



Prepared by group 2

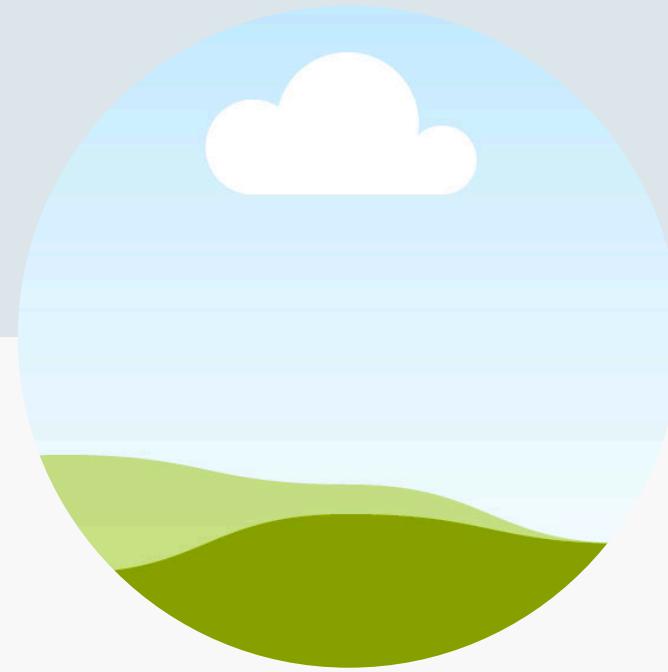
# *Movie Studio Investment Analysis*

Maximizing ROI for new studio investment

9th September 2025

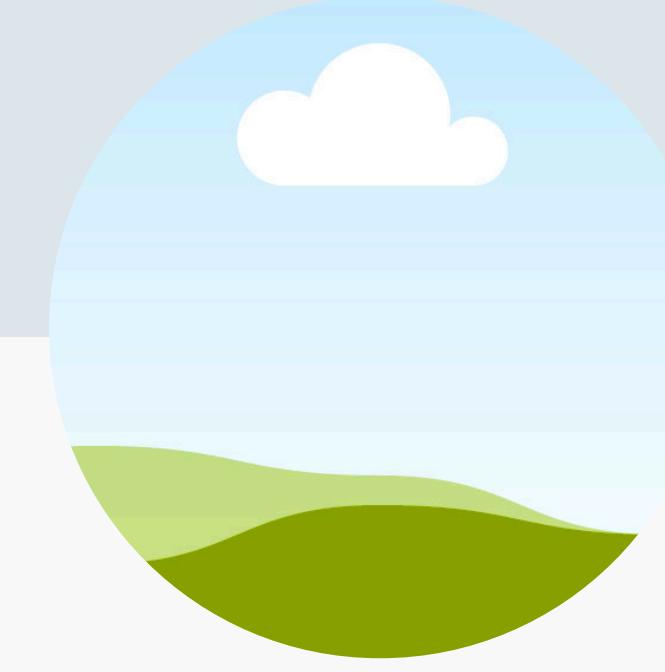


# *Team Members*



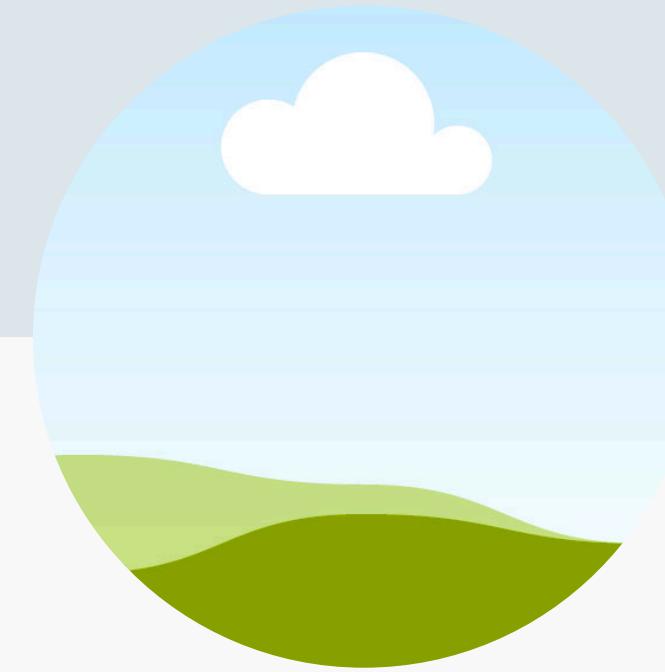
**Jeremiah Bii**

Member



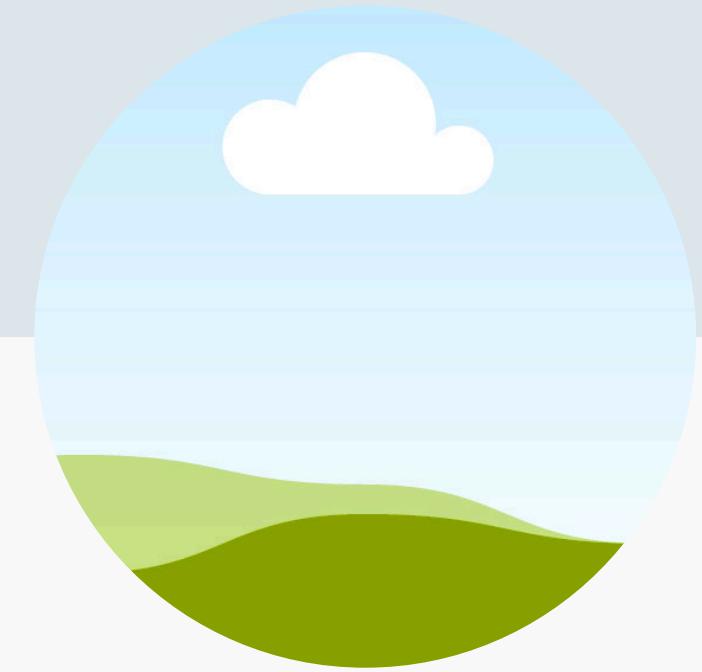
**Catherine Gachiri**

Member



**David Munyiri**

Member



**John Karanja**

Scram Master

# *Introduction*



**Purpose:** Our project aims to present data-driven recommendations that will guide new movie studio's production strategy.

**Key Question** What types of films should the new studio create to maximize profitability?

**Our Deliverable** Actionable business recommendations backed by data analysis of past movie performance.



# Business Understanding

## The Challenge:

The film industry involves significant financial risk. We need a strategy to make smart investments that generate strong returns

## Our Goal:

To use historical movie data to move beyond guess work and create a blueprint for financial success.

- **This analysis will help us answer key business questions:**

- Which movie genres are most profitable?
- Does the time of year a movie is released affect its success?
- Is there a budget range that delivers the best ROI?
- Does a movie's runtime impact how much money it makes?



# Data Understanding

## The Data:

To answer these questions, we collected information from three trusted sources

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### The Numbers:

- Provides essential financial data, including production budgets and worldwide box office earnings, which we used to calculate ROI.
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### Box Office Mojo:

Used to supplement our financial data.

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### IMDB:

Gave us key metadata like a movie's genre, release date, and runtime.

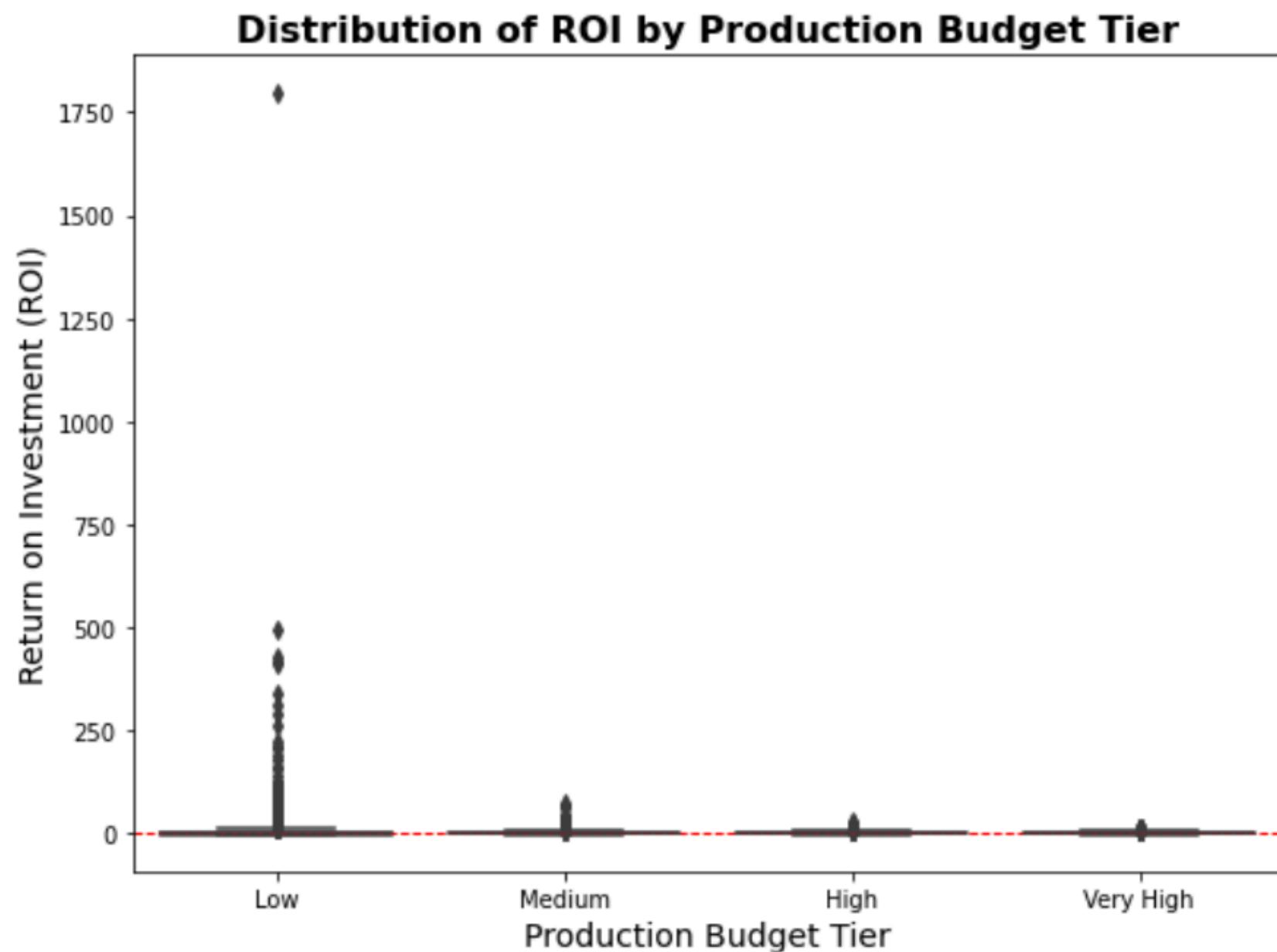
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## Data Sources:



## *Insight 1 -*

### *ROI is Unpredictable for Low-Budget Films*



#### **• What it shows:**

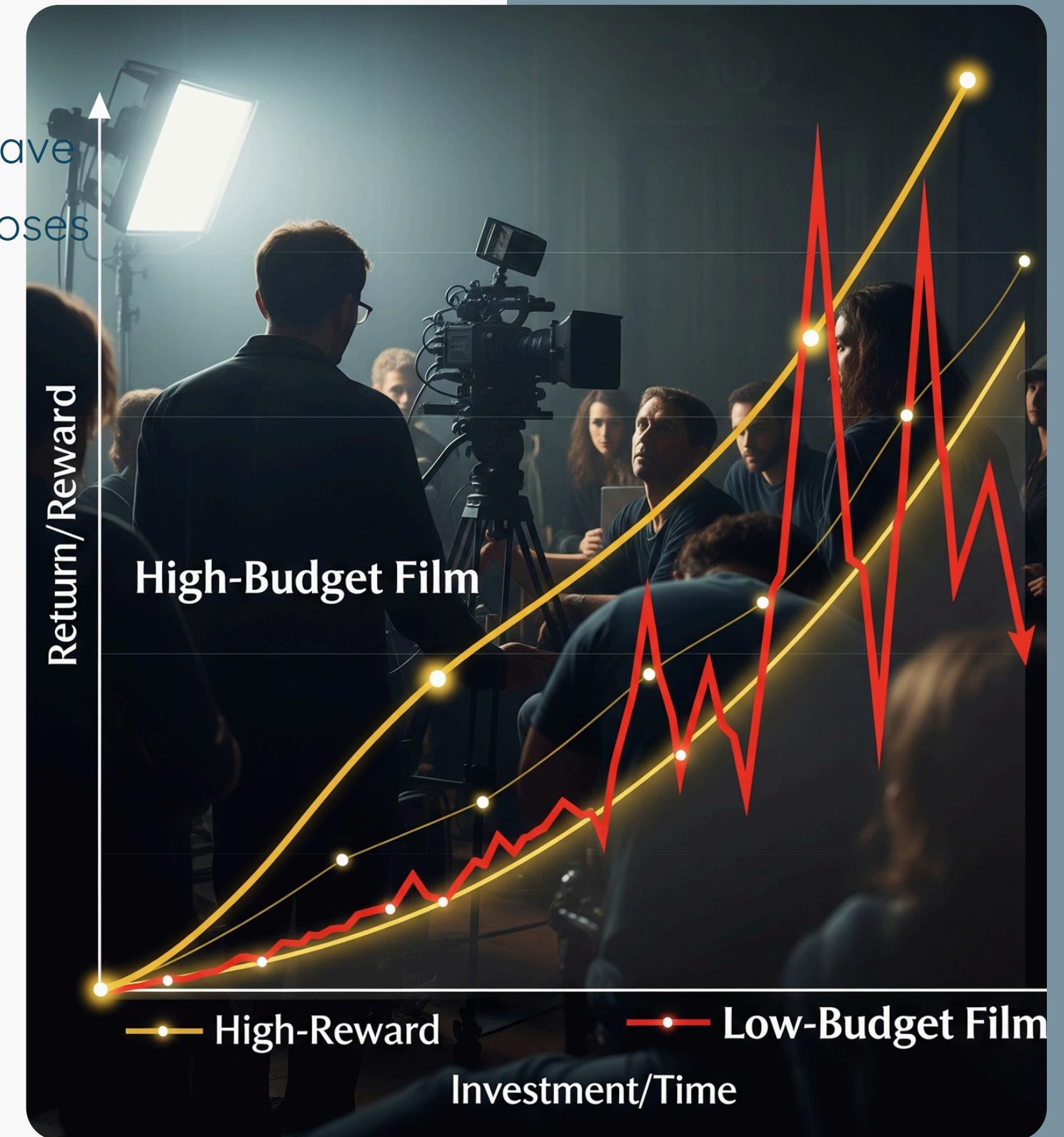
- For the Low Budget tier, the median ROI is below zero (approximately -0.04), meaning the typical low-budget movie loses money. The box is wide, and there are numerous outliers (both high and low), indicating extreme volatility and risk.
- For the Medium Budget tier, the median ROI is positive (0.65), showing that the typical movie in this tier is profitable. The box is narrower than for low-budget films, but there are still some outliers, suggesting moderate risk.
- For the High Budget tier, the median ROI is also positive (0.66) and similar to the medium tier, but the box is even narrower, indicating more consistent outcomes. The risk is lower than in lower tiers.
- For the Very High Budget tiers, the median ROI is the highest (1.17), meaning the typical blockbuster more than doubles its investment. The box is the narrowest, with few outliers, showing that outcomes are predictable and less risky. This tier represents the "safest" bet for profitability, but it requires significant capital.'

- *What it shows:*

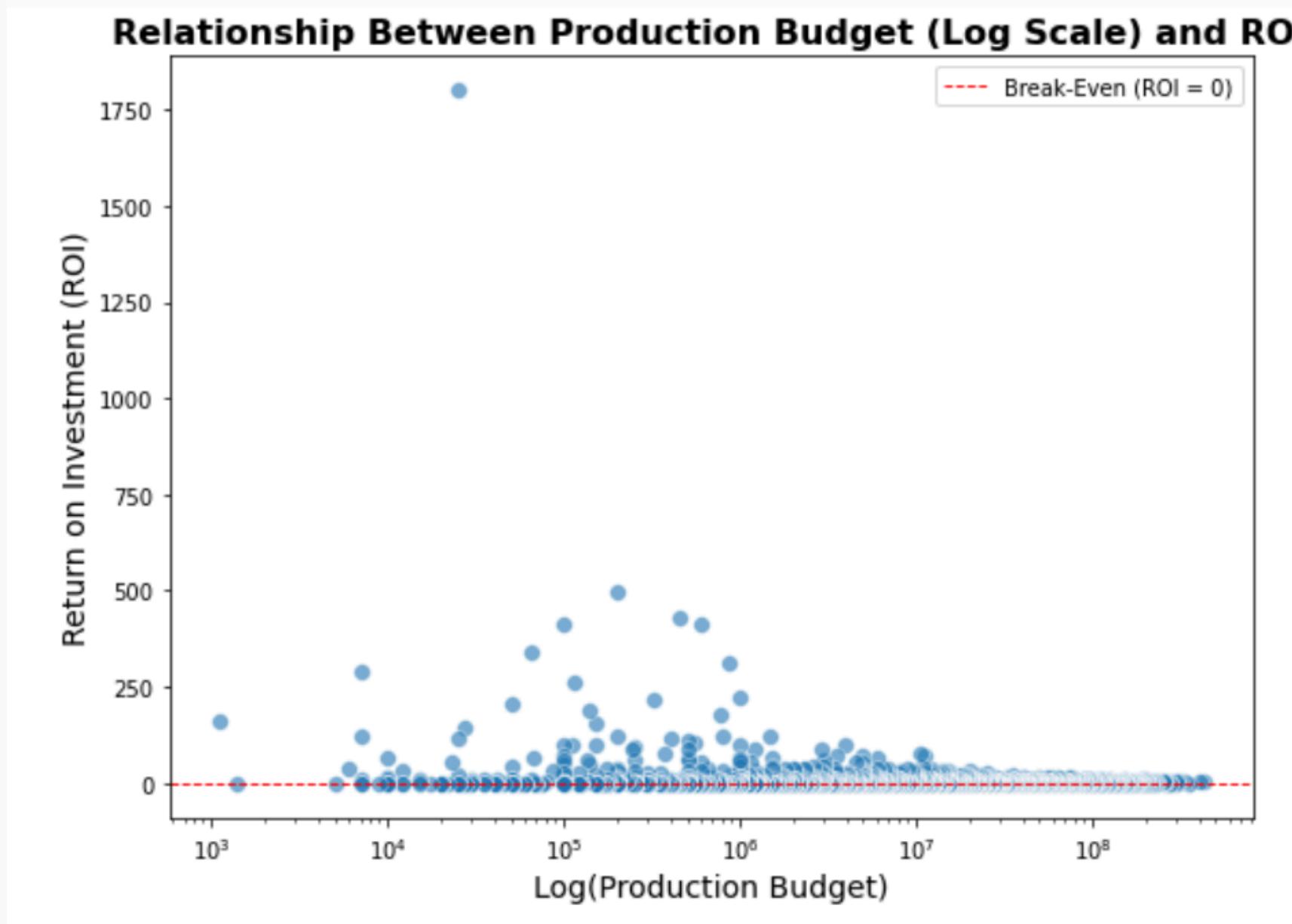
- Low-budget films are highly unpredictable. While a few may have spectacular returns, the median film in this category actually loses money. The risk is simply too high for a new studio.
  - As budgets increase, the returns become more reliable.

## *Business Recommendation*

Avoid a strategy that relies heavily on low-budget films. The high risk and low median return make it an unacceptable strategy for a new studio.



# *Insight 2 - Aim for Medium to High-Budget Films*

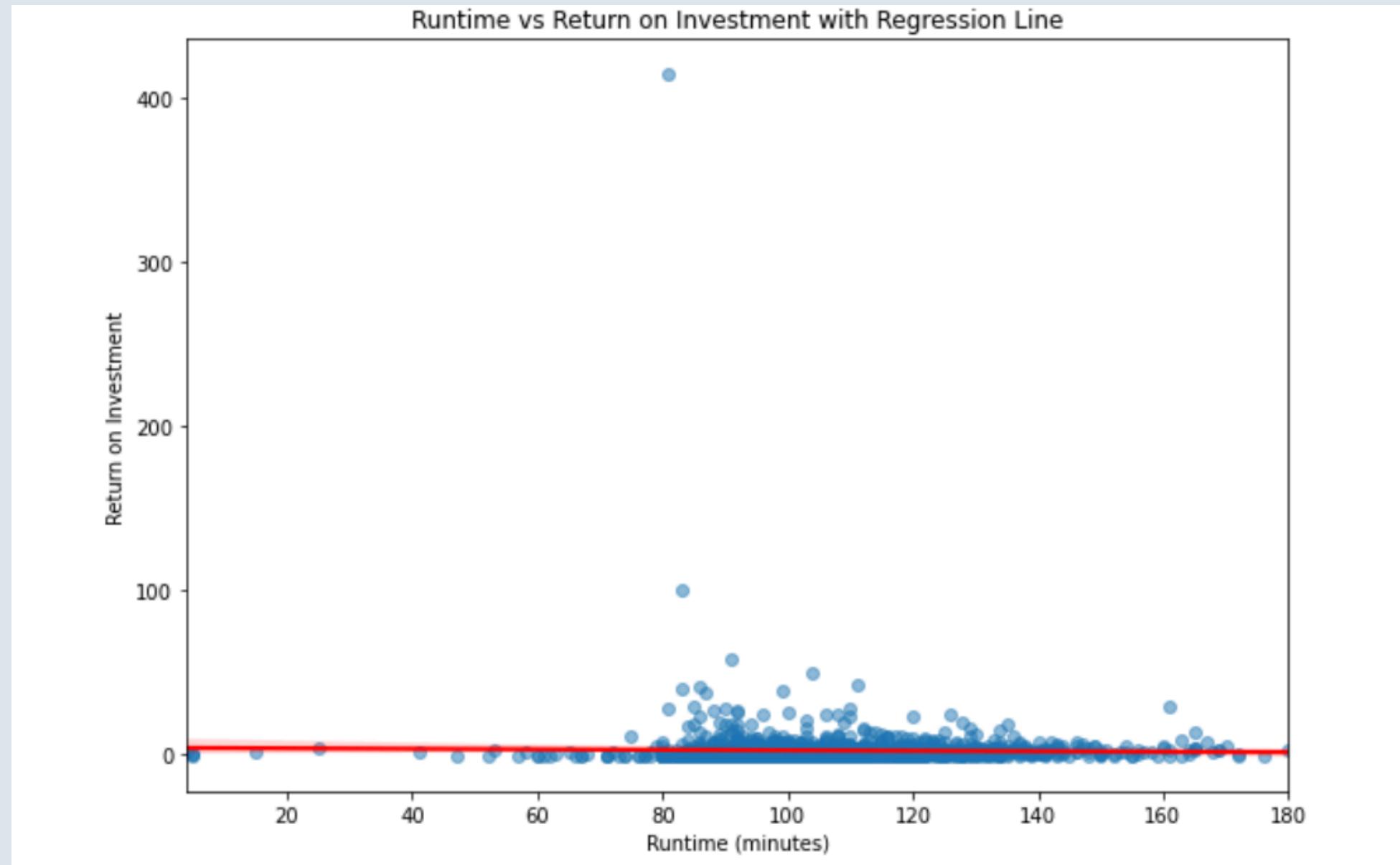


- *What it shows:*
  - Medium-budget films offer a stable, consistent path to profitability.
  - High and Very High-budget films offer the best combination of high returns and low risk.

## *Business Recommendation:*

Begin by building a portfolio of medium-budget films to establish a stable revenue stream. As the studio grows, gradually shift resources toward high-budget productions for superior and more predictable profits.

# *Insight 3 - Runtime is Not a Key Factor*

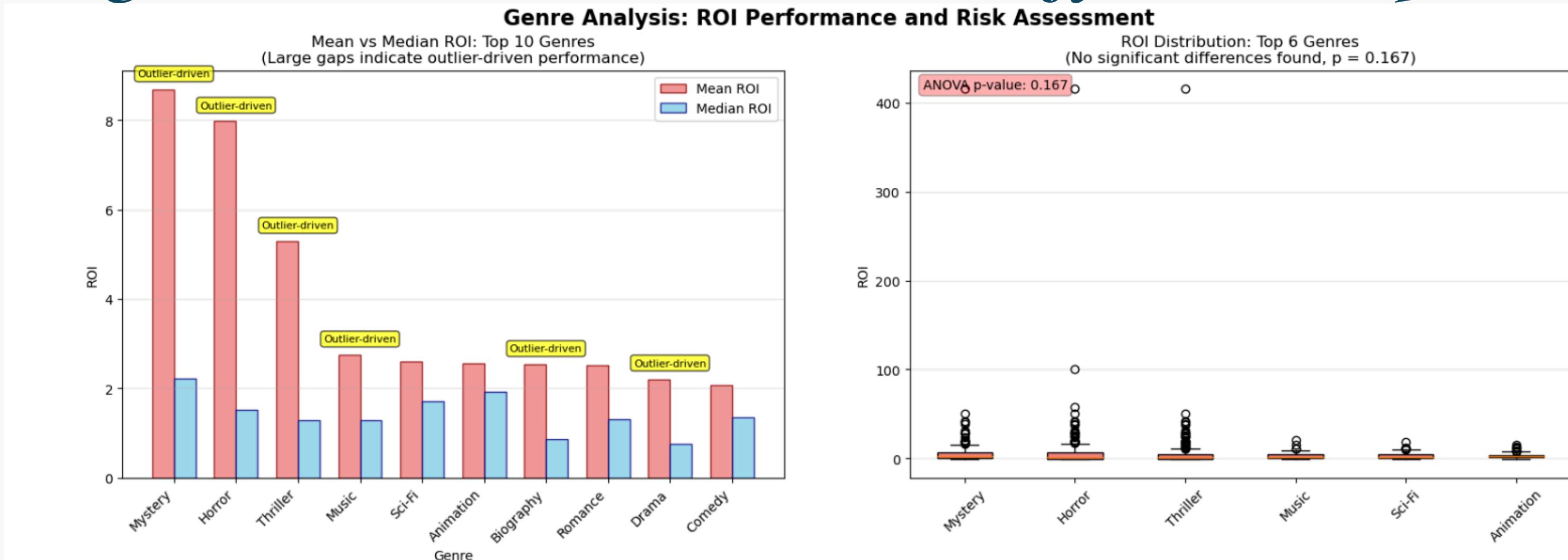


- ***What it shows:***
  - The visualization displayed is a scatter plot of movie runtime vs ROI, with the regression line (in red) drawn across the data points. This makes it clear that the trend line is almost flat, confirming that runtime has no meaningful effect on profitability.
  - The analysis found no significant correlation between a movie's length and its profitability.

## *Business Recommendation:*

Runtime should not be a deciding factor when selecting or producing films. Strategic focus should be on factors that have a proven impact, such as budget management and release timing.

# Insight 4 - Genre Choice: Diversify, Don't Specialize



- **What it shows:**

- The differences in average ROI across genres are minimal. While some genres may perform slightly better on average, genre alone does not guarantee a blockbuster.
- The data suggests that individual film quality and marketability within a genre are more important than the genre itself.

- **Business Recommendation:**

- Avoid specializing in a single genre. A diversified portfolio across a variety of genres is a safer strategy to mitigate risk and capture a wider audience.

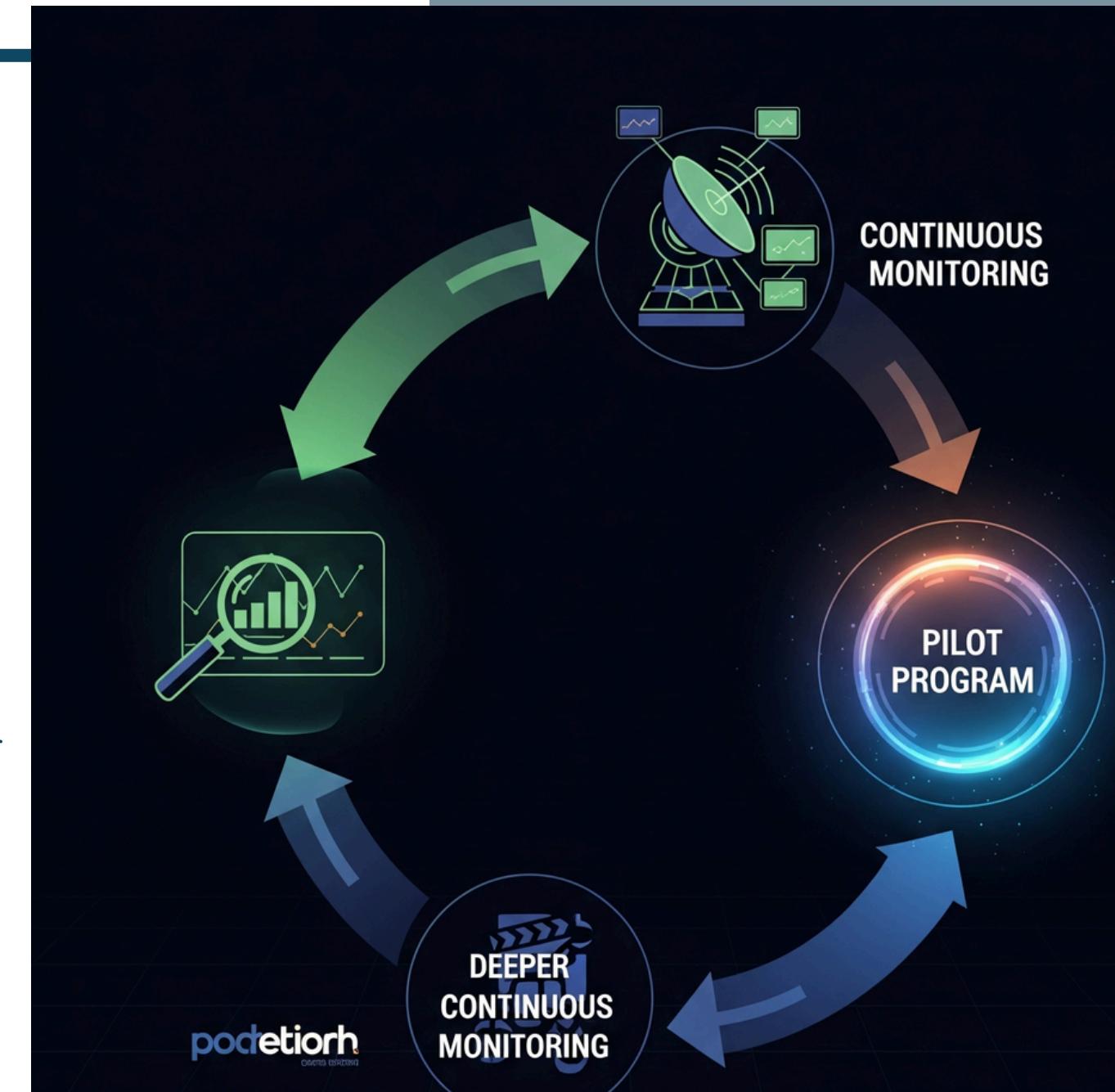
# *Recommendations Summary*

1. Implement a Phased Budget Strategy: Start with medium-budget films to build a stable foundation, then scale up to high and very high-budget films for better returns.
2. Avoid the Low-Budget Gamble: Do not rely on low-budget films as a core strategy due to their high risk and poor median performance.
3. Prioritize Influential Factors: Focus on budget management, strategic release timing, and marketing, as these have a much greater impact on profitability than a movie's length.
4. Diversify Your Genre Portfolio: The data shows that genre is not a strong predictor of success. A diversified portfolio is a more stable approach than specializing in a single genre.



# Next Steps

- 1. Deeper Analysis: Continue to analyze other factors, such as specific genres, release months, or director/actor influence.
- 2. Pilot Program: Apply these recommendations to the studio's first few projects and closely monitor their performance against our predictions.
- 3. Continuous Monitoring: Establish a system for ongoing data analysis to ensure our strategy adapts to market changes.





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# Thank you

Thank you for your time. We welcome any questions you may have.

## Presenters:

Jeremiah Bii, Catherine Gachiri, John Karanja and David Munyiri

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