Project: Visualizing Movie Data

By: Anthony Nguyen

Project Overview

As a business analyst consultant, your client is a new movie production company looking to make a new movie. The client wants to make sure it's successful to help make a name for the new company. They are relying on you to help understand movie trends to help inform their decision making. They've given you guidance to look into three specific areas:

- Question 1: How have movie genres changed over time?
- Question 2: How do the attributes differ between Universal Pictures and Paramount Pictures?
- Question 3: How have movies based on novels performed relative to movies not based on novels?

On top of that, the client asked you to explore one other question that you find interesting based on the data provided.

Step 1: Data Cleanup and Attribute Selection

- Many of the data attributes had null values, such as popularity by genre. I created new fields which excluded any null values from the data.
- List of attributes analyzed in this report:
- 1. Universal vs. Paramount
- 2. Popularity/Vote Count
- 3. Budget Adj.
- 4. Revenue Adj.

- 5. Based on a Novel
- 6. Profit Adi.
- 7. Genres
- 8. Release Date

Step 2: Tableau Visualizations

Question 1 Story – Tableau Public Profile Link:

https://public.tableau.com/views/Q1Story-

Nguyen_ATableauProject3Submission/Q1Story?:embed=y&:display_count=yes

• Question 1 Dashboard – Tableau Public Profile Link:

https://public.tableau.com/views/Q1Dashboard-

Nguyen_ATableauProject3Submission/Q1Dashboard?:embed=y&:display_count=yes

• Question 2 Dashboard – Tableau Public Profile Link:

https://public.tableau.com/views/Q2Dashboard-

Nguyen_ATableauProject3Submission/Dashboard1?:embed=y&:display_count=yes

• Question 3 Dashboard – Tableau Public Profile Link:

https://public.tableau.com/views/Q3Dashboard-

Nguyen_ATableauProject3Submission/Q3Dashboard?:embed=y&:display_count=yes

Question 4 Dashboard – Tableau Public Profile Link:

https://public.tableau.com/views/Q4Dashboard-

Nguyen_ATableauProject3Submission/Q4Dashboard?:embed=y&:display_count=yes

***Anthony Nguyen Project 3 – Tableau Public Profile Link:

https://public.tableau.com/profile/anthony.nguyen6103#!/

Step 3: Questions

- Question 1: How have movie genres changed over time?
 - Answer 1: There was no correlation between vote count, popularity, and budget from 1960-1987. Some genres would have low budgets with high vote counts and popularity. While other genres would have the highest budgets but low vote count and popularity. This changed from 1988-2015 where there was a strong correlation between vote count, popularity, and budget. As popularity and vote count increased, so did the budget. If the popularity, vote count, and budget increased, this had a positive effect on revenue and profit.
- Question 2: How do the attributes differ between Universal Pictures and Paramount Pictures?
 - Answer 2: The attributes differ slightly between Universal Picture (plus it's affiliates) and Paramount Pictures (plus it's affiliates). Universal has spent more on budget compared to Paramount Pictures. Also, Universal has more

on total profit across all movie genres compared to Paramount. Both production companies have their 4 highest revenues across the same movie genres: Action, Adventure, Comedy, and Drama. The allocation of revenue in the top 4 genres is difference amongst Universal and Paramount.

- Question 3: How have movies based on novels performed relative to movies not based on novels?
 - Answer 3: Movies based on novels have performed better than movies not based on novels. The attributes used to compare movies based on novels and movies not based on novels are as follows: budget, popularity, vote average, and profit. Movies based on novels have figures that are far greater than movies not based on novels across all attributes.
- Question 4: What are the top 5 highest profiting movie titles and movie genres of all time?
 - Answer 4: The top 5 profiting movie titles of all time are: Star Wars, Avatar, Titanic, The Exorcist, and Jaws. The top 5 profiting movie genres of all time are: Action, Adventure, Comedy, Drama, and Animation. I came up with this question by analyzing the data for question 1 and 2 at a macro level. In order to determine the correct answers for both questions 1 and 2, it is required to determine which genres have the highest profit. The same genres are consistent with the highest profits. Also, looking at the highest profiting genres, which of the top 5 highest profiting movie titles fall under the highest profiting genres: 3 of the top 5 profiting movie titles fall under the highest profiting genres: Action, Adventure, and Drama.