

# IMDB MOVIE ANALYSIS

# PROJECT DESCRIPTION

The goal of this project is to perform an in-depth analysis of the IMDB movie dataset. The focus of the analysis will be on various key aspects such as movie genres, runtime, language, directors, and budget. By examining these factors, the aim is to understand how they influence the IMDB ratings and the financial success of films.

# APPROACH

- Data Preparation – I started by obtaining the dataset provided for the project. The dataset includes details about movie titles, genres, runtimes, languages, directors, budgets, box office earnings, and IMDb ratings. I then carried out a data cleaning process to ensure the data was ready for analysis.
- Data Analysis - For the data analysis, I utilized Excel to conduct various analyses based on the project requirements. This involved transforming the data to extract useful insights, calculating key descriptive statistics, and creating visualizations to explore the relationships between different variables.

# TECH STACK USED

For this project, I used Microsoft Excel 2016. Microsoft excel is the best spreadsheet software in the world and it has inbuilt functions and tools which helps us in performing calculations, generating visualizations, and summarizing the results.

# INSIGHTS

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

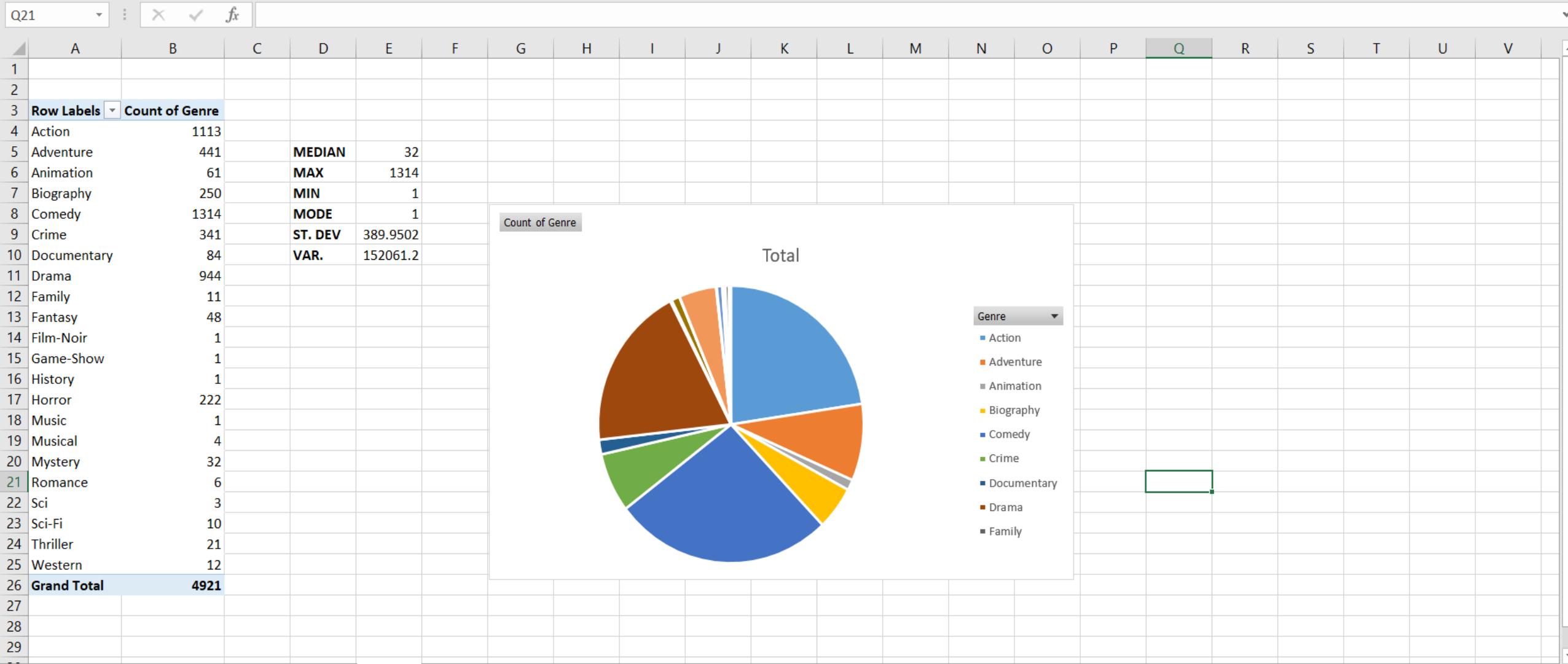
Determine the most common genres of movies in the dataset. Then, for each genre, calculate descriptive statistics (mean, median, mode, range, variance, standard deviation) of the IMDB scores.

File Home Insert Page Layout Formulas Data Review View Acrobat Tell me what you want to do...

Cut Copy Format Painter Paste Clipboard

Font Alignment Number Styles Cells Editing Adobe Acrobat

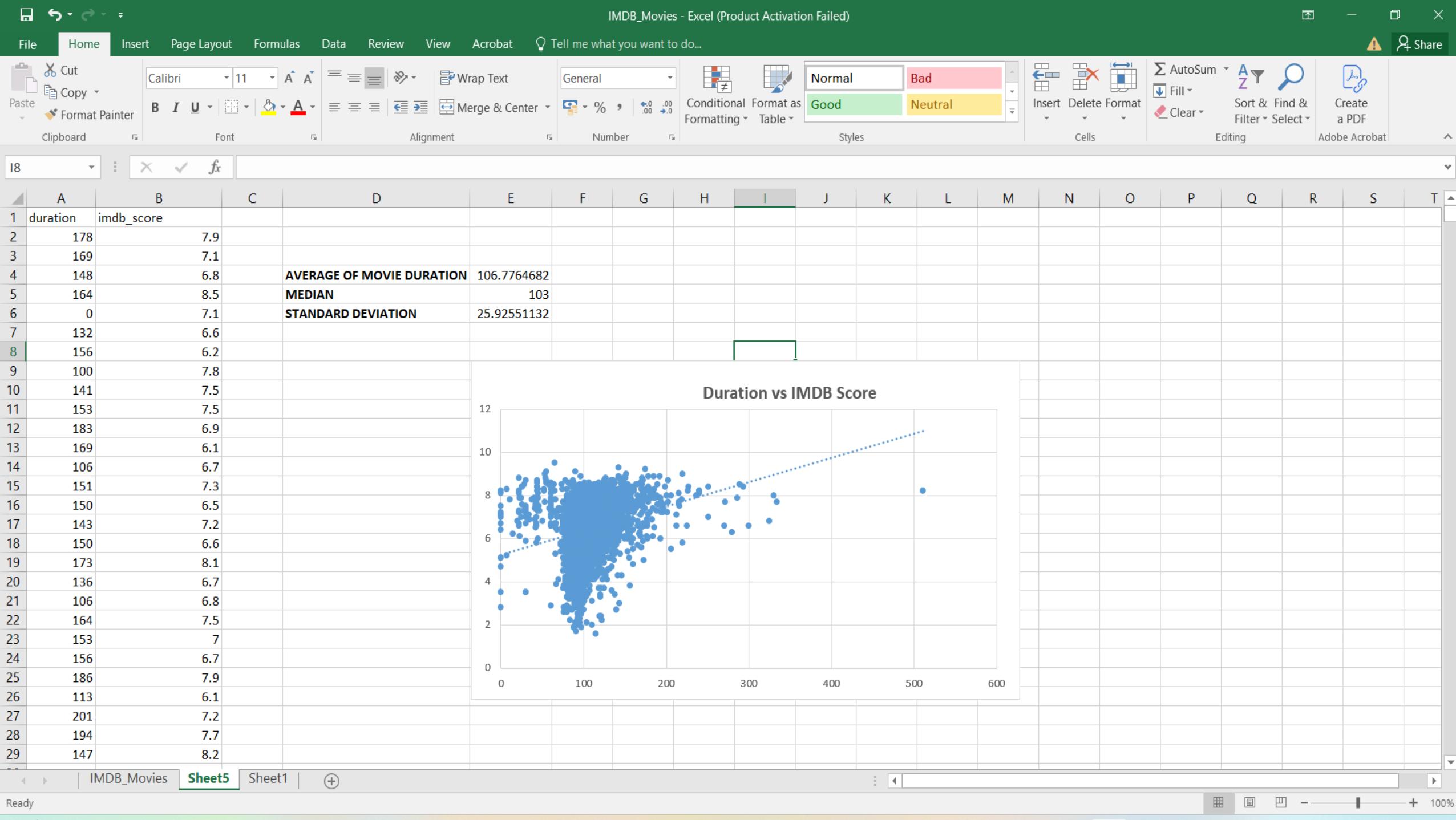
Calibri 11 A A Wrap Text General Conditional Formatting Table Normal Bad Good Neutral AutoSum Fill Sort & Filter Clear Create a PDF



# INSIGHTS

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

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



# INSIGHTS

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

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

IMDB\_Movies - Excel (Product Activation Failed)

PivotTable Tools

File Home Insert Page Layout Formulas Data Review View Acrobat Analyze Design Tell me what you want to do...

Cut Copy Format Painter Paste Clipboard

Font Alignment Number Styles Cells Editing Adobe Acrobat

B9 4751

Row Labels Count of language

English	4586
French	73
Hindi	28
Mandarin	24
Spanish	40
<b>Grand Total</b>	<b>4751</b>

PivotTable Fields

Choose fields to add to report:

Search

director\_name  
 duration  
 gross  
 genres  
 movie\_title  
 language  
 country  
 budget  
 imdb\_score

Drag fields between areas below:

FILTERS

COLUMNS

ROWS

VALUES

language Count of language

Defer Layout Update UPDATE

Language Analysis IMDB\_Movies Duration Analysis Sheet1 Sheet6 +

Ready 100%

# INSIGHTS

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

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

IMDB\_Movies - Excel (Product Activation Failed)

File Home Insert Page Layout Formulas Data Review View Acrobat Tell me what you want to do... Conditional Format as Table

Cut Copy Format Painter Paste Clipboard Font Alignment Number Styles Cells Insert Delete Format AutoSum Fill Clear Sort & Filter Select Create a PDF Adobe Acrobat

G15

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z AA AB AC AD AE AF AG AH AI AJ AK AL AM AN AO AP AQ AR AS AT

1

2

3 Row Labels Average of imdb\_score

4 Cary Bell 8.7

5 8.7

6 Charles Chaplin 8.6

7 8.6

8 John Blanchard 9.5

9 9.5

10 Mike Mayhall 8.6

11 8.6

12 Mitchell Altieri 8.7

13 8.7

14 Sadyk Sher-Niyaz 8.7

15 8.7

16 Grand Total 8.8

Average of imdb\_score

TOP 5 DIRECTORS

The chart displays the average IMDB score for the top 5 directors. The y-axis represents the average score, ranging from 8 to 9.6. The x-axis lists the directors: Cary Bell, Charles Chaplin, John Blanchard, Mike Mayhall, and Sadyk Sher-Niyaz. John Blanchard has the highest average score at 9.5, followed by Sadyk Sher-Niyaz at 8.7, Cary Bell and Mike Mayhall at 8.6, and Charles Chaplin at 8.7.

Director	Average Score
Cary Bell	8.7
Charles Chaplin	8.6
John Blanchard	9.5
Mike Mayhall	8.6
Mitchell Altieri	8.7
Sadyk Sher-Niyaz	8.7

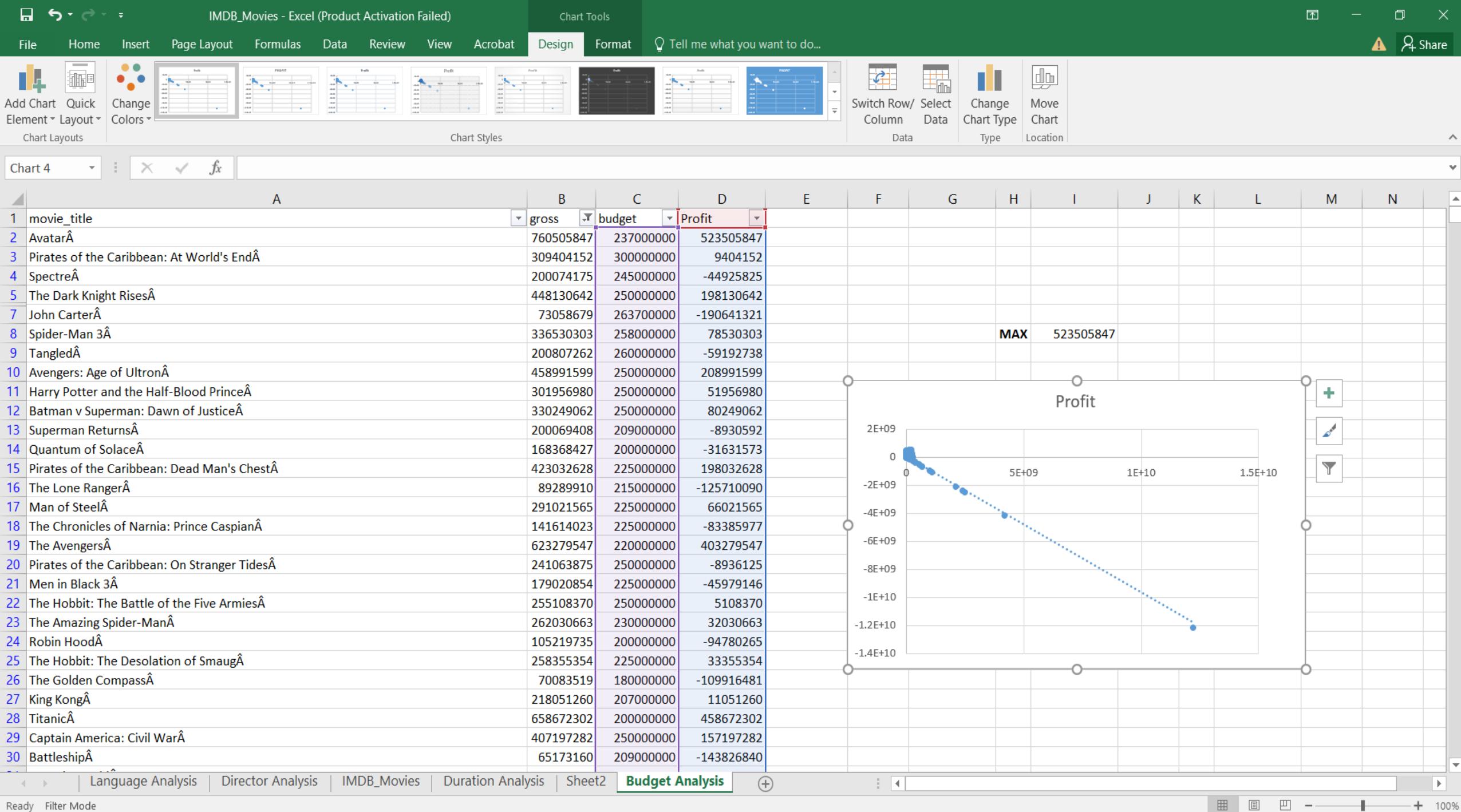
Language Analysis Director Analysis IMDB\_Movies Duration Analysis Sheet1 Sheet6 +

Ready 100%

# INSIGHTS

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

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



IMDB\_Movies - Excel (Product Activation Failed)

PivotTable Tools

File Home Insert Page Layout Formulas Data Review View Acrobat Analyze Design Tell me what you want to do...

PivotTable Name: Active Field: PivotTable1 Sum of Profit

Options PivotTable

Active Field: Drill Down Drill Up Collapse Field

Group Selection Expand Field

Group Ungroup Group Field

Insert Slicer Timeline Connections

Refresh Change Data Source

Clear Select Move PivotTable

Fields, Items, OLAP Relationships

PivotChart Recommended PivotTables

Field List +/- Buttons Headers

Field Headers Show

B14 : X ✓ fx 4177663861

A B C D E F G H I J K L M N

1

2

3 Row Labels Sum of Profit

4 Avatar 523505847

5 E.T. the Extra-Terrestrial 424449459

6 Jurassic World 502177271

7 Star Wars: Episode I - The Phantom Menace 359544677

8 Star Wars: Episode IV - A New Hope 449935665

9 The Avengers 403279547

10 The Dark Knight 348316061

11 The Hunger Games 329999255

12 The Lion King 377783777

13 Titanic 458672302

14 Grand Total 4177663861

PivotTable Fields

Choose fields to add to report:

Search

movie\_title  
 gross  
 budget  
 Profit

MORE TABLES...

Drag fields between areas below:

FILTERS

COLUMNS

ROWS

VALUES

movie\_title Sum of Profit

Defer Layout Update UPDATE

Language Analysis Director Analysis IMDB\_Movies Duration Analysis Sheet1 S ... +

Ready 100%

# RESULT

This project provided valuable insights into the factors that affect movie ratings and financial success. By examining genres, durations, languages, directors, and budgets, we were able to uncover trends and patterns that offer a deeper understanding of audience preferences and industry trends. Our conclusions deliver actionable recommendations for filmmakers, producers, and studios aiming to refine their movie production strategies and enhance their appeal to audiences.