MaxDiff vs Conjoint Analysis

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Maximum differential analysis and conjoint analysis (MaxDiff vs conjoint) are both advanced analytical tools used to obtain deep insights into customer preferences and differences between preferences score multiple brands/products. Below, we provide a quick comparison of both the techniques.

Difference between MaxDiff and conjoint analysis

MaxDiff analysis

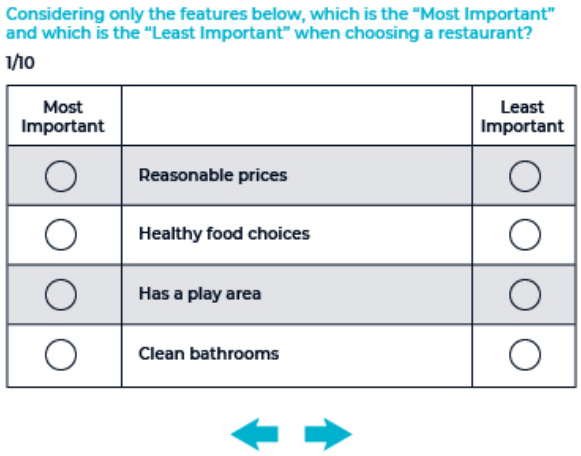
This approach is used to obtain preference/importance scores for multiple items. Respondents are typically shown 2-6 items on a single screen (e.g., different types of vehicles – midsize truck, sedan, minivan, SUV, mini SUV, hatchback, sports car, convertible, etc.) and asked to identify the best and the worst items. The method is also known as the best-worst scaling-type tool. This task is repeated multiple times, with a predefined set of combinations shown each time. The most popular common applications where this technique can be employed include message testing, brand preference, customer satisfaction and product features. Finally, data are compiled together, and the output is generated as utility scores for each item. The analysis of MaxDiff utility scores usually contains data that demonstrate how many times each attribute was displayed and the number of times each attribute was chosen as the best and the worst attribute. These three parameters relatively determine the importance of each item, providing clues to big brands on features that need to be embedded while manufacturing their products.

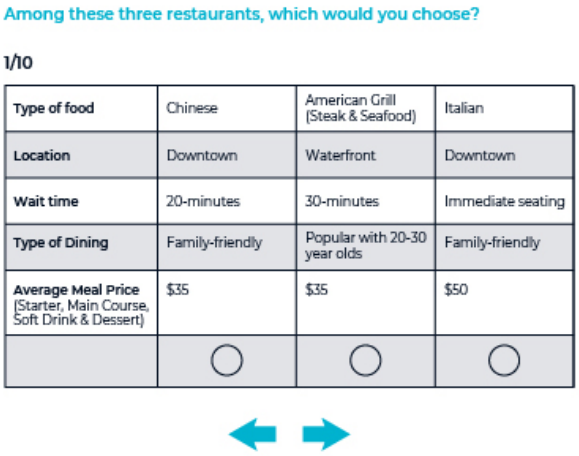
Conjoint analysis

In conjoint analysis, more parameters are added to the experiment, and a product/service is described by multiple attributes. Therefore, in the above example of cars, the brand and price attributes, in addition to vehicle type, would be added in a test. Product features are varied to make different combinations such as packages, a.k.a. product concepts. Respondents are then asked to rate/rank or, most commonly, choose (depending on the type of conjoint analysis) the concept they prefer (dependent variable). Based on the results drawn from respondents' opinions about the concepts, one can ascertain how valuable each feature – airbags, power windows, infotainment system and antilock brakes, among others – in the product is.

The key difference between the conjoint and the MaxDiff analysis is in conjoint analysis, the rating/choice of a concept is based on the sum total of its components. As stated above, it assumes an additive model, where the value of an overall product concept is equal to the sum of its parts. On the other hand, the MaxDiff method is not an additive model. It is an individual item/attribute-score-

based technique.





What they do	• It measures buyers' preference for a range of items, features, messages, etc.	• It measures how buyers value various components of a product/service packed in a bundle • Results help optimize the product/service offering
How they work	• A list of items to be tested is prepared • Usually 2-6 items are shown to each respondent at a time, who are then asked to indicate the best and the worst items • This task is repeated many times, using a different set of items in each task • Based on the results drawn from respondents' opinions about the concepts, one can ascertain how valuable each feature in a product is relative to the others	• A product/service is broken down into its components (attributes) and components are packed into concepts and combinations of those unique concepts are compared in each level. • Different product concepts are created by varying these features (levels) • A set of 3-5 product concepts are presented to respondents at a time and asked to rate, rank or, most commonly, choose the concept they would prefer. This task is repeated many times, with a different set of product concepts shown each time • Based on the results drawn from respondents' views about the concepts, one can figure out how much unique value each feature adds
Similarities	• Both techniques force trade-offs, which lead to greater discrimination among items • Both methods result in interval-scaled utility scores for each item/level tested, which can be transformed into ratio-scaled probabilities	
Differences	• Conjoint analysis assumes an additive model, where the value of the overall product concept is equal to the sum of its parts. The MaxDiff technique is not an additive model • In conjoint analysis, one can directly compare only utilities within each attribute. The direct comparison of a level of one attribute with another from a different attribute is not possible. On the other hand, all items are measured on the same scale in the MaxDiff method and can be directly compared	

How can we help?

Acuity can help the client with end-to-end services like suggesting the clients with the best analysis technique that they can use for their products and make it better with the results. Maxdiff and conjoint exercises can be incorporated with/without other questions in a survey to generate the best and effective results.

Sources

www.sawtoothsoftware.com

Table Source – www.sawtoothsoftware.com

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Acuity Knowledge Partners is a leading provider of high-value research, analytics and business intelligence to the financial services sector. The company supports over 350+ financial institutions and consulting companies through a team of over 3,000+ subject matter experts who work as an extension of the clients' teams based out of various global delivery centres.

We empower our clients to drive revenues higher. We innovate using our proprietary technology and automation solutions. We enable our clients to transform their operating model and cost base.

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