



IMDB-MOVIE ANALYSIS



PROJECT DESCRIPTION

The given project asks us to analyse IMDB Movie data.

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

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

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

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

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

APPROACH

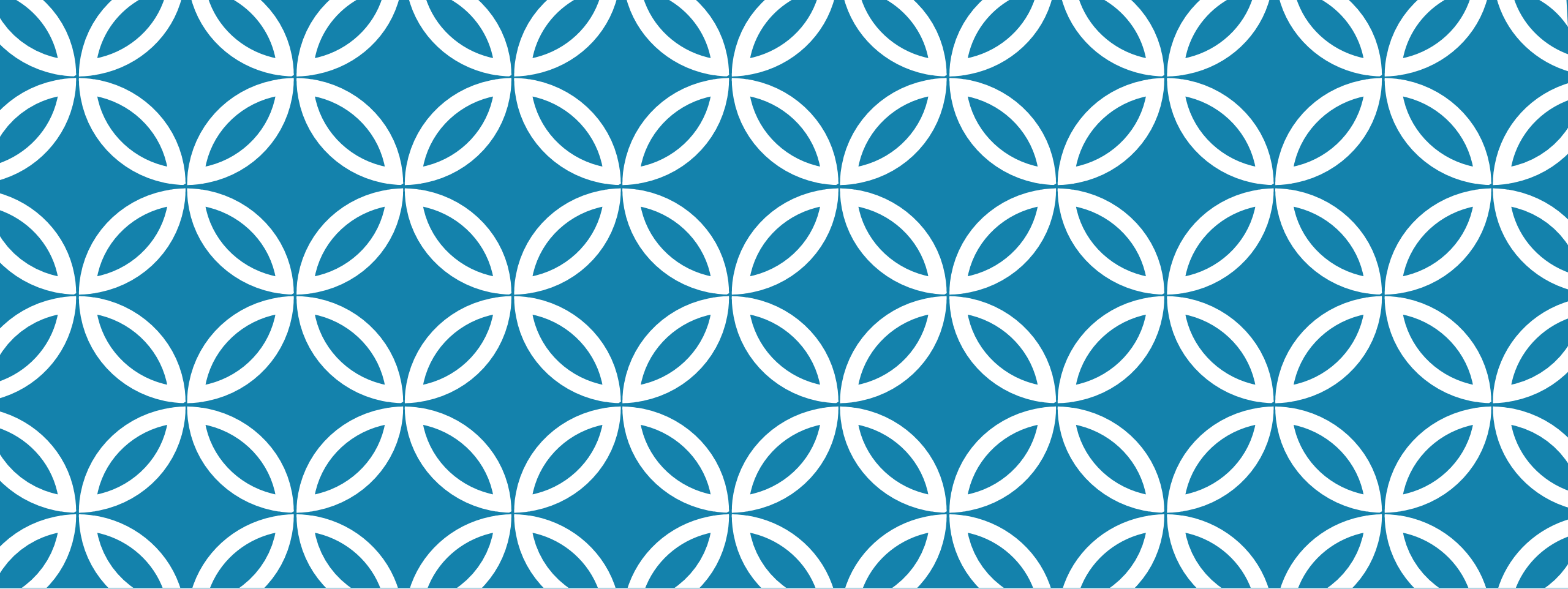
The required analysis was done with the help of various functions, formulae and tools which excel provides us.

TECH STACK

MS Excel is used for the analysis.

The ease of use and familiarity with the tool is the reason for its selection.

[Excel File](#)



INSIGHTS

1.DATA CLEANING

Blanks and unwanted rows were cleaned.

Columns were reduced from 28 to 16.

After removing null values, the rows were reduced from 5044 to 3891.

TOP GENRES

Genre	Count	Average IMDB	Profitability Average
Drama	1944	6.784877	10047152.49
Comedy	1503	6.184498	-3156373.362
Thriller	1117	6.378066	12282848.4
Action	962	6.290748	-563578.7921
Romance	879	6.426962	8760736.422
Adventure	787	6.458323	-1760592.976
Sci-Fi	497	6.322736	8937480.734
Horror	391	5.926087	30581085.51
Documentary	64	6.99375	8000785.969
Western	60	6.756667	12617638.02

Formula Used

```
=COUNTIF(Table3[genres],"*"&T4&"*")
```

```
=AVERAGEIF(IMDB_Movies!$D$2:$D$3888,"*"&S4&"*", $N$2:$N$3853)
```

```
=AVERAGEIF(IMDB_Movies!$D$2:$D$3888,"*"&S4&"*", $O$2:$O$3853)
```

Insights

- Drama followed by comedy and Thriller are the top Genres
- Though Depending upon the IMDB ratings, Documentary then Drama and then western are the top genres
- In terms of Profitability, Horror has the highest profitability despite having low count and low IMDB followed by western then thriller.
- Interestingly genres like comedy, action, adventure which has relatively higher IMDB rating average makes loss.
- Horror genre though with highest profitability has the lowest IMDB rating average

IMDB TOP 250

When all Languages are considered Shawshank Redemption is on the top with rating of 9.3 and list goes on till Ed Wood with rating 7.9.

When the English language is deselected then top film is The Good the Bad and the Ugly with IMDB rating of 8.9 and goes on till In the land of blood and Honey with rating of 4.3, it should be noted only 180 films of foreign language were in the database hence there are the top 180 and not the top 250.

(data set too large to fit in the ppt)

TOP DIRECTORS

Some Insights

- Crime, drama, comedy, action, adventure and thriller are the top genre of which these director direct movies
- Interestingly profitability and high IMDb rating has a negative correlation of - 0.284640806
- This is seen when only Alfred Hitchcock, Damien Chazelle, Majid Majidi , Christopher Nolan, Richard Marquand and Asghar Farhadi being profitable and not the others

Ddirector	Average of imdb_score
Tony Kaye	8.6
Charles Chaplin	8.6
Alfred Hitchcock	8.5
Ron Fricke	8.5
Damien Chazelle	8.5
Majid Majidi	8.5
Sergio Leone	8.433333333
Christopher Nolan	8.425
S.S. Rajamouli	8.4
Richard Marquand	8.4
Marius A. Markevicius	8.4
Asghar Farhadi	8.4

MOVIES BY MERYL STREEP, LEONARDO DICAPRIO AND BRAD PITT

Formulae used

```
=FILTER(F2:F3888,(E2:E3888=T18)+(E2:E3888=W18)+(E2:E3888=Y18))  
=XLOOKUP(X41,$F$2:$F$3853,$E$2:$E$3853)
```

Leonardo DiCaprio	The Man in the Iron Mask
Meryl Streep	The River Wild
Leonardo DiCaprio	Inception
Brad Pitt	Mr. & Mrs. Smith
Brad Pitt	True Romance
Brad Pitt	Spy Game
Leonardo DiCaprio	Body of Lies
Brad Pitt	Fury
Leonardo DiCaprio	The Quick and the Dead
Brad Pitt	Troy
Brad Pitt	Sinbad: Legend of the Seven Seas
Brad Pitt	Seven Years in Tibet
Leonardo DiCaprio	Blood Diamond
Leonardo DiCaprio	The Beach
Leonardo DiCaprio	The Revenant
Leonardo DiCaprio	The Wolf of Wall Street
Leonardo DiCaprio	Catch Me If You Can
Leonardo DiCaprio	J. Edgar
Brad Pitt	The Assassination of Jesse James by the Coward Robert Ford
Leonardo DiCaprio	The Aviator
Meryl Streep	The Iron Lady
Meryl Streep	Out of Africa
Meryl Streep	Julie & Julia
Meryl Streep	A Prairie Home Companion
Meryl Streep	The Devil Wears Prada
Meryl Streep	It's Complicated
Meryl Streep	Hope Springs
Leonardo DiCaprio	Gangs of New York
Leonardo DiCaprio	The Departed
Brad Pitt	Ocean's Eleven
Brad Pitt	Ocean's Twelve
Brad Pitt	Killing Them Softly
Brad Pitt	Fight Club
Brad Pitt	Babel
Meryl Streep	One True Thing
Leonardo DiCaprio	Marvin's Room
Brad Pitt	The Tree of Life
Brad Pitt	Interview with the Vampire: The Vampire Chronicles
Brad Pitt	The Curious Case of Benjamin Button
Leonardo DiCaprio	Titanic
Meryl Streep	The Hours
Leonardo DiCaprio	Revolutionary Road
Leonardo DiCaprio	The Great Gatsby
Leonardo DiCaprio	The Great Gatsby
Leonardo DiCaprio	Romeo + Juliet
Brad Pitt	By the Sea
Meryl Streep	Lions for Lambs
Leonardo DiCaprio	Django Unchained
Leonardo DiCaprio	Shutter Island

PROFITABLE MOVIE

Using Formula the Profit was found out and Avatar is found to be the most profitable film.

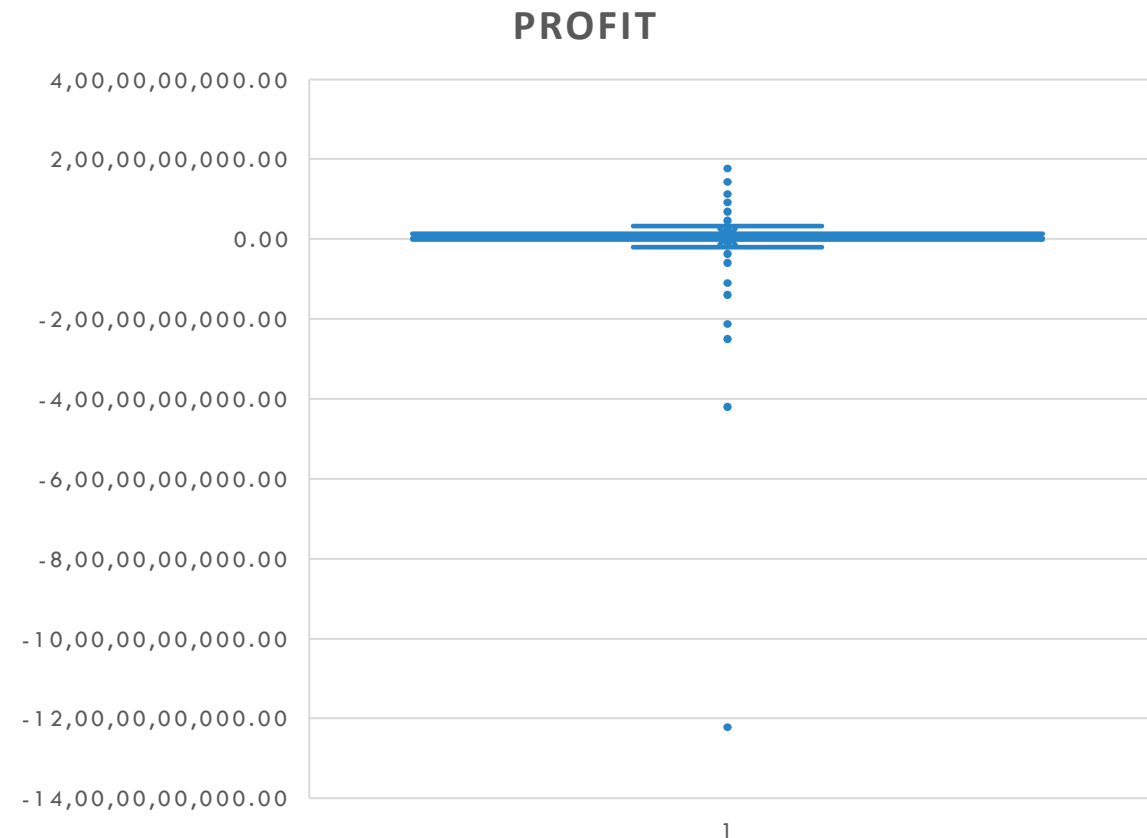
Box and Whisker graph shows that The Host and Lady Vengeance with loss of -12,21,32,98,588.00 and -4,19,97,88,333.00 respectively are clearly outliers.

Extra Insights

Star wars Episode 4: A new hope is the most profitable movie

The director Joss Whedon followed by Peter Jackson, Wolfgang Peterson, George Lucas, Mark Newell are the most profitable directors

Harrison Ford followed by Scarlett Johansson, J.K Simmons, Ryan Reynolds, Robert DeNiro and Robert Downey Jr. are the most profitable actors



RESULT

The given project helped me gain mastery in pivot tables, formulas and functions.
This helped in establishing an advance understanding for MS Excel.