



# MOVIE DATA DIVE

Movie Data Dive



# OVERVIEW

- I'm thrilled to present the results of my comprehensive movie data analysis project, aimed at addressing a critical challenge facing Microsoft's foray into the entertainment industry.
- By delving deep into the intricacies of film data, I have unearthed invaluable insights to inform strategic decision-making for the establishment of a new movie studio.
- Through rigorous exploratory analysis and advanced data visualizations, I have decoded audience preferences and pinpointed lucrative genres ripe for exploration.
- These findings empower Microsoft to make informed decisions, ensuring our future cinematic endeavors are poised for maximum impact and audience engagement.

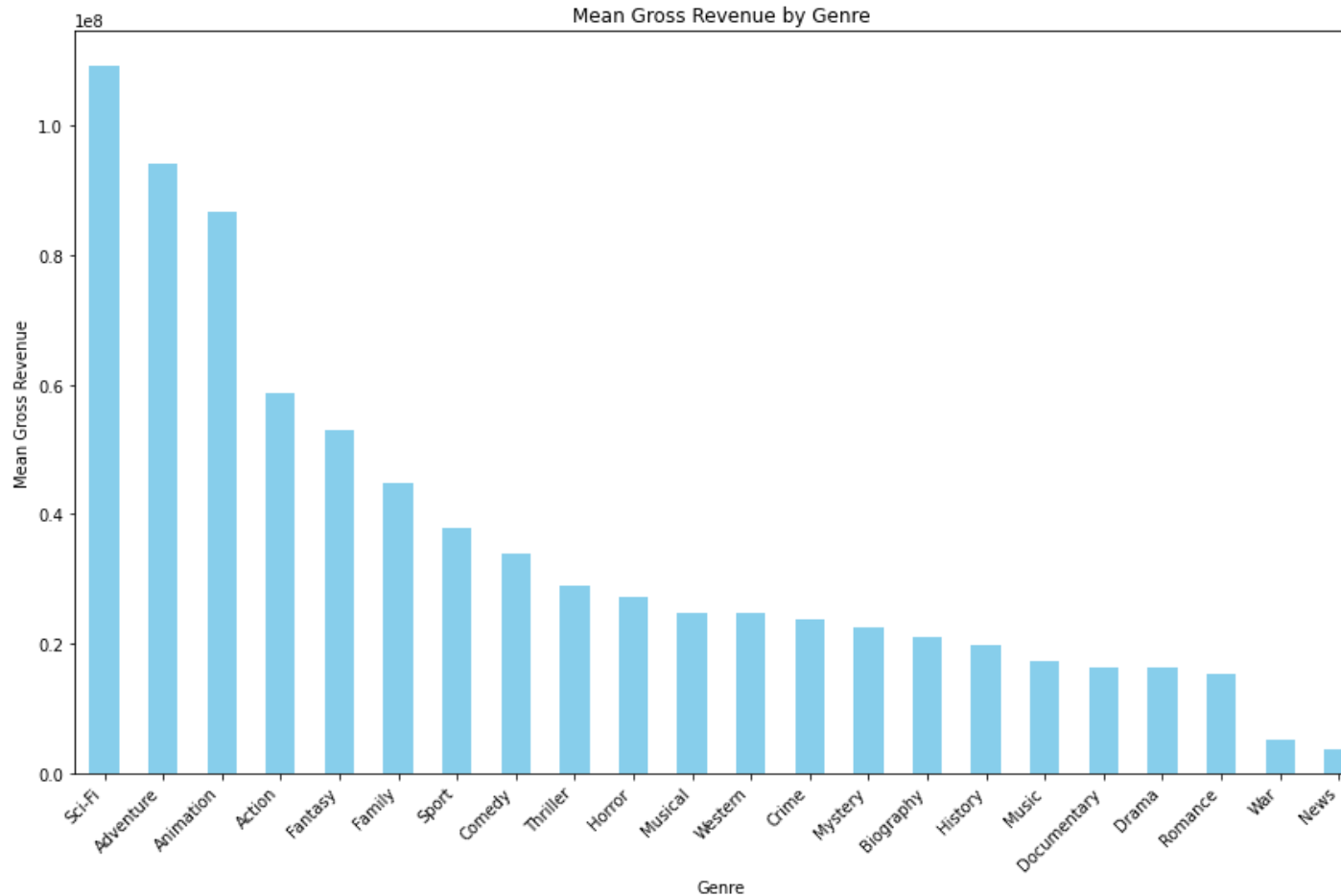
# BUSINESS PROBLEM

- Some of the questions tackled here were:
- How does the correlation between genre and rating influence audience perceptions of films?
- What is the association between runtime and rating, and how does this impact viewer satisfaction?
- How have movie ratings evolved over time, and what is the correlation between these changes and the popularity of different genres?
- How has the gross revenue of movies changed over time, and how does this relate to the popularity of various genres?

# DATA UNDERSTANDING

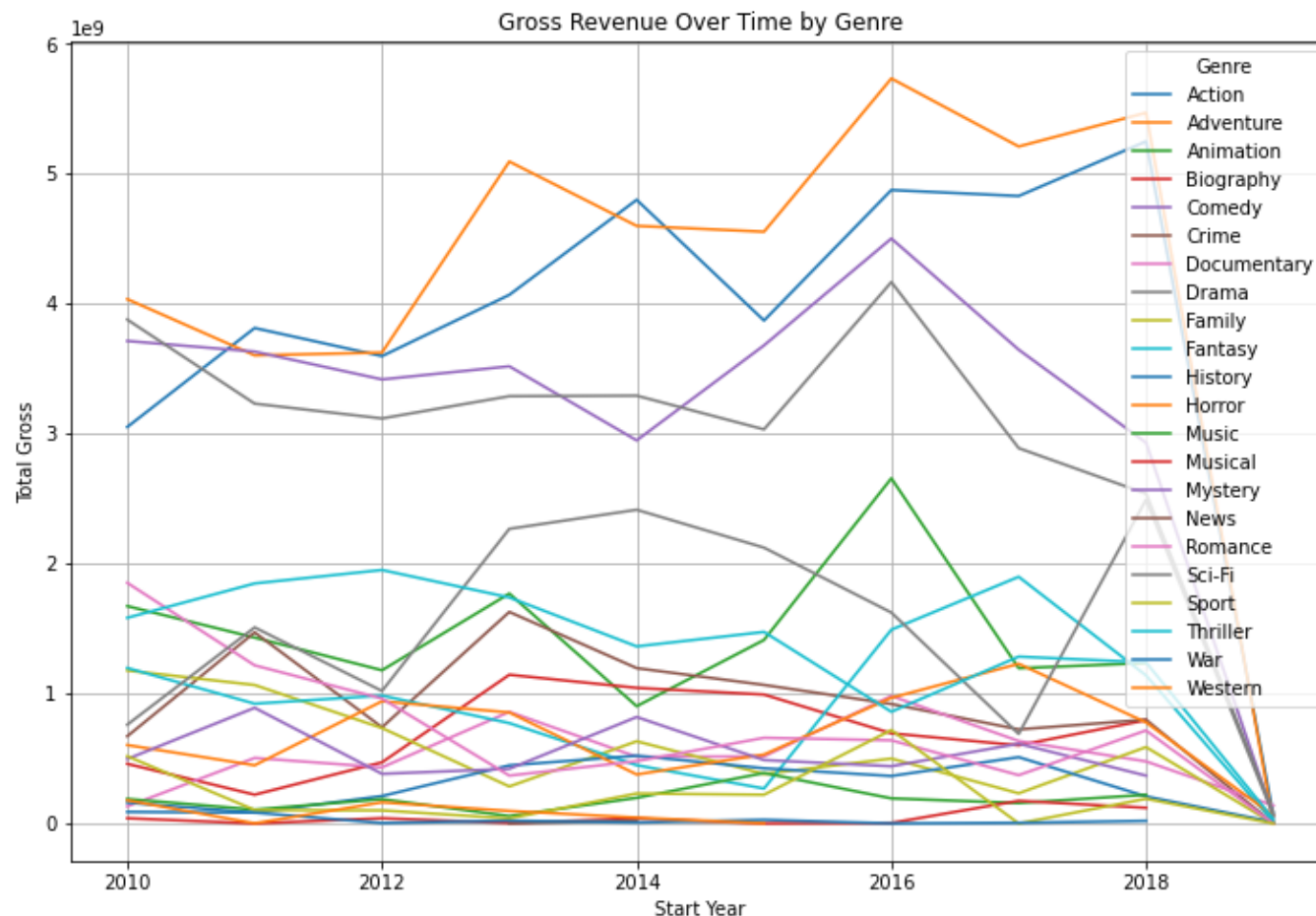
- The data being utilized for this analysis comprises a comprehensive dataset sourced primarily from IMDb (Internet Movie Database).
- It comprises a rich and diverse set of information pertaining to the film industry.
- It encompasses a wide array of variables such as genre classifications, release dates, box office performance metrics, audience ratings, critical reviews, production budgets, and demographic indicators.
- Additionally, the dataset incorporates historical trends spanning multiple years and includes a comprehensive range of movies across various genres and production scales.
- This robust dataset provides a nuanced understanding of the film landscape, enabling me to extract actionable insights to guide Microsoft's strategic decision-making in establishing its movie studio venture.

# Comparison Between Gross and Genre



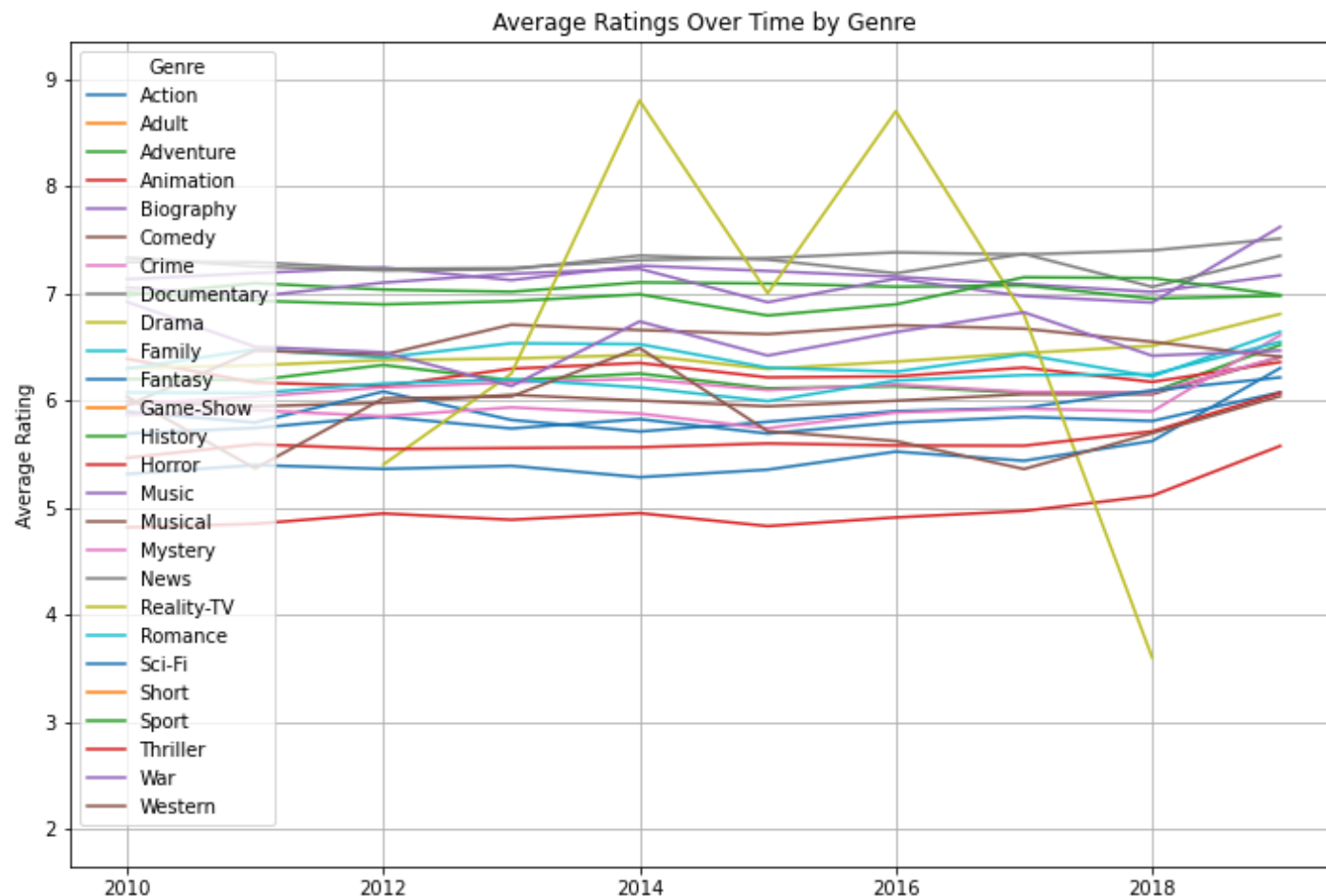
- Sci-Fi, Adventure, and Animation films emerge as the primary revenue drivers, whereas Romance, War, and News genres exhibit a relatively smaller market share. The elevated revenue associated with certain genres likely signifies heightened audience demand and widespread popularity, while genres with lower revenue might cater to more niche or specialized audiences.

# Comparison Between Genre and Gross Over Time



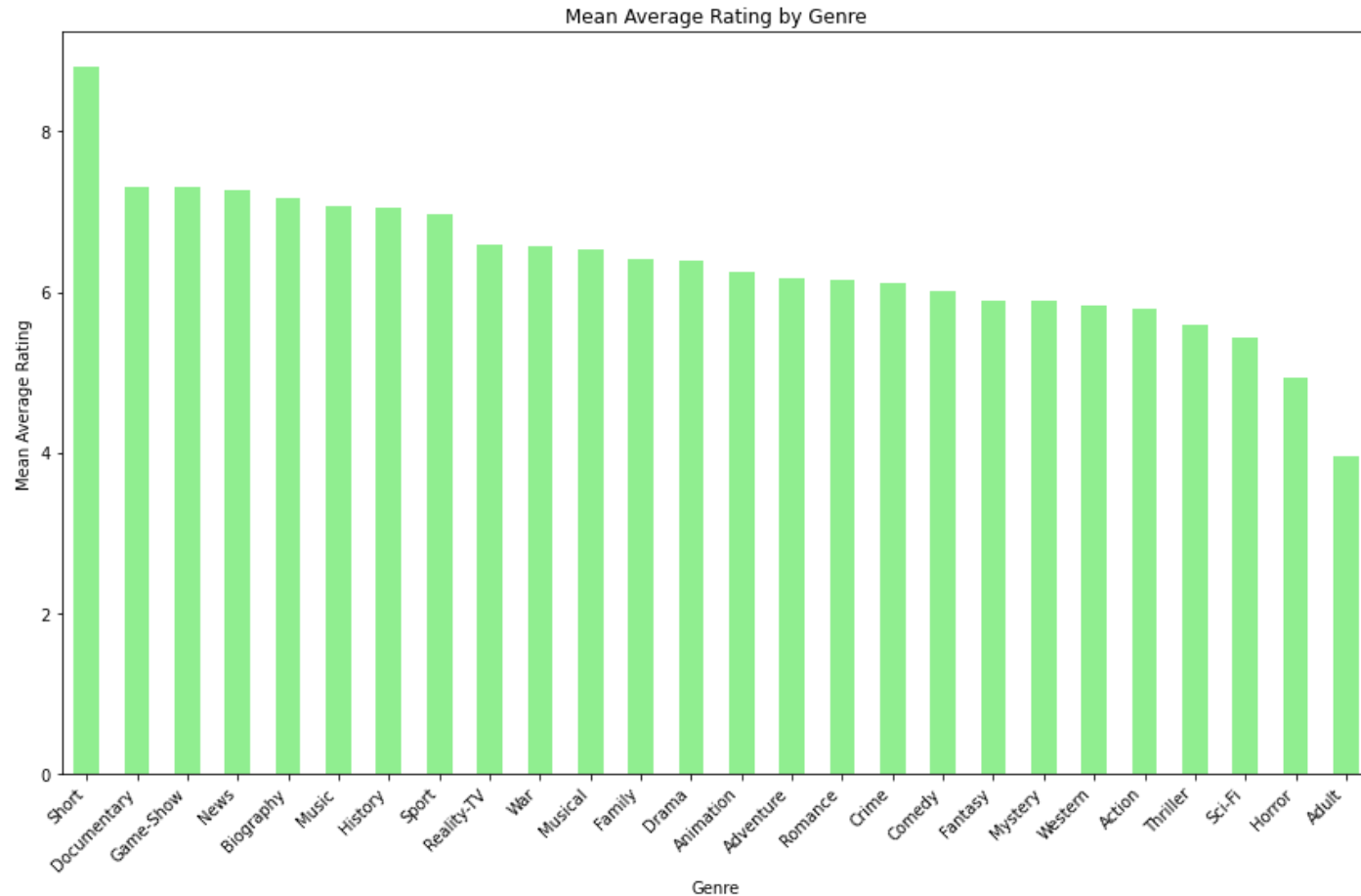
- Throughout the years spanning from 2010 to 2019, Action, Adventure, Comedy, and Sci-Fi genres consistently rank among the top four revenue-generating genres.

# Comparison Between Average Rating and Genre Over Time



- Over the period from 2010 to 2019, most movie genres maintain a relatively consistent average rating, with the exception of Drama/Reality-TV, which displays fluctuating ratings over the years.

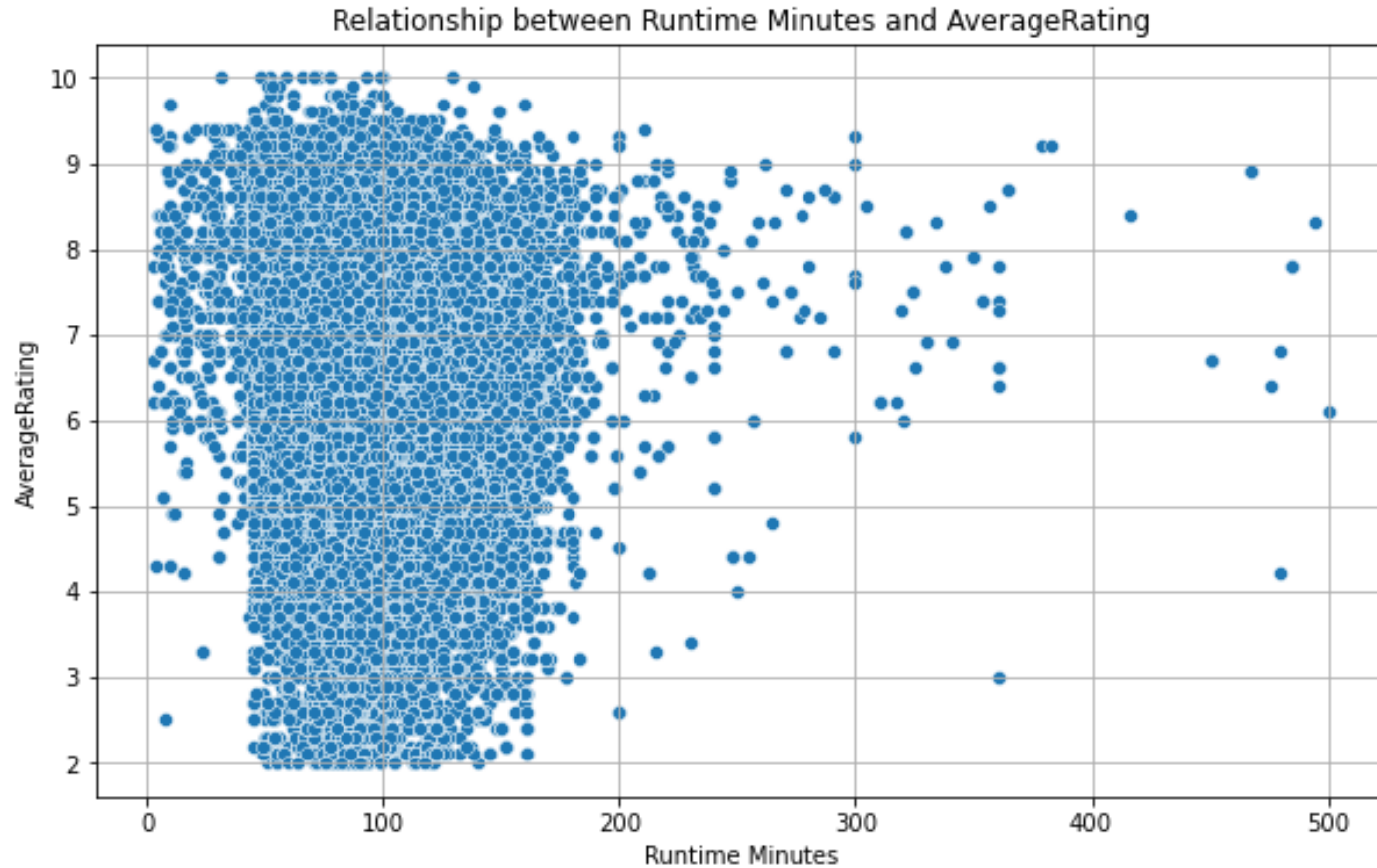
# Comparison Between Average Rating and Genre



- Short, Documentary, and Game Show films demonstrate a higher mean average rating, contrasting with Sci-Fi, Horror, and Adult genres, which register lower ratings on average. Elevated mean average ratings within specific genres likely reflect stronger audience preferences.



# Comparison Between Runtime minutes and Average Rating



- Movies with runtimes under 60 to 120 minutes emerge as the most preferred choice among audiences.



# RECOMMENDATIONS

- Given the revenue dominance of Sci-Fi, Adventure and Animation, Microsoft could prioritize these genres when selecting films for its movie studio. Allocating resources and investments toward these genres may yield higher returns.
- Genres like Action, Adventure, Comedy, and Sci-Fi consistently generate substantial revenue over the years. Microsoft should consider maintaining a diverse portfolio of films across these genres to ensure consistent revenue streams and mitigate financial risks.
- Incorporating genres like Short, Documentary, and Game Show, which boast higher mean average ratings, alongside the top revenue-generating genres can allow Microsoft to align with audience preferences and potentially elevate viewer satisfaction.
- The preference for movies with runtimes under 180 minutes suggests a preference for shorter films among audiences. Microsoft could focus on producing films with optimized runtimes to align with audience preferences and maximize engagement.



# LIMITATIONS

- The analysis is based on historical movie data and may not fully capture emerging trends or shifts in audience preferences. Future success in the movie industry could depend on factors not accounted for in the dataset.



THE END