

PROPOSAL: ESTIMATING THE EFFECT OF ADVERTISING ON CUSTOMER GOODWILL, ACQUISITION AND RETENTION

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<http://mba.yale.edu/faculty/profiles/khwaja.shtml>

The founder of Wanamaker's chain of department stores (which have since been acquired by Macy's), John Wanamaker is believed to have said, "I know that half of my advertising doesn't work. The problem is, I don't know which half." There is still lack of consensus on how advertising affects customer goodwill and in turn customer acquisition and retention. One reason for this is that although advertising expenditures can be measured it is extremely difficult to measure customer goodwill, and the consequent relationship between goodwill and customer acquisition and retention. This project will use a comprehensive dataset on subscribers to Sirius XM Radio to estimate the relationship between advertising, goodwill and customer retentions. The data set is comprised of 300,000 subscribers who first started using SiriusXM service during September 2009. It includes information on subscribers (and their vehicles in which they have SiriusXM radios), product usage, billing & payments, outbound/direct marketing to these subscribers, and customer service interactions. The data also includes the customer service interactions, i.e., notes taken by call center representatives and emails sent by customers. However, these are in free-text format. In addition, user listening logs (i.e., minute-by-minute logs of the radio stations users listened to) are available for those users who use the Internet service. The data is also augmented with information about the competitive radio offerings in each subscriber's geography.

The undergraduate student will help organize and structure the data (e.g., use text analysis to code the customer service interaction notes), and perform preliminary statistical analyses. The student will also help with a general literature review. The skills required will be familiarity with Excel and STATA (or some other comparable statistical software package).

The student will learn how to use and manage large, secondary data sets. The student will also learn how to conduct a literature review and perform statistical analyses (e.g., regression analysis) in preparation for a research project related to Industrial Organization/Marketing.