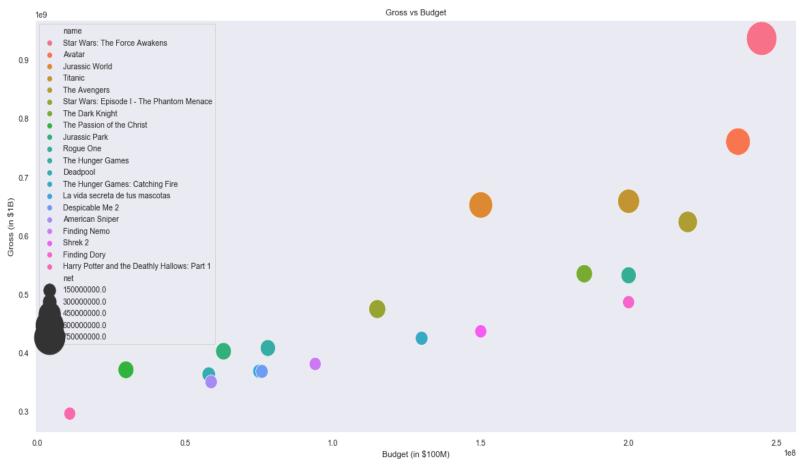
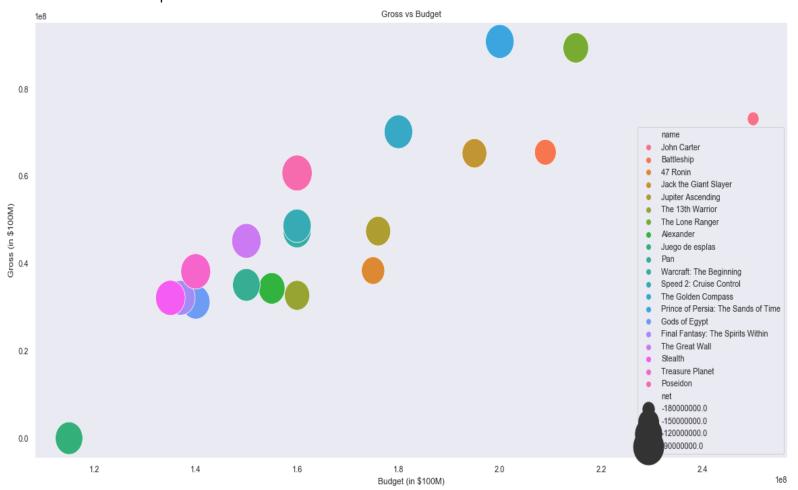
What Movies Make Great Profits?

Movie fans have increased dramatically in the past few decades dramatically increasing demand for movies. But what kind of movies do those fans like most? And what kind of movies are most successful? The following graph shows the world's most profitable movies from 1986 to 2016 in bubbles, the bigger the bubble the more profits the movie made. The x-axis is the budget in \$100M while the y-axis represents the gross in \$1B. The famous action & sci-fi movie, *Star Wars: The Force Awakens* (2015), topped the list of greatest profits (net revenue, gross - budget) with net revenue of about \$691M. *Avatar* had the second greatest success with net revenue of about \$523M. Other films had net revenues between \$285M to \$500M. The common theme between most of these movies, 85% of them, is that they were released in the 21st century and in the US. 55% of them had PG-13 rating and 50% of them had action genre.



Does that mean that modern movies with PG-13 rating and action genre will most likely be successful? Not really. Looking at the worst performers during that same period in the below similar graph, we can see that action movie *John Carter* (2012) had net revenue of about \$-177M (that's

\$177M lost) which also had PG-13 rating and was released in the US. That applies to many of the other worst performers list.



So is it possible to predict movie success based on its info? It turns out that the answer to this is complex and additional information about the movie context, its starring actor, director, and writer are needed to sufficiently answer this. In the next few sections, we will explore the data and find any correlations between different features. Later, more sophisticated methods will be used to reveal secrets behind successful movies.