# Microsoft in the Movies

A data-driven strategy.

# Summary

Microsoft aims to establish a new movie studio but lacks experience in film production. Our analysis of movie industry data (TMDB and IMDB) reveals that:

- Drama and Action are the most popular and critically acclaimed genres.
- Popularity (measured by votes) is a stronger predictor of financial success than critical ratings alone.
- High-budget films do not guarantee success; smaller films can also be profitable.
- Directorial talent and collaboration play crucial roles in the film industry.

**Key Recommendations:**

1. **Focus on Popular Genres:** Prioritize Drama and Action films while exploring other genres for potential success.
2. **Balance Budget and Creativity:** Invest in both big-budget and smaller projects.
3. **Prioritize Popularity and Marketability:** Develop effective marketing strategies to attract a wider audience.
4. **Invest in Talent:** Invest in talented directors, writers, and actors to ensure high-quality filmmaking.

# Outline

- Business Problem
- Data
- Methods
- Results
- Conclusions

# Business Problem

**Microsoft's Challenge:**

- Lacks experience in film production.
- Needs to identify promising movie genres and strategies to ensure success.

# Data

**Datasets:**

TMDB Movies: Information on movie popularity, ratings, release dates, budgets, and revenue.

IMDB Movie Basics and Ratings: Details about movies, cast and crew, genres, and ratings.

**Key Features:**

- Year
- Genre
- Ratings
- Popularity (votes)
- Budget
- Revenue
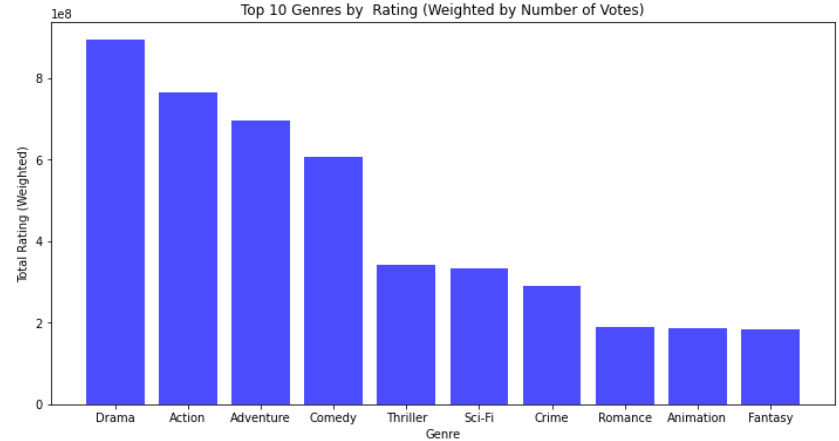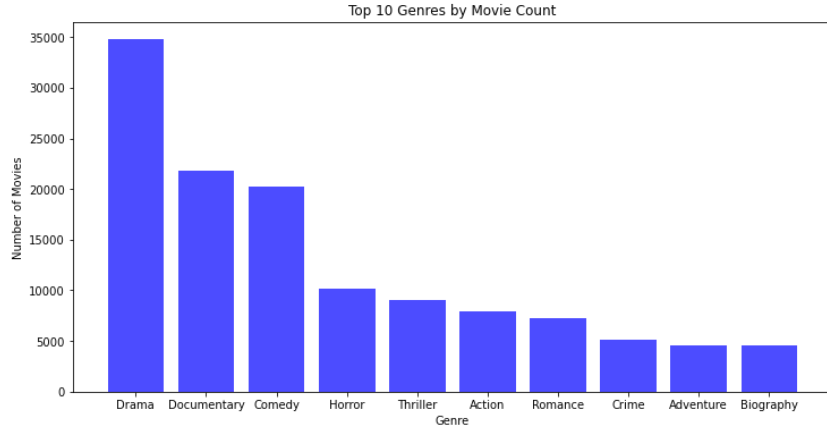- Primary profession (director, writer, etc.)

# Methods

**Data Cleaning and Preparation:**
- Handled missing values and duplicates.
- Filtered outliers and irrelevant data.
- Combined datasets for comprehensive analysis.
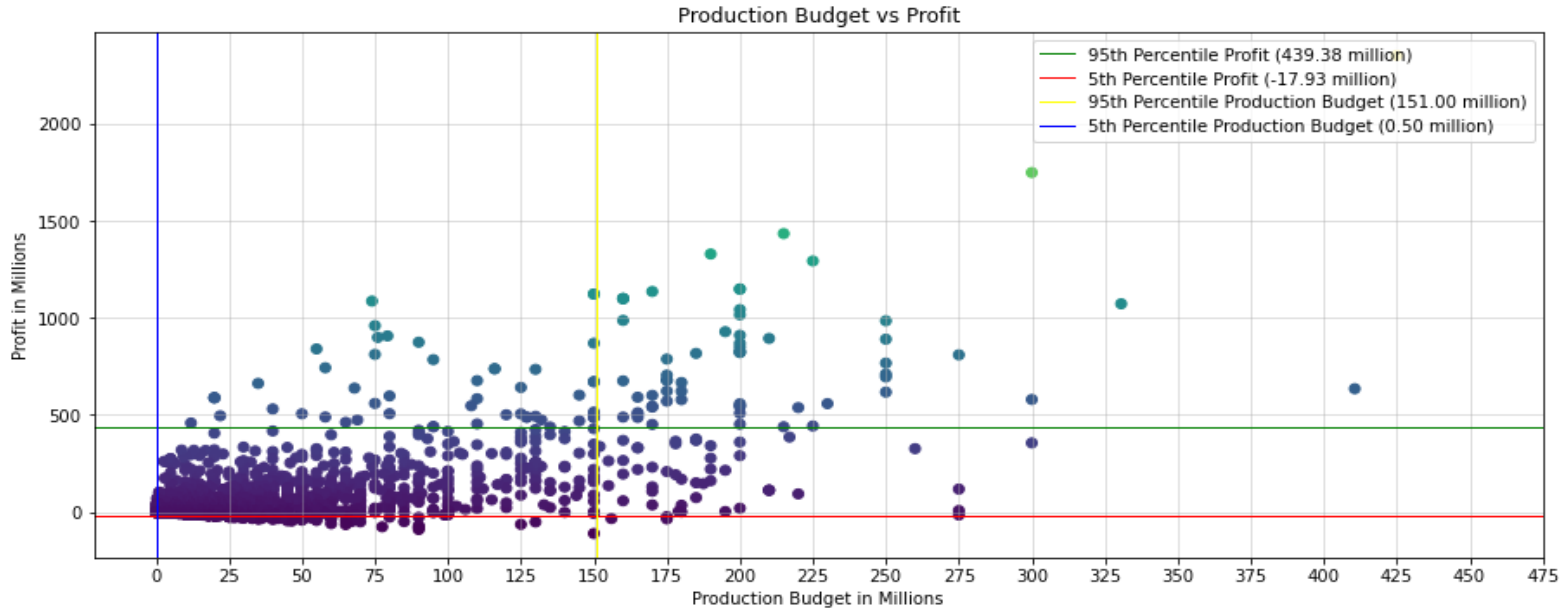
**Data Analysis and Visualization:**
- Calculated weighted ratings and profits.
- Created histograms, scatter plots, and bar charts to explore relationships and trends.
- Explored correlations between different variables.

# Results: Genre Analysis



Drama consistently performs well with both audiences(popularity) and reviewers(average votes)
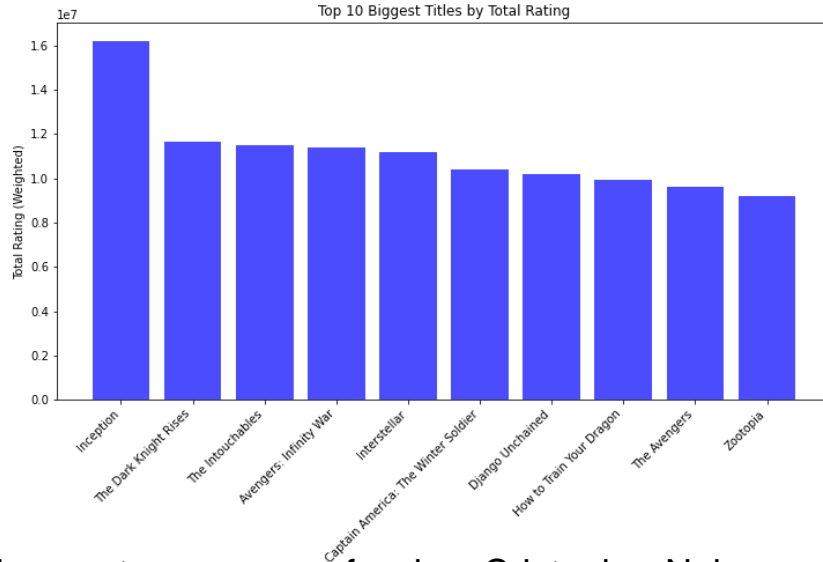
# Results: Budget & Profitability Analysis


Production Budget vs Profit

Focus on good stories and effective marketing, regardless of budget. Popularity is crucial for financial success.
- Most films have low to moderate budgets.
- Higher budgets don't guarantee higher profits.
- Popularity is a stronger predictor of profit than rating.

# Results: Professionals and Ratings Analysis


Top 10 Biggest Titles by Total Rating

Directors are the most common profession. Cristopher Nolan made Inception, The Dark Knight Rises, and Interstellar. 3 of the biggest films

Directors play an important role with good filmmakers overcoming genre limitations (is not a Drama film..

# Conclusions

Microsoft has a significant opportunity to enter the movie industry with a data-driven approach.

By focusing on popular genres, balancing budget and creativity, and prioritizing talent, Microsoft can establish a successful movie studio.

Next Steps:

- Conduct more detailed market research to identify emerging trends and audience preferences

- .Develop a comprehensive marketing and distribution strategy to maximize reach and impact.

- Establish partnerships with experienced filmmakers.

# Thank You!

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