Package Research
The Science of Package-Design Optimization
Why Optimize Package Designs?

Package graphics and copy are critical variables for nonadvertised or underadvertised brands in self-serve shopping environments. The package on a retail shelf is the last opportunity to influence consumers before they decide to buy. It’s the final sales pitch at the “moment of truth.” Any new package design or significant change to an existing package should always be submitted to the scrutiny of scientific consumer research.

The Starting Point: Qualitative Research

Before new package designs are created, it is always wise to conduct qualitative research to explore target consumers’ knowledge, frames of reference, perceptions, motivations, and needs related to the product category and your brand. What images, elements, phrases, symbols, and illustrations resonate with the target audience? The upfront qualitative work helps identify the most important package-design elements and provides guidelines for the creation of new package designs.

PackageOpt™ Optimization

A package, or package design, consists of shapes, colors, images, fonts, brand name, and messages. The number of permutations of these elements (i.e., unique package designs) can run into the thousands. With PackageOpt™, it is possible to predict consumer reactions to all possible combinations of these package elements.

The critical elements, identified in the qualitative research, are combined into various “scenarios” (or package prototypes) in choice-modeling experiments. Each unique combination of elements creates a prototypical package design. Respondents see each prototype package design in the context of major competitive packages, before rating the packages. Then choice-modeling analyses identify the best packages from the thousands of possible combinations. These best package designs are submitted to a regular package-testing regimen.
Virtual Shopping and 3D Animation

The retail shopping experience can be simulated online with virtual technology, so that respondents visually “fly into” a store and move to a shelf set where the test package is shown in a competitive context. Respondents are asked to choose the brand they would be most likely to buy if the products on the shelf set were the choices available. Respondents can click on packages to see greater detail, including ingredient statements and nutritional information. With 3D animation, packages can also be modeled so that respondents can rotate the packages to view them from many different angles. This is especially valuable if the package design involves a new shape or an unusual shape.

PackageScreen®

The package design process typically begins with the creation of a large number of “rough” or early-stage designs (whether PackageOpt™ is used or not). PackageScreen® identifies the package designs that resonate with consumers, so that creative efforts can be focused on the better designs.

A representative sample of 300 target-audience consumers are recruited. These participants see all of the package designs one at a time (typically 10 to 20 designs) on their computers, in randomized order. Then each person views the package designs a second time and answers a series of questions about each design. The answers to these questions are fed into a mathematical model to calculate an overall index score for each design.

PackageCheck®

The next step in the design process is to learn more about the better designs so that further improvements can be made. PackageCheck® is an online testing system created to provide diagnostic feedback.

A representative sample of 75 to 100 target-audience consumers view each package design online. Each respondent sees only one design (i.e., a monadic test) and then answers a series of standard questions, including a series of open-ended questions. The final report includes answers to standard questions, compared to Decision Analyst’s action standards, as well as verbatim responses to open-ended questions. The verbatim detail aids creative teams in improving the package’s graphic design and copy.
PackageTest®
As packages near the end of the design process, a more comprehensive evaluation is recommended, with extensive measurements to assess all of the important elements. PackageTest® is a monadic, online testing system that evaluates finished (or near-finished) package designs. Respondents see the test package in a competitive context, then in isolation. Then they see the front panel and, later, other panels. The report includes our analyses and recommendations. Decision Analyst’s SellingPower™ mathematical model calculates an overall score for each package design.

Eye-Tracking Diagnostics
For some packages, eye-tracking can provide additional diagnostic information. Depending on the product category and packaging issues, eye-tracking might be recommended. Eye-tracking can help reveal where a consumer’s eyes are focusing, show the pattern of eye movements, and map where the eyes are lingering. Pupil dilation can be an indicator of arousal. These measures are not predictive, but can add to our understanding of why the package scores as it does, and provide clues about how the package might be improved.

Why Decision Analyst?
Decision Analyst is a global marketing research and analytical consulting firm with over 35 years of experience in package-design testing and optimization. The firm has evaluated thousands of package designs over the past two decades for packaged goods brands, spanning many different product categories. Decision Analyst is a leader in advanced analytics and optimization techniques related to package designs. If you are thinking about testing new package designs, please give us a call.