

Movie Gross Analysis



Module 1 Final Project
Htoo Aung Latt

The Dataset - Problems and Limitation

- No unique identifier for data from different sources, had to use movie titles as an index to join data and dropped all the duplicate
- The IMDB database which is mainly used only goes back to 2010
- Some datasets are completely useless since they don't even contain titles

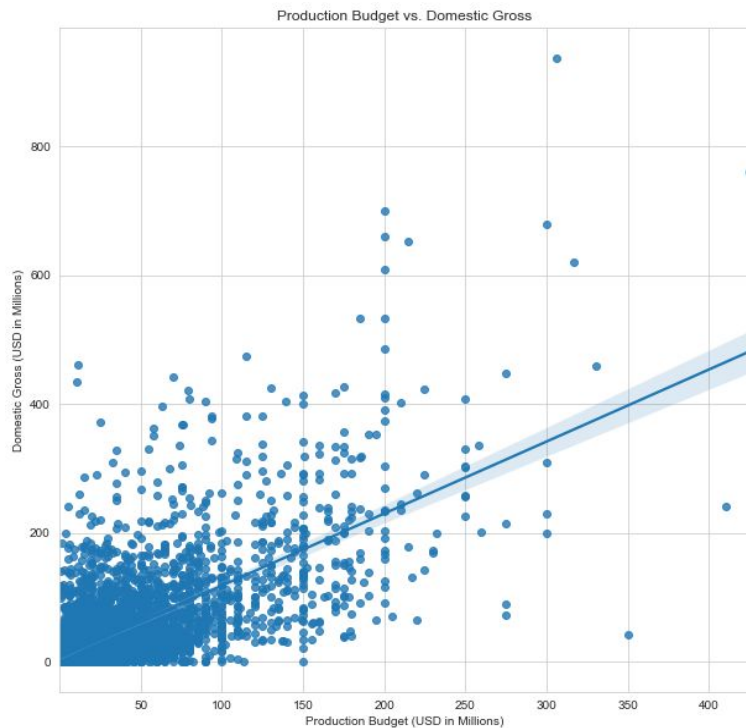
	tconst	primary_title	original_title	start_year	runtime_minutes	genres
0	tt0063540	Sunghursh	Sunghursh	2013	175.0	Action,Crime,Drama
1	tt0066787	One Day Before the Rainy Season	Ashad Ka Ek Din	2019	114.0	Biography,Drama
2	tt0069049	The Other Side of the Wind	The Other Side of the Wind	2018	122.0	Drama
3	tt0069204	Sabse Bada Sukh	Sabse Bada Sukh	2018	NaN	Comedy,Drama
4	tt0100275	The Wandering Soap Opera	La Telenovela Errante	2017	80.0	Comedy,Drama,Fantasy

id	release_date	movie	production_budget	domestic_gross	worldwide_gross
1	Dec 18, 2009	Avatar	\$425,000,000	\$760,507,625	\$2,776,345,279
2	May 20, 2011	Pirates of the Caribbean: On Stranger Tides	\$410,600,000	\$241,063,875	\$1,045,663,875
3	Jun 7, 2019	Dark Phoenix	\$350,000,000	\$42,762,350	\$149,762,350
4	May 1, 2015	Avengers: Age of Ultron	\$330,600,000	\$459,005,868	\$1,403,013,963
5	Dec 15, 2017	Star Wars Ep. VIII: The Last Jedi	\$317,000,000	\$620,181,382	\$1,316,721,747

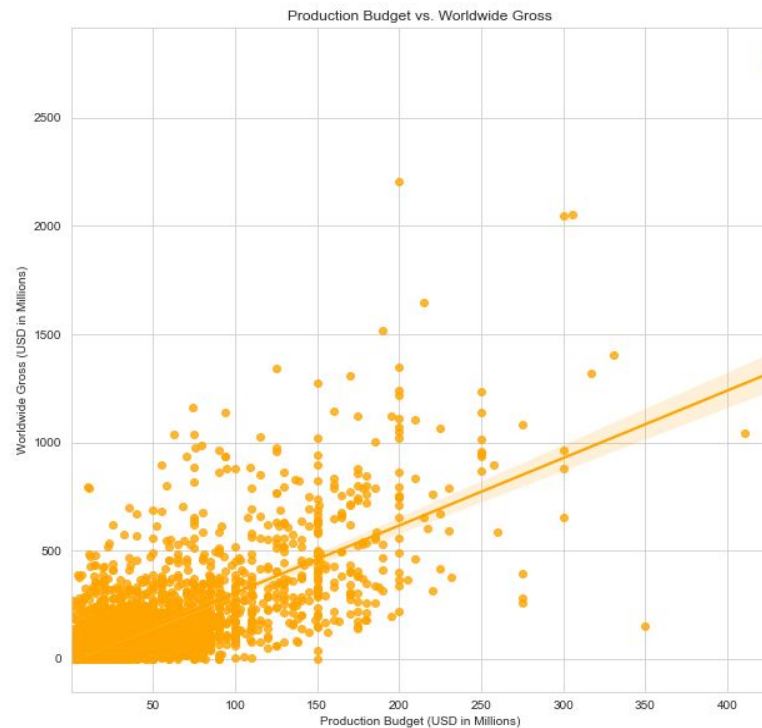
	title	studio	domestic_gross	foreign_gross	year
0	Toy Story 3	BV	415000000.0	652000000	2010
1	Alice in Wonderland (2010)	BV	334200000.0	691300000	2010
2	Harry Potter and the Deathly Hallows Part 1	WB	296000000.0	664300000	2010
3	Inception	WB	292600000.0	535700000	2010
4	Shrek Forever After	P/DW	238700000.0	513900000	2010

Production Budget vs. Gross

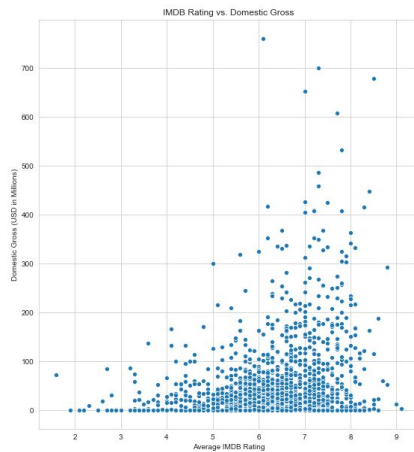
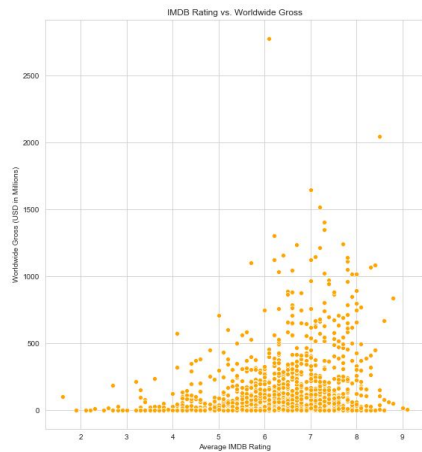
Correlation Coefficient - 0.687



Correlation Coefficient - 0.749



IMDB Rating vs. Gross

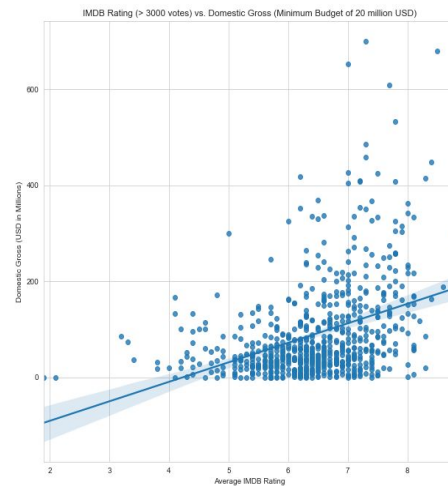
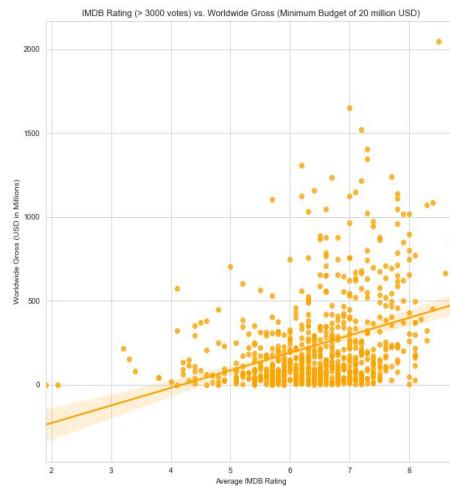


IMDB Rating vs Gross

Correlation Coefficient - 0.25/0.269

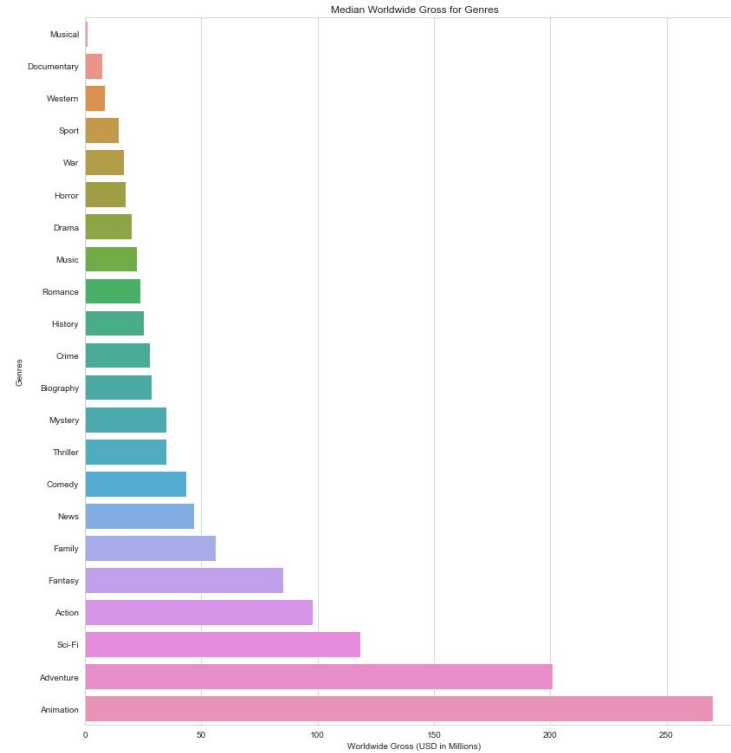
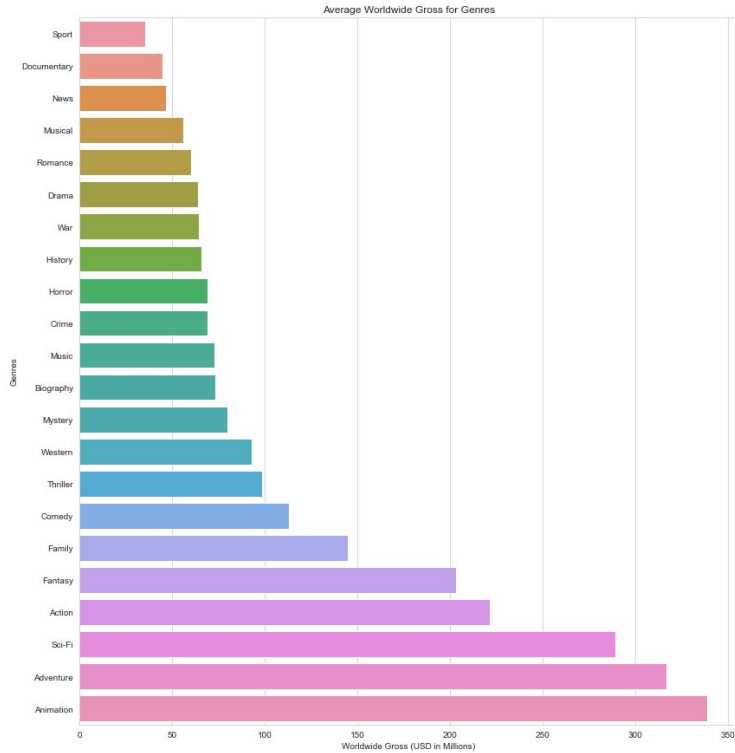
IMDB Rating vs Gross (>3000 votes
and >20 million budget)

Correlation Coefficient - 0.349/0.381



Highest Grossing Genres

Top Five Genres



Animation

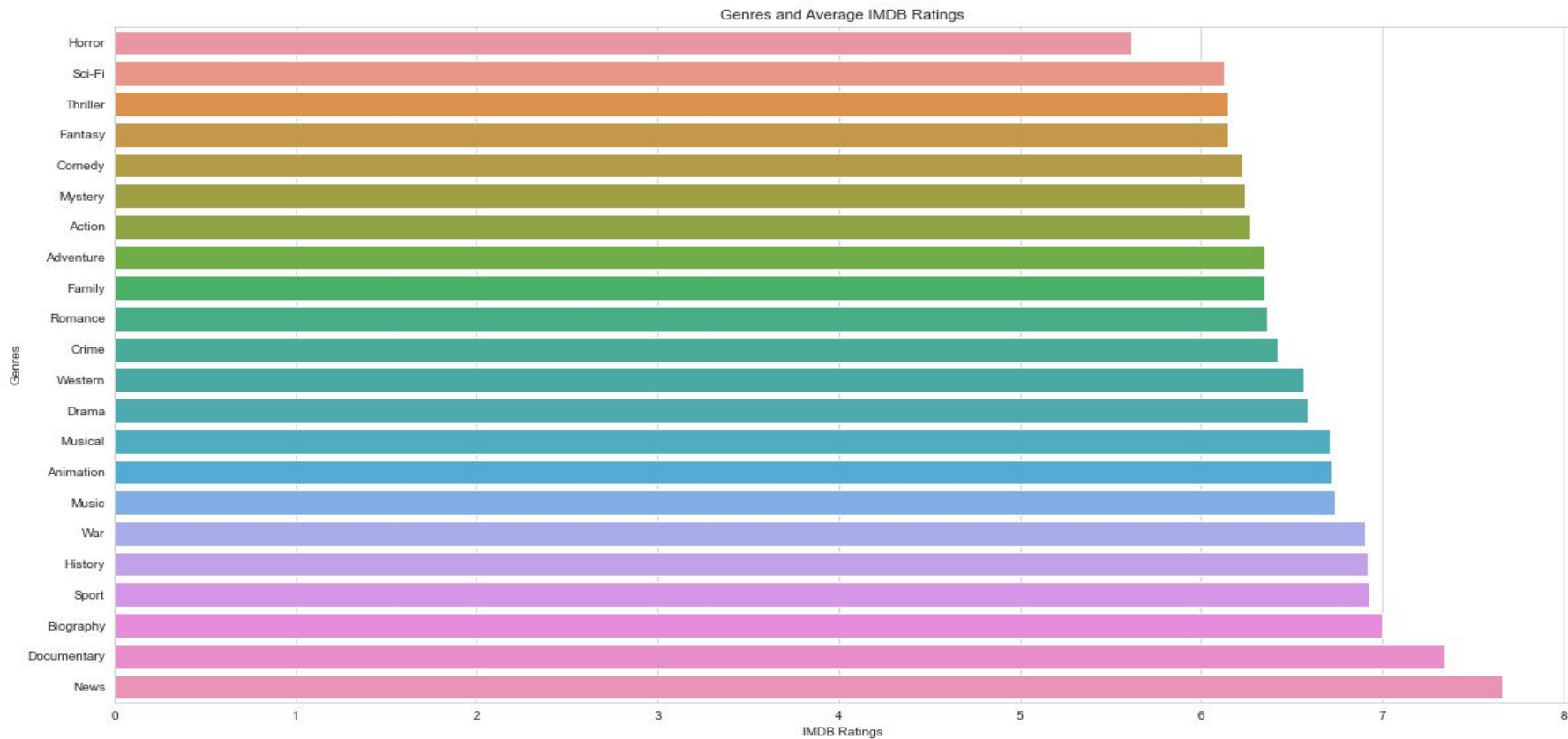
Adventure

Sci-Fi

Action

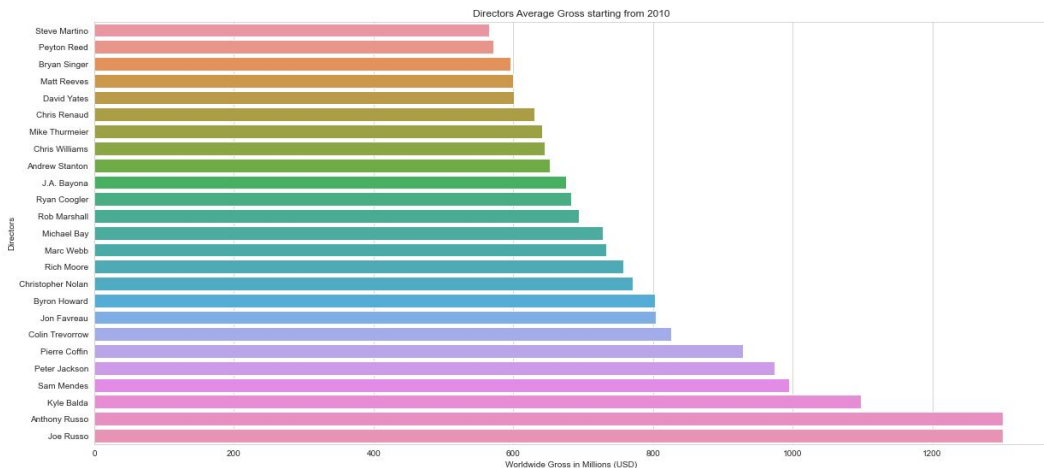
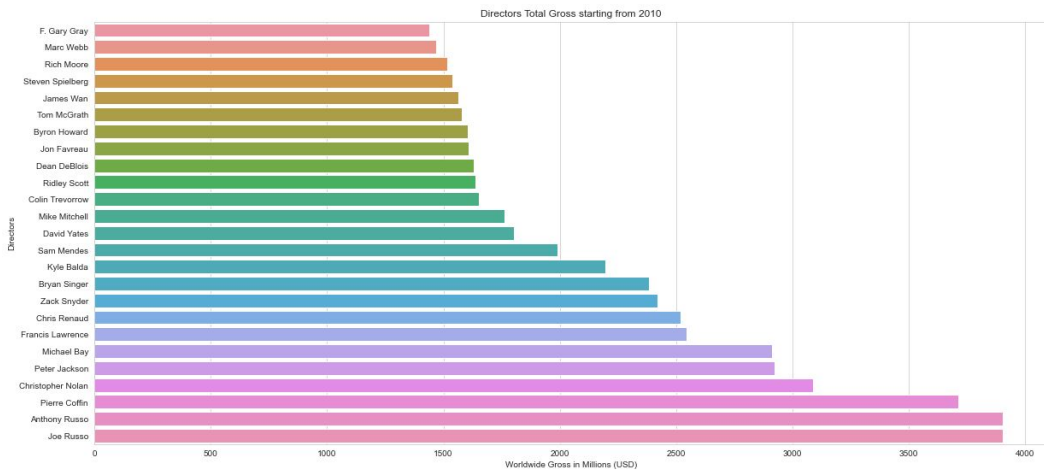
Fantasy

IMDB Ratings vs. Genres



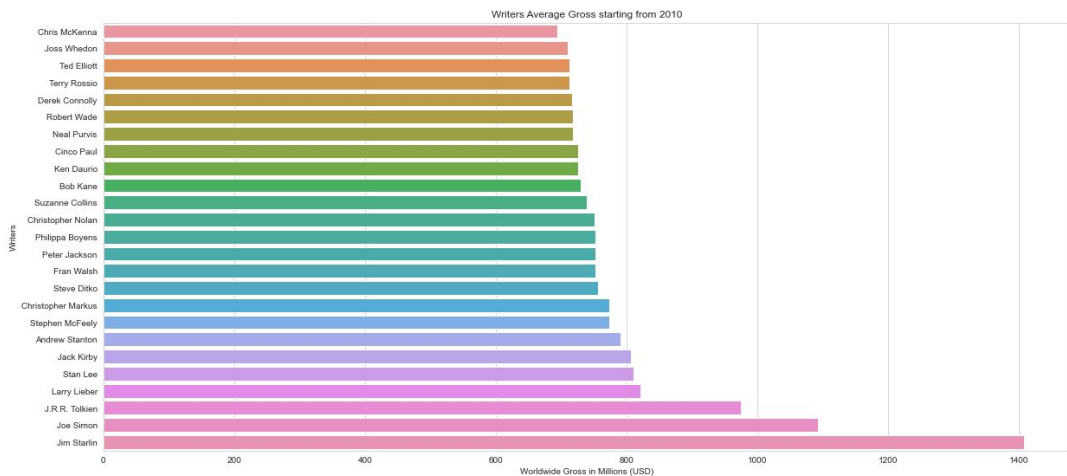
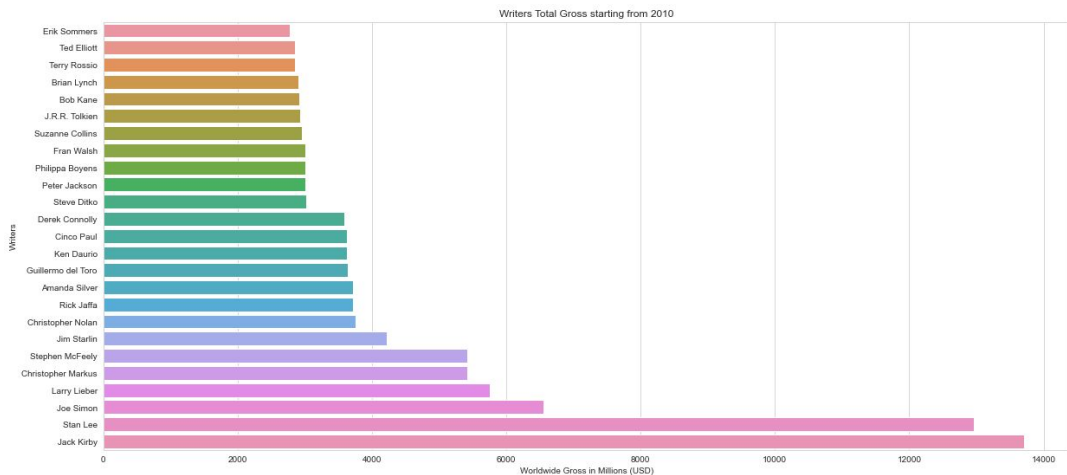
Directors Total and Average Gross since 2010

- Couple of big name directors that have been around for decades
- A lot of directors for franchises



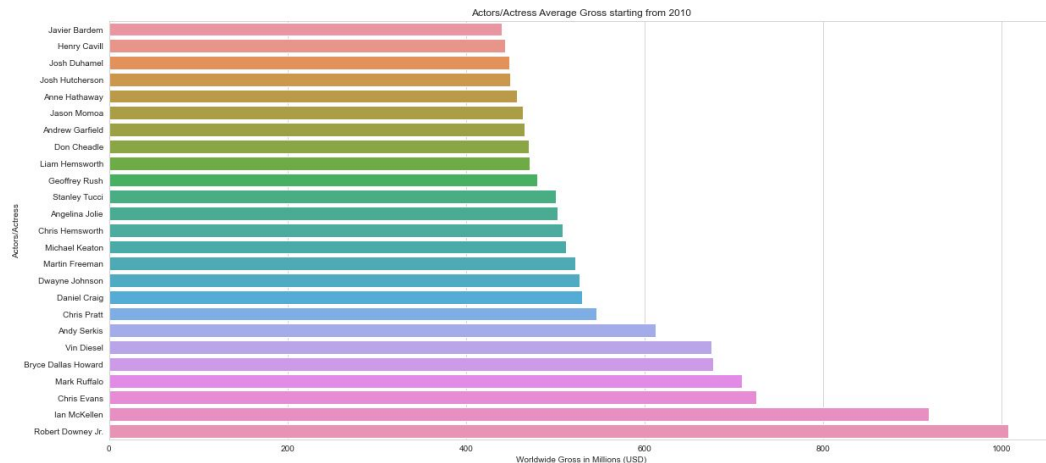
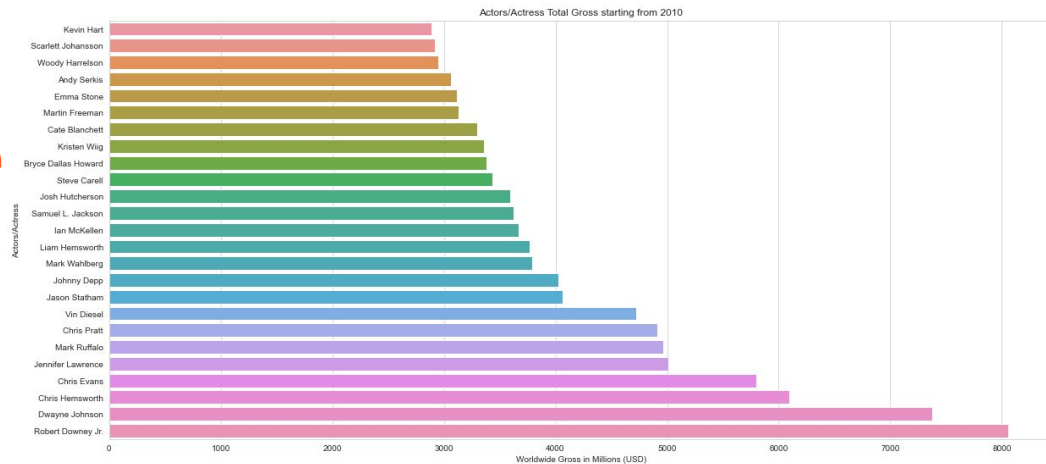
Writers Total and Average Gross since 2010

- Not limited to screenplay writers
- Lots of comic book writers and authors including those who have passed
- Adapted screenplays have done very well



Actors/Actresses Total and Average Gross since 2010

- Mostly Stars That Are A Part Of Franchises
- Only A Few Can Be Credited With Being The Main Reason For Box Office Success
- All Household Names



Conclusion

FRANCHISES

GENRES

ESTABLISHED SOURCE MATERIAL

Animation

Adventure

Directors With Good Track Record In The Past Ten Years

Sci-Fi

Action

Big Name Actors That Are Already Household Names

Fantasy

Thank You