you optimize your packaging and palletization?

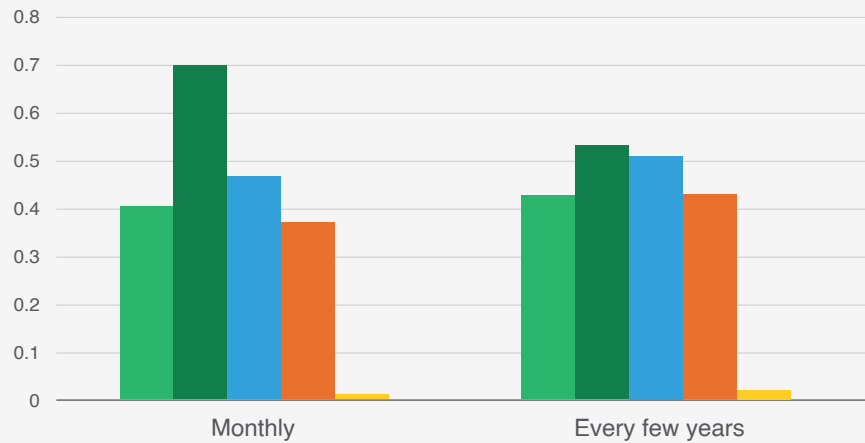


This growing variability of distribution methods creates a lot of ambiguity that must be addressed on a more frequent basis. The good news is, those that optimize more frequently are realizing cost savings benefits more than those who only review every few years.

More than 60% of those who optimize on a monthly basis are predominantly optimizing for different pallet sizes.

What are the reasons you optimize your packaging and palletization?

- Sustainability
- Cost savings (Bids, Procurement, etc.)
- Supplier Optimization
- Logistic (Transportation costs, efficiency, etc)
- Others

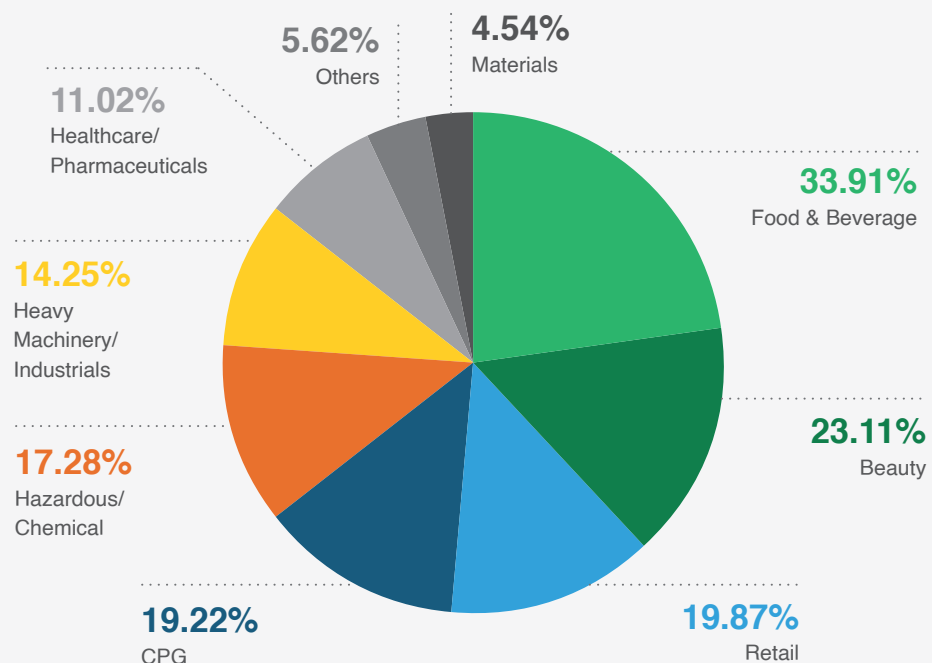


About Survey Participants

To ensure the validity of our study we collected responses across a wide spectrum of organizations and personnel.

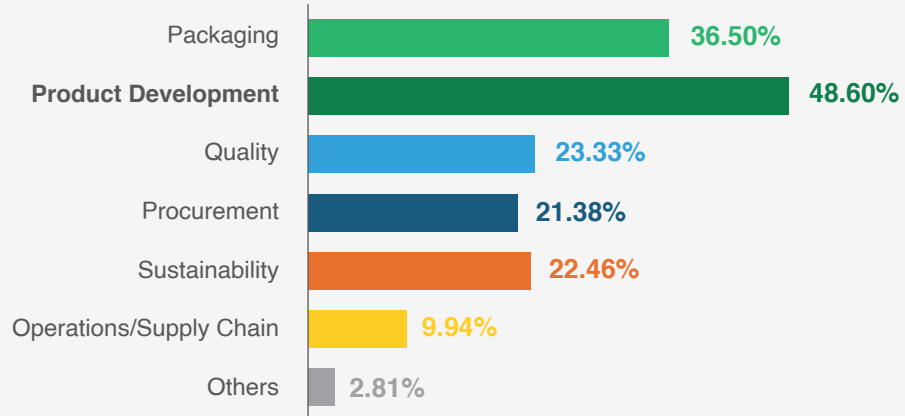
463 packaging and supply chain professionals participated in this study, across a wide selection of industries.

What industry are you in?



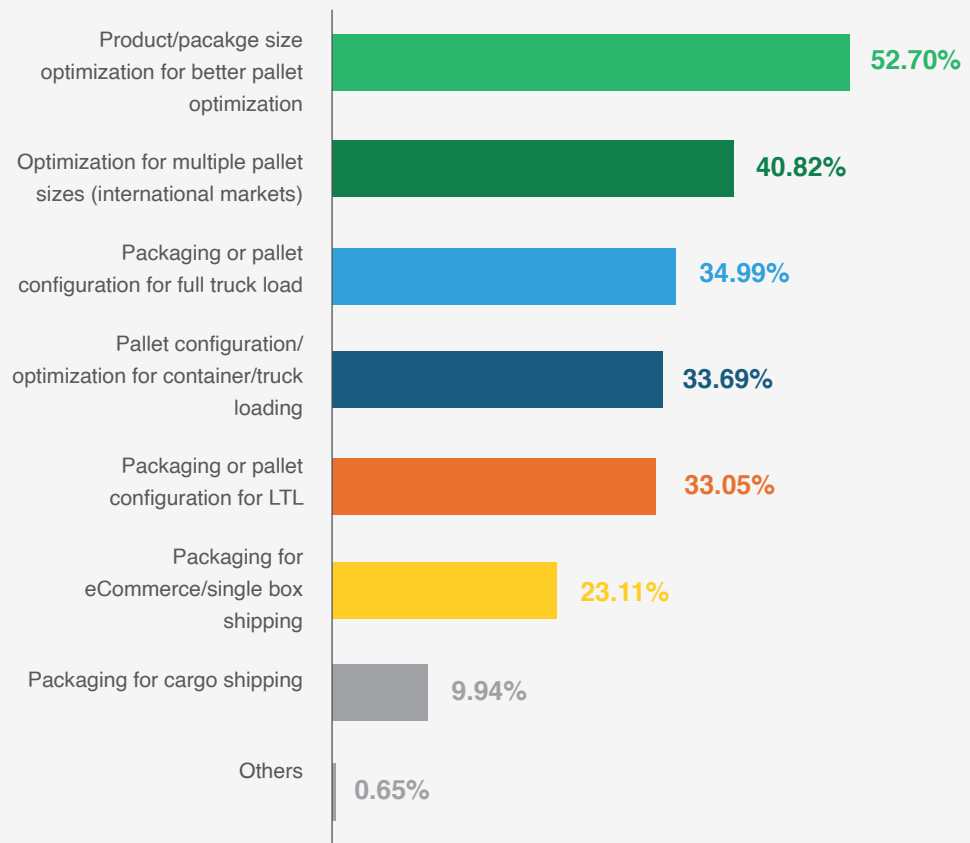
The biggest group of participants are product development professionals, followed by packaging experts.

What is your job function?



Participants represented a wide range of packaging and pallet optimization use cases.

What kind of packaging optimization does your company typically conduct for palletization?



52.7% of respondents optimize for product/package size for better palletization, showing the need to link the primary package to the tertiary packaging and optimize as a unit.

At the most basic level, optimization includes reconfiguration of the case on pallets – this is the least complex type of optimization, and also the least impactful.

When the primary package is optimized, the effects are translated out to the case, pallet, and truck and enables greater optimization possibilities. This type of optimization can be challenging without Specification Management systems in place to manage the data linkages between product, primary packaging, and tertiary packaging, causing issues like waste and recalls.

How Specright can help set your organization up for success when it comes to optimization

Our research demonstrates that those benefiting the most from their palletization software are combining it with better data accessibility due to use of a Specification Management tool. Specright's out-of-the-box integration with TOPS Pro makes it a natural fit for any team hoping to improve their packaging and palletization efforts.

TOPS users can now automatically transfer data from Specright to TOPS Pro when beginning a unitization or palletization analysis. Once the analysis in TOPS Pro is complete, the designs and files are automatically passed back to Specright and associated to the correct packaging specifications.

By better managing packaging data and the palletization design process, brands can transform how they approach shipping and logistics, a \$9T industry worldwide.

“The integration between Specright and TOPS is going to save us a great deal of time and improve specification development efficiency and accuracy. We can begin to focus on issuing specification packets with much higher accuracy in a shorter period of time.”

Victoria Chatman-Galloway,
Global Head & Vice President,
Packaging Center of Excellence, OFI



ABOUT SPECRIGHT

Specright is the first purpose-built platform for Specification Data Management™. Whether it's packaging, raw materials, formulas, products, or machines, Specright helps companies digitize, map, and take action across their supply chain to reduce costs, increase profitability, and drive sustainability. For more information, visit:

www.specright.com.



ABOUT TOPS

TOPS Software Corporation is the leading provider for case-sizing and pallet layout optimization software. TOPS has a customer base of over 10,000 installations, and continues to incorporate new features to meet evolving industry needs. Their diverse customer base spans all segments of the manufacturing, transportation and shipping industries. For more information or a free trial, visit:

<https://topseng.com>

