

# Role of Constructed Preferences in the Success of Green Design

Erin MacDonald, Ph.D. Candidate

Advisors: Panos Papalambros, Richard Gonzalez

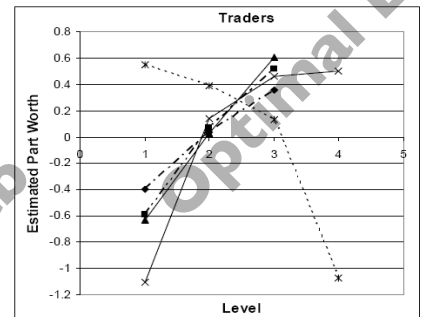
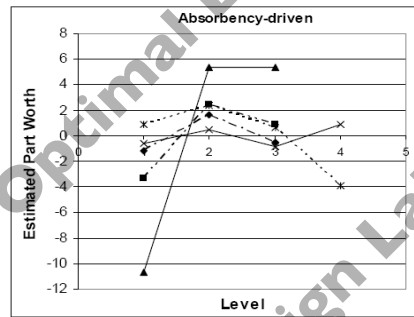
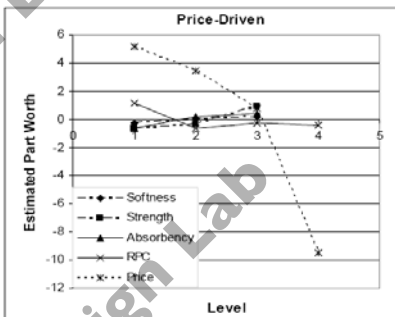
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## People Construct Product Preferences

- Engineers tend to view preferences as a database of information that people access to make decision, but research in psychology has shown that people construct preferences on a case-by-case basis in response to the situation at hand
- The impact on product design is that user preferences are inconsistent: the needs designers “find” in the product design process may be created in response to the need-finding process, and may not be present at time of product purchase and use
- This work addresses the large and troublesome preference inconsistencies that exist for green products

## Traders: Green consumers or not?

Using a mixed logit model, we identified three groups of paper-towel consumers as shown in the graphs below. The traders group of 120 people appears to trade-off amongst paper towel attributes, and 30% of them refused to buy a paper towel because it did not have recycled paper content. However, all but 2 traders purchased paper towels with NO recycled paper content the last time they went shopping.



## Design for Activation of Preferences

- As people were given increasing information about a paper towel’s absorbency, preference for quilting in the towel decreased to the point that the attribute of quilting was insignificant.
- We term quilting a “sentinel” attribute for the “crux” attribute absorbency, as absorbency is an important product attribute, but difficult to evaluate without other attribute cues. We have developed a rigorous set of hypothesis for identifying crux and sentinel attribute relationships using construction of preferences.
- We will next investigate if sentinel green attributes can activate a particular construction of preferences for the traders.

