The Effects of Incentive Alignment, Realistic Images, Video Instructions, and Ceteris Paribus

Instructions on Willingness to Pay and Price Equilibria

by

Felix Eggers

John R. Hauser

and

Matthew Selove

February 2016

Felix Eggers is an Assistant Professor of Marketing and Fellow of the SOM Research School at the Faculty of Economics and Business, University of Groningen, Nettelbosje 2, 9747 AE Groningen, The Netherlands. 31 50 363 7065, f.eggers@rug.nl.

John R. Hauser is the Kirin Professor of Marketing, MIT Sloan School of Management, Massachusetts Institute of Technology, E62-538, 77 Massachusetts Avenue, Cambridge, MA 02142, (617) 253-2929, hauser@mit.edu.

Matthew Selove is an Assistant Professor of Marketing at the Marshall School of Business, University of Southern California, 3670 Trousdale Parkway, BRI 204F, Los Angeles, CA 90089-0443, 213-740-6948, selove@marshall.usc.edu.
The Effects of Incentive Alignment, Realistic Images, Video Instructions, and Ceteris Paribus Instructions on Willingness to Pay and Price Equilibria

Abstract

Easy-to-use software for conducting conjoint experiments makes it feasible to create online choice-based conjoint (CBC) surveys in a matter of a few minutes. With technological hurdles mostly eliminated, the validity of the CBC experiment largely depends on the quality of its implementation. For example, research on incentive alignment (IA) suggests substantial improvements in predictive validity. In this study, we compare IA to three proposed implementation options that practitioners have been using in an attempt to increase predictive validity of CBC experiments. They are (1) using high-quality images instead of text-only descriptions of stimuli, (2) including video instructions to familiarize respondents with the stimuli and the conjoint task, and (3) explicitly stating the ceteris paribus assumption, i.e., mentioning specific features of the product that are not subject to experimental variation. We compare these four implementation options in a 2^{(4−1)} between-subjects experiment about smartwatch designs. We show that investing in a more realistic implementation increases the precision (scale) of the estimates and improves predictive validity. Using images has the highest effect that matches the effect of IA. Video instructions and the ceteris paribus instructions appear to have no significant effect on predictive validity. Indeed, video instructions might even lower precision, possibly due to a significantly longer interview time and potential respondent fatigue.

We show further that these changes in predictive validity matter both strategically and tactically. Strategically, conjoint analyses are often used to evaluate new product features. In a companion paper we demonstrate that, when price equilibria are considered, changes in predictive validity affect strategic decisions on product attributes. The changes we find here are large enough to enable that effect. Tactically, the resulting price equilibria suggest differences in willingness to pay with immediate implications for pricing. Conjoint analyses are also increasingly used in litigation to measure consumer’s
willingness to pay for patented or trademarked features. (Some experts also estimate willingness to buy.) When there are many features and/or many products, marketing experts use conjoint simulators to estimate the demand curve and rely to economics experts to compute damages. When the number of products and attributes are small, some marketing experts advocate that the conjoint analyses be used to compare price equilibria with and without attributes enabled by the patent. They propose that damages be based on the differences in these price equilibria. We show that both methods are sensitive to the quality of the conjoint-analysis implementation. Marketing experts should strive for the highest quality implementation: we recommend IA, when feasible, and the use of realistic descriptions of the product attributes. Failure to do so, may reduce the accuracy of estimates of willingness to pay and/or willingness to buy.

**50-word description**

We compare the effects of incentive alignment, realistic images, video instructions, and *ceteris paribus* instructions in choice-based conjoint experiments on willingness to pay and price equilibria. We show further which factors influence the predictive validity and that these changes matter both strategically and tactically.