Case Study

Pregis
Protective Packaging Solutions

Pregis helps retailer significantly improve profitability by reducing damage

A large national retailer of home décor products was **losing more than $1 million dollars of profit annually due to damaged goods** returns. Equally as important, they were not even aware of the extent of the loss. Here's how that can happen to even the most savvy and successful retailers.

The company had an extremely low damage rate. Approximately, .6% of products delivered were returned by consumers due to damages. With some companies experiencing ecommerce damage rates as high as 8%, on the surface, .6% returns seemed exceptional. However, the real metrics were still to come.

Driven by the company's purchasing and operations departments—whose performance reviews were impacted by how well they controlled the annual packaging spend—the philosophy was to focus on the unit cost for protective packaging components and not really look beyond that. Other attributes were not primary considerations when deciding what to buy and from whom. That purchasing philosophy resulted in the use of traditional void fill to protect millions of shipments from multiple distribution center locations across the country.

Winds of change

The company was aware that their damage rate was .6%. However, the marketing department began to notice that negative customer experiences due to damaged goods were being shared across multiple social media channels. They knew that even a small damage rate of under 1% was adversely affecting their brand promise and customer retention goals, due to the negative experience "amplification" across an individual purchaser's social media reach.

That was the catalyst for the company to rethink its approach.

Study: 15% said they would be **highly unlikely** to purchase from the company again after receiving a damaged item. **$1 million cumulative lost** sales impact.

Pregis 6 part analysis

You cannot alter, what you do not know. This has been the driver behind the development of Pregis' 6 part damage analysis. It has been designed to show companies all of the real costs associated with damaged

goods so that a more informed packaging decision can be made. Here's what the customer learned about the real costs associated with damage.

1. **Freight.** When a consumer receives a damaged item, they must absorb the cost of not only shipping the product back, but also send out a replacement item. This retailer paid an average of $9 per shipment to have a product delivered. When a product was damaged they would have to pay for it to be returned, and a new item sent back.

Additional impact per order: **$18** ⊕

2. **Product replacement.** When that product comes back damaged, you either need to dispose the product and send a different one as a replacement or you have to put in time, labor and parts to repair before sending out the same product. In this case, the average cost of goods was $25.

Additional impact per order: **$25** ⊕

3. **Customer service labor.** On average, customer service personnel spend an average of 12 minutes on the phone (oftentimes much more) or online processing a return. However, that time allocation can be much higher if the situation is complex or the customer wants to vent.

Additional impact per order: **$6** ⊕

4. **Warehouse labor.** There are two parts to this consideration. When the returned damaged shipment comes in, an employee has to unbox it and determine if it can be fixed and resent to the consumer or put back into stock. The second part, is that the fulfillment processed has to be repeated.

Additional impact per order: **$5** ⊕

5. **Packaging supplies.** Sending a replacement shipment to the consumer also means you will be paying twice for supplies. This typically will include a corrugated box or mailer, cushioning and/or void fill, tape, labels, etc.

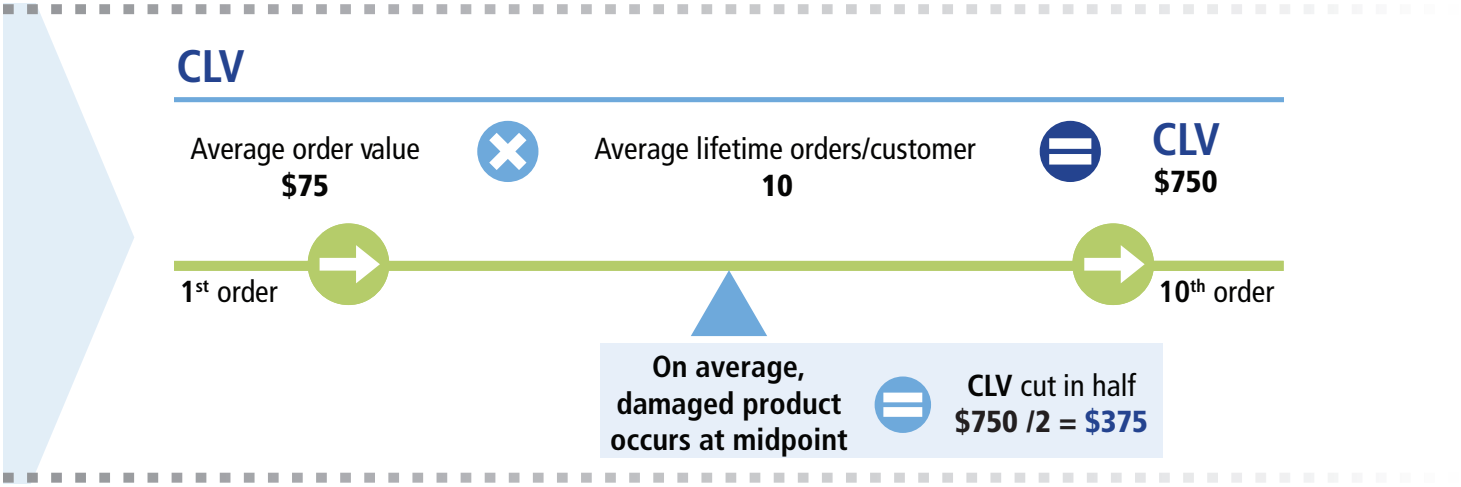
Additional impact per order: **$2** ⊕

Total cost per damage incident without including impact to customer lifetime value is $56. ⊖

6. **Customer lifetime value impact.** This is the most expensive part of the equation—the loss of customer lifetime value.

In a recent study conducted by Packaging InSight, an **overwhelming 15% of participants** indicated that they would be **extremely unlikely to purchase** from the company again after receiving a damaged item. This compelling statistic

highlights the importance of product protection. In fact, **product protection** was ranked as the "most important" characteristic of the packaging materials used to ship items to their final destination (as compared to sustainability and ease of product removal) by 80% of participants.



Additional impact per order: Using the number from the Packaging Insight study that **15% of customers would not place another order** with the company after a damage incident, coupled with a **customer lifetime value of $750,** we assign **$56† of future sales lost** due to each occurance, assuming the damage happens at midpoint in the buying relationship.

The solution

After taking the retailer through the calculation above and meeting with the cross functional team, the company was open to review an alternative solution. Pregis was able to show them how going from traditional void fill to an **on-demand hybrid cushioning (HC) pad would give them multiple performance and overall cost benefits.**

Hybrid cushioning differs from traditional void-fill pillows because it features multiple air chambers in a horizontal and vertical square pattern vs. one large cell. Flat, perforated rollstock is mounted onto Pregis' AirSpeed® Versa HC unit, which creates the rows of shock absorbing, air-filled pockets as the air is transferred between the proprietary square chambers.

In this instance, an 18-inch wide pad with large (1 ¼-inch) cell height met the project goal of reducing damaged product incidents.

However, the right solution also had to be supported with a program to train the packers. They were the critical last step to making sure the hybrid cushioning was used properly to insure the best possible outcome. (This included both onsite training and visual instruction materials posted at the pack station as a reminder.)

The goal was to pick a solution and provide training to **reduce the damage rate from .6% to .2%.**

†calculation is shown on page 4.

Pregis
Protective Packaging Solutions

Impact:

The **true impact for each damage occurrence was $112** when considering **cost to re-fulfill the item ($56)** and **loss of future sales ($56).** The company shifted their focus from minimizing packaging spend (buying the lowest cost solution) to making the most profitable decision for their overall business.

That translates to **$1 million negative impact** when including loss of future sales.

Impact of lost sales

1.5MM annual orders ⊗ 0.6% damage ratio = 9,000 customers experience damage

9,000 ⊗ 15% (customers that will not reorder)
= 1,350 lost customers ⊗ $375 CLV Impact

= **$506,250** total lost sales due to damage

*Note:
$56.25 financial impact of each damaged order
+ $56.00 expense for damage replacement
= $112 impact of each damage occurrence

$506,250 (total lost) / 9,000 (customers who received damaged item) = $56.25*

9,000 damage orders ⊗ $56.00* per damage incident = **$504,000** total expense

$506,250 total lost sales due to damage
$504,000 expense for damage replacement

Total annual impact = $1MM

Solution:

Pregis' challenge was to provide a solution that would **reduce the damage ratio from .6 to .2.** Doing so would reduce the $1 million impact to $350K. The company could spend as much as 45 cents additional per package on protective packaging to realize the potential $650K savings. Anything less than 45 cents would be delivered as profit to the bottom line. (Example: spending an extra 20 cents per package would improve the impact to the bottom line by more than $400K.)

In the end, the customer **installed 15 AirSpeed Versa machines (producing 18-inch pads) to feed 30 workstations.** The conversion from traditional air pillows to the hybrid cushioning material with a bio-additive met the desired damage reduction goal of 0.2%. The implementation was supported by a national training program to educate and train packers on

the importance of providing a consistent and positive customer experience. The transition slightly increased packaging material spend, but the net budget impact was positive as a result of the reduced damage occurrence. The cross functional team that helped to drive the decision is extremely pleased with the outcome and recognized by the company's leadership for their holistic view of the product journey.

Cross-functional decision teams are critical

Gone are the days when unit cost is the only consideration. Cross-functional teams are necessary so that the expenditure and solution meets all objectives. These typically include performance, damage reduction, customer experience and growing the brand. Operations, purchasing, marketing, logistics, etc., should all have a seat at the table.