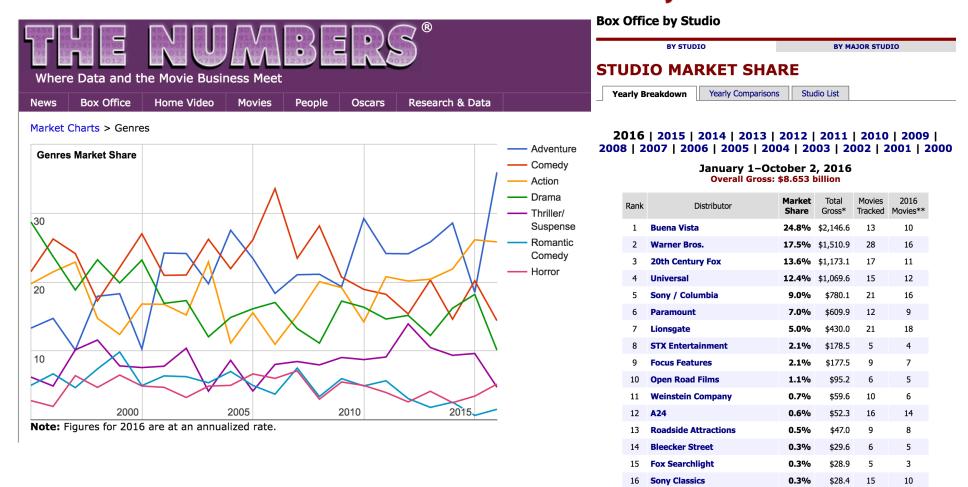
Return on Investment: Movie Genre & Studio Options

HENG-RU MAY MERKLE-TAN, PHD

Genres | Studios & Market Share

Box Office Mojo

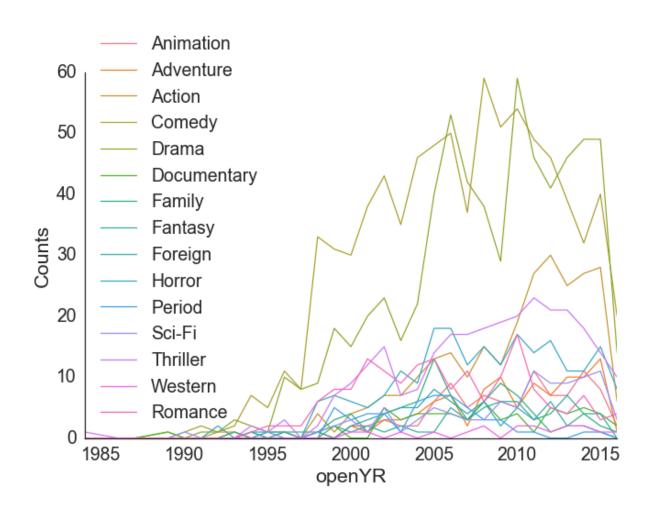


Return on Investment?

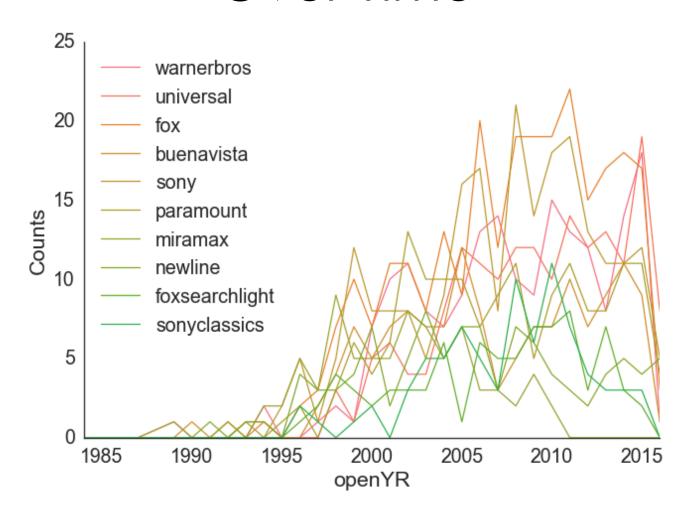
 Ln(ROI) = Ln(World Gross / Production Budget)

- Data Sources:
 - Box Office Mojo
 - Release Details; Theatres; Duration; Oscar Nominations
 - The Numbers
 - Budget, Gross + inflation correction

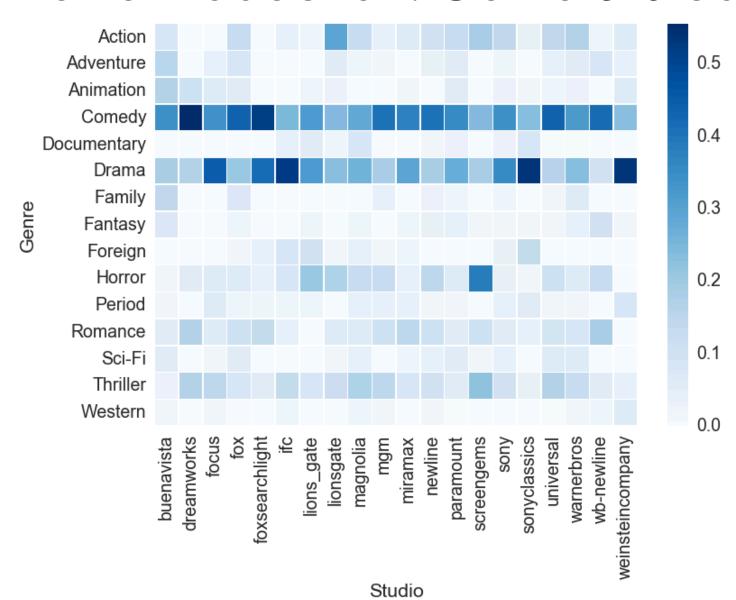
Movie Genre Over Time



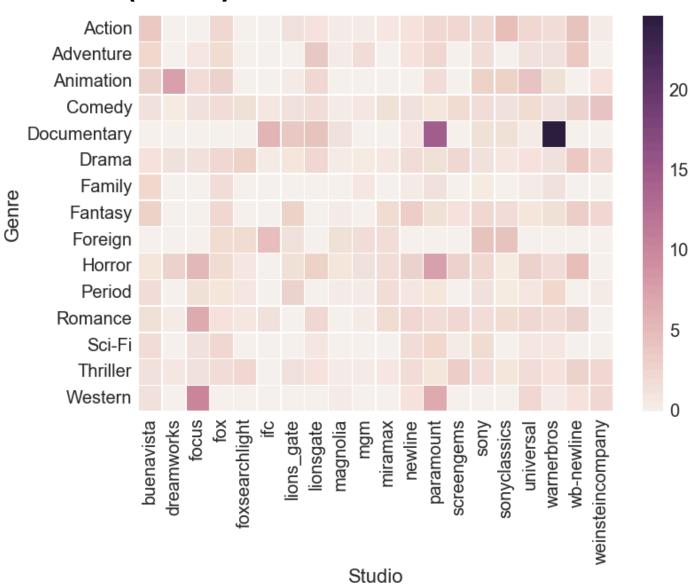
Movie Production by Studio Over Time



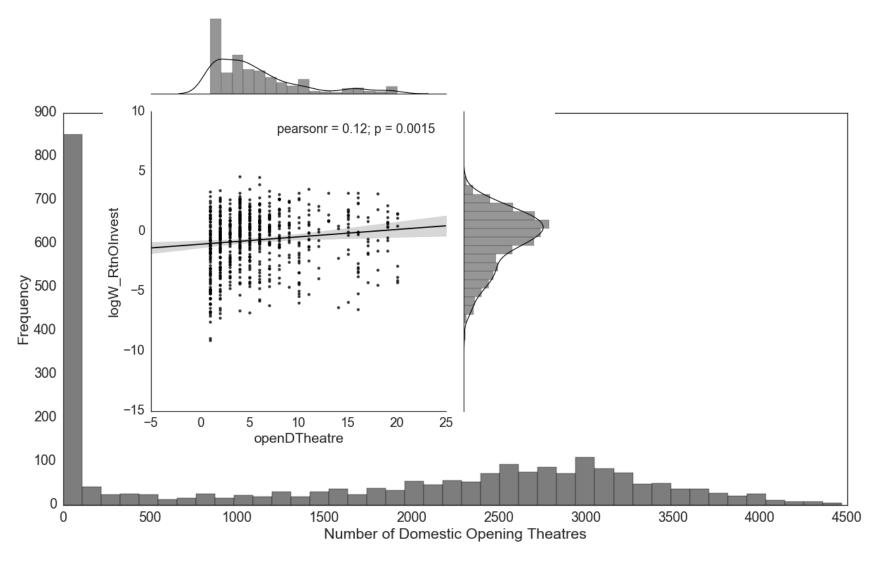
% Movie Production: Genre & Studio



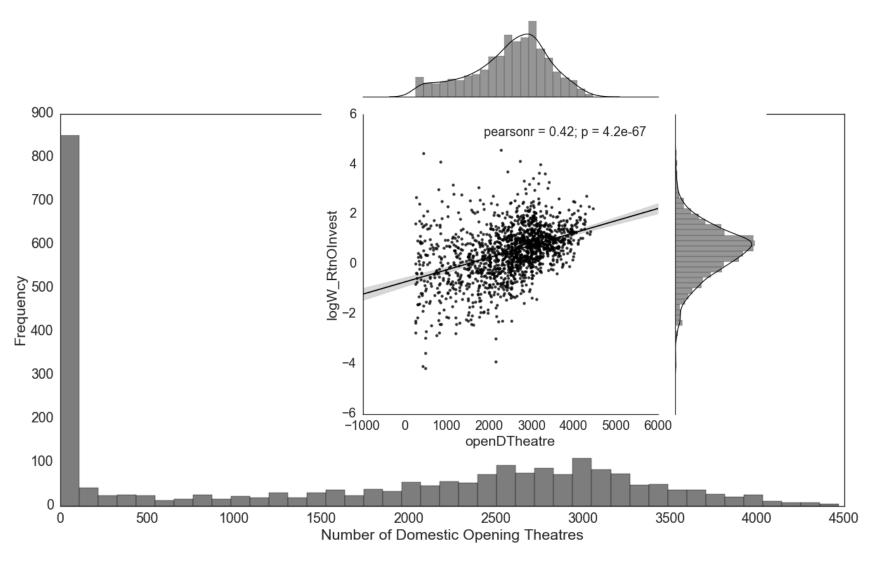
Ln(ROI): Genre & Studio



Opening Theatres



Opening Theatres

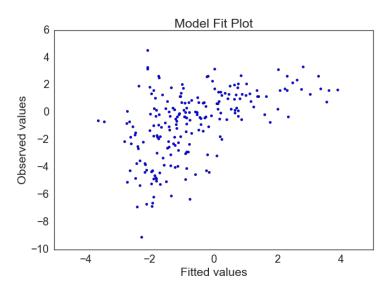


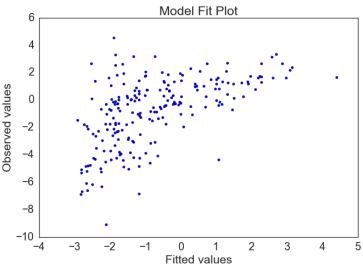
Methodology Overview

- Assessing Features (Genre | Studio):
 - OLS | Lasso | Ridge | Decision Trees |
 Interactions
 - K-Folds Cross Validation; K=5
 - Final Model via OLS
- 2 Partial Models :
 - In(ROI) ~ Genre
 - In(ROI) ~ Studio

Opening Theatres <= 20

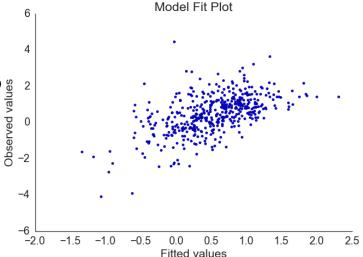
- Genres (r_sq ~ 0.33)
 - Duration of Release (e^0.01)
 - Oscar Nomination (e^1.72)
 - Comedy (e^0.90)
 - **Drama** (e^0.62)
 - Foreign (e^1.13)
- Studios (r_sq ~ 0.35)
 - Duration of Release (e^0.01)
 - Oscar Nomination (e^1.57)
 - Miramax (e^1.41)
 - FoxSearchlight (e^2.41)
 - **LionsGate** (e^1.38)
 - WeinsteinCo (e^1.61)
 - Focus (e^1.21)



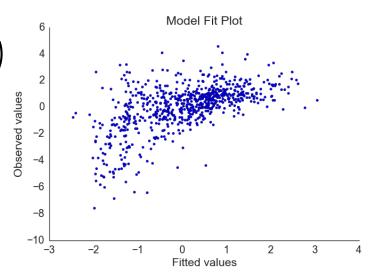


Opening Theatres >> 250

- Genres (r_sq ~0.3)
 - Duration of Release (e^0.009 g
 - Oscar Nomination (e^3.1)
 - Documentary (e^1.67)
 - Horror (e^0.42)

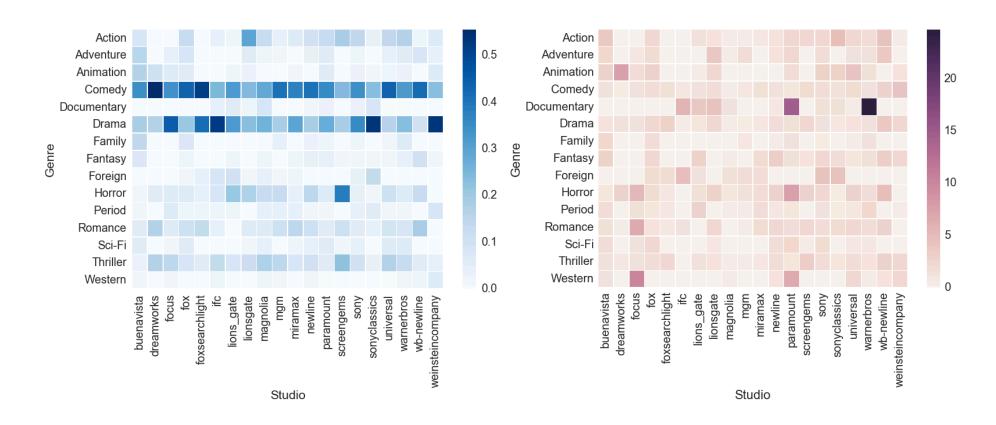


- Studios (r_sq ~0.3)
 - Duration of Release (e^0.01)
 - Oscar Nomination (e^0.23)
 - Universal (e^0.26)
 - Screengems (e^0.53)
 - **LionsGate** (e^0.34)
 - **WB-Newline** (e^0.58)



Models capture different aspects of data

- Comedy | Drama vs Documentary | Horror
- Studios and their relative market share



Return on Investment: Movie Genre & Studio Options

HENG-RU MAY MERKLE-TAN, PHD HENGRUMAY@GMAIL.COM