**AEM 6700 Economics of Consumer Demand, spring 2016**

**In-class Activity #5: “What attributes drive the demand for Smart TVs”**

By now, you have gained substantial experience in demand analysis and got a promotion. You are asked to give advice a major retailer on how to best go to market with a quite differentiated product category, namely Smart TVs. You are to take over this project, which was started by a colleague who recently left the firm.

This is what was already done (and given to you): The attributes in question are 1) brand manufacturer; 2) screen size; 3) 3D feature (yes/no) and 4) price. Each attribute has different levels, as described below. Your colleague designed and implemented a choice experiment with 70 respondents from Amazon Mturk. Each respondent was given 12 choice sets; and each choice set had three 3 profiles (i.e., 3 different combinations of brand, screen size, 3D feature, and price). You are given two data sets described below. One reflects the choices of respondents (TV\_Choices\_data); the other includes respondent characteristics (TV\_Choices\_Demographics). *NOTE: I am giving you consumer characteristics in case you want to further explore this model, but we will not consider them here.*

Your task is to use these data to answer the following questions:

* What is the impact of changes in the level of attributes on consumer utility?
* Which attribute does the conjoint analysis indicate is the most important in the overall purchase decision?
* Are these data useful in making any pricing decisions?

***DATA : " TV\_Choices\_data.csv "***

* Product Category : Smart TV
* Variables :
* id : respondent id (1,...,70)
* choice : 1~4 for the choice of UPC 1~5, 4 for no-buy option
* [smarttv1, smarttv2, smarttv3] : 1 for Samsung, 2 for Sony for profiles 1,2,3 respectively.
* [s\_screen1, s\_screen2, s\_screen3] : screen sizes in profiles 1,2,3 respectively.
* [threed1, threed2. threed3] : whether 3D is supported (0/1) in profiles 1,2,3 respectively.
* [s\_price1, s\_price2, s\_price3] : prices in profiles 1,2,3 respectively.

***DATA : " TV\_Choices\_demographics.csv "***

* Demographic data for users 1,...,70
* Variables :
* Q3, Q4, Q5, Q6 as below.





