

Movie Data Analysis Project

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Movie Studio Overview:

Understanding different issues when deciding on what films to create. Movies are trends that you must keep in mind. There is always going to be successful movies because they always come out at the right time. Adversely, it may be the wrong time to release a movie. My job is to help you guys, The Company, figure out what you need to be successful.

Business Understanding:

You need to look for these factors when making a film!

What film genres are performing the best at the box office?

What is the optimal runtime for box office success?

Which directors are associated with the most successful films?

Director	Movie	Year	runtime_minutes	genres	averagerating	numvotes	weighted_rating
Christopher Nolan	Inception	2010	148.0	Action,Adventure,Sci-Fi	8.8	1841066	8.648692
Christopher Nolan	Interstellar	2014	169.0	Adventure,Drama,Sci-Fi	8.6	1299334	8.406835
Anthony Russo	Avengers: Endgame	2019	181.0	Action,Adventure,Sci-Fi	8.8	441135	8.267156
Joe Russo	Avengers: Endgame	2019	181.0	Action,Adventure,Sci-Fi	8.8	441135	8.267156
Christopher Nolan	The Dark Knight Rises	2012	164.0	Action,Thriller	8.4	1387769	8.233397
Quentin Tarantino	Django Unchained	2012	165.0	Drama,Western	8.4	1211405	8.211229
Joe Russo	Avengers: Infinity War	2018	149.0	Action,Adventure,Sci-Fi	8.5	670926	8.166725
Anthony Russo	Avengers: Infinity War	2018	149.0	Action,Adventure,Sci-Fi	8.5	670926	8.166725
Damien Chazelle	Whiplash	2014	106.0	Drama,Music	8.5	616916	8.142100
Martin Scorsese	The Wolf of Wall Street	2013	180.0	Biography,Crime,Drama	8.2	1035358	8.002160

A close-up photograph of a person's hand holding a pen, poised to write on a document. The background is heavily blurred, showing bokeh light effects from an indoor setting. The text 'Data Understanding' is overlaid in white on the left side of the image.

Data Understanding

The three topics we are going to assess further in this presentation will highlight all the necessities to make a great film. All my data was retrieved by IMDB and Mojo Box Office.

Analyzing Genres in Films

Can you spot what is the underlying factor?

Sorted by Weighted Rating

genres	weighted_rating
Sci-Fi	6.56
Animation	6.5
Sport	6.48
Biography	6.47
Western	6.47
Adventure	6.47
History	6.42
Crime	6.39
Action	6.39
Drama	6.38
Music	6.37
Mystery	6.35
Thriller	6.33
Documentary	6.32
War	6.32
Comedy	6.31
Musical	6.3
Fantasy	6.3
Family	6.3
Romance	6.3
Horror	6.19

Sorted by Average Gross

genres	average_gross
Sci-Fi	154736554
Animation	154448269
Adventure	152038535
Action	94623112
Fantasy	85101303
Family	74612641
Comedy	55269519
Thriller	44004933
Musical	42575945
Western	38652560
Sport	33230026
Mystery	30747571
Horror	29711783
Crime	27859799
Music	27714050
Biography	24555963
History	21194853
Drama	20293874
Romance	17308700
War	8174136
Documentary	2773641

The top 2 genres that are made are:

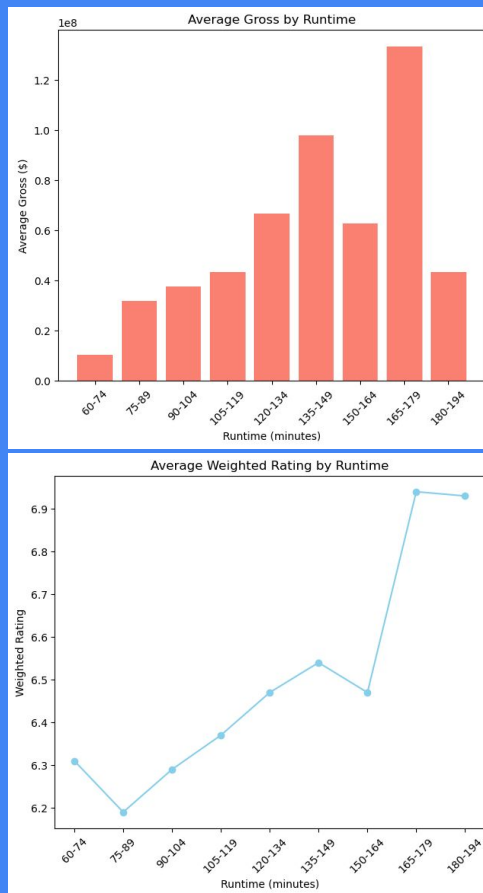
Sci-Fi - Science Fiction films that feature imaginative and futuristic concepts

Animation - Digital motion pictures to create graphical movements.

Runtime of Films

What is the casual amount of time you should spend in a movie?

In this current generation we can see that people don't have the greatest attention span. Make the films long enough to be enjoyable but also not short enough to get bored of them.



165-179 minutes shows the most optimal runtime to produce a film.


Within the allotted time, you are able to produce character development as well as keep the audience aspiring for the film.

The Directors

The most successful directors and their associated genres.

Top 10 Directors by Weighted Rating

Director	weighted_rating	num_movies	genres
Christopher Nolan	8.21	4	Action,Adventure,Sci-Fi, Actio...
Lee Unkrich	7.88	2	Adventure,Animation,Comedy
Ronnie Del Carmen	7.85	1	Adventure,Animation,Comedy
Pete Docter	7.85	1	Adventure,Animation,Comedy
Quentin Tarantino	7.84	2	Crime,Drama,Mystery, Drama,Wes...
Tim Miller	7.78	1	Action,Adventure,Comedy
Adrian Molina	7.76	1	Adventure,Animation,Comedy
Anthony Russo	7.76	3	Action,Adventure,Sci-Fi
Joe Russo	7.76	3	Action,Adventure,Sci-Fi
Martin Scorsese	7.68	3	Adventure,Drama,Family, Myster...

An aerial photograph of the New York City skyline at dusk. The Empire State Building is the central focus, its spire illuminated with red and green lights. The city is densely packed with skyscrapers, many of which have their windows lit up. The sky is a mix of dark blue and orange, with some clouds. The water of the harbor is visible in the distance.

Conclusion:
You need these factors in
order to make a successful
film!

Recommendations

According to my analysis, I believe these are the keys to producing a successful film. But what makes a film great? It needs to have box office success. That's why my data has pinpointed the greatest films in order to understand what we need to look for.

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graph TD; A[Focus on High-Performing Genres] --- B[Optimize Movie Runtime]; B --- C[Collaborate with Successful Directors];
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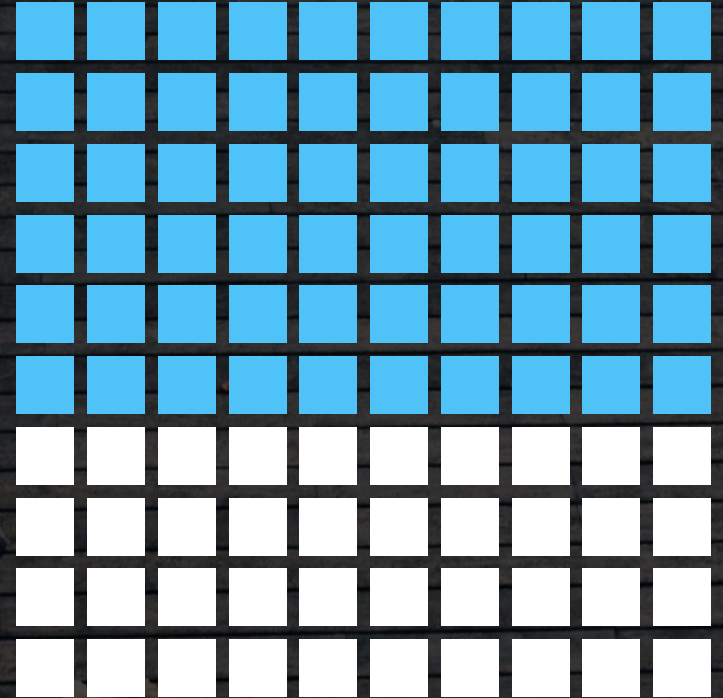
Focus on High-Performing Genres

Optimize Movie Runtime

Collaborate with Successful Directors

What's the next steps?

Conduct research on the current market. That focuses on trending films. And acquire the talent needed.



Thank You



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Questions?

What films genres do you think can make an impact?

Does streaming a movie make an impact on watching the film?

Are there other factors that we should be looking for?