

# A Study into some of the Highest Grossing Movies between 1983 and 2024

Using Power BI, I have created 3 dashboards to answer 3 different question:

1. How does the distributor affect total and opening gross
2. Does year affect total gross
3. Does Month affect total gross

To answer these questions, I've used a dataset found on Kaggle which I have created a sample of below, showing the first 10 movies by name.

Movie Name	Opening Gross	Total Gross	% of Total Gross on Opening	Total Theaters	Average Earnt per Theatre	Date	Distributor
17 Again	23722310	64167069	37.00	3255	7287	17 April 2009	Warner Bros.
10 Cloverfield Lane	24727437	72082998	34.30	3391	7292	11 March 2016	Paramount Pictures
2 Guns	27059130	75612460	35.80	3025	8945	02 August 2013	Universal Pictures
21	24105943	81159365	29.70	2648	9103	28 March 2008	Sony Pictures Releasing
10,000 BC	35867488	94784201	37.80	3410	10518	07 March 2008	Warner Bros.
21 Jump Street	36302612	138447667	26.20	3121	11631	16 March 2012	Sony Pictures Releasing
101 Dalmatians	33504025	136189294	24.60	2794	11991	27 November 1996	Walt Disney Studios Motion Pictures
2 Fast 2 Furious	50472480	127154901	39.70	3408	14810	06 June 2003	Universal Pictures
22 Jump Street	57071445	191719337	29.80	3306	17262	13 June 2014	Sony Pictures Releasing
2012	65237614	166112167	39.30	3404	19164	13 November 2009	Sony Pictures Releasing

## How do different distributors affect the total and opening gross?

The objective of this dashboard is to find out which distributors average a higher opening and total gross.  
At the end of the dashboard, the user should be able to make a decision of who is the best distributor and the best to use if an independent film writer needed someone to distribute a new film.

Total Number of Films

1000

Average Opening Gross

47M

Average Total Gross

156M

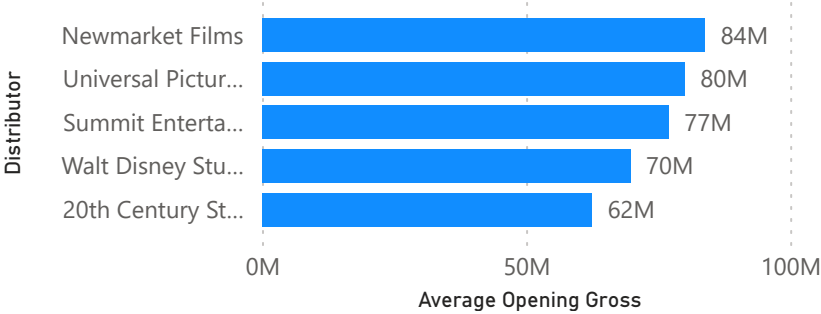
Median Total Gross

121M

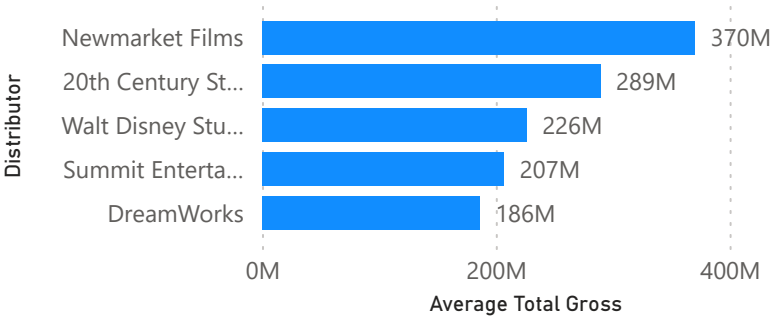
Number of Distributors

28

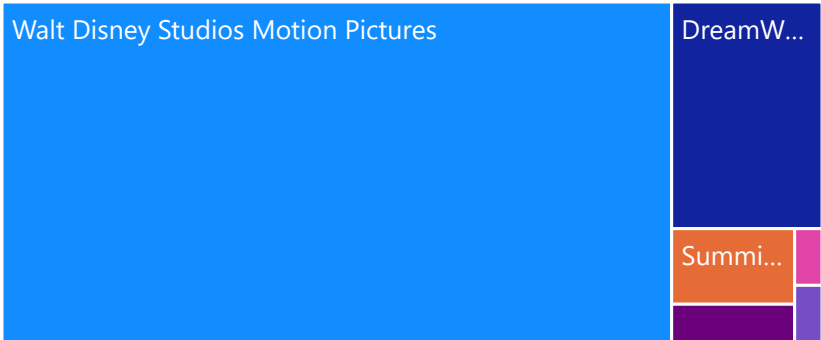
Top 5 Average Opening Gross by Distributor



Top 5 Average Total Gross by Distributor



Total No. of Films by Distributor for each Distributor in graphs



Since we have 28 unique distributors, it would be difficult to plot all 28 on a bar chart. Therefore we take the top 5 distributors for both the Average Opening Gross and Average Total Gross and plot them instead. This gives us a little less information overall but makes it easier to answer the questions at hand.

The average opening gross for the entire dataset is 47 million, while the top 5 all have a average opening gross over 62, with the number 1 spot being 37 million above the average.

The average total gross for the entire dataset is 156 million with the top 5 being at least 20% higher than the average.

## Conclusion:

From both bar charts, we can see that Newmarket Films have the highest average opening and total gross. However, from the tree map, Newmarket Film only has 1 film released, which was "The Passion of Christ".

Newmarket Films Distributor	The Passion of the Christ Movie Name	370274604 Total Gross
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A similar thing is happening for Universal Pictures International who have the second highest average opening gross but with only 1 film, it makes it a little less valid.

Universal Pictures Internat... Distributor	Five Nights at Freddy's Movie Name	137275620 Total Gross
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So, on average we can see that 20th Century Studios, Walt Disney Studios and Summit Entertainment are the top three distributors. If someone needed a film to be distributed they should look at these 3 companies. Since Disney have the most films with a high average, they may have the best chances of success. And by looking at a median of 172,558,876, which is 50 million higher than the overall median, Disney would be my first choice distributor with 20th Century Studios as my second.

Walt Disney Studios Motion Pictures  
172558876  
Disney Studios Median Gross

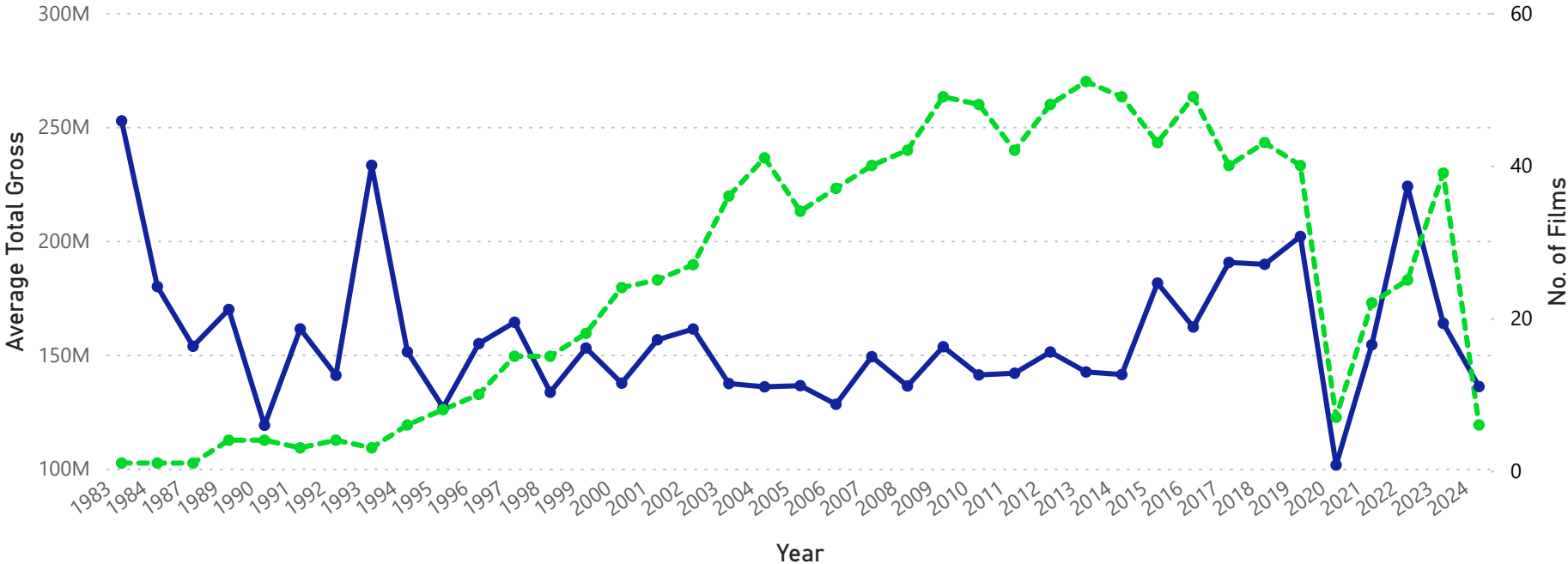
Does the year a film was released affect the average gross of a film?

The objective of this dashboard is to find out if a film is more likely to have a higher gross in a certain year.  
At the end of the dashboard, the user should see if re-releasing an old film would bring in more revenue compared to the initial release.

Total Number of Films	Count of Years	Earliest Year Available	Latest Year Available	Average Total Gross	Median Total Gross
1000	39	1983	2024	156M	121M

Average Total Gross by Year

● Average Total Gross ● No. of Films



The Plot shows 2 line graphs, the solid blue line shows the change in average gross over the 39 years in the dataset. The dashed green line shows the number of films released in each year. 1983 has the largest average total gross, however only 1 film was released.

Star Wars: Episode VI - Return of the Jedi  
1983

There are a couple of other modes in the graph, one at 1993, one at 2019 and the final one at 2022.

We also see a large increase in films created since 2000. It decreased in and around 2020 because the Covid pandemic hit the world but the graph begins to increase again with 2023. 2024 hasn't been completed yet so we can expect a larger value at the end of the year.

Overall, we can see there are a larger quantity of films released in after 2000 then before, however the average total gross stays around the same level until 2016 when we see an increase in gross. Since the question is whether to re-release an old film, let's consider the highest average gross being Star Wars: Episode VI. There are multiple factors to whether a film should be re-release. The obvious one is if there is a hype or resurgence around a particular franchise. In this case, Star Wars is a very large franchise with a lot of newer fans, so a re-release of an old film would go down very well. However, if the film is a random "one off" film it may not be viable to re-release in 2024. This is due to two reason. The first is that the number of films released each year are much larger than when these films were releases initially making it a more competitive market. The second is the current low total gross of films released over the last 4 year. To conclude, I believe a film from a large franchise getting re-released (such as the recent Jurassic Park 30th Anniversary) is very beneficial, however I would not recommend unless the film has a large following.

Does the release month affect the average gross of a film?

The objective of this dashboard is to find out which months bring in a higher gross. At the end of the dashboard, the user should be able to make a decision of when to release a film over a year period.

January February March April May June July August September October November December

Total Number of Films

1000

Average Total Gross

156M

Median Total Gross

121M

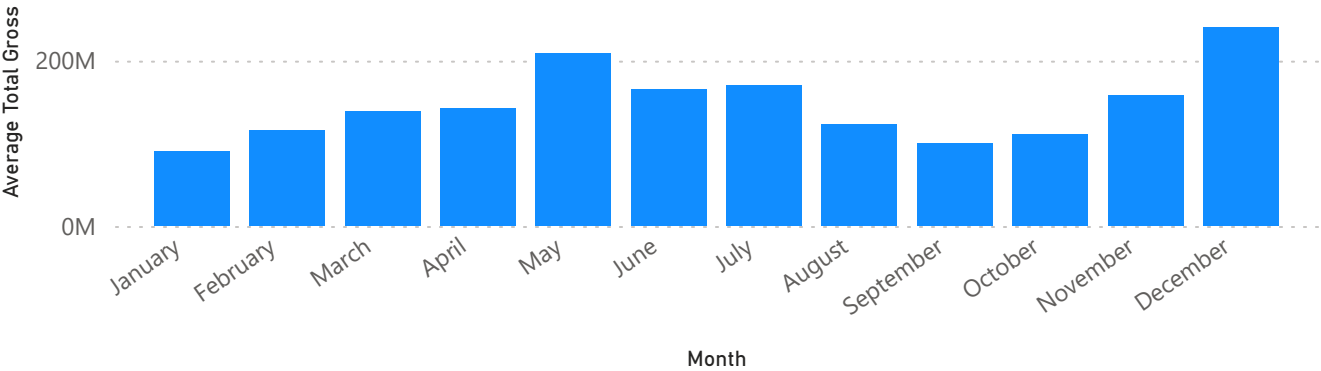
Average No. of Films per Month

83.33

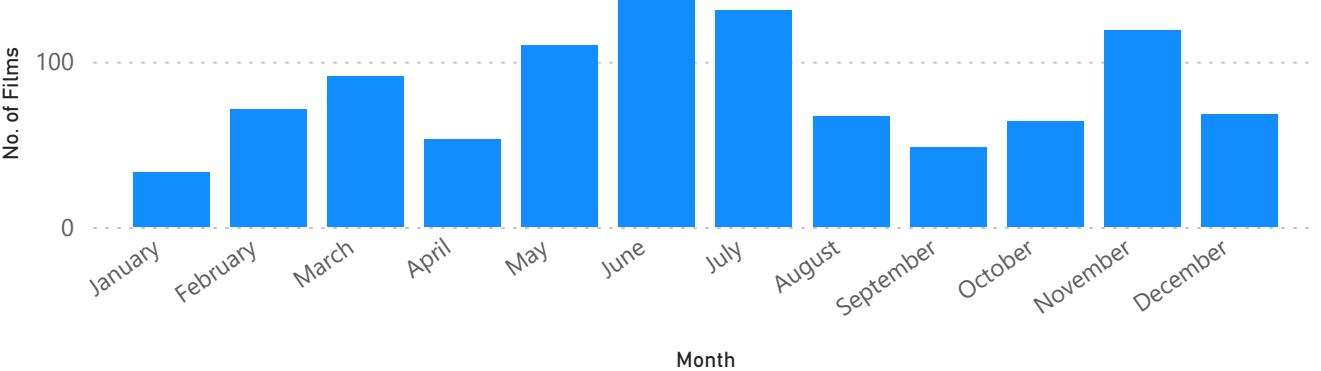
Month with the largest Average Gross

December

Average Total Gross by Month



No. of Films by Month



We have 2 plots here. The top one shows the average total gross for the films released in each month. The bottom is a plot showing the total number of films released in each month. Visibly, May and December have the highest average total gross with each being over 200 million gross. On the other hand, January and September have the lowest average gross.

We can also see that May, June and July have the highest count of films released, alongside November. We can group the May, June and July into the "summer" months, although May is technically spring.

Something a little surprising is the number of films that were released in March, although the dataset includes films in March so any year after has less films because the dataset isn't updated for films after March.

Similarly, our "summer" months are yet to be updated so there will be even more films released in those months which means larger peaks.

Similarly, our "summer" months are yet to be updated so there will be even more films released in those months which means larger peaks. Looking more generally at the plots, the first is bi-modal with modes in May and December while the second is multimodal with modes in March, June and November. There is also no real correlation between how much the film made and which month it was released, making our analysis a little more opinion based. That being said, we can solo out two cases. The first would be to release the film in our "summer" months. They have a lot of films released and a reasonable gross as well. Also, people will already be at the cinema to see other films so there may be a higher quantity of people seeing different films. The second case would be to release the film in December. December has the least number of films released but has the highest average gross, meaning less competition and more total gross. Although if your film makes more sense to release in Summer than Winter the decision is made for you.