



Taking a qual-quant approach to design research

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Product success depends heavily on the success of designers in communicating purchase criteria and brand identity in product, package and logo design. The problem is that, in testing the design concepts, it can be very difficult for respondents to articulate and evaluate what the concepts are actually communicating to them.

Design semantics is a qualitative tool for industrial and graphic designers intended to capture what design concepts are communicating to respondents and profile their perceptions. Design semantics ensures that respondents develop a shared definition of attributes with each other and with the designers and that they discuss, measure and rate the distinguishing attributes in the design concepts.

Reporting includes a profile of each concept plotted per segment or per market, according to your needs, plus analysis of the accompanying qualitative discussion; a comparison of each profile with ratings of likeability and purchase intent; and concluding analysis of the design elements that are revealed to engage and motivate consumers in the marketplace.

Design semantics is an adaptation of the semantic differential - a quantitative tool - to qualitative research. Typically, the semantic differential serves in quantitative research to measure the strengths and weaknesses of a product or service by having respondents rate it between positive and negative

descriptors; the mean of the responses is plotted to provide a profile. The data distribution is charted and percentages can be determined.

In a qualitative design study, getting such a profile enables designers to identify clearly what a design communicates to respondents. But we must rethink the standard quantitative approach for our design purposes. We replace strengths vs. weaknesses with attributes that are non-judgmental and randomly organized to capture and measure what the design communicates. Figure 1 gives an example of the different application.

Let's say the goal of the client - a manufacturer of electronic appliances - is to understand what consumers like in a television design that would stimulate interest and motivate purchase intent in the online or store retail environment.

Figure 1

Quantitative: Profile respondent perceptions of a bank's strengths and weaknesses so the bank may improve its image.

Rate Northern Savings and Loan along each of the following scales:

Modern	_____	Old fashioned
Friendly	_____	Unfriendly
Attractive exterior	_____	Unattractive exterior
Helpful services	_____	Indifferent to customers
Successful	_____	Unsuccessful

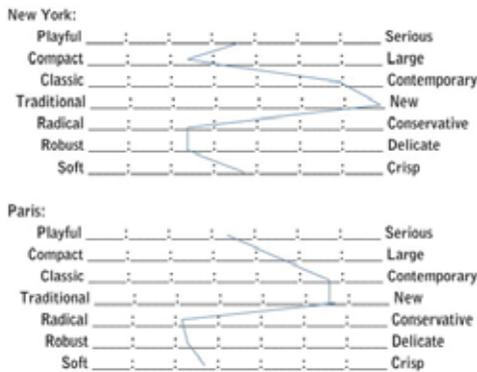
Qualitative: Profile the attributes respondents see in a package design: non-judgmental attributes, randomly ordered to measure brand communication.

Rate Model A along each of the following scales

Warm	_____	Clinical
Basic	_____	Premium
Complex	_____	Easy to Use
Common Sense	_____	Science
Expert	_____	Friendly

Figure 5

Sample results: Form C Composite Profile



tions is now their preferred choice; what elements, if any, from any of these additional models they would like to merge with their original preferred choice; what company they think produces their preferred choice; which company may make the one they like least and so on.

Step 5: Reporting

In the report, we are able to provide the composite profiles of each model, along with the qualitative comments, to analyze and guide the client on how to produce the design that best captures interest and motivates sales.

The qualitative comments will yield associations and impressions in our analysis about the design concepts and provide insights into purchase intent. The composite quantitative profiles measure in design terms what such comments mean.

As in quantitative research, the profiles are created by

plotting the mean of responses for each pair of adjectives. Figure 5 shows that the aggregate of respondents in New York (total of 24 respondents) felt very strongly that Model C was a new and contemporary design concept for a television and were a little less certain that it looked compact and robust. They were neutral about whether the feel was more soft or crisp or more serious or playful.

Where the mean lands in the middle - say around 4 on a seven-point scale - that tells us that the design element either leaves most people indifferent or is polarizing. Either response is a red flag for a designer. A check of the data distribution revealed that, in this case, the New Yorkers were conflicted about those design elements.

It's important to remember that, given the small sample, the findings are directional but the measurements are precise. Besides the mean, which shows where most responses fall toward either side of the paired opposites in the overall concept profile, the data distribution is charted and percentages can be determined.

Makes such guidance possible

The product or package designer's goals are to attract consumers to the product in the retail/online environment; to motivate purchase; and to embody the brand identity. Getting consumer respondents to make this possible for designers - getting them to understand and use design language and to articulate their responses to design concepts in order to guide the designers - has always been a challenge both qualitatively and quantitatively. The benefit of the qualitative design semantics process for industrial and graphic designers is that it helps make such guidance possible in a way that is precise, insightful, reliable and measurable. | Q