



MOVIE ANALYSIS





OVERVIEW

MICROSOFT SEES ALL THE BIG COMPANIES CREATING ORIGINAL VIDEO CONTENT AND THEY WANT TO GET IN ON THE FUN. THEY HAVE DECIDED TO CREATE A NEW MOVIE STUDIO, BUT THEY DON'T KNOW ANYTHING ABOUT CREATING MOVIES. YOU ARE CHARGED WITH EXPLORING WHAT TYPES OF FILMS ARE CURRENTLY DOING THE BEST AT THE BOX OFFICE. YOU MUST THEN TRANSLATE THOSE FINDINGS INTO ACTIONABLE INSIGHTS THAT THE HEAD OF MICROSOFT'S NEW MOVIE STUDIO CAN USE TO HELP DECIDE WHAT TYPE OF FILMS TO CREATE.

BUSINESS UNDERSTANDING

The business problem is that Microsoft wants to launch a new film production company but lacks the relevant background or expertise.

To make wise choices regarding what kinds of films to produce, they must ascertain what kinds of movies are currently profitable at the box office.

The goal of this project is to analyze the present trends and patterns in the film business and determine what kind of movies Microsoft should produce.



DATA UNDERSTANDING

- **For this analysis, I used movie datasets from Box Office Mojo, IMDB, TheMovieDB, and The Numbers to look at the movie trends in order to drive meaningful insights.**
- **The data sources are popular online-based websites that most people use to refer to when looking up what movies to watch. These datasets contain data about the movies that have aired over the years, the trend of popularity, the overall gross and genres, etc.**
- **These Datasets will help in determining what sort of movie the studio should invest in.**
- **In order to work with this data I merged the datasets in order to carry out further data analysis**

DATA ANALYSIS

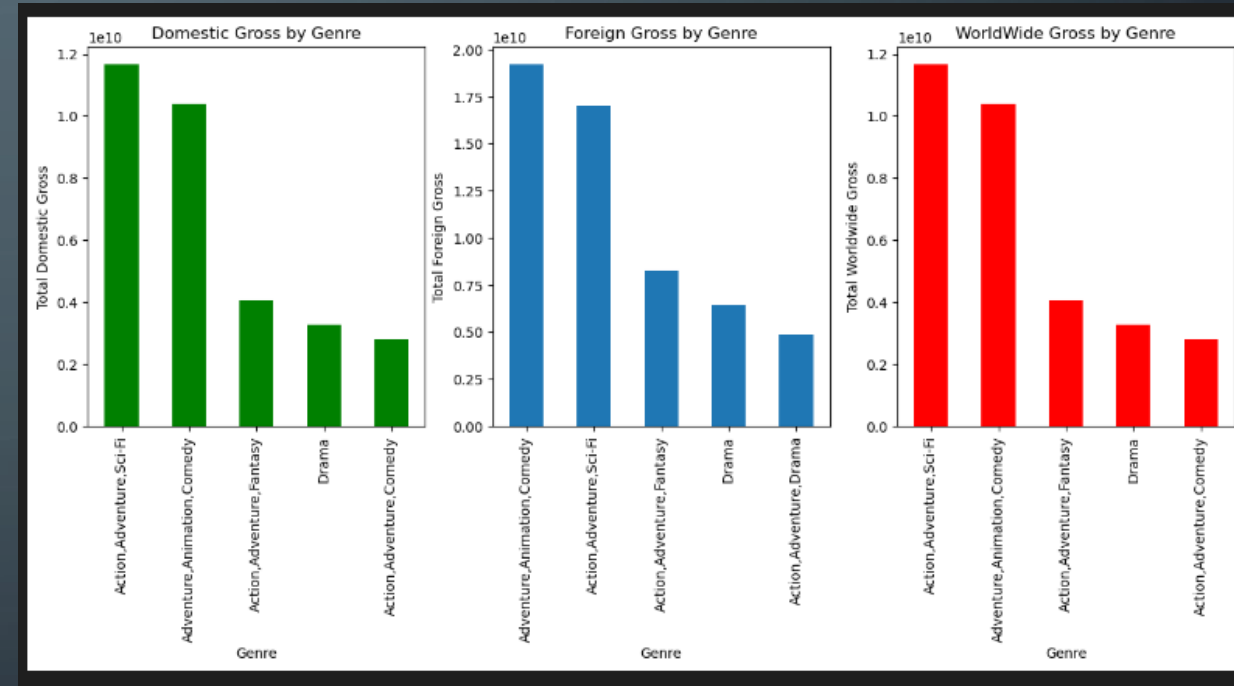
Data analysis refers to the process of inspecting, cleaning, transforming, and modeling data in order to uncover useful information, draw conclusions, and support decision-making.

I carried out Exploratory data analysis to solve the business problem at hand.

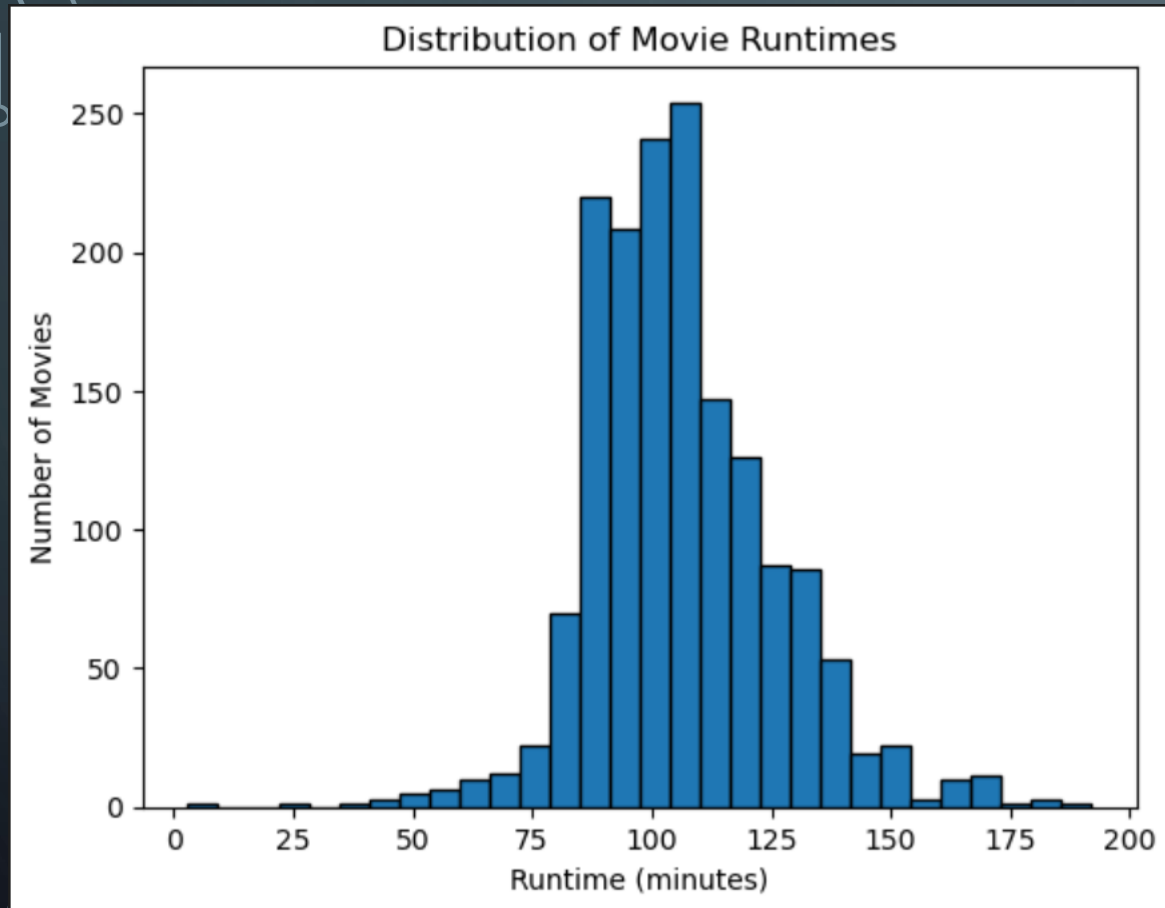


MOST PROFITABLE GENRES

- ❖ The domestic gross bar chart shows that the genres Action, Adventure, and sci-fi are the most profitable to invest.
- ❖ The foreign gross by genre bar chart shows that the most profitable genres catering to the international market besides the domestic market are Adventure, Animation, and Comedy, since it brings in the highest gross profit
- ❖ worldwide gross by genre bar chart, shows that Action, adventure, and Sci-fi is the most profitable genre to invest in. This is the ideal recommended genre to invest in if the target genre audience is both the domestic market and the international market.



HISTOGRAM TO SHOW DISTRIBUTION OF MOVIE RUNTIMES



This plot can help you identify if there are any common runtime intervals for successful movies, or if there is a trend toward shorter or longer movies.



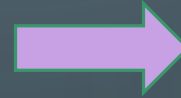
FINDINGS & RECOMMENDATION

According to the distribution of runtime(minutes), most movies follow the trend of having a runtime of between 100 and 110 minutes.

I would recommend following this trend like the rest of the movies in production to maximize the chances of success for the production of the movies.

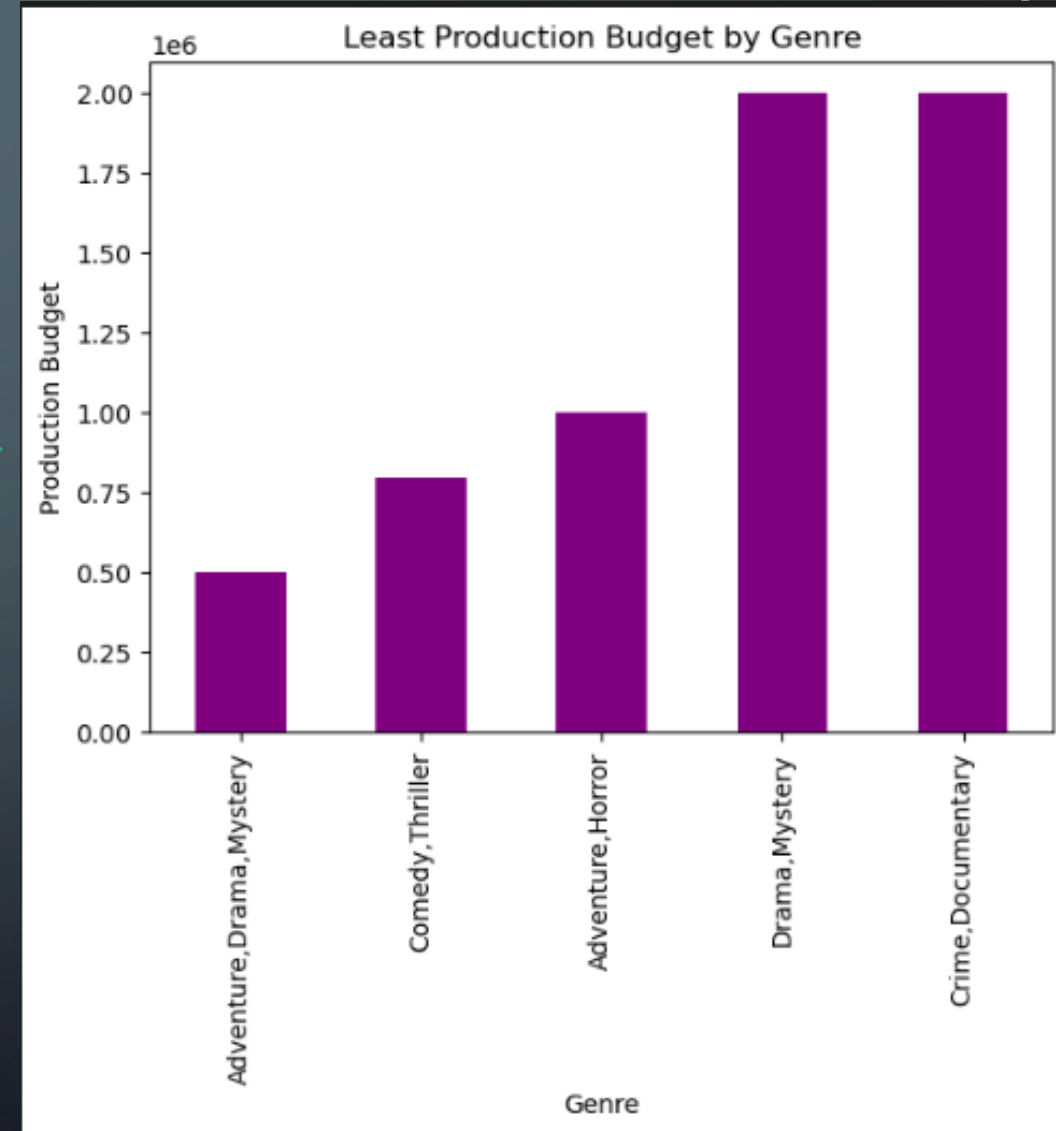
LEAST PRODUCTION COST

I FOUND THE MOVIE GENRES THAT HAVE THE LEAST PRODUCTION COST BY GROUPING DATA BY GENRES AND CALCULATING THE TOTAL PRODUCTION BUDGET TO FIND THE LEAST PRODUCTION COST AND VISUALIZE THE OUTCOME.



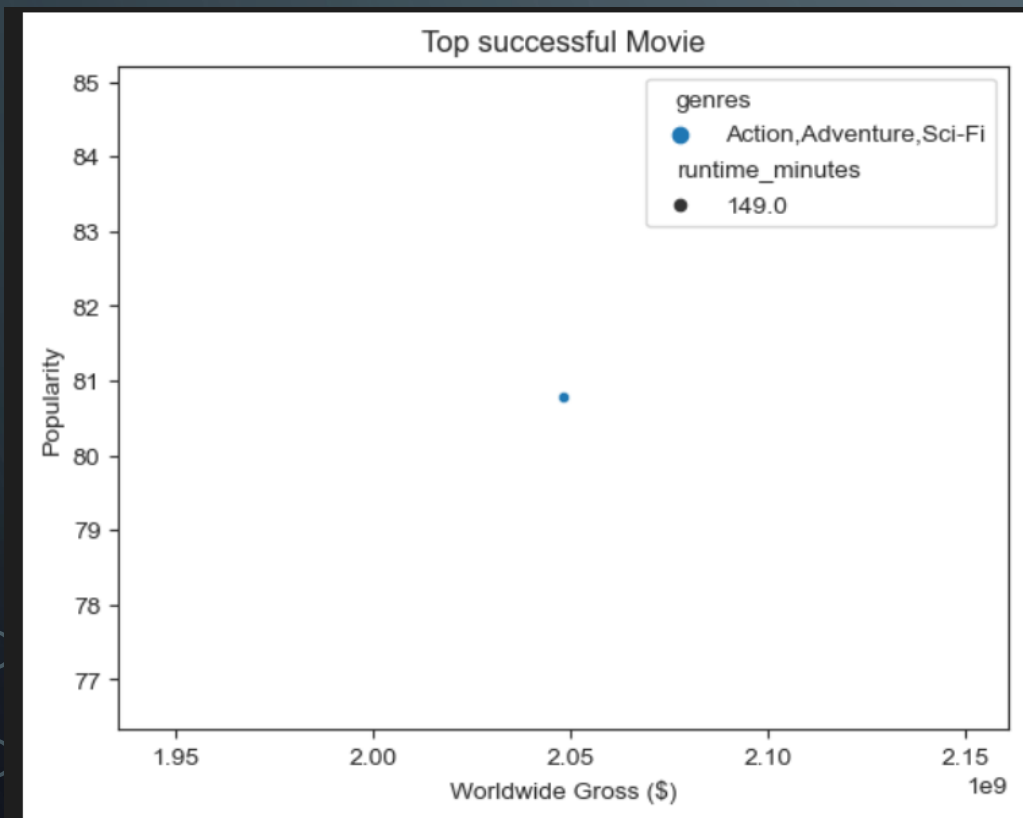
FINDINGS

FROM THE BAR GRAPH, THE GENRE THAT WILL COST THE LEAST TO PRODUCE A MOVIE IS ADVENTURE, DRAMA, AND MYSTERY. I WOULD RECOMMEND THIS IF MICROSOFT IS INTERESTED IN INCURRING A MINIMAL COST FOR THE PRODUCTION OF THEIR FIRST MOVIE RELEASE



MOST SUCCESSFUL MOVIE

features of the most successful and most popular movie and its characteristics



The most successful movie of all time is Avengers: Infinity war



FINDINGS

According to the above visualization, the genres of the most successful movie is Action, Adventure, and Sci-fi and the runtime minutes is 149. Microsoft can adapt and replicate this to ensure the success of the movie to be produced.

RECOMMENDATIONS

From above the analysis, the ideal genres to invest in depends on the target audience

- The genres I highly recommend Microsoft to invest in are Action, Adventure, and Sci-Fi since this genre has the top total domestic gross and worldwide gross. This will ensure success in the domestic market and worldwide markets.
- Microsoft should invest in Adventure, Animation, and Comedy genre since it brings in the highest Foreign gross profit if the target audience of the movie to be created is the international market excluding the domestic market.



RECOMMENDATIONS

- In consideration of the production cost, the genres with the least production cost are Adventure, Drama, and mystery. Microsoft should consider this option if the main goal is to produce a movie with the least cost incurred but this will not guarantee the success of the movie.
- The ideal runtime according to the popular trend followed by most movies in production is between 100 and 110 Minutes. This could be a good start for the production of the first Microsoft movie.
- Microsoft can also consider adapting the trend of the most popular movie of all time which have a runtime of 149 minutes and genres of Action, Adventure, and Sci-Fi. This will ensure the popularity of the movie.



NEXT STEP

- ☐ **Conduct further research on how the popularity of the studio affects the movie being produced**
- ☐ **Conduct further research on where the movie is being produced and its success**
- ☐ **Conduct further research on how the language of the movie being produced determine its ratings**





QUESTIONS AND ANSWERS SESSION

Name : MARWA OSMAN

LinkedIn profile: [linkedin.com/in/marwa-osman-00190b222](https://www.linkedin.com/in/marwa-osman-00190b222)

THANK YOU