Report On Movie Industry Insight Dashboard

1. Introduction:

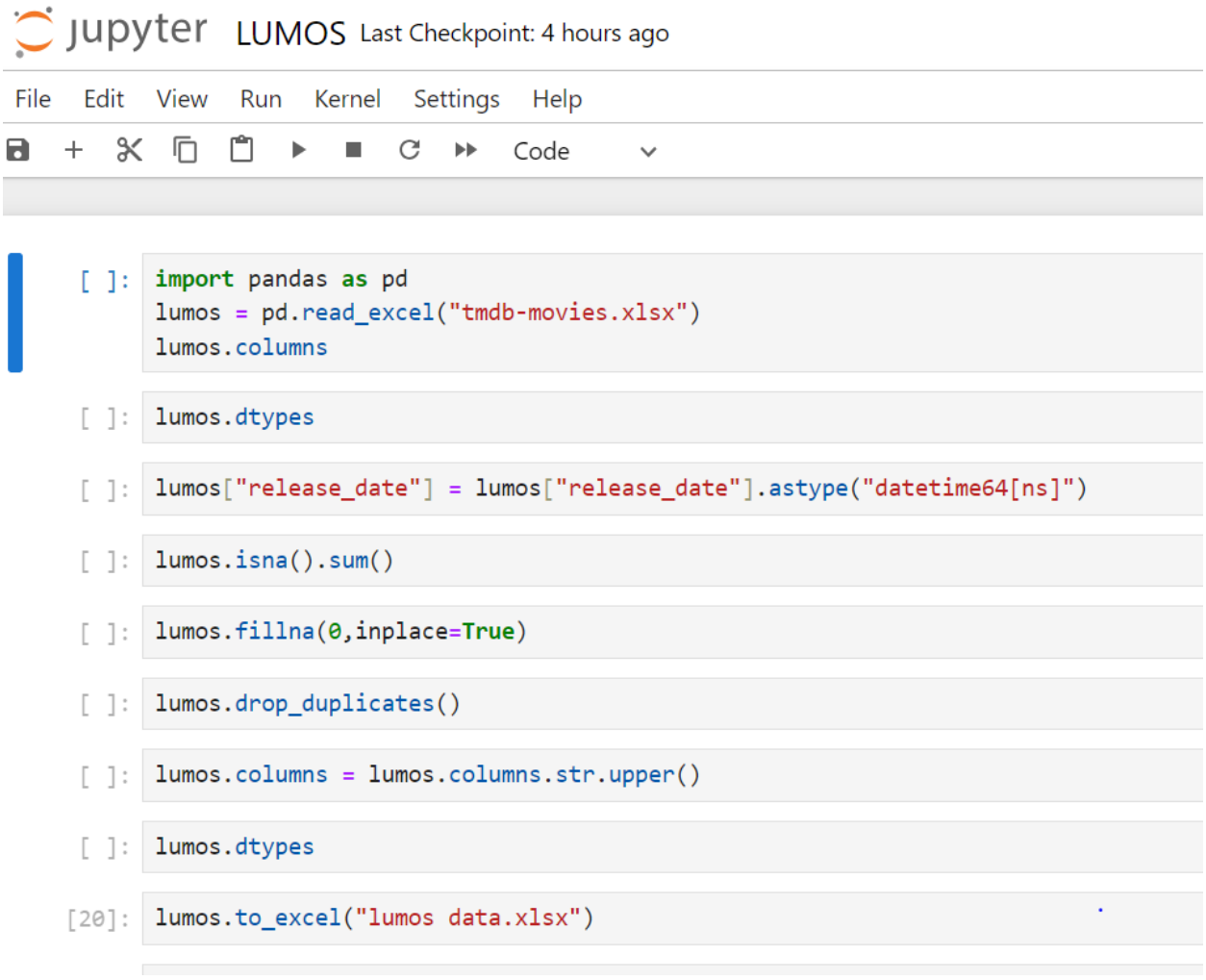
This report presents an analysis of the movie industry, focusing on budget, revenue, genre performance, and top-grossing movies. The data was preprocessed using Python, analyzed in Excel, and visualized using Power BI to create an insightful dashboard.

2. Data Preprocessing with Python:

Python was utilized for the initial data preprocessing to ensure the dataset was clean and ready for analysis. The preprocessing steps included:

Handling Missing Values: Missing values in the dataset were identified and handled appropriately. For instance, missing revenue or budget figures were filled with median values or removed based on relevance.

Data Transformation: Columns such as Release Date were converted into datetime formats, and new columns were created, such as Release Year for better temporal analysis.



3. Data Analysis in Excel:

After preprocessing, the data was exported to Excel for further analysis. In Excel:

Pivot Tables: Pivot tables were created to summarize key metrics, such as the total budget and revenue by year and genre, and the number of movies released each year.

Calculations: Various calculations were performed, such as average revenue per genre and identifying the top 10 genres based on total revenue.

Insights: These tables helped in deriving insights such as the most profitable genres and the trend in movie releases over the years.

Row Labels	Sum of REVENUE	Sum of BUDGET
June	52,717,808,548	16,385,622,197
May	51,377,449,994	16,339,250,831
December	49,583,695,232	17,107,451,020
November	47,884,989,395	16,504,271,703
July	45,218,036,371	15,923,977,659
October	35,422,890,071	14,221,885,681
September	31,617,559,745	12,624,120,522
March	28,835,167,123	10,676,319,440
January	26,195,175,298	10,335,072,062
April	23,968,771,020	10,127,276,544
August	21,423,300,771	9,558,123,016
February	18,475,349,307	9,119,497,414
Grand Total	**432,720,192,875**	**158,922,868,089**

Row Labels	Count of ID	Sum of REVENUE
2015	629	26,762,450,518
2014	700	24,331,150,183
2013	659	24,703,633,017
2012	588	24,668,428,824
2011	540	23,695,591,578
2010	490	21,959,998,545
2009	533	22,180,170,559

Row Labels	Sum of REVENUE
ACTION	96,606,072,845
ADVENTURE	73,107,006,764
COMEDY	67,952,461,496
DRAMA	61,678,301,024
ANIMATION	28,797,048,213
FANTASY	18,303,948,327
SCIENCE FICTION	17,046,401,611
HORROR	15,432,626,119
THRILLER	13,003,269,735
CRIME	12,706,767,478
FAMILY	8,854,452,778
ROMANCE	7,046,888,501
MYSTERY	3,019,881,629
WAR	2,708,551,908
MUSIC	2,304,615,926
HISTORY	1,951,867,180
WESTERN	1,305,819,749
DOCUMENTARY	852,211,592
TV MOVIE	42,000,000
FOREIGN	-
Grand Total	**432,720,192,875**

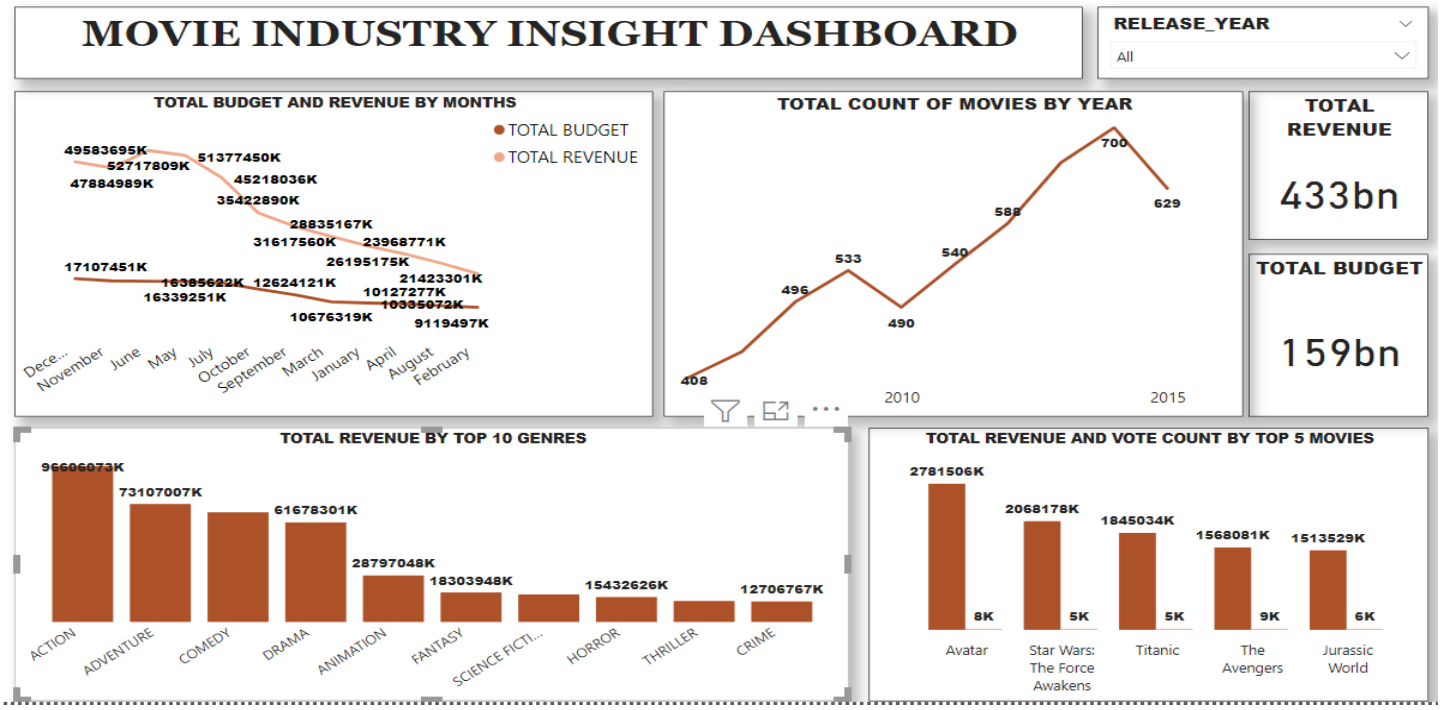
Row Labels	Sum of REVENUE	Sum of VOTE_COUNT
Avatar	2,781,505,847	8,458
Star Wars: The For	2,068,178,225	5,292
Titanic	1,845,034,188	4,675
The Avengers	1,568,080,742	9,024
Jurassic World	1,513,528,810	5,562
Furious 7	1,506,249,360	2,947
Avengers: Age of U	1,405,035,767	4,304
Harry Potter and th	1,327,817,822	3,750
Frozen	1,277,284,869	3,691
Iron Man 3	1,215,439,994	6,882
Grand Total	**16,508,155,624**	**54,585**

Sum of REVENUE	Sum of BUDGET	Sum of VOTE_COUNT
432,720,192,875	158,922,868,089	2,362,157

TOTAL REVENUE	432,720,192,875
TOTAL BUDGET	158,922,868,089

4. Visualization in Power BI:

Power BI was then used to create an interactive dashboard that presents the findings visually:



Total Budget and Revenue by Month: A line chart compares the total budget and revenue generated across different months, highlighting seasonal trends in movie releases and earnings.

Total Count of Movies by Year: A line chart shows the number of movies released each year, identifying peaks and trends over time.

Total Revenue by Top 10 Genres: A bar chart displays the top 10 genres by revenue, showing which genres are the most lucrative.

Total Revenue and Vote Count by Top 5 Movies: Another bar chart compares the revenue and audience vote count for the top 5 highest-grossing movies, providing insight into their popularity and financial success.

Key Metrics: Total revenue and budget are prominently displayed, summarizing the overall financial scope of the dataset.

5. Conclusion:

The Movie Industry Insight Dashboard provides a comprehensive overview of the movie industry's financial landscape. By preprocessing the data in Python, conducting detailed analysis in Excel, and visualizing the results in Power BI, we were able to identify key trends and insights that can guide decision-making in areas such as genre investment and release timing.