

Data Driven Movie Studio Profitability Analysis

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<u>Date</u>: 02 May 2025

BUSINESS PROBLEM

Problem statement:

• The company aims to establish a new movie studio to capitalize on the growing demand for original video content. However, due to lack of experience in movie production, they need data-driven insights to make strategic decisions about film production that will maximize profitability in a competitive entertainment market.

Target:

• This presentation explores strategic, data-driven insights for movie studio executives. We analyze box office data, financial risks, and audience feedback to optimize production strategies and profitability.



Business Challenges & Solutions

Challenges

- New to the film industry
- Uncertain production strategies
- Financial risk exposures

Solutions

- Analyze genre, budget, release date data
- Identify profitable strategies
- Provide actionable recommendations

Objectives

- To analyze historical box office data to identify trends over the years
- To explore any linear relationship between production budget and revenue
- To identify best rated genre
- To provide actionable recommendations on best film production strategies

Data Collection & Preparation

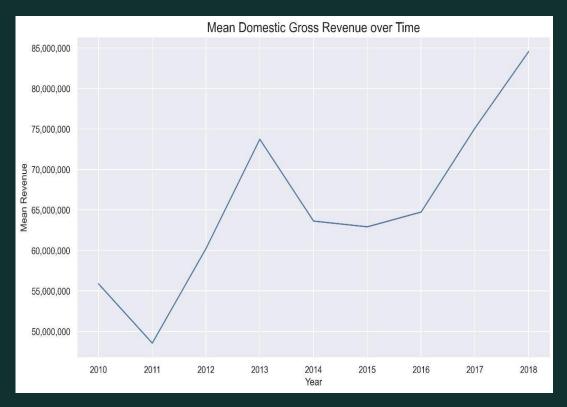
Data Sources

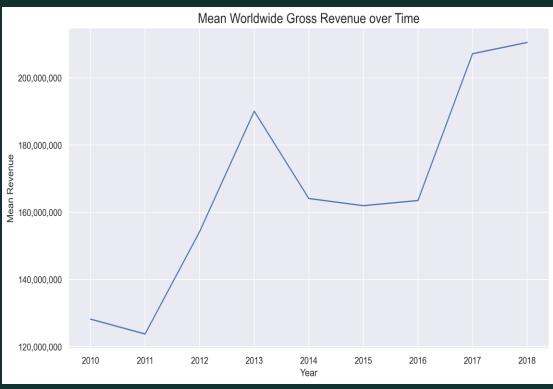
- IMDB
- Box Office Mojo
- The Numbers

Preparation Steps

- Remove Duplicates and cleaned missing values
- Normalized columns and merged datasets

Box Office Trends Overview

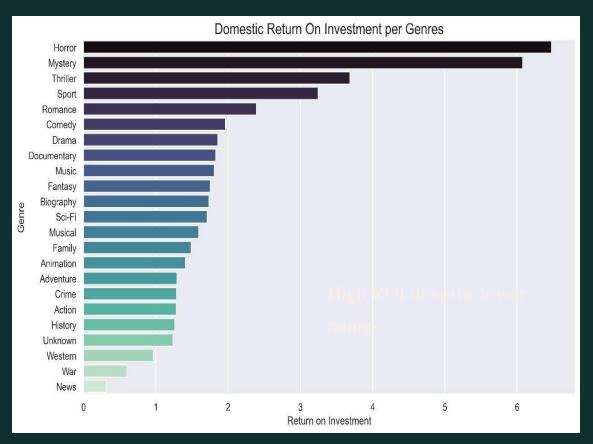


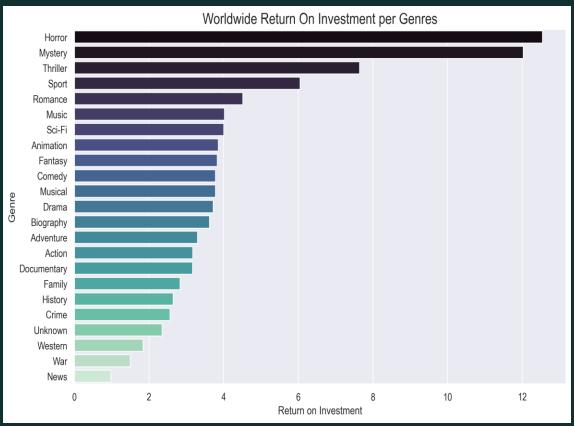


Trend
Peak years 2011 to 2018.

Domestic revenue range \$ 40 - \$ 85 million. Worldwide revenue range \$ 100 - \$ 200 million

Genre vs Return on Investment

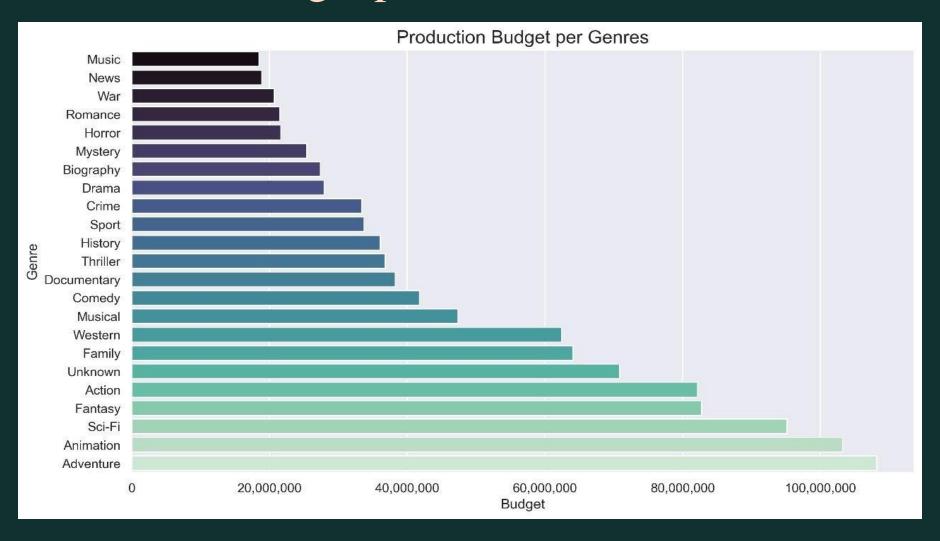




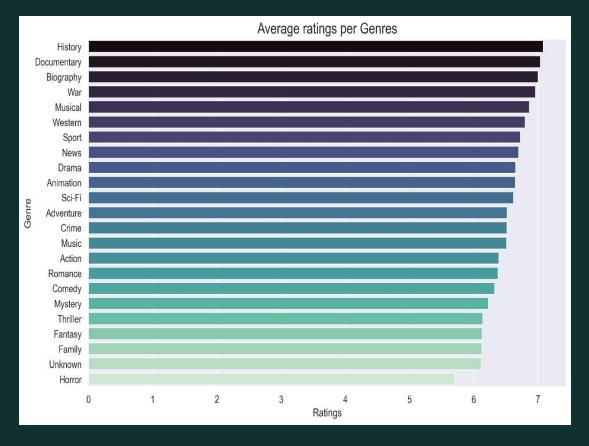
Horror

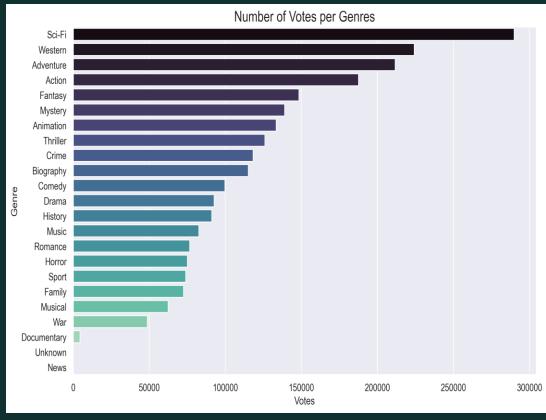
High ROI despite lower ratings.

Production Budget per Genre



Ratings per Genre





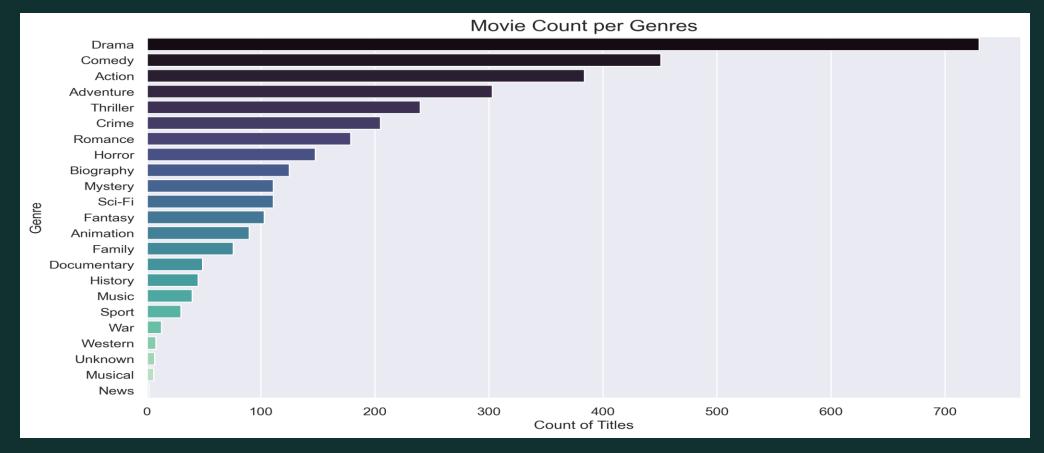
History

High ratings but niche viewership.

Sci-Fi

Most audience votes indicate high popularity.

Movies Count per Genre



Drama

Most frequently produced genre.

Strategic Recommendations for Studio

Focus Genres

Prioritize Horror, Mystery, Thriller genres for profitability.

Diversification 2

Balance between domestic and worldwide

Budget Control

Lean Budget improve profitability.

Collaborations

Partner with streaming platforms to widen distribution.

Data-Driven

Model

Use analytics continuously to fine-tune production strategies.

Create multivariate model for future predictions.



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