IMDB Movie Analysis With PowerBI

Description:

Problem Statement

The dataset provided is related to IMDB Movies. A potential problem to investigate could be: "**What factors influence the success of a movie on IMDB?**" Here, success can be defined by high IMDB ratings. The impact of this problem is significant for movie producers, directors, and investors who want to understand what makes a movie successful to make informed decisions in their future projects. Consider this as an open ended question and come up with more analysis points. Anyway, here are some of the analysis ideas given to you.

Data Cleaning

This step involves preprocessing the data to make it suitable for analysis. It includes handling missing values, removing duplicates, converting data types if necessary, and possibly feature engineering.

Data Analysis

Here, you'll explore the data to understand the relationships between different variables. You might look at the correlation between movie ratings and other factors like genre, director, budget, etc. You might also want to consider the year of release, the actors involved, and other relevant factors.
Five 'Whys'

Approach

This technique will help you dig deeper into the problem. For instance, if you find that movies with higher budgets tend to have higher ratings, you can ask "Why?" repeatedly to uncover the root cause. Here's an example:

Q: "Why do movies with higher budgets tend to have higher ratings?"

A: They can afford better production quality.

Q: "Why does better production quality lead to higher ratings?"

A: It enhances the viewer's experience.

Q: "Why does an enhanced viewer experience lead to higher ratings?"

A: Viewers are more likely to rate a movie highly if they enjoyed watching it.

Q: "Why are viewers more likely to rate a movie highly if they enjoyed watching it?"

A: Positive experiences lead to positive reviews.

Q: "Why do positive reviews matter?"

A: They influence other viewers' decisions to watch the movie, increasing its popularity and success.

Report and Data Story

After your analysis, you'll create a report that tells a story with your data. This should include your initial problem, your findings, and the insights you've gained. Use visualizations to help tell your story and make your findings more understandable.

Remember, as a data analyst, your goal is not just to answer questions but to provide insights that can drive decision-making. Your analysis should aim to provide actionable insights that can help stakeholders make informed decisions.

Data Analytics Tasks

You are required to provide a detailed report for the below data record mentioning the answers of the questions that follows:

A. Movie Genre Analysis: Analyze the distribution of movie genres and their impact on the IMDB score.

Task: Determine the most common genres of movies in the dataset. Then, for each genre, calculate descriptive statistics (mean, median, mode, range, variance, standard deviation) of the IMDB scores.

B. Movie Duration Analysis: Analyze the distribution of movie durations and its impact on the IMDB score.

Task: Analyze the distribution of movie durations and identify the relationship between movie duration and IMDB score.

C. Language Analysis: Situation: Examine the distribution of movies based on their language.

Task: Determine the most common languages used in movies and analyze their impact on the IMDB score using descriptive statistics.

D. Director Analysis: Influence of directors on movie ratings.

Task: Identify the top directors based on their average IMDB score and analyze their contribution to the success of movies using percentile calculations.

E. Budget Analysis: Explore the relationship between movie budgets and their financial success.

Task: Analyze the correlation between movie budgets and gross earnings, and identify the movies with the highest profit margin.

Note: Make sure you paste the dashboards in the report and create the detailed report of your analysis

DATASET LINK:

https://drive.google.com/file/d/1bXz_ksbuLRFP9wDZBE53MyeQi2Ko54PI/view?usp=sharing