Characteristics of Successful Studios: Insights for Microsoft

Allison Lee and Steven Dye October 2019

The Problem

What kind of movie studio should Microsoft be?

What kind of movies should Microsoft be producing?

Approach

- Define success (Return on Investment)
- Gather and clean necessary data
- Split movie studios into groups based on yearly budget

The Data

Only looked at data that had all of the following info:

- Movie Budget
- World-wide Gross
- Studio Producer

Focused on two data frames:

- Bom.movie_gross
- tn.movie_budgets

New Variables

Created:

- 'roi'
- 'studio_size'
- 'movie_budget_size'

Studio_size:

Large: hundreds of millions and up

Ex. Warner Brothers

Medium: tens of millions

Ex. MGM

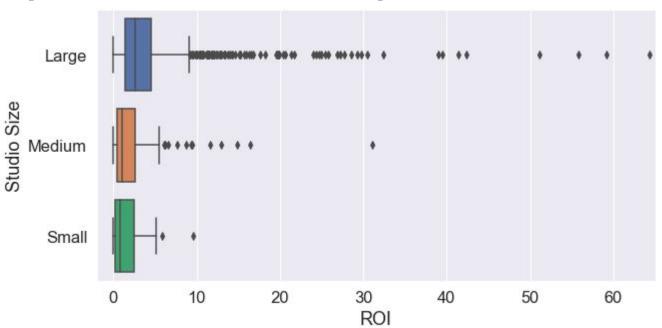
Small: millions and less

Ex. First Look

How did differently sized movie studios perform over the time period?

ROI			(Gross Revenue		
studio	studio_sixe	roi	studio	studio_size wo	orldwide_gross	
WB (NL)	Large	16.49	P/DW	Large	507.80	
FD	Large	11.56	BV	Large	462.30	
UTV	Medium	11.17	GrtIndia	Medium	263.50	
Orch.	Small	8.54	Fox	Large	242.77	
GrtIndia	Medium	7.78	Sony	Large	239.87	
BH Tilt	Medium	6.89	Uni.	Large	236.70	
Uni.	Large	5.88	WB (NL)	Large	230.83	
Par.	Large	5.85	WB	Large	219.70	
TriS	Large	4.91	Par.	Large	199.60	
MBox	Small	4.88	MGM	Medium	139.78	
	\ /			\ /		

How did differently sized movie studios perform over the time period?



Not in image: "The Gallows" (2015) created by Warner Bros. Studio (Large Studio Size), which has an ROI of 416 and 'The Devil Inside" (2012) created by Paramount Pictures (Large Studio Size) which has an ROI of 102.



Cheap Movies: < \$10 million

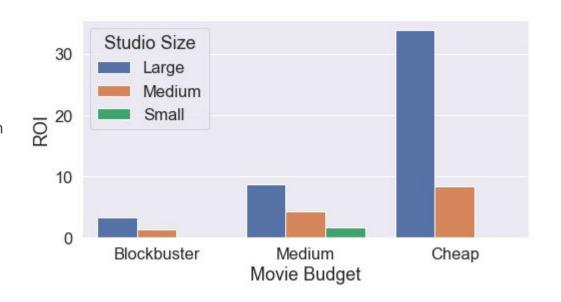
Ex: Fruitvale Station

Medium Movies: \$10 - \$100 million

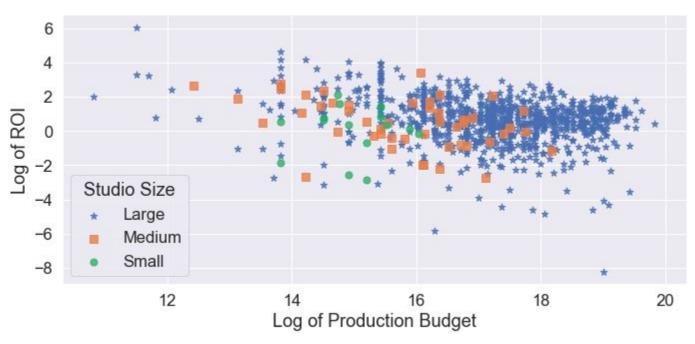
Ex: Get Out

Blockbuster Movies: > \$100 million

Ex: Avengers: Endgame



Is there a movie budget sweet spot?



Diminishing returns for each dollar you spend on a movie

Recommendations:

- Keep movie budget low. Low budget films are low-risk and can yield high ROIs.
- You don't have to be a large studio to produce top performing films--but it helps. Large studios can take more risks, as illustrated by their wide distribution of ROIs.
- Metrics matter. Focus on impact per dollar spent (ROI).
- Microsoft should aim to make 10 cheap movies a year, on average. We assume Microsoft has the budget in the range of a large studio (100 million USD).

Future Considerations

Add additional features

Conduct analysis on films that performed poorly

Appendix

Some examples of films in our dataset with the highest ROI

	production_budget_x	roi
title_year		
The Gallows 2015	0.1	415.56
The Devil Inside 2012	1.0	100.76
Insidious 2011	1.5	65.58
Unfriended 2015	1.0	63.36
Paranormal Activity 2 2010	3.0	58.17
Split 2017	5.0	54.79
Get Out 2017	5.0	50.07
Chernobyl Diaries 2012	1.0	41.41
Paranormal Activity 3 2011	5.0	40.41
Annabelle 2014	6.5	38.52
The Last Exorcism 2010	1.8	37.98
Insidious Chapter 2 2013	5.0	31.38
Dangal 2016	9.5	30.02
The Purge 2013	3.0	29.42
Lights Out 2016	5.0	28.76

production budget v