

Phase1 project: Movie Data Analysis

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PROJECT MAIN OBJECTIVE

For this project, We will use exploratory data analysis to generate insights for the Microsoft stakeholder who would like to venture in movie creation fun.

SPECIFIC OBJECTIVES

This project's value is in helping a this specific stakeholder solve a real-world problem by exploring the following insights.

- 1.Types of studios that are currently doing best in movie making.
- 2.Understanding the most produced genres that has better ratings and with more votes .
- 3.Identifying gross revenue for each top 10 genres to start with.
4. Preferred runtime for movies.
6. Trends and patterns in growth of movie creation industry.

DATA SOURCES

<https://www.boxofficemojo.com/>

<https://www.imdb.com/>

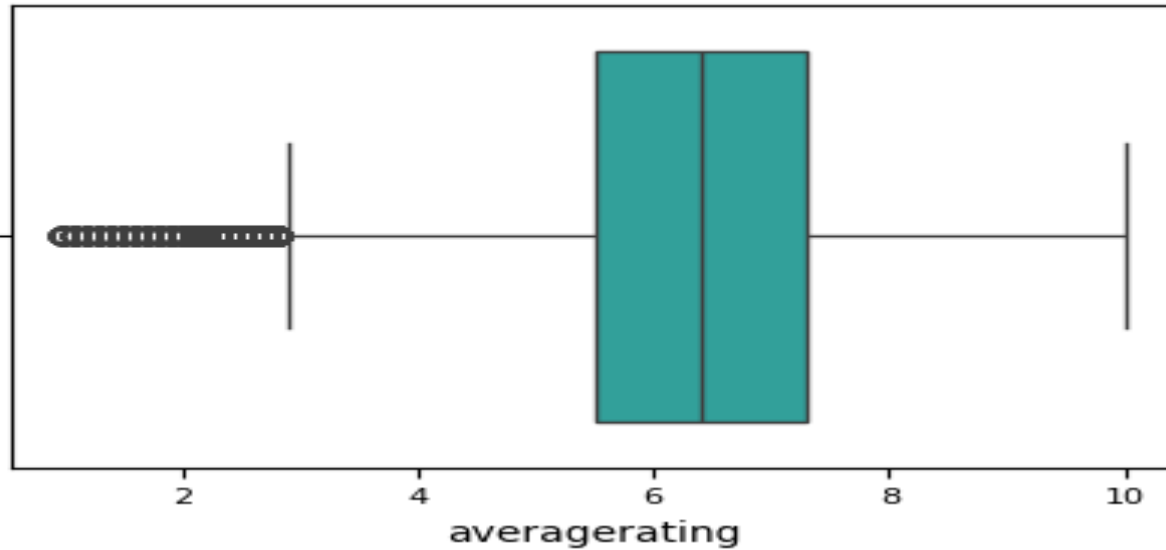
<https://www.rottentomatoes.com/>

<https://www.themoviedb.org/>

<https://www.the-numbers.com/>

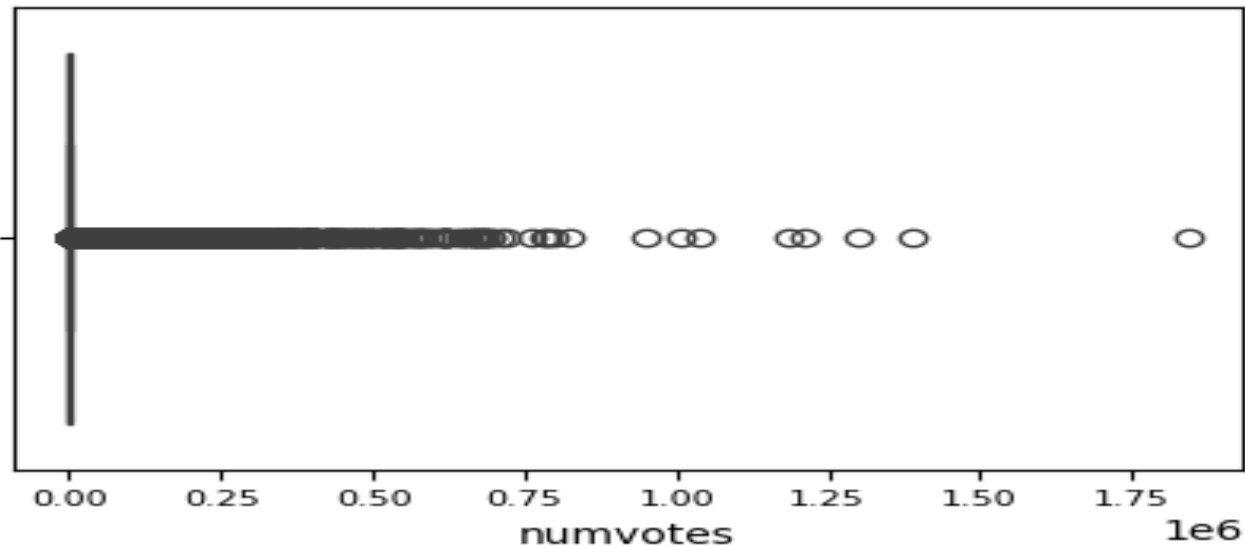
DISTRIBUTION OF VOTES AND RATINGS

Boxplot to detect outliers for averagerating



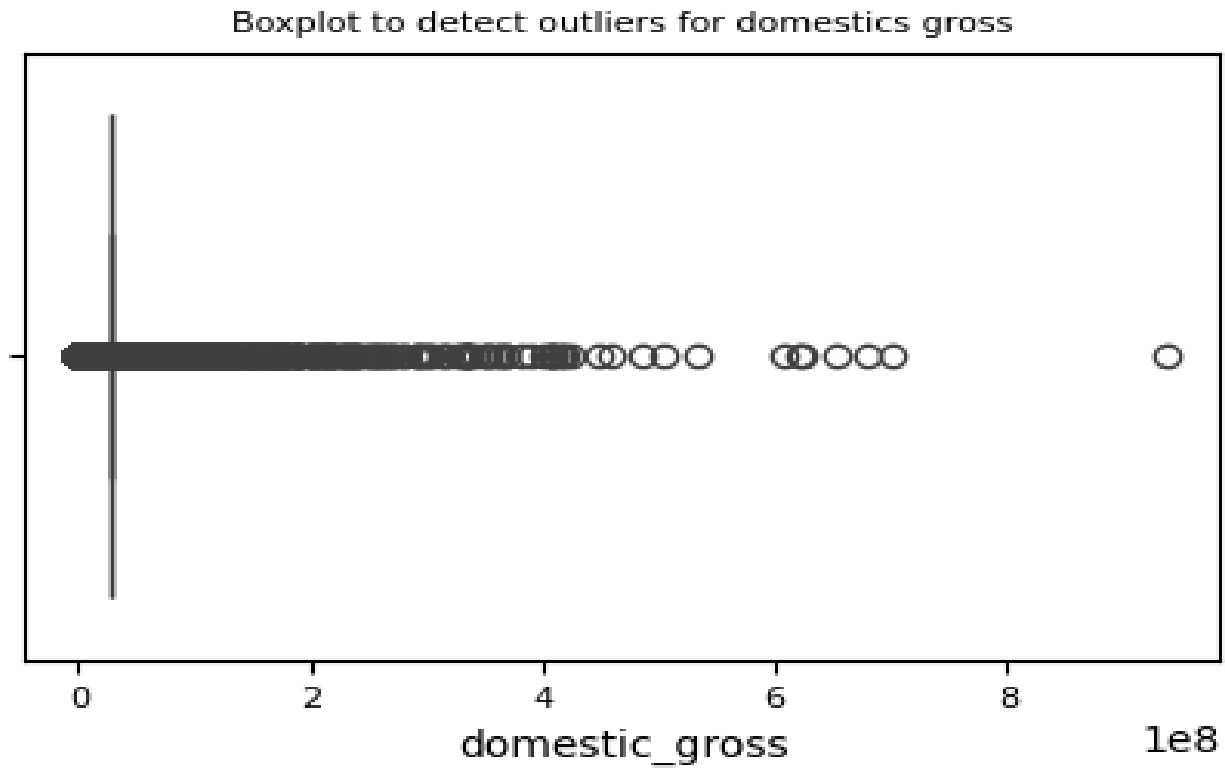
There are ratings for some movie titles that were abnormal

Boxplot to detect outliers for numvotes



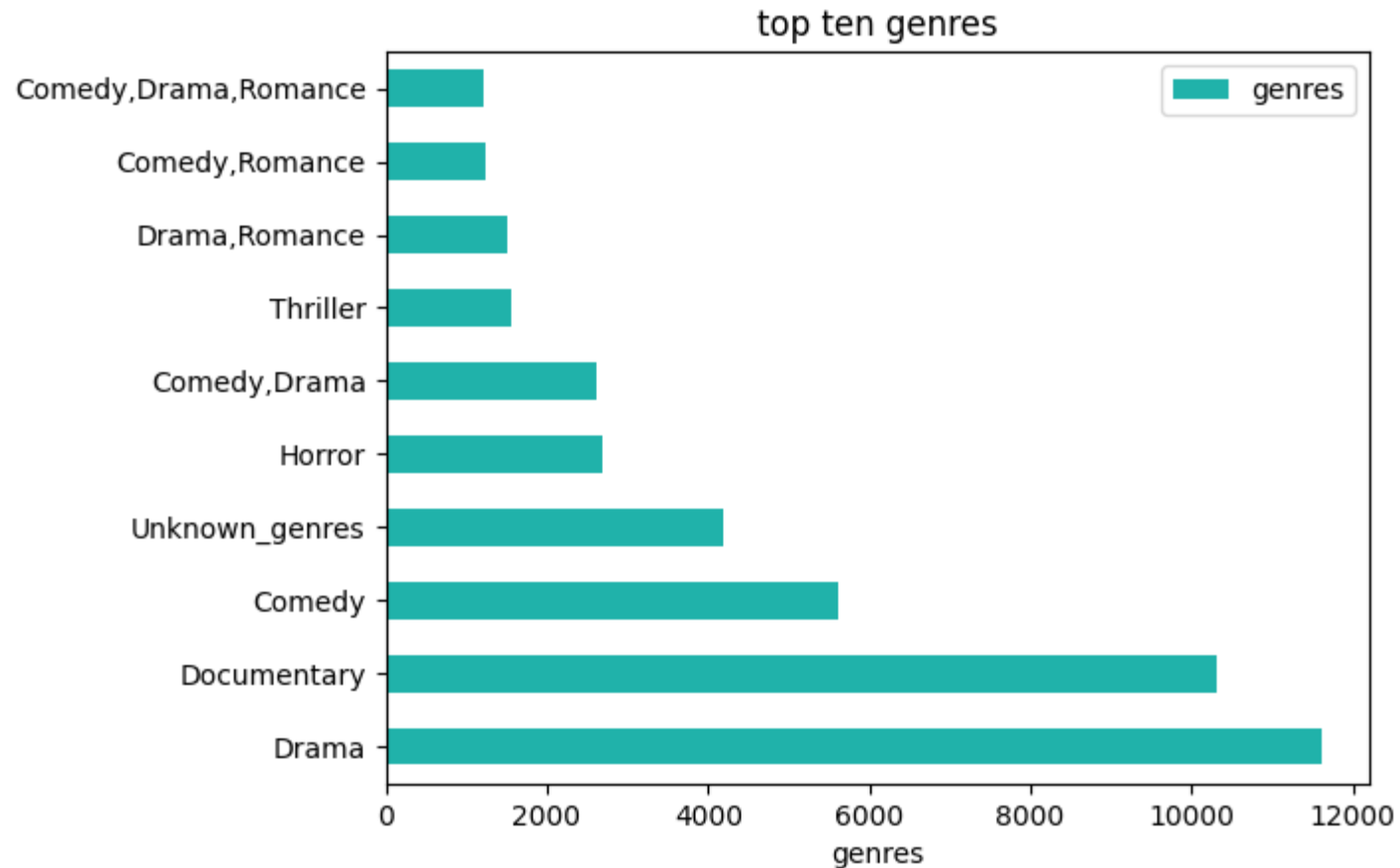
There are number of votes for some movie titles that were abnormal

DISTRIBUTION OF DOMESTIC GROSS



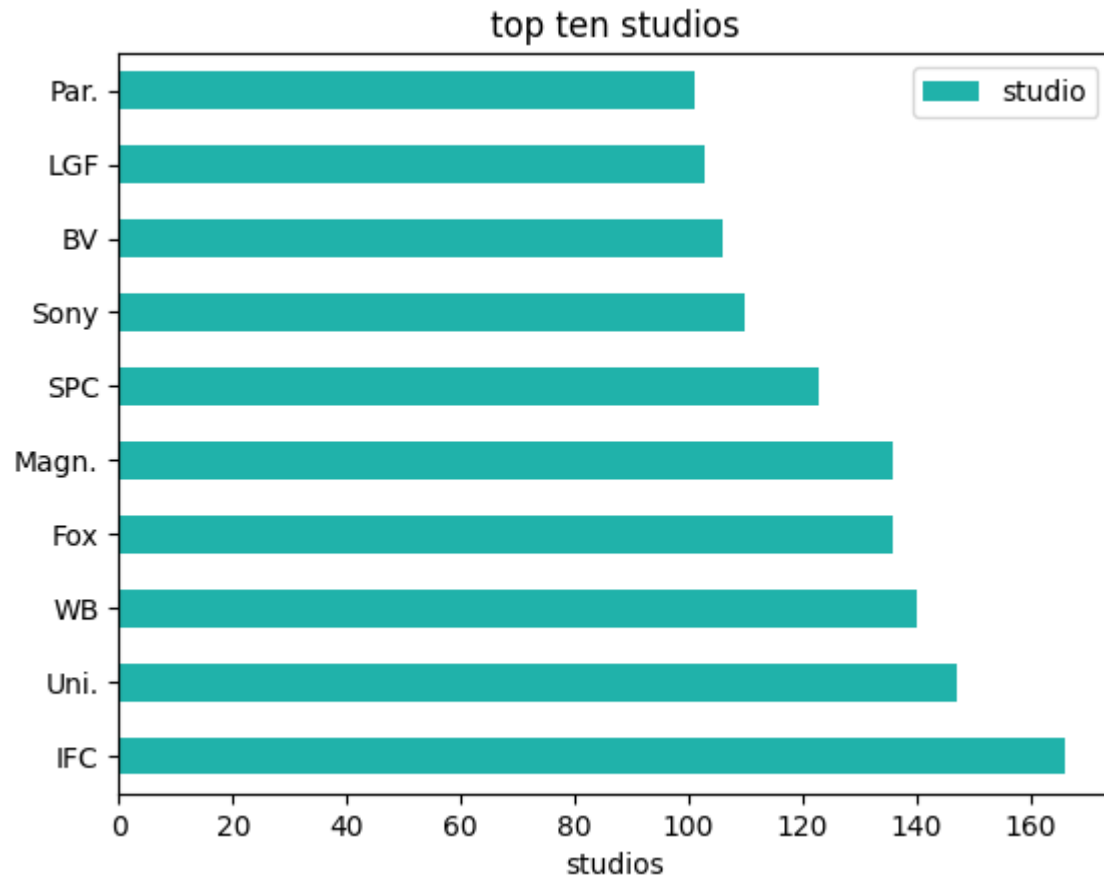
**There are some movie titles
that gave abnormal domestic
gross returns**

ANALYSIS OF LEADING GENRES



The leading genre in terms of movie titles produces is Drama, Documentary and comedy

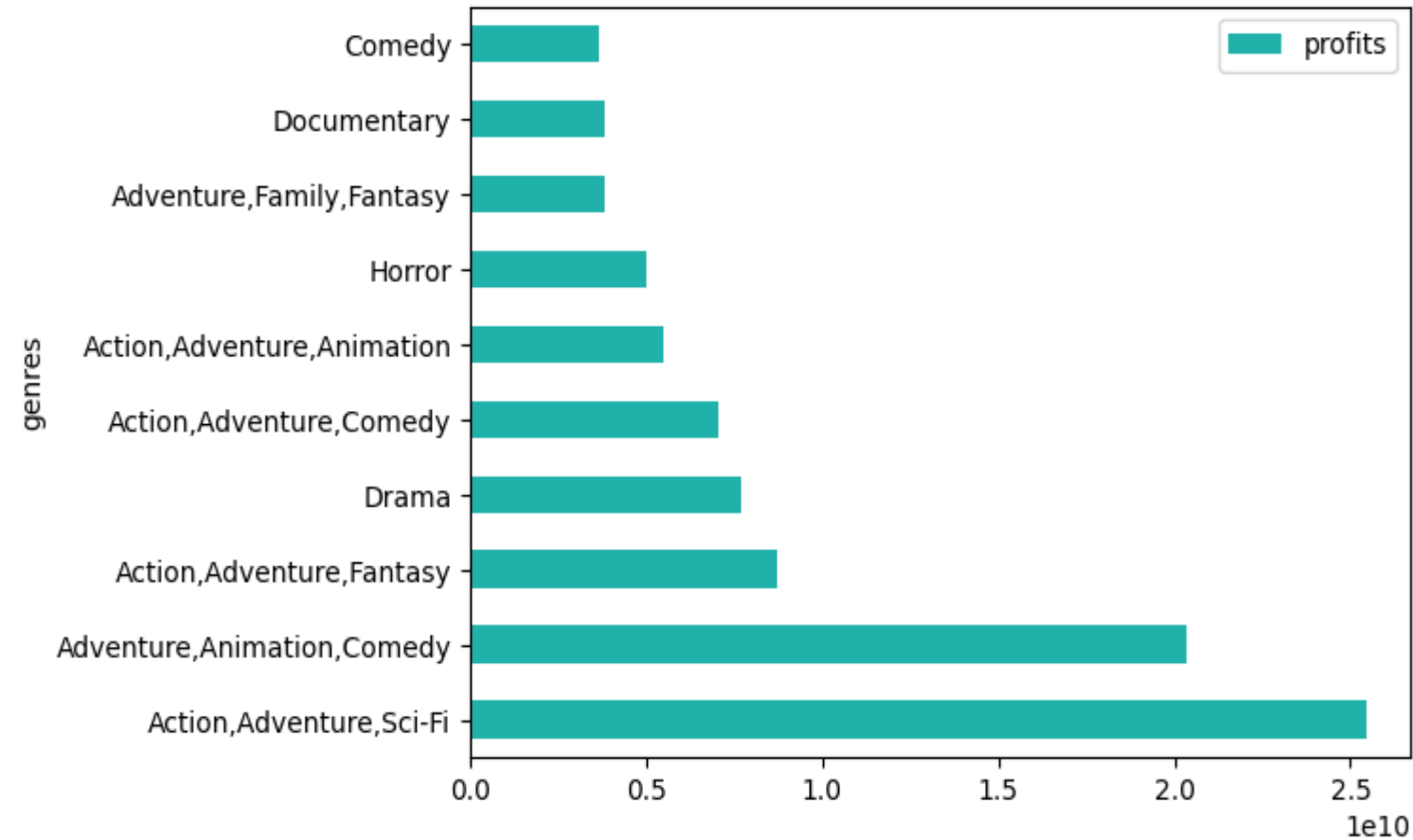
ANALYSIS OF LEADING STUDIOS



The leading studio in the moving production industry is IFC. This makes it the Best studio to work with for launching movies.

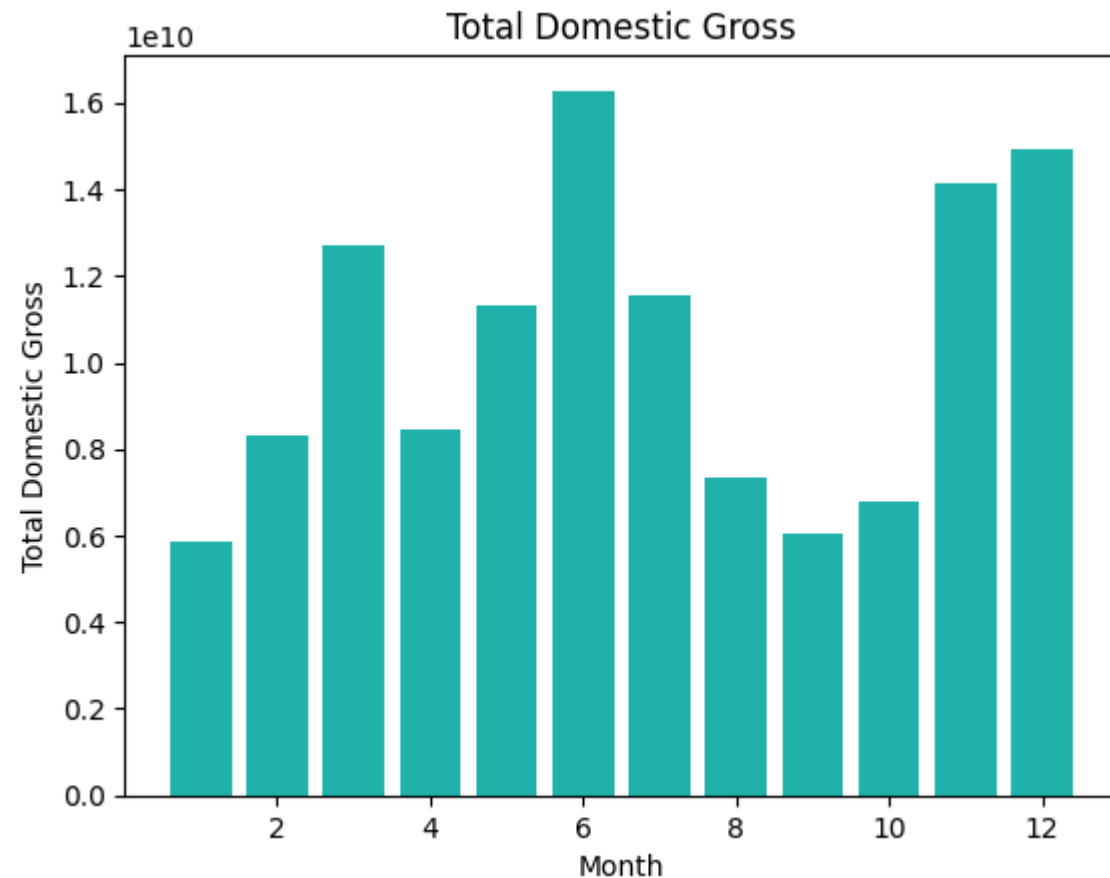
ANALYSIS OF LEADING GENRES WITH RESPECT TO PROFIT

(Worldwide gross -Production budget)



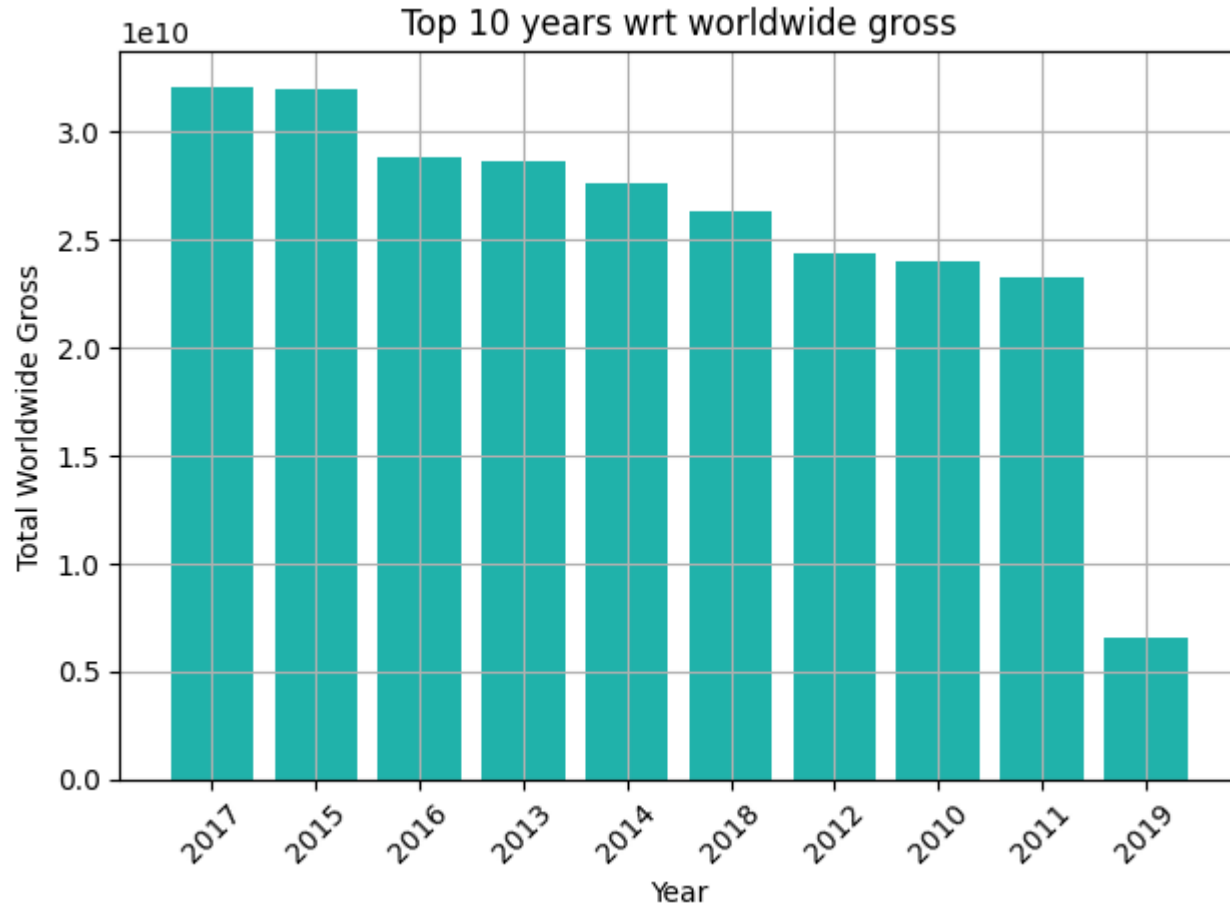
Action, Adventure,Sci-Fi gave good profits when we compare worldwide gross and production budget

DOMESTIC GROSS VS RELEASE DATE GENERATION TREND BY MONTH



June is leading as the best month that had many releases hence high domestic gross.

WORLDWIDE GROSS REVENUE TREND BY YEAR



Worldwide gross are high in 2017,2015 and very low in 2019 . This shows a decline in worldwide gross as time progresses.

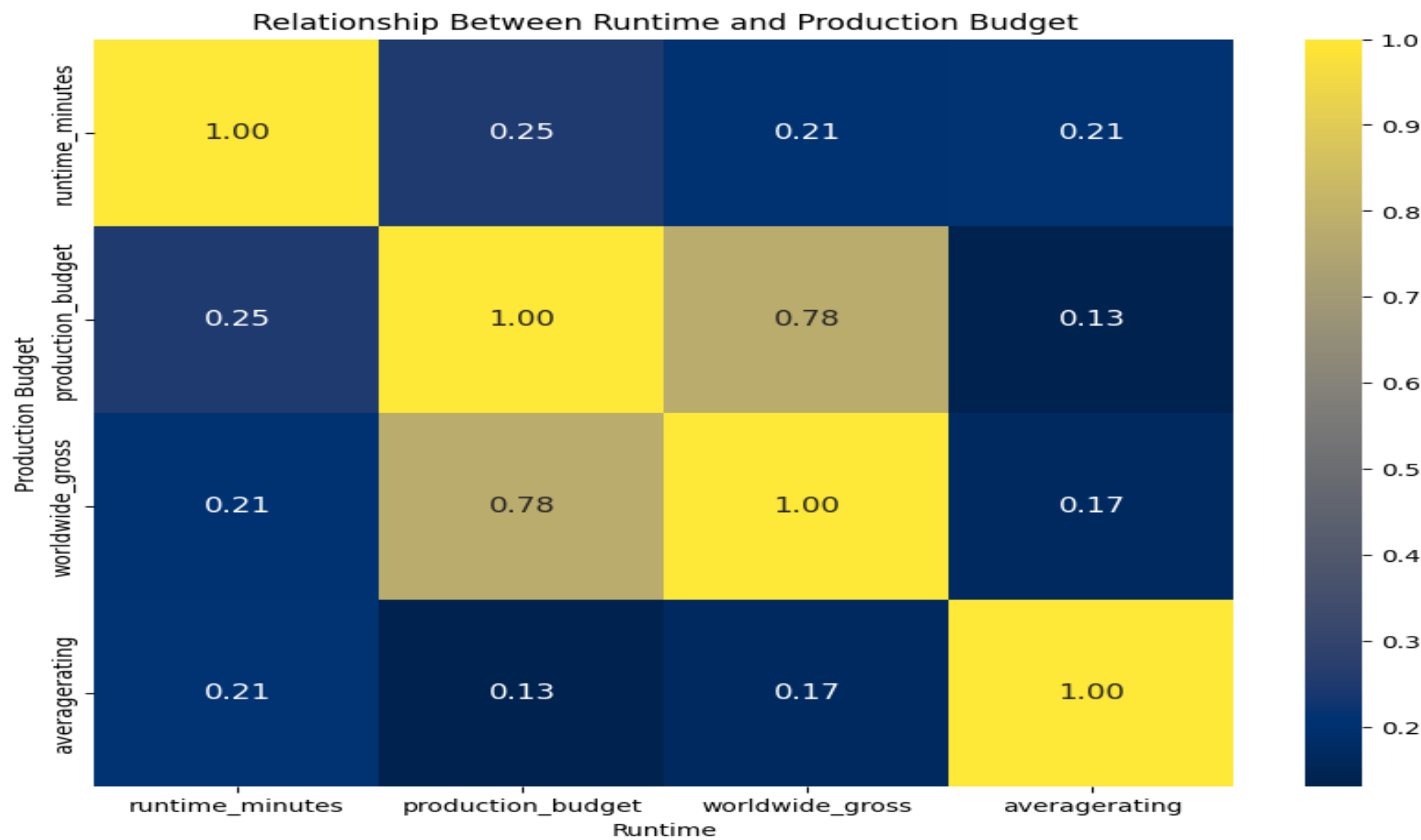
PROFIT TREND BY YEAR



Profits are high in 2017, 2015 and very low in 2019. This shows a relationship between worldwide gross and profits.

A decline in one affects the other.

CORRELATION OF AVERAGE RATING,RUNTIME,NUMBER OF VOTES,PRODUCTION BUDGET,WORLDWIDE GROSS



CORRELATION CONTINUED....

1. There is a correlation between runtime minutes and production budget. Movies titles that run for longer minutes will cost high production budget.
2. There is a correlation between runtime minutes and worldwide gross. Movies titles that run for longer minutes will return high gross.
3. There is a correlation between runtime minutes and average rating. Movies titles that run for longer minutes will get good ratings
4. There is a correlation between production budget and worldwide gross. Movies titles that run for longer minutes have high budget return high worldwide gross.

FINDINGS

1. There is a correlation between a movie's runtime, average ratings and number of votes to its production budget
2. Action adventure and SCI-FI were the most profitable in revenue
3. Drama led in the most produced genres
4. IFC studio produced most movie titles

RECOMMENDATIONS

I would recommend the following to Microsoft stakeholders;

1. To consider venturing in movie production with genres like Action adventure ,SCI-FI and Drama
2. To launch their movies with IFC studios
3. To translate their movies to worldwide languages.
4. To observe festivals and months of the years with most holidays to release movies.

Thank you