

DATA VISUALIZATION

DATA VISUALIZATION OF IMDB TOP 1000 MOVIES

AN ANALYSIS OF IMDB RATINGS, GENRES, DIRECTORS, AND MORE

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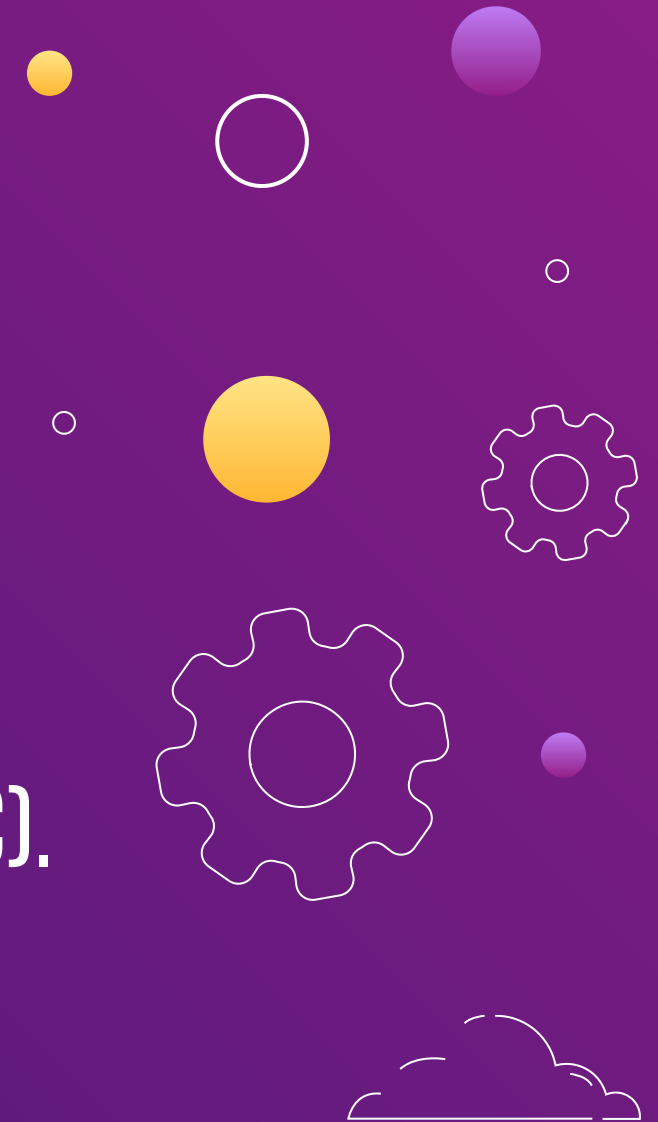
INTRODUCTION

- OBJECTIVE: PRESENT KEY INSIGHTS INTO TOP-RATED MOVIES USING DATA ANALYSIS.
 - DATASET USED: IMDB TOP 1000 MOVIES DATASET.
 - TECHNIQUES/TOOLS: PYTHON (PANDAS, MATPLOTLIB, SEABORN), DATA VISUALIZATION.
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DATA PREPARATION

- STEPS TAKEN TO CLEAN AND PREPROCESS DATA:
 - HANDLING MISSING VALUES.
 - CONVERTING DATA TYPES (E.G., GROSS EARNINGS TO NUMERIC).
 - HANDLING OUTLIERS USING THE IQR METHOD.
- KEY OUTCOMES: - TOTAL DUPLICATE ROWS: 0.

- MISSING VALUES HANDLED IN KEY COLUMNS (CERTIFICATE, META_SCORE, GROSS).



TOP 10 HIGHEST-RATED MOVIES

Movies have ratings
close to 9.0 or higher.



Mix of classic and
modern masterpieces.



Dominance of certain
genres like drama or
thriller.



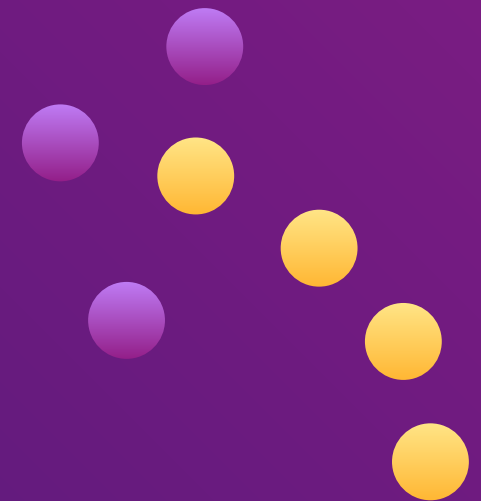
DISTRIBUTION OF IMDB RATINGS



Distribution of IMDb Ratings 7.0 - 8.0



Very few movies have ratings above 9.0 or below 5.0.



NUMBER OF MOVIES RELEASED PER YEAR

- STEADY INCREASE IN MOVIE PRODUCTION IN RECENT DECADES.
- DIPS DURING GLOBAL EVENTS LIKE WORLD WAR II OR COVID-19.



MOST COMMON MOVIE GENRES

- POPULAR GENRES: DRAMA, ACTION, COMEDY.
- IMPACTFUL BUT LESS FREQUENT GENRES: DOCUMENTARIES, WAR FILMS.
- SHIFTS IN POPULARITY (E.G., RISE OF SCI-FI AND SUPERHERO GENRES).





AVERAGE IMDB RATING BY GENRE

- HIGHER-RATED GENRES: DOCUMENTARY, BIOGRAPHY, HISTORY.
- POPULAR BUT LOWER-RATED GENRES: ACTION, COMEDY, HORROR.

TOP 10 DIRECTORS WITH HIGHEST AVERAGE IMDB RATING



- DOMINATED BY LEGENDARY DIRECTORS LIKE CHRISTOPHER NOLAN AND QUENTIN TARANTINO.
 - SOME DIRECTORS FOCUS ON QUALITY OVER QUANTITY.



GROSS EARNINGS VS. IMDB RATING

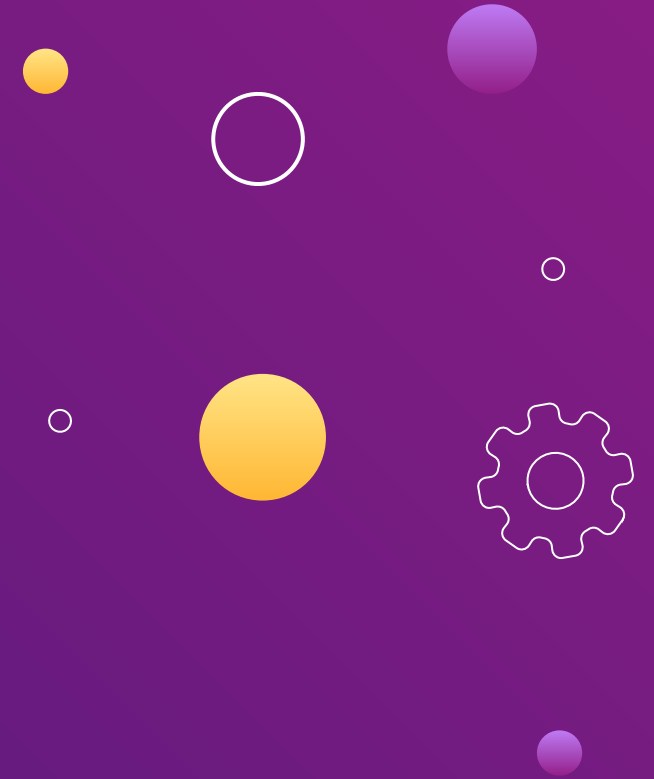
- • High-grossing movies can have mixed ratings.
- • Critically acclaimed films may not always be box office successes.

DOES RUNTIME AFFECT IMDB RATING?

- NO STRONG CORRELATION.
- SWEET SPOT: 120—150 MINUTES.

MOST FREQUENT ACTORS IN TOP 1000 MOVIES

- VETERAN ACTORS DOMINATE DUE TO LONG CAREERS.
 - FREQUENT COLLABORATIONS WITH RENOWNED DIRECTORS.
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CONCLUSION

- KEY INSIGHTS INCLUDE:

01

- Popular genres, directors, and runtime sweet spots.

02

Trends in movie production over time.

- POTENTIAL FOR FURTHER ANALYSIS:

03

Trends over decades.

04

Deeper comparisons across genres.