

Homework 1: Power Tool Segmentation Case **(individual assignment; 12% of your course grade)**

Purpose

This assignment serves three purposes. First, it allows you to get experience working with raw results from actual conjoint data. Second, it lets you think practically whether the data have an opinion about how many segments are needed to represent the market. Finally, it challenges you to create your own segmentation, and to apply it in developing segment profiling of an actual consumer product (i.e., small angle grinder).

Deliverables

At the beginning of the class on 10/2, please submit a hard copy of a report that answers all questions provided in this homework assignment.

Data

We will use latent class analysis outputs from a conjoint study conducted by B&D (titled “Power Tool Segmentation Estimation Results.xlsx”, available in Blackboard). This Excel file contains latent class analysis outputs based on data collected from 250 potential customers who answered a conjoint questionnaire on small angle grinders. The instructor has camouflaged the original data file to protect the proprietary rights of B&D. However, the key managerial insights from the data are kept intact.

Note that the conjoint survey was administered to a representative sample of potential customers, i.e. all possible customers you should consider are proportionately represented in your data.

Managerial context and background

Throughout this assignment, you are a consultant to Black & Decker (<http://www.blackanddecker.com>). Black & Decker owns both the Black & Decker brand (mostly targeting DIY consumers) and the DeWalt brand (mostly targeting professional users). Your task is to research a possible introduction of a small angle grinder under the DeWalt brand, and develop a Marketing strategy (segmentation, targeting and positioning). This assignment focuses on Customer analysis via segmentation. However, in order to complete the information you need for targeting, you will need to consider (and perhaps do a little online research) into the other two “C’s” Company and Competition as well.

Please answer each of the following questions:

- (1) **(5 points) Calculating willingness-to-pay:** In the 2-segment case, calculate the first consumer segment's willing to pay for a top slider over a side slider switch. Report this willingness-to-pay. Show how you set up your calculations, and discuss your findings.
- (2) **(5 points) Calculating attribute importance weights:** In the 2-segment case, calculate the first consumer segment's importance weights associated with each attribute. Report the importance weights. Show how you set up your calculations, discuss your findings.
- (3) **(10 points) Choose the optimal number of segments:** reflect on the differences between the results across the different numbers of segments (i.e., 2, 3, 4, and 5 segments). What are some benefits to having higher numbers of segments? What are some of the main disadvantages of having additional segments? In both cases, be as concrete as possible in your discussions, illustrating advantages or disadvantages through specific examples. What number of segments best balances the pros and cons related to model fit and model usefulness? Briefly justify your decision.

还应该在 5 个 market share! *选什么数不要紧, 解释清楚原因即可.*
- (4) **(10 points) Name and profile the consumer segments:** based on the optimal number of segments you choose in Q3, give each segment a name and provide a brief consumer profile for each segment. Your goal is to look for significant and large differences between segments in terms of attribute importance weights and segment-level part-worths.
- (5) **(10 points) Targeting and positioning:** based on the optimal number of segments you choose in Q3, briefly analyze the pros and/or cons to targeting each of the segments. Based on these evaluations, choose which segment you would target for the introduction of DeWalt Small Angle Grinder, and discuss why. Make sure to briefly mention your analysis of each of the 3C's (Company, Competition, and Consumer). Craft a positioning statement.