Soraya Ticketing Data

Luz Andrino & Munzerin Hossain
California State University Northridge

Introduction

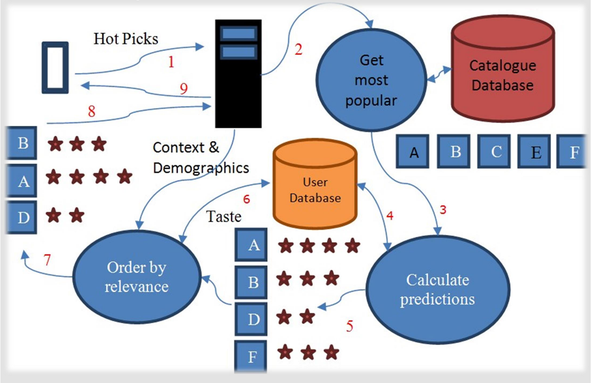
The goal of this project was to see how we can attract more consumers (both students and nonstudents) to the Soraya Performing Arts Center.

We created a survey using Qualtrics to later send out to different groups such as previous attendees of Soraya Center events and CSUN students. The survey includes inquiries on what drove a consumer to return to the Survey, or neglect to return, how they heard about the center..
We also used Python to see what variables would affect ticket sales.

Methodology

Python

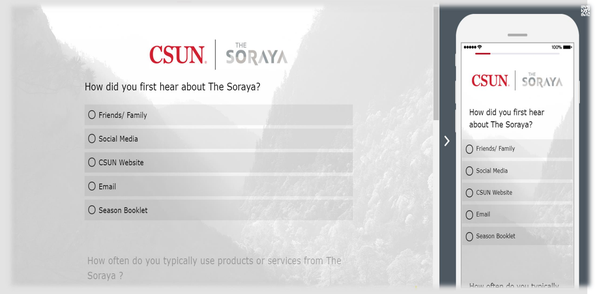
We used a recommender system, an artificial intelligence tool through the programming language, python to identify variables affecting ticketing sales.
Machine learning algorithms in recommender systems are typically classified into two categories — content based and collaborative filtering methods although modern recommenders combine both approaches. Content based methods are based on similarity of item attributes and collaborative methods calculate similarity from interactions.
.

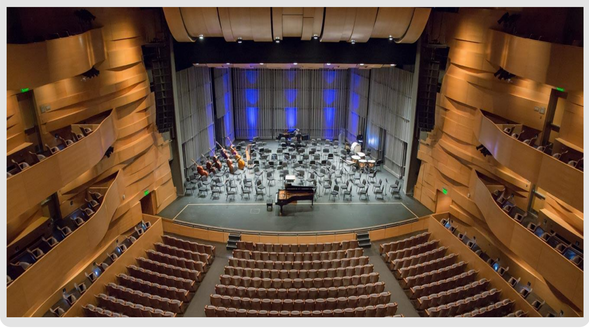


Methodology

Survey

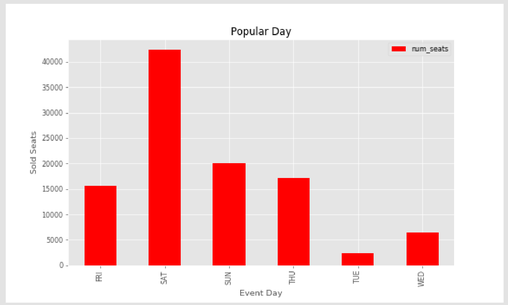
The survey was largely focused on CSAT, Customer Satisfaction. The first block of the survey asked about the demographics of the consumer. Including age, gender identity, and location through zip code.
The survey is mostly multiple choice questions with few fill ins. I used a display logic function for some questions that is customized for each respondent.
The following question will show conditionally based on the previous answer given.
The survey is compatible for both desktop and cell phone use.

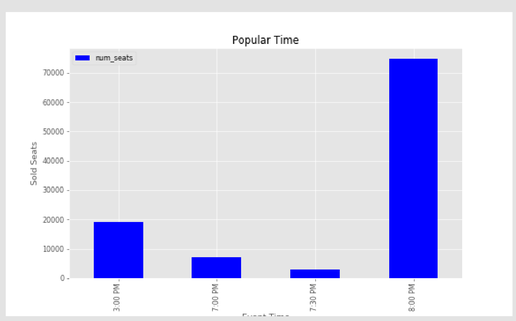


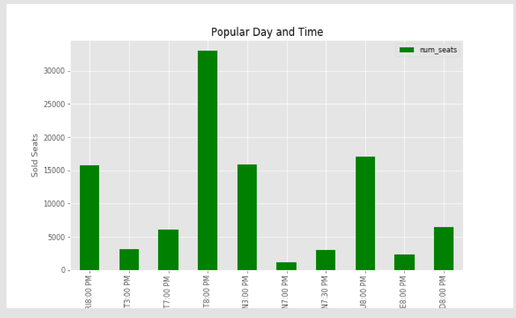


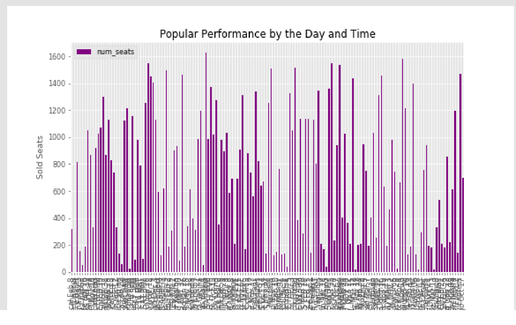
Results

Recommender system helped to understand the relationship between the audience and ticketing demand of consumers to see.
The combination of graphs of popular events, time, and day shows us that the highest number of tickets have been sold for the shows that took place at 8:00 pm, Saturday. Saturday at 8 pm is the most popular time and day for the audience.









Discussion

The purpose of this project is to see what are the most significant variables that affect ticket sales, recruitment for performance acts, and to schedule based on customer demand.

Our main goal was to see what would attract more customers at the performing arts center at CSUN.

Recommendations

To create more versions of the survey targeting specific consumers. One survey would focus on CSUN students who attended performances at the Soraya; the second survey would focus on any consumers outside of CSUN and why they chose Soraya.

The data set we have received was not current, it was from three years ago and it did not have enough information to predict which show will be more popular than others.

Acknowledgements

We want to thank our faculty advisor, Dr. Shapiro and the Soraya Ticketing Data Analyst, Jose Felix.
Thanks to the NSF Grant #1842386 we were able to do this project.