Movie Analysis

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Summary

Descriptive analysis of the movie dataset demonstrated:

→ Highest average rating genres are "Adventure", "Action, Sport", and "Drama, Western".

→ The top global grossing genres "Action, Adventure, Sci-Fi", "Adventure, Animation, Comedy", and "Action, Adventure, Fantasy".

→ Top genres for domestic sales "Action, Adventure, Sci-Fi", "Adventure, Animation, Comedy", and "Action, Adventure, Fantasy".

Leading genres for foreign sales comprise "Adventure, Animation, Comedy", "Action, Adventure, Sci-Fi", and "Action, Adventure, Fantasy".

→ The lengthiest average runtimes by genres are "Drama, Western", "Adventure, Drama, Sci-Fi", and "Drama, History, Sports".

→ . Genres with the shortest average durations include "Action, Sport", "Adventure, Comedy, Horror", and "Documentary, News".

→ Movies with a runtime of 59 minutes generated the highest revenue across market segments.

Outline

Business Problem

Data and Method

Results

Conclusions

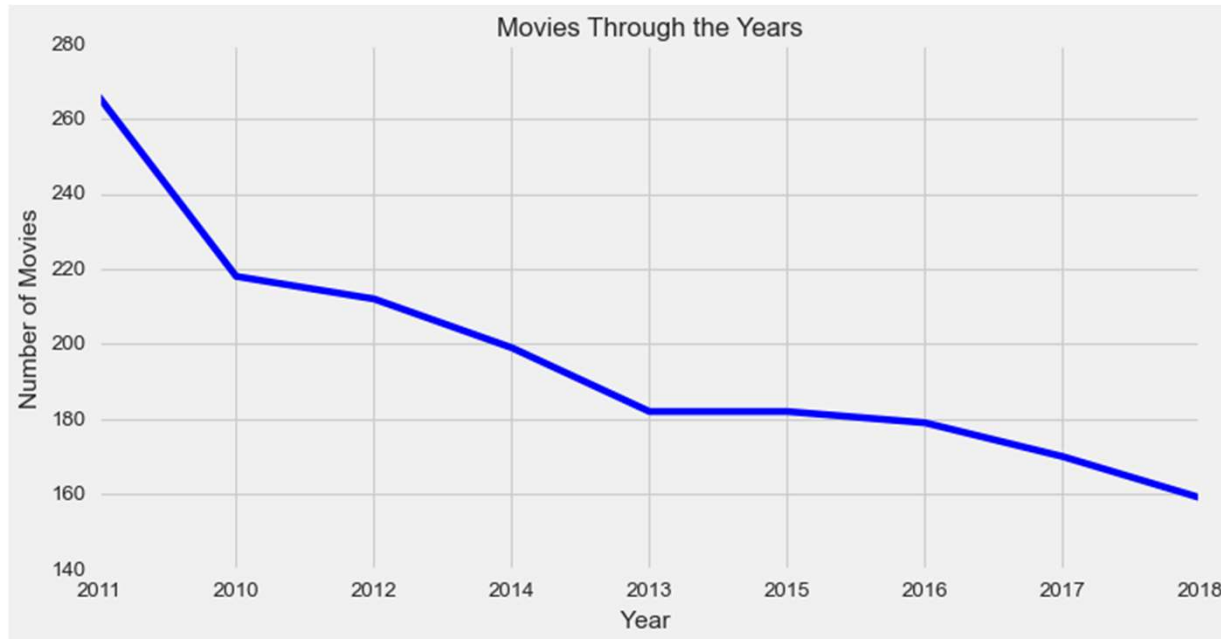# Business Problem

What to Produce - Genre Selection
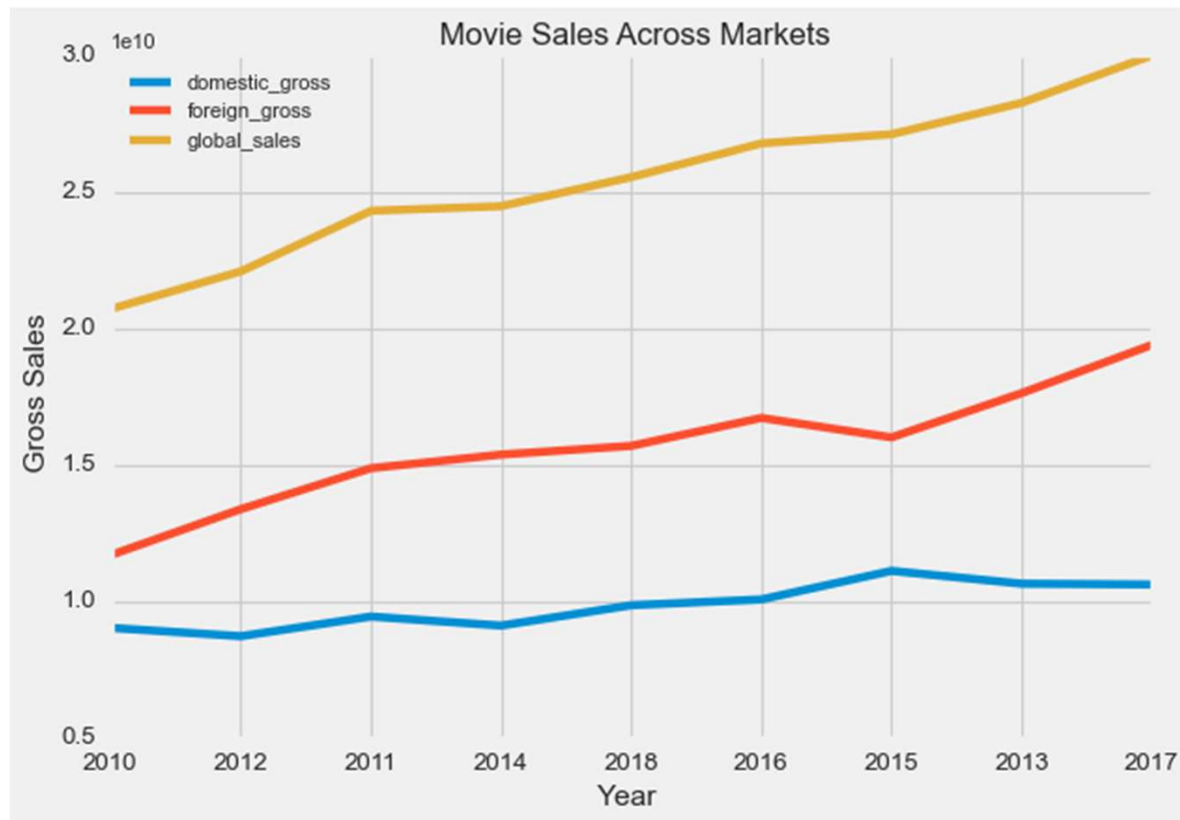
How - Movie Duration

Who - Market Segment

Data and Method

Movies Produced Through the Years
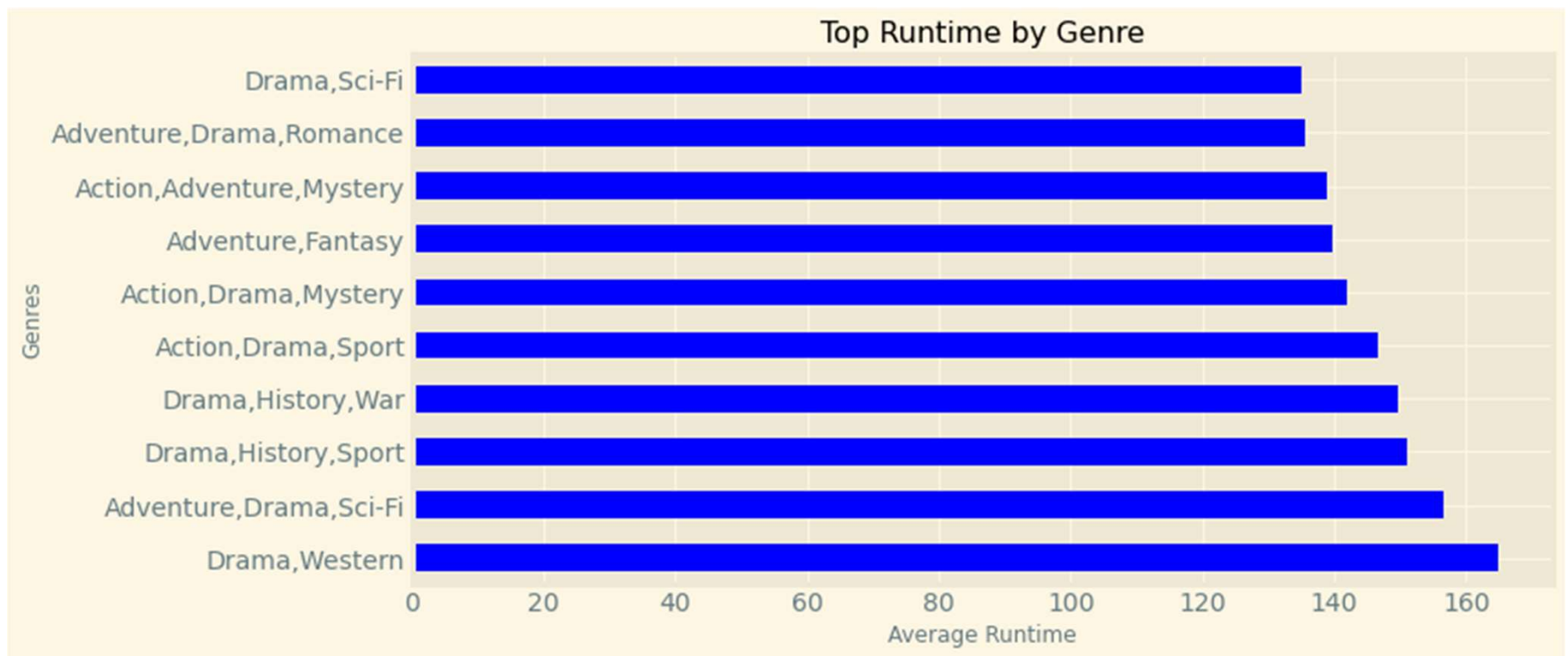
- 2010 - 2018 movie production trended downward

Data and Method
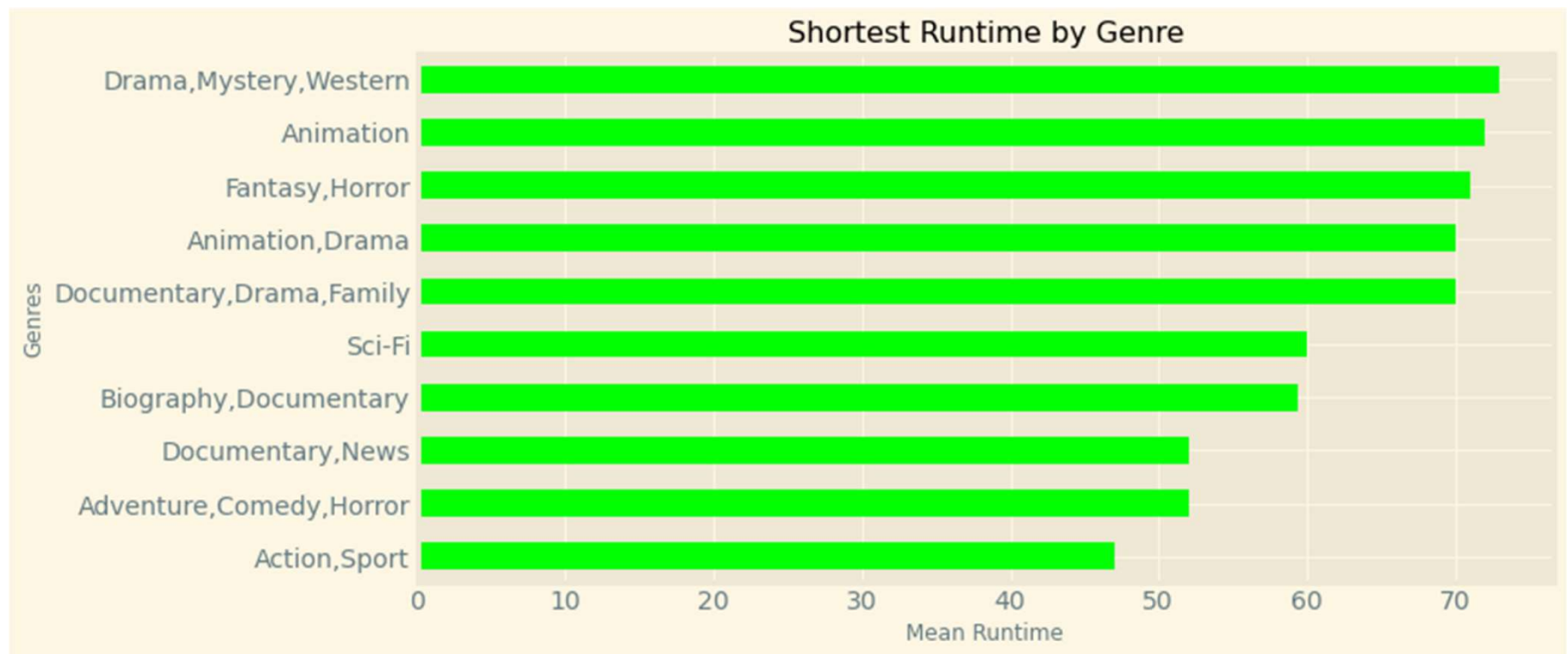

Movie Sales Across Markets

Market Performance though the years
1. Foreign and global sales significant upward trend

2. Domestic sales moderate increase.

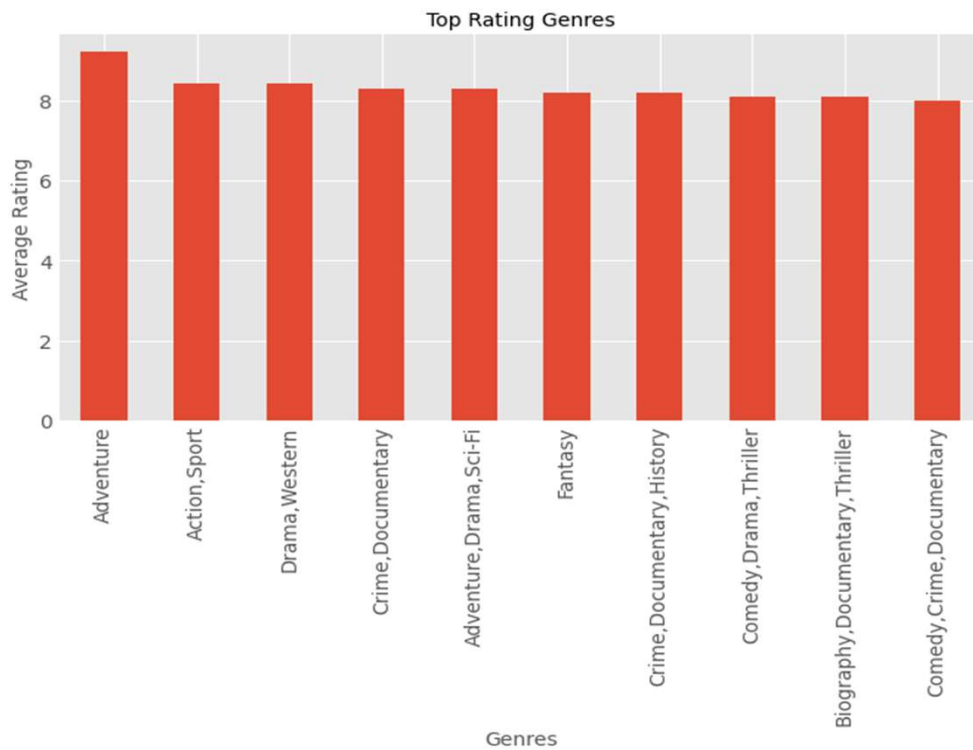3. Inverse relationship between quantity and sales during the specified period.

Data and Method

Top Runtime by Genre

Data and Method

Shortest Runtime by Genre

(Horizontal bar chart showing Mean Runtime for genres, x-axis: 0 to 70+)

- Drama,Mystery,Western — ~73
- Animation — ~72
- Fantasy,Horror — ~71
- Animation,Drama — ~70
- Documentary,Drama,Family — ~70
- Sci-Fi — ~60
- Biography,Documentary — ~59
- Documentary,News — ~52
- Adventure,Comedy,Horror — ~52
- Action,Sport — ~47

Data and Method

Top Rating Genres

Top Rating Genres

- "Adventure"

- "Action, Sport"

- "Drama, Western".

Data and Method

Market Performance by Genres
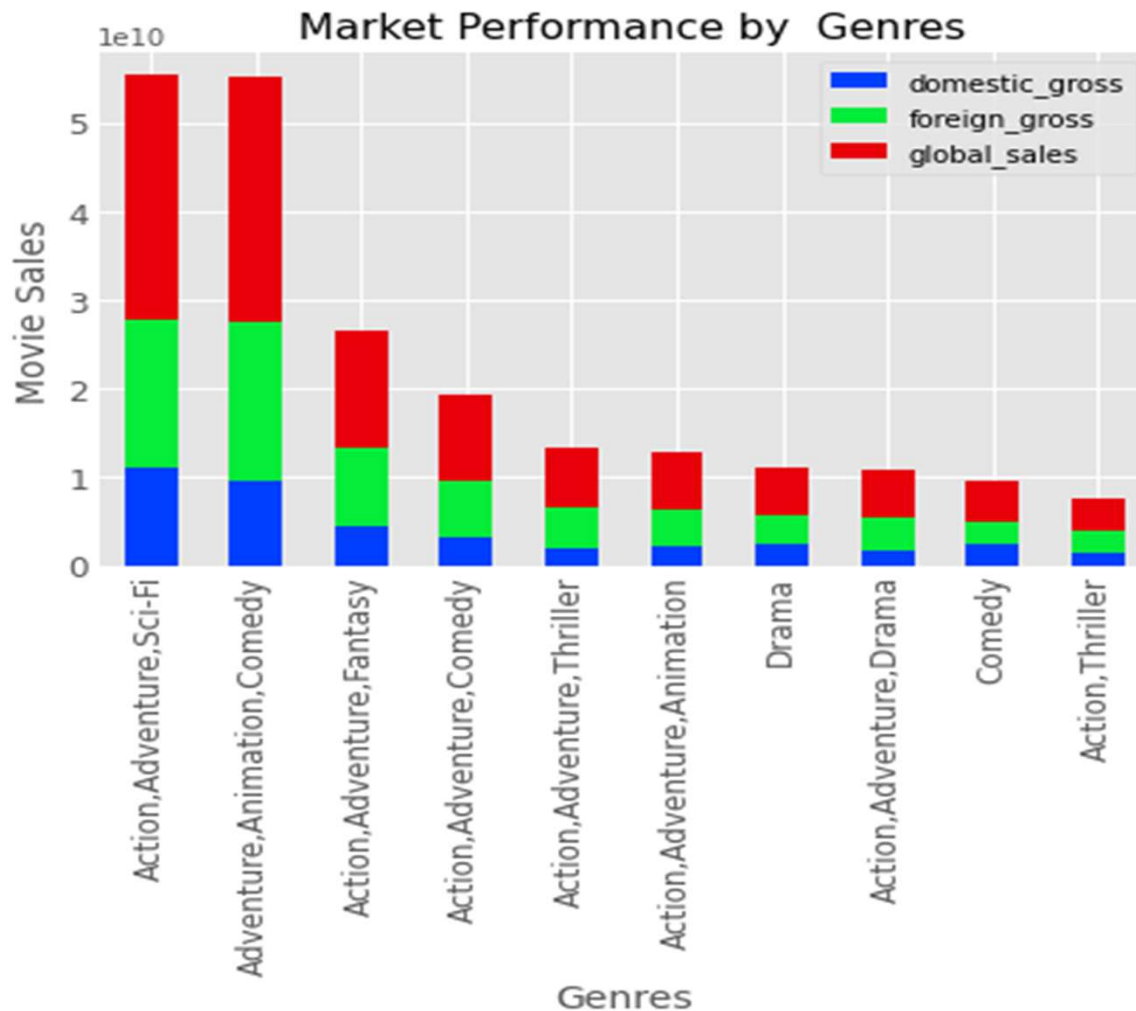
Market Performance by Genres
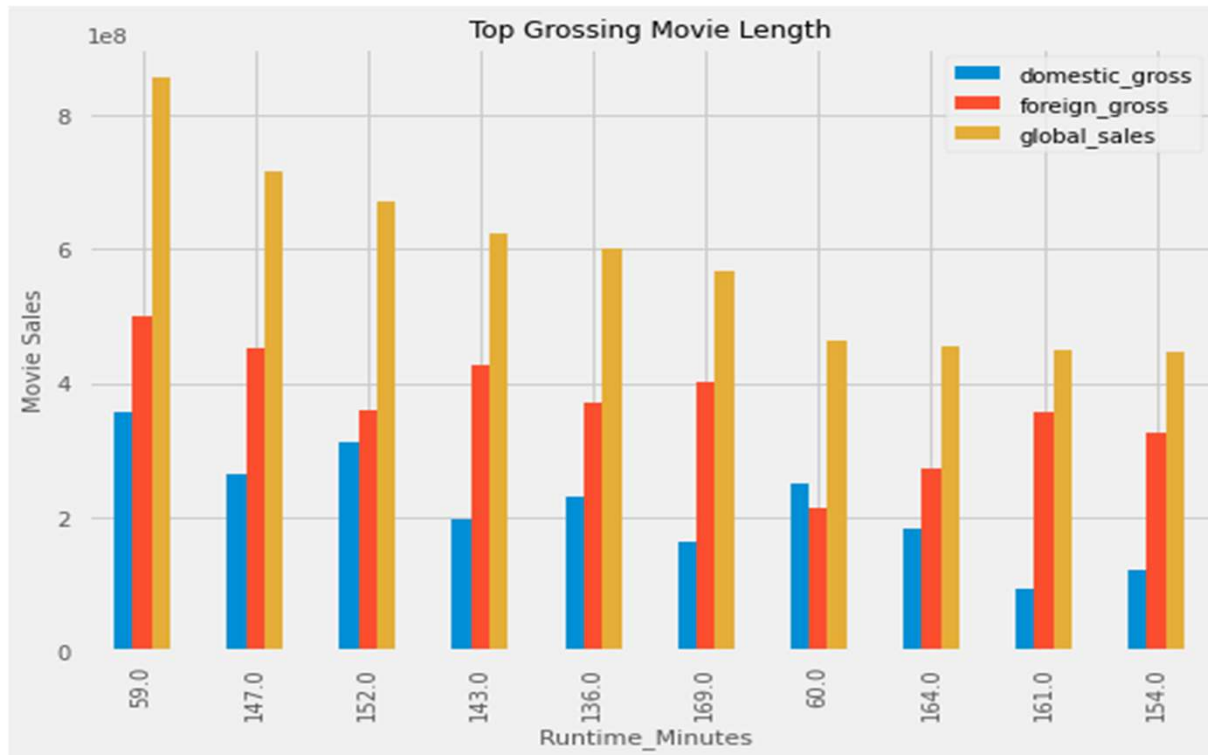1. Top Global :

"Action, Adventure, Sci-Fi",

2. Top Domestic :

"Action, Adventure, Sci-Fi",

3. Top Foreign:

"Adventure, Animation, Comedy",

Data and Method

Movie Length Market Performance
- 59 minutes runtime generated the highest across all markets.

- Runner-up domestic market runtimes of 152 and 149 minutes

- Runner-up foreign markets, 147 and 143 minutes.

Data and Method

Top Grossing Rating

- 8.8 domestic ($148.4 m). average rating decreases, the domestic gross also declines.

- 8.4 foreign ($282.1 million) consistent across different average ratings.

- The global sales peak at an average rating of 8.8, $424.3 million. average rating decreases, the global sales decrease

Results

Correlation Matrix
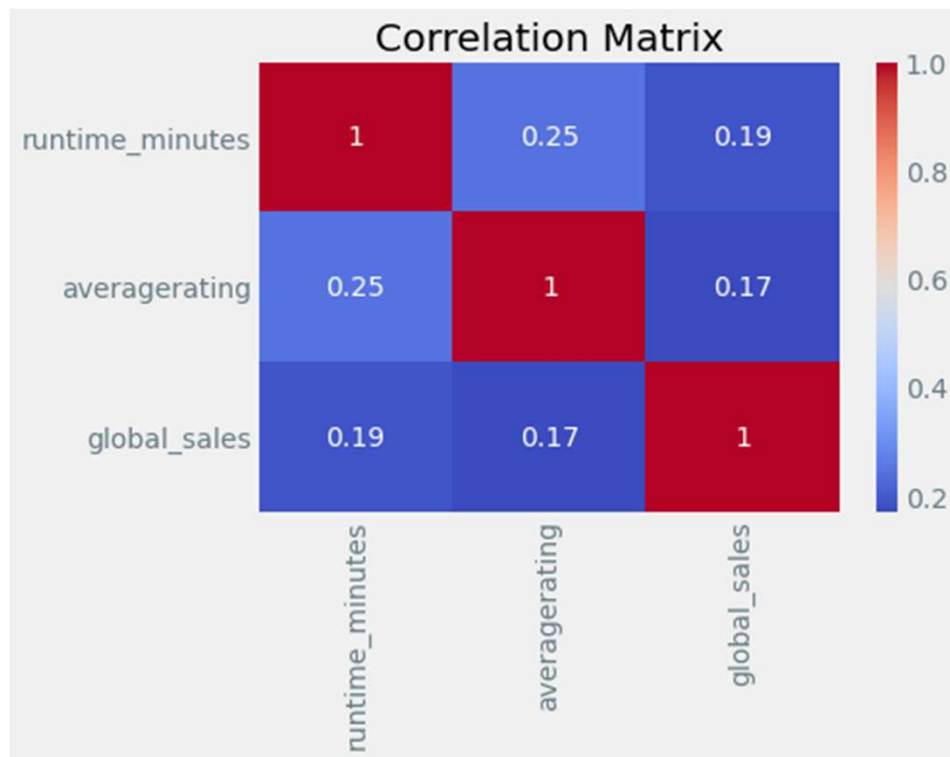
Correlation coefficient

- runtime_minutes' and 'averagerating' is 0.25

- 'runtime_minutes' and 'global_sales' is 0.19

- 'averagerating' and 'global_sales' is 0.17

Ordinary Least Squares (OLS) results:

Independent/ dependent variable	R-squared value
Movie length and global sales	0.036
Movie length and domestic sales	0.025
Movie ratings and global sales	0.029
Movie length and movie ratings	0.061
Genres and global sales	0.122

All OLS analyses were statistically significant.

R-squared value indicates that the model explains only a small proportion of the variance in variables, suggesting the influence of other factors not included in the model

Conclusion

Based on these findings, here are three actionable recommendations

1. Genre-based Content Strategy:

- The top-ranking genres with the highest average ratings, such as "Adventure", "Action, Sport", and "Drama, Western", prioritize content creation and marketing efforts towards these genres.
- Allocate resources towards developing compelling narratives and high-quality productions within these genres to attract and retain audiences.

2. Market-specific Distribution Approach: The Global Strategy

- Tailor distribution strategies based on market preferences
- Foreign markets focus on promoting genres like "Adventure, Animation, Comedy" and "Action, Adventure, Sci-Fi"
- Domestic markets emphasize genres like "Action, Adventure, Fantasy

Conclusion

3. Optimize Movie Runtimes for Global Appeal:

- Optimize movie lengths to align with audience preferences across different markets.
- Shorter runtimes like 59 minutes show strong performance globally.
- Longer durations like 152 and 149 minutes resonate better domestically.
- Tailor content duration based on regional preferences to maximize audience engagement and revenue generation.

Next Step

- Advance by integrating additional databases to evaluate a broader range of industry variables
- Delve into elements like budget, release timing, and language to enrich the analysis.
- Forecast adverse outcomes across genres.
- Employ predictive modeling for a comprehensive analysis that guides business decisions.

Questions

Thank You!

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