

A full-page background image showing a woman with long red hair, seen from behind, wearing a white, form-fitting, sleeveless gown. She is standing on a red carpet, looking towards a large crowd of photographers and cameras. The photographers are mostly men in black suits, holding professional cameras with flashes. The scene is brightly lit, with a strong light source creating a lens flare effect. The overall atmosphere is that of a high-profile movie premiere or awards ceremony.

# Safe Bets for A Successful Premier

Analysis of Film Profitability  
& Genre Selection  
For Microsoft

Dan Hales &  
Clair Marie Wholean

**“ What genre should  
we make,**

**and what budget  
should we plan for? ”**

# Do big budget movies make a lot of money ?

To find out, we can analyze

*production budget vs. worldwide gross.*

# Data Sources

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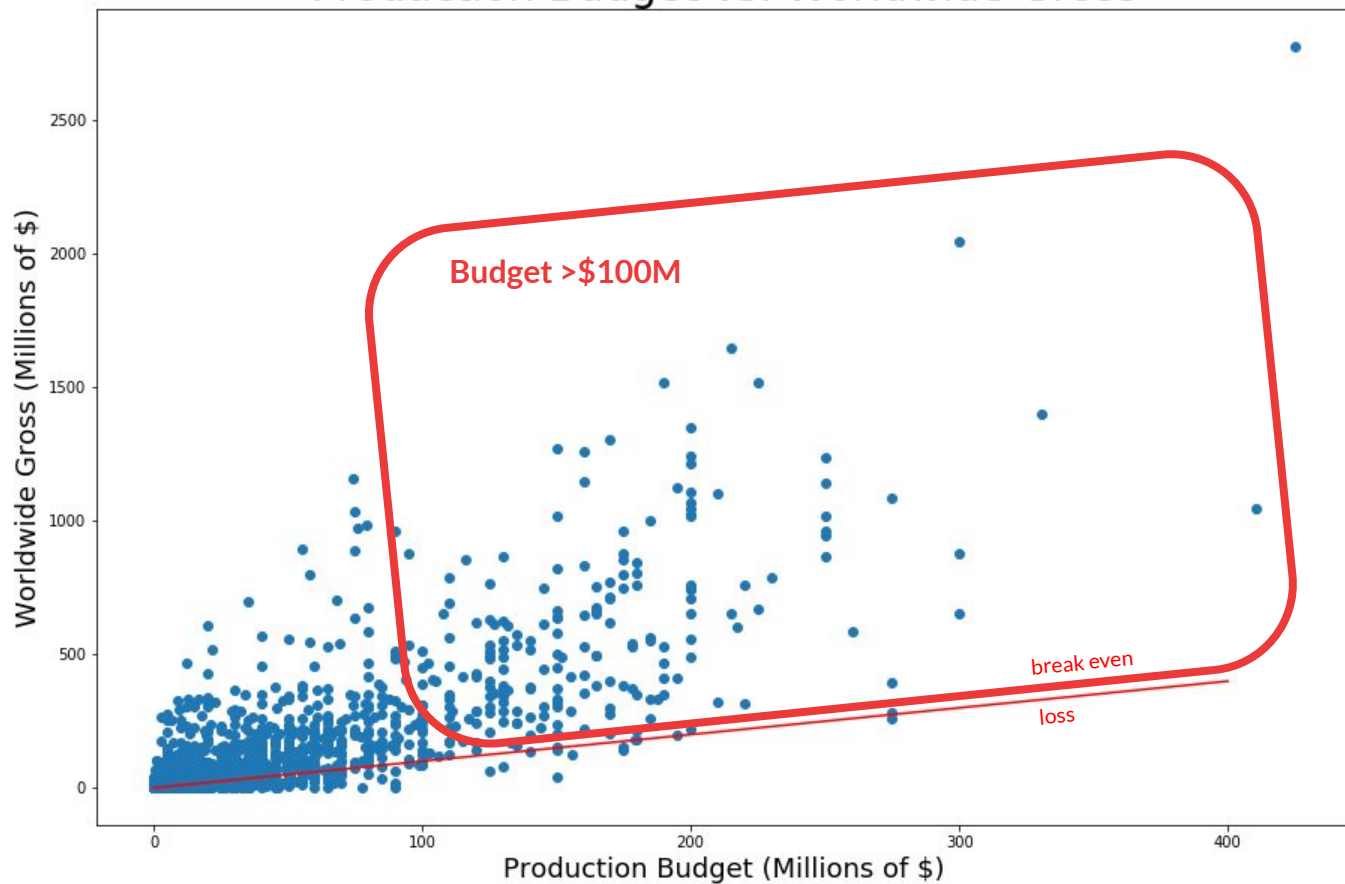
<b>Sources:</b>	TN Movie Budgets TMDB Movies
<b>Quantity:</b>	1,641 movies
<b>Time of Data:</b>	Released 1944 - 2011
<b>Accuracy:</b>	Analyzed using ratios to eliminate inflation calculations
<b>Reliability:</b>	Genres cross-checked with imdb.com

# Limitations

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- All box office sales are down since Netflix started movie streaming
- No data on which movies are most popular for streaming
- Foreign films not considered
- Movies with more than one genre are counted in each genre
- Director & actor popularity affects profitability, not considered
- Release timing not considered

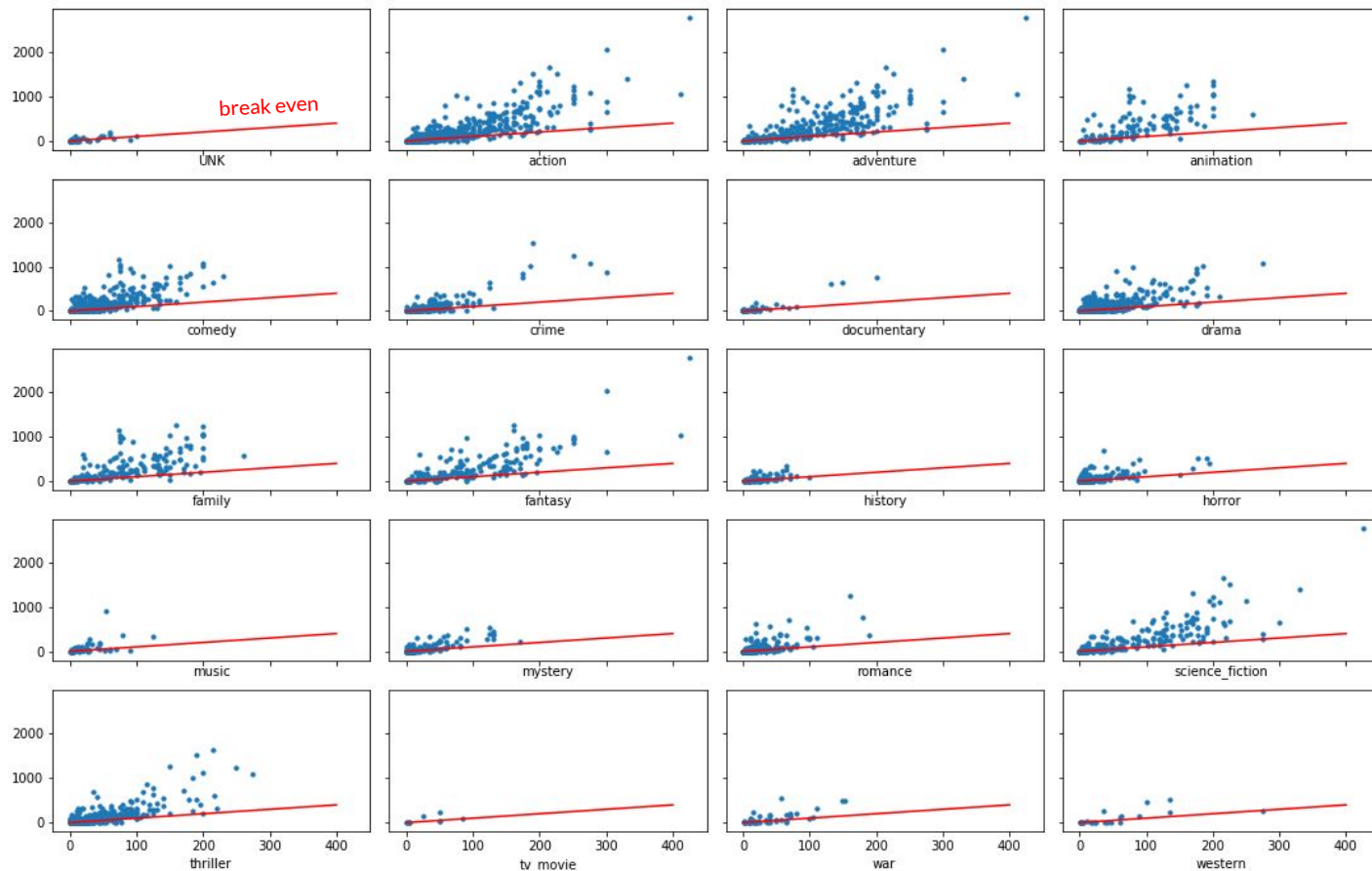
## Production Budget vs. Worldwide Gross



# Are *any* genres safe?

Let's look at the same graph,  
broken down by genre.

Production Budget vs. Worldwide Gross By Genre (Millions of \$)



Note:  
not adjusted  
for inflation

# Not all genres are equal

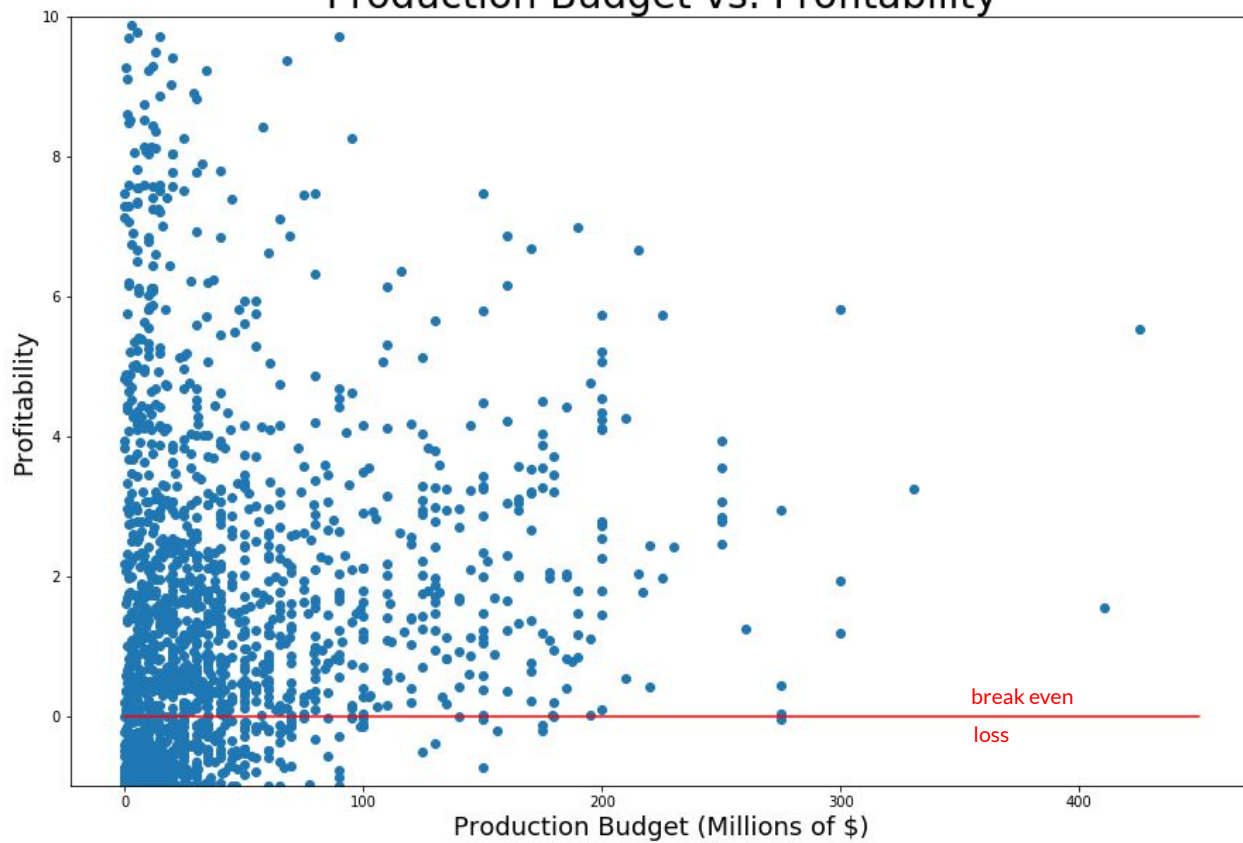
**Are big-budget movies worth it?**

**We need a new metric.**



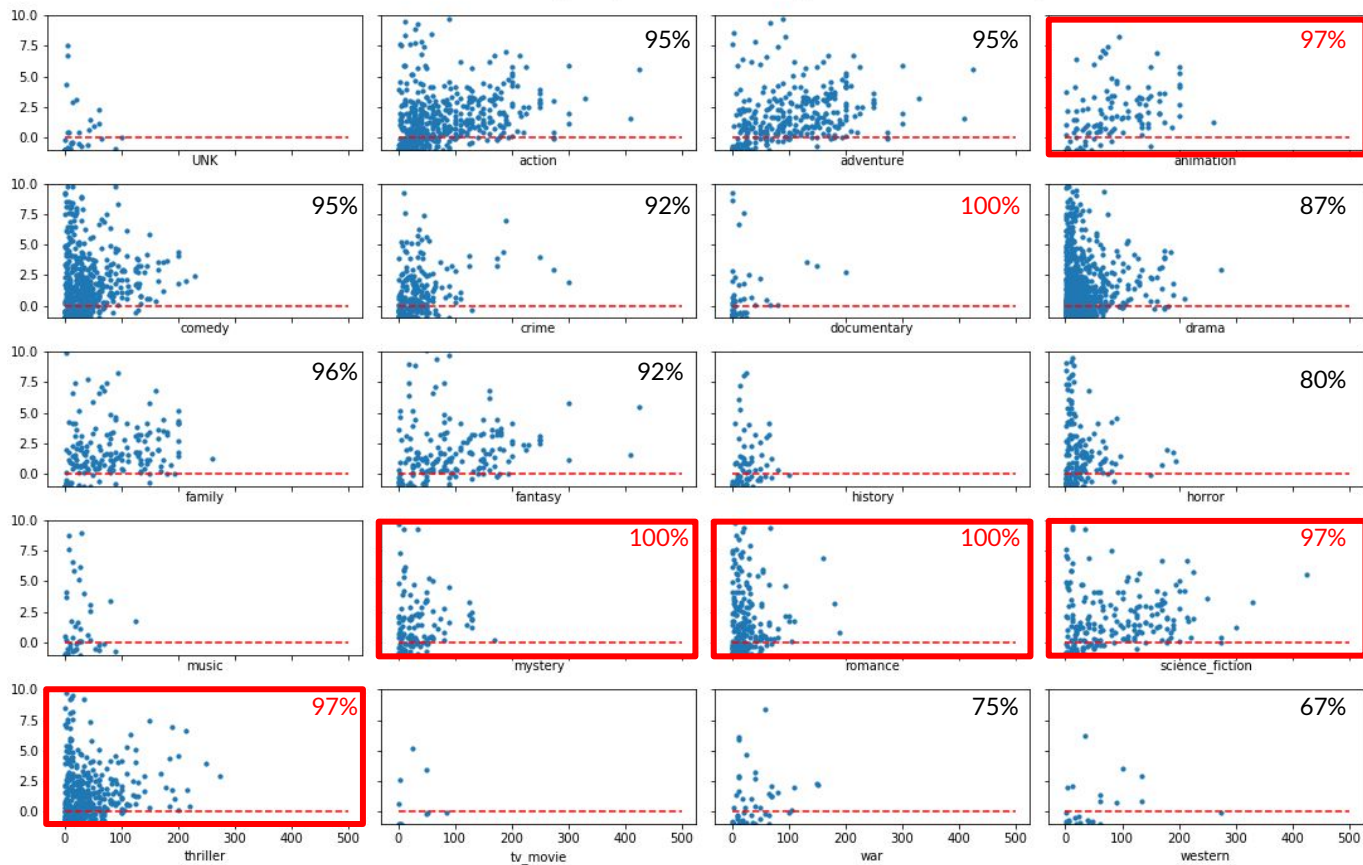
$$\text{profitability} = \frac{\text{Gross revenue} - \text{budget}}{\text{budget}}$$

# Production Budget vs. Profitability



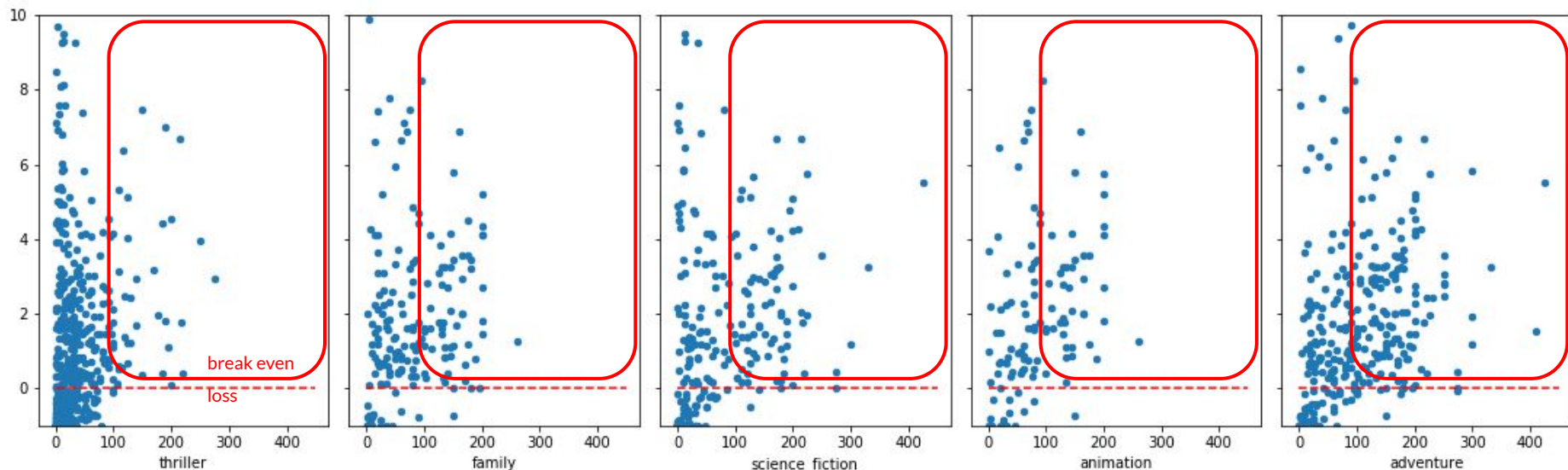
**Safe Genre =  
97% of movies  
with at least a  
\$100m budget  
above break  
even line**

Production Budget (Millions of \$) vs. Profitability



# Recommendation

Production Budget (Millions of \$) vs. Profitability



2.4

2.0

2.2

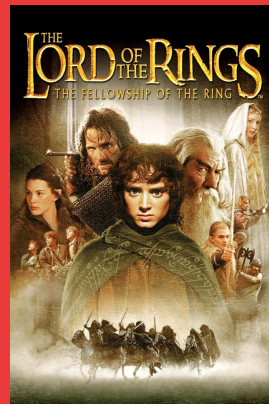
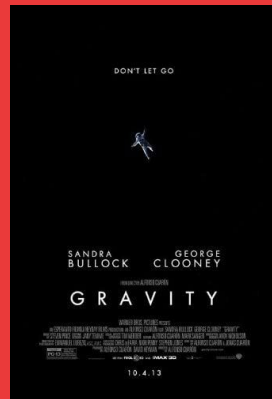
2.4

2.2

Mean profitability when budget is > \$100m

# Safe Bets

*SciFi, Animation, Mystery, Romance, Thriller > \$100M*



Budget  
Revenue  
Profitability

\$160 M  
\$529M  
2.3

\$100 M  
\$732M  
5.3

\$109 M  
\$887M  
7.2

\$150 M  
\$1.45 B  
8.6

\$237 M  
\$2.79B  
5.5

# Future Research

What characteristics do Oscar-winning movies have in common?

What season is the best time to release each of the “safe bet” genres?

Which genre most consistently achieves a high profitability?

Why aren't live action family movies as popular as they used to be?

Is profitability affected by the following:

- Architecturally significant filming locations
- Plots related to current events