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# Best Practices for Testing Packaging Redesigns

**TABS**Analytics

**DECISION  
INSIGHT**   
A TABS Group Company

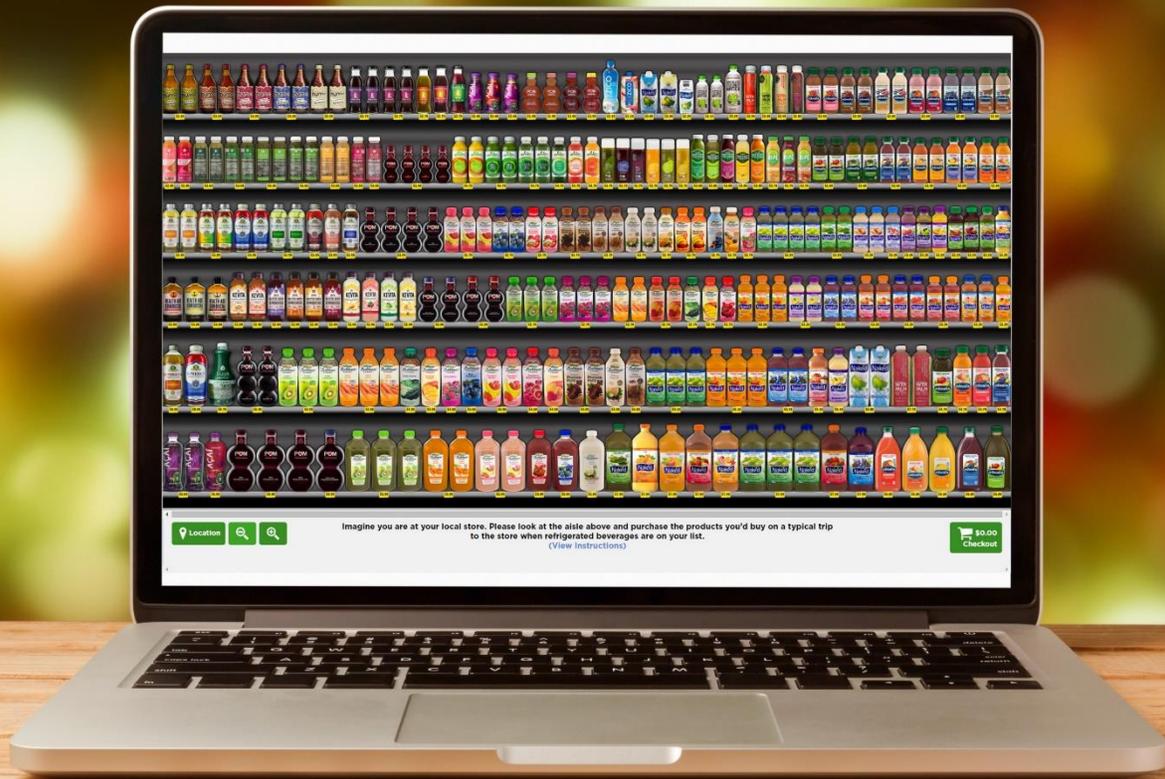
## Executive Summary

Brands make changes to their packaging for a variety of reasons. They may be trying to refresh their overall image, seeking to improve perceptions about the product, or highlight product features, such as taste, health or other trending characteristics. The goal of making these significant and visible changes is typically to enhance brand equity. But at the same time, there's a real possibility of a costly downside: the new packaging could harm sales or cause the product to lose significant shelf presence.

Decision Insight, a division of TABS Analytics, relies on its extensive packaging research experience to explain the myths of package redesign and why traditional testing methods are not the optimal tools. Decision Insight outlines best practices for testing package redesigns, including virtual shopping; shares findings about the outcomes of package redesigns; and describes how to make packaging research work for your brand.

**While this paper focuses on in-store work, we test packaging for eCommerce as well. We understand the challenges of getting *your image* noticed online.**





## Survey Methodology

Decision Insight analyzed the results from packaging studies conducted over a three-year period in categories spanning from baby food, to sports nutrition, to hot dogs. This analysis enabled Decision Insight to uncover patterns of shopper behavior and perceptions when interacting with new packages, including purchase decisions, product shelf impact, product and brand equity evaluations, and aesthetic package appeal.

To collect the data, category consumers completed an online exercise in which they “shopped” a virtual aisle. Each aisle contained either the current package or a new package for the product of interest, along with a selection of competitive products, as it would in a real store. Then, participants answered a variety of survey questions about which products they noticed, how they felt about the brands they saw, and what they liked or didn’t like about the package. To analyze the results across studies, Decision Insight measured the change for each variable – penetration, dollar sales, product awareness, etc. – from the current package to each test package.

**Decision Insight validates virtual shopping results against real in-market sales. Brand share from consumers’ virtual purchases consistently correlate to actual brand share to a very high degree.**

## The Problem with Packaging Redesign

When brands redesign packaging, there are typically four goals they hope to achieve:

1. Generate sales in the marketplace
2. Break through shelf clutter and be easily found on the shelf
3. Enhance brand messaging
4. Have aesthetic appeal

Yet, this is easier said than done. Changing package design can be a risky proposition. And Decision Insight's research shows that there's a real potential that you could do more harm than good.

Having conducted many package tests over the years, Decision Insight has uncovered that less than 1 in 10 packaging changes had a positive impact on sales. More concerning: Nearly half of the new package designs had a negative impact on sales. Additionally, among the nearly 40% that had no impact on sales, half of those had a positive impact on qualitative measures, such as findability on the shelf and product perceptions.



### Nearly half of the packaging designs had a negative impact on sales.



Source: Decision Insight Packaging Studies (2016 to 2018)

Test packages typically impact stated purchase intent (PI) negatively. However, the effect on PI (-3%) does not accurately reflect the magnitude of the impact to sales that virtual shopping results show (-8%). For this reason, it is important to test the package on the shelf in a competitive environment, and not just ask consumers whether they would buy it or not.

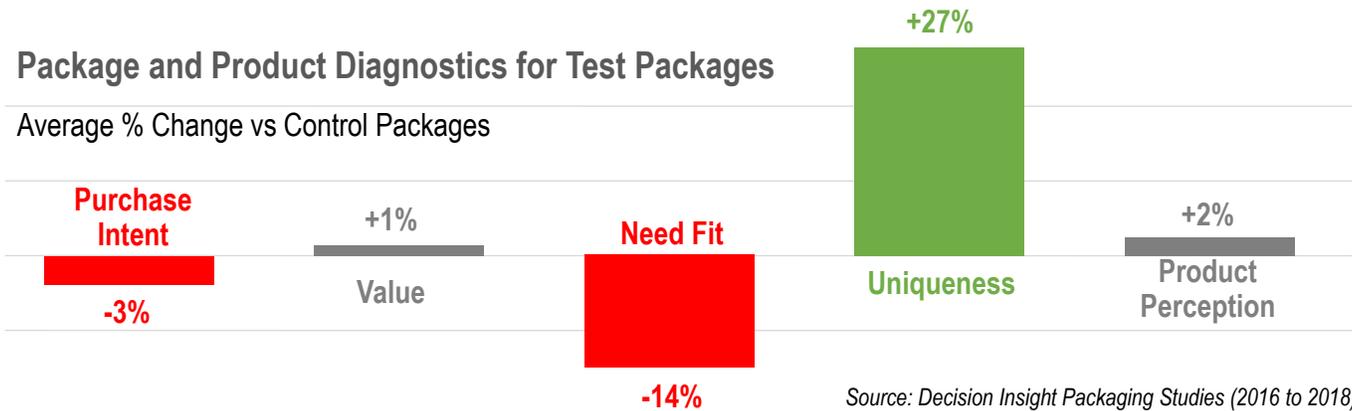
Perceptions of value and equity diagnostics for both the product and package remain flat compared to the control packages, but there are stark differences for Need Fit and Uniqueness. Uniqueness increases for test packages, reflecting the fact that these packages tend to be more adventurous and visually interesting than what's currently on the market. Need Fit, on the other hand, drops dramatically because consumers may not recognize the products they know and love.

**Average impact of all designs showed:**

- ✓ **41% decreased sales by 5% or more**
- ✓ **28% had a positive qualitative impact, but not on sales**
- ✓ **28% had no effect qualitatively or quantitatively**

**Package and Product Diagnostics for Test Packages**

Average % Change vs Control Packages



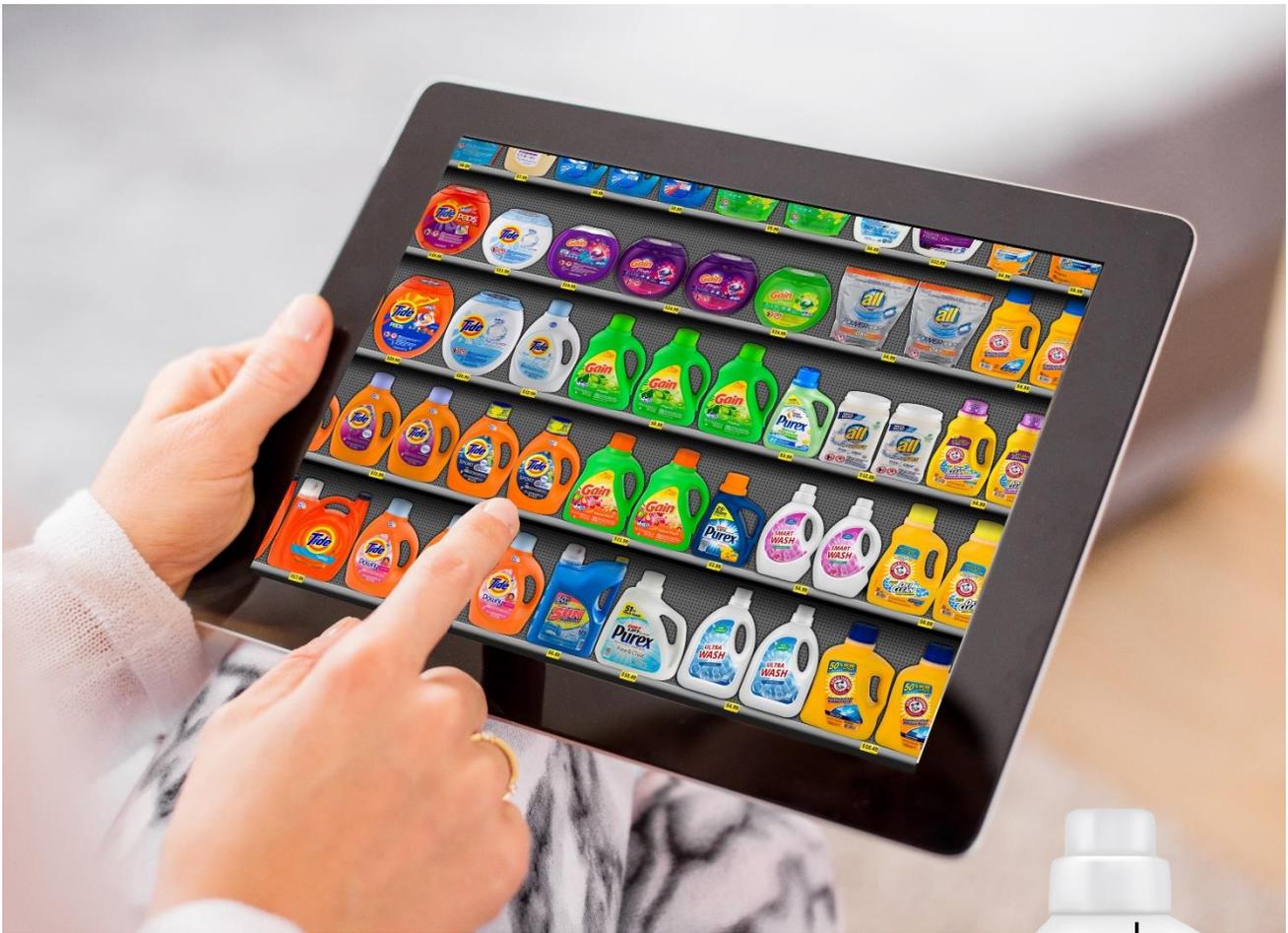
Source: Decision Insight Packaging Studies (2016 to 2018)

Let's take a closer look at results from Decision Insight packaging studies over the three-year period:

- Of the new packages we tested, less than 10% showed a meaningful increase in penetration (sales increase) versus the current package among category shoppers.
- On average, new packages achieve 8% less penetration, 5% less shelf impact (recall), and take 4% longer to find on the aisle compared to the current package among category shoppers.
- The average sales change across all tests: 3% decline.

Decision Insight's findings are directionally consistent with in-market results of package changes tracked by TABS: 25% of observed package changes resulted in a decrease in sales of 10% or more, while only 5% delivered an increase.

**Results are directionally consistent with in-market results of package changes tracked by TABS Analytics.**



## Why Traditional Package Testing is Missing the Mark

If brands are redesigning their packaging to improve sales, garner shelf attention or reinforce messaging, why don't these changes work?

Much of it begins with the testing process. Traditional testing methods focus mainly on aesthetics, not true shopper behavior. The tests evaluate whether the package stands out visually. For example, they examine whether consumers' eyes are attracted to the design more so than competing products in that category, and whether it is able to garner more attention or quicker recognition than other products.

But the main problem with most packaging research is that it ignores the fact that environment and competitive set impact what consumers **buy**. A package's shelf impact can be effectively tested by placing it on a virtual shelf surrounded with competitive products.

## Virtual Shopping: The Methodology

What traditional approaches don't take into account is how the product and its new packaging performs on the shelf in a full competitive set. One of the most effective ways to address this shortcoming and gain better understanding of how the packaging will perform in the market, is through virtual shopping.

Virtual shopping can help brands understand:

- If current buyers will continue to buy with the new package
- If non-buyers will switch to your brand
- Whether there will be shifts in the mix of sales within the portfolio
- Whether there will be interaction with other products and/or brands

Virtual shopping recreates a typical shopping experience, but rather than going into a brick and mortar store, the study is conducted online. First, participants enter the virtual store, and shop as they would in real life. They can interact with shelf variations, scroll through the aisle to view different products, click on individual items to pick them up to learn more, then return the item to the shelf or select it to purchase.

**Key output from the shopping exercise shows how each package variation impacts purchase incidence (% of people buying) and sales (units sold, dollars) for the portfolio and the category.**

**1** Participants enter a virtual store...



**2** where they shop as they would in real life, interacting with shelf variations.



**3** Respondents scroll through the aisle to view different products...



**4** and click on items to pick them up, learn more, return to shelf, or select to purchase.



After respondents have completed the virtual shopping exercise, you will want to follow up with diagnostic questions about the product and the packaging itself. For example, you'll want to know which brands they recall seeing on the shelf, and how they rate the product and package to measure impact on brand perceptions. You'll also want to send them back to the virtual aisle with the mission of finding the specific product as quickly as possible to measure the degree to which the product stands out on the shelf. And finally, you should ask shoppers to tell you what they liked – and didn't like – about the package from an aesthetic point of view.

To gain a full understanding of the impact of packaging changes, and to help *optimize* the design, you should also include three key measures:

- ✓ **Findability** – This determines a shopper's ability to locate the new package on the shelf. You can determine if the package is getting lost on the shelf amidst other designs, if brand users can easily find the new design, and if there is enough SKU differentiation in multi-item lines.
- ✓ **Product Evaluation** – Through this you can gain a better understanding of how well the packaging communicates key messages. Shoppers should rate the product on key brand equity measures. It's important to focus on the product here, not the package because when you ask a consumer to evaluate a package, they lose the ability to think like a consumer... they become a graphic designer.
- ✓ **Hot Spot** – This enables you to identify specific elements that drive appeal or may detract from it. Shoppers can click directly on the package and indicate what is appealing, unappealing and confusing, and why. This will help you better understand how the packaging elements contribute to the product's appeal and provide specific direction on elements that may need to be revised.

**The Hot Spot Exercise is an engaging tool to measure what shoppers like and dislike about specific elements of the package design. An interactive heatmap tool overlays response density and highlights areas of click data with corresponding verbatim responses.**



**Key output of Hot Spot is a profile of the appealing, unappealing and confusing elements. Verbatim responses of why are also collected.**

## Research Hierarchy of Critical Packaging Metrics

Decision Insight's Virtual Package Testing solution provides critical insights, including how the package impacts what shoppers buy. This approach helps brands get better insights into true shopper behavior, rather than stated behavior, because it is conducted in a realistic context of the store environment within a competitive set.

Combining virtual shopping with DI's proprietary diagnostic tools provides a complete perspective of new packaging implications. This includes strategic guidance on potential risks and objective recommendations to *improve sales performance* through research-informed packaging decisions. This approach offers several key metrics not easily attained through traditional testing:

- 1. Sales** – *Which packaging is most likely to persuade shoppers to choose your products?* Decision Insight measures sales impact for each packaging design based on virtual shopping, placing the current and test packages in the context of the store and shelf. The key output from shopping is an understanding of how each design impacts sales (volume/units sold, dollars) and penetration/purchase incidence (% of people buying).
- 2. Shelf Presence** – *Which packaging helps the line break through the shelf clutter and makes it easy to find your products?* The #1 reason new packaging fails is because it loses shelf presence. If a product can't be found, it can't be purchased. Decision Insight looks at recall and findability exercises to assess how new packaging stacks up in terms of shelf presence.
- 3. Brand Equity** – *Which packaging most effectively communicates key benefits and maximizes product perceptions?* New packaging must enhance brand perceptions. Decision Insight includes post-shopping ratings where respondents rate the products on key attributes to the brand and the intended communication.
- 4. Aesthetics** – *Which package do shoppers like best?* We include an exercise to evaluate what they like, dislike, and find confusing about each design, to help improve the offer.



"I love UltraWash. It is my go-to brand because it is so effective."



## Changing a Package Design Can Be Quite Risky

It's clear from Design Insight's experience and research that you need to be prepared to lose a small percentage of your sales, since it's harder for the shopper to find your product on the shelf. To help minimize the risk and position new package designs for success, it is important to test them with shoppers, in the context of the store and shelf, before going to market.

The economics are clear: You can protect your business through optimized packaging execution with a relatively minor investment in package testing using virtual shopping. [Click here for a virtual shopping demo.](#)

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## About Decision Insight

Decision Insight (DI), a division of TABS Analytics, is a leading shopper insights and retail strategy firm that uncovers shopper behaviors and motivations. Twenty years of partnering with leading CPG companies have groomed the team at DI to actively anticipate emerging needs to deliver **in-store and eCommerce solutions** that lead to activation, triggering higher shopper satisfaction and increased sales. Our Test & Learn research is forward-looking and based on shopper behavior. Learn more about our brick & mortar and [eCommerce packaging research solutions](#) at [www.decisioninsight.com](http://www.decisioninsight.com).

For more information about this white paper or Decision Insight package testing offerings, email Leslie Downie at [leslie@decisioninsight.com](mailto:leslie@decisioninsight.com).

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