A-Lab 2021 Sample Project Proposal

Churn Management: The Effect of Complaints on Subscriber Retention

The Daily Planet

Project Summary

What effect do home delivery subscriber complaints have on subscription retention?

Project Context

The Daily Planet is Metropolis's largest news organization, providing news, analysis, and information. This project seeks to understand the relationship between home delivery subscriber complaints and retention as The Planet seeks to maintain print revenues while growing digital only subscriptions.

Project Purpose

The Planet will learn how subscriber complaints influence churn. The Planet monitors complaints and enacts strategies to improve the rate of complaints, but it is not clear how much effort/investment should be put toward improving the rate. If subscriber complaints are not a good predictor of churn, should The Planet focus the effort/investment designed to improve these rates elsewhere? If they are a good predictor, how does the Planet utilize predictive modeling to intervene before a subscriber cancels?

Project Pitch

Maintaining print revenue is vital to The Planet's future and its efforts to continue its mission and to grow digital subscribers and revenue as the entire industry struggles with declining ad revenues. Retention of existing print subscribers is the most important part of maintaining print revenue. Nearly 70% of print subscribers have been with The Planet for 10 or more years, but about 0.65% of subscribers have their subscription cancelled each week.

Students will work with the analysts and managers in the print subscription team to understand the inner workings of a news media company, and use machine learning techniques to make an impact on the core business of the company.

Project Skills

Ideally the student team will have some experience in natural language processing (NLP) and A/B testing, and can communicate the results clearly in a non-technical way to the management.

Project Data

Please see email attachment for a small representative data sample.

The data set includes Complaint and Cancellation transactions from 2006-2017. The size of this data is approximately 10 million rows x 26 columns. It will also include a copy of our Subscriber table with 4.1 million rows x 86 columns. This table houses one row for each subscriber and includes various fields such as Original Start Date, Last Stop Date, etc. Also included will be a Demographic table with 4.1 million rows x 24 columns.

The source of the data is an internal Data Warehouse. The data is used regularly for analysis and marketing campaign execution. The particular analysis being suggested for this project has not been done in a meaningful way. We will provide access to the data via Dropbox.

The data set is clean and maintained on a daily basis. This project will not require much time to prepare or clean the data. Students can begin working with the data right away. This dataset is unique as it will allow students to use their background knowledge in relational databases and to utilize or develop predictive modeling skills.

- Data Description:
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- Data Access and Computational Resources:
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- Other Details:
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Primary Contact Information

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