2022 Studio Strategy Recommendations

Microsoft Studios

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Summary

This project leverages tools from Python and pandas to provide exploratory data analysis that helps the head of Microsoft's fledgling movie studio decide what type of films to create. The actionable insights have been distilled from data sets provided by IMDB and The Numbers.

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- Business Problem
- Data
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- Findings
  - Opening Dates
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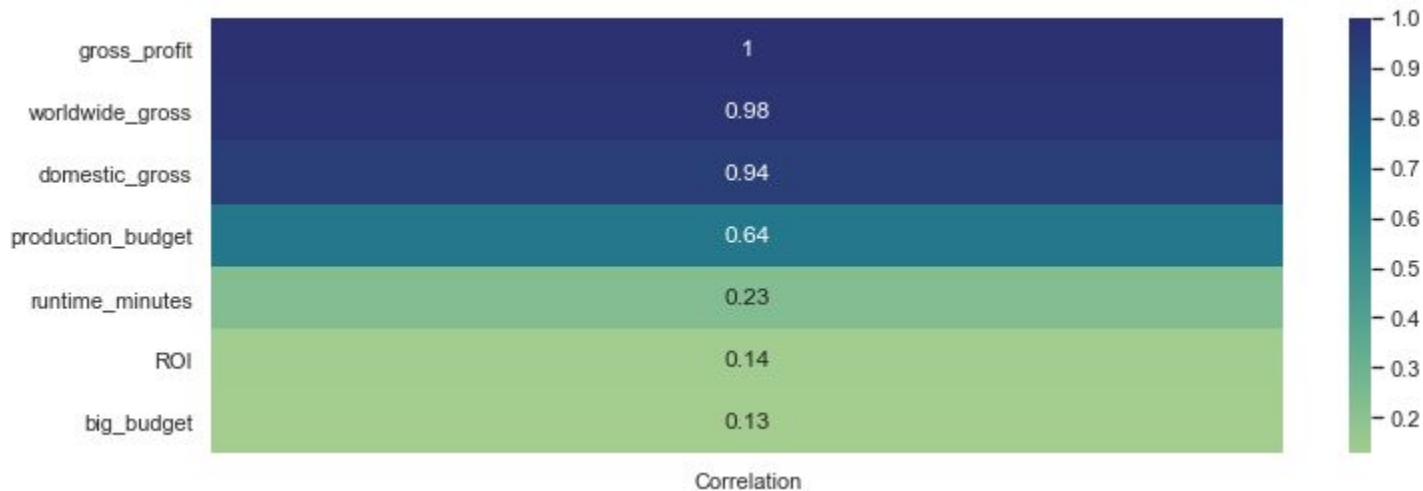- Summary

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Business Problem

Microsoft Corporation (MSFT) has recently made the business decision to create original content for the Box Office. Being a new business division, the new studio head must determine which projects should be strategically prioritized. Since this is a brand new movie studio, informed decision making must rely on public and readily available historical data of past movie releases.
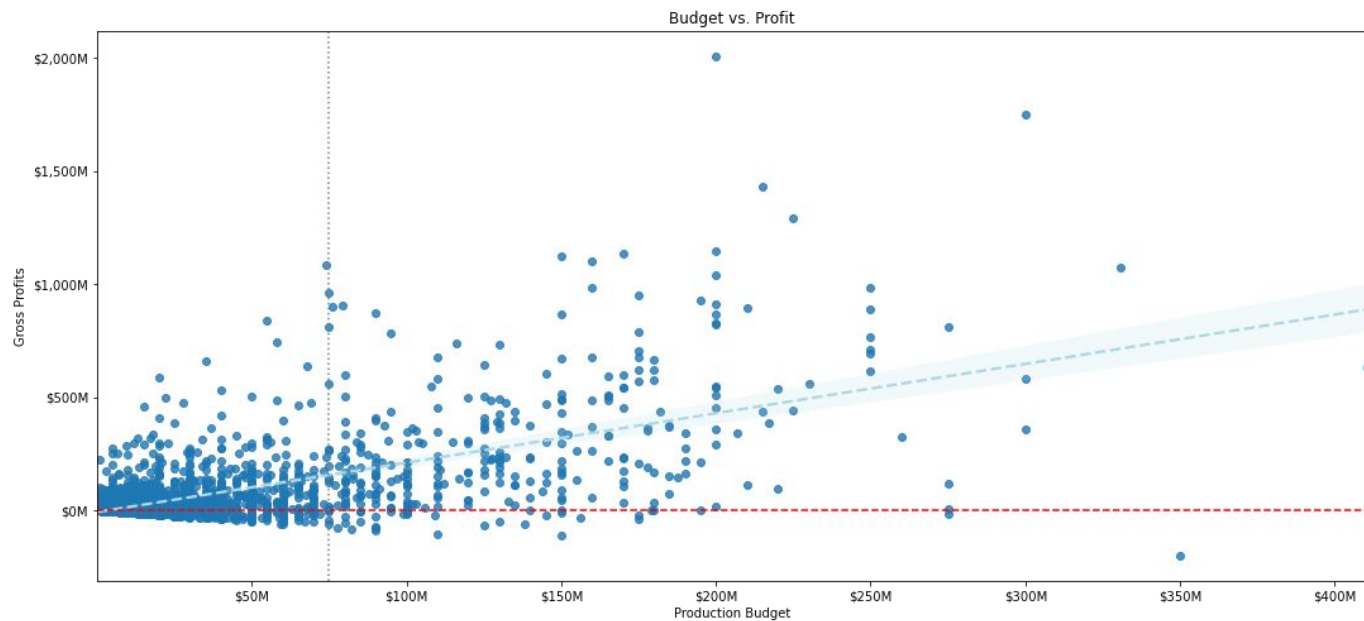
Data

- Merged data from IMDB and TN
- Analyzed used budgets and revenue to calculate gross profit and return on investment
- Measured historical performance by release month, genre and filmmaker

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What attributes are most closely related to profits?

	Correlation
gross_profit	1
worldwide_gross	0.98
domestic_gross	0.94
production_budget	0.64
runtime_minutes	0.23
ROI	0.14
big_budget	0.13

Profits vs ROI

Budget vs. Profit

Profits vs ROI

Budget vs. Profit
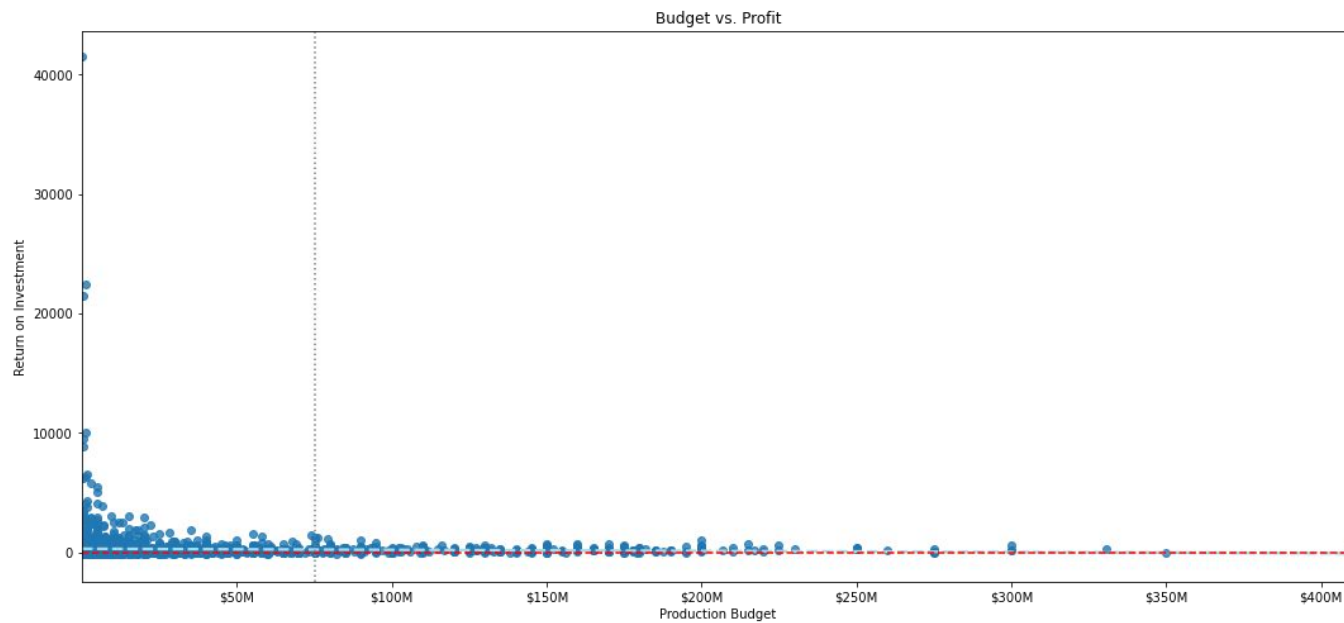
When should we schedule our releases?
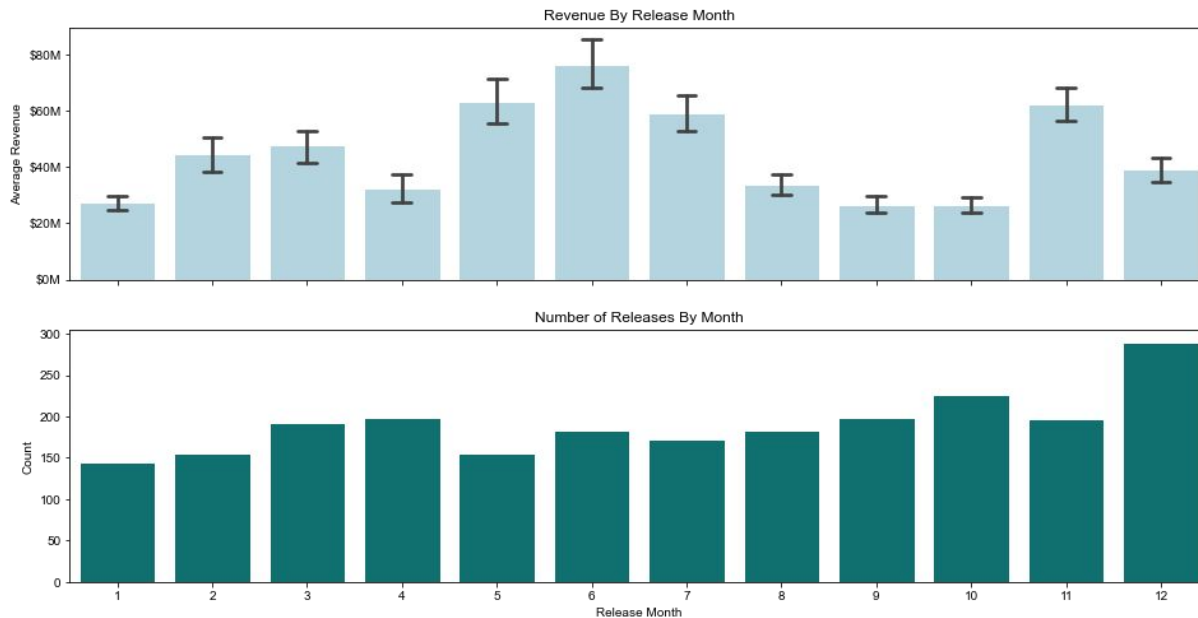
Does it depend on the genre?

Number of Releases by Month by Genre
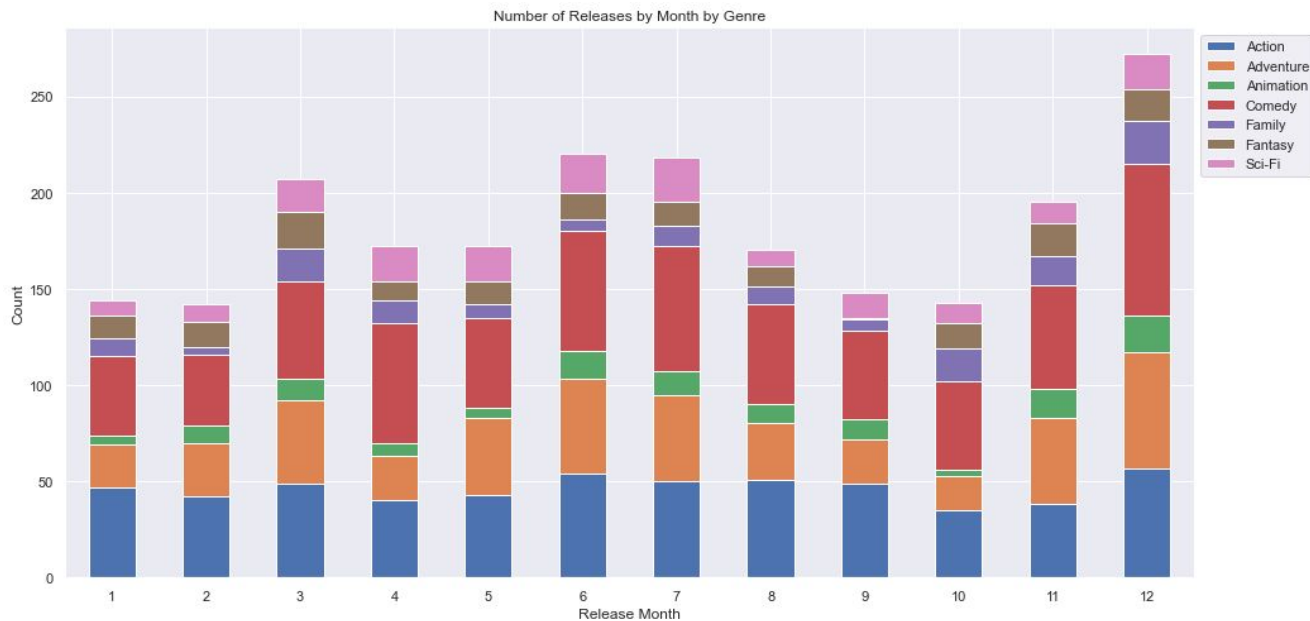
Should we prioritize certain genres?
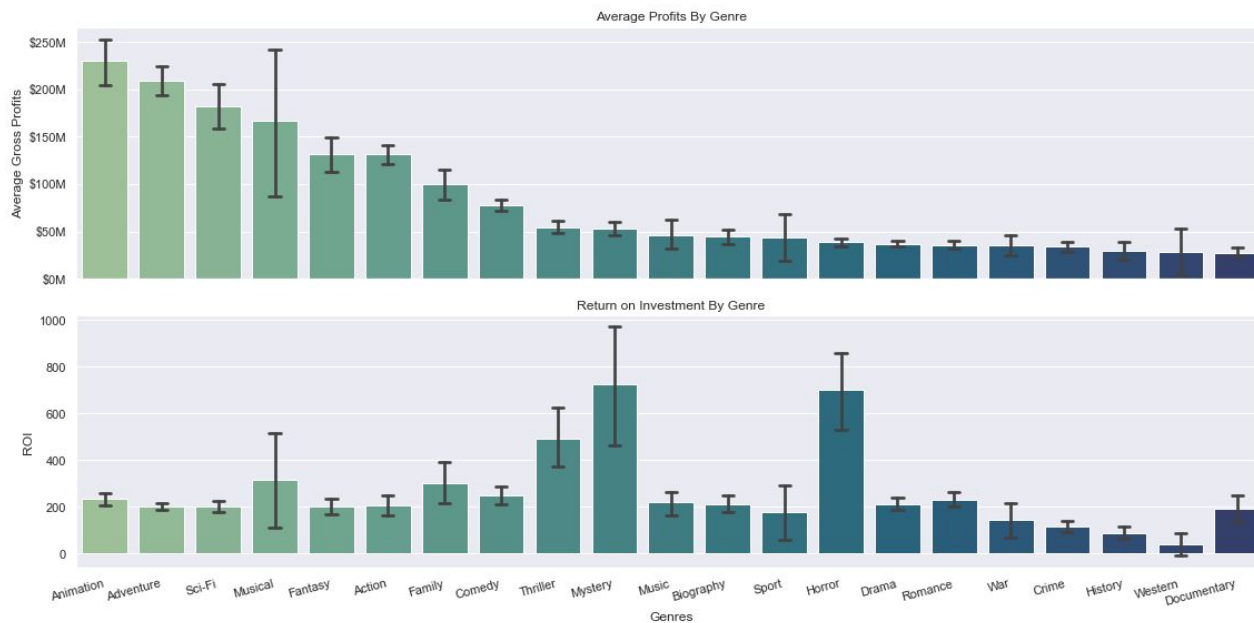
Any notable directors to work with?

| | Action | | Adventure | | Fantasy | | Sci-Fi | | Animation | | Comedy |
	primary_name	gross_profit	primary_name	gross_profit	primary_name	gross_profit	primary_name	gross_profit	primary_name	gross_profit	primary_name
0	Colin Trevorrow	1433854864	Kevin Lincoln	2008208395	James Wan	986894640	Colin Trevorrow	1433854864	Brad Bird	1042520711	Kyle Balda
1	Ryan Coogler	1148258224	Pete Meads	2008208395	Bill Condon	843815419	Ryan Coogler	1148258224	Kyle Balda	1023031962	Eric Guillon
2	J.A. Bayona	1135772799	Colin Trevorrow	1433854864	Peter Jackson	724316015	J.A. Bayona	1135772799	Eric Guillon	959727750	Jared Bush
3	Anthony Russo	1060868501	Ryan Coogler	1148258224	Patty Jenkins	671133378	Joe Russo	1060868501	Jon Favreau	906914868	Lee Unkrich
4	Joe Russo	1060868501	J.A. Bayona	1135772799	David Slade	638102828	Anthony Russo	1060868501	Jared Bush	869429616	Pierre Coffin
5	James Wan	986894640	Adam Green	1122469910	Joachim Rønning	558241137	Ryan Fleck	948061550	Lee Unkrich	868879522	Andrew Stanton
6	Ryan Fleck	948061550	Joe Russo	1060868501	Espen Sandberg	558241137	Anna Boden	948061550	Pierre Coffin	854936333	Angus MacLane
7	Anna Boden	948061550	Anthony Russo	1060868501	David Yates	537311470	Joss Whedon	784645092	Andrew Stanton	821215193	Yarrow Cheney
8	Jake Kasdan	874496193	Kyle Balda	1023031962	Scott Derrickson	511404566	Michael Bay	736240986	Angus MacLane	821215193	Tim Miller
9	Joss Whedon	784645092	James Wan	986894640	Seth MacFarlane	506016627	Jon Watts	705166350	Yarrow Cheney	811750534	David Leitch

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Any notable directors to work with?

	Thriller		Animation		Comedy		Family		Horror		Romance		Mystery	
	primary_name	ROI	primary_name	ROI	primary_name	ROI	primary_name	ROI	primary_name	ROI	primary_name	ROI	primary_name	ROI
0	Chris Lofing	41556	Kyle Balda	1374	Sujit Mondal	22400	Brandon Camp	6212	Travis Cluff	41556	Jamie Buckner	5479	Travis Cluff	41556
1	Travis Cluff	41556	Eric Guillon	1280	Jamie Buckner	5479	Katharine Round	2985	Chris Lofing	41556	Josh Boone	2460	Chris Lofing	41556
2	Joaquin Perea	10076	Pierre Coffin	1155	Adam Wingard	2589	Adam Sputh	1853	Joaquin Perea	10076	Richard Dailey	1874	Levan Gabriadze	6336
3	Chris Stokes	9458	Jon Favreau	1144	Lynn Shelton	2475	Jesse Rose	1853	David Gordon Green	8101	Ryan Coogler	1850	Jordan Peele	5007
4	David Gordon Green	8101	Yarrow Cheney	1082	Damien Chazelle	2032	Bill Condon	1815	Levan Gabriadze	6336	Drake Doremus	1391	Bradley Parker	4141
5	Levan Gabriadze	6336	Chris Renaud	749	Richard Dailey	1874	Stephen Chbosky	1423	Tod Williams	5817	Sam Taylor-Johnson	1327	James Wan	4024
6	Jordan Peele	5007	Garth Jennings	746	Kyle Balda	1374	Andrew Erwin	1123	Jordan Peele	5007	David Lowery	1296	John R. Leonetti	3852
7	Bradley Parker	4141	Christophe Lourdelet	746	Haakon Sand	1344	Jon Erwin	1123	Bradley Parker	4141	John Madden	1246	Henry Joost	3399
8	James Wan	4024	Phil Lord	663	Gudmund Sand	1344	Guy Ritchie	970	James Wan	4024	Troy Murray	1146	Ariel Schulman	3399
9	John R. Leonetti	3852	Christopher Miller	663	David Esbjornson	1321	Harald Zwart	907	Ariel Schulman	3399	Justin Baldoni	1050	Robert Heath	2618

Limitations of this project

- MPA ratings
- Actors
- Marketing

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Summary Conclusion

- Determining Budgets
- Target May, June, July and November release dates
- Plan projects that fall into the 4 strategic tiers
    - Tier 1: Animation, Comedy, and Family
    - Tier 2: Adventure, Sci-Fi, Fantasy and Action
    - Tier 3: Mystery, Horror, Thriller and Romance
    - Tier 4: Musicals
- Look to sign filmmakers with proven success
- Further Analysis

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Questions?

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