

Task 1.10 - Project Reflections

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Game Co Assumption:

Game Co's executive board is planning the marketing budget for 2017. Their assumption is that videogame sales for the various geographic regions have stayed the same over time.

Objective:

Analyse the Videogame Sales dataset till October 2016 and provide valuable insights to Game Co's executive board for planning the marketing budget for 2017.

About dataset:

The dataset includes the information about the top-ranking video games between the years 1980 and 2020. It includes 11 columns and 16598 rows of data. The games were listed by ranking, name of game, the platform used, the publisher who made it, the year it was made, the genre of the game and the number of sales in million in the following geographic regions- North America, Europe, Japan, Other, and Globally.

#Step 1:

The below steps were performed to explore the data and validated whether it matches the marketing team expectations or not. If not, then the marketing budget will need to be redistributed among the regions in order to maximize return on investment.

1. Made a copy of original dataset.
2. Cleaned those data to ensure that there is only relevant data for my analysis.
 - Removed duplicate data and empty rows of data, as it was not a useful information for my analysis.
 - Replaced blank cells with "N/A" in name, platform, genre & publisher column.
 - Deleted some special characters on the name and corrected the typos in publisher column.
 - Checked if there are any outliers.
 - Impute all blanks in the sales columns with the respective average value.
 - Didn't use any information after the year 2016 as it was beyond the scope.
 - I have excluded all the data before 1983 as it was incomplete and very old for 2017 insights.

Insights from Data:

Global sales by region:

I started my analysis by comparing the percentage of global sales by regions.

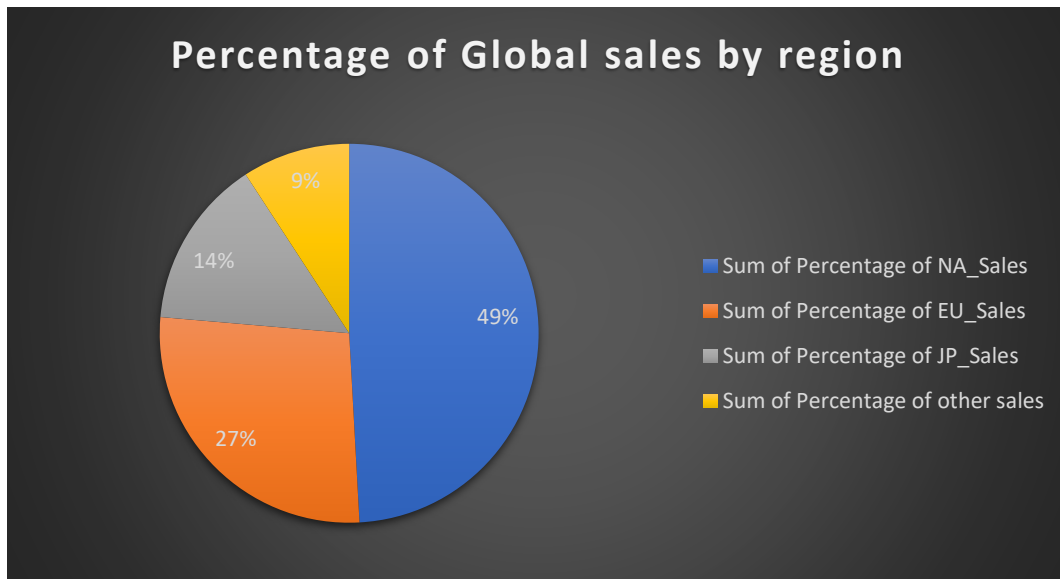


Figure 1

From figure 1, we can understand that the North America sales is almost half of the Global Sales during the years 1983-2016. The North America has the highest proportion of Global sales (49%) and Japan has the lowest proportion of Global sales (14%). (Without considering the sales from the other regions)

Regional sales by Year:

Then the data has been summarized by the percentage of Global sales by region across the years between 1983 and 2016.

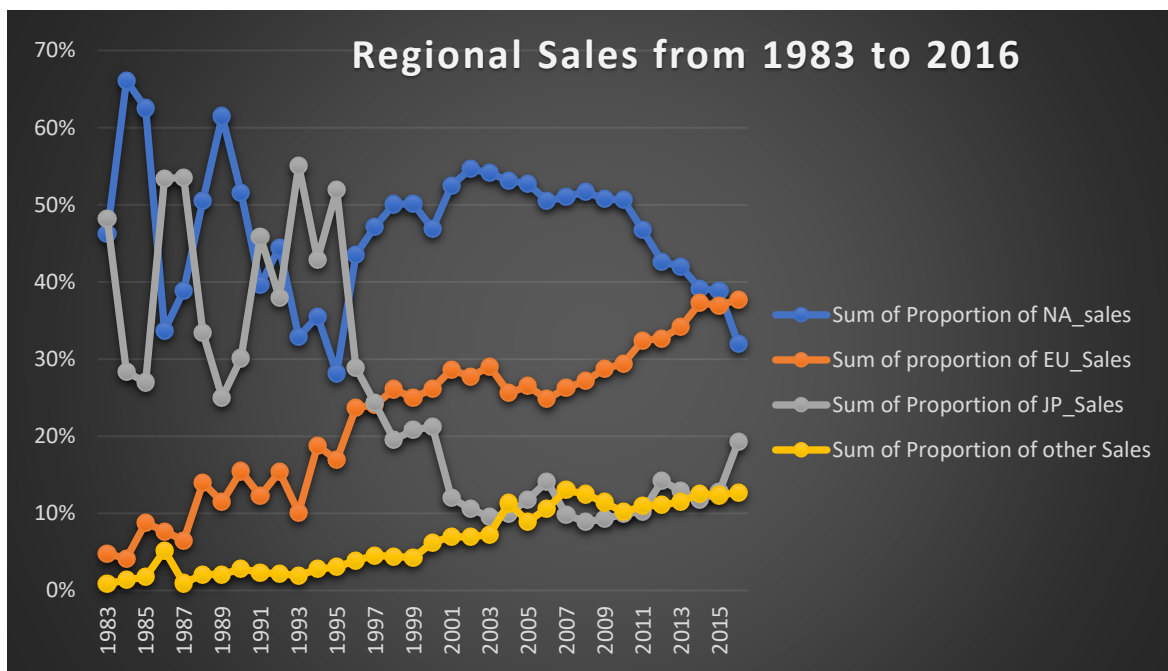


Figure 2

Looking at the regional sales for North America, Japan, and Europe in comparison to the Global sales, it is observed that none of the regions have remained the same over time.

The North America had the greatest numbers of sales for most of the years. But in the recent years, there is a decline in North American sales and European sales have the consistent rise from the beginning over the years and Japan have also shown some incline in their recent sales. Also in 2016, European market overpassed the North American market.

So, the team's expectation doesn't align with the insights from the dataset, so it should be revised. From the analysis, there is a potential of sales growth in European market. So, Game Co should revise their expectations by considering European market as the highly sales potential market followed by North American market and then the Japanese market.

I have also analysed this data based on some variables, as the regional sales will differ depends on variables like Genre, Publishers and platforms across years.

Regional sales by Genre:

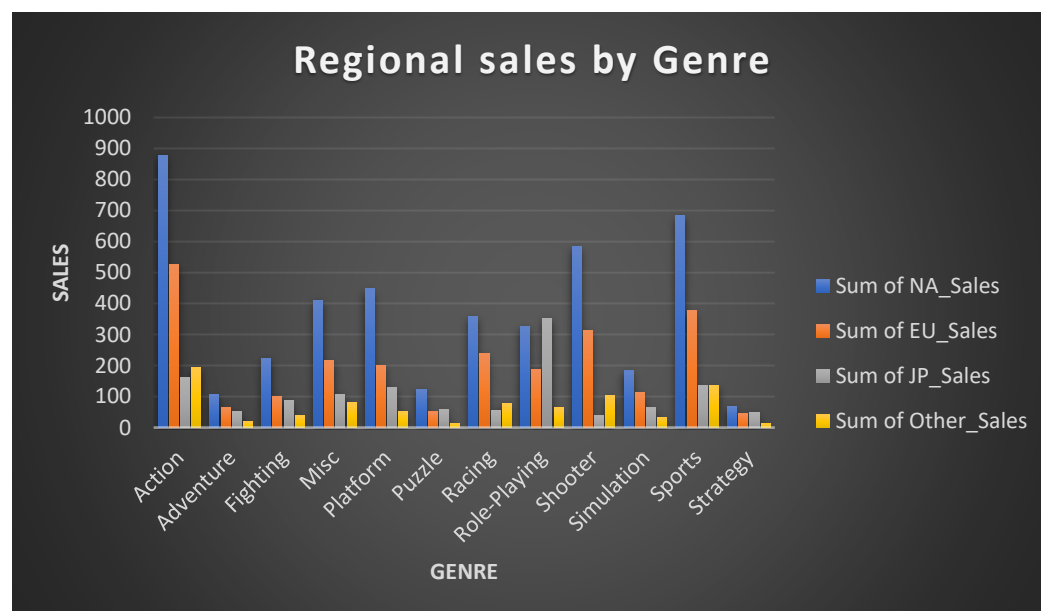


Figure 3

North America seems to lead the number of sales in almost every genre type except Role-Playing Games. The highest sales of the Role-Playing genre belong to Japan. According to this analysis, we can increase the stock of most selling genres in those regions.

Global Sales by Genre:

Below figure 4, shows the global sales of video games across different genre. It is observed that Action, Sports, and shooter are the top 3 Genres across Global. So, the team can also keep the stocks of these genres in all regions.

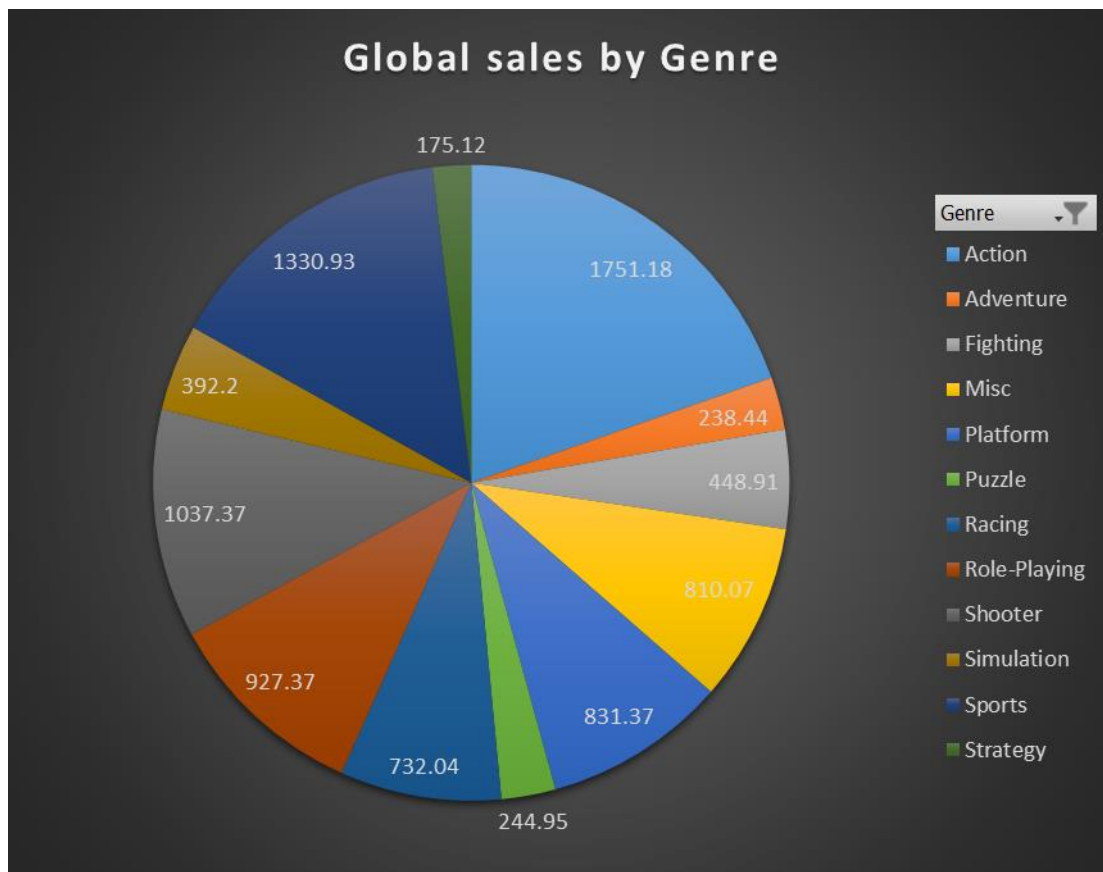


Figure 4

Regional sales by platform:

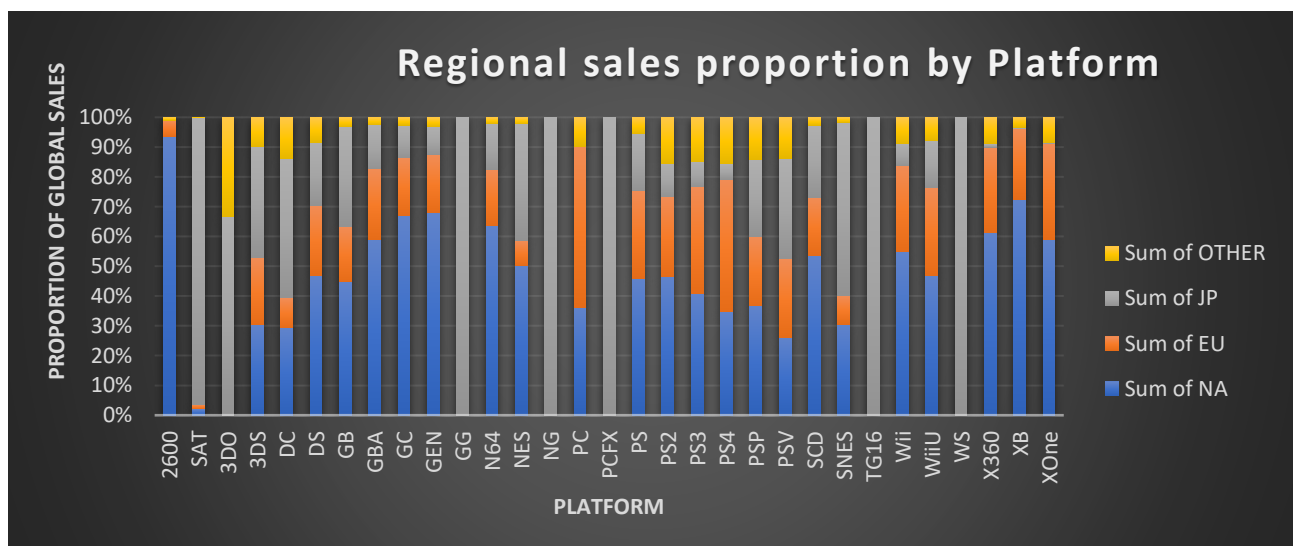


Figure 5

The figure 5 shows the percentage of sales in different regions based on various platforms from years 2010 to 2016. Due to technology changes, it is better to look and understand the popularity of certain platforms on each region from the recent years. The availability of

platforms across regions can also be consider as a factor, while planning the marketing budget for 2017.

#Step 4:

All the visualizations used in my presentation shows the videogames trends and the sales in different regions across years from 1983 to 2016. I have used pivot table to generate these visualizations.

The proportion of global sales by region shows the variations in sales over time and it helps us to understand that the team's expectation didn't align with the insights from the dataset, so it should be revised.

It also gives an overview of the popular platforms and genres in each region. As a result, the fact that each geographical location has a specific marketing recommendation based on sales, platform, and genre helps the marketing team in planning and allocating the marketing budget for 2017.
