How film length, genre and budget affect a film's reception among audiences

Arjun Dhatt

20/12/2020

## **Keywords**

- Film
- Genre
- Budget
- Linear Regression
- Title

#### Abstract

In this report, I will be looking at the various factors that influence a film's reception among audiences. Using the 'ggplot2movies' packages, I will be looking at the dataset 'movies' and filtering the dataset to include relevant variables such as — title, rating, genre, and budget. Then I will run an analysis to identify the variables that affect a film's reception among audiences. After completing the analysis, I concluded that ...

### Introduction

Many factors can influence an audience's reaction to a film. Various variables such as the length of the film, the genre, budget can influence the film's reception. This poses the interesting question — how does a films length, genre and budget affect it's reception among audiences?

In the report, I will investigge this question by taking a deep look at the interplay between all the factors. I began the analysis by cleaning the 'ggplot2movies' data so that it only includes variables of interest such as — film title, film length, film rating, and film budget.

Since some of the variables I listed above do not contain information for some important variables, I deleted those entries so that all films in the dataset are analyzed from the same standpoint.

I began the analysis by looking at the variable budget. I conducted a linear regression and using p-value I determined that [...]. Next, I looked at various film genres. [List rest of variables and the work that I did with them.]

With the results from the analysis discussed above, I concluded that []

In the rest of this report, I will begin by looking at the data, showing my analysis,. and then a conclusion.

### Data

```
library(ggplot2movies)
head(movies)
```

```
## 2
            $1000 a Touchdown 1939
                                        71
                                                             20 0.0 14.5 4.5 24.5
                                                NA
                                                      6.0
## 3
       $21 a Day Once a Month 1941
                                         7
                                                NA
                                                      8.2
                                                                 0.0 0.0 0.0 0.0
## 4
                      $40,000 1996
                                                                       0.0 0.0 0.0
                                        70
                                                NA
                                                      8.2
                                                              6 14.5
## 5 $50,000 Climax Show, The 1975
                                        71
                                                      3.4
                                                             17 24.5
                                                                       4.5 0.0 14.5
                                                NA
## 6
                         $pent 2000
                                        91
                                                NA
                                                      4.3
                                                             45
                                                                 4.5
                                                                       4.5 4.5 14.5
##
                      r8
                            r9
                               r10 mpaa Action Animation Comedy Drama Documentary
       r5
            r6
                 r7
## 1 14.5 24.5 24.5 14.5
                          4.5
                                4.5
                                               0
                                                         0
                                                                1
                                                                       1
                                               0
                                                         0
                                                                       0
## 2 14.5 14.5 14.5 4.5
                          4.5 14.5
                                                                1
                                                                                   0
     0.0 24.5
                0.0 44.5 24.5 24.5
                                              0
                                                         1
                                                                0
                                                                       0
                                                                                   0
     0.0 0.0
                0.0 0.0 34.5 45.5
                                               0
                                                         0
                                                                1
                                                                       0
                                                                                   0
## 5 14.5 4.5
                0.0
                     0.0 0.0 24.5
                                               0
                                                         0
                                                                0
                                                                       0
                                                                                   0
## 6 14.5 14.5
                4.5
                     4.5 14.5 14.5
                                               0
                                                         0
                                                                0
                                                                       1
                                                                                   0
##
     Romance Short
## 1
           0
                 0
## 2
           0
                 0
## 3
           0
                 1
## 4
           0
                 0
## 5
           0
                 0
## 6
           0
                 0
```

# **Analysis**

Show analysis of data

#### Results

Show what we concluded from our analysis

## Appendix

Show all lines of code and extranneous graphs