



## CONJOINT ANALYSIS: AN INTRODUCTION AND ITS IMPLICATIONS IN MANAGEMENT RESEARCH

\*Daya Suvagiya, Shilpa V. C. and Shah Parth

(Research Scholer, Junagadh Agriculture University, Junagadh, Gujarat)

\*Corresponding Author Email- [Pateldaya1993@gmail.com](mailto:Pateldaya1993@gmail.com)

### Introduction

Any product or service should be devised keeping in mind the requisite bundle of attributes to satisfy the needs of a customer. The task of the marketers is to identify the needs of the consumers and the value (or importance) they assign to each need. Hence conjoint measurement a versatile technique that can be used to study consumer quality evaluations with respect to agricultural products, food products and services *etc.*

Since the mid-1970s, conjoint analysis considerably used as a method that portrays consumer's decisions realistically. Further, during 1990s, the application of conjoint analysis increased even further, spreading to almost every field of study and specially in the field of marketing research. Other than this, in the field of agriculture, conjoint analysis is used to determine consumer preferences for any new variety of the crops viz. pigeon pea, rice etc. The knowledge of consumer's preference for certain features of the product provides a very useful basis for planning prior to commercial production and launching new product or a variety. Conjoint originated in mathematical psychology and was developed by marketing professor Paul Green at the Wharton School of the University of Pennsylvania.

In general words, conjoint means anything which is joined together or combined. Whereas the marketers catch this phrase as the features which are considered jointly.

For example, if a farmer or consumer wants to buy a tractor then what attributes he/she will expecting from the product? He might be go for its attributes along with their levels like capacity (50 HP, 40 HP, 30 HP), price (5-7, 7-9, >9 lakhs), Colour (Green, Blue, Red). Then it becomes a formidable task farmer to go for which attributes and levels. There might be different combinations are exists. To choose the best among all combinations, a farmers may go for conjoint analysis. This is why, we need Conjoint Analysis.

### Without Conjoint Analysis

If we imagine marketing without conjoint analysis, it becomes superfluous. And selling becomes superfluous when the product or service fails to meet the needs of the consumer. Why a product may fails to meet the needs of the consumers? Because a consumer has a bundle of needs. Any product or service should be devised keeping in mind the requisite bundle of attributes to satisfy the needs of a customer. The task of the marketers is to identify the needs of the consumers and the value (or importance) they assign to each need.

### Timeline of Conjoint Analysis

Since the mid-1970s, conjoint analysis considerably used as a method that portrays consumer's decisions realistically. Further during 1990s, the application of conjoint analysis increased even further, spreading to almost every field of study and especially in the field of

marketing research. And in the field of agriculture, conjoint analysis is used to determine consumer preferences for any new variety of the crops *viz.* pigeon pea etc. The knowledge of consumer's preference for certain features of the product provides a very useful basis for planning prior to commercial production and launching new product or a variety.

### **What is Conjoint Analysis ?**

Conjoint analysis is a multivariate technique developed specifically to understand how respondents develop preferences for any type of object (product, services or ideas) (Hair *et al.* 2010).

Conjoint analysis is a method that estimates the structure of consumer preference his/her overall evaluation of a set of alternatives products with pre-specified levels of various attributes (Dhamotharan and Selvaraj, 2013).

### **Need for Conjoint Analysis**

If we go into a real world, buyers do not make decisions based on a single attribute alone. Instead, they examine a range of products, all with different combination of features and attributes, and perform a complex series of trade-offs before reaching a decision. Different consumers can evaluate the quality of a product differently and there does not exist one as a 'best quality'. Hence conjoint measurement is a versatile technique that can be used to study consumer quality evaluations with respect to agricultural and food products etc. Also this technique will helps to predict the profitability and/or market share for proposed new product concepts given the current offering of competitors. Other than this, the technique will be also helpful in *viz.*,

- Predicting the impact of new competitor products or market share if we make no change in our competitive position.
- Predicting customer switch rates either from our current products to new products we offer or from our competitors' products to our new products.
- Predicting competitive reaction to our strategies of introducing a new product.
- Predicting the differential response to alternative advertising strategies or advertising themes.
- Predicting the customer response to alternative pricing strategies, specific price levels, and proposed price changes.

### **Advantages of Conjoint Analysis**

Advantages of using conjoint analysis can be explained as under:

- One can gain thorough understanding about the market and the value for their services or products as how respondents see it.
- The method of conjoint analysis is perfect for measuring value of brand names related to competing brands.
- Reveals ultimate preference of consumers when competing influences exists.
- Able to predict desirability of combinations which are not actually offered.
- Can estimate contribution of each factor and assess its cost effectiveness.

- Data collection procedure is quite simple as the consumers are required to compare the different alternatives and rank the combinations in the order of preference.
- It estimates psychological trade-offs that consumers make when evaluating several attributes together.

### **Conclusion**

In almost any situation in which consumers have to choose between several options the conjoint approach can be used to determine which attributes of the product are important for the respondent. Thereby, CA is a versatile marketing technique for measuring consumers' "quality judgments". Conjoint measurement can be meaningfully applied to study the role that different quality attributes play in the evaluation process regarding agricultural, health care and food products. An especially attractive feature of conjoint measurement is that it starts at the level of an individual. This allows the researcher to form market segments based on individuals' quality perceptions instead of grouping respondents on the basis of certain criteria. To sum up, researchers and managers in agriculture and management often face problems in understanding the consumer's perspectives. A conjoint measurement study can very well assist them in solving such problems.

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