

Box Office Blueprint: Data-Driven Insights for Smarter Movie Production

Collaborators



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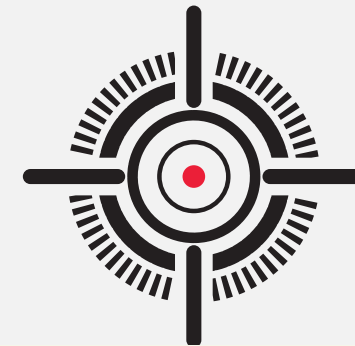
KELVIN SESERY

Business Problem



Industry Shift

Big studios are investing heavily in original video content.



Ambition

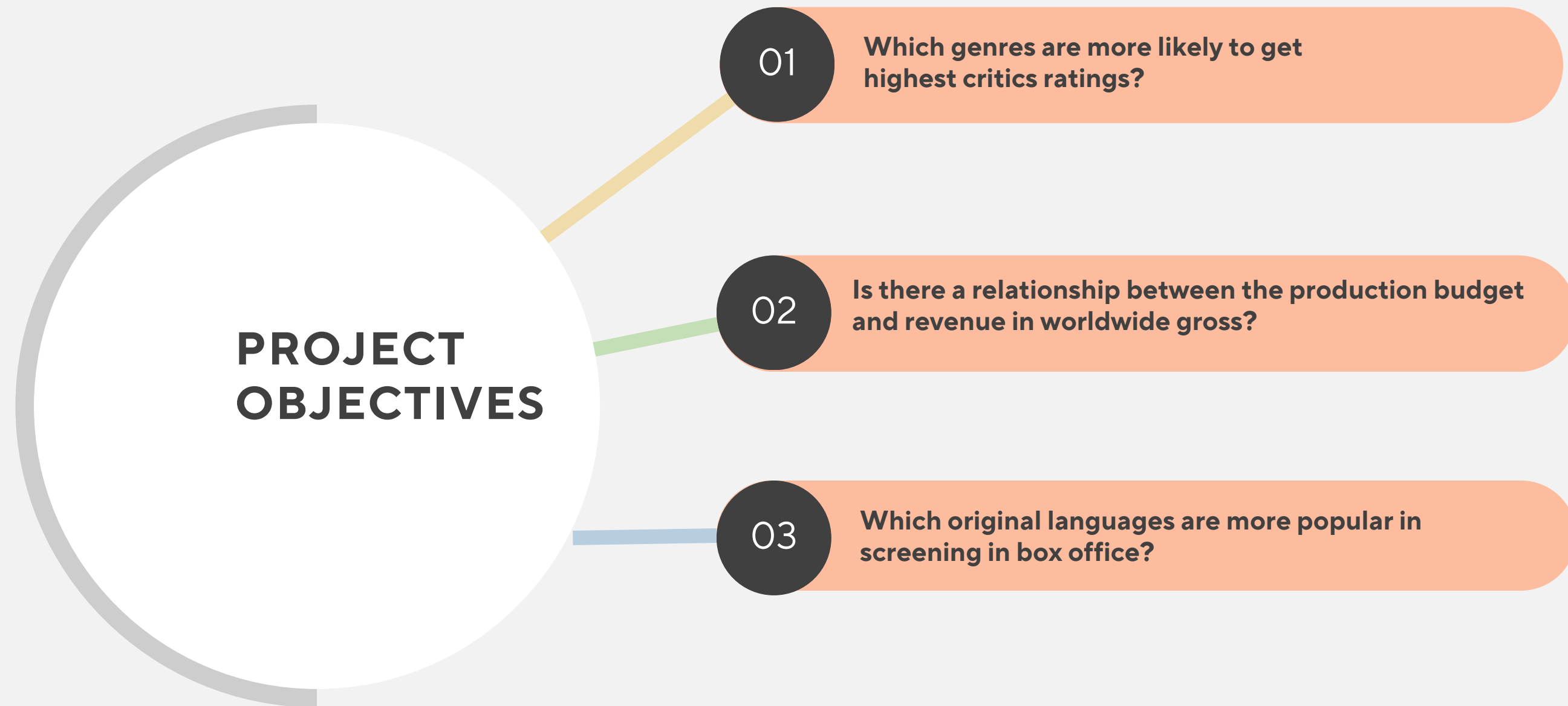
Box Office Blueprint wants to enter the movie industry with a new studio.



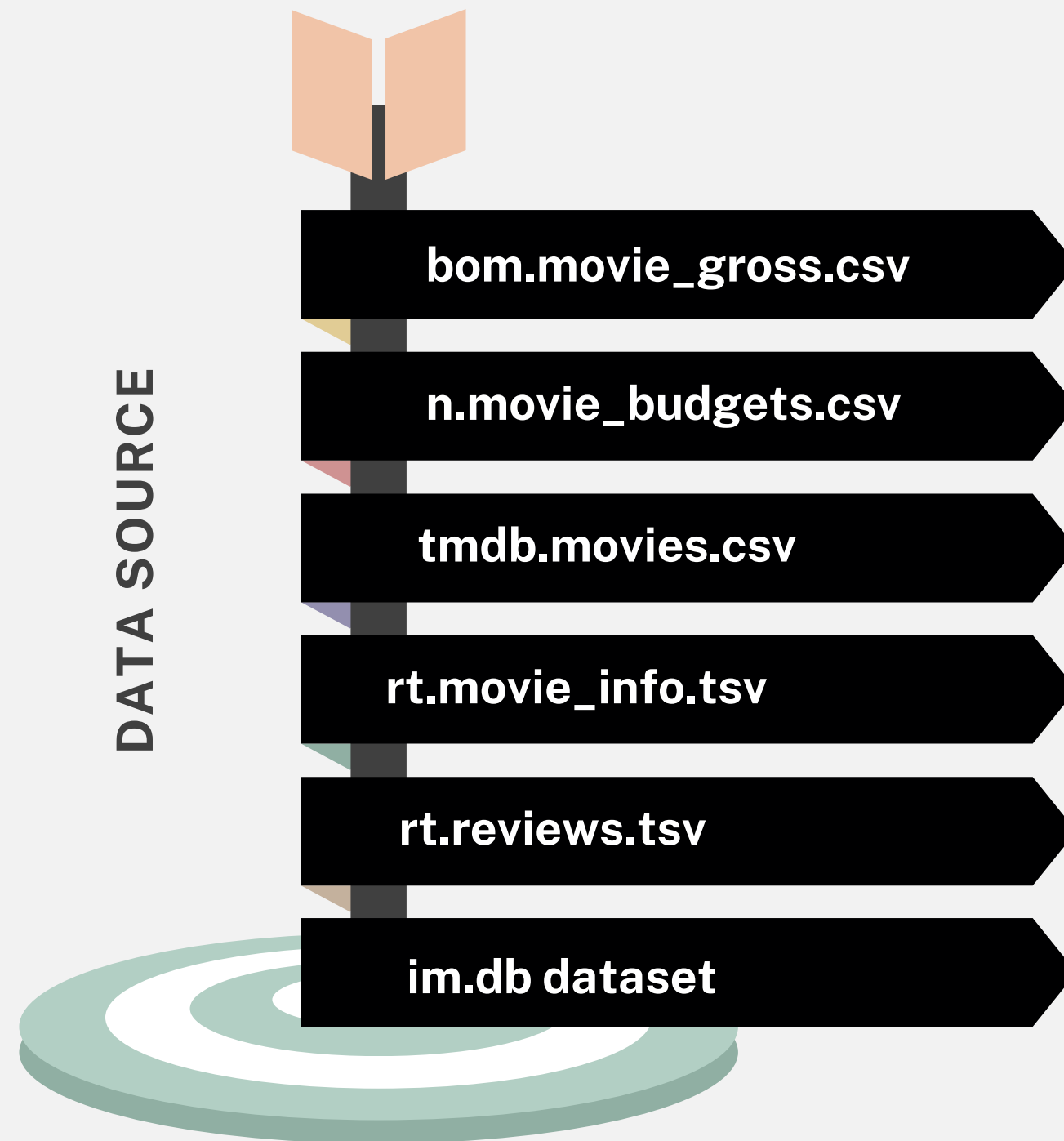
The Challenge

lack experience and knowledge about what drives box office success.

Goals



DATA UNDERSTANDING



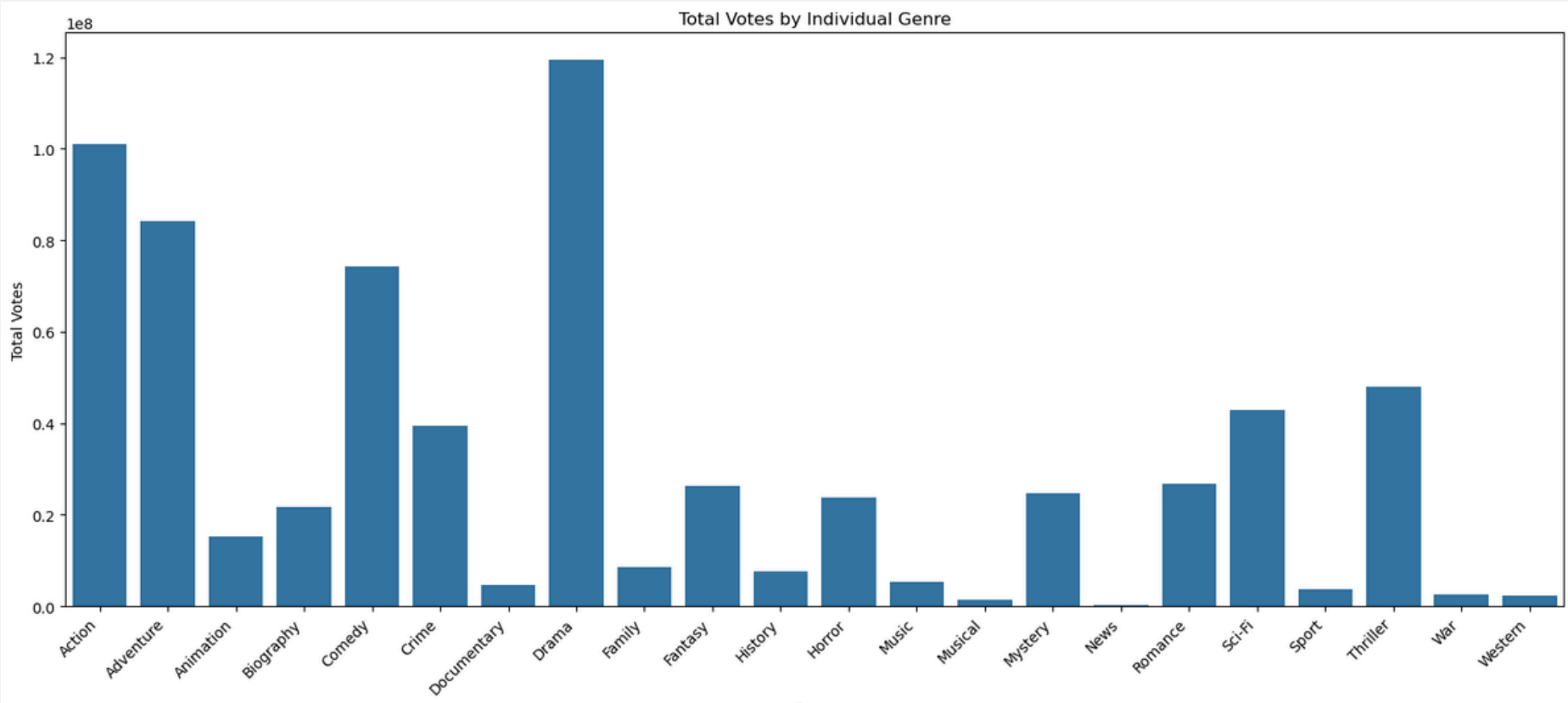
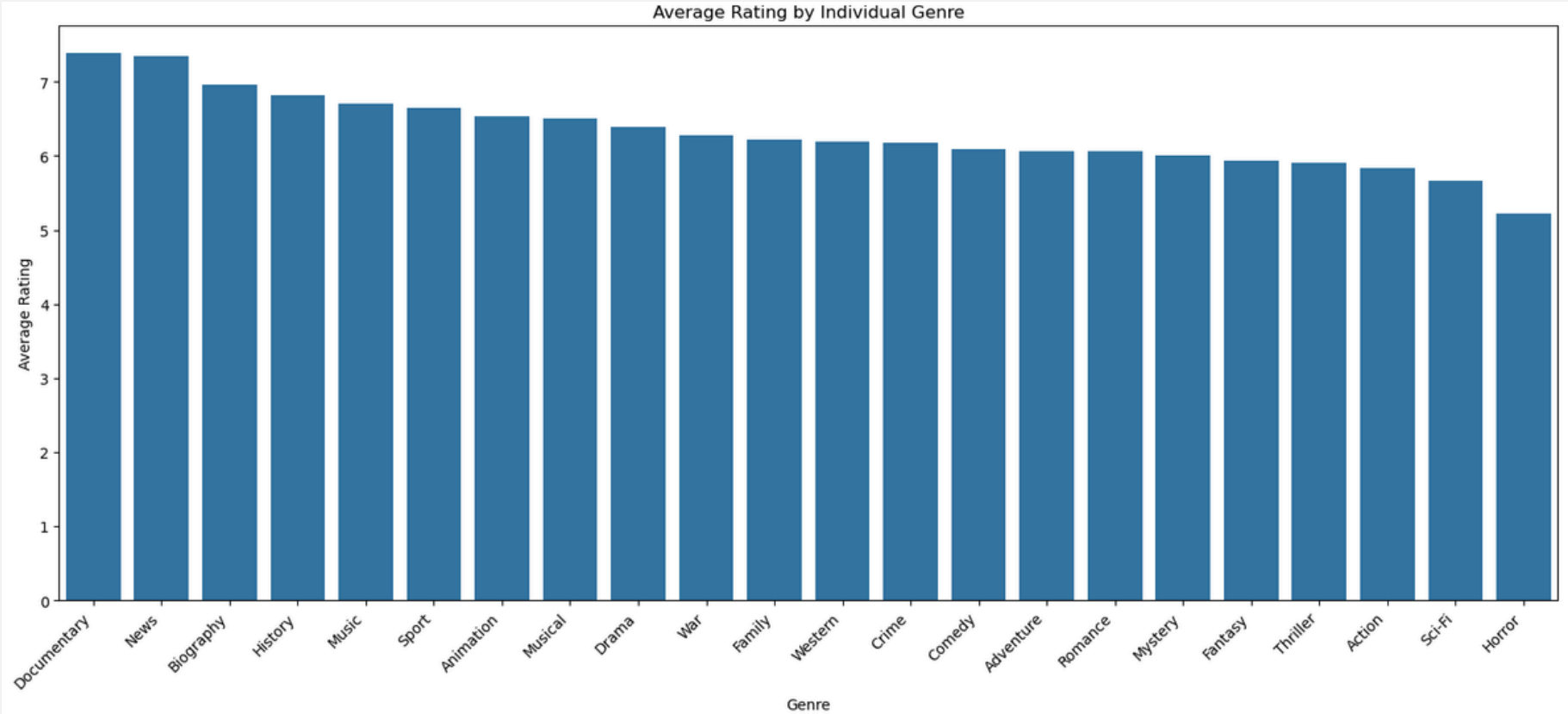
- The primary goal of the analysis is to uncover meaningful trends in production budgets, gross earnings, and audience ratings. These insights will support strategic decision-making for a new movie studio, enabling it to identify profitable genres and themes. By aligning content production with market demand and audience preferences, the studio can optimize its investment and increase the likelihood of producing successful original video content

DATA EXPLORATION

- In analyzing the data sets, we utilized Python using
 - Pandas
 - Data
 - Wrangler
 - numpy
 - scipy
 - matplotlib
 - pathlib
 - SQLite3
 - Seaborn
- To explore the structure ,quality and contents of the data to better understand the variables and identify any potential issues.

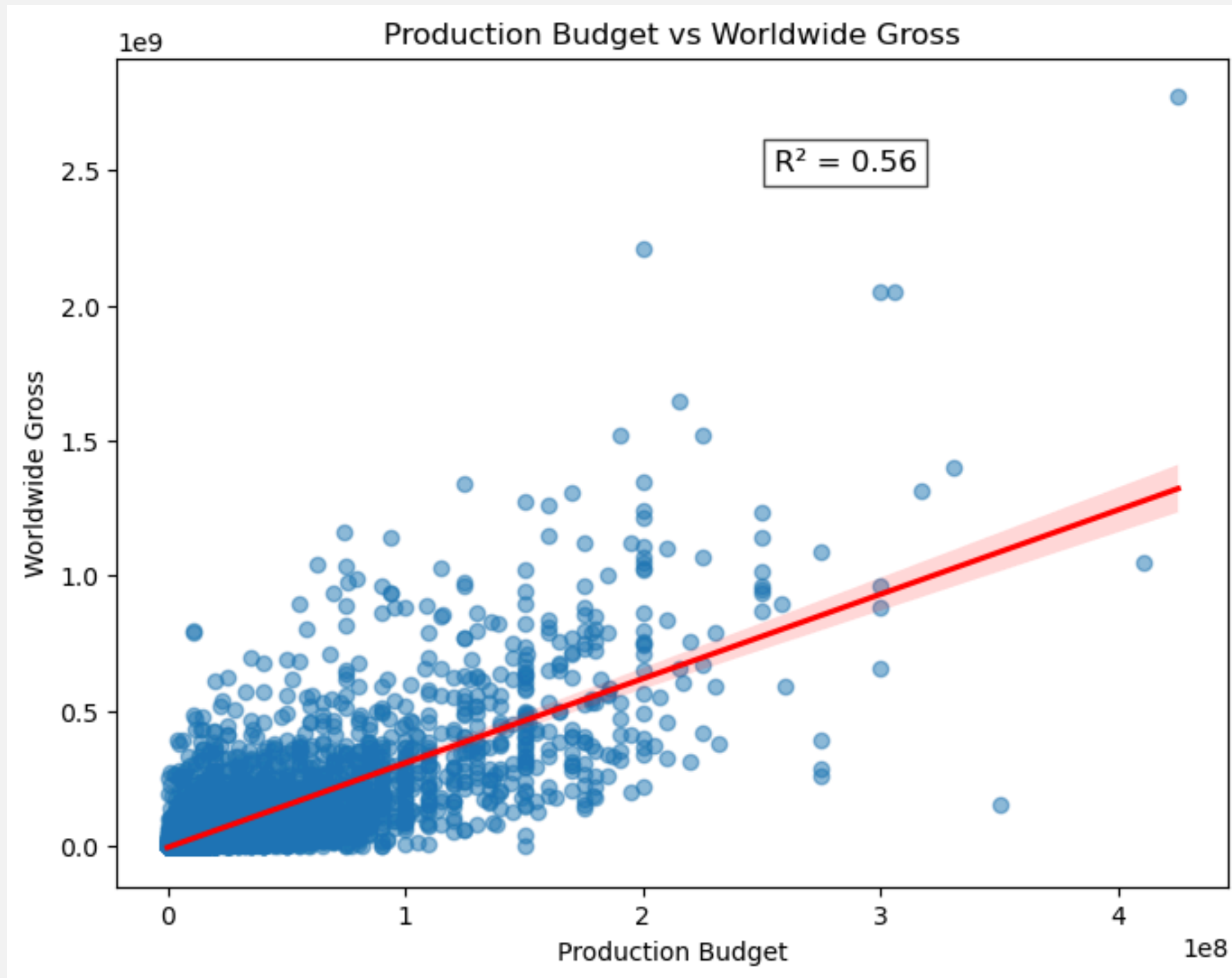
Findings & Methodology

PRODUCTION BUDGET AND WORLDWIDE GROSS REVENUE



The analysis shows that highly rated genres include Documentary, News, Biography, History, and Music, while the most popular by audience votes are Drama, Action, Adventure, Comedy, and Thriller. This reveals a key distinction: some genres earn critical acclaim but attract fewer viewers, while others draw large audiences despite lower ratings. A balanced view of both ratings and popularity is essential for strategic decisions.

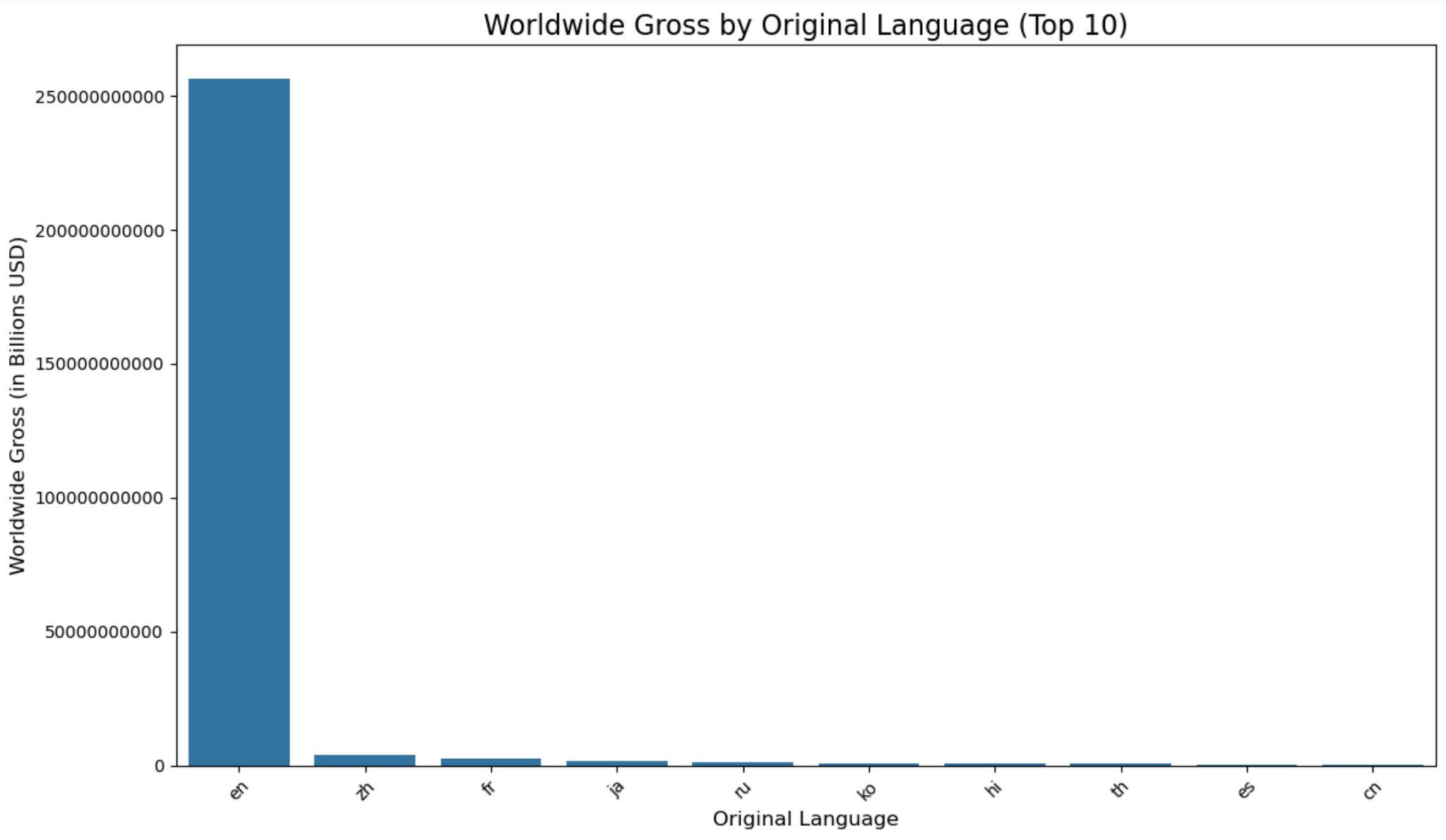
PRODUCTION BUDGET AND WORLDWIDE GROSS REVENUE



Key Findings

- Production budget has a strong positive relationship with worldwide gross ($r = 0.75$).
- 56% of revenue variation is explained by budget (R^2), while 44% comes from other factors like marketing, timing, and star power.
- Most films align with the trend, but outliers show that some big-budget films flop while some low-budget ones overperform.

LANGUAGE AND POPULARITY



The bar chart reveals that the top five most popular original languages in films are English (en), French (fr), Spanish (es), Russian (ru), and Japanese (ja), respectively

BUSINESS RECOMMENDATIONS

1

PRIORITIZE DOCUMENTARIES AND DRAMA FILMS

Drama attracts the widest audience, while Documentaries earn the highest ratings. A balanced strategy, using Drama for mass appeal and Documentaries for credibility, will boost both revenue and reputation, ensuring sustainable success.

2

INVEST IN A HIGHER PRODUCTION BUDGET

Higher production budgets are linked to greater worldwide gross revenue, but success is not guaranteed. Some big-budget films flop while smaller ones excel. A smart approach is to invest more strategically, balancing budget size with careful risk assessment to maximize returns.

3

PRODUCE FILMS IN ENGLISH

The analysis found that English is the dominant and most popular original language for films in the worldwide box office market. To maximize the film's potential reach and commercial success, the studio should prioritize producing movies in English.



Thank You