Using Data to Guide Microsoft's Original Video Content Venture

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Guiding Microsoft's Original Video Content Venture

Descriptive analysis to help Microsoft scope a project to enter the market

- Focus on designing films in the most popular genres while minimizing financial risk.

- Identify the directors most familiar with those genres.

- Identify thematically diverse directors who can help Microsoft realize its vision.

Outline

- Business problem
- Methods
- Data
- Results
- Conclusions

Business Problem

- Identify success

- Constrain the set of options by focusing on successful film genres

- Identify the director best equipped to manage the content selected

Data

- IMDb -- Movie characteristics data:
      Database tables
      Film genre, ratings, people, roles

	avg_rating	num_votes
count	73,856	73,856
mean	6.33	3,524
std	1.48	30,294

- The Numbers -- Movie production data:
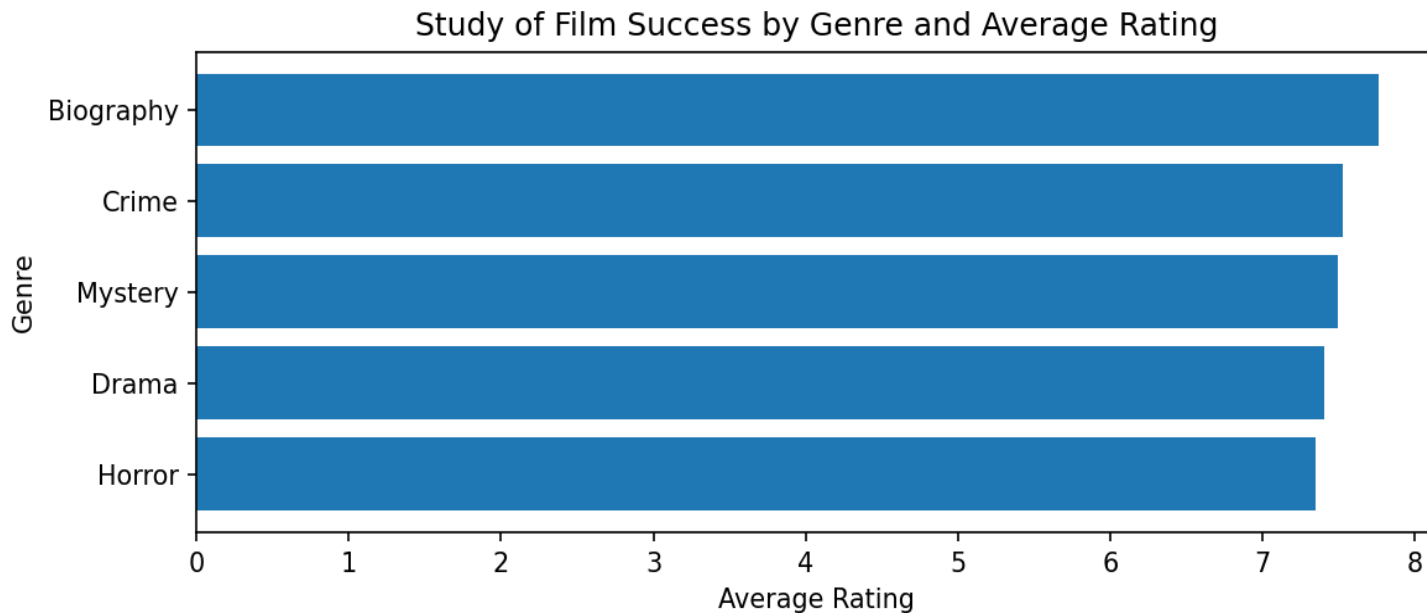   Comma delimited file
      Budget, earnings

	domestic_gross_int	production_budget_int	net_profit
count	5782	5782	5782
mean	41,873,330	31,587,760	10,285,570
std	68,240,600	41,812,080	49,921,370

Methods

- Data preparation and cleaning

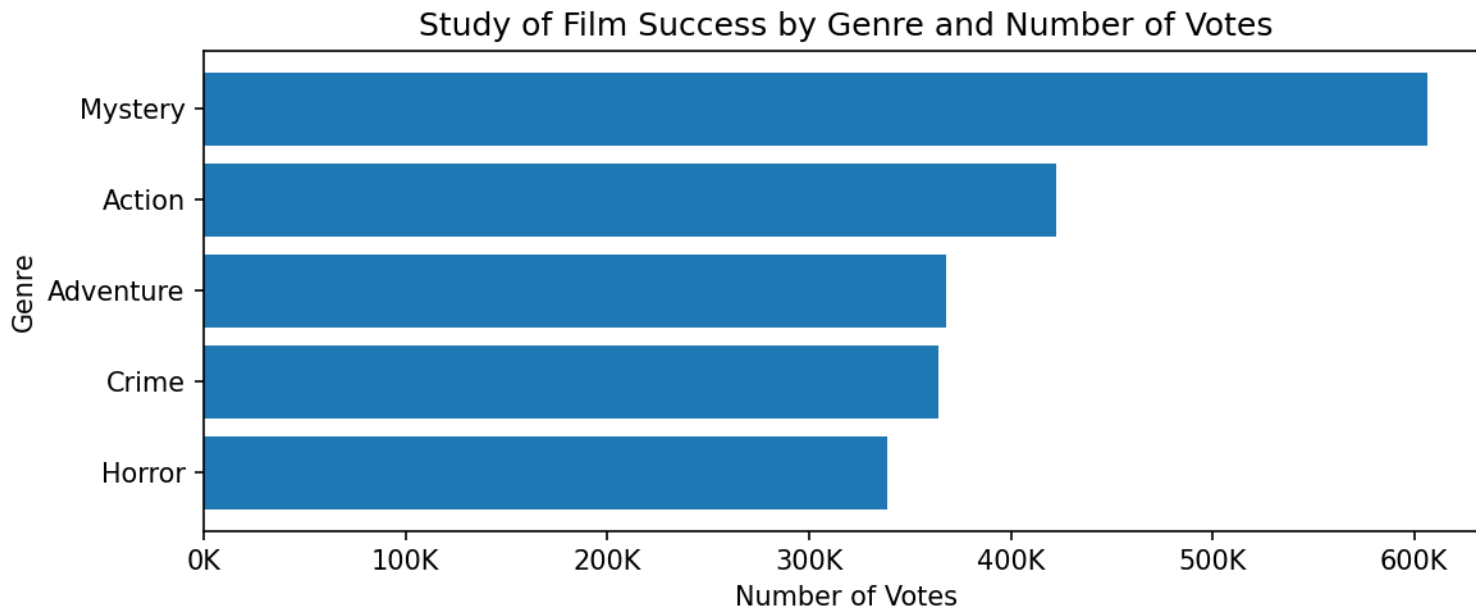- Examination of variable independence

- Descriptive data analysis

Results: Genre Selection

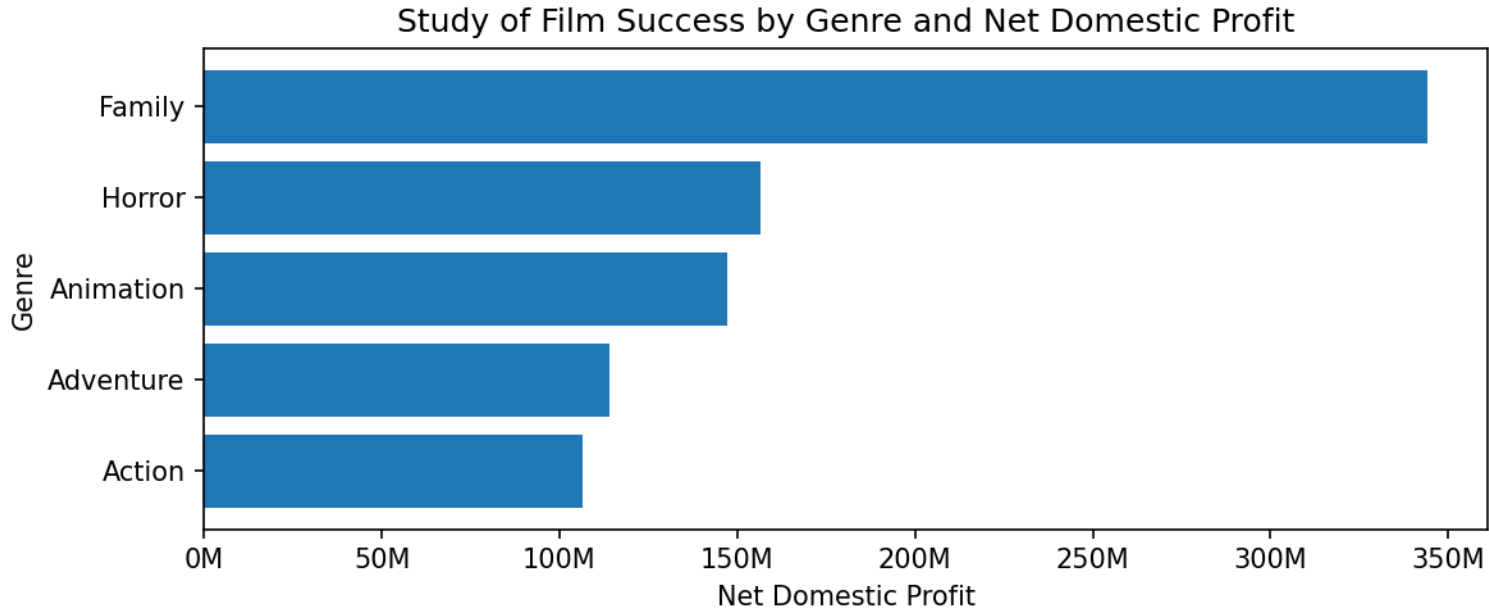Little variety by quality among top five genres

Results: Genre Selection

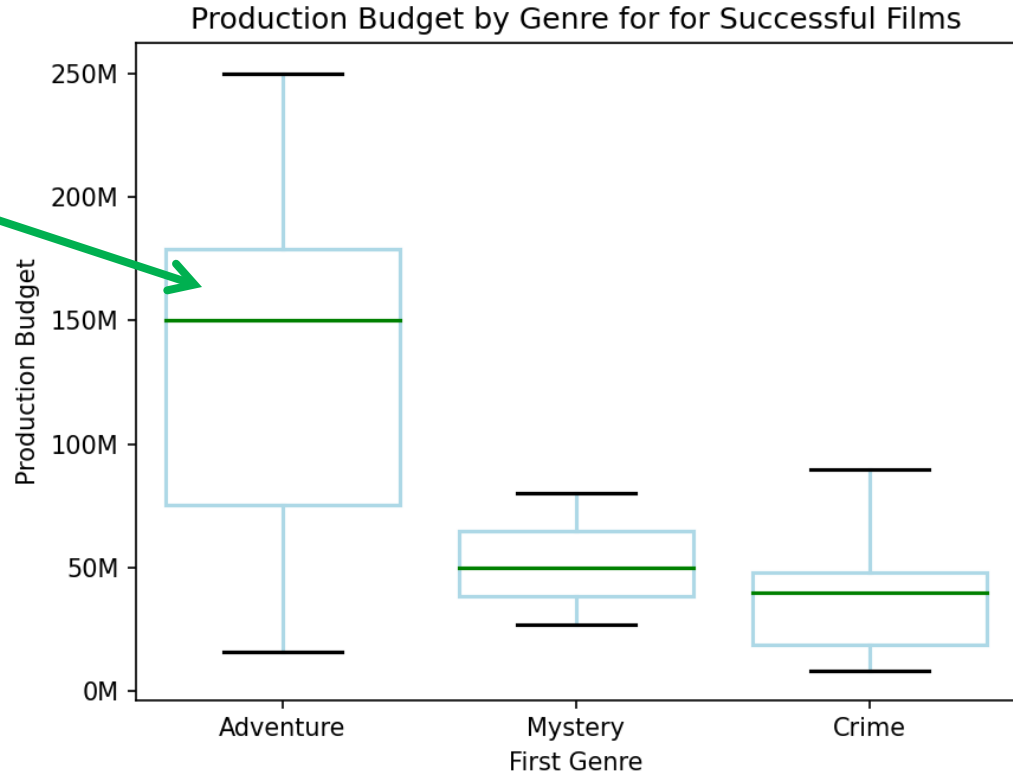The **Mystery** genre most popular among the top five genres, **Crime** repeated

Study of Film Success by Genre and Number of Votes

Results: Genre Selection

Family has highest net domestic profit**, Adventure** repeated.

Results: Genre Selection

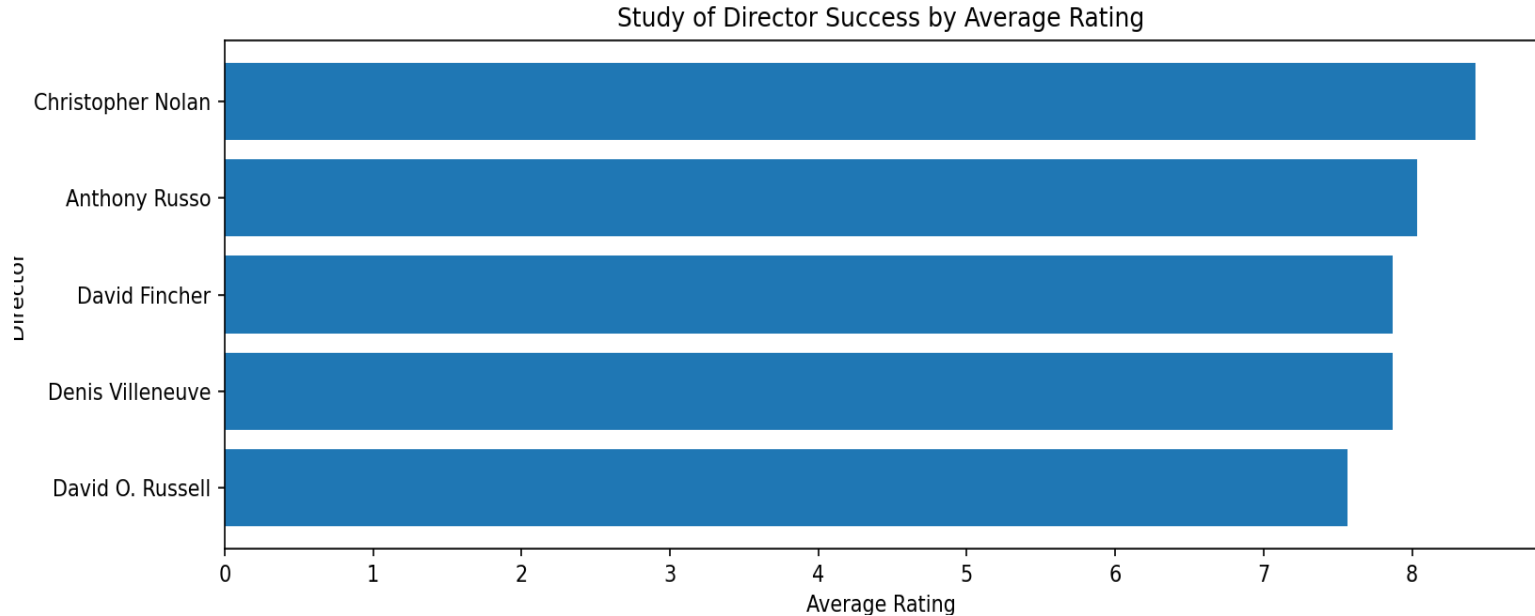**Adventure** among the more expensive genres to produce

Production Budget by Genre for for Successful Films
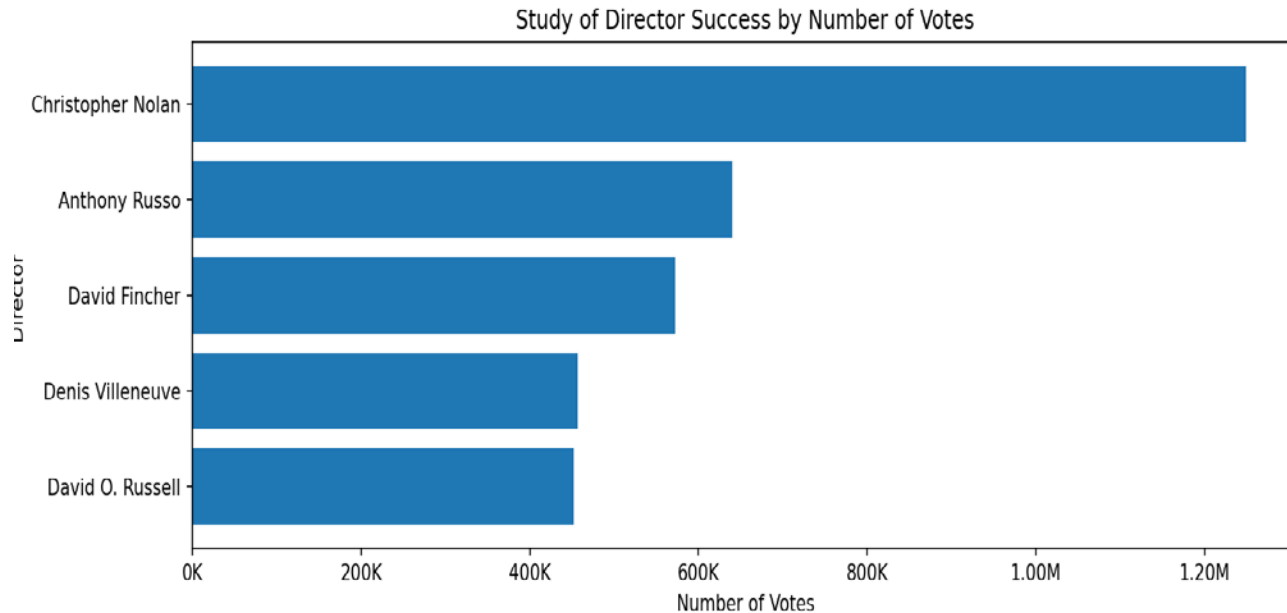
Results: Director Selection

Christopher Nolan, Anthony Russo, with **David Fincher** among top directors associated with Mystery, Crime, and Adventure genres
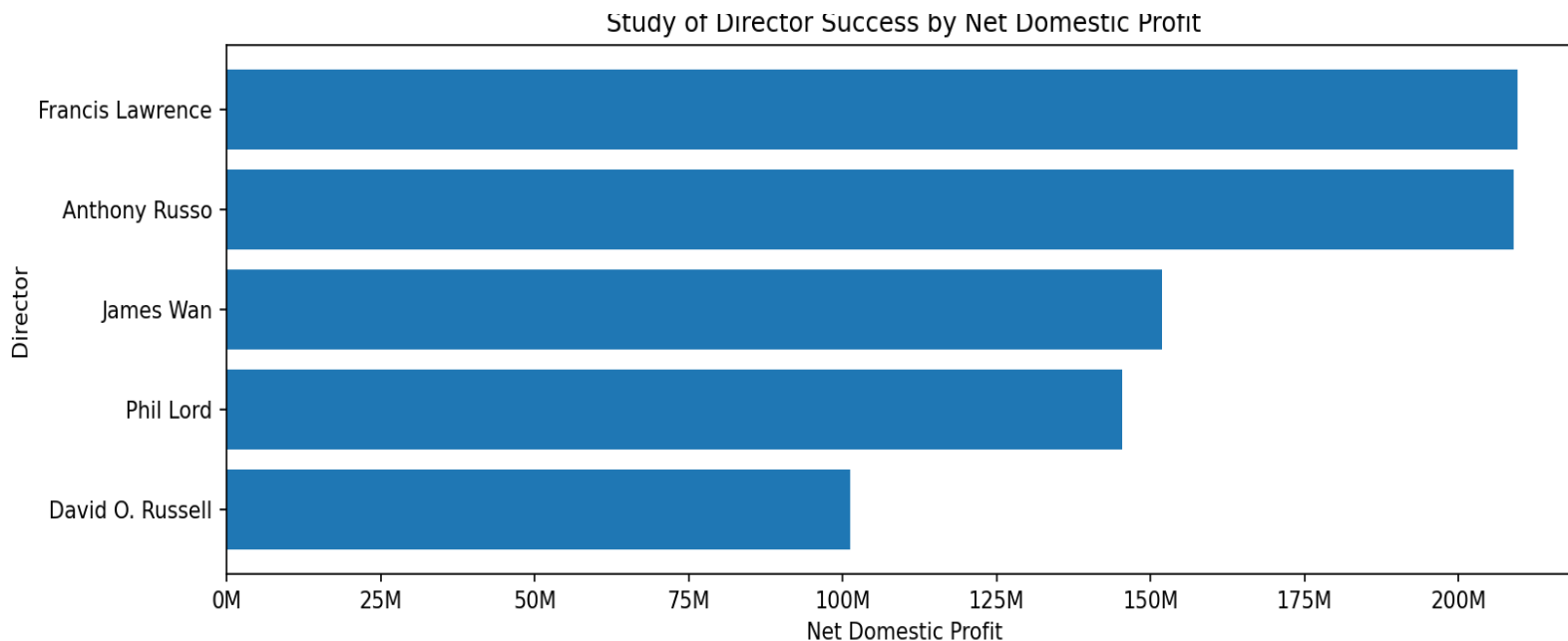
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Study of Director Success by Average Rating

Results: Director Selection

Christopher Nolan, Anthony Russo along with **David Fincher** again among top three by popularity

Results: Director Selection

Francis Lawrence and Anthony Russo tied for films with highest domestic profit**.**

Study of Director Success by Net Domestic Profit

Results: Director Diversity

Among the 3 most successful directors, David Fincher and **Christopher Nolan** have more diverse portfolios

Director	Movie	Genre
Anthony Russo	Capital America: The Winter Soldier	Action, Adventure, Sci-Fi
	Captain America: Civil War	Action, Adventure, Sci-Fi
	Avengers: Infinity War	Action, Adventure, Sci-Fi
David Fincher	The Social Network	Biography, Drama
	The Girl with the Dragon Tattoo	Crime, Drama, Mystery
	Gone Girl	Drama, Mystery, Thriller
Christopher Nolan	Interstellar	Adventure, Drama, Sci-Fi
	The Dark Knight Rises	Action, Thriller
	Inception	Action, Adventure, Sci-Fi
	Dunkirk	Action, Drama, History

Conclusions

If Microsoft chooses to focus on the genre of film as the scoping condition:

- Focus on with the **most successful genres: Mystery** or **Crime**
- **Moderate financial risk** by avoiding high production costs genres like Adventure.

If Microsoft prefers to hire the director to help define the scope of the original content project

- Hire the director who can work across the greatest diversity of genres: **Christopher Nolan** or **David Fincher**

Thank You!

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