

1. Introduction

1.1 Problem

A movie theater chain is interested in exploring new outdoor business models, such as outdoor showings or drive-in theaters to implement post-COVID-19 in Seattle. The movie theater chain wants to better understand customer segmentation in Seattle based on venues around the city. They are also looking for a location recommendation to implement and test these new outdoor business models in 2021.

1.2 Background

Box office revenues have declined from ~\$10.3B in 2019 to \$2B in 2020 due to COVID-19 (boxofficemojo.com). Additionally, there has already been an ongoing shift to OTT platforms (such as Netflix and Hulu) over the past decade with consumers increasingly relying on these online streaming services for watching content. This has taken business away from traditional content distribution platforms including linear TV and movie theaters. Given these dual factors, it is an important question for the movie theater chain stakeholder to explore alternative business models and locations to help maintain its revenues/profits and to sustain the future health of the company and possibly entire movie theater industry. Outdoor showings and drive-in theaters are one possible alternative. Finally, it is suitable to have Seattle as a testing ground to find a location as it is less expensive to implement in this city vs. other larger metropolitan areas known for film such as Los Angeles or New York. If the chosen location is successful, then it can be launched in additional locations around the country using similar parameters/location data analysis.

1.3 Data

Foursquare location data will be used to analyze the following via the **Foursquare API**:

- Popularity (aka foot traffic) of different neighborhoods based on the frequency and type of venues
- Density/Number of existing movie theaters in different areas of Seattle
- Seattle's similarity to and differences from nearby cities Portland and Vancouver to better understand Seattle's unique customer segments

Additionally, **industry reports** will be used:

- Ibisworld, WSJ, etc. for insights into consumer behavior trends
- See 'Sources' below

Sources:

<https://therealdeal.com/2020/09/20/movie-theaters-might-not-come-back-after-all/>
<https://news.yahoo.com/will-movie-theaters-survive-the-pandemic-192954518.html>
<https://www.cinemablend.com/news/2559660/how-the-movie-theater-business-model-could-change-if-more-studios-shift-to-streaming>
<https://www.wired.com/story/on-the-future-of-movies/>
<https://www.hartfordbusiness.com/article/movie-theaters-screening-digital-alternatives>

How this data will be used to solve the problem:

- Both the foot traffic and density of movie theater and non-movie theater venues will be used to determine the optimal location selection for an outdoor showing/drive-in theater

- The recommended area will have at least some nearby food/drink venues but not be so densely populated to allow for social distancing
- Seattle's similarity to and differences from nearby cities Portland and Vancouver to better understand Seattle's unique customer segments -> this will be used to determine the genres and types of content that will be recommended for showing at outdoor showings/drive-in theaters

Industry Reports

- These reports will be used in conjunction with the location data from Foursquare to determine possible recommendations for locations and programming for the movie theater chain in Seattle, e.g. what types of genres and movie content are most compelling for Seattleites?