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## The Consideration Set Based Submarket Identification: An Application of the Hierarchical Factor Analysis Model

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### **Abstract**

In this study, we focus on the consumers' consideration set and submarkets of the market. In the modern matured market, there are too many competitive brands, and consumers cannot evaluate all the available brands. They only see the subset of the brands to compare them and choose between them. The subset of comparison and evaluation is called a consideration set. Brands are required to be in this consideration set, to be chosen. Therefore, identification of the consideration set is an important issue for brand managers. However, examining the consideration set is relatively difficult as compared with actual choice, because we cannot observe the composition of the set from behavioral data such as purchase records. To address this issue, we examine the consideration set collected through a research survey. In our analysis, we propose a model to examine the submarket structure. Our model incorporates factor analysis into a discrete choice model and assumes hierarchical structure. To use the discrete choice model, we can obtain the consideration probability of each brand. Factor analysis model enables us to identify submarkets. Since we assume the hierarchical expression, we can examine the relationship between consumers' characteristics and the consideration probability of each submarket.

### **Keywords**

Consideration Set; Submarket; Discrete Choice Model; Factor Analysis; Hierarchical Model