Project Report: Factors Influencing Movie Success on IMDB

1. Project Description

Overview: This project investigates the factors influencing the success of movies on IMDB. Success is defined by high IMDB ratings. Understanding these factors is crucial for movie producers, directors, and investors to make informed decisions for future projects.

Problem Statement: The main problem to investigate is: "What factors influence the success of a movie on IMDB?" The findings will provide insights into elements contributing to higher IMDB ratings.

2. Approach

Data Source: The dataset used for this project contains information on movies, including their genres, directors, durations, languages, budgets, and IMDB ratings. The data was sourced from an IMDB Movies dataset.

Data Cleaning:

- Handled missing values by removing rows with missing or non-numeric values in critical columns.
- Removed duplicates to ensure data quality.
- Converted data types as necessary, particularly for numeric columns like IMDB scores and budgets.

Data Analysis Techniques:

- Used Excel functions for descriptive statistics (e.g., AVERAGE, MEDIAN, STDEV).
- Created visualizations such as bar charts, pie charts, histograms, and scatter plots.
- Applied correlation analysis to examine relationships between variables.

3. Tech-Stack Used

Software:

• Microsoft Excel 2022: Used for data cleaning, analysis, and visualization.

Purpose: Excel provided the necessary functions and tools for performing statistical analysis and creating visual representations of the data.

4. Data Analysis and Findings

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.

2597								
2598	imdb_score_ACTION	imdb_score_DOCUMENTARY	imdb_score_ADVENTURE	imdb_score_Drama	imdb_score_Animation	imdb_score_Comedy	imdb_score_Mystery im	ndb_sc
2599 COUNT=	1146	121	923	2594	242	1872	500	
2600 MEAN=	6.246247818	7.180165289	6.441170098	6.763762529	6.576033058	6.195245726	6.4864	6.5
2601 MEDIAN=	6.3	7.4	6.6	6.9	6.7	6.3	6.6	
2602 MODE=	6.1	7.5	6.7	7.2	6.7	6.7	6.6	
2603 STD DEV=	1.115922422	1.056536782	1.131196138	0.957353999	1.139594803	1.090713849	1.090758703	1.
2604 VARIANCE=	1.245282852	1.116269972	1.279604703	0.916526679	1.298676314	1.189656701	1.189754549	1.0
2605 MAXIMUM=	9.1	8.7	8.9	9.3	8.6	9.5	8.6	
2606 MINIMUM=	1.7	1.6	1.9	2	1.7	1.7	2.2	
2607 RANGE=	7.4	7.1	7	7.3	6.9	7.8	6.4	
2608								

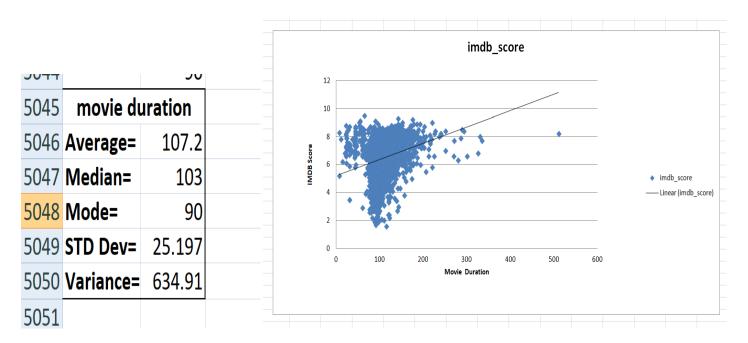
2337									
2598	imdb_score_Crime	imdb_score_Sci-Fi	imdb_score_Horror	imdb_score_Biography	imdb_score_thrille	imdb_score_Romance	imdb_score_History	imdb_score_Film-Noir	imdb_score_Musi
2599	889	616	565	293	1411	1107	207	6	1
2600	6.564791901	6.281818182	5.843539823	7.150170648	6.314245216	6.450587173	7.083574879	7.633333333	6.5075757
2601	6.6	6.4	5.9	7.2	6.4	6.5	7.2	7.65	6
2602	6.6	6.7	6.2	7	6.1	6.5	7.5	#N/A	
2603	1.02645633	1.210816001	1.130468522	0.722515799	1.054333735	0.996035141	0.887901843	0.43204938	1.2257181
2604	1.053612597	1.466075388	1.277959079	0.52202908	1.111619625	0.992086002	0.788369682	0.186666667	1.5023849
2605	9.3	8.8	8.7	8.9	9	8.6	8.9	8.2	8
2606	2.4	1.9	2.2	4.5	2.2	2.1	2	7.1	2
2607	6.9	6.9	6.5	4.4	6.8	6.5	6.9	1.1	6
2000									

Insights: Drama movies tend to have higher average IMDB scores compared to other movies.

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.



Insights:- It is clear that most of the movies lie between 100 and 200 mins of duration.

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.

1707		English	Japanese	French	Mandarin	Aborigina	I Spanish	Filipino	Hindi	Russian	Maya	Kazakh	Telugu	Cantonese
1708	AVERAGE=	6.39843	7.39444	7.03836	6.78846	6.95	6.9375	6.	7 6.632	14 6.3636	54	7.8	6	8.4 6.95455
1709	MEDIAN=	6.5	7.6	7.2	2 7.05	6.95	7.15	6.	7 6.9	95 6	.5	7.8	6	8.4 7.2
4710	MODE=	6.7	8.2	7.2	7.9	#N/A	7.2	#N/A	7	.8 5	.3 #N/	A #N/A	#N/A	6.5
4711	STD DEV=	1.12207	0.99082	0.72699	1.04205	0.77782	0.85506	#DIV/0!	1.3989	96 1.3836	57 #DIV/	'0! #DIV/	0! / #DIV/	0.70479
1707	German	Aramaic I	talian	Dutch	Dari	Hebrew (Chinese N	Mongolian S	Swedish	Korean	Thai	Polish	Bosnian	None Hu
1708	7.34211	7.1	7.22727	7.425	7.5	7.58	5.66667	7.3	7.44	7.3875	6.63333	8.25	4.3	#DIV/0!
1709	7.6	7.1	7.3	7.45	7.5	7.6	5.7	7.3	7.6	7.5	6.6	8.25	4.3	#NUM!
4710	7.4	#N/A	#N/A	7.8	#N/A	#N/A	#N/A	#N/A	#N/A	7.7	#N/A	9.1	#N/A	#N/A
4711	0.95412	#DIV/0!	1.24426	0.43493	0.14142	0.33466	0.55076	#DIV/0!	0.75697	0.82538	0.45092	0.9815	#DIV/0!	#DIV/0! #
1707	None	Hungarian I	Portugues	Danish	Arabic	Norwegiar (Czech k	(annada Z	Zulu	Panjabi	Tamil	Dzongkha	Vietnames	Indonesiar Ur
4708	#DIV/0!	7.1	7.5	7.5	#DIV/0!	7.15	7.4	7.1	7.1	6.6	5.1	7.5	7.4	7.9
4709 [°]	#NUM!	7.1	8.1	8.1	#NUM!	7.3	7.4	7.1	7.1	6.6	5.1	7.5	7.4	7.9
4710	#N/A	#N/A	8.1	8.1	#N/A	7.6	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
4711	#DIV/0!	#DIV/0!	1.07703	1.07703	#DIV/0!	0.57446	#DIV/0!	#DIV/0!	0.28284	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.42426 #
4743														
4707	Kannada	Zulu	Panjabi	Tamil	Dzong	kha Vietna	ames Indor	esiar Urdı	u Ro	manian Pe	ersian	Slovenian	Greek	Swahili
4708	7.1	7.:	1 6	.6	5.1	7.5	7.4	7.9	7	7.2	7.575	6.4	7.3	7.4
4709	7.1	7.:	1 6	.6	5.1	7.5	7.4	7.9	7	7.2	7.95	6.4	7.3	7.4
	#N/A	#N/A	#N/A	#N/A	4N/	4 #N/	/A #N	/A #1	N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#IN/A					,		,	.,	,	,	//		,
4710 4711	#N/A #DIV/0!	0.28284	4 #DIV/0	! #DIV/	0! #DIV/	'0! É#DIV	/01 0.4	2426 #DI	IV/0! (.98995	1.20381	#DIV/0!	#DIV/0!	#DIV/0!

Insights: Movies in Telugu generally have higher average IMDB scores compared to movies in other languages.

D. Director Analysis

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

3	Row Labels	Average of imdb_score	90th percentile of imdb scores
4	A. Raven Cruz	1.9	7.5
5	Émile Gaudreault	6.7	
6	Éric Tessier	6.6	
7	Étienne Faure	4.3	
8	Ãlex de la Iglesia	6.1	
9	Aaron Hann	6	
10	Aaron Schneider	7.1	

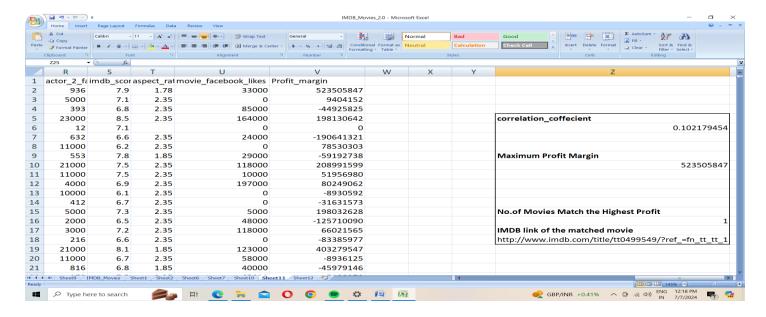
			A	В
Row Labels	▼ Average of imdb_sco ᢋ		drew Haigh	7.
Akira Kurosawa	8.1		drew Stanton	7.73333333
1 Alejandro G. IñÃį rritu			drey Zvyagintsev	
8 Alex Garland	7.78333333		na Muylaert	7.
9 Alex Gibney	7.7		thony Powell	7.
O Alfonso Cuarón	7.7		thony Vallone	7.
			Folman	_
2 Alice Wu	7.6		ghar Farhadi	8.
Amal Al-Agroobi	8.2		rry W. Blaustein	7.
4 Andrei Tarkovsky	8.1		n Affleck	7.6 7.9
O5 Andrew Haigh	7.7		rnardo Bertolucci	
11 Andrew Stanton	7.733333333		l Melendez ly Wilder	8. 7.97
Andrey Zvyagintsev	8	239 Br		7.97
29 Anna Muylaert	7.9		an Henson	7.5
40 Anthony Powell	7.6		an Percival	7.
43 Anthony Vallone	7.8		rl Theodor Drever	8
1 Ari Folman	8		roline Link	7.
59 Asghar Farhadi	8.4	308 Ca		8.
78 Barry W. Blaustein	7.6		therine Owens	8.
83 Ben Affleck	7.65		an-wook Park	7.63333333
99 Bernardo Bertolucci	7.95		arles Binamé	7.03333333
07 Bill Melendez	8.4		arles Binama© arles Chaplin	8
16 Billy Wilder	7.975		arles Enguson	7.8666666
			ia-Liang Liu	7.30000000
39 Brad Bird	7.58		ris Buck	7.
66 Brian Henson	7.7		ris Paine	7.
70 Brian Percival	7.6		ristian Carion	7.
99 Carl Theodor Dreyer	8.1		ristophe Barratier	7.
05 Caroline Link	7.7		ristopher Nolan	8.42
08 Cary Bell	8.7	386 Ch		7.
14 Catherine Owens	8.4			
20 Chan-wook Dark	7 63333333			
A				
	В	7.65	А	В
83 Ben Affleck			A Chia-Liang Liu	7.0
83 Ben Affleck 99 Bernardo Bertoluco		7.95	Chris Buck	7.0
83 Ben Affleck 99 Bernardo Bertoluco 07 Bill Melendez		7.95 - 340 $8.4 - 353$	Chris Buck Chris Paine	7.0 7.1
83 Ben Affleck 99 Bernardo Bertoluco 07 Bill Melendez 16 Billy Wilder		7.95 338 8.4 353 7.975 362	Chris Buck Chris Paine Christian Carion	7.6 7.6 7.7
83 Ben Affleck 99 Bernardo Bertoluco 07 Bill Melendez 16 Billy Wilder 39 Brad Bird		7.95 338 8.4 353 7.975 362 7.58 370	Chris Buck Chris Paine Christian Carion Christophe Barratier	7.4 7.4 7.4 7.4
83 Ben Affleck 99 Bernardo Bertoluco 7 Bill Melendez 16 Billy Wilder 39 Brad Bird 66 Brian Henson 70 Brian Percival	i	7.95 338 8.4 353 7.975 362 7.58 370 7.7 382 7.6 386	Chris Buck Chris Paine Christian Carion	7.6 7.6 7.7
83 Ben Affleck 99 Bernardo Bertoluco 7 Bill Melendez 16 Billy Wilder 39 Brad Bird 66 Brian Henson 70 Brian Percival 90 Carl Theodor Dreye	i	7.95 338 8.4 353 7.975 362 7.58 370 7.7 382 7.6 386 8.1 426	Chris Buck Chris Paine Christian Carion Christophe Barratier Christopher Nolan	7.1 7.7 7.1 7.1 8.421
83 Ben Affleck 99 Bernardo Bertoluco 7 Bill Melendez 16 Billy Wilder 36 Brad Bird 6 Brian Henson 70 Brian Percival 90 Carl Theodor Dreye 05 Caroline Link	i	7.95 338 8.4 353 7.975 362 7.58 370 7.7 382 7.6 386 8.1 426 7.7 433	O Chris Buck Chris Paine Christian Carion Christophe Barratier Christopher Nolan Chuan Lu	7.3 7.3 7.5 7.5 8.42:
83 Ben Affleck 99 Bernardo Bertoluco 7 Bill Melendez 16 Billy Wilder 39 Brad Bird 66 Brian Henson 70 Brian Percival 99 Carl Theodor Dreye 50 Caroline Link 08 Cary Bell	i	7.95 338 8.4 353 7.975 362 7.58 370 7.7 382 7.6 386 8.1 426 7.7 433 8.7 433	Chris Buck Chris Paine Chris Paine Christan Carion Christophe Barratier Christopher Nolan Chuan Lu Cristian Mungiu D.W. Griffith Damien Chazelle	7.0 7.0 7.1 7.1 8.42: 7.1 1
83 Ben Affleck 99 Bernardo Bertoluco 7 Bill Melendez 16 Billy Wilder 39 Brad Bird 66 Brian Henson 70 Brian Percival 99 Carl Theodor Dreye 05 Caroline Link 08 Cary Bell 14 Catherine Owens	:i	7.95 344 8.4 35 7.975 36 7.58 37 7.7 38 8.1 422 7.7 43 8.7 43 8.4 44	Chris Buck Chris Paine Christian Carion Christophe Barratier Christopher Nolan Christopher Nolan Chuan Lu Cristian Mungiu D.W. Griffith Damien Chazelle	7.4 7.7 7.4 7.4 8.422 7.7 7.6 8.8
83 Ben Affleck 99 Bernardo Bertoluco 7 Bill Melendez 16 Billy Wilder 39 Brad Bird 66 Brian Henson 70 Brian Percival 90 Carl Theodor Dreye 05 Caroline Link 08 Cary Bell 14 Catherine Owens 20 Chan-wook Park	:i	7.95 348 8.4 353 7.975 366 7.58 37 7.7 38 7.6 38 8.1 42 7.7 43 8.7 43 8.8 44 4333333 496	O Chris Buck Chris Paine Christ Paine Christophe Barratier Christopher Nolan Chuan Lu Cristian Mungiu D.W. Griffith Damien Chazelle Dan Gilroy Dave Carroll	7.0 7.1 7.1 8.42. 7.1 8.6 7.1 8.7
83 Ben Affleck 99 Bernardo Bertoluco 7 Bill Melendez 16 Billy Wilder 39 Brad Bird 66 Brian Henson 70 Brian Percival 99 Carl Theodor Dreye 05 Caroline Link 08 Cary Bell 14 Catherine Owens 00 Chan-wook Park 23 Charles Binam	:i	7.95 334 8.4 35 7.975 366 7.58 37 7.7 38. 7.6 38 8.1 426 7.7 43 8.7 43 8.4 44 4333333 496 7.7 516	Chris Buck Chris Paine Chris Paine Christan Carion Christophe Barratier Christopher Nolan Chuan Lu Cristian Mungiu D.W. Griffith Damien Chazelle Dan Gilroy Dave Carroll David Fincher	7.4 7.7 7.4 7.4 8.422 7.7 7.6 8.8
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83 Ben Affleck 99 Bernardo Bertoluco 7 Bill Melendez 16 Billy Wilder 39 Brad Bird 66 Brian Henson 70 Brian Percival 90 Carl Theodor Dreye 90 Caroline Link 98 Cary Bell 40 Catherine Owens 90 Chan-wook Park 91 Charles Binamã© 92 Charles Chaplin 93 Charles Ferguson	:i :r 7.6333	7.95 348 8.4 349 7.975 36. 7.58 370 7.7 38. 7.6 388.1 422 7.7 433 8.7 433 8.4 444 443 333333 499 7.7 510 8.6 52	Chris Buck Chris Paine Chris Paine Christian Carion Christophe Barratier Chuan Lu Cristian Mungiu D.W. Griffith Damien Chazelle Dan Gilroy Dave Carroll David Lean David Lean	7.0 7.1 7.1 8.42: 7.1 8.1 7.1 7.1 7.7
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83 Ben Affleck 99 Bernardo Bertoluco 70 Bill Melendez 16 Billy Wilder 36 Brian Henson 70 Brian Percival 90 Carl Theodor Dreye 01 Cary Bell 14 Catherine Owens 12 Charles Binamã© 14 Charles Chaplin 15 Charles Chaplin 16 Charles Ferguson 18 Chia-Liang Liu 16 Chris Buck	:i :r 7.6333	7.95 348 8.4 349 7.975 36 7.58 37 7.7 38 7.6 38 8.1 42 7.7 43 8.7 43 8.4 44 8.333333 49 666667 52 7.6 54 7.6 554 7.7 566	Chris Buck Chris Paine Chris Paine Christophe Barratier Christopher Nolan Christopher Nolan Chuan Lu Cristian Mungiu Daw. Griffith Damien Chazelle Dane Garroll David Fincher David Lean David Lynch David Sington	7.6 7.1 7.1 7.1 8.42: 7.1 8.1 7.5 7.5 7.7 7.6
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B3 Ben Affleck B9 Bernardo Bertoluco 7 Bill Melendez 16 Billy Wilder 39 Brad Bird 66 Brian Henson 70 Brian Percival 90 Carl Theodor Dreye 10 Cary Bell 14 Catherine Owens 10 Charles Binamé 14 Charles Binamé 15 Charles Chaplin 16 Charles Ferguson 17 Charles Ferguson 18 Chia-Liang Liu 19 Chris Buck 19 Christan Carion 10 Christophe Barratie 10 Christophe Rarratie 10 Christophe Rolan 10 Christophe Rolan 10 Christian Mungiu 11 D.W. Griffith 15 Burien Chazelle	7.6333 7.8666	7.95 348 3.49 3.79 3.67 3.75 3.76 3.76 3.88 3.1 4.22 3.33 3.34 4.44 3.33 3.77 5.16 5.66 6.66 6.70 7.8 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7 5.66 7.7	Chris Buck Chris Paine Chris Paine Christophe Barratier Christopher Nolan Chuan Lu Cristian Mungiu D.W. Griffith Damien Chazelle Dav Carroll David Fincher David Lean David Lynch David Sington Dean DeBlois Deepa Mehta Denis Gansel Denny Arcand Don Siegel Dror Moreh Duncan Jones	7.0 7.1 7.1 8.42; 7.1 8.8 7.1 7.5 7.7 7.5 7.6666666 7.1 7.96666666 7.1 7.96666666
83 Ben Affleck 99 Bernardo Bertoluco 7 Bill Melendez 16 Billy Wilder 30 Brad Bird 6 Brian Henson 70 Brian Percival 90 Carl Theodor Dreye 10 Carl Theodor Dreye 10 Carl Theodor Dreye 11 Carl Theodor Dreye 12 Carl Theodor Dreye 13 Charles Binamé 14 Catherine Owens 15 Charles Binamé 16 Charles Chaplin 17 Charles Ferguson 18 Chia-Liang Liu 19 Christian Carion 19 Christophe Barratie 10 Christiophe Barratie 10 Christiophe Barratie 11 Chuan Lu 12 Cristian Mungiu 13 D.W. Griffith 15 Damien Chazelle 14 Damien Chazelle	7.6333 7.8666	7.95 334 8.4 34 7.975 35. 7.975 36. 7.58 37. 7.7 38. 7.6 38. 8.1 422 7.7 43. 8.7 43. 8.8 4 44. 8.333333 49. 7.7 510. 8.6 522 7.6 54. 7.6 54. 7.7 56. 7.8 56. 7.7 56. 7.8 56. 7.7 59. 8.425 57. 7.7 59. 8.425 57. 7.7 59. 8.425 61. 8.5 61. 8.5 61. 8.5 61. 8.5 61.	Chris Buck Chris Paine Chris Paine Christian Carion Christophe Barratier Christopher Nolan Chuan Lu Cristian Mungiu Di.W. Griffith Damien Chazelle David Fincher David Lean David Lynch David Lynch David Sington Dean DeBlois Deepa Mehta Denis Villeneuve Dennis Gansel Don Hall Don Siegel Dror Moreh Duch Dor Moreh Duch Dor Moreh Dorn Jones Edgar Wright	7.1 7.1 7.1 7.1 8.42! 7.1 8.8 7.1 7.6 8.3 7.76666666 7.1 7.96666666 7.1 7.96666666 7.1 7.5 7.1 7.1
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83 Ben Affleck 99 Bernardo Bertoluco 70 Bill Melendez 16 Billy Wilder 36 Brad Bird 60 Brian Henson 70 Brian Percival 90 Carl Theodor Dreve 10 Cary Bell 14 Catherine Owens 10 Charles Binamé 15 Charles Binamé 16 Charles Chaplin 17 Chiris Buck 18 Chia-Liang Liu 18 Christ Paine 19 Christophe Barratie 19 Christophe Barratie 19 Christophe Nolan 10 Christophe Barratie 10 Christophe Garratie 10 Christophe Barratie 11 Christophe Barratie 12 Cristian Mungiu 13 D.W. Griffith 15 Damien Chazelle 14 Dave Carroll 15 Dave Carroll 16 Dave Carroll	7.6333 7.8666	7.95 348 8.4 349 7.97 36 7.975 36 7.758 37 7.7 38 8.1 422 7.7 43 8.7 43 8.33333 499 7.7 51 8.6 522 7.7 56 7.8 565 7.7 566 7.9 57 8.425 7.7 596 8 61 8.5 61 7.9 63 7.9 64 7.6 7.9 66 7.9 63 7.9 64	Chris Buck Chris Paine Chris Paine Christophe Barratier Christopher Nolan Christopher Nolan Chuan Lu Cristian Mungiu D.W. Griffith Damien Chazelle Dan Gilroy Dave Carroll David Fincher David Lean David Lynch David Sington Dean DeBlois Deepa Mehta Denis Villeneuve Dennis Gansel Denys Arcand Don Hall Don Siegel Dror Moreh Duncan Jones Edgar Wright Elic Craig Elic Kazan	7.0 7.1 7.1 7.1 8.42. 7.1 8.1 7.1 7.1 7.6 8.1 7.76666666 7.1 7.96666666 7.1 7.1 7.5 7.1 7.5 7.1 7.5 7.1 7.1 7.1 7.1
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Bas Ben Affleck Bernardo Bertoluco 7 Bill Melendez 16 Billy Wilder Bas Brad Bird 6 Brian Henson 70 Brian Percival 90 Carl Theodor Dreye 10 Carl Theodor Dreye 10 Carl Theodor Dreye 11 Carl Theodor Dreye 12 Carl Theodor Dreye 13 Charles Binam 14 Catherine Owens 15 Charles Binam 16 Charles Chaplin 17 Charles Ferguson 18 Chia-Liang Liu 19 Christian Carion 19 Christophe Barratie 19 Christian Carion 10 Christophe Barratie 10 Cristian Mungiu 11 D.W. Griffith 12 Dawid Fincher 14 David Fincher 15 David Lynch 16 David Lynch 17 David Sington	7.6333 7.8666	7.95 3.48 8.4 3.49 7.97 3.8 7.6 3.8 8.1 42 7.7 43 8.7 43 8.3 333 8.9 7.6 52 666667 52 7.6 54 7.6 55 7.7 566 7.8 566 7.9 57 8.425 57 7.7 59 8.425 57 7.7 59 8.61 8.5 61 8.5 61 8.5 61 8.5 61 8.5 65 7.6 64 8.6 65 7.6 64 8.6 65 7.6 64 8.6 65 7.6 64 8.6 65	Chris Buck Chris Paine Chris Paine Christophe Barratier Christopher Nolan Christopher Nolan Chuan Lu Cristian Mungiu D.W. Griffith Damien Chazelle Dan Gilroy Dave Carroll David Fincher David Lean David Lynch David Sington Dean DeBlois Deepa Mehta Denis Villeneuve Dennis Gansel Denys Arcand Don Hall Don Siegel Dror Moreh Duncan Jones Edgar Wright Elic Craig Elic Kazan	7.1 7.1 7.1 7.1 8.42! 7.2 7.1 8.3 7.7 7.7 7.7 7.7 7.6 66666666666666666

	A	В
510	David Fincher	7.75
524	David Lean	8
527	David Lynch	7.64
547	David Sington	8.1
559	Dean DeBlois	7.766666667
566	Deepa Mehta	7.8
569	Denis Villeneuve	7.96666667
572	Dennis Gansel	7.6
575	Denys Arcand	7.7
596	Don Hall	7.9
601	Don Siegel	7.6
616	Dror Moreh	7.6
619	Duncan Jones	7.566666667
630	Edgar Wright	7.6
640	Eli Craig	7.6
642	Elia Kazan	7.86666667
653	Eric Bress	7.7
	Eugenio Derbez	7.6
	Fabián Bielinsky	7.9
688	Fernando León de Aranoa	7.7
	Fernando Meirelles	7.6
702	François Girard	7.7
711	Frank Capra	8.06
713	Frank Darabont	7.975
715	Frank Lotito	8.2
730	Fred Zinnemann	7.76
732	Fritz Lang	8.3
739	Gareth Evans	7.6
765	Georg Wilhelm Pabst	8
769	George Cukor	7.9
778	George Roy Hill	8.2
70/	Giovanni Zelko Sheeta IMDR Movies Sh	neat1 / Sheat? / Sheat6 / S

Insights:- These highlighted rows are the top directors whose movies scored highed han the percentile average imdb score which is 7.5.

E. Budget Analysis

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



Insights: Higher budgets generally lead to higher gross earnings, but the profit margin is not solely dependent on the budget.

5. Insights

Summary: The analysis reveals several key factors influencing movie success on IMDB:

- Drama genres tend to receive higher ratings.
- Longer movies have slightly higher ratings.
- English language movies are generally rated higher.
- Directors with a track record of success significantly influence movie ratings.
- Higher budgets correlate with higher gross earnings, but other factors also affect profitability.

Actionable Insights:

- Producers should focus on drama genres and invest in longer, high-quality productions.
- Selecting successful directors can enhance a movie's chances of receiving higher ratings.
- While budgeting is important, focusing on overall quality and audience experience is crucial for profitability.

6. Results

Achievements: The project provided a comprehensive understanding of the factors influencing movie success on IMDB. The insights gained can guide producers, directors, and investors in making informed decisions for future projects.

Impact: The findings highlight the importance of genre, duration, language, and director choice in a movie's success, offering actionable strategies for the movie industry.

Excel workbook link:-

https://docs.google.com/spreadsheets/d/12UBbDIYMz45Y7KFdHeQwIcr8joxMxHD6/edit?usp=drive_link&ouid=101458483477908669666&rtpof=true&sd=true