Michael Surdek

Milestone 1

Speaker Notes

Richard is an employee at a large online retailer that is launching a next generation e-Reader. He is in charge of a project with the objective of maximizing the efficiency of the company’s marketing efforts. Richard believes that it is possible to predict when customers will be most likely to purchase the new e-Reader, based on data of customers who have bought previous generations of the e-Reader. The company also offers many additional products and services for e-Reader users such as books, magazines, and digital music.

There are two main data sources with which the company is currently working. The first data set contains customers who have bought previous generations of the e-Reader. The data set includes some basic information as well as the customer’s browsing and purchasing history. The second data set contains current and potential customers. The goal is to place these customers into four categories of adopters based on trends that can be identified within the training data. The variables are similar across the two data sets. The variables gender, age, marital status, web activity, browsing and purchasing history, and payment method can be found in both sets of data. The training data set also includes the variable eReader\_adoption, which shows the category of adopter for each customer at the time of their previous purchase.

The four adoption categories are innovator (first week), early adopter (second or third week), early majority (fourth through eighth week), and late majority (after two months). This variable is important because it makes it possible to identify which variables affected purchase timing in the past and to predict when future customers will make their purchase. Although the data set contains many variables that will likely be solid predictors of purchase timing, some other data could be collected by the company that might also be useful. Examples of this type of data are home address, occupation, family size, and additional services that the customer uses.

With all of this data, it should be possible to exploit analytics in order to add business value and uncover new opportunities. The main goal of Richard’s project is to assign a “probable adoption time” to each potential customer. When this is done, marketing can be timed and targeted for each individual when they are most likely to respond. For example, customers identified as innovators might not require any marketing efforts. It is possible that these customers are going to purchase the new e-Reader within the first week no matter what. Instead of using marketing resources in this way, the company might decide to target the early adopters and turn them into innovators by offering a pre-order bundle. These are already good customers, who would likely buy the e-Reader within a couple of weeks, but it could be worth it to get them committed as soon as possible. Additionally, customers in the early or late majority might need more incentives to get over the hump. Marketing could target these customers a few weeks after the e-Reader is released and offer them benefits such as a free trial or additional services. Finally, the value of this project can be extended beyond the marketing of this one new e-Reader. The company can use insights derived from this project to increase web activity or to connect customers to other products at the optimal times with a “customers also bought” or recommended product applications.