Characteristics of Successful Studios: Insights for Microsoft

Allison Lee and Steven Dye
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The Problem

Which types of studios are associated with successful films?

What kind of movie studio model should microsoft base theirs off of?

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

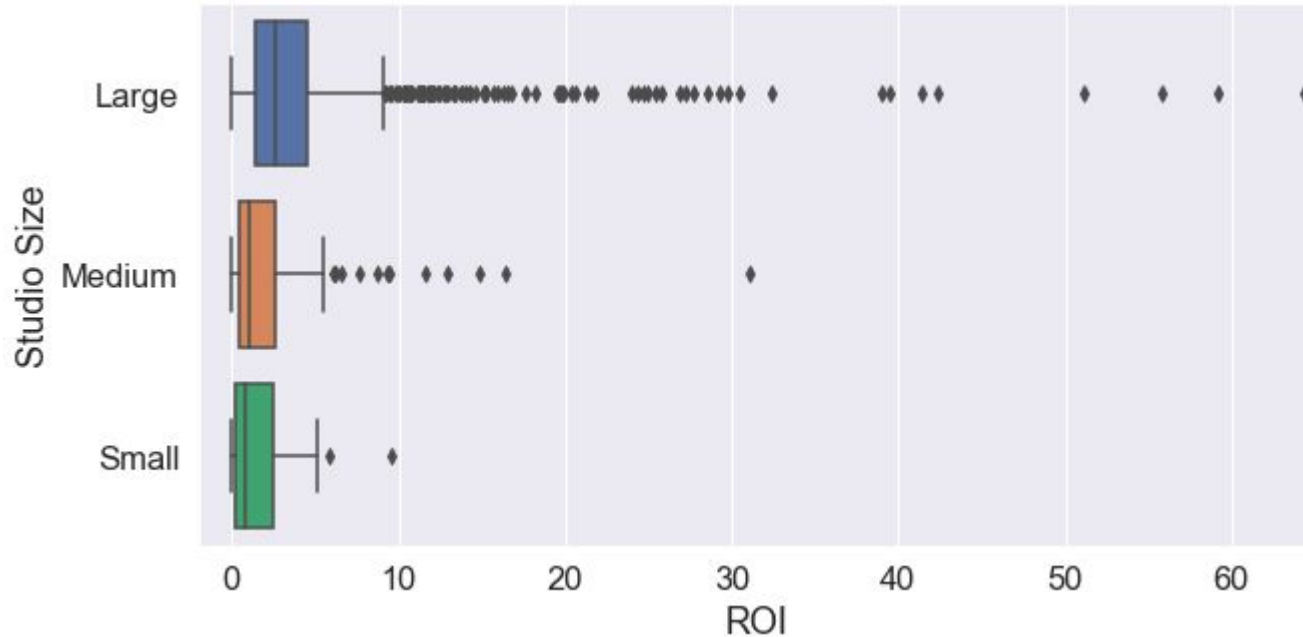Created:

- '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?

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.

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

ROI

studio	studio_size	roi
WB (NL)	Large	16.49
FD	Large	11.56
UTV	Medium	11.17
Orch.	Small	8.54
GrtIndia	Medium	7.78
BH Tilt	Medium	6.89
Uni.	Large	5.88
Par.	Large	5.85
TriS	Large	4.91
MBox	Small	4.88

Gross Revenue

studio	studio_size	worldwide_gross
P/DW	Large	507.80
BV	Large	462.30
GrtIndia	Medium	263.50
Fox	Large	242.77
Sony	Large	239.87
Uni.	Large	236.70
WB (NL)	Large	230.83
WB	Large	219.70
Par.	Large	199.60
MGM	Medium	139.78

Which budget sizes result in the highest impact per dollar?
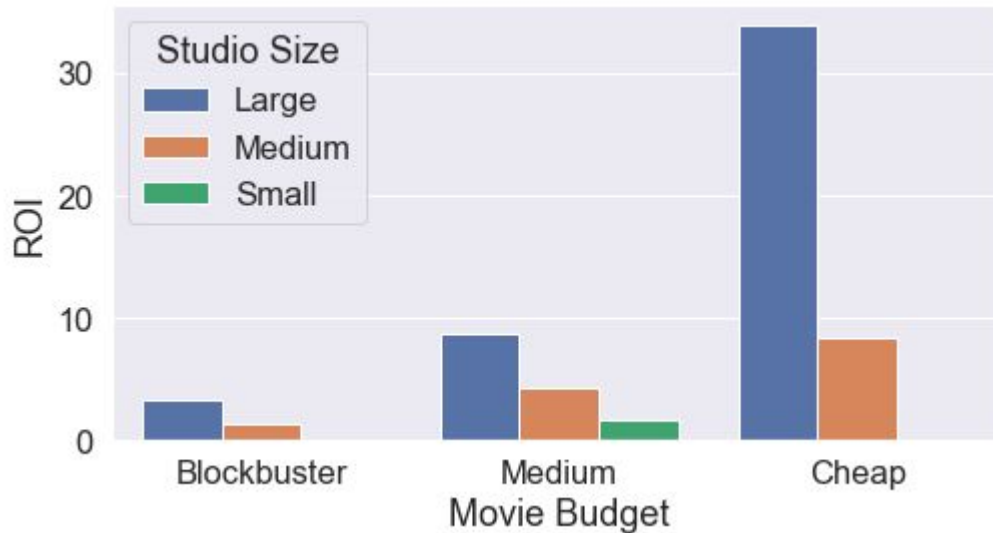
Cheap Movies: < $10 million

Ex: Fruitvale Station
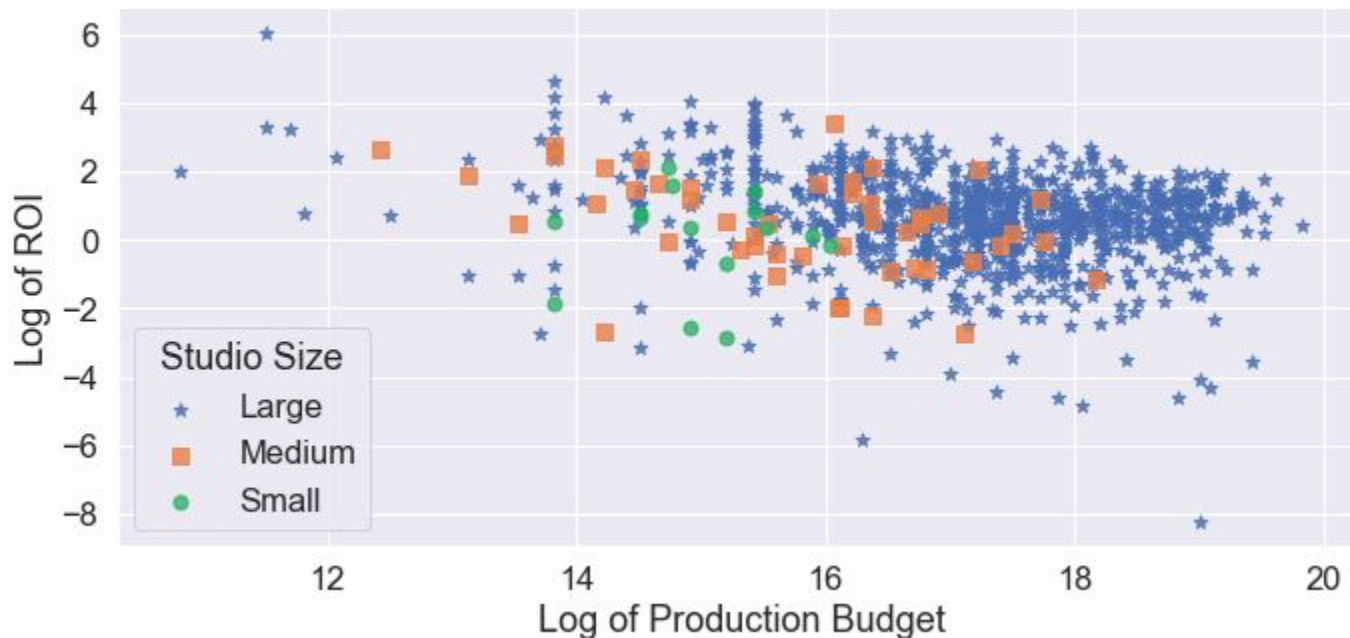
Medium Movies: $10 - $100 million

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

title_year	production_budget_x	roi
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