



#### Introduction

- ☐Microsoft Corporation wants to diversify its business
- □ Product diversification into movie industry can enable Microsoft reduce dependence on a single industry and tap into new markets
- Diversifying to create original video content can help Microsoft expand their brand presence and reach a wider audience
- Diversification should be approached strategically and based on evidence from market research for successful expansion

### Business problem

- ☐ The movie industry is profitable as evidence from box office revenues
- However, success is not guaranteed as the returns are determined by a number of risk factors.
- ☐There is a need to understand factors that influence profitability in order to make informed investment decisions

## **Objectives**

#### ☐Main Objective

 To determine factors that influence profitability of movie genres.

#### ☐ Specific Objectives

- Owhat are the top produced genres of movies?
- Do average rating, runtimes, budget and production budget influence profitability of movies?
- O What genres should the company consider investing in?

## Data Understanding

- □Data sourced from the Box Office Mojo and IMDB.
- Genres: Category of artistic composition, characterized by similarities in form, style, or subject matter for a piece of content.
- ☐Ratings: Customer rating of the movies watched
- ☐ Worldwide gross: Box office revenues from all countries the movie sold.

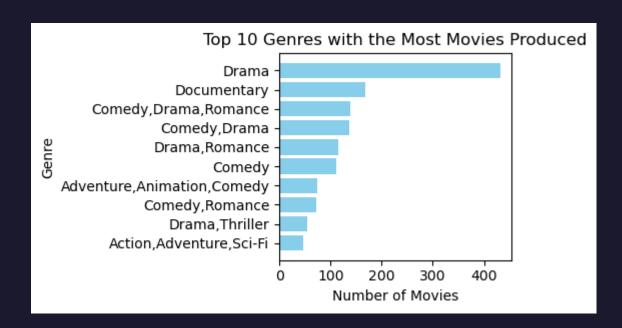
# Data Cleaning

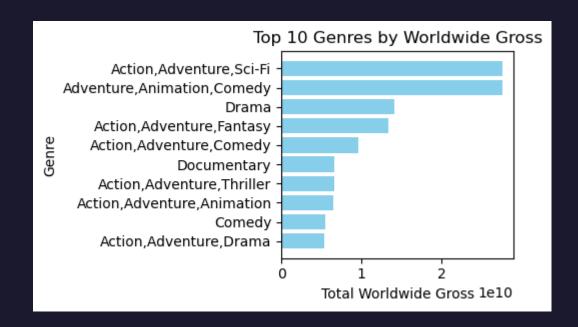
- Dropped irrelevant columns
- ☐ Converted production worldwide gross to float
- □Dropped missing values
- ☐ Checked for duplicates and anomalies
- □Imputed Missing Data with either Mean, mode or Median
- Focused on movies with a rating of five and above

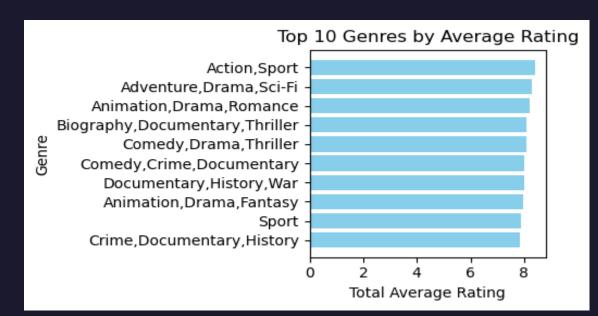
# Data Analysis

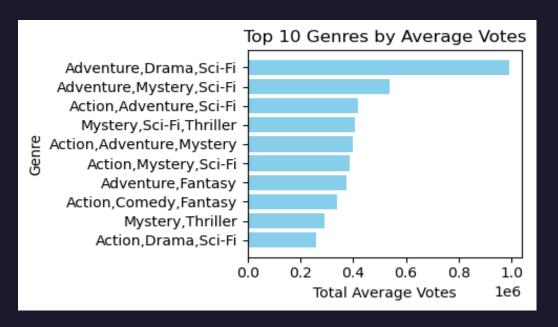
- □Exploratory data analysis was used
- ☐Genres ranked by frequency to determine top 10
- □ Production budget, worldwide gross, average rating and profit grouped by genres
- □Correlation between production budget, profit, run times in minutes and average rating
- □Bar graph between top 10 genres and average rating, world wide gross and profit

# Results









#### Recommendations

□While choosing the movie to produce, genre, production budget and profitability should be the main factors followed by average rating. ☐ Focus on high-budget genres with strong profitability. Action, adventure, Sci-Fi, adventure, animation, comedy, and action, adventure, fantasy have both high production budgets and significant profits. Investing in these genres can offer potential returns on

□ investment due to their popularity and financial success

#### Recommendations

investment options.

- □ Consider genres with high ratings and moderate production budgets. Drama, documentary, and adventure, drama, Sci-Fi receive high ratings and have moderate production budgets. These genres indicate a balance between critical □ acclaim and financial viability, making them promising
- □ Explore opportunities in popular genres with moderate production budgets: Drama, comedy, and adventure, animation, comedy are popular genres with moderate
- production budgets. Investing in these genres can tap into widespread audience appeal while managing production costs effectively, potentially leading to profitability.

