

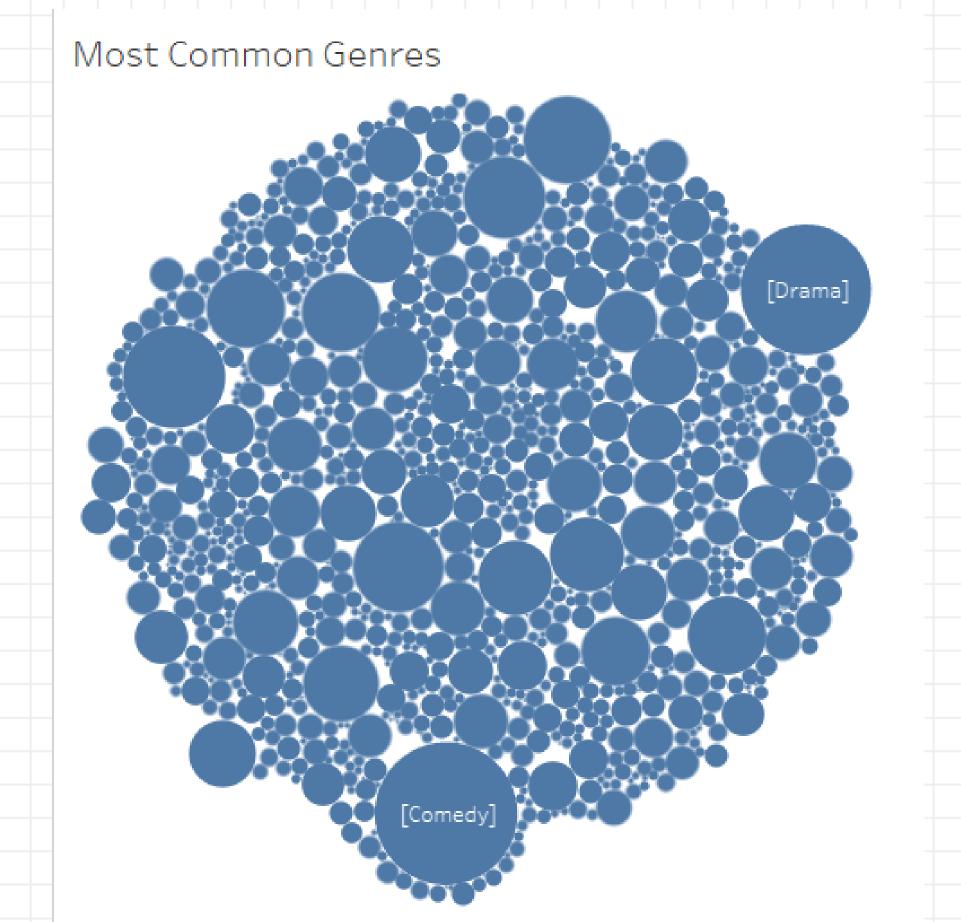
Average Runtime & Revenue

How profitable runtimes of movies are against each other:

Average Run Time and Revenue	
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1,819,416,500	941,077,500								-
2,760,494,000	1,505,724,000								
1,066,554,500	878,339,000	439,169,500		313,6	92,500	250,95	4,000	564,646,50	
	815,600,500	501,908,000 188,215,500							-
1,003,816,000				125,4	125,477,000		0		
1,380,247,000	1,192,031,500			62,738,500					

Genre Comparison by Size

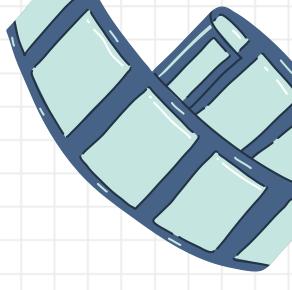




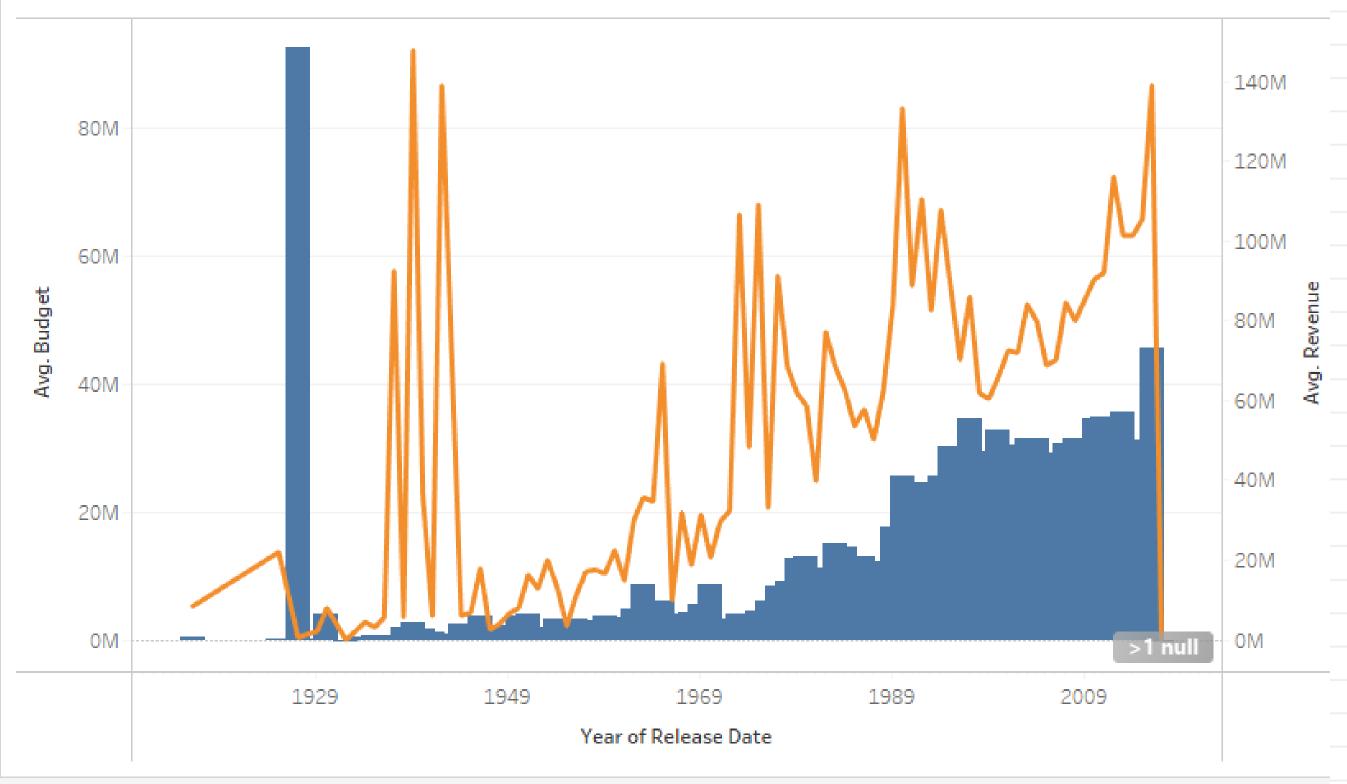
Comedies and Dramas are the most preferred, with Romance in 3rd



Average Cost vs. Profit



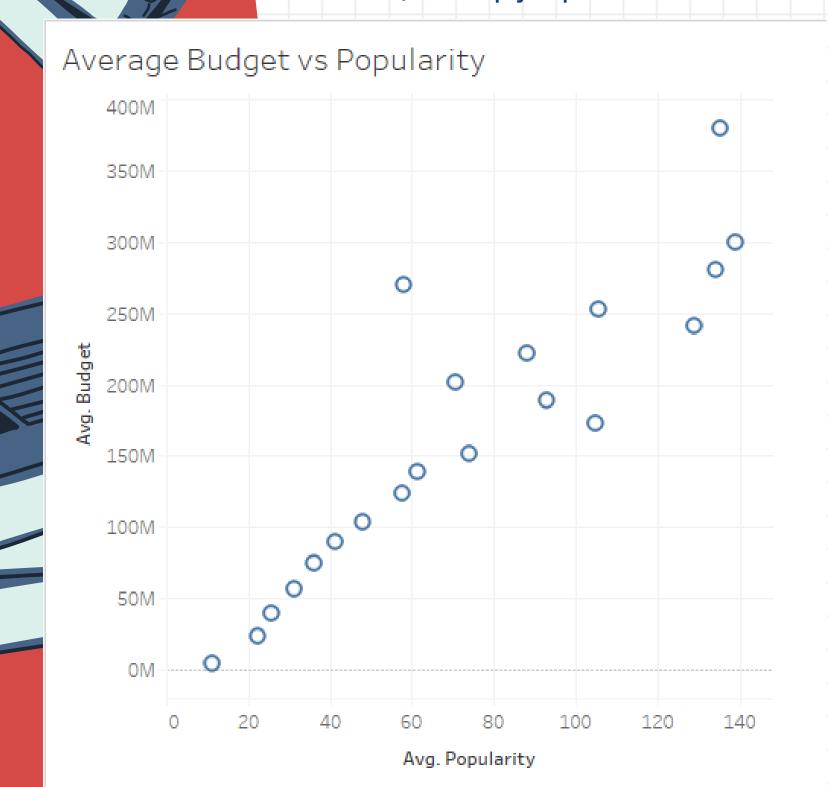
Average Profit vs Average Cost by year.

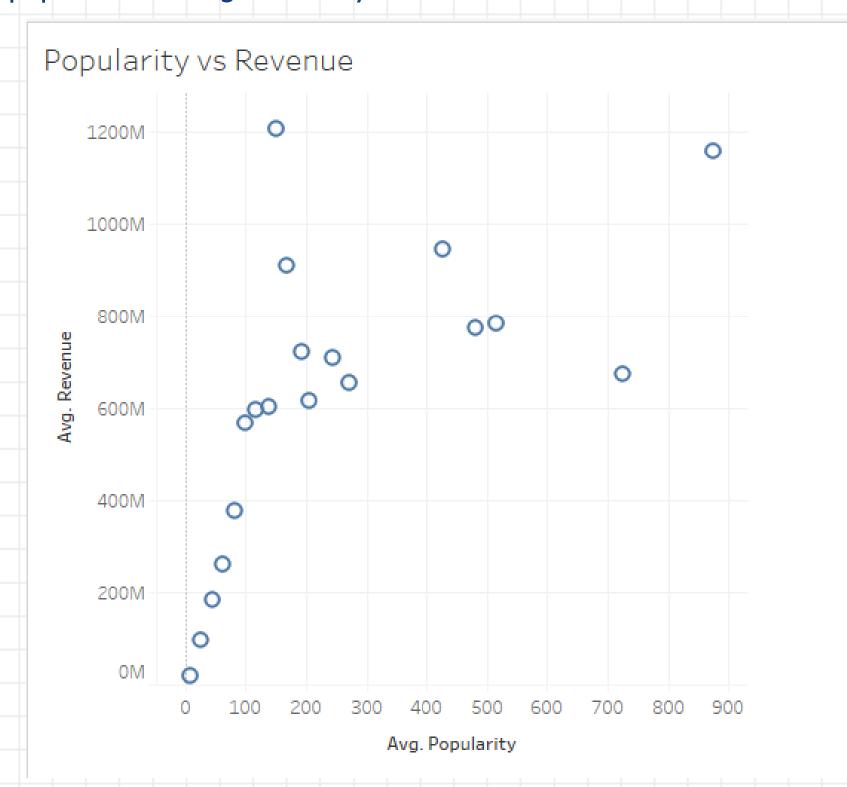


The comparison of average cost vs. profit by year could give perspective on a high level view of the industry as a whole. It also demonstrates how both profits and costs increase over time, with some years being noticeably "better" than others in terms of profit margins.

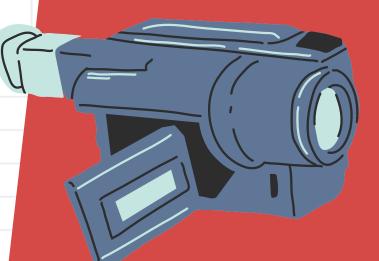
Budget vs. Popularity

The data displayed on the left graph indicates that the larger the budget, the higher of votes they tend to get. While budget equates to popularity, being popular does not necessarily equate to revenue. Average movies in terms of popularity make as much on average as above average popular movies. This does show, however, a steep jump in revenue the more popular a movie gets initially.

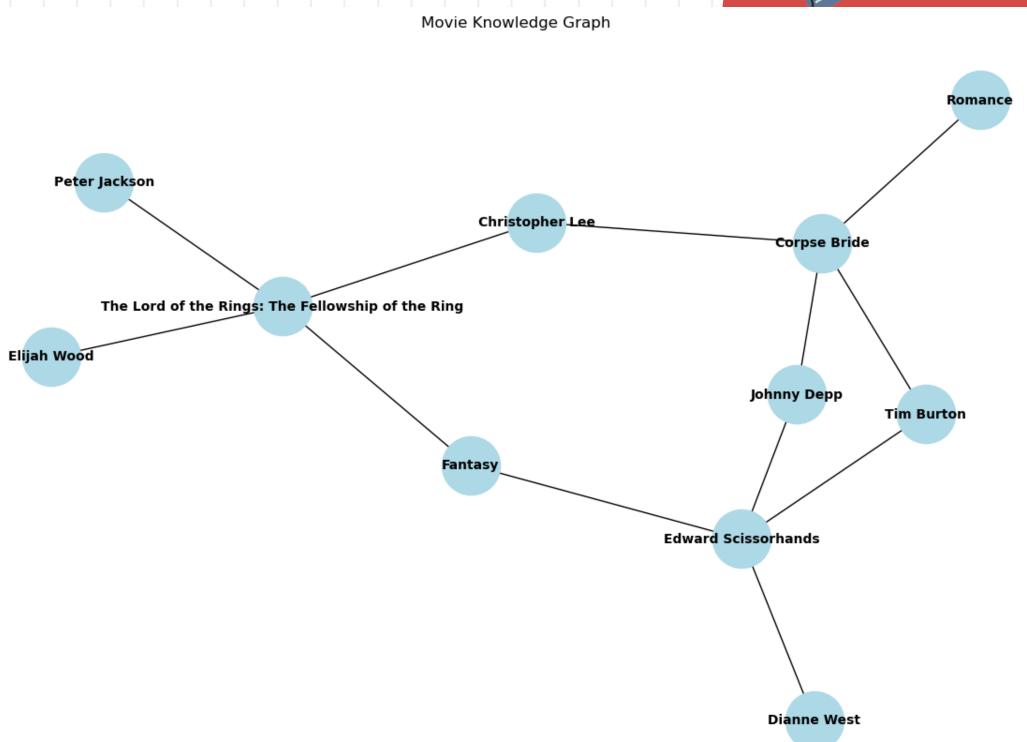




Movie Knowledge Graph



This knowledge graph is useful for understanding the connections between different elements of the film industry, such as which actors have worked with which directors, or what genres certain movies are categorized under. It provides a visual way to analyze the network of relationships within the movie data.



Budget & Revenue by Movie

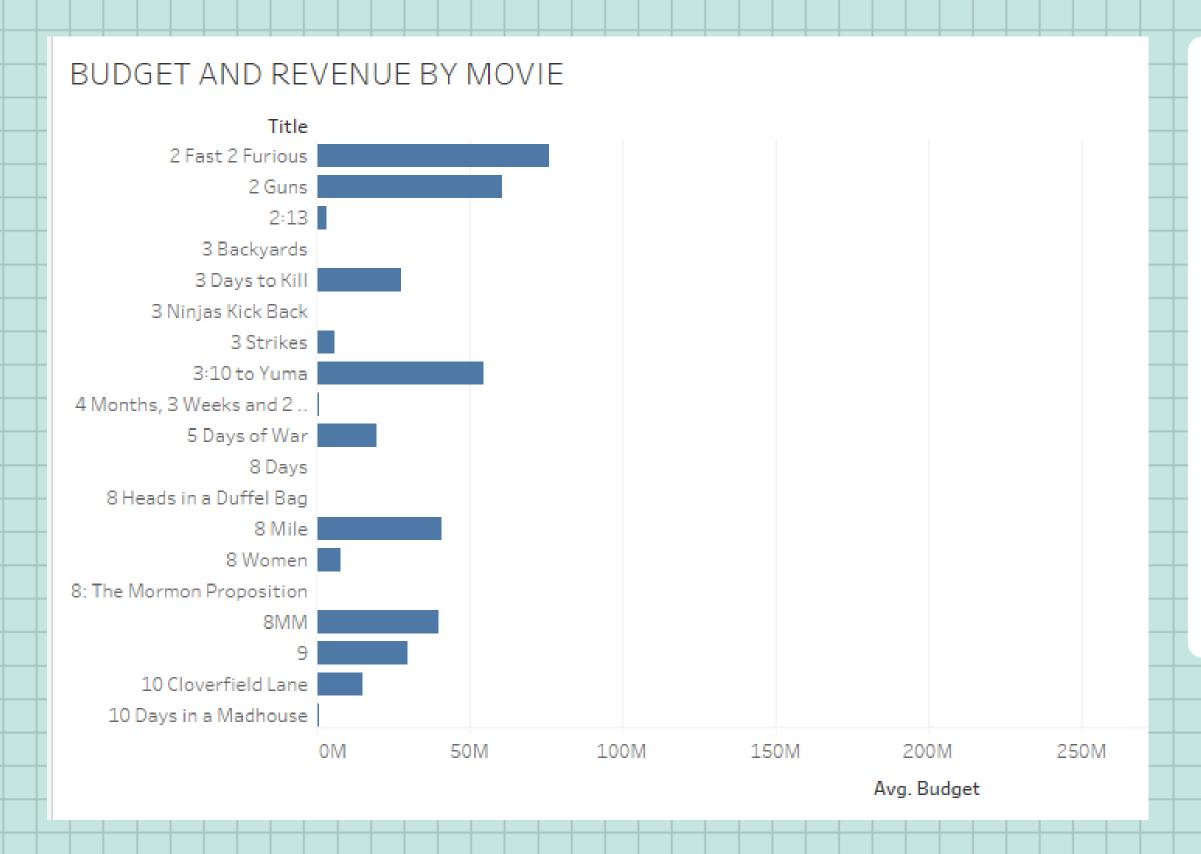


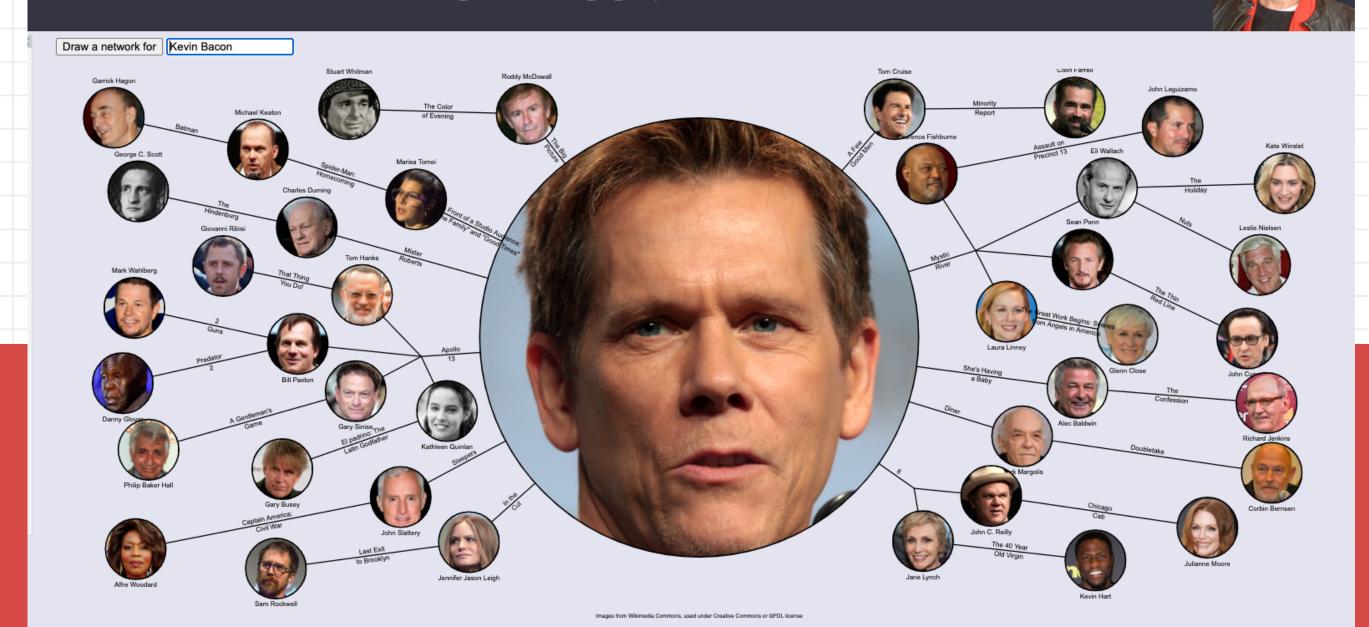
Tableau enabled us to scroll & view movie by movie to view what the profit and budget was for specific movies



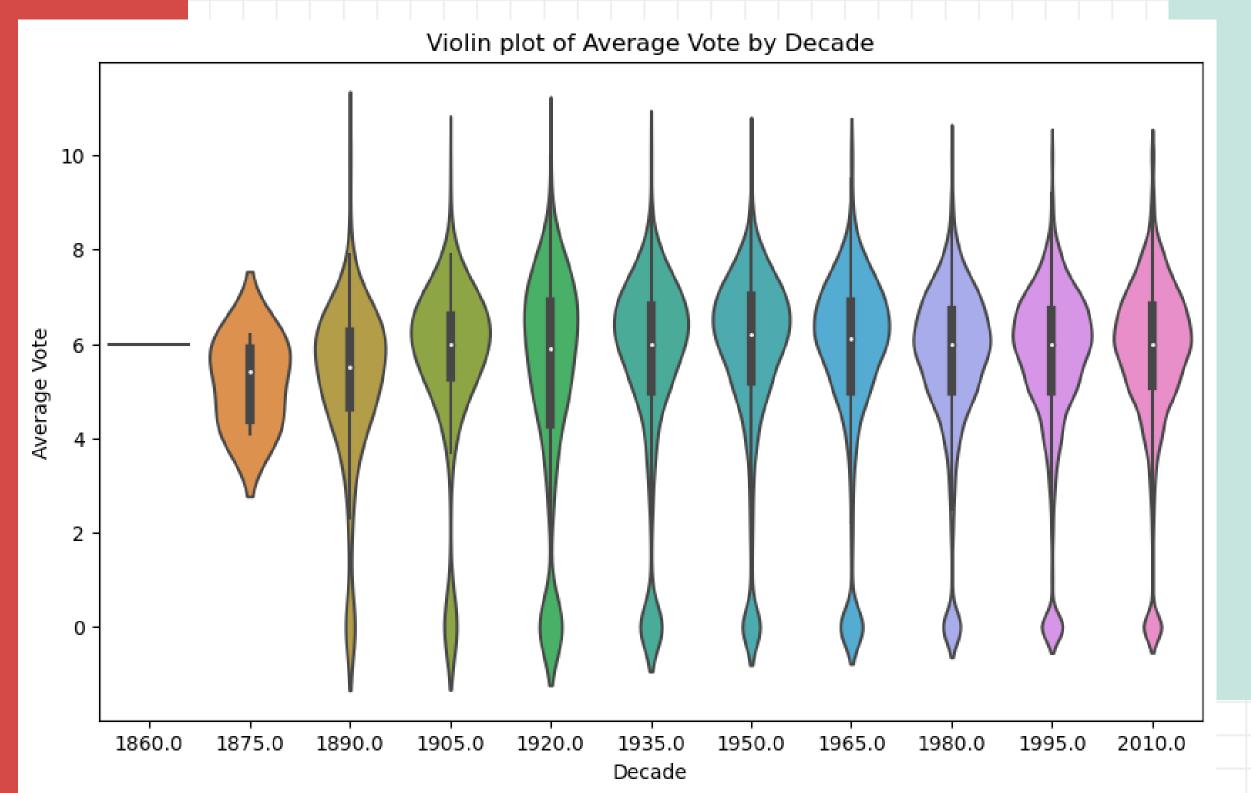
Quick Fun Fact!

Did you know that Christopher Lee is known as the center of the film universe? If you play 6 degrees to kevin Bacon while focusing on Christopher Lee, the average moves to get to anyone else in the industry is 2.5

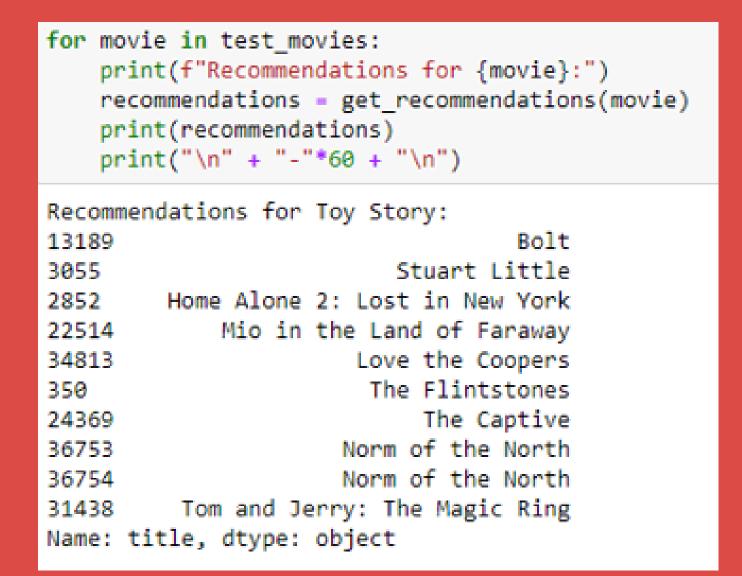
THE ORACLE OF BACON



Average Vote by Decade



This violin plot graph indicates that the averages votes are spread more thin over time, which could indicate that consumers are expecting more from films.



Content Based Machine Learning Recommendation Engine



For this analysis we utilized Google, Canva, Tableau, ChatGPT, course TA's, fellow students, Stack Overflow, and educational resources provided by UT's Data Analytics Bootcamp.

License data for this analysis came from "The Movie Database (TMDB)" via Kaggle.com.