

## Contents

INTRODUCTION AND BACKGROUND .....	2
Problem statement .....	2
Main objective .....	2
Specific objectives.....	2
Data Understanding.....	2
Methodology.....	3
Conclusions .....	3
Recommendations .....	3

## INTRODUCTION AND BACKGROUND

The film industry is a dynamic and highly competitive industry where success or failure of a movie can have significant financial implications in movie authors. Understanding the factors that contribute to a film performance at the box office comes handy and crucial to the film makers, productions studios and investors.

For my study I would like to clearly understand the relationship between the variables and the film performance.

### Problem statement

This project addresses the challenge of identifying the factors that determine the success of a film in a box office. Through analyzing the datasets in the box office, we aim at finding out the relationship between variables such as gross revenue, genre, budget, directors and release dates.

### Main objective

To identify the factors that contribute to film performance in box office. By conducting data analysis and visualizations we try to understand the patterns and trends that help film makers make right decision in the business.

### Specific objectives

To establish if there is a relationship between budget and revenue.

To identify the relationship between highly rated movies and the directors.

To establish which kind of genre of has the high popularity.

To establish the relationship between revenue and the directors of the movies.

### Data Understanding

The dataset used for this project contains information about film box office revenues including variables such as release dates, genres, budgets and revenues. Explanatory data analysis techniques will be used to get clear understanding of the dataset including handling missing values, checking data types, identifying outliers and placeholder values and also extracting relevant features for analysis.

## Methodology

This project will utilize various data analysis and visualization techniques in python including python libraries such as pandas and matplotlib. The dataset present for this project will be explored through descriptive statistics, group-wise analysis and visualizations. Key relationship and trends will be identified to provide insights into factors influencing firm performance at box office.

## Conclusions

Total revenue has shown a significant increase over the years indicating a significant positive trend in the performance of in box office.

Monthly revenue Analysis reveals seasonal trends in film performance at box office, certain months such as summer and holiday tend to have higher revenue averages indicating peak periods for moviegoers.

There is a positive relationship between a films budget and its revenue , suggesting that higher investment in production tend to yield higher returns.

Some studios consistently generate higher revenues indicating their strong position in the industry. This can help investors and collaborators to make informed decisions about investments and collaborations.

## Recommendations

**Budget Allocation:** While higher budget can increase the production value and attract more viewers, it is important to allocate budgets strategically. Consider the target audience, genre and the market demand to determine the perfect budget for a film.

**Genre Analysis and Targeting:** Understand the revenue potential and audience preference for different genres. Identify genres that align with production studio's strengths and market demand.

**Collaboration and Partnership:** Explore collaborations and partnerships with established studios, directors, or industry professionals and actors who have a track record of successful box office performance.