

DATA DRIVEN FILM PRODUCTION: A DATA ANALYSIS FOR STRATEGIC FILM PRODUCTION

PROJECT

Presented by: SIMON WAMAI, VENESER
PAMELAH, PRECIOUS KALIA, LYDIAH
◆ MUTANU, LOGAN KIMATHI, JANE NJUGUNA



OVERVIEW

Our project contains an analysis of current trends in the film industry to inform the development strategy for a new movie studio. Using box office data from different sources, we will analyze different trends that affect a movies box office performance.

01

ANALYZE BOX
OFFICE DATA
TO IDENTIFY
TRENDS AND
PATTERNS

02

RECOMMEND
TYPES OF MOVIES
TO PRODUCE
BASED ON OUR
ANALYSIS

03

MODEL
RELATIONSHIP
BETWEEN
PRODUCTION
FACTORS AND
REVENUE



Business Understanding

We need a clear understanding of what drives box office success in order to compete effectively. We must analyze current trends and uncover which genres, story themes, production elements, and audience segments consistently lead to high-grossing films





DATA UNDERSTANDING

In order to understand how well a film performs at the box office, it is crucial to examine its financial results. We can investigate possible connections between certain genres or elements of the movies and their box office performance.

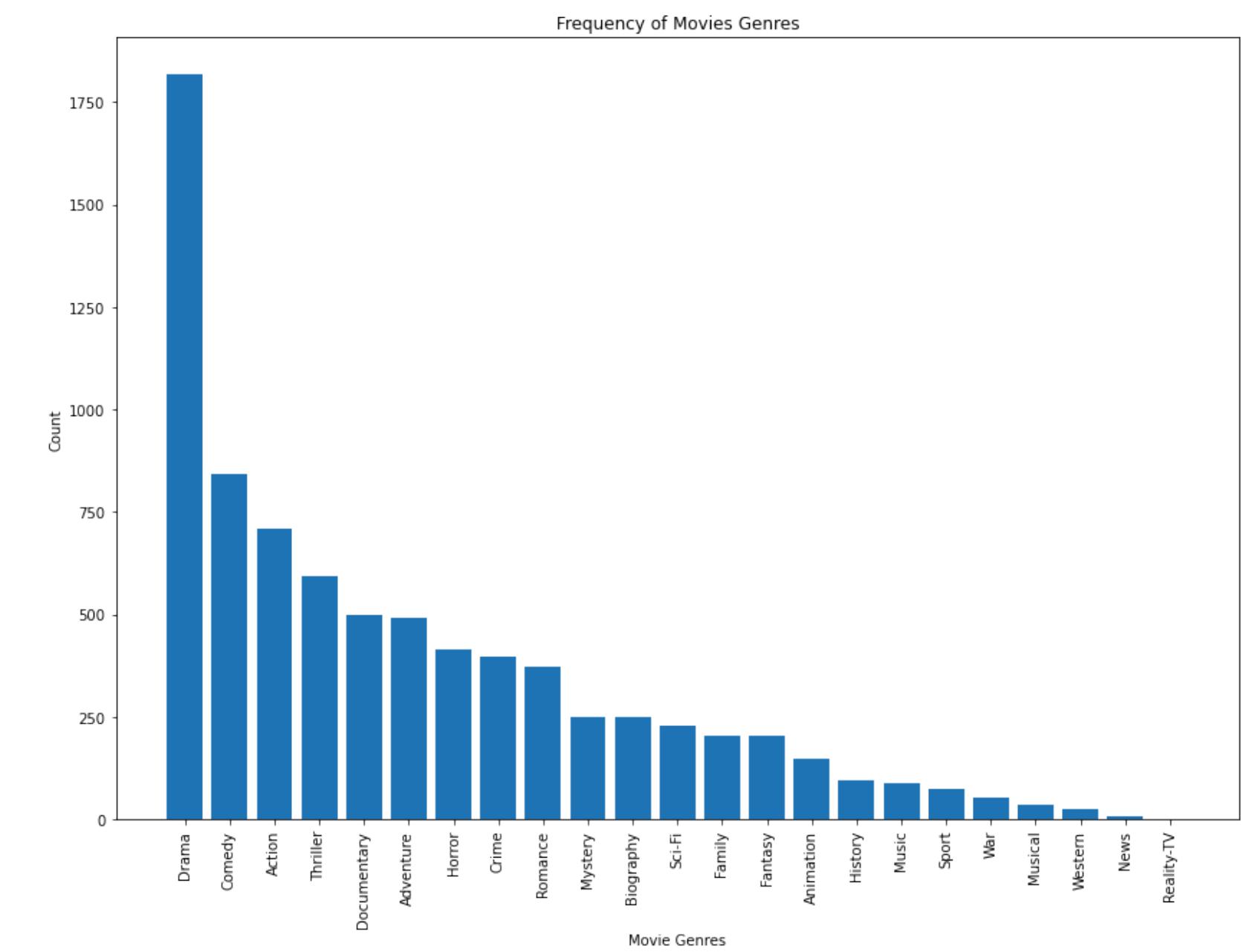
Data analysis

1.GRAPH OF FREQUENCY OF MOVIES GENRES

Observation

The most common movie genre by a huge margin was Drama followed by Comedy, Action and Thriller.

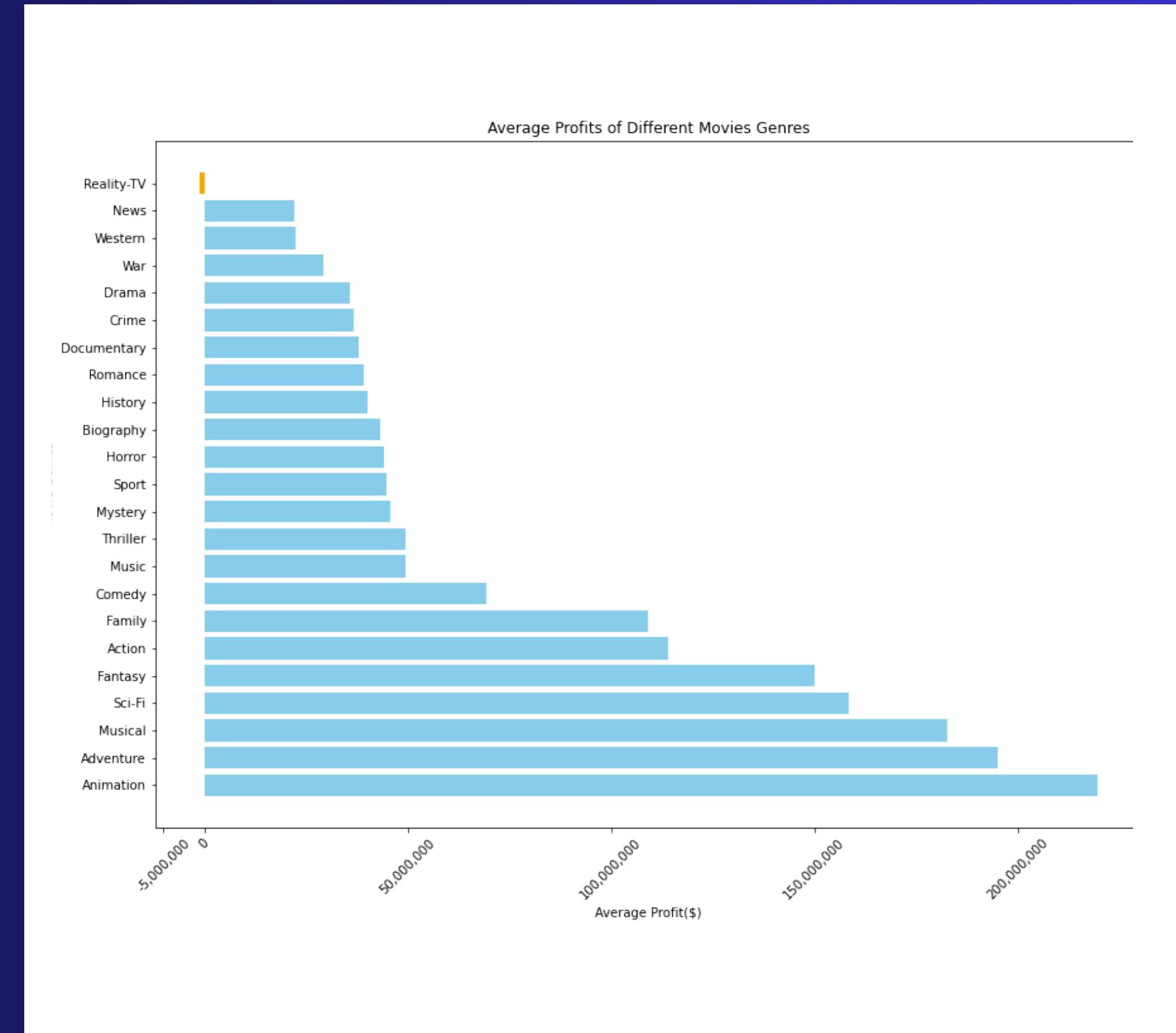
Reality TV and News were the least popular genres.



2.AVERAGE PROFITS OF DIFFERENT MOVIES GENRES

Observation

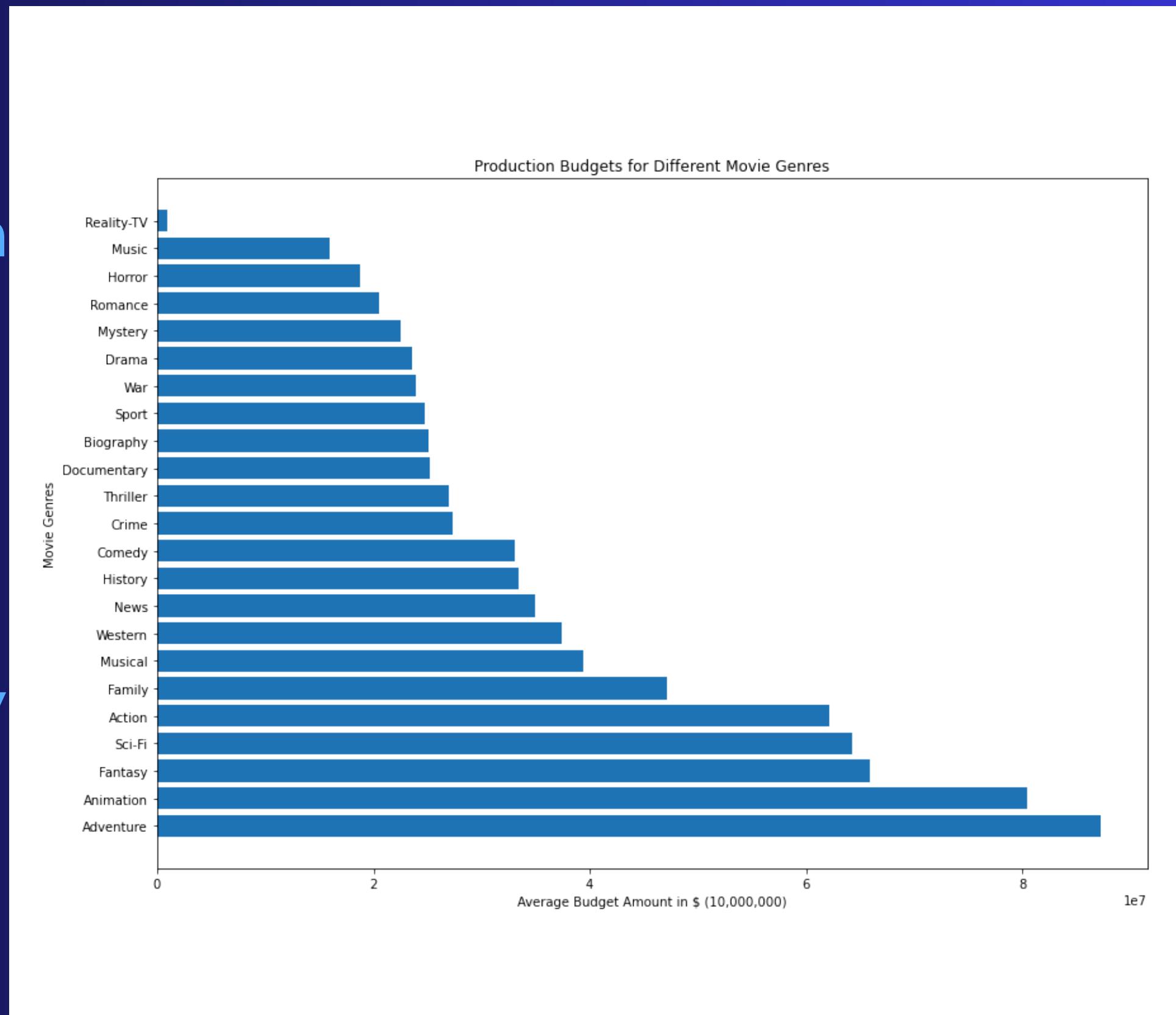
Animation, adventure and musical genres yielded the highest profits. Movies with Drama as part of their genres despite being most common had relatively lower profits compared to the other genres. Reality-TV genre was worst performing with losses.



3.PRODUCTION BUDGETS FOR DIFFERENT MOVIE GENRES

Observation

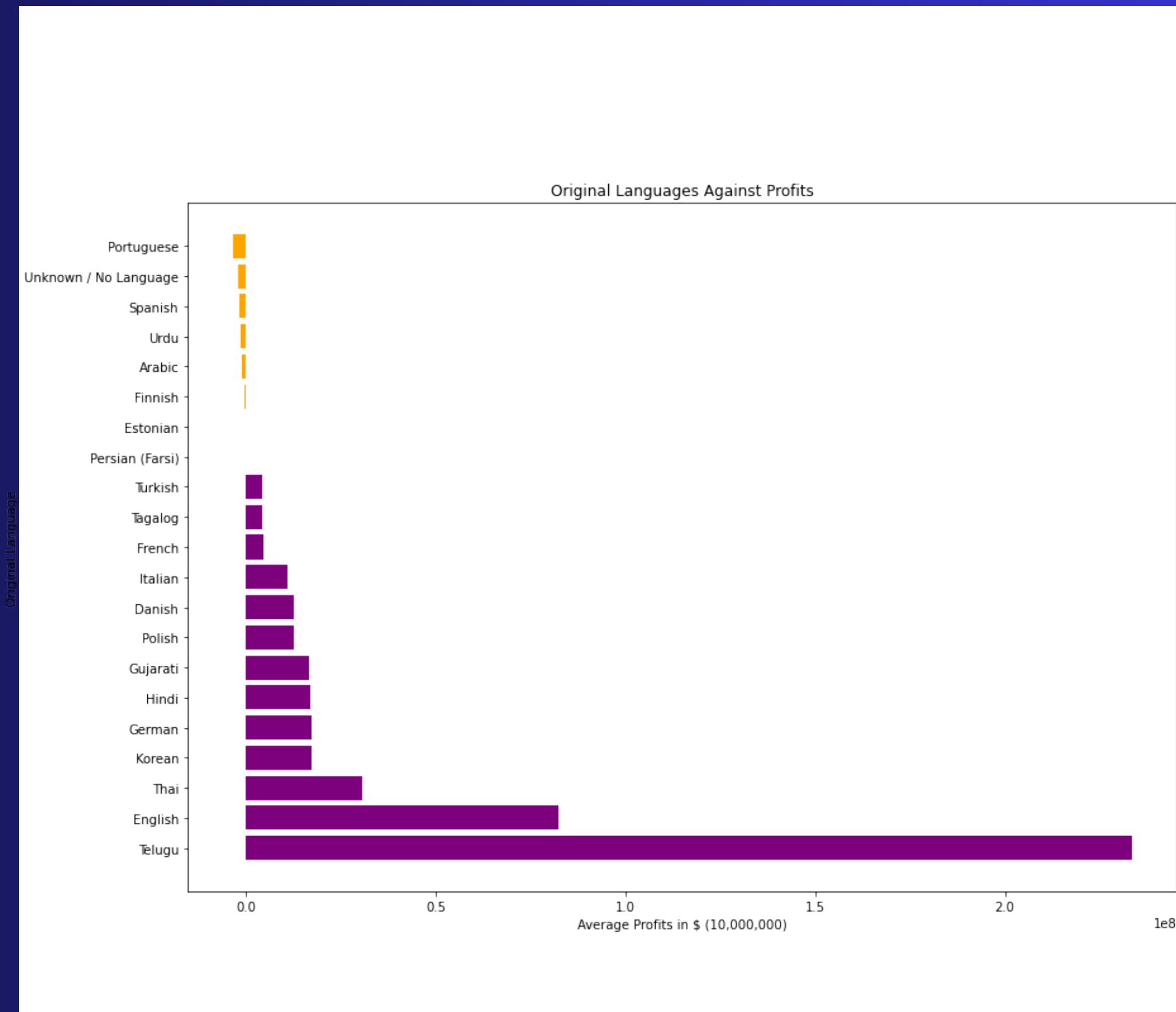
Movie studios spent more money to make **Adventure** and **Animation** films which could explain why they produce them in fewer numbers. In contrast, Drama films are relatively less expensive to produce making them more frequently produced by studios



4.ORIGINAL LANGUAGES AGAINST PROFITS

Observation

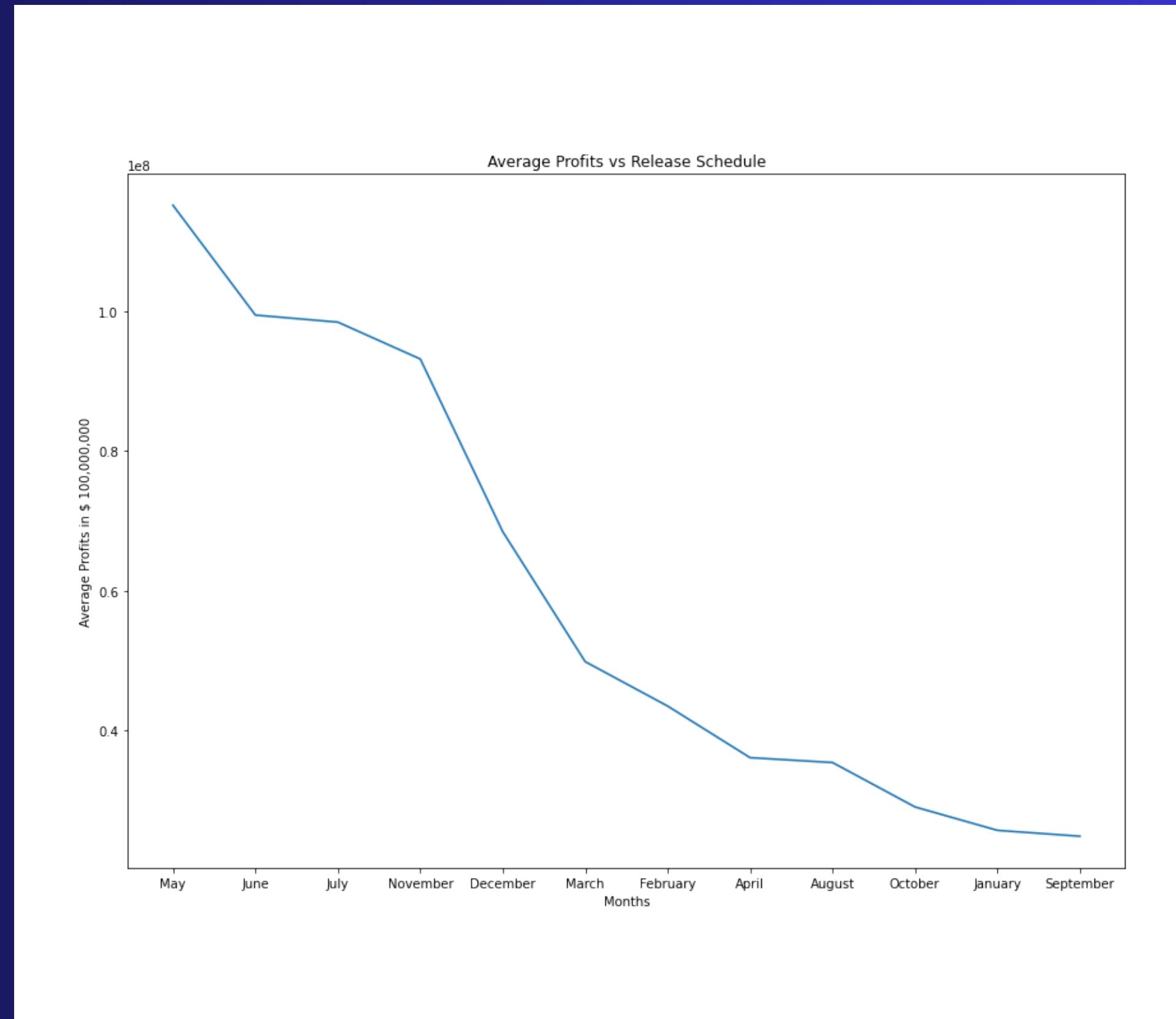
From the plot we can conclude that Telugu has a strong regional following in India(Bollywood) so it has a mass audience hence the higher average profit. English films dominate the global market due to their widespread appeal and the influence of Hollywood, which benefits from substantial marketing budgets and a large distribution. The least popular are Turkish, Portuguese, Spanish, Urdu, Arabic, and Finnish



5.AVERAGE PROFITS VS RELEASE SCHEDULE

Observation

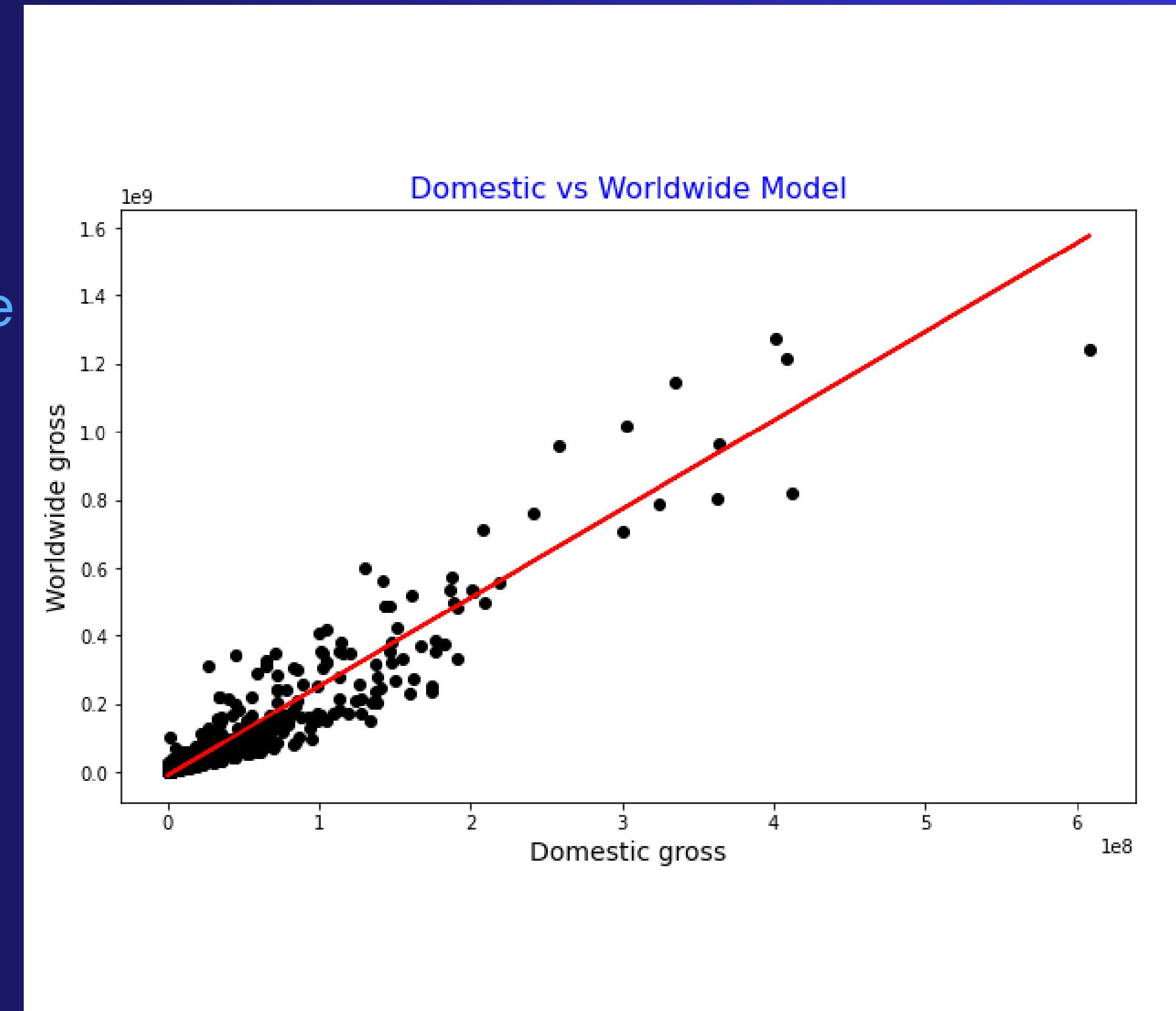
Movies released in the subsequent months of May, June, July are clearly the most profitable this is due to summer blockbuster season.Holiday Season (November and December) is another profitable period.Post-holiday and Back-to-school slumps (January and September): January comes after the christmas holiday spending and audience numbers drop



6.DOMESTIC VS WORLDWIDE MODEL

Observation

The model for production budget and the world wide gross shows the strong positive correlation. From modelling, the coefficient of 3.4 shows the change in the worldwide gross at the box office for every unit change in production budget, it also confirms the strong correlation from the heatmap.





RECOMMENDATIONS

1. The studio should prioritize high-return genres like action, sci-fi, fantasy, musicals, adventure, and animation, especially adventure and animation, while exploring dramas and reducing reality TV.
2. Release high-budget films during peak seasons (May–July and Nov–Dec) for maximum audience engagement, especially for adventure and family-oriented genres. Consider lower-budget or niche releases for off-peak months.
3. Prioritization of English and Telugu films for broader audience reach and higher profits, while also considering a more targeted strategy for Turkish films due to their smaller audience and limited international appeal.

NEXT STEPS

Assessing the relationship between box office performance and production quality across various film genres can reveal important information about what influences profitability and audience engagement. Analyze for special effects such as the sound effects, production locations, video quality, artist and characters.

Analyzing how well studios turn their financial investments into box office earnings is part of researching the return on investment (ROI) for various film genres. This is of significance in analyzing how high the profits are for a given genre. For example, while genres like Adventure and Animation may have high production budgets, their consistently strong box office performance can result in high ROIs, making them lucrative investments meanwhile genres like Drama might be less costly to produce but may not yield much

in case of any inquiry

Connect with us.



- PRECIOUSAHONO@GMAIL.COM
- LOGANKIM62@GMAIL.COM
- PAMELAVANNESSA131@GMAIL.COM
- MUTANUMALALA@GMAIL.COM
- JANENJUGUNA922@GMAIL.COM
- SYMONWAMAE.K@GMAIL.COM

