

Capstone I Proposal

By Bradley Harrison

Question: In which months do movie releases make the most money?

Because films are often a multi-million-dollar investment, film distributors seek to reach as wide an audience as possible to make their films successful. Several factors play in this decision-making process, including the release date of the film. To further examine the relationship between a movie's release date and its eventual sales success, I collected the box office data for the top 1000 film opening weekends from boxofficemojo.com. After scraping the data, I received the following table with no null values (see picture below).

Unnamed: 0	Rank		Release	Opening	Total Gross	% of Total	Theaters	Average	Date	Distributor
0	0	1	Avengers: Endgame	\$357,115,007	\$858,373,000	41.6%	4662	\$76,601	Apr 26, 2019	Walt Disney Studios Motion Pictures
1	1	2	Avengers: Infinity War	\$257,698,183	\$678,815,482	38%	4474	\$57,599	Apr 27, 2018	Walt Disney Studios Motion Pictures
2	2	3	Star Wars: Episode VII - The Force Awakens	\$247,966,675	\$936,662,225	26.5%	4134	\$59,982	Dec 18, 2015	Walt Disney Studios Motion Pictures
3	3	4	Star Wars: Episode VIII - The Last Jedi	\$220,009,584	\$620,181,382	35.5%	4232	\$51,987	Dec 15, 2017	Walt Disney Studios Motion Pictures
4	4	5	Jurassic World	\$208,806,270	\$652,270,625	32%	4274	\$48,855	Jun 12, 2015	Universal Pictures
5	5	6	The Avengers	\$207,438,708	\$623,357,910	33.3%	4349	\$47,698	May 4, 2012	Walt Disney Studios Motion Pictures
6	6	7	Black Panther	\$202,003,951	\$700,059,566	28.9%	4020	\$50,249	Feb 16, 2018	Walt Disney Studios Motion Pictures
7	7	8	The Lion King	\$191,770,759	\$543,638,043	35.3%	4725	\$40,586	Jul 19, 2019	Walt Disney Studios Motion Pictures
8	8	9	Avengers: Age of Ultron	\$191,271,109	\$459,005,868	41.7%	4276	\$44,731	May 1, 2015	Walt Disney Studios Motion Pictures
9	9	10	Incredibles 2	\$182,687,905	\$608,581,744	30%	4410	\$41,425	Jun 15, 2018	Walt Disney Studios Motion Pictures
10	10	11	Captain America: Civil War	\$179,139,142	\$408,084,349	43.9%	4226	\$42,389	May 6, 2016	Walt Disney Studios Motion Pictures

For the purposes of this project, I will mainly focus on the Release (title of the movie), Opening (opening weekend revenue), Date, and Distributor columns. My Minimum Viable Product will be displaying a relationship between the month a movie released and its opening

weekend revenue. I will accomplish this by first examining the entire dataset, then by grouping the data points by year and distributor to compare trends between the different years and studios. I will demonstrate my findings using correlation maps, scatterplots, and other data visualization methods.