

Microsoft Movie Recommendation Unit

BOX OFFICE INSIGHTS

9.17.21

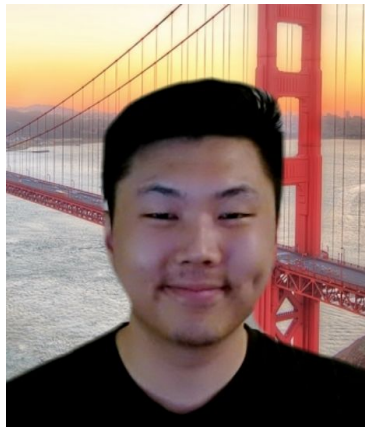
MEET THE TEAM



DOUG MILL
Budget to Gross

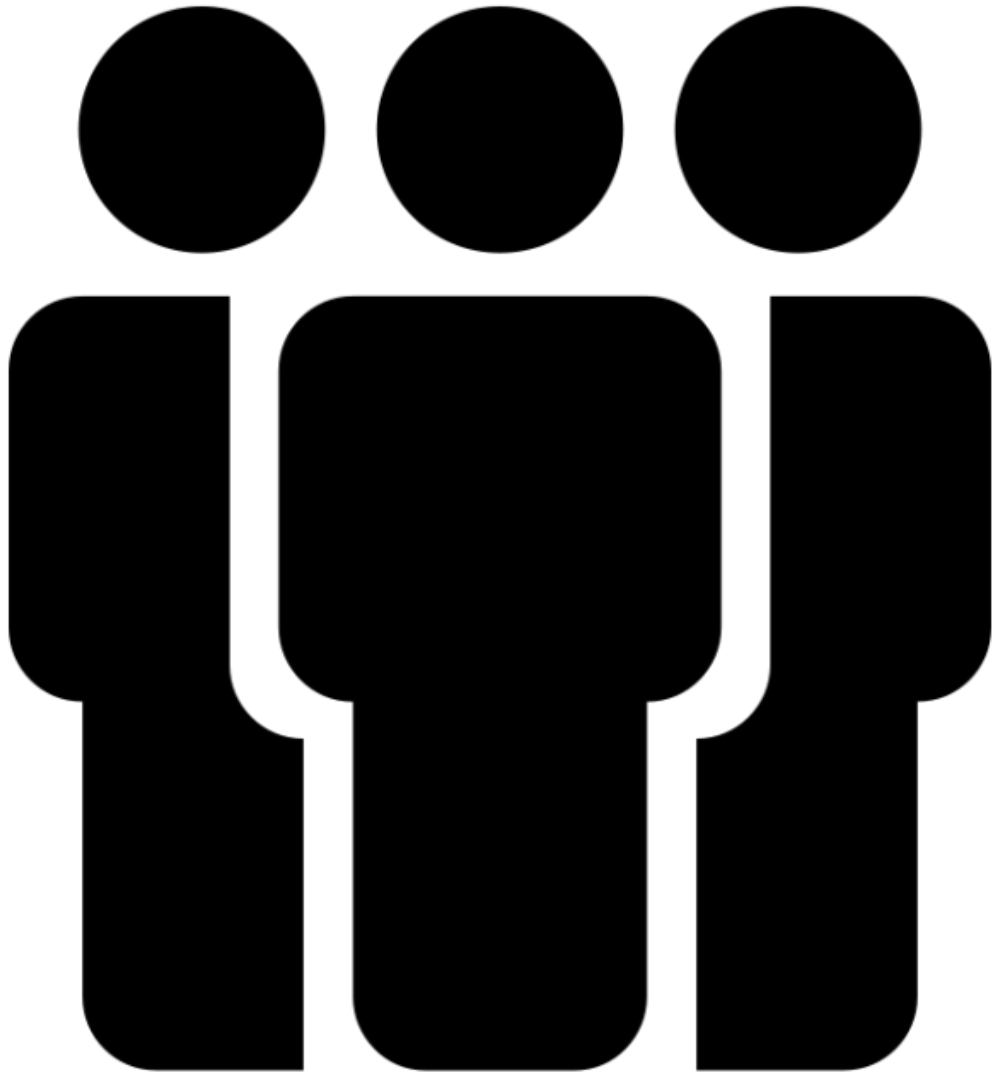


CARLOS MCCRUM
Impact of Genres



MICHAEL LEE
Seasonality of Movies





AGENDA

BUSINESS PROBLEM

DATA & METHODS

RESULTS

CONCLUSIONS

FUTURE INVESTIGATIONS





Business Problem

Our Objective:

- Optimize resource allocation for the Microsoft Movie Studio
- Determine the best time of year to release projects
- Provide insights about various genres in terms of costs and returns



Go big or go home -- How Microsoft can make a splash

See why releasing a high budget Sci-Fi Adventure
in the spring is your best bet!



DATA & METHODS

Steps to Formatting Our Dataset



THE DATA

- IMDb

Microsoft's Top Competitor (2015-2018)

- The Numbers

Over 20,000 movies and nearly 100,000 people tracking what movies are enjoyed

- Box Office Mojo

Provides comprehensive box office data for 60+ countries and territories.

Methods

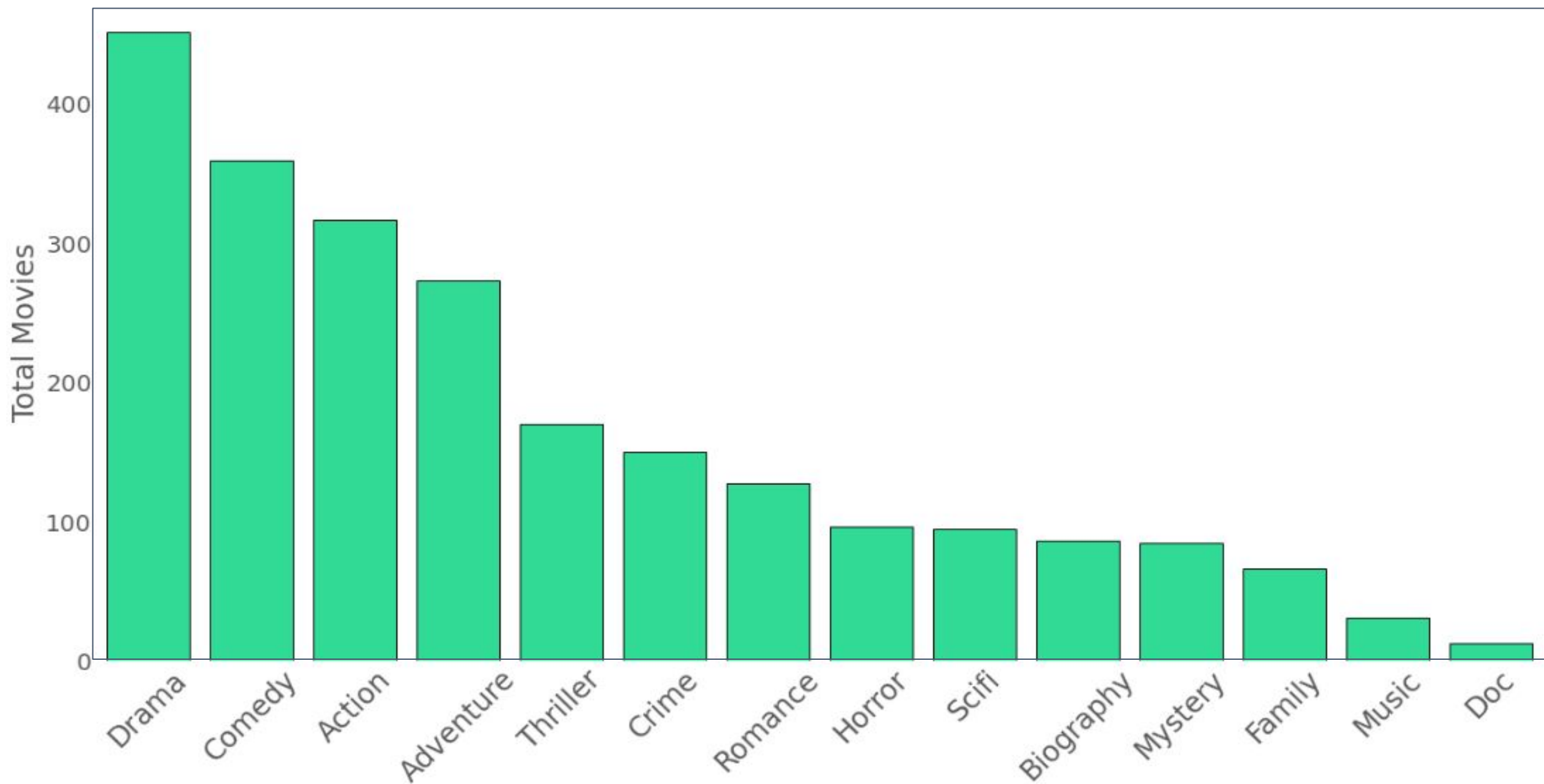


- We only included movies with a budget and a worldwide gross of 1M or more
- Data only includes films released 2010-2020

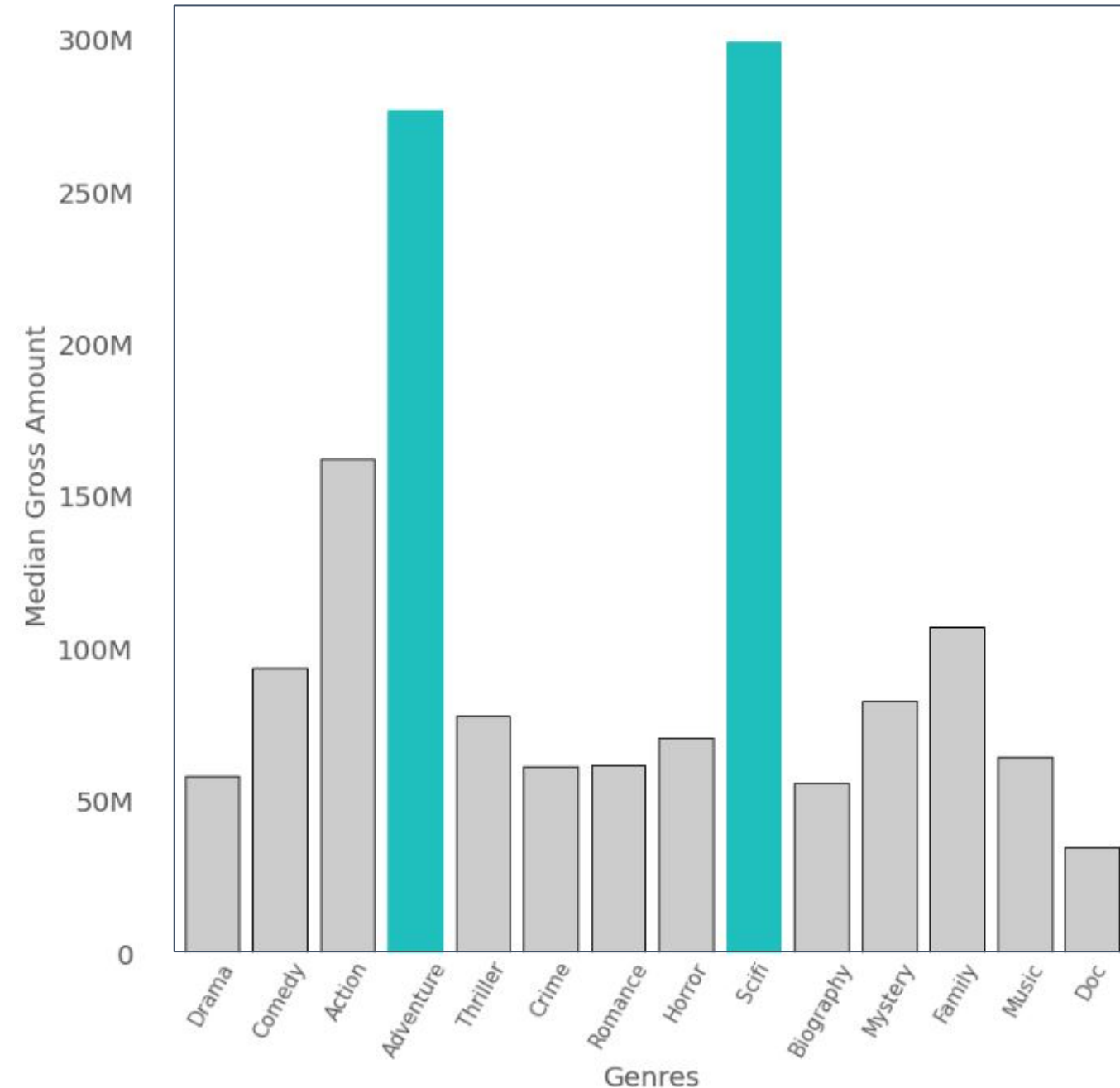
RESULTS

A Breakdown

Genres of Movies Made Since 2010



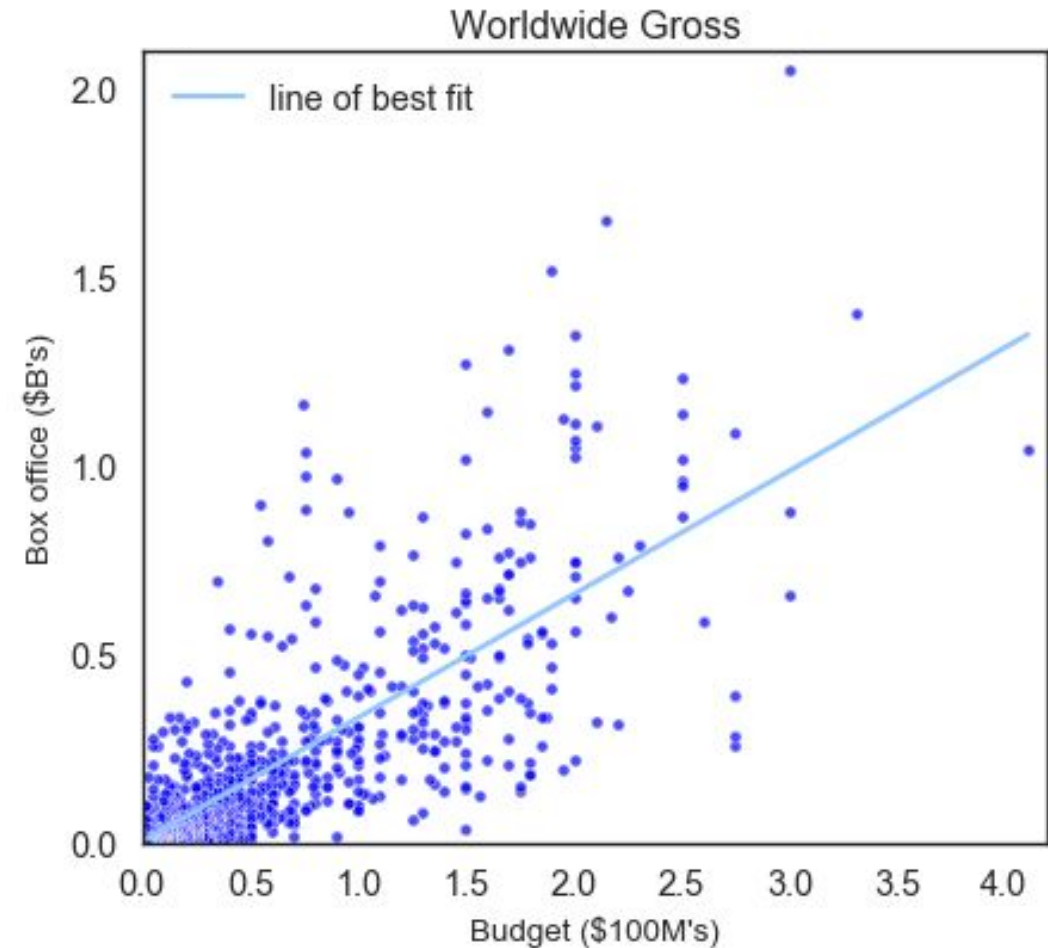
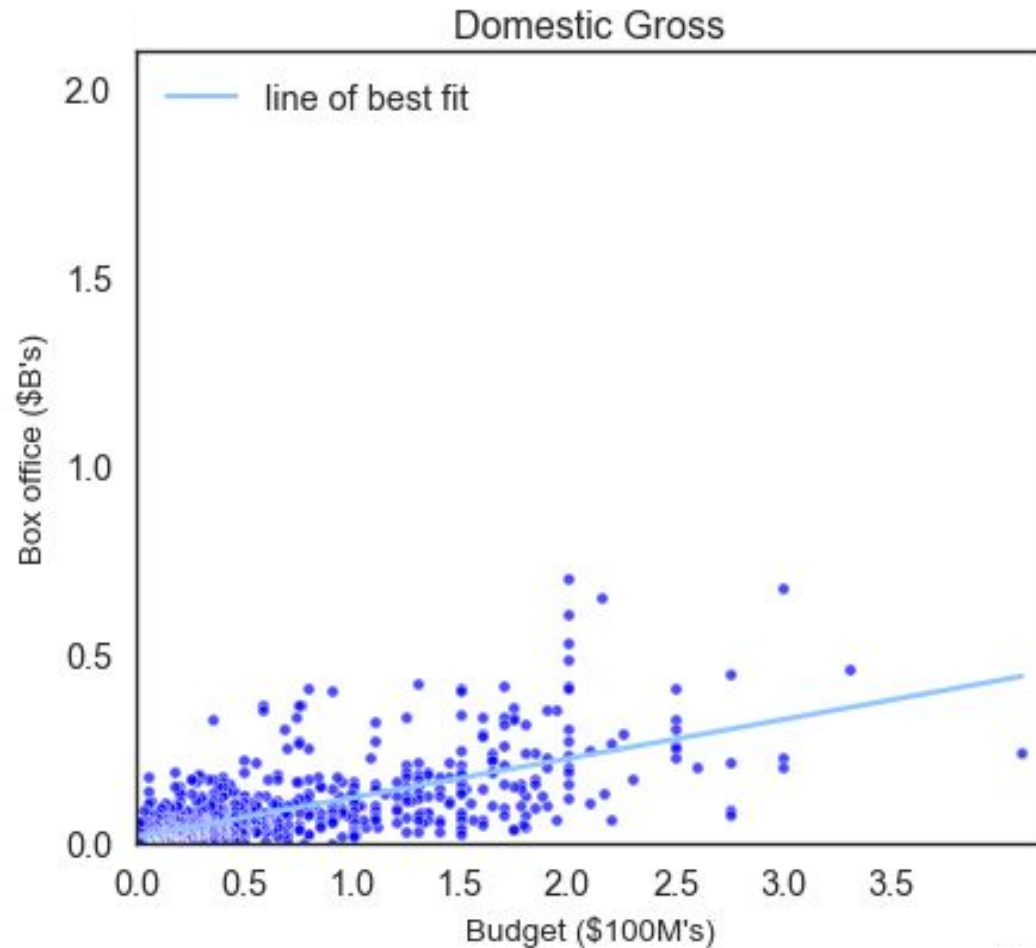
Worldwide Gross



Sci-Fi is Popular

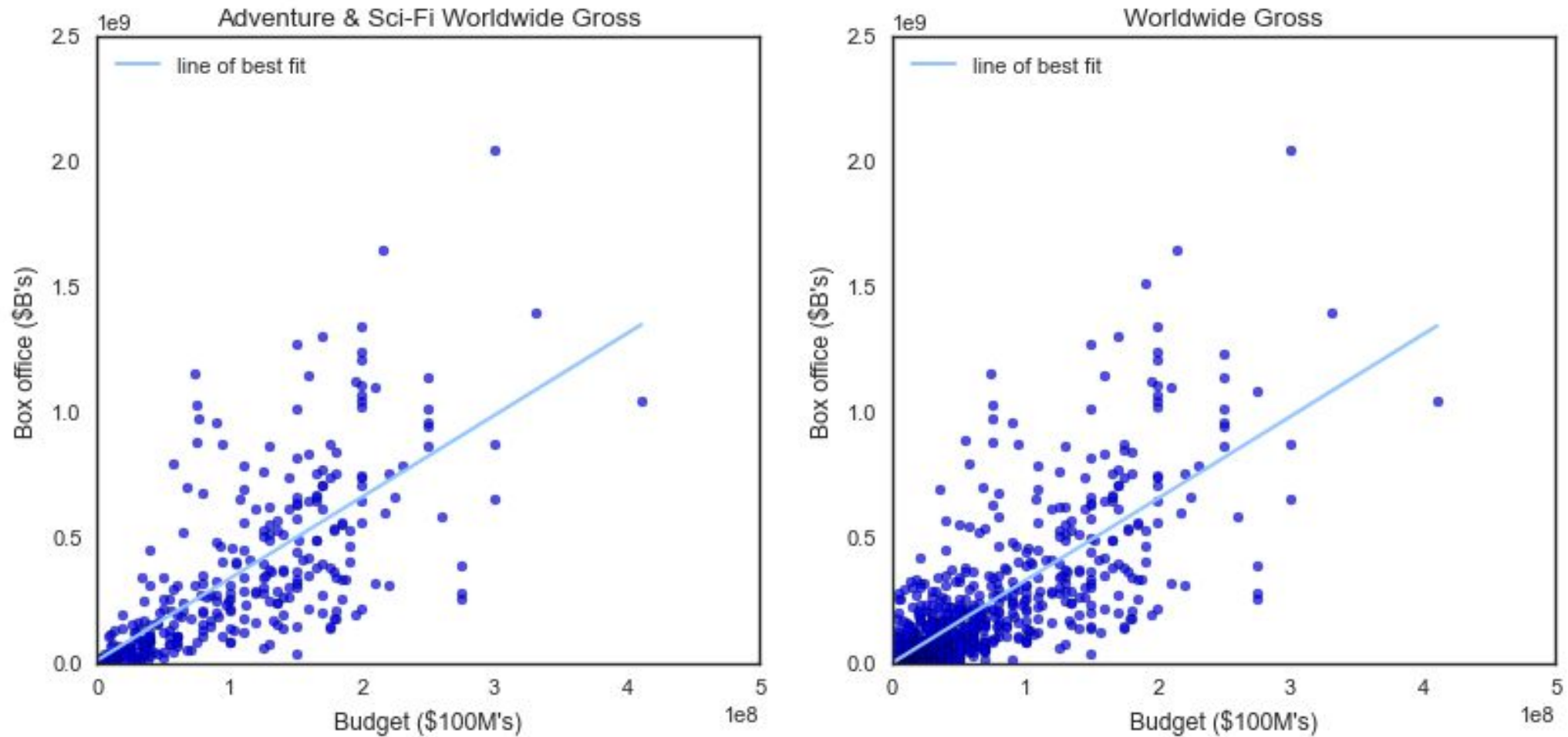
- We've separated our genres to see what movies people are seeing the most since 2010.
- Right away we see Sci-Fi and Adventure genres are the most popular!

Global Appeal -> 3x Gross



- Movies which transcended cultural and geographical barriers paid off in a big way
 - Budget impacts Box Office both domestically and globally

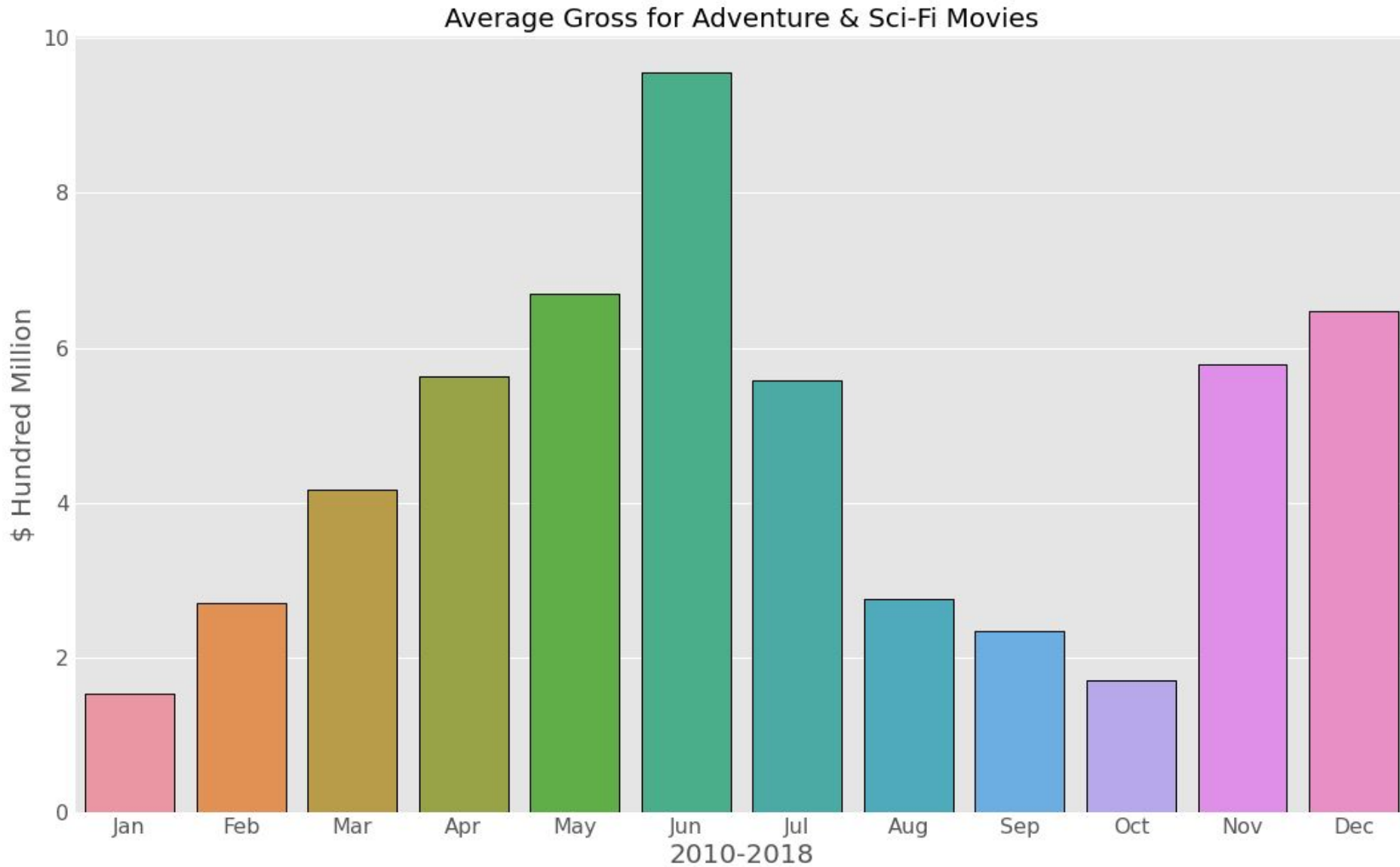
Adventure & Sci-Fi were the most financially and culturally significant



→ The biggest globally grossing movies line up with the adventure and sci-fi genres

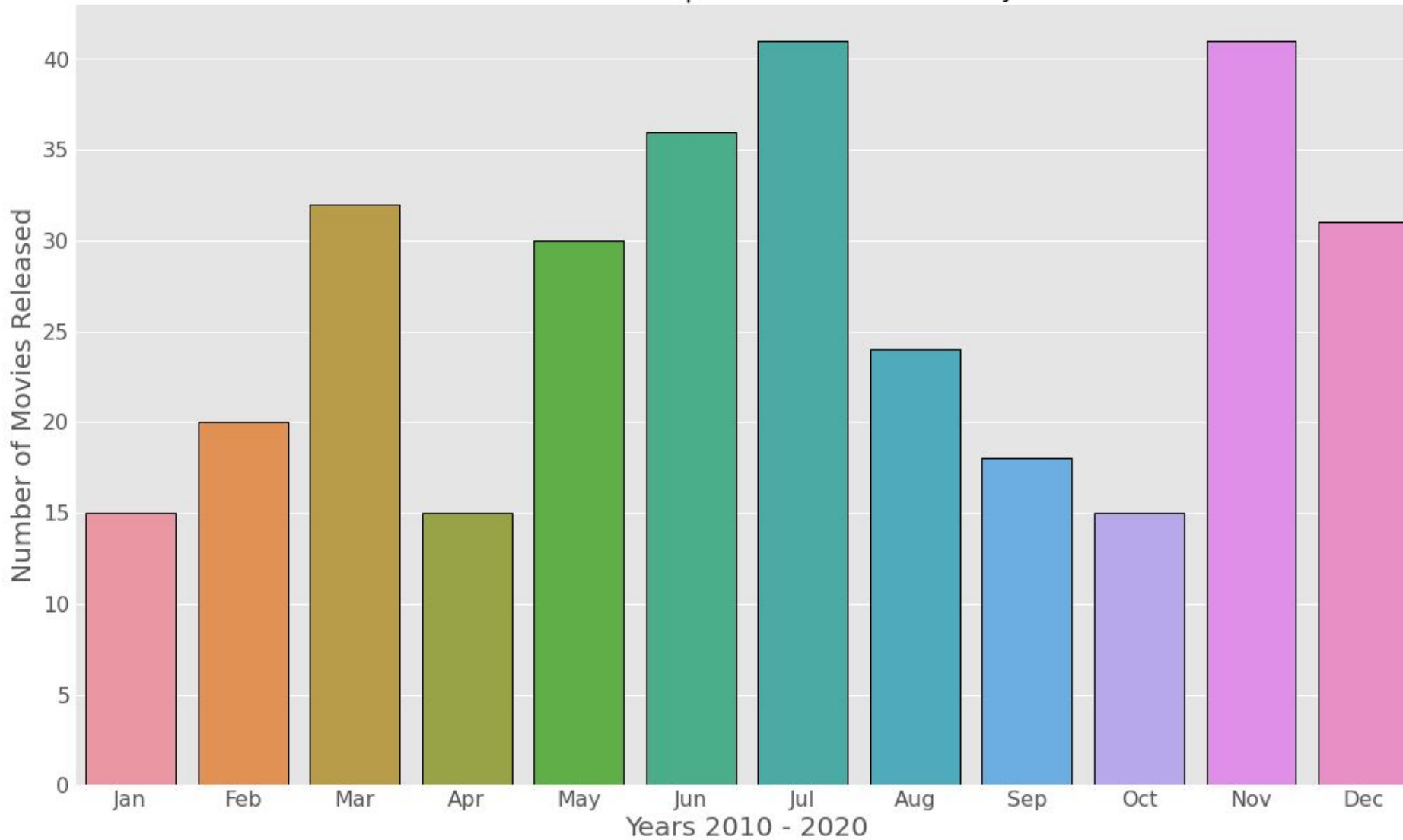
Do Movies Have a Favorite Season?





- First Half of Year
- Especially good during spring
- Avoid Aug-Oct launch

Number of Adventure | Sci-fi Films Released by Month



- Spikes May-Jul, & Holiday Season.
- Aim for April for least competition & High Gross Income

CONCLUSIONS



CONCLUSIONS

- The genres that gross the most are Adventure and Science Fiction.
- Higher budgets which include international marketing lead to the highest box office numbers and profit margin.
- Aim for April-July launch. If not, delay until Holiday Season.

FUTURE INVESTIGATIONS

NEXT STEPS

FUTURE INVESTIGATIONS

- Natural language processing (NLP) sentiment analysis on reviews
- More statistical analysis given constraints
- See how Science Fiction is trending over the years

QUESTIONS?



THANK YOU



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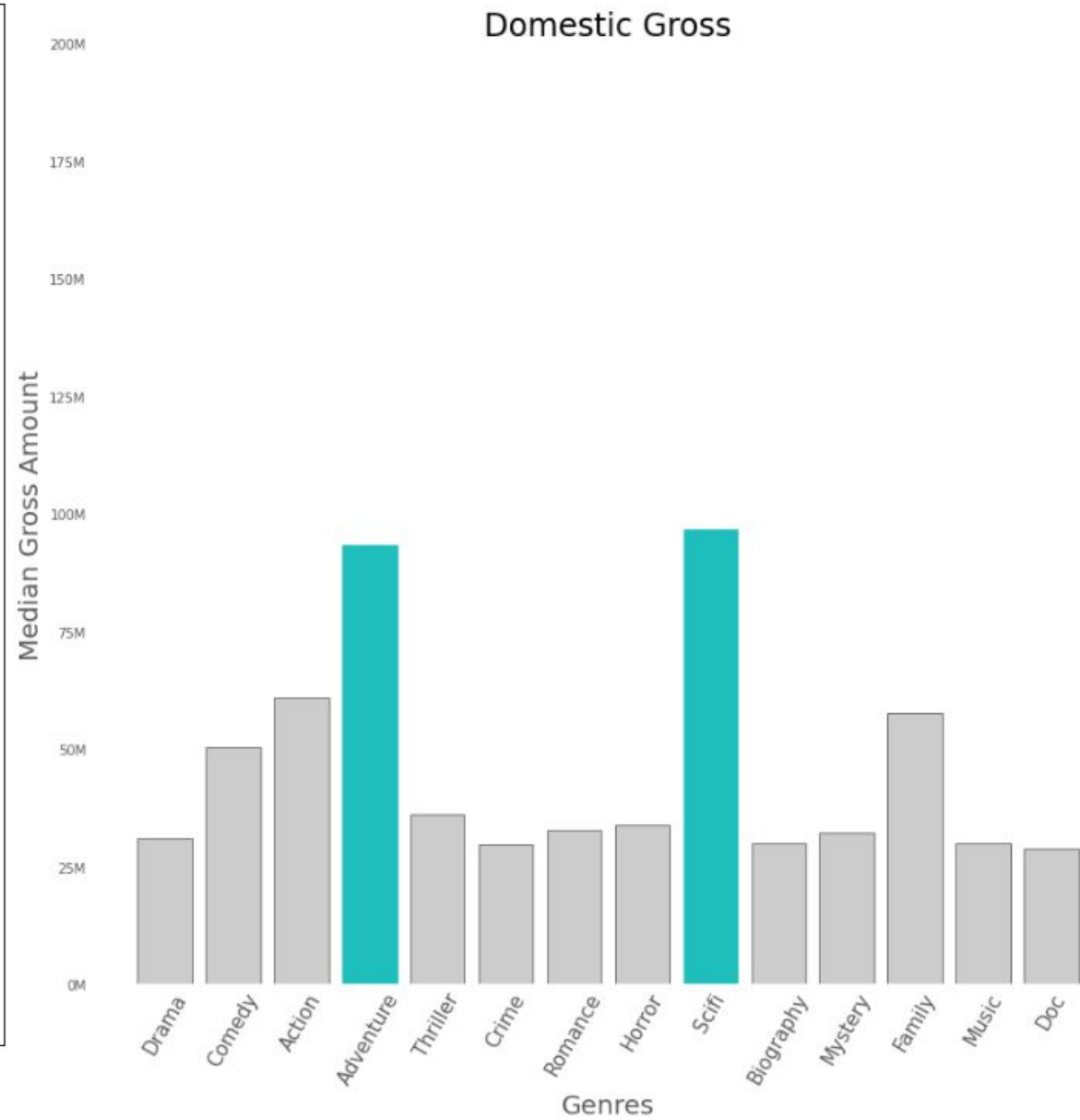
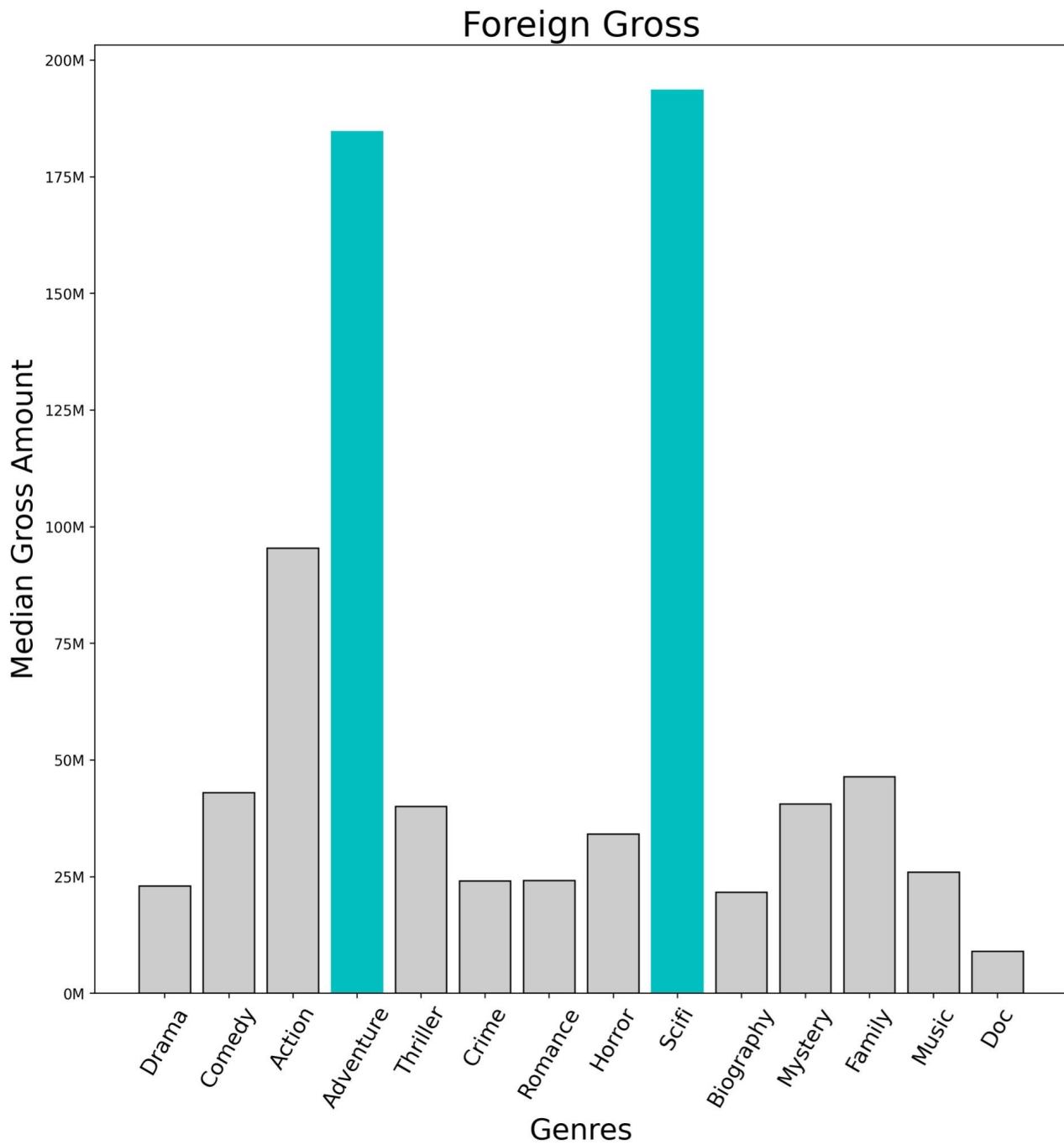
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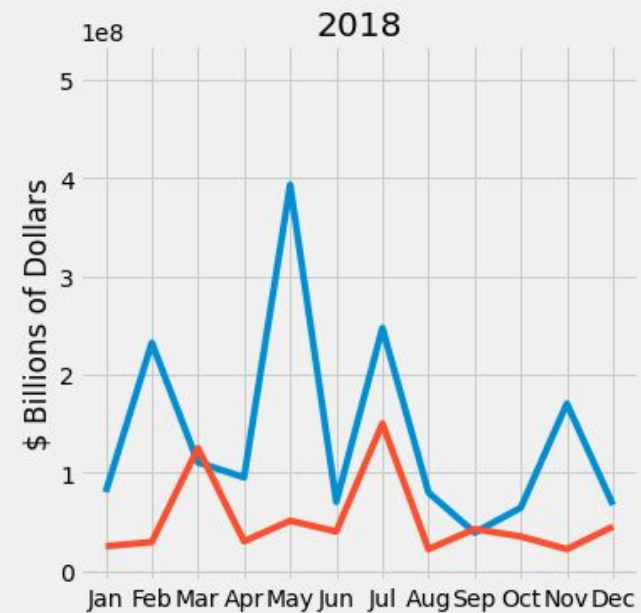
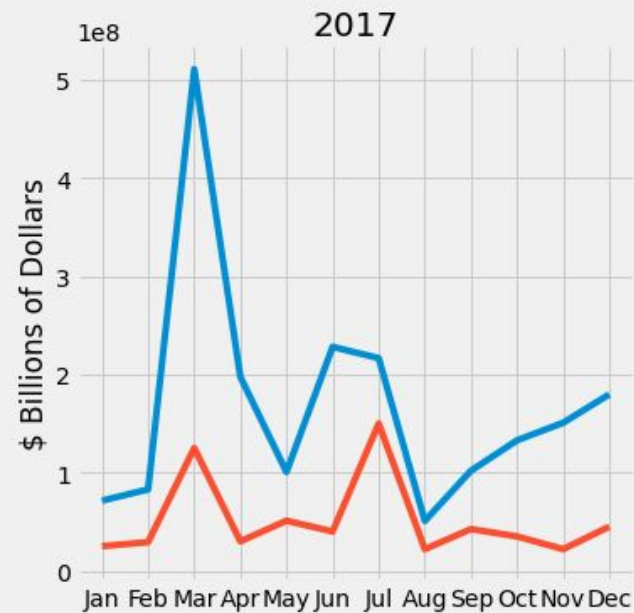
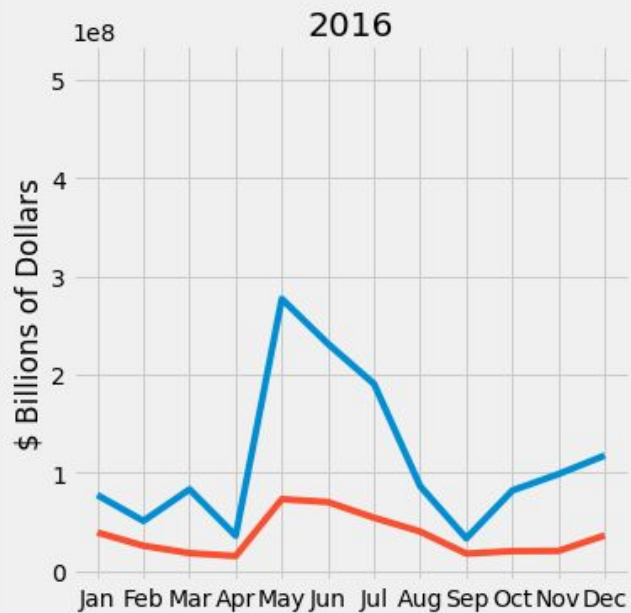
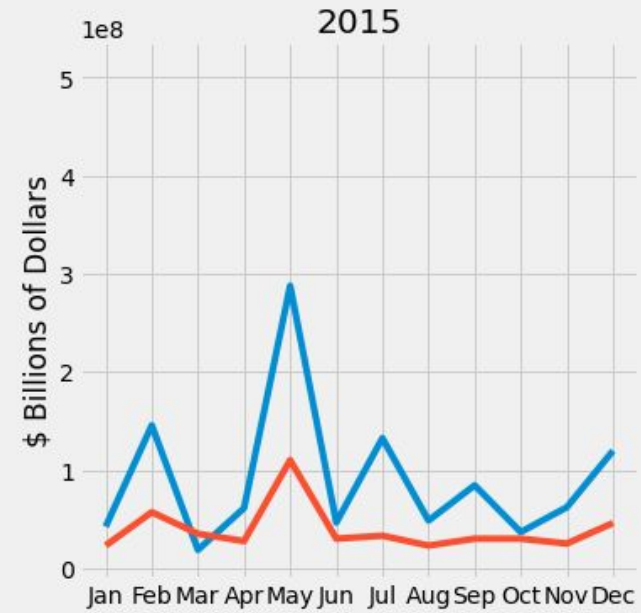
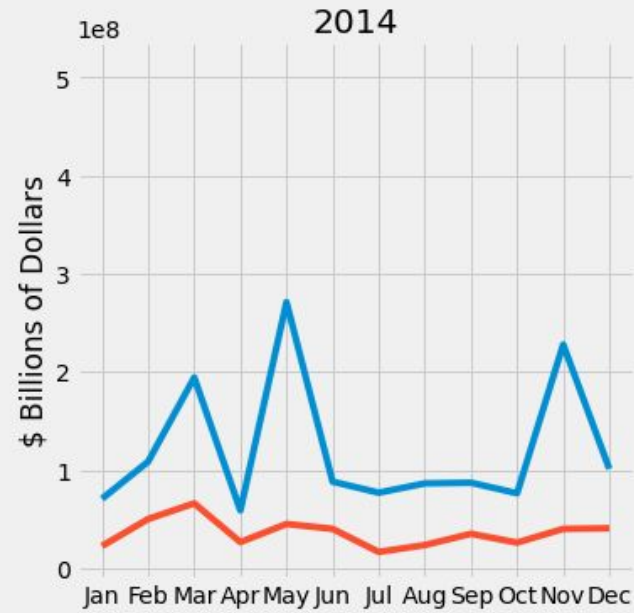
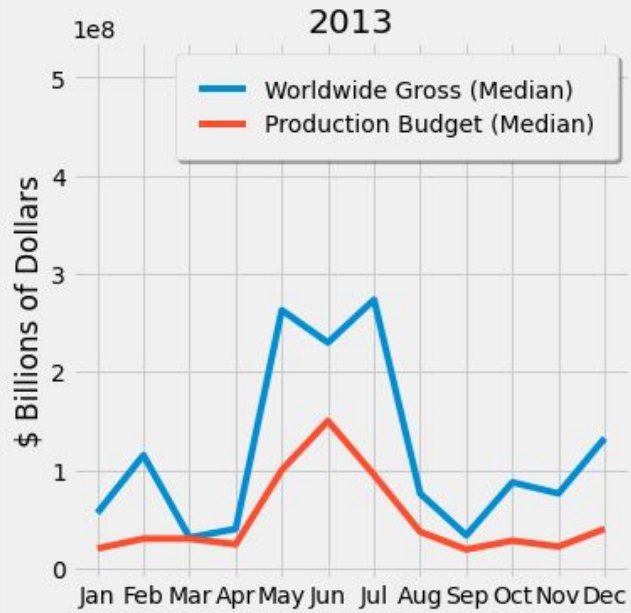
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APPENDIX

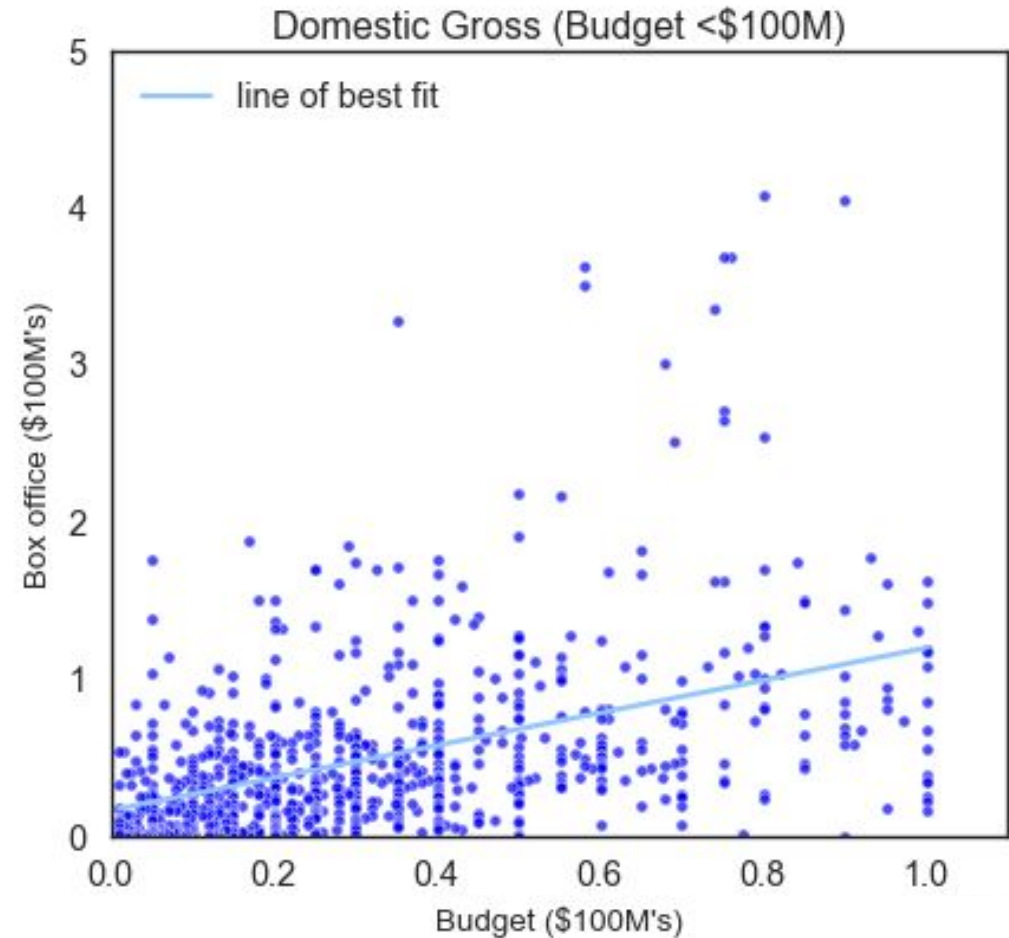
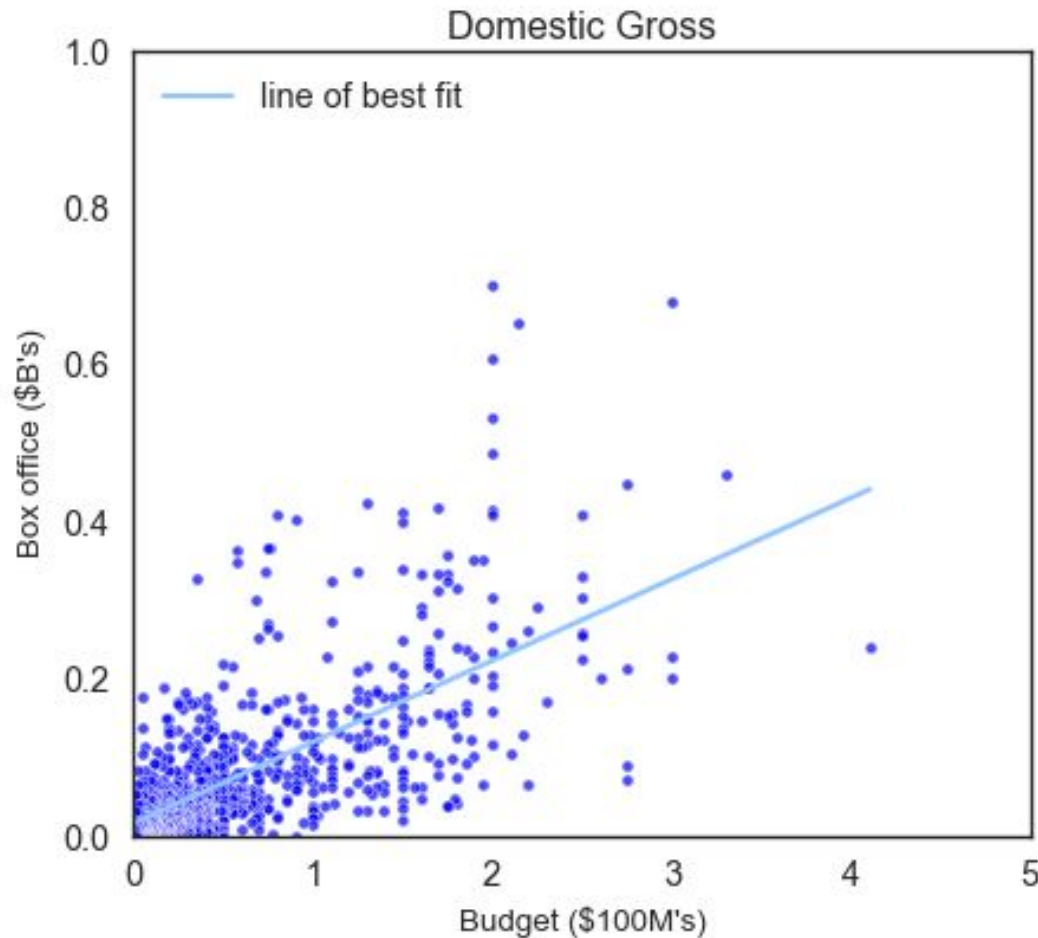






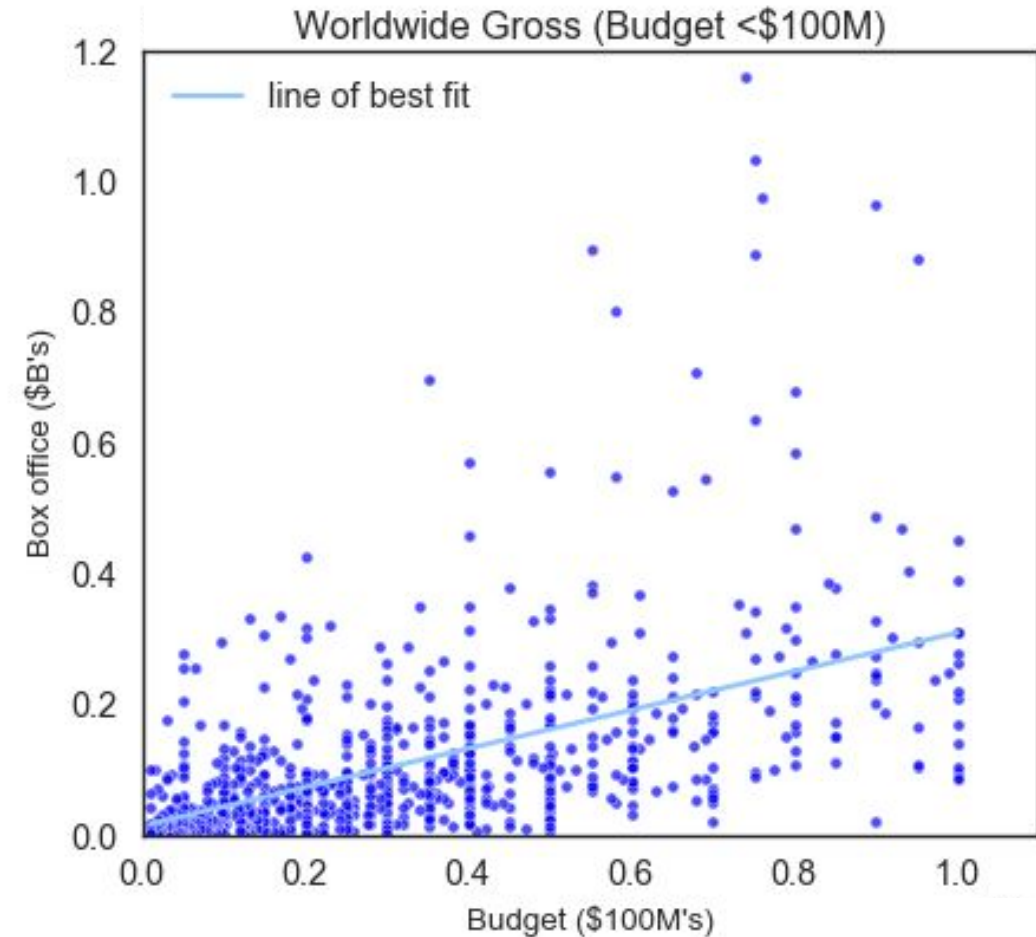
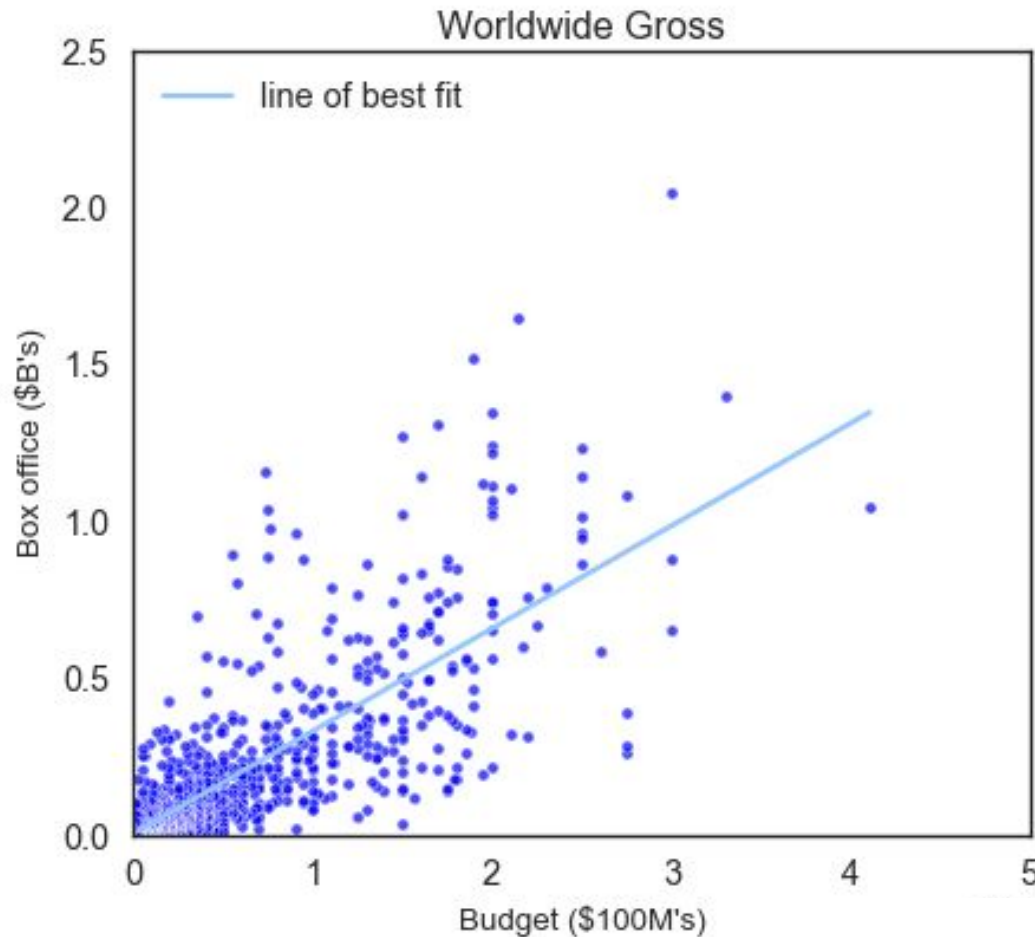
First Half of
the Year
Outperforms
Second half

Domestic Gross & Budget < \$100M



- Budget:Domestic Gross is 1:1 whereas Budget:Worldwide Gross 3:1
- Need for international advertising

Focus: Profit Margin or ROI



- Movies with Higher Budgets had the Largest Profit Margins
- Budgets <\$100M have potential for high ROIs, but also a higher chance of failure