

MICROSOFT Studios

Original Content Recommendations

Market research for a smooth start.

Let's start with what we know.

Our data sources for this exploration are:

- -The Movie Database (TMDb) api
- -The Numbers provided dataset
- <u>IMDB</u> provided datasets







Features & Data Subsets



Engineered Feature: ROI%

In an effort to make recommendations with best returns in mind, we chose to use an ROI calculation to help make informed visualizations.



Subset: High Budget Films

Our initial investigation revealed that the films with the highest budgets generated the highest ROI. To make recommendations that are profit-driven, we chose to look only at high budget/high return films.



Further Subsets

Working only with high budget films, we then created subsets of data to explore the relationship between rating, runtime, genre, director, and release timing and ROI.



Measuring Success



REVENUE | what determines profitability?

We chose to subset this data and explore properties of the films with the highest ROI.



WHICH | film characteristics and success

What characteristics build a stellar film? After exploring this data we have insights to offer regarding genre, runtime and budget.



WHEN | release timing affect on returns

When is the best time to launch a successful program?

Budget

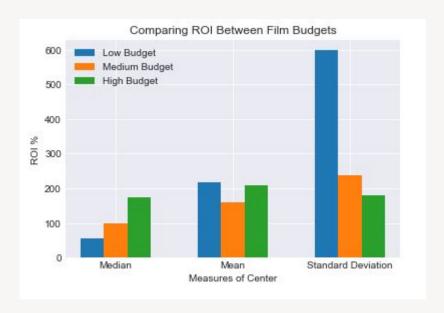
Financial Recommendations

On average, high budget films outperformed low and medium budget films, and yielded the highest return on investment.

Median was used as our measure of center because of the heavy right-skew in low budget films.

Parameters:

- Films made in year 2000 or later
- Low budget: \$1MM-\$50MM
- Medium budget: \$50MM-\$100MM
- High budget: over \$100MM



MPAA Rating and Performance

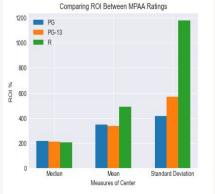
Depending on our risk tolerance, we should focus on producing films rated either PG or R.

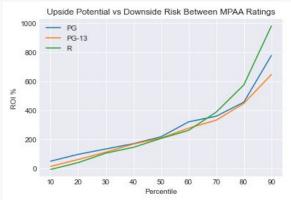
Rated PG:

- Lower expected value
- More predictable outcome
- Risk averse option but leaves profits on the table

Rated R:

- Highest expected value
- More downside potential
- Profit maximizing option but takes on bigger risk





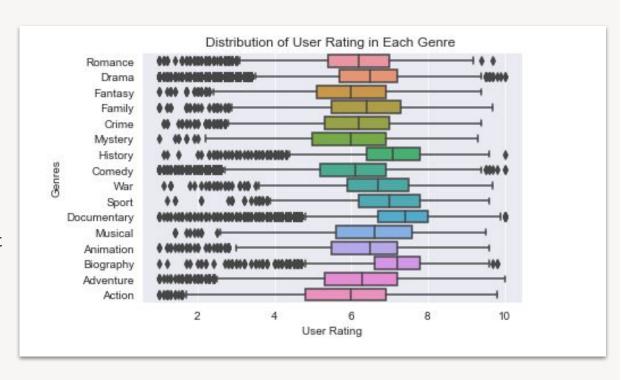
Genre and User Rating

Here is a breakdown of the top 15 genres from IMDB staring at year 2000

Top Rated Genres:

- 1) Documentary
- 2) Biography
- 3) History
- 4) Sport
- 5) War

Note: This is only one factor that impacts the user rating. All genres have a range of ratings,, these 5



Director and User Rating

These are the top 5 directors in each genre. You might want to consider using one of them when making a movie.

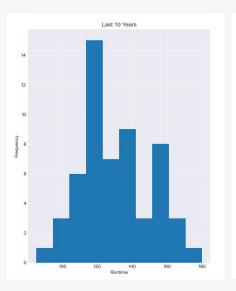
	ACTION	ANIMATION	DRAMA	FAMILY
Emre Oran		Kimberlee Bassford	Chad Carpenter	Thomas Veit
Adam Rabinwitz	Himesh Bhargo	Ethan H. Minsker	Nagaraja U	Kimberlee Bassford
Karzan Kardozi	Marc Levin	Sumnash Sri Kaljai	Dante TM	Sudheer Shanbhogue
Roi Maoz	Mark Benjamin	Mert Gokalp	Arsel Arumugam	Linda Palmer
Violeta Paus Soto	Mary HJ	Sheila Sofian	Bill Suchy	Dan Salmon

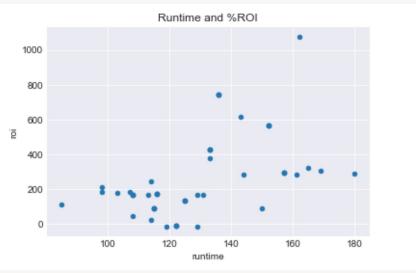
WAR	COMEDY	HISTORY	MYSTERY	MUSICAL	SPORT
Luc Cote	Emre Oran	Robert Tutak	Amitabh RC	AMR Gamal	JJ.M. Berrios
Matthew Millian	Kirk Murray	Bharatha H	Aghora Vidya	Briar March	Joe Heslinga
Soheil Salimi	Joe Heslinga	Chathra W	Chris Rodriguez	Matt Hoffman	Keli Price
Alper Caglar	Quentin Tarantino	Mahdieh ZZ	Zorko Sirotic	Amparo Fortuny	Julio CT
Alexandra SL	Abinav Thakur	Aldo Tardozzi	Gentian Selo	Chris Berg	Marcio C

BIO	DOC	ROMANCE	CRIME	FANTASY
Dante TM	Daniel Alexander	Thomas Veit	Daniel Alexander	Michael Scholtz
Bill Suchy	Ivana Diniz	Karen Guliani	Michael Ozias	Christoph Tripp
Karazan Kardoz	i Lindsay Thompson	Aghora Vidya	Vyacheslav Bihun	Nicolas Pradal
Nikoloz H	Loreto Di Cesare	Danial H	Amitabh RC	Pierre Selvini
Jlm Toscano	Masahiro Hayakawa	Iris Bolling	Arik Reiss	Sebastian C

Runtime and Performance

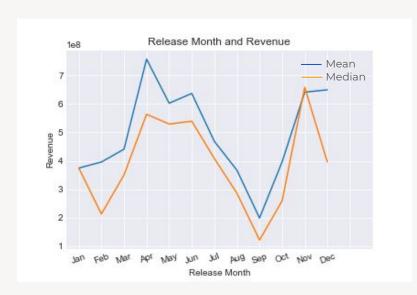
- Most films are 105-130 minutes
- Past 140 minutes, the ROI increases but the variability is higher, but with few low dips

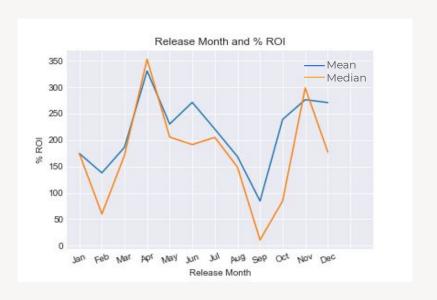




LAUNCH

Specific Recommendations





Film releases in March-April and October-December outperform releases other times of the year.

CONCLUSION

Direct Recommendations for Microsoft Studio Program Launch

To maximize returns on investments, Microsoft should:

- Produce films with budgets over \$100MM
- Focus more on producing R rated films (unless risk aversion is high)
- Produce films longer than 140 minutes in runtime
- Release the films in either April or November on a Friday

Genres with high ratings:

Documentary, Biography, History, Sport, War

Directors with high ratings:

 Lindsay Thompson, Ivana Diniz, Matt Hopkins, Masahiro Hayakawa, Soudabeh Mora

NEXT STEPS

More data, further exploration.

- Explore ROI for the IMDB information and get more recent data
- Analyze specific subsections, e.g. low budget comedy films
- Explore the effect streaming services and the recent changes to how studios are releasing on the performance of films



THANK YOU

For your time and attention.

Project Repository: <u>GitHub repo link</u>

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