**Video Game Sales**

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Section: V4

1. **Introduction**   
   A great deal of the entertainment business revolves around video games, and it can be fascinating to see what factors contribute to a game's success. I'll be analyzing a dataset of video games that have sold over 100,000 copies for my research. This dataset, which was gathered from vgchartz.com, contains significant information about every game.

1. **Objectives**  
   This project's primary objectives are:
   1. To examine the distribution of video game sales among various platforms, genres, and geographical areas.
   2. To identify patterns in the years' sales of video games.
   3. To comprehend how various elements (such as publisher, genre, and platform) affect worldwide sales.
   4. To produce graphs and charts that clearly illustrate the findings.
2. **Dataset Description**

The dataset has information about video games that have sold more than 100,000 copies. Here are the columns included:

* **Rank**: Overall sales ranking.
* **Name**: Name of the game.
* **Platform**: Platform where the game was released (e.g., PC, PS4, etc.).
* **Year**: Year the game was released.
* **Genre**: Genre of the game (e.g., Action, Adventure).
* **Publisher**: Company that published the game.
* **NA\_Sales**: Sales in North America (in millions).
* **EU\_Sales**: Sales in Europe (in millions).
* **JP\_Sales**: Sales in Japan (in millions).
* **Other\_Sales**: Sales in other regions (in millions).
* **Global\_Sales**: Total worldwide sales (in millions).

1. **Methodology**   
   **4.1 Gathering and Cleaning Data**   
   Source: The dataset was gathered from vgchartz.com and is available on Kaggle.   
   Cleaning: Take care of missing values, get rid of duplicates, and make sure data formats are consistent.

**4.2 Data Visualization and Exploration**Characteristic Statistics For sales data, compute fundamental statistics such as mean, median, and mode.   
Tools for Visualization: To make charts, use programs like Seaborn and Matplotlib.   
Display the breakdown of gaming sales by platform.   
Display the breakdown of game sales by genre.   
Analyze sales across the following regions: NA, EU, JP, Other.   
Examine historical sales trends.

**4.3 Trend Analysis**  
Time Series Analysis: Examine the evolution of game sales over time with time series analysis.   
Regression Analysis: Examine the effects of several variables (publisher, platform, and genre) on worldwide sales.

5) Expected Outcome  
• A thorough breakdown of video game sales by area, genre, and platform.   
• Knowledge of patterns and variables influencing the sales of video games.   
• Reports and charts that make the results easy to understand.   
• Advice for publishers and game developers.   
  
  
6) Conclusion  
This project will analyze sales data from vgchartz.com to provide insights into what makes a successful video game. We can uncover trends and patterns in this dataset that can assist publishers, marketers, and game creators in making more informed choices.

7)Link:

<https://www.kaggle.com/datasets/gregorut/videogamesales>

https://www.kaggle.com/code/himanshu2411/gaming-industry-over-the-years-eda