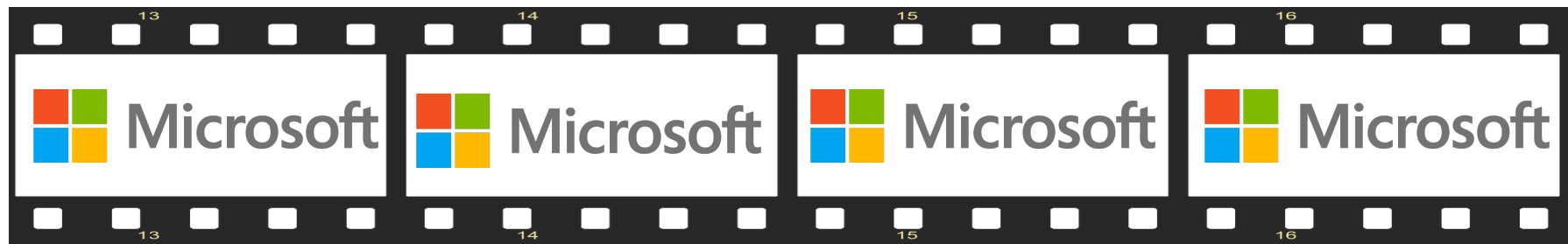


# Microsoft Enters the Movie Business



Flatiron School Data Science  
Project 1

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# Overview

Microsoft is launching a movie studio and the company wants to know what kinds of movies are most successful.

This analysis examines data about movies from recent years to determine **which genres perform best among viewers.**



# Outline

- Business Problem
- Data & Methods
- Results
- Conclusions

# Business Problem

**How do you measure the success of a movie?**

- Box office ROI vs. Number of viewers

**What kinds of movies are most successful?**

- Which genres perform best?
- What proportion of movies should Microsoft make of specific genres?

# Data

- Insights are derived from IMDb, one of the most popular movie databases online.
- Analyzed data on movies from 2010 to 2019.
- Used information about each movie's:
  - Genres
  - Average user rating
  - Number of votes



# Methods

## Measure of success:

**Number of votes a movie received on IMDb**

Why?

A higher number of votes indicates more people have seen the movie.

Plus: ROI at the box office is arguably an outdated measure in the age of streaming.

Many popular, big-budget movies are released directly to streaming services.



Source: [Variety](https://www.variety.com/article/VR_1265837000)

# Methods, cont.

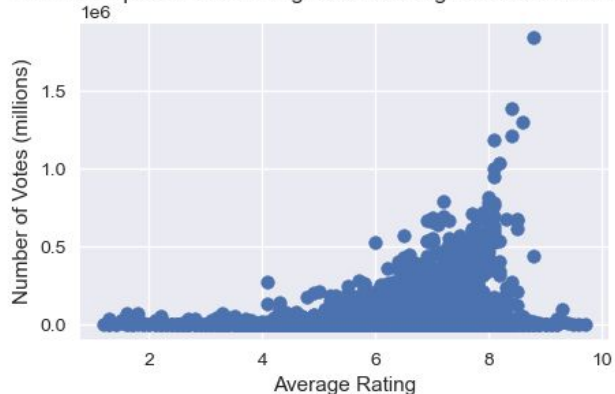
## What about making good movies?

On IMDb, users vote to rate movies from 1 to 10.

My analysis shows that a **higher vote count is also associated with a higher rating.**

In other words when a movie has a high vote count, it's also more likely to have a good rating.

Relationship between average movie rating and number of votes



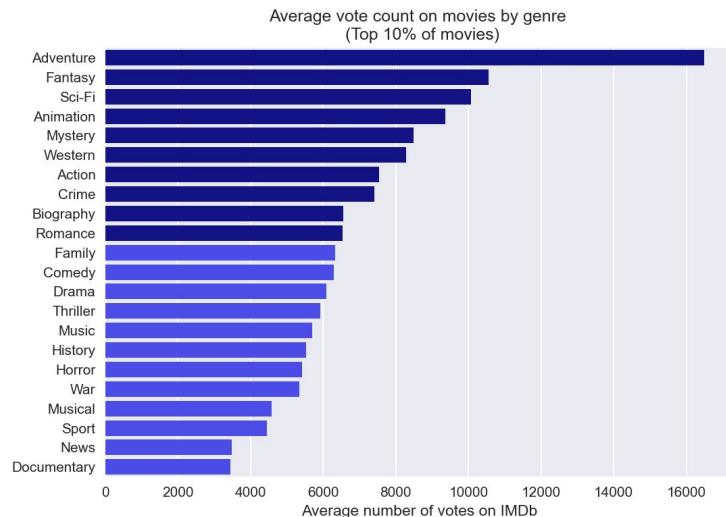
# Results

The results are based on ranking movies from highest to lowest vote count. I then isolated the top 10% of movies.

## Most successful genres

Among the top 10% of movies, combinations of these 10 genres perform best:

- Adventure
- Fantasy
- Sci-Fi
- Animation
- Mystery
- Western
- Action
- Crime
- Biography
- Romance





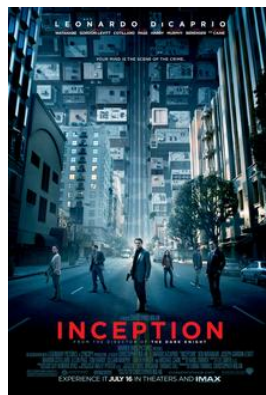
# Results, cont.

## Top 10 genres:

- Adventure
- Fantasy
- Sci-Fi
- Animation
- Mystery
- Western
- Action
- Crime
- Biography
- Romance

Many of the top-ranked movies have a **combination** of these genres.

## Examples



*Inception*  
Action, Adventure, Sci-Fi



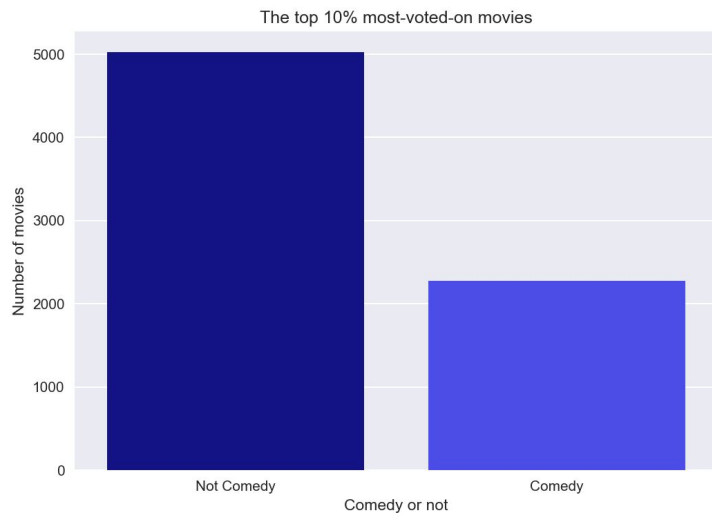
*The Grand Budapest Hotel*  
Adventure, Comedy, Crime

## Results, cont.

### What about comedies?

Notably, comedy was not ranked among the top 10 genres.

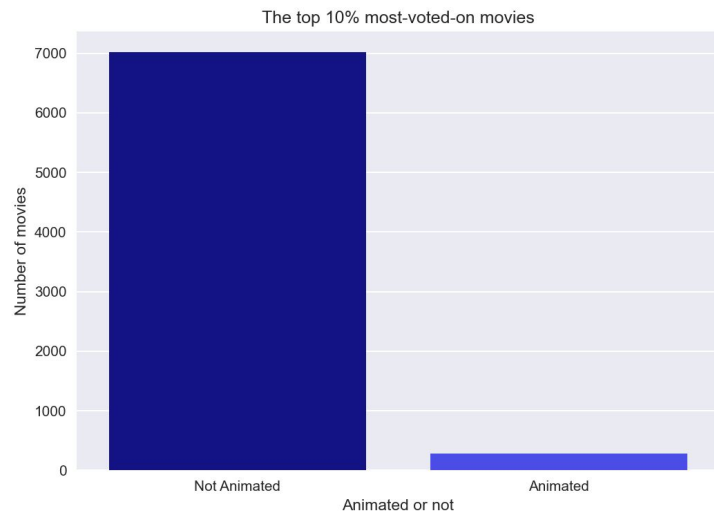
However, of the top ranked movies, 31.22% happen to also be comedies.



# Results, cont.

## Animated movies

Of the top ranked movies, 3.93% are animated.



# Recommendations



**1. Focus on movies with some combination of the following 10 genres:**

- Adventure
- Fantasy
- Sci-Fi
- Animation
- Mystery
- Western
- Action
- Crime
- Biography
- Romance

**2. About one third of movies should be comedies.**

**3. About 4% of movies should be animated.**



# Thank you!

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