# Exploratory Analysis of Movies For Microsoft Movie Studios

# O1 Introduction

#### **OUR GOALS**

→ To undertake an exploratory analysis of box office success.

→ Give actionable findings to inform Microsoft's new movie studio strategy

### -Business Understanding

The Business Understanding focuses on understanding the objectives and requirements of the project.

We will focus on;

- → The necessary knowledge and understanding of the factors that contribute to box office success.
- → To explore the landscape of successful films in the current market and provide actionable insights
- To analyzing comprehensive data on box office records, movie genres, audience demographics, and other relevant variables,
- → To identify the types of films that resonate with audiences and have the potential to thrive commercially.

The insights derived from this analysis will enable Microsoft to make informed decisions about the types of films they should create, ensuring they can effectively compete and succeed in the highly dynamic and competitive movie industry.

## 02 Data Analysis

#### -Data Source

IMDb is an online database of information related to films, television series, podcasts, home videos, video games, and streaming content online – including cast, production crew and personal biographies, plot summaries, trivia, ratings, and fan and critical reviews.



#### -Data Understanding

The dataset will encompass various dimensions related to movies, box office performance, genres, ratings, audience demographics, and other relevant variables. The following aspects will be considered for data understanding:

- → Movie Genres: The dataset will categorize movies into different genres, such as action, comedy, drama, sci-fi, etc. This classification will allow for analysis of the popularity and performance of various genres at the box office.
- → Movie runtime: the dataset will categorize movies into their respective runtime. This data will provide insights on what is the most favourable runtime for the audience.
- → Movie rating: this dataset will inform which is the highest rated movies to inform which is the most prefered movies
- → Number of votes: this gives insight to the number of audience have watched and commented on the movies

By comprehensively understanding the data, including its sources, completeness, accuracy, and potential limitations, the analysis can be conducted effectively. This understanding will enable appropriate data preprocessing, exploration, and analysis techniques to be applied, leading to meaningful insights and actionable recommendations for Microsoft's new movie studio.

#### -Data Analysis

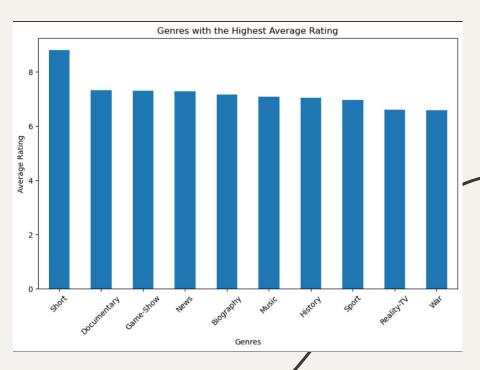
Below are the key areas of focus in our analysis of the data from IMDB in order of gaining insights on what movies Microsoft studios should focus on:

- → Genres with the Highest Average Rating: The genres with the highest average ratings are indicative of audience preferences for quality content. Investing in these genres can increase the likelihood of producing well-received movies. Consider focusing on genres such as Drama, Biography, History, Animation, and Music.
- → Genres with the Highest Number of Votes: Genres with the highest number of votes suggest movies that have garnered significant attention and popularity from the audience. Investing in these genres can potentially lead to higher box office success and audience engagement. Consider genres like Action, Adventure, Drama, Sci-Fi, and Thriller.
- → Genres with the Longest Average Runtime: Genres with longer average runtimes indicate a potential audience preference for immersive and in-depth storytelling. Investing in these genres can provide opportunities for developing more complex narratives and engaging the audience for a longer duration. Consider genres such as Biography, Drama, History, Fantasy, and War.

## Genres with the Highest Average Rating

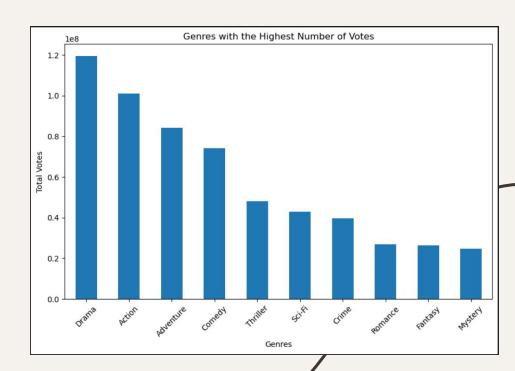
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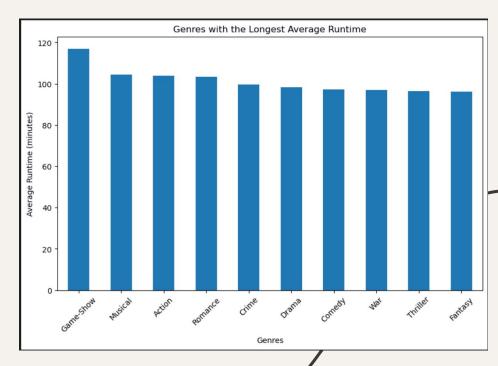
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#### Genres with the Longest Average Runtime

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#### Recommendation

- Based on the analysis and visualizations of the provided data, the recommendations for movie types and genres to consider for investment suggest investing in genres such as Drama, Biography, History, Animation, and Music.
- These genres have shown high average ratings, indicating potential critical acclaim. Additionally, genres like Action, Adventure, Drama, Sci-Fi, and Thriller have garnered high numbers of votes, demonstrating their popularity and audience engagement.
- Furthermore, genres like Biography, Drama, History, Fantasy, and War have longer average runtimes, appealing to viewers who prefer immersive storytelling. Staying informed about market dynamics, audience preferences, and industry trends is essential for making successful investment decisions in the film industry.

It's important to note that these recommendations are based on the provided data and general trends. Market dynamics and audience preferences may vary over time, so it's crucial to conduct further market research, analyze current trends, and consider specific target audiences to make informed investment decisions in the film industry.

## **Thanks**

Do you have any questions?

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