



YOUR BEST CHOICE FOR CHOICE RESEARCH

Some Background

Conjoint methods have been used in marketing for close to 40 years, but a new era began about 1990 when "choice based" techniques came into play. There was no dedicated software then. One had to understand experimental design and how to manipulate econometric estimation programs. Paul Riedesel did.

A second revolution occurred in the past decade when increased computing power made it feasible to employ Bayesian statistical methods to estimate utilities at the individual level. This was a major breakthrough. Simulations of preference are more accurate, and various kinds of segmentation are now possible.

Behind many of these developments is Sawtooth Software, a vendor serving the marketing research community alone. Founder Rich Johnson is a Living Legend, and the senior staff are omnipresent at professional conferences, sharing their latest learnings. We are delighted users of their software (and have been for years).

This combination of state-of-the-art software and Paul Riedesel's two decades of experience with the techniques make Action Marketing Research your best choice for choice research.

Prioritizing Offers

A common issue for marketers is choosing which of several offers to make or features to include. Direct measures of popularity may be fine, but in other cases you want more precise measurements of the value each option has.

A permutation of conjoint methods called "MaxDiff" (for Method of Maximum Differences) is an effective tool for estimating the utility of each option. Respondents see multiple sets of options and are asked to identify their first and last preference in each set. This can be done with full conjoint profiles as well, but works especially well for comparing discrete items.

The idea is simple enough, but designing just the right choice sets is not so simple. Fortunately for us, we have Sawtooth's MaxDiff module for our online survey program. Like any conjoint task, MaxDiff requires significant interviewing time, but the output is powerful and precise.

The more options to be weighed, the more valuable a tool like MaxDiff becomes. And because individual-level utilities are calculated, it is possible to assess combinations of offers/features in a reliable fashion. We like it. So will you.

$$P(i|C) = P[(V_i + e_i) > (V_j + e_j)], \forall j \in C$$

Adding the Voice of the Consumer

"If you want to know what consumers prefer, why not just ask them?" Historically, researchers have had to choose between direct (self-explicated) preferences and those derived from choice experiments. The case for the latter is that it uses observed preferences to estimate what consumers actually value.

What was called "adaptive" conjoint was a hybrid, computer-assisted method in which consumers did specify attributes they had to have, and ones that were unacceptable. The program then presented profiles to be rated that took into account these self-explicated preferences.

The problem was, adaptive methods had not been combined with the now-standard choice-based conjoint. That has changed. The newest tool from Sawtooth is a module that applies an adaptive front end in a survey, followed by choice sets that take into account what each consumer has said is a must-have and what is a deal-breaker.

We are happy to be using this Adaptive Choice Based Conjoint (ACBC). While we are hardly alone in the industry, we bring to it the experience of 20 years of thinking about conjoint problems and solving them. ACBC is not needed for all choice research. With only a handful of variables, plain CBC will work as well and is quicker. As the number of variables grows, the more of an advantage ACBC confers to the researcher.

We have never run this business by selling "products", and that will not change. If you don't need ACBC or CBC (in our opinion), we won't bring it up. But if our judgment is that choice analysis is the right way to go, you can be assured that we will recommend the best methods for your unique needs.

What If?

An indispensable part of any conjoint study is a simulation tool. The goal is usually to choose a product configuration or offer that optimizes

consumer preferences *vis a vis* competitive products. While literal profitability is difficult to forecast, the overall design should keep price or costs in perspective.

A simulation program takes the "utility" scores that have been estimated from the conjoint tasks, and uses them to model the preferences that would result between two or more product configurations that the analyst has defined (using the variables and levels in the study). Often, configurations are created that represent key competitors. The analyst then tests various configurations against them to find out what is most competitive.

Sample size permitting, sub-groups of study respondents can be analyzed separately. The need to look at separate segments is an important factor in sample size. We have looked at segments with as few as 60 members, but prefer larger ones.

At the least, we will work with a simulator to prepare our report and recommendations. Clients usually ask to have the tool as well. In any case, the better we understand the exact scenarios or decisions to be made, the better job we can do in helping you.

Conjoint is not magic. It can't give you the right answers if you haven't even thought through the questions. Part of our job is to make sure we are thinking about the right business questions. That's why we promise "research you can use."

On Another Topic . . .

We have for several years run online tests of both audio and video spots. One "secret" for doing so successfully is using a specialized and fast file server. Your average ISP would choke at the bandwidth requirements. Another is to offer a choice of formats to respondents. Most can play MP3 audio files, but you must be considerate of both Windows and Mac users when it comes to video. We keep the tools on hand to make the necessary file conversions.