

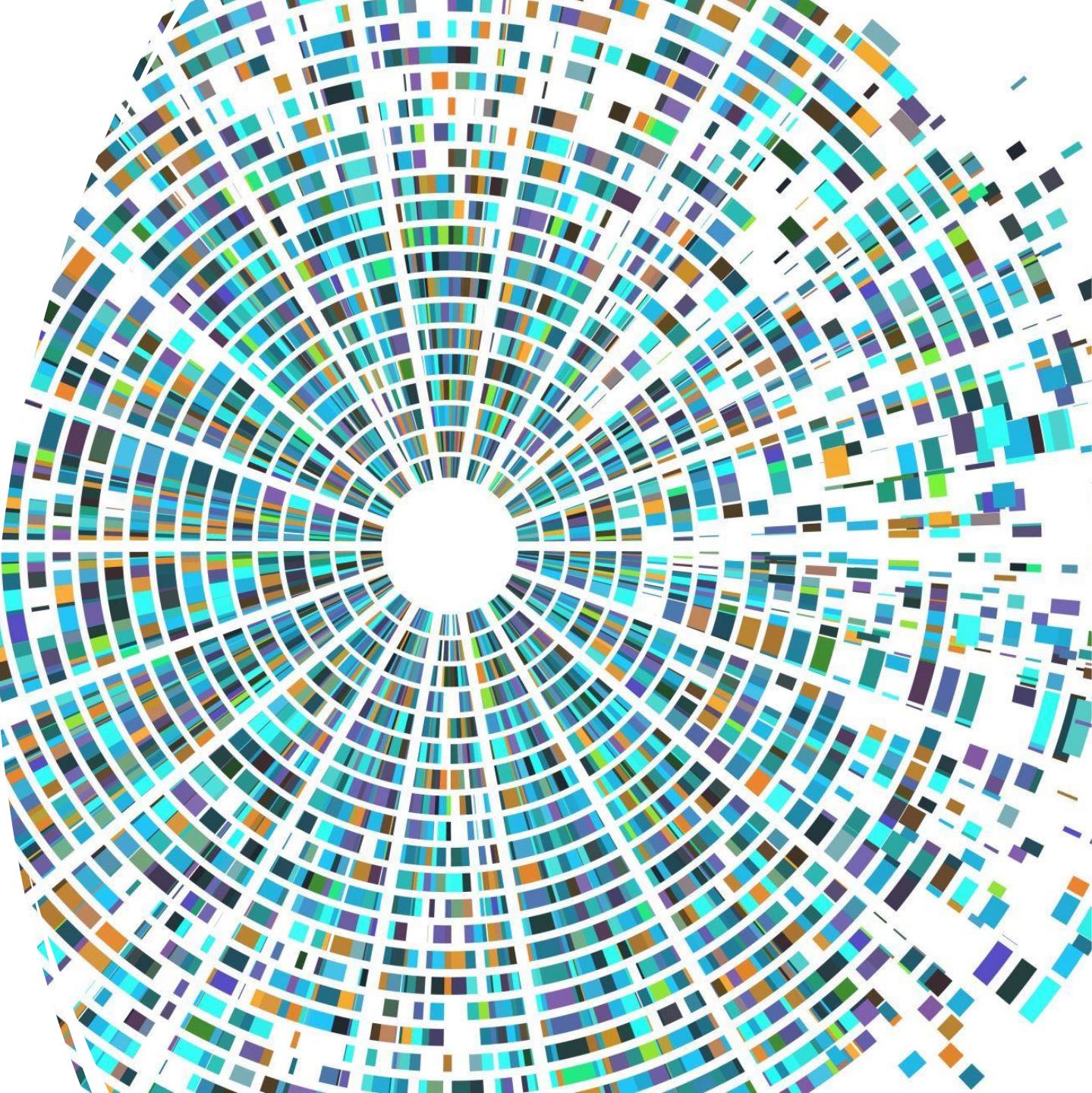
Warner Brothers Data Analysis

MGMT 635101 Fall 2023

Green Team
Aditya, Mehul, Sreya,
Suchita, Thanmai,
Volney

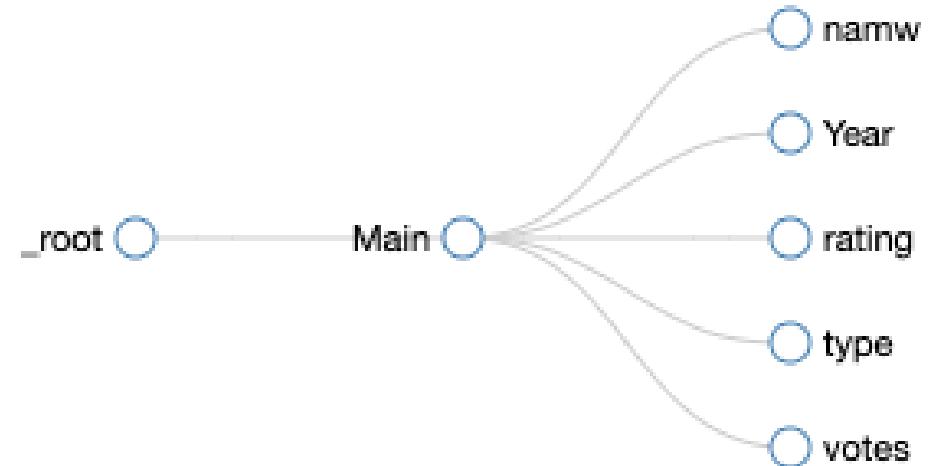
Warner Bros. IMDB Analysis

- Data Extraction
- Data Exploration
- Business Analysis
- Theatricals Analysis
- Key Inferences



Data Collection:

- 40,000 Data instances
Captured using web scraping tools.
- Blank & incorrect instances
Corrected
- Correct Data types
formatted



Data Exploration :

- All the instances modified to usability
- New column named Weighted rating created to counter the influenced rating

Index	Name	Year	Rating	Type	Votes	Influence of votes	Weighted rating
39052	The Rosie O'Donnell Show	1996	1	TV Episode	11	Influenced	2
39053	Episode dated 10 October 1996	1996	1	TV Episode	11	Influenced	2
39124	The Rosie O'Donnell Show	1996	1	TV Episode	13	Influenced	2
39125	Episode dated 20 October 1996	1996	1	TV Episode	13	Influenced	2
39132	The Rosie O'Donnell Show	1996	1	TV Episode	16	Influenced	2
39133	Episode dated 5 December 1996	1996	1	TV Episode	16	Influenced	2
39166	The Rosie O'Donnell Show	1996	1	TV Episode	13	Influenced	2
39167	Episode dated 10 January 2000	1996	1	TV Episode	13	Influenced	2
39094	The Rosie O'Donnell Show	1996	1.1	TV Episode	17	Influenced	2.2
39095	Episode dated 28 September 1996	1996	1.1	TV Episode	17	Influenced	2.2
37578	Red Bird Lane	2021	1.1	TV Movie	15	Influenced	2.2
39110	The Rosie O'Donnell Show	1996	1.2	TV Episode	12	Influenced	2.4
39111	Episode dated 14 March 2000	1996	1.2	TV Episode	12	Influenced	2.4
39148	The Rosie O'Donnell Show	1996	1.2	TV Episode	16	Influenced	2.4
39149	Episode dated 13 February 1996	1996	1.2	TV Episode	16	Influenced	2.4
39160	The Rosie O'Donnell Show	1996	1.2	TV Episode	12	Influenced	2.4
39161	Episode dated 4 December 1996	1996	1.2	TV Episode	12	Influenced	2.4
39098	The Rosie O'Donnell Show	1996	1.3	TV Episode	15	Influenced	2.6
39099	Episode dated 5 November 1996	1996	1.3	TV Episode	15	Influenced	2.6
39170	The Rosie O'Donnell Show	1996	1.3	TV Episode	12	Influenced	2.6
39171	Episode dated 12 April 2002	1996	1.3	TV Episode	12	Influenced	2.6
37592	Spaced	2008	1.3	TV Movie	433	Influenced	2.5
39072	The Rosie O'Donnell Show	1996	1.4	TV Episode	12	Influenced	2.8

Business Analysis

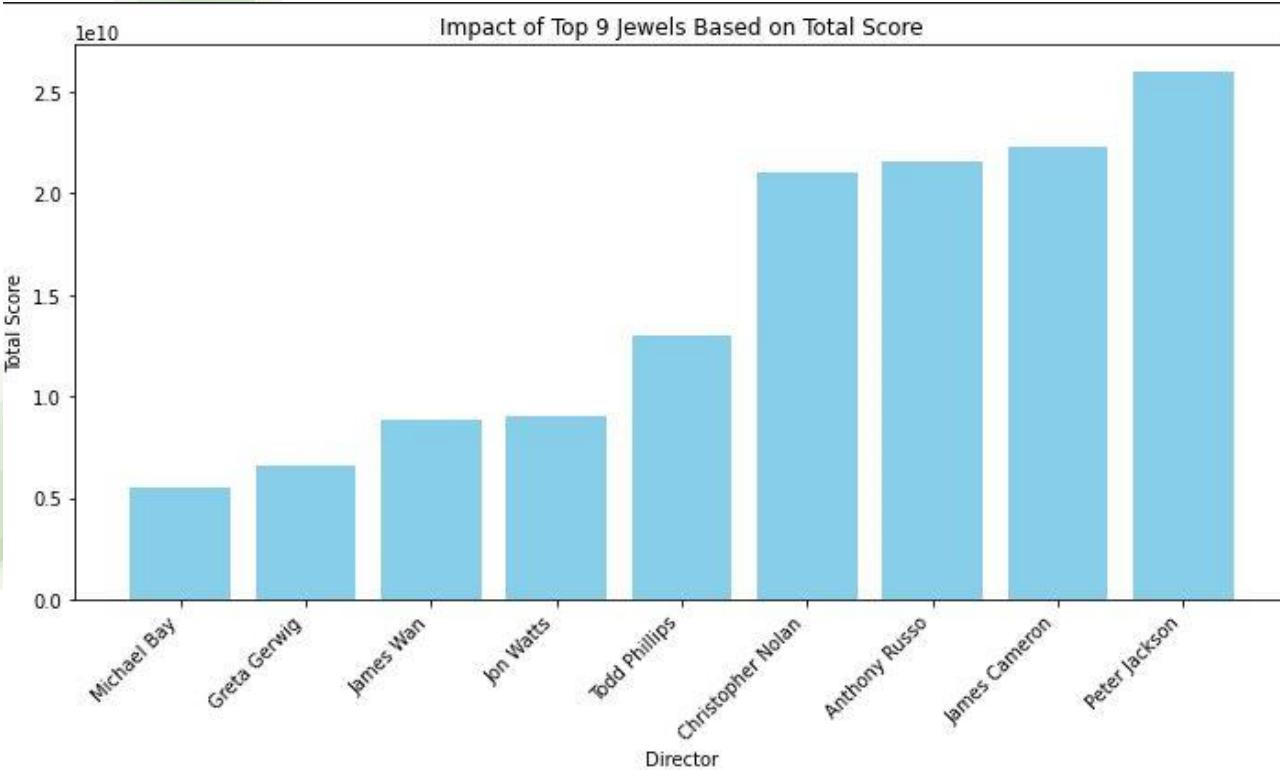
During analysis the Ratings, voting and year were the prominent factors to evaluate all our questions from Data

Index	Name	Year	Rating	Type	Votes	Influence of votes	Weighted rating
39052	The Rosie O'Donnell Show	1996	1	TV Episode	11	Influenced	2
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39160	The Rosie O'Donnell Show	1996	1.2	TV Episode	12	Influenced	2.4
39161	Episode dated 4 December 1996	1996	1.2	TV Episode	12	Influenced	2.4
39098	The Rosie O'Donnell Show	1996	1.3	TV Episode	15	Influenced	2.6
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39170	The Rosie O'Donnell Show	1996	1.3	TV Episode	12	Influenced	2.6
39171	Episode dated 12 April 2002	1996	1.3	TV Episode	12	Influenced	2.6
37592	Spaced	2008	1.3	TV Movie	433	Influenced	2.5
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The 9 Jewels Of Warner Bros

Identification of Key Directors

1. Based on the Optimized Weighted rating
2. A model was developed to identify the key Directors who bring money, reputation , recognition of combination of all.
3. Rating, Global Revenue, Oscars, awards and budget we assigned weights to identify the Directors

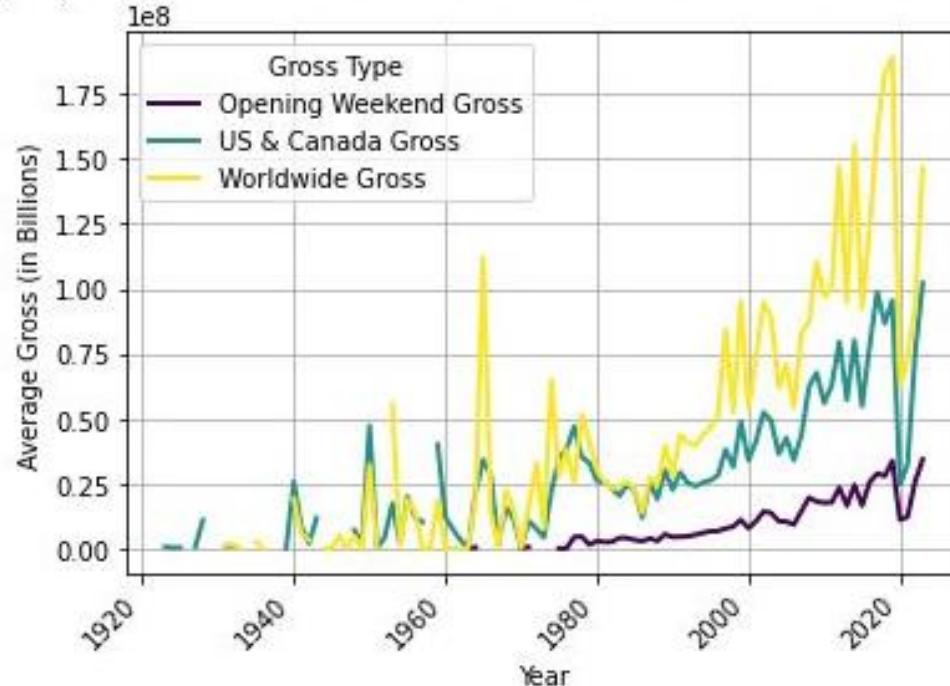


Source of Capital

The region of Money

1. Based on Evaluation of US & Canada gross vs Worldwide gross
2. For a movie to bring money it must perform good in terms of business in US & Canada Market
3. That big drop in 2020 is the effect of Covid-19

Average Opening Weekend, US & Canada Gross, and Worldwide Gross Over the Years





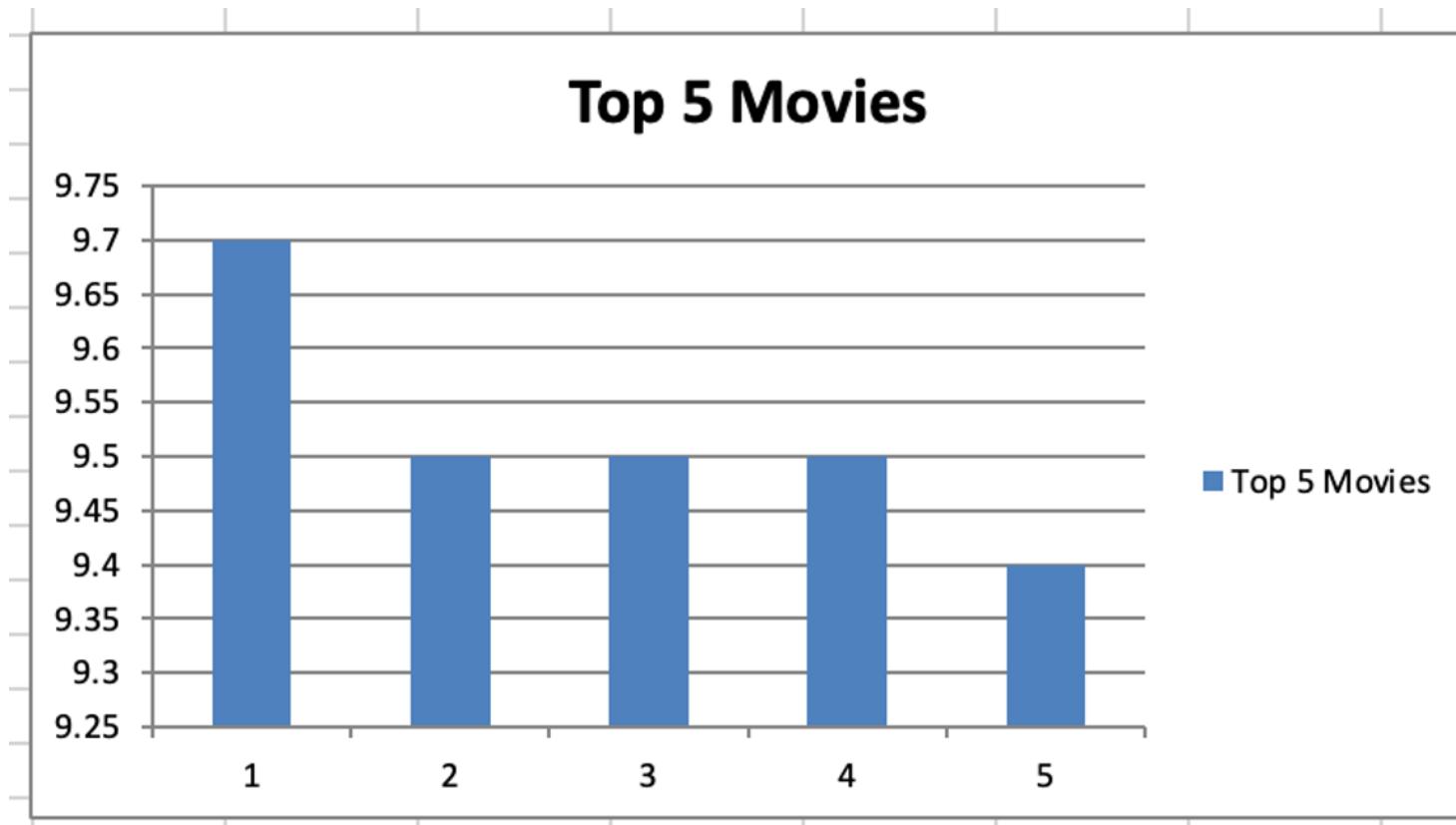
Top 5 Warner Brothers Movies Since 2000

Top 5 Movies - Titles and Ratings

1. The Lord of the Rings: The Return of the King - Special Extended Edition Scenes - Rating: 9.7
2. The Lord of the Rings: The Two Towers - Special Extended Edition Scenes - Rating: 9.5
3. Dominic Monaghan Interviews Elijah Wood - Rating: 9.5
4. The Lord of the Rings: The Fellowship of the Ring - Special Extended Edition Scenes - Rating: 9.5
5. Town Bizzness Pt 3 - Rating: 9.4

Suchita

Movie Ratings Distribution



Suchita

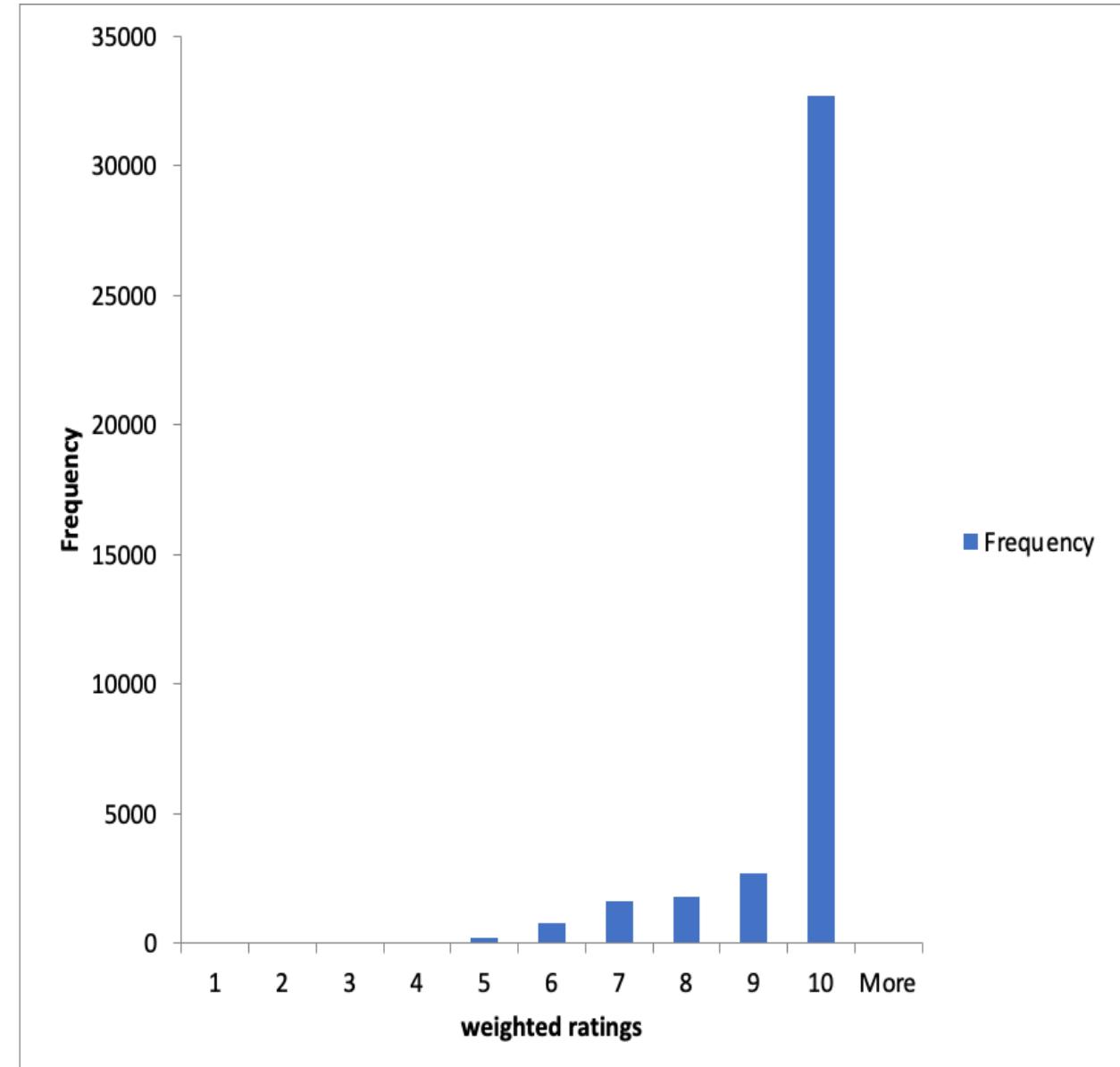


Movie Ratings Distribution

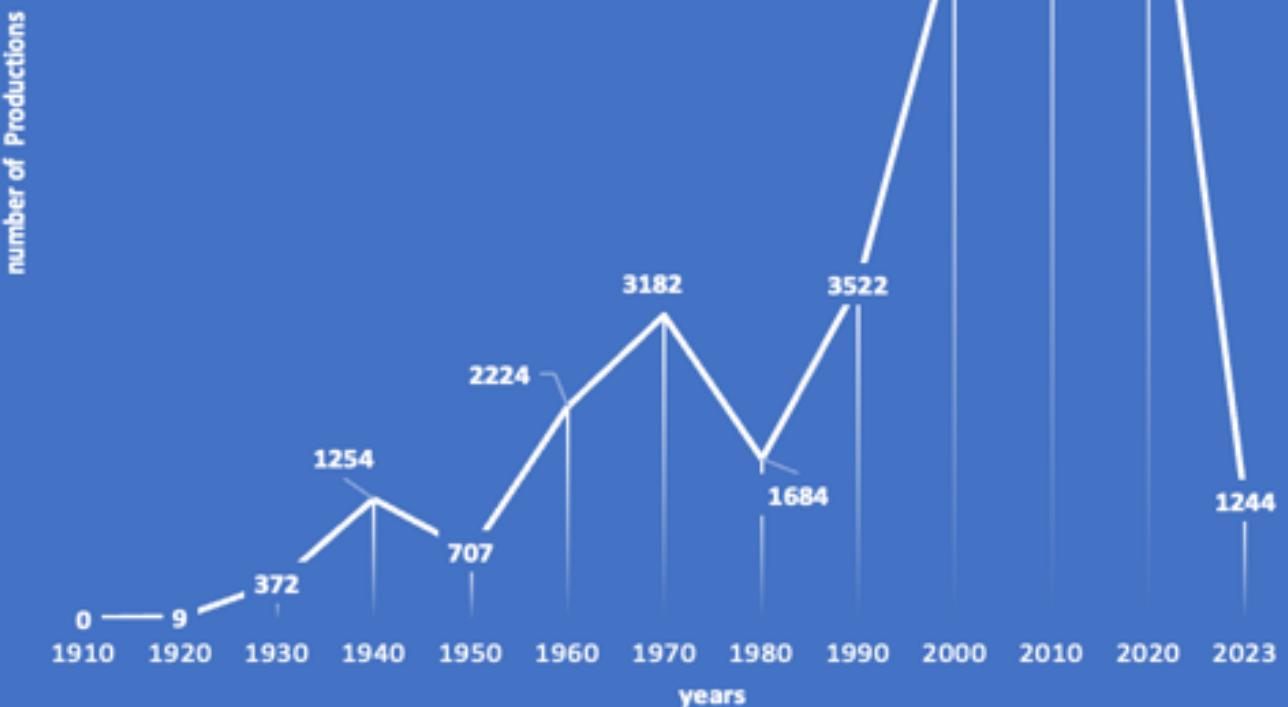
- Shows the ratings of the top 5 Warner Brothers movies since 2000.
- Ratings range from 9.4 to 9.7, indicating high critical acclaim.
- The highest-rated movie significantly surpasses others.

Hits by Warner Bros.

1. Total number of hits (rating 7-10) - 37152 (93%)
2. Total number of moderate movies (rating 5-7) - 2407 (6.03%)
3. Total number of Flops (rating 0-5) - 356 (0.89%)



Content produced by Warner Bros till date.



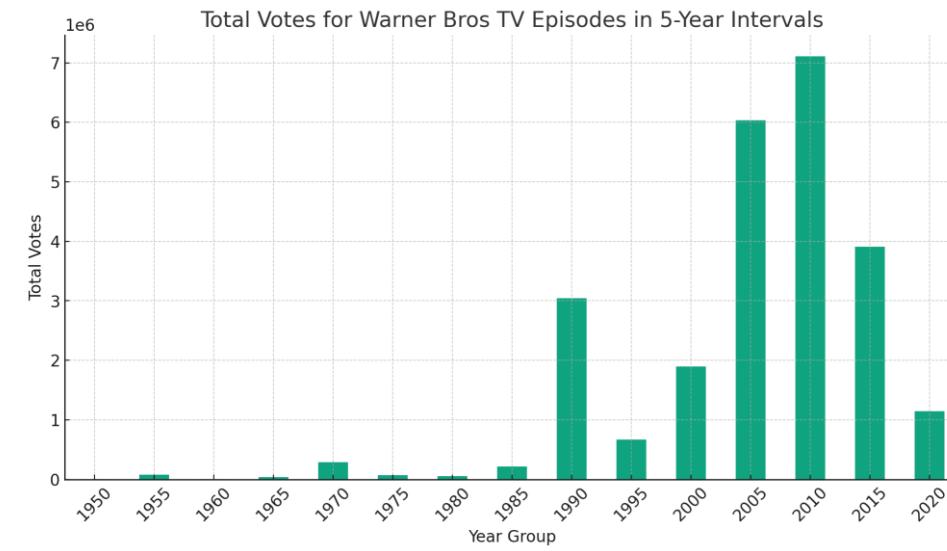
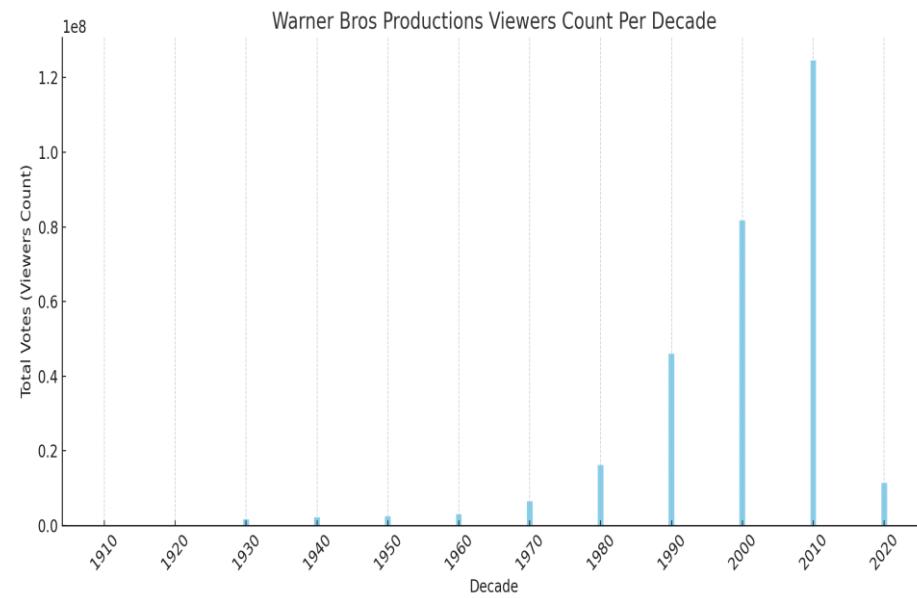
- The overall increase in number of content produced by Warner Bros. seems to be linear.
- During the 90s, the production almost doubled, which could be the result of mergers like Time Warner's acquisition of Turner Broadcasting System in 1996 brought additional content into the Warner portfolio.
- We can observe the effects of covid on the film industry. Though the decade 2020-2030 is not over but still the number 1244 productions seems to be low.

TREND ANALYSIS FOR REAL TIME CORRELATION

Thanmai

Q. Analyzing viewers for every 5 or 10 years whether they are increasing or decreasing for particular TV episodes

Warner Bros Productions and their viewers – For 10 years and 5 years



Thanmai

Graph Explanation

- For the 5-year grouping, the correlation coefficient between the years and the viewer counts is roughly 0.73, indicating a high positive correlation and pointing to a general pattern of rising viewer numbers over time.
- The correlation coefficient for the 10-year grouping is roughly 0.65, which also shows a positive connection—albeit one that is marginally less than for the 5-year grouping but nevertheless points to an overall rise of viewers over time.
- It is noteworthy to acknowledge that there has been a notable decline of viewers over the most recent period (2020). This might be the result of missing information for the current decade, shifting TV viewing preferences, or other outside variables this dataset does not include.
- In summary, there appears to be a general upward tendency in viewership across time, with a discernible decline in the most recent period of record.

Q. Analyze the data and categorize highest and lowest rating TV episodes

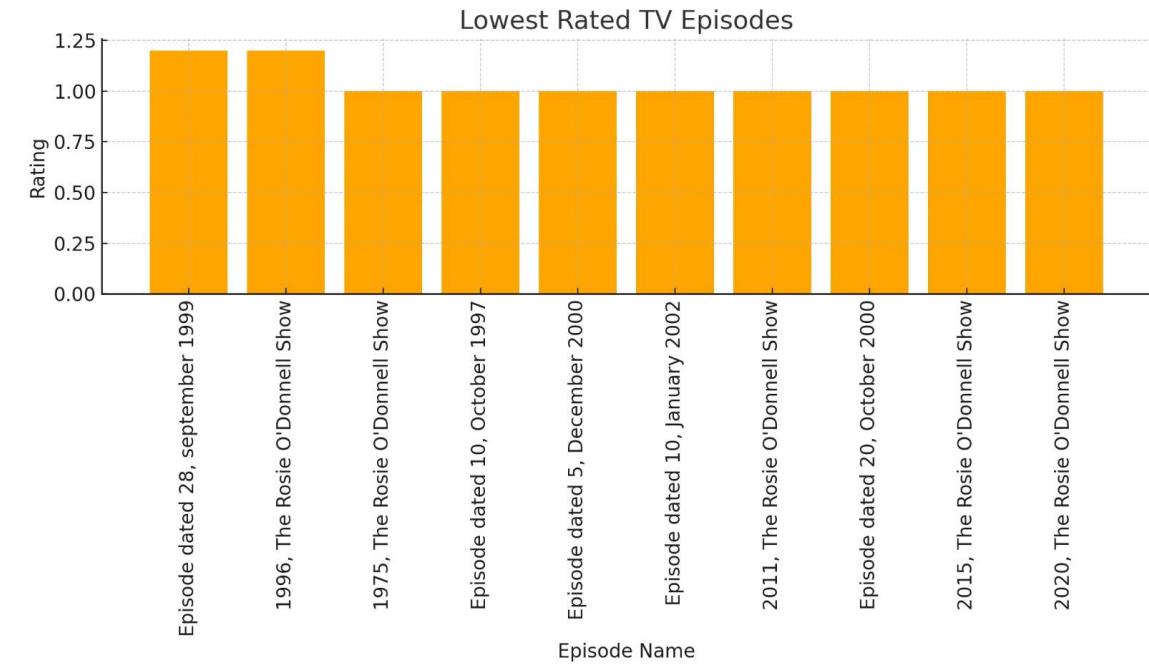
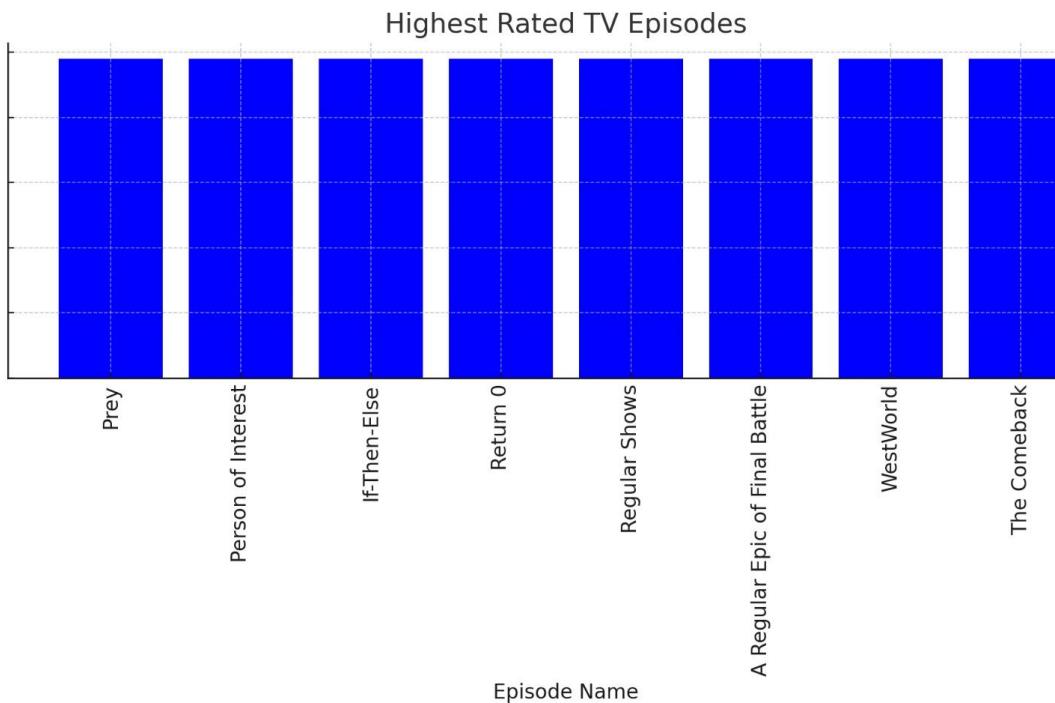
TV Episodes – Top 5 Highest and Lowest Rated

RatingCategory	Episode Name	Numerical Data Rating
Lowest	Episode dated 28, september	1.2
Lowest	1996, The Rosie O'Donell Show	1.2
Lowest	1975, The Rosie O'Donell Show	1
Lowest	Episode dated 10, October 19	1
Lowest	Episode dated 5, December 2	1
Lowest	Episode dated 10, January 2000	1
Lowest	2011, The Rosie O'Donell Show	1
Lowest	Episode dated 20, October 20	1
Lowest	2015, The Rosie O'Donell Show	1
Lowest	2020, The Rosie O'Donell Show	1

RatingCategory	Episode Name	Numerical Data Rating
Highest	Prey	9.8
Highest	Person of Interest	9.8
Highest	If-Then-Else	9.8
Highest	Person of Interest	9.8
Highest	Return 0	9.8
Highest	Regular Shows	9.8
Highest	A Regular Epic of Final Battle	9.8
Highest	WestWorld	9.8
Highest	The Comeback	9.8

This table lists the top 5 highest and lowest rated episodes, with '1. Prey', '2. Person of Interest', 'If-Then-Else', and others sharing the top spot with a rating of 9.8, while several episodes of "The Rosie O'Donnell Show" are tied for the lowest rating at 1.0.

TV Episodes Rating Distribution



Thanmai

Graph Explanation

The following findings were obtained by analyzing the greatest and lowest rated TV programs from the supplied data and using trend analysis for real-time correlation:

Highest Rated Episodes:

These are the episodes in the dataset that have received the highest numerical ratings. They all have the same rating of 9.8, which is the highest in the dataset.

Lowest Rated Episodes:

In contrast, these episodes receive the lowest ratings (1.0) across the sample. It's noteworthy that "The Rosie O'Donnell Show" consistently receives the lowest ratings.

Average Rating Per Year:

The average annual numerical rating of TV episodes is displayed by this trend. The average ratings change over time, and the years span from 1914 to 2020. The dataset's most recent year, 2020, has an average rating of almost 6.57.

Real-Time Correlation for Trend Analysis:



- The real-time correlation shows the relationship between the average TV episode ratings and the passage of time.
- The somewhat positive correlation implies that there is a general trend toward rising ratings over time, however this trend is not unambiguously upward and is subject to change because of various factors.
- The information indicates that although TV episode ratings have been rising over time, this trend has not been steady throughout all years and may be impacted by other variables not included in this dataset.
- Additional data points, such viewership figures, episode air dates, and contextual details about the TV shows, would be helpful for a more accurate study.

Warner Brothers Theatricals Analysis

Volney



Modeling for ROI?



Warner Brothers Theatricals Analysis

Volney

upwork

Hi Volney,

Congratulations on your new freelancer hire! Dagmawi M.'s contract for [Programmer to scrape the web and populate a spreadsheet on movie data](#) started on Dec 06, 2023 UTC. Here are the details:

Contract information	
Freelancer	Dagmawi M.
Hiring Manager	Volney S.
Job Type	Fixed Price
Agreed Amount	\$ [REDACTED]

The Contract Room is a centralized place where you can collaborate with your freelancer. Here you can send messages, use video chat, track time and payments, and access the Work Diary.

[View Contract Room](#)

Cover letter
Hey, I've built an IMDB scraper before and I can pull the data for you. I can also use box office mojo or any other site you prefer. I guarantee [more](#).

[View Full Proposal](#)

Thanks,
The Upwork Team

Thanks for your time,
The Upwork Team

Hired Engineer

A Index	B Name	C Year	D Budget	E Genre Num	F Ld Atcr Num	G MPAA RTG Num	H Director Rev Num	I Awards	J Oscar Wins	K Opening Weekend G	L US & Canada G	M ENSEMBLE SCO	N Gross % of Budget	O Worldwide Gross
1	The Shawshank Red	1994	25000000	24	515	2	136	21	0				847	0.0
2	The Dark Knight	2008	18500000	10	7	1	4	162	2				3583	0.0
3	The Lord of the Ring	2003	94000000	4	5	1	1	215	11				2037	0.0
4	Pulp Fiction	1994	8000000	71	32	2	70	69	1				3333	0.0
5	The Lord of the Ring	2001	93000000	4	5	1	1	125	4				1684	0.0
6	Inception	2010	16000000	1	3	1	4	159	4				2272	0.0
7	The Lord of the Ring	2002	94000000	4	5	1	1	132	2				2081	0.0
8	From Borehamwood	2014	\$9301	212	1411	18	1530	0	0				2787	0.0
9	Muse - Live at Rome	2013		193	1411	6	1530	0	0				1409	0.0
10	Interstellar	2014	16500000	25	38	1	4	44	1				1301	0.0
11	GoodFellas	1990	25000000	74	60	2	76	44	1				1224	0.0
12	The Matrix	1999	6300000	16	14	2	32	42	4				2106	0.0
13	Foals Live at the Ro	2013	147214	256	1411	6	1530	0	0				1359	0.0
14	Seven	1995	3300000	20	46	2	38	29	0				727449	2849.00
15	The Green Mile	1999	60000000	90	13	2	136	15	0				599	0.0
16	Tom Petty and the H	2007		193	1411	6	341	0	0				2727	0.0
17	Django Unchained	2012	10000000	67	111	2	70	58	2				1278	0.0
18	The Prestige	2006	40000000	76	7	1	4	6	0				1529	0.0
19	The Departed	2006	90000000	17	3	2	76	98	4	815812	1900000	1851	0.0	1900000
20	American History X	1998	20000000	71	148	2	699	4	0	942814	2517600	1738	0.0	2517600
21	Casablanca	1942	950000	128	695	3	1010	14	3	308499	1152117	1829	0.4	1152117
22	Joker	2019	55000000	17	29	2	6	121	2				3470	0.0
23	Avengers: Endgame	2019	356000000	4	1	1	3	70	0				2602	0.0
24	The Dark Knight Risi	2012	25000000	21	7	1	4	43	0				3489	0.0
25	The Shining	1980	19000000	163	67	2	139	6	0				3248	0.0
26	Avengers: Infinity W	2018	321000000	1	1	1	3	46	0				2379	0.0
27	Amadeus	1984	18000000	28	424	9	323	43	8	40489746	251409241	3116	11.8	411569241
28	Queen of the Night i	1929		24	1411	10	1530	0	0	100137835	317101119	2454	4.3	790653942
29	The Reggae Movie	1995		193	1411	2	95	0	0	52784433	184069126	3794	3.4	336567158
30	Heat	1995	60000000	10	106	4	139	17	1				3265	0.0
31	2001: A Space Odyss	1998	12000000	154	385	9	139	12	0				140980	1192.00
32	A Clockwork Orange	1971	22000000	194	567	2	139	8	0				2995	0.0
33	Full Metal Jacket	1987	30000000	110	334	2	1024	11	0				2194	0.0
34	Once Upon a Time II	1984	30000000	71	60	18	852	6	0				1579	0.0
35	Ayla	2017		44	713	6	1494	4	0				2289	0.0
36	The Cranes Are Flyin	1957		128	1344	1	655	54	0	8611147	37491364	2587	2.0	122426792
37	Won't You Be My Ne	2018		191	585	18	804	0	0	11053366	25020758	3545	0.9	94320758
38	Gintama the Movie:	2013		187	670	3	1530	0	0	7543504	25052000	2860	0.4	25052000
39	AC/DC Let There Be	1980		193	1411	18	1530	0	0				1647	0.0
40	Wembley - Football	2013		199	1411	18	1530	0	0				0.0	0.0
78	Ben-Hur	1959	15000000	127	357	6	1530	5	0	0	13931	37189	0.2	2783332
79	Before Sunset	2004	2700000	12	396	18	1530	0	0				3762	0.0
82	Woodstock	1970	600000	293	1237	18	1530	0	0				2718	0.0
83	The Bandit	1996	1200000	17	724	18	1530	0	0				0.0	0.0
84	Her Sey Cok Güzel O	1998		912	528	18	1530	0	0				2503	0.0
85	Au coeur de la vie	1963		110	1411	18	1145	0	0				2073	0.0
86	Chicago 70	1970	40000	24	1411	1	235	1	0	122744989	315058289	1419	4.8	855301806
87	Ry Cooder & The Mo	1988		212	1411	1	1501	0	0	36206331	128261724	2766	5.1	414351546
88	Dune	2021	165000000	4	115	18	1530	0	0				0.0	0.0
89	Blade Runner 2048	2017	15000000	80	21	18	1115	0	0	92579212	390532085	2246	6.1	1131927996
90	JFK	1991	40000000	61	18	18	1530	1	0	53505326	14048049	1305	0.0	367799011
91	The Revenant	2015	135000000	4	3	18	1364	0	0	53505326	14048049	978	3.7	367799011
92	The Martian	2015	108000000	25	35	18	1530	0	0	75812205	216648740	38	622674139	
93	La La Land	2016	30000000	47	103	18	1530	0	0	17248545	101631272	4406	2.4	183031272
94	Deadpool	2016	58000000	31	20	2	1132	0	0	36169328	404540171	2978	11.1	955339117
95	Her	2013	23000000	65	29	2	1530	0	0	17005332	69268230	1084	3.2	11766230
96	Black Swan	2010	13000000	35	151	3	9	0	0	25398367	135384756	15.0	202084756	
97	Beauty and the Bea	1991	25000000	58	113	18	1530	0	0	54592779	179020854	2.9	654213485	
98	Magnolia	1999	37000000	24	25	6	1269	0	0			1784	0.0	1753823
99	Blood Diamond	2006	10000000	111	3	18	1530	0	0	4739913	25093810	1206	1.0	25893810
100	Life of Brian	1970	40000000	0	619	1	106	1	0			1033	0.0	0.0

Compiled Data

Warner Brothers Theatricals Analysis

Volney

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	Actor Index	Dir Index	Rating Index	Genre Index	Actor ENS SCR		
title index																									
1	The Shawshank Redemption					1 Peter Jackson				1 PG-13		1 Action Adventure Sci-Fi				Aksel Hei	1								
2	The Dark Knight		1 Robert Downey Jr.			2 Daniel Radcliffe	2 James Cameron			2 R		2 Animation Adventure Comedy				Shu Chei	1								
3	The Lord of the Rings		3 Leonardo DiCaprio			3 Anthony Russo, Joe Russo	4 Christopher Nolan			3 PG		4 Action Adventure Comedy				Babs Olu	3								
4	Pulp Fiction		4 Sam Worthington			5 Elijah Wood	6 Dwayne Johnson			5 (blank)		5 Action Adventure Fantasy				Benjamin	3								
5	The Lord of the Rings		5 David Yates			6 Todd Phillips	7 Christian Bale			6 Not Rate		6 Adventure Family Fantasy				Souad F	3								
6	Inception					7 Bryan Singer	8 Clint Eastwood			7 TV-MA		7 Comedy Drama Romance				Danai Gu	4								
7	The Lord of the Rings		8 Will Smith			9 Christian Bale	10 George Clooney			8 TV-14		8 Comedy Romance				Allen Coll	6								
8	From Borehamwood					10 Steven Spielberg	11 Adam Sandler			9 X		9 Comedy				Jean-Mic	6								
9	Muse - Live at Rom					10 Tim Burton	11 Ben Affleck			10 Passed		10 Action Crime Drama				Jim Boles	6								
10	Interstellar					11 Jake Gyllenhaal	12 Jon Hamm			11 Unrated		11 Adventure Comedy Family				Alli Astin	7								
11	GoodFellas					12 Ryan Reynolds	13 Tom Hanks			12 GP		12 Drama Romance				Alistair Br	7								
12	The Matrix					13 James Wan	14 Keanu Reeves			13 TV-G		13 Action Comedy Crime				Jason Fit	7								
13	Foals Live at the Ro					14 Ridley Scott	15 Sandra Bullock			14 Approved		14 Animation Action Adventure				Richard E	7								
14	Seven					15 Barry Sonnenfeld	16 Tom Holland			15 TV-PG		15 Horror Mystery Thriller				Sadwyn F	7								
15	The Green Mile					16 Zack Snyder	17 M. Night Shyamalan			16 NC-17		16 Action Sci-Fi				Chieh Ho	8								
16	Tom Petty and the I					17 Richard Donner	18 Alfonso Cuarón			17 Crime Drama Thriller		18 Action Crime Thriller				Chih-Ju L	8								
17	Django Unchained					18 Alfonso Cuarón	19 Steven Soderbergh			19 Comedy Crime		19 Crime Drama Thriller				Doze Niu	8								
18	The Prestige					19 Steven Soderbergh	20 Marc Webb			20 Crime Drama Mystery		20 Crime Drama Mystery				Emerson	8								
19	The Departed					21 Andy Muschietti	22 Bradley Cooper			21 Action Drama Thriller		21 Action Drama Thriller				Ethan Ju	8								
20	American History X					22 Chris Columbus	23 Greta Gerwig			22 Action Adventure Thriller		22 Action Adventure Thriller				Feng Hsii	8								
21	Casablanca					23 Greta Gerwig	24 Margot Robbie			23 Adventure Fantasy		23 Adventure Fantasy				Han Dian	8								
22	Joker					24 Matt Reeves	25 Tom Cruise			24 Drama		24 Drama				Hsu-Ling	8								
23	Avengers: Endgame					25 Raja Gosnell	26 Mel Gibson			25 Adventure Drama Sci-Fi		25 Adventure Drama Sci-Fi				Ju-Lung	8								
24	The Dark Knight Ris					26 Genndy Tartakovsky	27 Brad Pitt			26 Comedy Drama		26 Comedy Drama				Kim-Ning	8								
25	The Shining					27 Andrew Garfield	28 Johnny Depp			27 Action Adventure Family		27 Action Adventure Family				Mark Cha	8								
26	Avengers: Infinity W					28 Carlos Saldanha	29 Joaquin Phoenix			28 Biography Drama Music		28 Biography Drama Music				Mark Chas	8								
27	Amadeus					29 Michael Bay	30 Brad Pitt			29 Adventure Drama Fantasy		29 Adventure Drama Fantasy				Shih-Sia	8								
28	Queen of the Night					30 Wolfgang Petersen	31 James McAvoy			30 Action Adventure		30 Action Adventure				Yu-Chieh	8								
29	The Reggae Movie					31 Matthew Vaughn	32 John Travolta			31 Action Comedy		31 Action Comedy				Adriano F	9								
30	Heat					32 Liana Wachowski, Lilly Wachowski	33 Shawn Levy			32 Action Sci-Fi Thriller		32 Action Sci-Fi Thriller				Aldo Farci	9								
31	2001: A Space Odys					33 Chris Hemsworth	34 Hugh Jackman			33 Adventure Comedy Fantasy		33 Adventure Comedy Fantasy				Giancarla	9								
32	A Clockwork Orange					34 Robert Zemeckis	35 Matt Damon			34 Horror		34 Horror				Guilu Do	9								
33	Full Metal Jacket					35 George Lucas	36 Joel Schumacher			35 Drama Thriller		35 Drama Thriller				Giuseppe	9								
34	Once Upon a Time					36 The Cranes Are Fly	37 Ben Stiller			36 Action Adventure Crime		36 Action Adventure Crime				Guerrino	9								
35	Ayla					37 Jason Momoa	38 Matthew McConau			37 Party Jenkins		37 Crime Thriller				Marcello	9								
36	The Cranes Are Fly					38 David Fincher	39 Brett Ratner			38 Biography Drama History		38 Biography Drama History				Mario Bar	9								
37	Won't You Be My Na					39 Jackie Chan	40 Jackie Chan			39 Drama Fantasy Romance		39 Drama Fantasy Romance				Nito Cost	9								
38	Gintama the Movie					40 David F. Sandberg	41 Arnold Schwarzeneg			40 Horror Thriller		40 Horror Thriller				Renato M	9								
39	AC/DC: Let There E					41 Wes Ball	42 Mike Newell			41 Comedy Drama Family		41 Comedy Drama Family				Riccardo	9								
40	Wembley - Football					42 Eddie Redmayne	43 Sam Raimi			42 Action Comedy Fantasy		42 Action Comedy Fantasy				Tino Soco	9								
41	Ben-Hur					44 Edward Zwick	45 Martin Freeman			43 Action Thriller		43 Action Thriller				Belinda C	10								
42	Before Sunset					45 Gail Gadot	46 Morgan Freeman			44 Drama Fantasy Horror		44 Drama Fantasy Horror				Cesáreo	10								
43	Woodstock					46 Steve Martino, Michael Thurmeyer	47 Jesse Eisenberg			45 Action Biography Drama		45 Action Biography Drama				Franisco	10								
44	The Bandit					47 James Mangold	48 Taika Waititi			46 Action Horror Sci-Fi		46 Action Horror Sci-Fi				Francisco	10								
45	Her Sey Çırı Güzeli					49 Dylan O'Brien	50 Ang Lee			47 Comedy Drama Music		47 Comedy Drama Music				Francisco	10								
46	Au cœur de la vie					50 Tobeey Maguire	51 Rami Malek			48 Drama Family		48 Drama Family				Francisco	10								
47	Chicago 70					51 David Ayer	52 Jay Roach			49 Biography Drama		49 Biography Drama				Francisco	10								
48	Ry Cooper & The M					52 Jay Roach	53 Kevin Reynolds			50 Action Drama History		50 Action Drama History				Francisco	10								
49	Deadpool					53 Lou Diamond	54 Robert Pattinson			51 Drama Sci-Fi Thriller		51 Drama Sci-Fi Thriller				Francisco	10								
50	JFK					54 Lorraine Bracco	55 Tim Miller			52 Action Adventure Horror		52 Action Adventure Horror				Francisco	10								
51	The Revenant					55 Tim Miller	56 Sarah Jessica Park			53 Adventure Drama Family		53 Adventure Drama Family				Francisco	10								
52	The Martian					56 Alejandro G. Iñárritu	57 Guillermo del Toro			54 Adventure Comedy Drama		54 Adventure Comedy Drama				Francisco	10								
53	La La Land					58 Bruce Willis	59 Julia Roberts			55 Action Mystery Sci-Fi		55 Action Mystery Sci-Fi				Francisco	10								
54	Deadpool					59 Tim Miller	60 Morgan Freeman			56 Drama Sport		56 Drama Sport				Francisco	10								
55	Her					60 Patrick Stewart	61 Alejandro G. Iñárritu			57 Action Comedy Mystery		57 Action Comedy Mystery				Francisco	10								
56	Black Swan					61 Alejandro G. Iñárritu	62 Denzel Washington			58 Animation Family Fantasy		58 Animation Family Fantasy				Francisco	10								
57	Beauty and the Be					62 Denzel Washington	63 Alec Baldwin			59 Action Adventure Mystery		59 Action Adventure Mystery				Francisco	10								
58	Magnolia					63 Alec Baldwin	64 Robert Pattinson			60 Drama Sci-Fi Thriller		60 Drama Sci-Fi Thriller				Francisco	10								
59	Blood Diamond					64 Robert Pattinson	65 Kevin Reynolds			61 Drama Sci-Fi Thriller		61 Drama Sci-Fi Thriller				Francisco	10								

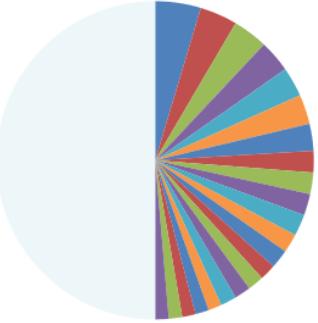
Indexed Values

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	index	YEAR	BUDGET	GENRE	LEAD	MPAA	RTC	DIRECTOR	AWARDS	OSCARs	OPENING	US/CAN	ENSEMBLE	GROSS/BU	GROSS
19	2006	\$ 90,000,000.00		17	3	2	76	98	4	\$ 815,812.00		\$ 1,900,000.00							19	2006	\$ 90,000,000.00		1851	3	\$ 291,480,452.00								
20	1998	\$ 20,000,000.00		71	148	2	699	4	0	\$ 942,814.00		\$ 2,517,600.00							20	1998	\$ 20,000,000.00		1738	0	\$ 2,517,600.00								
21	1942	\$ 950,000.00		128	695	3	1010	14	3	\$ 308,499.00		\$ 1,152,117.00							21	1942	\$ 950,000.00		1829	0	\$ 1,152,117.00								
22	1984	\$ 18,000,000.00		28	424	3	321	43	8	\$ 40,489,746.00		\$ 251,409,241.00							22	1984	\$ 18,000,000.00		3116	12	\$ 411,569,241.00								
23	1970	\$ 40,000.00		111	3	18	1115	0	0	\$ 122,744,989.00		\$ 315,058,289.00</td																					

Warner Brothers Theatricals Analysis

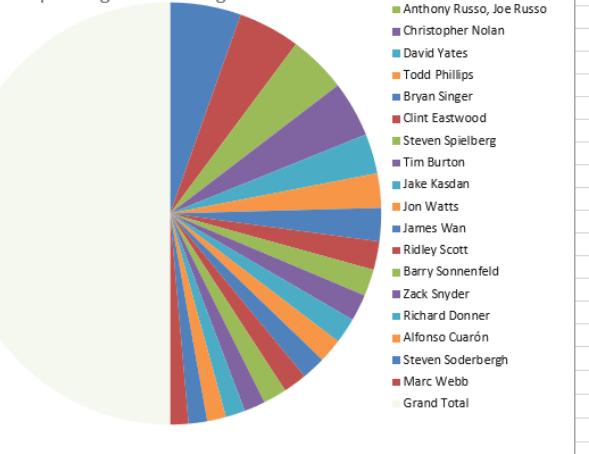
Volney

Top 20 Oscar Winning Directors



- Peter Jackson
- James Cameron
- William Wyler
- George Cukor
- Christopher Nolan
- Martin Scorsese
- Alfonso Cuarón
- Miles Forman
- Ang Lee
- Denis Villeneuve
- Alejandro G. Iñárritu
- Elia Kazan
- Joshua Logan
- Damien Chazelle
- George Miller
- Michael Curtiz
- Kathryn Bigelow
- Michael Anderson, John Farrow
- Robert Benton

Top 20 Highest Grossing Directors

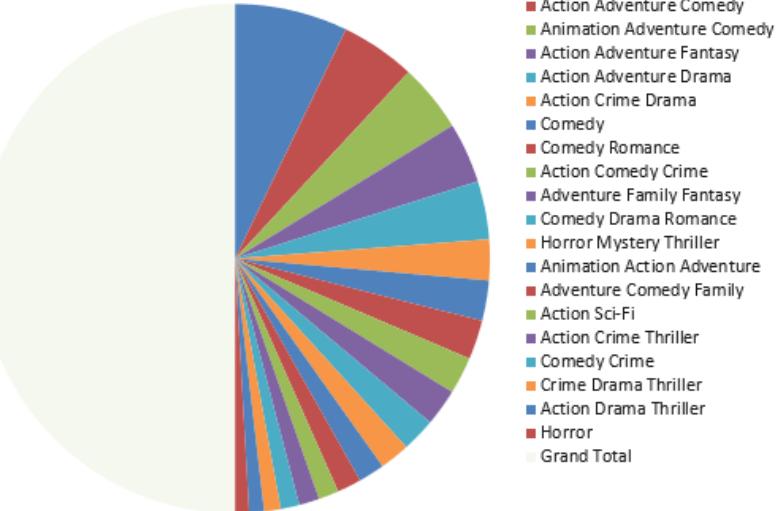


- Peter Jackson
- James Cameron
- Anthony Russo, Joe Russo
- Christopher Nolan
- David Yates
- Todd Phillips
- Bryan Singer
- Clint Eastwood
- Steven Spielberg
- Tim Burton
- Jake Kasdan
- Jon Watts
- James Wan
- Ridley Scott
- Barry Sonnenfeld
- Zack Snyder
- Richard Donner
- Alfonso Cuarón
- Steven Soderbergh
- Marc Webb
- Grand Total

CORRELATION DATA

	YEAR	BUDGET	GENRE	LEAD	MPAA RT	DIR	AWARDS	OSCARS	OPENING	US/CAN	ENS	GROSS/B/L GROSS	
YEAR	1.00												
BUDGET	0.46	1.00											
GENRE	0.32	0.29	1.00										
LEAD	0.63	0.52	0.35	1.00									
MPAA	-0.02	-0.14	-0.04	-0.03	1.00								
DIR	0.08	-0.05	0.06	0.13	0.61	1.00							
AWAR	0.03	0.08	0.04	0.07	0.18	0.26	1.00						
OSC	-0.01	0.05	0.05	0.07	0.09	0.12	0.55	1.00					
OPEN	0.07	0.06	0.02	0.08	-0.06	0.01	0.17	0.12	1.00				
USCAN	0.07	0.07	0.03	0.10	-0.08	-0.02	0.13	0.12	0.90	1.00			
ENS	-0.06	0.03	0.03	0.00	0.07	0.01	0.03	0.02	-0.02	-0.03	1.00		
GROSSBUI	0.02	0.01	0.03	-0.01	-0.10	-0.02	0.00	0.00	0.09	0.18	-0.04	1.00	
GROSS	0.05	0.04	0.01	0.07	-0.06	-0.01	0.16	0.12	0.89	0.94	-0.02	0.15	1.00

Opening Weekend Gross by Genre



- Action Adventure Sci-Fi
- Action Adventure Comedy
- Animation Adventure Comedy
- Action Adventure Fantasy
- Action Adventure Drama
- Action Crime Drama
- Comedy
- Comedy Romance
- Action Comedy Crime
- Adventure Family Fantasy
- Comedy Drama Romance
- Horror Mystery Thriller
- Animation Action Adventure
- Adventure Comedy Family
- Action Sci-Fi
- Action Crime Thriller
- Comedy Crime
- Crime Drama Thriller
- Action Drama Thriller
- Horror
- Grand Total



Insights

Warner Brothers Theatricals Analysis

Volney

Opening Weekend							
Regression Statistics							
Multiple R	0.211201772						
R Square	0.044606188						
Adjusted R Sq	0.034158382						
Standard Err	21711353.69						
Observations	833						
ANOVA							
	df	SS	MS	F	Significance F		
Regression	9	1.81128E+16	2.01254E+15	4.269431165	1.96174E-05		
Residual	823	3.87948E+17	4.71383E+14				
Total	832	4.06061E+17					
Coefficients							
	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-62873432.24	81660980.56	-0.769932369	0.441560945	-223161738.9	97414874.44	
X Variable 1	36605.24517	40796.82608	0.897257181	0.369844091	-43472.83037	116683.3207	
X Variable 2	0.000176247	0.021318131	0.008267459	0.993405601	-0.041668059	0.042020553	
X Variable 3	4912.55218	10130.30351	0.484936327	0.627850558	-14971.72039	24796.82475	
X Variable 4	-1750.41818	2046.023713	-0.855521911	0.392511273	-5766.457041	2265.620805	
X Variable 5	369066.4774	160541.5077	2.298885084	0.021761188	53947.4788	684185.4759	
X Variable 6	-719.9830663	1652.499822	-0.435693279	0.66317353	-3963.593374	2523.627241	
X Variable 7	272149.8036	68585.94525	3.968011268	7.87971E-05	137525.8381	406773.769	
X Variable 8	1078328.911	1508533.243	0.714819455	0.474923322	-1882696.507	4039354.33	
X Variable 9	403.2913943	857.7564814	0.470170034	0.638358105	-1280.356451	2086.939239	
Worldwide Gross							
Regression Statistics							
Multiple R	0.200443427						
R Square	0.040177567						
Adjusted R Sq	0.029681332						
Standard Err	191411243.5						
Observations	833						
Coefficients							
	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-163528600.5	719938058.8	-0.227142597	0.820369272	-1576659469	1249602268	
X Variable 1	125565.5061	359672.2397	0.349110919	0.72709534	-580417.3741	831548.3863	
X Variable 2	-0.123777526	0.187944518	-0.658585457	0.510346201	0.492684542	0.245129489	
X Variable 3	42753.07019	89310.59843	0.478700971	0.632278523	-132550.2937	218056.4341	
X Variable 4	-24424.9211	18038.11723	-1.354072645	0.176084885	-59831.05076	10981.20856	
X Variable 5	2899354.851	1415363.134	0.2048488321	0.040828918	121208.439	5677501.262	
X Variable 6	2027.383954	14568.73902	0.139159879	0.889357857	-26568.87453	30623.64244	
X Variable 7	2207366.97	604666.1691	3.650554773	0.000278194	1020497.602	3394236.337	
X Variable 8	13904777.63	13299503.48	1.045511034	0.296093816	-12200161.07	40009716.33	
X Variable 9	4682.845667	7562.137165	0.619248972	0.535923732	-10160.49999	19526.19132	

Regression Statistics							
ANOVA							
	df	SS	MS	F	Significance F		
Multiple R	0.946235036						
R Square	0.895360743						
Adjusted R Sq	0.893289436						
Standard Error	63315831.16						
Observations	833						
Coefficients							
	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	144517491.4	238428425.4	0.60612526	0.544599324	-323484413.8	612519396.7	
Year	-78767.58552	119124.0566	-0.661223163	0.508654946	-312591.5742	155056.4031	
Budget	-0.101442544	0.062175945	-1.63154003	0.103160382	-0.223485295	0.020600207	
Genre	9844.166633	29559.62483	0.338027455	0.739198686	-48177.27406	67865.60732	
Lead	1994.505224	5997.224912	0.332571356	0.739542866	-9777.214867	13766.22531	
MPAA Rtg	77022.5464	472428.7412	0.163035268	0.870530836	-850289.4996	1004334.592	
Director	-851.6837249	4839.036924	-0.176002733	0.86033525	-10350.04155	8646.674101	
Awards	511863.8411	202450.0122	2.528346803	0.011646725	114482.5672	909245.1151	
Oscars	-3427968.308	4411663.771	-0.777023927	0.437368746	-12087451.95	5231515.339	
Opening Gross	1.800408105	0.232272777	7.751266109	2.69168E-14	1.344488883	2.256327327	
US/CAN	2.094452694	0.073695627	28.42108288	3.2238E-124	1.949802332	2.239103056	
Ensemble	-799.8417068	2503.778086	-0.319453913	0.7494637	-5714.410566	4114.727153	
Gross/Budg	-169195.4455	245716.7409	-0.688579325	0.491282853	-651503.3026	313112.4116	
Inputs							
YEAR	BUDGET	GENRE	LEAD	MPAA RTG	DIR	AWARDS	OSCARs
1914 - 2024	1 TO 311	1 TO 1410	1 TO 17	1 TO 1565	0 TO 251	0 TO 11	TO 856 MIL
							TO 4758
						ESTIMATED REVENUE	\$ 144,517,491.43

94% Pearson Correlation

Low Correlation

Warner Brothers Theatricals Analysis

Volney

HOME > TV > NEWS Dec 12, 2023 11:30am PT The Washington Post

Style Arts & Entertainment Power The Media Fashion Of Interest

Netflix Releases First Biannual Viewing Report With Massive Trove of Data, Including for Licensed Titles

By Jennifer Maas ▾

Q f t g m ...

Netflix reveals what people are really watching with new viewing data

The streaming platform shared its most comprehensive report on viewership data

By Scott Suttler and Taylor Lorenz December 12, 2023 at 11:30am PT



HOME > TV > TV NEWS

Netflix Takes Big Data Transparency Step, Releasing Viewing Numbers for 18,000 Titles

The Night Agent' and season two of 'Ginny & Georgia' were the most watched shows in the first half of 2023.

BY RICK PORTER DECEMBER 12, 2023 11:34AM

After years of resisting, Netflix releases viewing statistics for nearly all titles

PUBLISHED TUE, DEC 12 2023 2:54 PM EST | UPDATED TUE, DEC 12 2023 4:17 PM EST

Alex Sherman @SHERMANS49

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Netflix Posts Viewer Data on Every Show, Film for First Time

■ 'The Night Agent' is the No. 1 show in first semiannual report
■ Streaming leader is increasing disclosures of audience data

Headlines 12 Dec 2023

What We Watched: A Netflix Engagement Report



Entertainment 12 December 2023 Global

NETFLIX

What We Watched: A Netflix Engagement Report

Hours viewed from January to June 2023

Title	Available Globally?	Release Date	Hours Viewed
The Night Agent: Season 1	Yes	2023-03-23	812,100,000
Ginny & Georgia: Season 2	Yes	2023-01-05	665,100,000
The Glory: Season 1 / 더 글로리: 시즌 1	Yes	2022-12-30	622,800,000
Wednesday: Season 1	Yes	2022-11-23	507,700,000
Queen Charlotte: A Bridgerton Story	Yes	2023-05-04	503,000,000
You: Season 4	Yes	2023-02-09	440,600,000
La Reina del Sur: Season 3	No	2022-12-30	429,600,000
Outer Banks: Season 3	Yes	2023-02-23	402,500,000
Ginny & Georgia: Season 1	Yes	2021-02-24	302,100,000
FUBAR: Season 1	Yes	2023-05-25	266,200,000
Manifest: Season 4	Yes	2022-11-04	262,600,000
Kaleidoscope: Limited Series	Yes	2023-01-01	252,500,000
Firefly Lane: Season 2	Yes	2022-12-02	251,500,000
The Mother	Yes	2023-05-12	249,900,000
Physical: 100: Season 1 // 피지컬: 100: 시즌 1	Yes	2023-01-24	235,000,000
Crash Course in Romance: Limited Series // 밀타 스캔들: 리미티드 시리즈	Yes	2023-01-14	234,800,000
Love Is Blind: Season 4	Yes	2023-03-24	229,700,000
BEEF: Season 1	Yes	2023-04-06	221,100,000
The Diplomat: Season 1	Yes	2023-04-20	214,100,000
Luther: The Fallen Sun	Yes	2023-03-10	209,700,000
Falso Profundo Corazón 4 // And the Fallen Tommorrow 4	No	2022-08-21	206,500,000

Engagement Report



Let's Step Back – *What is IMDb's Purpose?*

IMDb: Internet Movie Database

Purpose: Online database for information about films, TV programs, home videos, video games, and streaming content

Launch Year: 1990

Content Includes:

- Cast and crew credits

- Plot summaries

- User ratings

- Reviews

Comprehensiveness: Comprehensive information about a wide range of movies, TV shows, and media

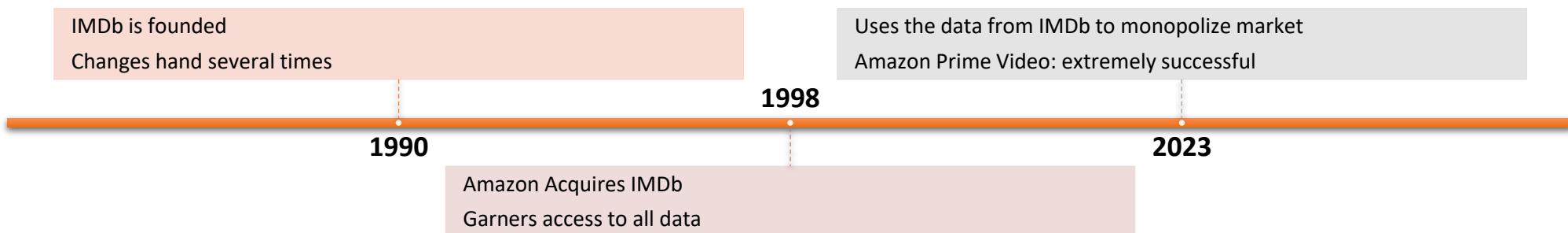
Searchable: Users can search for specific titles, actors, directors, etc.

Industry Significance: Widely used by industry professionals and casual movie enthusiasts

Features: Provides a platform for users to rate and review movies

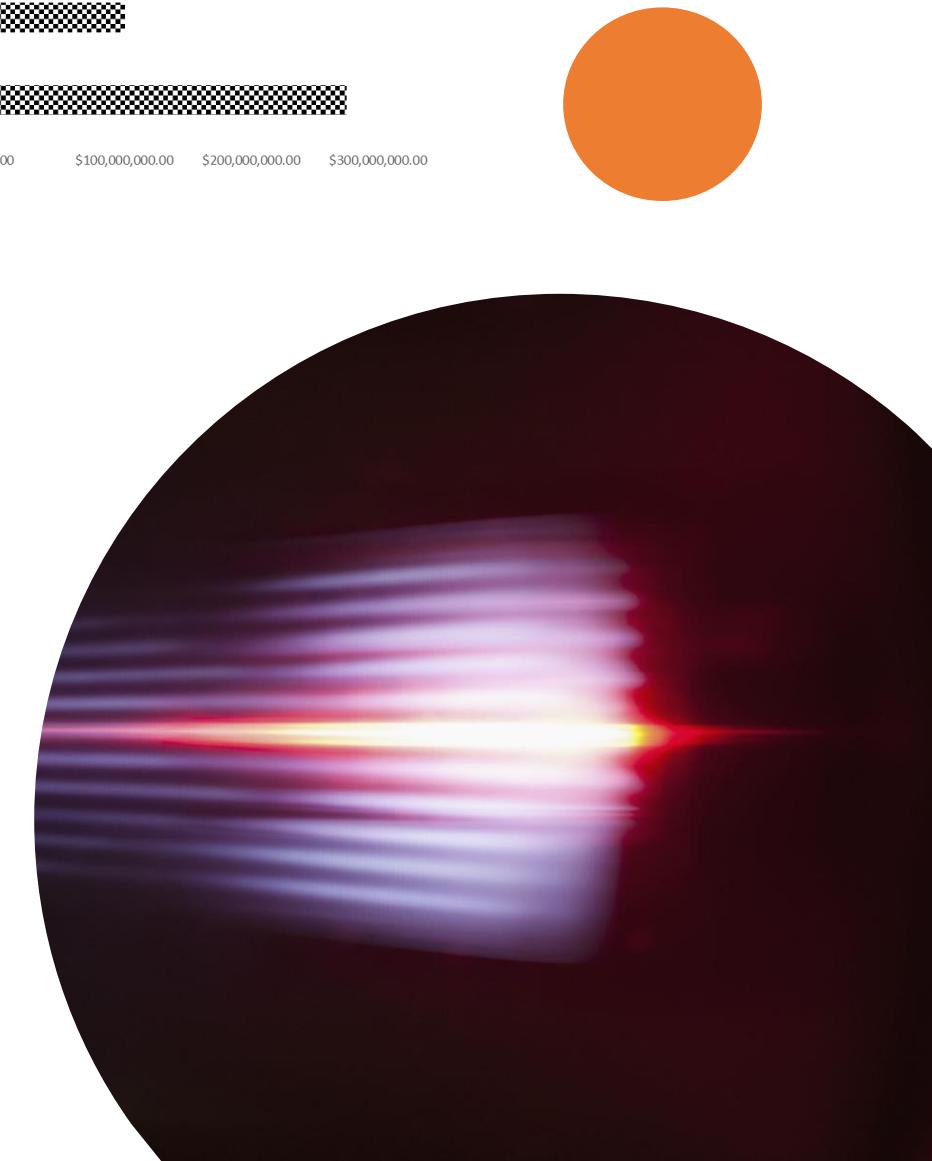
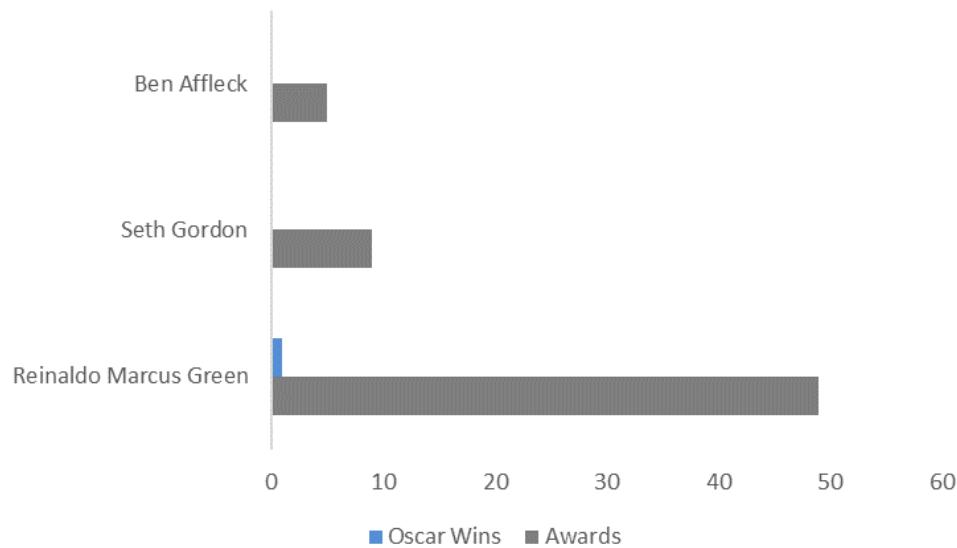
Accessibility: Accessible online for free, with additional premium features available

Amazon's Involvement



Effects on Warner Bros

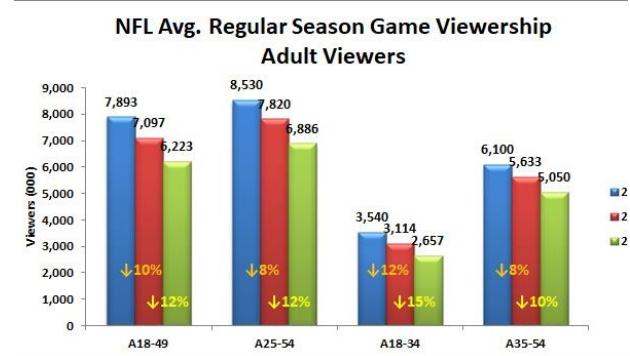
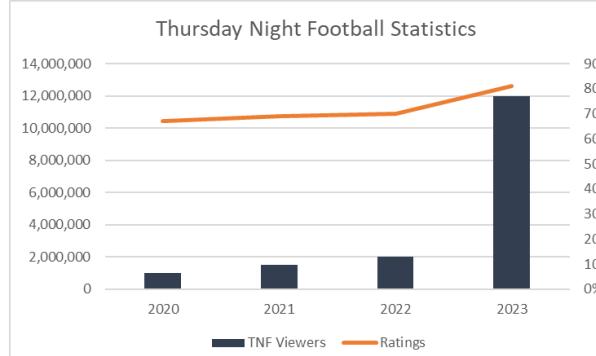
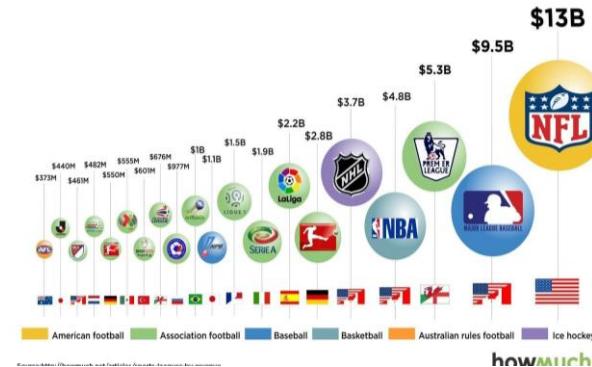
- Sports Genre Movie Directors Analysis
 - The Way Back
- Directors gained fame by focusing on Sports Genre
 - Revenue and Award Analysis



NFL Thursday



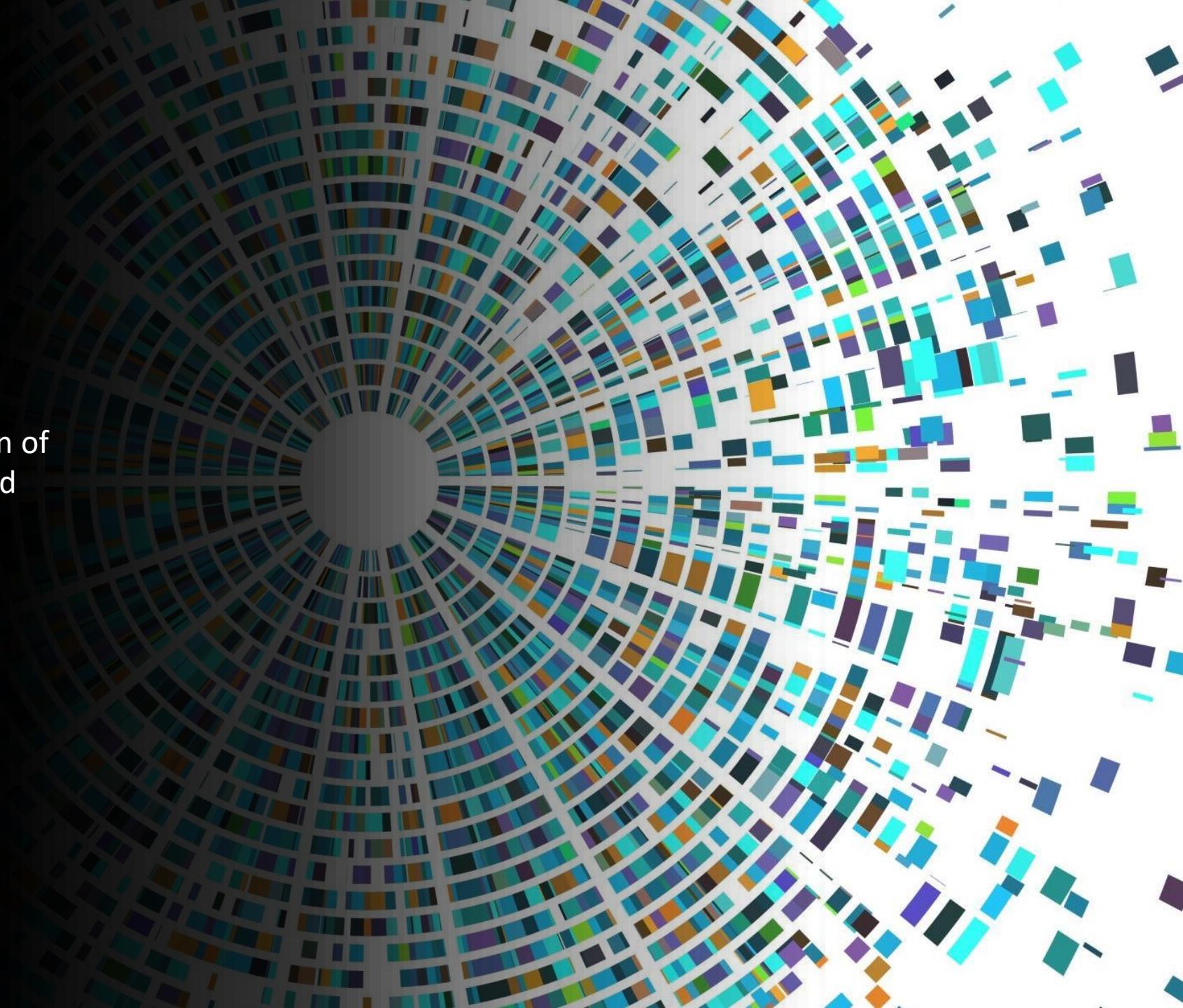
Top Professional Sports Leagues by Revenue



- \$13.2 billion, 11-year exclusive rights deal with the NFL for Thursday games March 2021
- Amazon's 15 games averaged about 9.6 million viewers
- 11.3 million with Amazon's internal data included
- TNF averaged 2.11 million viewers, 11% better than Thursday nights in 2021
- Broke record for 12.5 million viewers last Thursday

Warner Bros. IMDB Main Takeaways

- As a team we produced a collection of data using web scrapping, weighted rating calculation to analyze data appropriately
- Deduced from the data that an increase in number of content produced per decade is linear
- Highlighted significant trends and correlations in data



THANK YOU!

