



# Data Driven Movie Studio Profitability Analysis

Presented by group 7

*Patrice Okoiti | Kevin Oguda | Paul Lenamuge | Dennis Osebe*

*Date: 02 May 2025*

This presentation explores strategic, data-driven insights for movie studio executives. We analyze box office data, financial risks, and audience feedback to optimize production strategies and profitability.



# Business Challenges & Solutions

## Challenges

- ◆ New to the film industry
- ◆ Uncertain production strategies
- ◆ Financial risk exposures

## Solutions

- ◆ Analyze genre, budget, release date data
- ◆ Identify profitable strategies
- ◆ Provide actionable recommendations

# Data Collection & Preparation

## Data Sources

- IMDB
- Box Office Mojo
- The Numbers

♦

♦

## Preparation Steps

- Remove Duplicates and cleaned missing values
- Normalized columns and merged datasets

# Box Office Trends Overview

## Trend Visualization

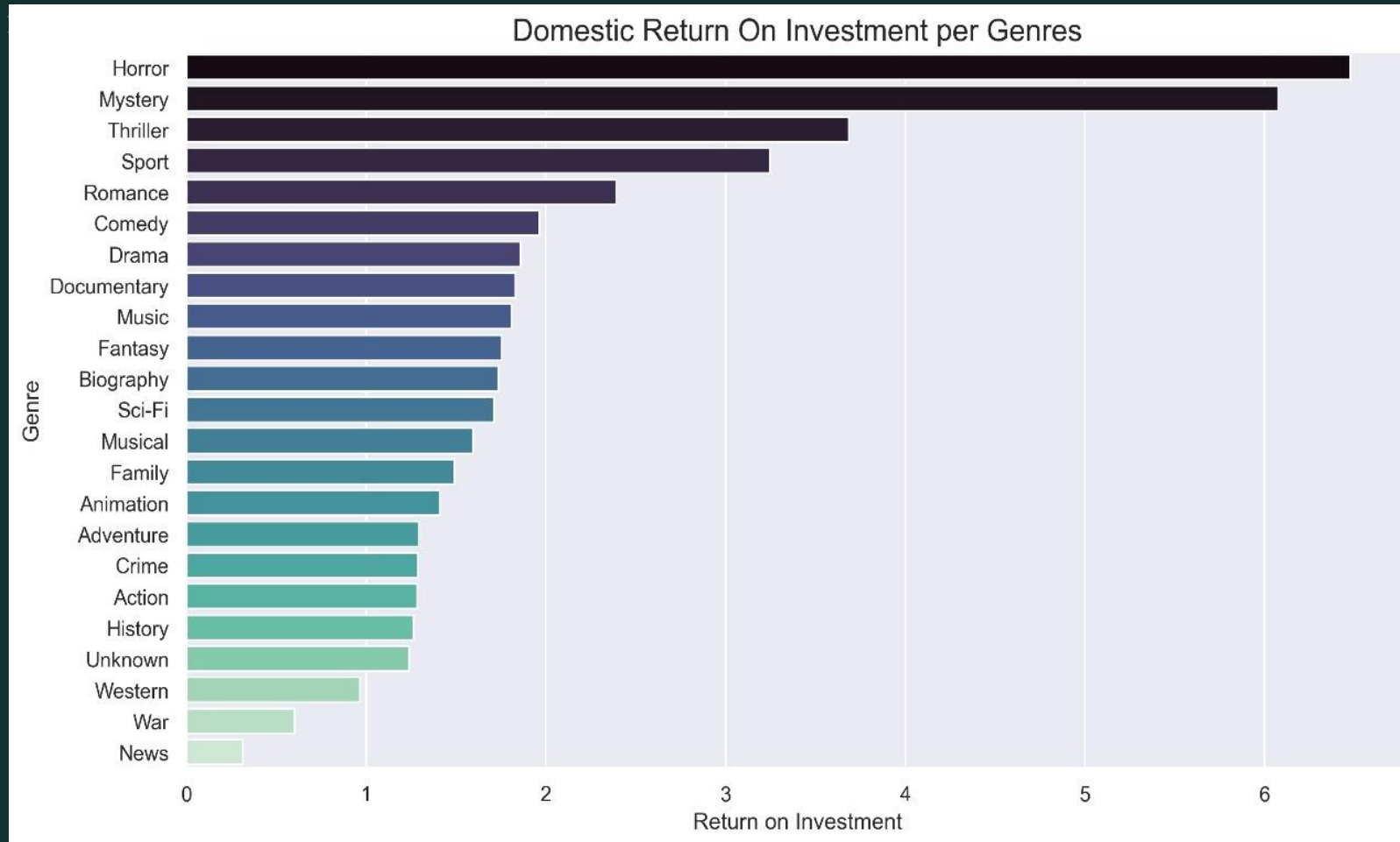
Visualized box office performance across years.

## Key Findings

Identified peak years with highest revenue and production volume.

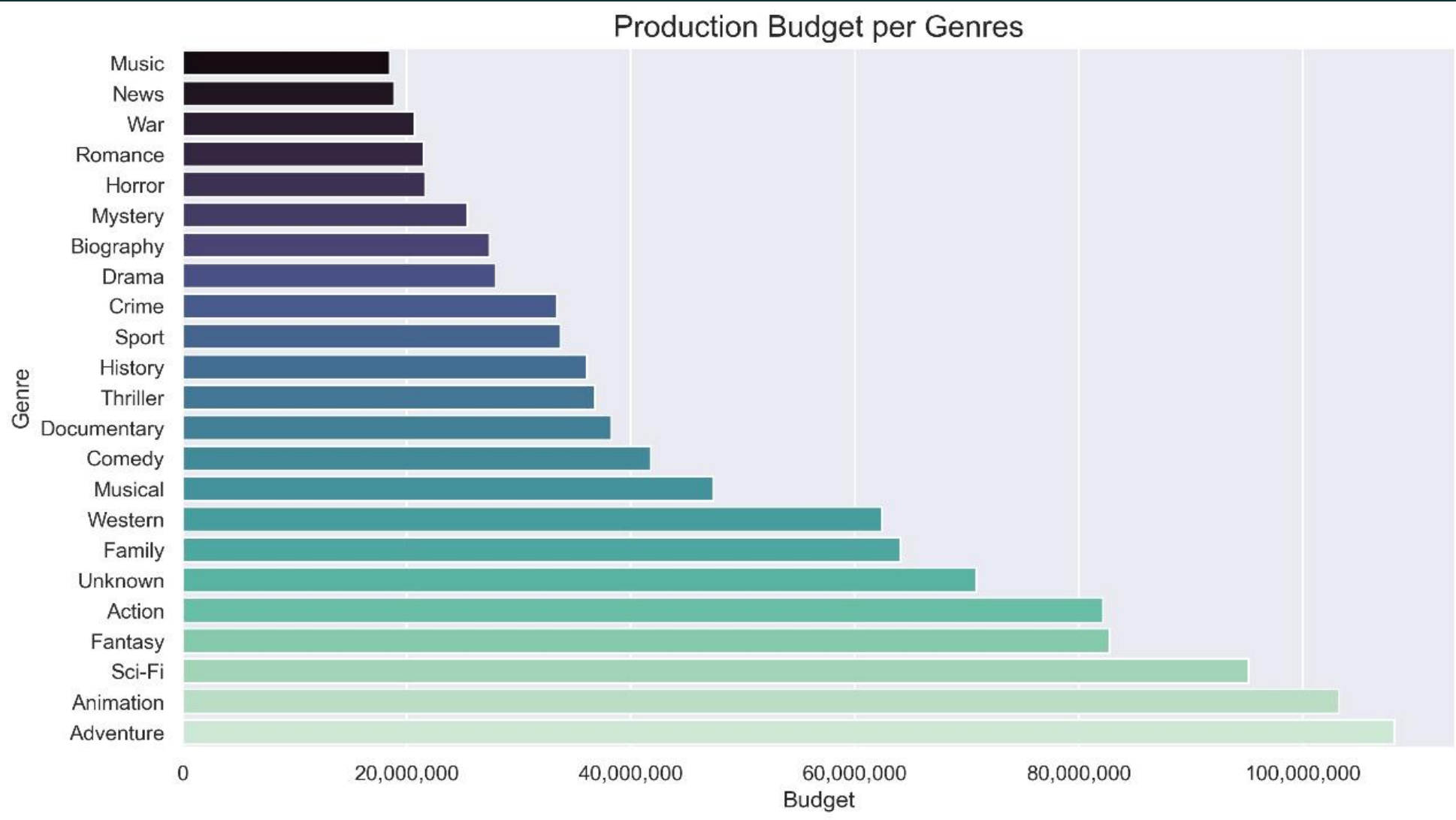


# Genre vs Return on Investment

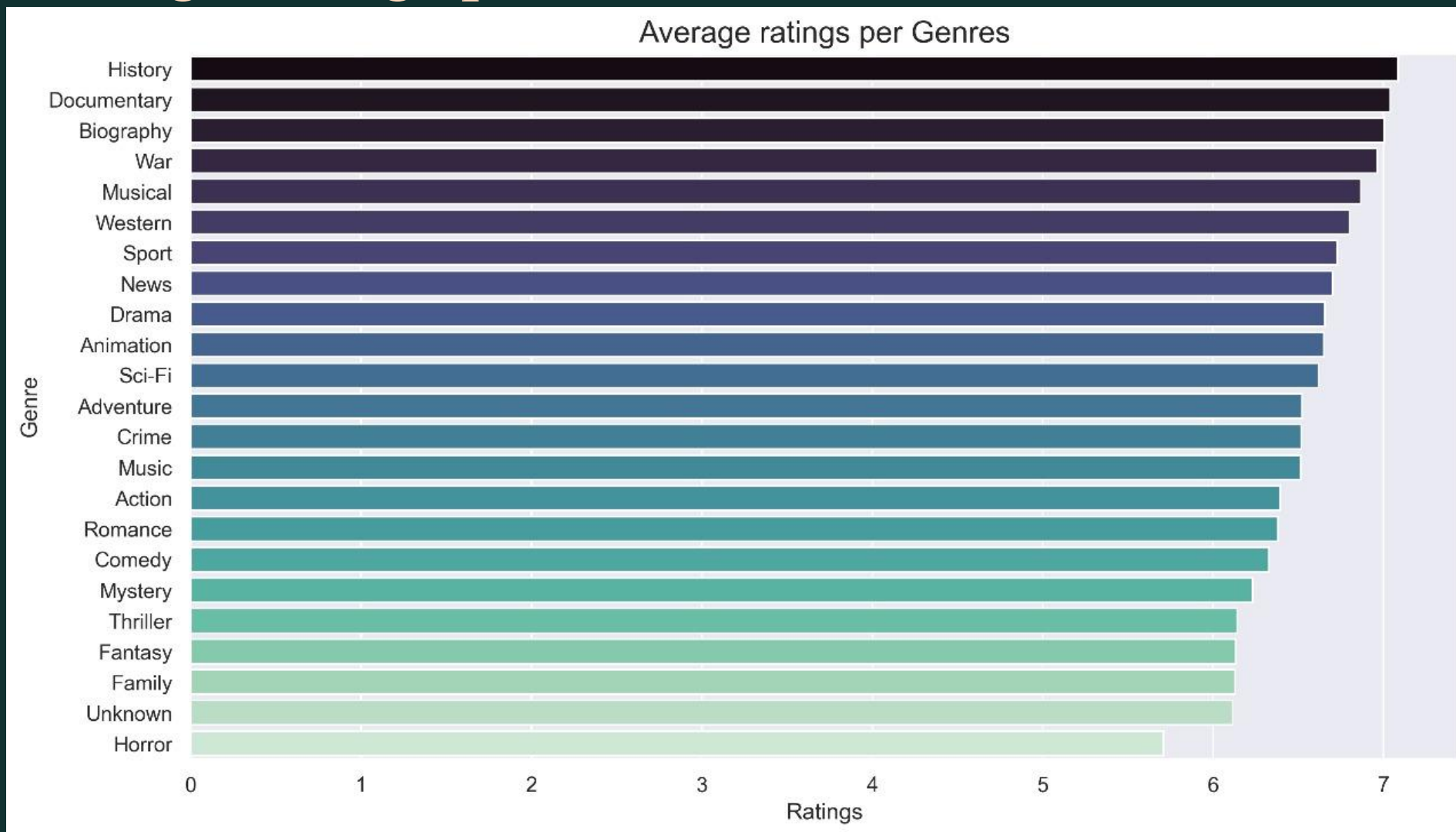


Horror recorded the highest ROI over the Years making it the best genre to launch with.

# Production Budget per Genre



# Average ratings per Genre



# Audience Review Insights by Genre

## Drama

Most frequently produced genre.

## Horror

High ROI despite lower ratings.

## Sci-Fi

Most audience votes indicate high popularity.

## History

High ratings but niche viewership.



# Key Takeaways & Next Steps



## Budget Management

Lean budgets improve profit margins.



## Genre Profitability

Horror yields highest ROI among evaluated genres.



## Audience Focus

Customize strategies to genre-specific audience preferences.



## Strategic Direction

Align studio production with data and market trends.



# Strategic Recommendations for Studio

1

## Focus Genres

Prioritize Horror, Mystery, Thriller genres for profitability.

2

## Budget Control

Cap budgets at \$30 million to maximize returns.

3

## Collaborations

Partner with streaming platforms to widen distribution.

4

## Data-Driven

Use analytics continuously to fine-tune production strategies.

