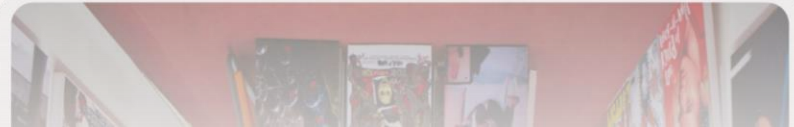


~Predicting movie studio success~



INTRODUCTION

Let's get right into it.



OVER VIEW

- Breaking into the entertainment industry can be a risky investment for Microsoft given the competition from already existing companies such as Netflix, Movie box, Rotten tomatoes, Box office and many others. Undeterred by this threat, Microsoft wants to join in the fun. To make this new venture a success, we will carry out an extensive analysis on Box Office to be able to come up with recommendations for Microsoft.
-

“

*To make a film is easy, To make
a good film is war. To make a
very good film is a miracle.*

by: Alejandro Gonzalea

Business content

- The key business questions that will guide us in giving recommendations to Microsoft stakeholders include:
 - 1. What is the most popular movie genre?
 - 2. How does runtime distribution affect movie production?
 - 3. What is the relationship between movie production and revenue generated?

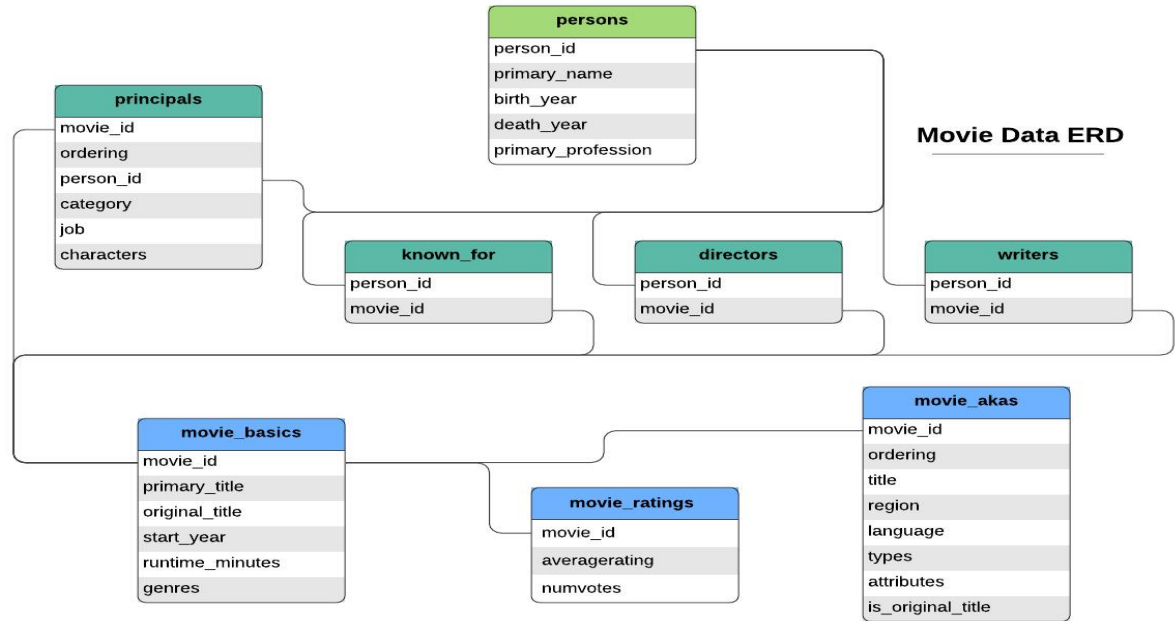
DATA

The data that we will be working with includes:

1. Box Office Mojo .
2. IMDB
3. Rotten Tomatoes
4. The Movie DB
5. The Numbers

We are also provided a Movie data ERD that shows the relationship between tables in the database

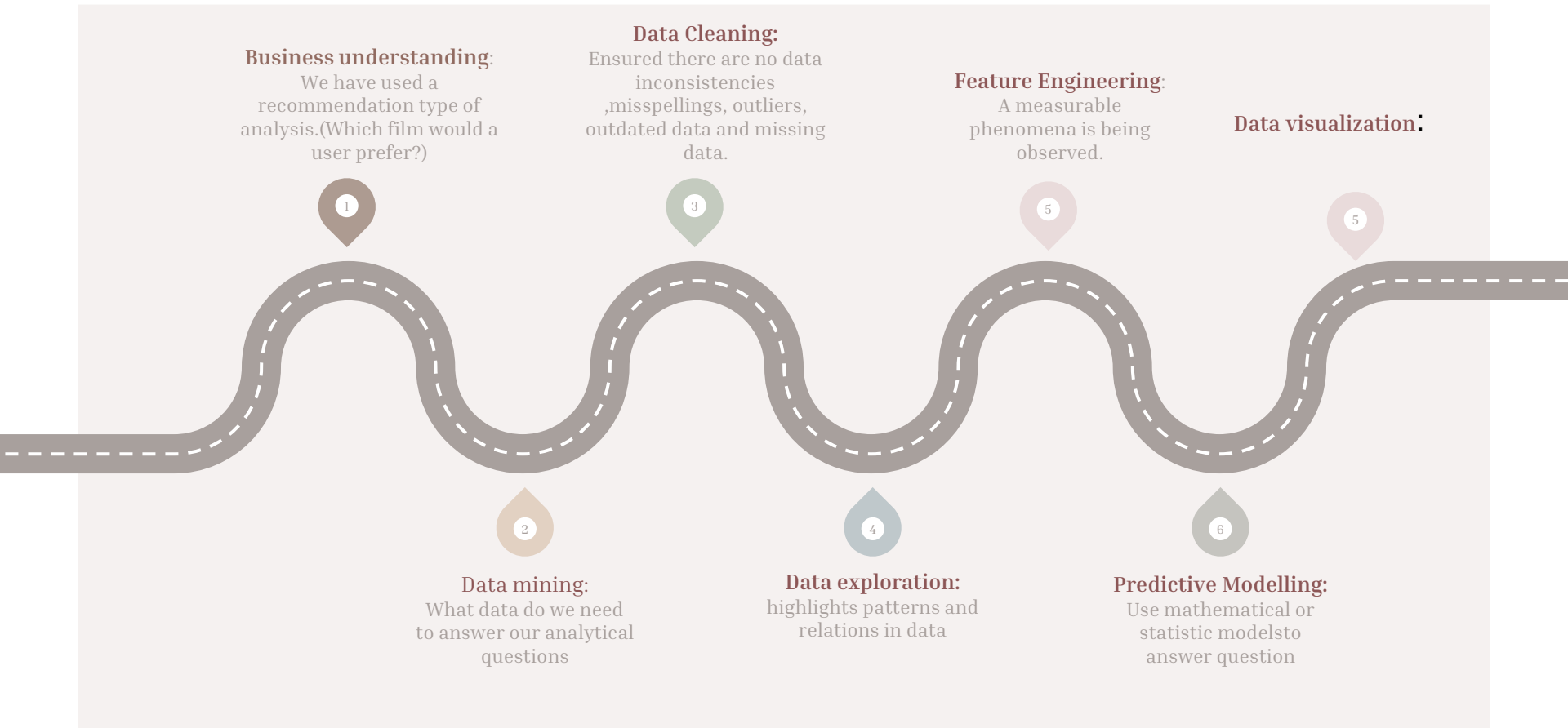
Movie Data ERD



Process steps

1. Business understanding
2. Data mining
3. Data cleaning
4. Data exploration
5. Feature Engineering
6. Predictive Modeling
7. Data visualization

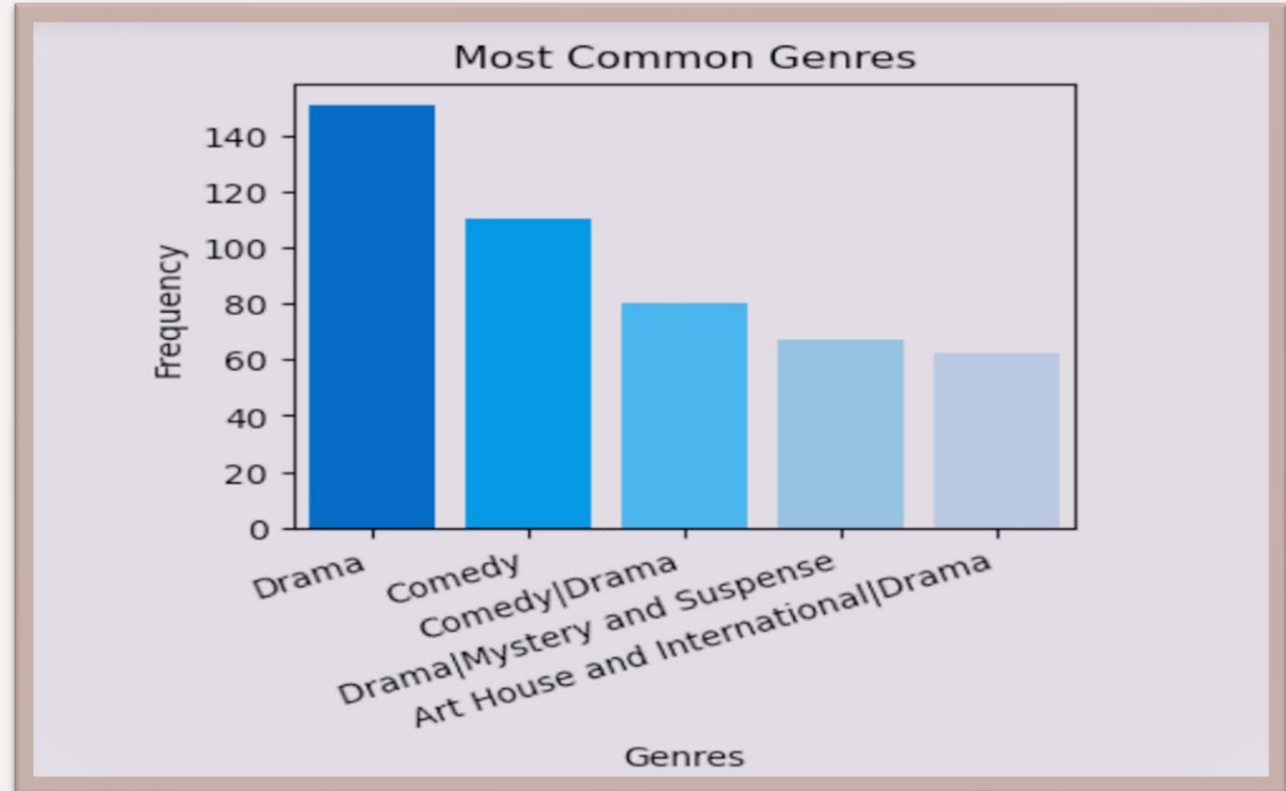
Process Steps



RESULTS:

First analysis

From my analysis on the movie.info csv file **the most common genre is Drama**. The genres that were given include: Drama, Comedy, Comedy Drama, Drama Mystery and Suspense, Art House and International Drama. From this analysis I would advise Microsoft to put more emphasis on Drama and Comedy movies.

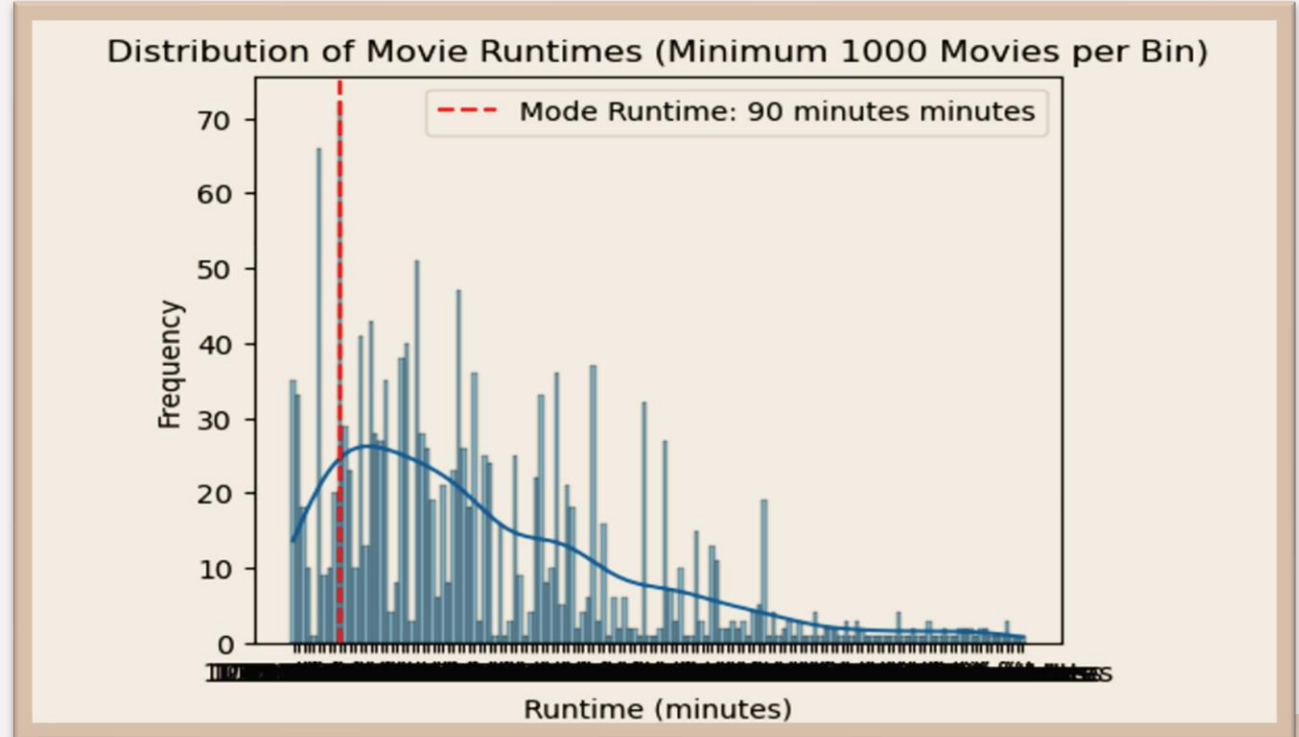


Second analysis:

The **mode** runtime is 90 minutes .

This analysis shows that most people love watching movies that have a runtime of 90 minutes.

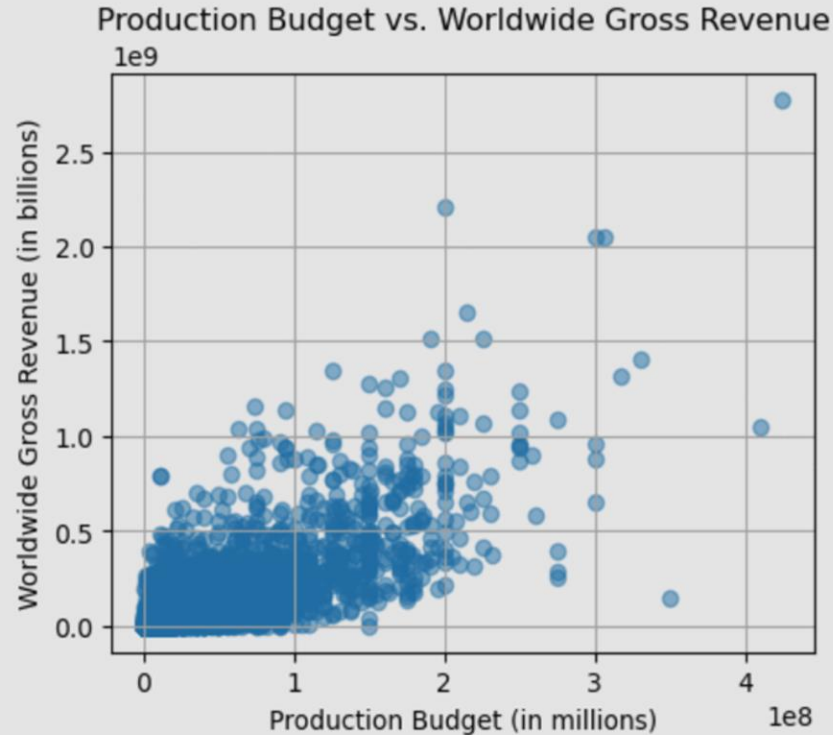
The graph is also skewed to the right. This shows that as the runtime increases the frequency of the movies decreases. This shows that, people generally prefer movies with lesser runtime.



Third analysis:

There's a strong positive correlation between production budget and worldwide gross revenue, investing more in production may lead to higher returns.

There seems to be a very strong correlation between Production budget and Worldwide Gross Revenue. I would advice Microsoft to invest more on their production budget.



Evaluation and Recommendation



Movie genres

Since the Drama genre has the highest ratings, it would be wise to start production of movies in that genre.

Microsoft can also include the Comedy genre as it is second in popularity..

Runtime

Microsoft should focus on producing movies with a runtime of 90 minutes. From the graph it is evident that as runtime increases the frequency of movies.

Production budget

Microsoft should heavily invest in their production budget in order to increase their returns

Segmentation Microsoft should consider segmenting their movies according to age and gender in order to meet the needs of their audience

Strategic Planning: Armed with the correlation coefficient, studios can develop strategic plans for their future movie productions. They can set budget targets based on revenue expectations and adjust their marketing and distribution strategies accordingly

Thanks!

Any questions?

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Contact Information



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I am a data science enthusiast and I am privileged to get this opportunity to work with microsoft on this project. I am looking forward to more of such opportunities to showcase my skills in data analysis by come up with solutions and recommendations for your problems. Below I have linked my social media platforms and details for future collaborations.

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