

ISM425 Business Analytics

Group Project Description

This group project is one of the most valuable components of ISM 425 to you as a future data scientist. This project is a fun, realistic way to gain experience that you will build on throughout your career. I expect you to work hard on this project and take it very seriously. Do not underestimate the time it will take to complete this project. It is never too early to start on this project!

The system: You will be using the techniques that you have learned in this class to develop a predictive model.

General Guidelines: Five students in a group. You will present your model and results in class. Each group submits a copy of the final report.

Grading: You also need to submit a final report (10 pages). The total points that may be awarded for the group project is 30. 20 of the 30 points will be based on the quality of your work, and 10 of the 30 points will be based on your prediction outcome. The first place will receive 10 points, the second place will receive 9, and the third place will receive 8, and so on.

Project Description: Gray market of luxury handbags

A gray market is an unauthorized distribution channel of genuine branded products. Brand owners often price their products differently across different geographical regions. Because of the price gaps, gray market sellers can buy branded products at the retail price from the origin countries and then resell them in other countries to make a handsome profit. One example of this phenomenon has been seen on Taobao.com, China's equivalent of Amazon, where the top two guests on the VIP list of LV's Galeries Lafayette location regularly resell LV handbags. The rising of online gray markets may lead to a financial loss to the authorized distributors and subsequently damage the brand owners' relationship with their authorized distributors. Therefore, it is important for brand owners to predict sellers' pricing decision in gray markets in order to better address this threat.

We developed a web crawler to automatically collect all listings of LV handbags on Taobao.com. For each listing, we collected information such as listing prices, seller location, counts of listing page being marked as favorite, transaction history, etc. The graymarket.xlsx file contains real data that were collected in the first week of June in 2011. The Codes worksheet explains all the variables available including predictors and response (ListingPrice).