Video Game Sales

Objective

Video games sales dataset contains sales data for video games from all around the world, across different platforms, genres and regions. Armed with this data and analysis, future developers can better understand what types of gameplay and mechanics resonate more with players to create a new gaming experience. Undertake a comprehensive analysis to produce a report on

- Insights on what games successful (hit) across the globe
- What other things can we learn from this dataset

Introduction

Video games are a billion-dollar business and have been for many years. This dataset has details about sales in North America, Europe, Japan, Rest of world and also global sales. The data is from the year 1983 till 2012. An extensive analysis is done to find out most successful games in different regions, top publisher in different regions, most famous genre of games and sales over the time period of 1983 to 2012.

Initial Findings

- ➤ There are 1907 rows and 13 columns in the dataset.
- ➤ Index column is dropped since it will not be useful for the analysis
- ➤ There are null values in Year and Publisher columns
- ➤ There are no duplicate values

Exploratory Data Analysis

Data Pre-Processing

- ➤ The null values in Year column are imputed using median of the column
- ➤ The remaining null values are almost 0.1% of the total dataset. Since it is very negligible, the columns with null values are dropped. Now, there are 1905 rows and 12 columns in the dataset.
- ➤ The column Year is converted to int so that it will be easier for visualisation.
  There are 1517 unique Game Titles, 22 unique Platforms, 12 unique Genres and 94 unique genres in the dataset.

Inference from the graphs

- ➤ The top 10 highest selling games worldwide are Wii Sports, Super Mario Bros, Mario Kart Wii, Wii Sports Resort, Tetris, New Super Mario Bros, Wii Play, Duck Hunt, New Super Mario Bros. Wii and Nintendogs.
- ➤ The highest selling genre worldwide is Sports closely followed by Action and Platform.
- ➤ Maximum number of games are sold through the Platform PS2 followed by Wii.
- ➤ The top Publisher who sells highest number of games worldwide is Nintendo
- ➤ The overall trend in the sale of games is increasing till 2008, then the trend falls. Highest number of games have been sold in 2008 globally.
- ➤ In 2008, highest games were sold in Sports genre closely followed by Misc and Action. In the recent 6 years, 2012 has the least sale of games. In 2012, the highest sale is in

Action genre, but no games were sold in Fighting, Simulation, Strategy and Puzzle genres.

➤ In 2008, the greatest number of games were sold in PS3 Platform. But in Platforms 3DS, WiU, GBA and PSV, not even a single game was sold. In 2012, there is no sales from PSP, PS2, GBA and PSV Platforms.

➤ Among the regions North America, Europe, Japan and Rest of World, highest sales are from North America followed by Europe.

➤ In North America, Europe and Rest of World, Wii Sports is the highest selling game while in Japan, Pokemon Gold/Silver Version is the highest selling game.

➤ In North America, Europe and Rest of World, highest number of games sold belong to Sports Genre while in Japan, highest number of games sold belong to Role-Playing Genre

➤ In North America, Europe and Rest of World, highest number of games are sold via PS2 Platform whereas in Japan, most of the games are sold via DS Platform

➤ The top most publisher who sells highest number of games in all the regions is Nintendo

➤ The overall trend in the sale of video games in all the regions is increasing till late 2000s then it falls. The sales in Japan are highly volatile compared to the other regions.

Conclusion

The highest video game sold worldwide is Wii sports, Nintendo is the top publisher who sells most of the games and Sports is the highest selling genre all over the world except Japan. The video game sale in Japan is different from the sales in other parts of the country. This might explain the volatility in the sales over the years.