

# **MSFT Cinema Ventures**

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### **Assumptions and Data**

We will discuss the assumptions underlying our analysis and the data

2

### **Recommendations and Insights**

We will explore our findings as we explored the available data

3

## **Further Analysis Required**

Our proposed next steps



# 1. Assumptions and Data

## **Assumptions and Data**



#### Assumptions:

- Microsoft will pursue a budget of at least \$30 million
- Microsoft is interested in maximizing profit the company's possible movie business as a standalone entity

### **Box Office Mojo**



#### **Rotten Tomatoes**



#### The Numbers

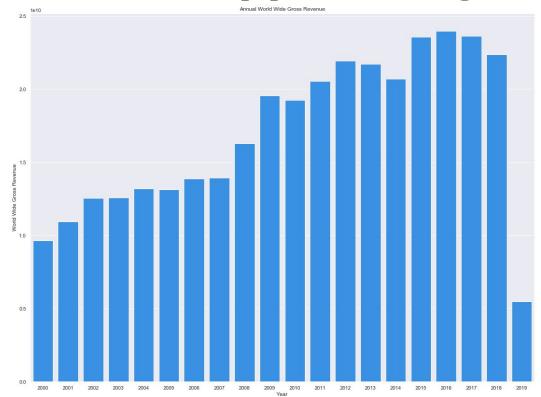


# 2. Insights and Recommendations

What are our findings?



# The Opportunity



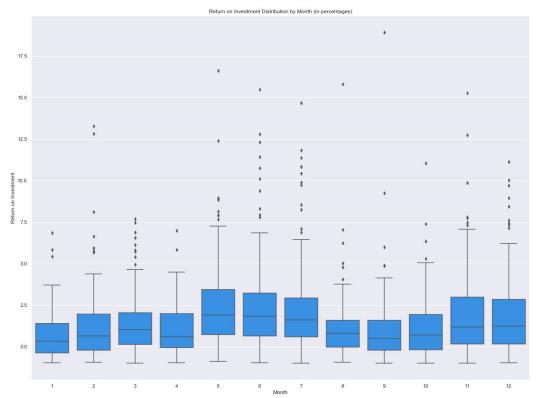
Gross Revenue is in \$10 billions



# Annual global revenue has a compound annual growth rate of 4.8% between 2000 and 2018.

- Data is not complete for 2019
- Removed movie projects with budgets below \$30 million

# Seasonality



Return on investment is in percentages (ie 2 = 200% or 2x investment)



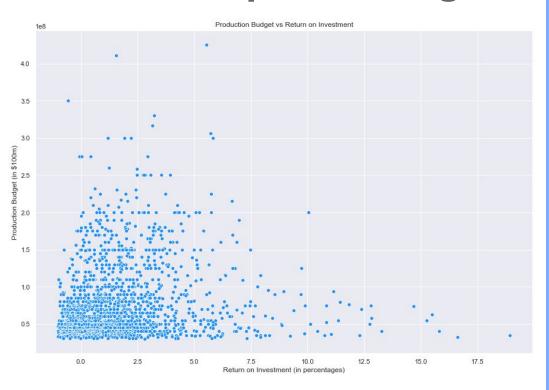
Graph depicts the seasonal nature of return on investment in the movie business

#### Insights/Recommendations

- The second and fourth quarter appear to have the highest median return on investments
- The first quarter is not an optimal time to release a movie historically

- Removed outliers to include 95% of the data
- Assumed MSFT will pursue project with budget above \$30 million

# Is There an Optimal Budget?



Production Budget in \$100 millions Return on investment is in percentages (ie 2 = 200% or 2x investment)



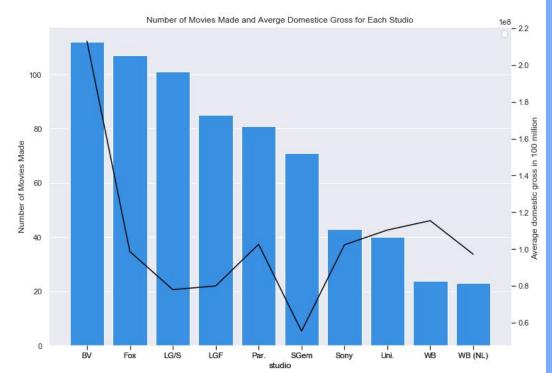
Graph depicts the relationship between the project budget and return on investment (ROI).

#### Insights/Recommendations

- There does not appear to be a discernible relationship between production budget and ROI
- The correlation between the two variables is 0.12. Slightly positive yet too small to draw any conclusions

- Removed outliers to include 95% of the data (Two standard deviations from the median)
- Assumed MSFT will pursue project with budget above \$30 million

## Studio Performance



Bars = Numbers of movies made Line graph = Average domestic gross Average domestic gross is to the power of 8 (ie 1 = 100,000,000



Graph depicts the relationship between the amount of movies a studio makes and there their average gross per movie.

#### Insights/Recommendations

- Despite the highest indexing studio number of movies made is not a depiction of studio performance
- Central limit theorem implies the more movies a studio makes the more likely their average gross will approach the mean average (~100 million)

- Data was cut off to only show the top 10 companies based on number of movies made
- Assumed MSFT will opt to contract their movies to a studio with an established brand

# ROI per Movie Rating in Each Genre



NR

PG-13

Graph depicts the relationship of the movies rating and return of investment for each movie genre

#### Insights/Recommendations

- Movie genres typically have a targeted audience for optimal revenue
- The comedy genre had the highest number of movies present while PG-13 had the highest average ROI

#### Notes:

Microsoft

- Data was calculated using median ROI to compensate for outliers
- Movies were reduced to only one genre category to avoid permutation of data

# 3. Further Analysis Required

We list a few topics which should be explored.

### **Further Analysis Required**

#### ROI per Producer/Director

Producers and Directors control the purse strings, which ones are most efficient

#### **Predictive Analysis**

Determine factors that lead to success using more advanced data science techniques

#### **Competitive Analysis**

Assess the film industry strategy of Amazon, Apple and Netflix using SWAT analysis

#### **ROI per Actor**

Which actors provide the best return on investment

#### **Franchises**

Should Microsoft pursue a big budget Halo movie franchise. Assess franchise ROI.

#### Stock Price Impact

How did the market react when Amazon announced it was to produce movies?

# Thanks!

Does anyone have any questions?