**Homework 4: Things to do with Smartphone data**



You should use the **smartphone.csv** dataset for this homework. The dataset **smart.csv** has data on a conjoint analysis of important attributes of a smartphone by consumers. Each observation denotes the consumer decision on a set of choices. The description of columns is as follows:

* 1. **ID:** = Subject’s ID
  2. **Question:** = The number of the question which has been asked from the subject
  3. **Alternatives:** = The alternative index in the corresponding question
  4. **UsingFORInternet:** = denotes will subject uses the phone only as a phone (i.e., “no”) or as a device to connect to internet (i.e., “yes”)
  5. **InternetConnetivity:** = How well the alternative’s capability is in connecting to Internet
  6. **Design:** = How well the alternative’s design
  7. **OperatingSystem:** = What is the operating system of the phone.
  8. **Price:** = The price of the alternative
  9. **Choice:** = Which alternative was chosen by the subject

**GOOD LUCK!** 

1. This homework has only one question.

Imagine, you are advising a new phone company. Please find which attributes have significant effect on consumers’ purchase decision. You can use a latent utility model to determine the main choice driven factors in choosing a smartphone. Note that people have heterogeneity in terms of how someone will use her phone. Should you advise a different set of attributes for different types of consumers?

You can use a logistic model here. You should provide a professional, managerial report to summarize your analyses. It must be short, informative, and inclusive. You must run models and recommend possible product line based on the conjoint analysis. Furthermore, provide a clear targeting group strategy for each recommended product. ***The last sentence must provide a clear strategy for this firm***.

For example:

* Which factors play important role in choosing a smart phone?
* Which product should be targeted to each type of consumers?
* What will be the effect of increasing of price?

Your model and argument should convivence us to follow your recommendations in making our next phone in this market.