CONSUMER PACKAGED GOODS & RETAIL
Taking the Risk Out of New Packaging Initiatives with Perfect Shelf

White Paper

SUMMARY

Nearly 75 percent of all purchase decisions are made in the store and packaging is primary driver of what the shopper puts in their basket. Yet, over half of packaging initiatives perform worse than the packaging it replaced and only 10 to 15 percent of packaging design efforts actually improve sales. Given the cost and effort needed to change packaging, how can companies improve the odds for success?

Dassault Systèmes Perfect Shelf **3D**EXPERIENCE® solution can slash the time and cost to validate new package designs in-context of the store while keeping the shopper experience at the heart of your innovation efforts. This allows companies to improve the chance of success of packaging initiatives while reducing the risk.

The Need to Validate Package Designs In-Context

Nearly 75% of all purchase decisions are made at store, and packaging plays a critical role to

- *influence* **shoppers** by gaining their attention at the shelf (STOP)
- *convey* **key messages** and points of difference versus the competition (HOLD)
- *convince* **shoppers** to place the product in their basket (CLOSE)

Companies need to proceed carefully to ensure that new packaging initiatives deliver the results they want. But unfortunately, most packaging initiatives fail.

According to 2011 Design Management Institute research[1], 50 percent of new packaging initiatives are worse than the existing package and may harm the brand if launched into the market. Only 10 to 15 percent of new package designs have an immediate (and statistically significant) positive impact on purchase levels from shelf. And the cost of failure for packaging initiatives is exceedingly high, while the chance for success makes any redesign effort a risky proposition.

As just one example, the failed Tropicana juice packaging redesign[2] shows the risks of changing packaging without keeping the consumer at the center of the effort. While the new design appeared to refresh the packaging's core equity elements and modernize the brand, when it was placed on shelf, it faded into the background and appeared similar to many private label juices. Sales dropped 20% in the two months after launch[3] and the new packaging had to be pulled from the shelves, costing millions in lost sales and supply chain costs. This could have been prevented if the package redesigns were viewed in the full context of the store and against the competitive packaging on the shelf.

Stuck in the Physical World

Unfortunately, testing packaging today can be very expensive, because you need to physically prototype the packages, the shelves, and even the store to create in-context testing. At a minimum

- New packages need to be physically prototyped using limited run molds or 3D printing
- Competitive products need to be purchased in large quantities
- Shelving units need to be purchased and built

This testing process can take weeks or months of effort and thousands of dollars to create a single shelf set. Researching merchandising strategies and the impact of store planning may even require mocking up an entire store costing millions of dollars or using expensive specialized market research firms.

Multiply this effort for additional store formats, geographies, and customers, and the cost and time required to validate new designs with in-context packaging review and qualification is virtually impossible except for the biggest brands with the deepest pockets.

...the cost of physical testing

Brand manufacturers rarely conduct package testing because of the costs involved. Developing prototypes costs between $500 to $5,000 per pack. When all of the costs are factored in, physical testing can cost between $70,000 to $150,000.[4] Some large Consumer Packaged Goods manufacturers spend millions to create their own research facilities containing full stores to support the breadth of their portfolio.

See new package designs in the context of a virtual store.

Validating Packaging Using Virtual Stores

Now, Dassault Systèmes Perfect Shelf **3D**EXPERIENCE solution enables Consumer & Packaged Goods (CPG) manufacturers and retailers to perform virtual in-store, in-context testing of new packages in half the time and at a third the cost of traditional in-context testing. Packages, shelves, and stores can be created in a virtual universe and reused over and over to test multiple design options or other brands in the portfolio.

Instead of creating costly physical prototypes, CPG companies can easily create 3D packages using a combination of 2D pictures and package dimensions in just a few seconds. Manufacturers can rapidly create hundreds or even thousands of products to populate virtual stores at a fraction of the time and cost of procuring physical products or generating 3D representations with CAD or 3D rendering tools.

Shelves and stores can be rapidly created using gondola and fixture libraries, and then configured to model key retailers and channels. This allows new designs to be viewed in multiple shopping venues, including grocery, convenience store, mass outlets, and even high frequency store formats. Designers can view their new packaging in different environments to measure its ability to stop, hold, and close the shopper.

Immersive, lifelike 3D environments enable shopper research using large visualization "walls" or "caves", large screen displays, desktop monitors, or mobile devices. These efforts ensure that new package designs will deliver the proper return on investment before you commit to an expensive packaging change that could negatively impact your brand.
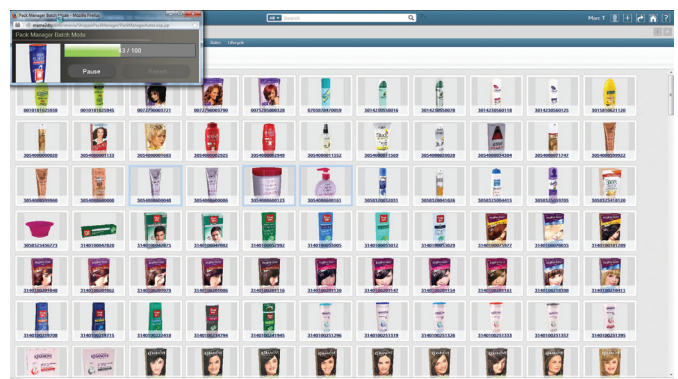
One person can generate 500 to 700 new 3D packages per day using Perfect Shelf.

Perfect Shelf can be used to create any part of the store whether traditional store aisles or specialty areas like the pharmacy.

Package validation research can be conducted using large visualization "walls" or "caves", large screen displays, desktop monitors, or tablet devices.
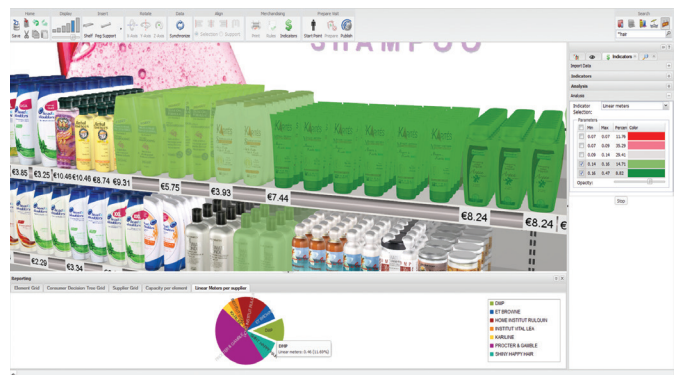
Create Once and Reuse Rapidly

Once virtual products, categories, shelves, and stores have been created, brand manufacturers and retailers can reuse the same virtual environments to expand in-context research from their top-tier brands to all the brands in their portfolio and swap out the redesigned product. Attempting this in a physical world would be cost prohibitive and logistically impossible.

In addition, unlike other solution providers or research agencies that charge by research session, Perfect Shelf enables companies to build assets once and then reuse them for all their research needs. This drives down annual costs for package validation and allows multiple packaging initiatives to take advantage of the same virtual environment.

Teams can import business data directly from Excel or other data sources and then set targets to aid analysis.

Understanding In-Market Impact in Context

Once the new package design has been launched in the market, Perfect Shelf can provide business metrics in the context of the shelf in 3D. Business leaders can review key metrics like revenue, margin, turnover, days of hand, and other performance metrics that are essential to running their business.

You see how the packaging change is performing in the context of the store and quickly understand the impact it has made on its own sales and the different competitive products around it. It can provide insights into how the package has changed shopper behavior during the product selection process and enable leaders to take data-driven action.

Companies can see how new packaging is performing in the context of the shelf.

Validate Package Designs with Perfect Shelf

Dassault Systèmes Perfect Shelf **3D**EXPERIENCE solution can slash the time and cost to validate new package designs while keeping the consumer experience at the heart of your innovation efforts.

- Shift package design success rates with early in-context validation
- Reduce time and cost for physical research or other virtual providers
- Expand research cost-effectively to all packaging initiatives instead of just a few
- Drive more efficient innovation for both top and bottom line growth

Learn more about how Dassault Systèmes Perfect Shelf **3D**EXPERIENCE solution can help you improve your packaging initiative success rates today.

For more information, visit **www.3ds.com/perfectshelf**

[1]Young, Scott. "50 Percent Wasted": Insights to Improve Packaging Success Rates and ROI. Design Management Institute Journal, May 2011.

[2]Zmunda, Natalie. "Tropicana Line's Sales Plunge 20% Post-Rebranding" Ad Age, April 2, 2009. http://adage.com/article/news/tropicana-line-s-sales-plunge-20-post-rebranding/135735/

[3]Ibid.

[4]Ordabayeva, Nailya and Pierre Chandon. Predicting and Managing Consumers' Package Size Impressions. Journal of Marketing, September 2013.

Our **3D**EXPERIENCE Platform powers our brand applications, serving 12 industries, and provides a rich portfolio of industry solution experiences.

Dassault Systèmes, the **3D**EXPERIENCE® Company, provides business and people with virtual universes to imagine sustainable innovations. Its world-leading solutions transform the way products are designed, produced, and supported. Dassault Systèmes' collaborative solutions foster social innovation, expanding possibilities for the virtual world to improve the real world. The group brings value to over 170,000 customers of all sizes in all industries in more than 140 countries. For more information, visit **www.3ds.com**.

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