### James Ross Consulting

### The Hidden Cost Traps in Packaging

Many organisations believe their packaging systems are already optimised, but significant inefficiencies often remain hidden in plain sight.

From outdated specs to unseen labour burdens and regulatory risks, this white paper explores the silent cost traps that even experienced teams can overlook - and what you can do to uncover them.

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# Why Even Lean, Experienced Teams Still Miss Opportunities

If you're working in operations or supply chain, chances are you've already looked closely at your packaging spend. You've negotiated with suppliers, standardised materials, and streamlined SKUs. So, when someone suggests you might still be leaving money on the table, the natural response is: "Where?"

It's a fair question. Most organisations believe their packaging systems are already running efficiently. But in our experience, significant savings often remain. Not because teams are missing the obvious, but because hidden costs are embedded in familiar processes, often left unquestioned.

According to a McKinsey & Company report, operational inefficiencies account for up to 15% of total operational expenses in the shipping sector, amounting to over \$50 billion in global losses each year. Packaging plays a quiet but powerful role in that figure affecting everything from freight and storage to labour and compliance.

Let's look at where these cost traps tend to hide, why they're often overlooked, and what you can start doing to uncover them.



# Dimensional Weight: Paying to Ship Empty Space

One of the most overlooked contributors to inflated logistics costs is dimensional (or "DIM") weight; the method used by most carriers to charge for parcels based on volume rather than weight.

Packaging that's too large for the product it holds can drive up transportation costs significantly. These incremental charges don't always show clearly on invoices, so they tend to go un-notice until someone digs into the shipping data.

The issue often arises from a packaging spec that was once fit for purpose but hasn't kept pace with changes in product, palletisation, or carrier rules. This is particularly common in legacy systems where packaging decisions were made years ago and haven't been revisited. In a time where fuel surcharges and emissions regulations are tightening globally, shipping inefficiencies like this can quickly add up.



20%

Operational inefficiencies—such as inflated dimensional-weight charges—can increase logistics costs by over 20% (Cisco-Eagle).

# Over-Specified Materials: Paying for Protection You Don't Need

Another common trap is the use of materials that exceed the actual needs of the product or supply chain.

It's understandable. When damage risk is high, teams often default to thicker or more rigid materials. But as technology, logistics processes, and handling equipment improve, what once made sense might now be excessive.











Over-specification not only increases material costs, but also impacts shipping, storage, and environmental footprint. Many companies simply haven't revisited material choices in several years, even though new alternatives may offer better performance at a lower cost.

Manufacturers spend over \$150 billion/year on packaging—small efficiencies can yield billions in savings (Specright).

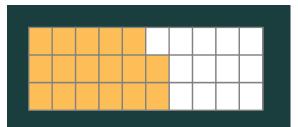


# Labour and Waste Handling: The Hidden Operational Burden

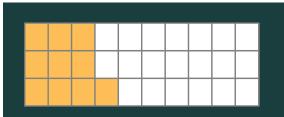
While packaging materials are easy to track in the budget, labour and waste disposal related to packaging are often absorbed into general operating costs.

But inefficient packaging design can have a real impact on the production floor. For example, if workers have to manually cut, re-seal, or dispose of excessive packaging, this adds to downtime and increases safety risks.

These costs are hard to measure directly, which makes them easy to ignore. But for high-volume operations, even small inefficiencies in handling time or waste management can create substantial financial drag over time.



A large portion of packaging waste (often 40–58% of box volume) comprises void fill or unnecessary materials - requiring additional disposal, downtime, and labour.



Implementing semi-automated systems—such as automated case erecting or sealing—can boost throughput by 30%+, reducing labor overhead without full automation.



## Overpackaging: Redundant or Excessive Packaging

# Over-packaging is often driven by legacy assumptions or an outdated emphasis on product appearance.

Excess inserts, multi-layered boxes, or oversized cartons might look polished, but they can slow packing, increase costs, and frustrate end users. In sectors like e-commerce or consumer goods where unboxing experience and speed-to-ship are critical, it's worth reassessing whether every layer of packaging is necessary.

Extra trays, sleeves, or decorative wraps can add weight, increase material usage, and complicate handling without delivering real value. In fact, return rates can sky-rocket with poor packaging design contributing to product damage or consumer frustration.

Sustainability expectations also play a role. Excessive packaging is increasingly at odds with consumer sentiment and evolving regulations. What once felt like premium presentation may now be perceived as unnecessary waste.

In categories like fashion and accessories, return rates can reach up to 30% (Shopify)



### **Customisation:**

### **Lack of Standardisation Across SKUs**

SKU-level customisation is often necessary, especially in industries with diverse product ranges. But where packaging formats proliferate unchecked, costs can quickly spiral.

Non-standard box sizes, inserts, or labelling can increase procurement complexity, slow production, and introduce errors in fulfilment or transport.

Many organisations miss this cost because it doesn't appear as a line item; rather, it's reflected in excess inventory, longer setup times, or poor warehouse space utilisation. Consolidating or modularizing packaging across similar products can free up cash and streamline operations significantly.



### Aniticipating Changes: Regulatory and Environmental Costs

In recent years, extended producer responsibility (EPR) schemes and other packaging-related regulations have introduced new cost structures, many of which are still evolving.

The EU's Packaging and Packaging Waste Regulation (PPWR), for example, will enforce stricter material choices and labelling in the coming years.

What's tricky here is that these costs aren't always immediate. But failing to anticipate or model their impact now could lead to steep penalties or rushed redesigns later. Businesses that take a proactive approach to regulatory alignment are far more likely to stay ahead of cost and compliance curves.

# Why Do These Costs Stay Hidden?

# So why don't internal teams catch these issues sooner?

It's rarely due to negligence or lack of expertise. Instead, it comes down to **proximity**. When you're deep inside a system, especially one that's evolved slowly, it's hard to see the inefficiencies that have become normalised.

Other times, cost centres are siloed: the packaging spec belongs to marketing or R&D, while the logistics team absorbs shipping cost increases. Without visibility across the full packaging lifecycle, those hidden traps never connect into a clear savings story.



### What You Can Do Now

## The good news is that uncovering hidden packaging costs doesn't require a total system overhaul.

Even a few focused actions can lead to measurable improvements across efficiency, sustainability, and cost.

1

#### Map your packaging lifecycle end-to-end

From material selection and supplier terms to line efficiency, logistics, and disposal. Small disconnects at any stage can quietly compound costs.

2

#### Review legacy packaging specs

Especially on high-volume or long-standing SKUs. These are often ripe for light weighting or simplification without compromising product protection.

3

#### Check for dimensional inefficiencies

Particularly in e-commerce, retail-ready, or direct-to-consumer formats. Carriers and warehouse teams often spot oversizing before finance does.

4

#### Talk to the line teams

Production and warehouse staff often have first-hand insights into packaging workarounds, waste handling, or bottlenecks that never make it into reports.



#### Watch the regulatory horizon

Plastic taxes, labelling laws, or extended producer responsibility rules can introduce costs overnight. Staying proactive avoids costly redesigns later.

If internal bandwidth is limited, or you're unsure where to focus first, working with a partner like James Ross Consulting can help accelerate this discovery process. With deep cross-sector experience and packaging-specific analytics tools, JRC helps companies unlock significant hidden value.

# If you're interested in finding out more about how you can deliver savings like these to your business, get in contact via:

https://www.jrconsulting.com