

Project Reflection

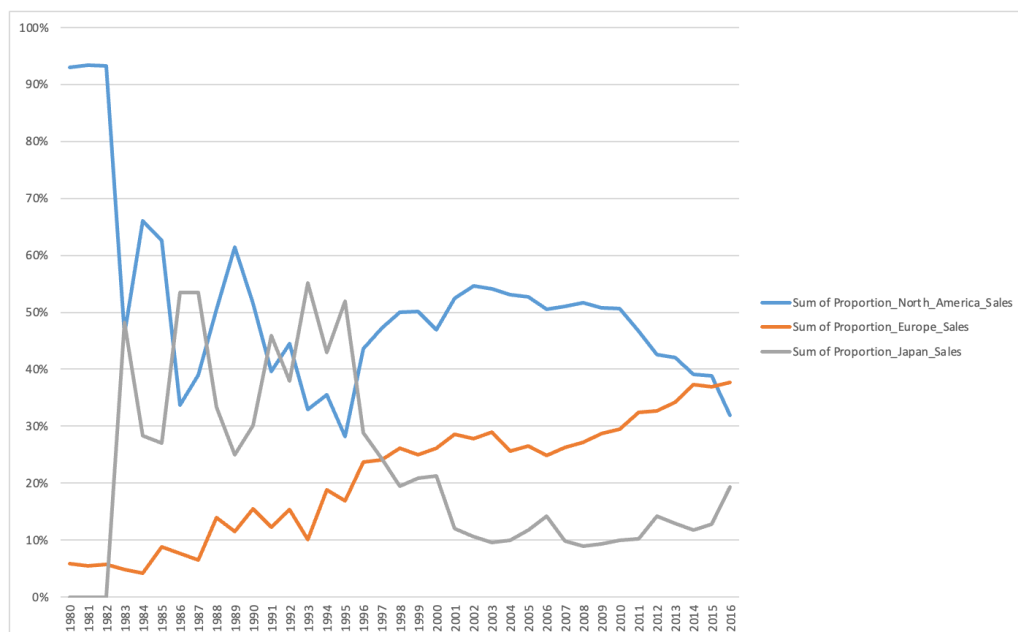
Preliminary Analysis Reflection:

Through various exercises related to this dataset, I gained insights that contradict GameCo's executive board's expectations of uniform video game sales across different regions. I discovered variations in sales among different regions and identified trends that are important to highlight. For example, the graph below shows the proportion of global sales in the three largest markets. This graph helped me identify the volatility in the sales data over time, track the trajectory of each region's sales over time, and compare sales among different regions.

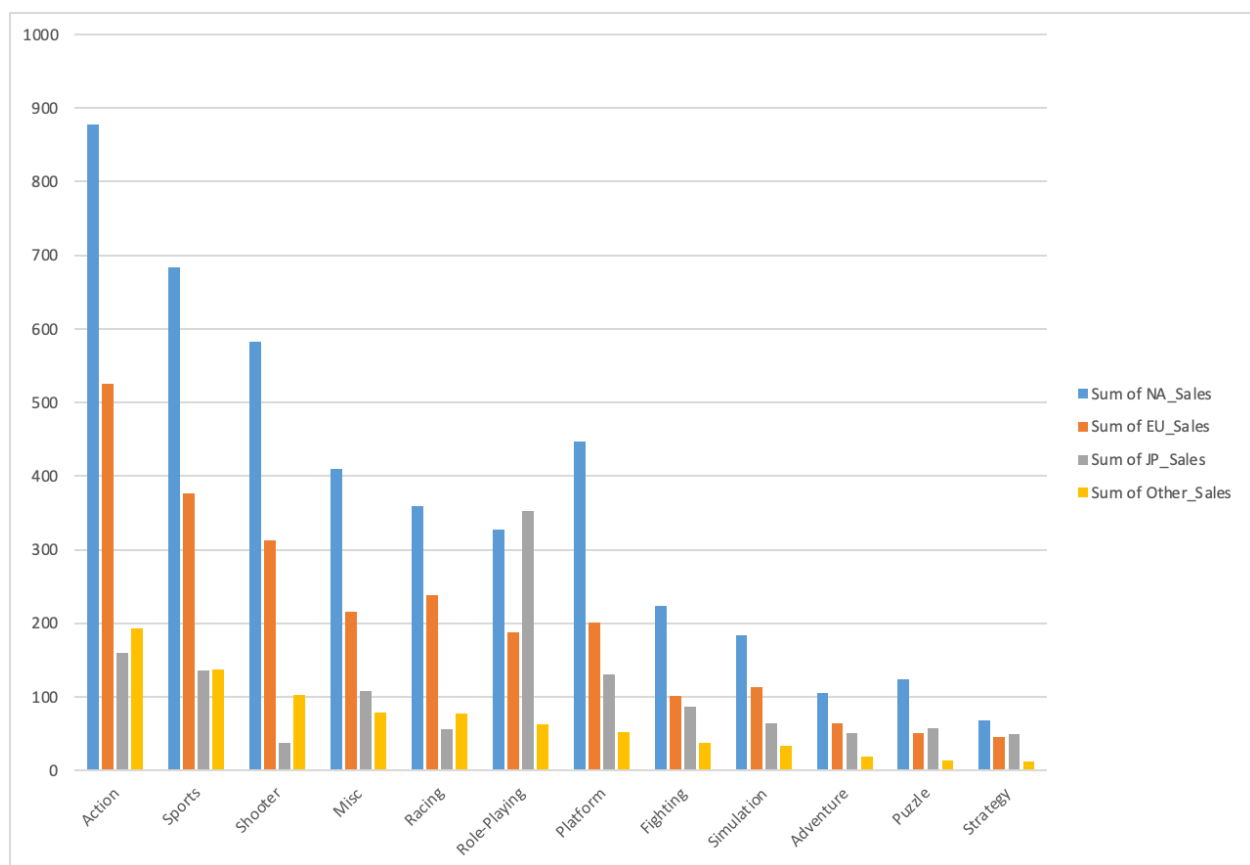
To organize the data, I inserted a pivot table and extracted the years, placing them in the rows field. I used the "Sum of proportion" field function feature of Excel to calculate the proportion of sales for each market and placed those in the values field. I further cleaned the data by filtering out unnecessary years, years with insufficient data, or incorrectly labeled years.

I chose to depict this data using a line graph because it was the most effective way to display a large dataset with many data points. This allows me to display all the data points without overcrowding the graph. Additionally, connecting data points makes it easier to observe the overall pattern and identify any fluctuations. This approach helped me to organize the data and gain a better understanding of the dataset.

Since this approach was effective in helping me understand the data, I decided to refine it further and incorporate it into my project so that my target audience can also gain a global perspective about the dataset.



Through this graph, I gained a deeper understanding of the different genre preferences among regional markets. I chose to use a clustered column chart to compare and contrast the different regions and get a full picture of the individual markets. However, after creating a pivot table with the sum of sales for each region, I decided to look at the global sales proportions of each region to better understand the size of the market based on global sales. Additionally, I used a 100% stacked graph for my final presentation because it made the data more concise and easier to follow by dedicating only a single bar per genre category. By organizing my data this way, I was able to understand individual market preferences and compare them to different markets simultaneously.



Presentation Reflection:

The executive board of GameCo expected sales to remain constant across different regional markets when deciding the marketing budget for 2017. However, sales data revealed that this was not the case. To test this assumption, I analyzed historical sales data from 2008-2016 to determine if there were any consistent or varying patterns. This helped me understand the trends and conduct marketing research by analyzing preferences for genres and platforms in different regions. This was crucial in identifying the top game categories based on market preferences.

After my preliminary data analysis, in which I grouped the data by summing sales per region over time, I concluded that sales were not consistent. The question then was how to present this finding in a way that made the most sense to the executive board. To provide the best answer to this question, I compared the global sales proportions of each region over time by graphing them next to each other. This allowed for a better comparison between different regions and showed how sales had varied over time for individual markets. I decided to use a line graph for data visualization (slide 3) because it works well for showing trends over time and connecting the data points, making it easy to observe overall patterns and identify any fluctuations or changes over time. The graph provides clear and concise evidence that sales data in all markets have not been consistent over time. It shows that sales in all markets, particularly North America and Japan, became less volatile after 1996. Additionally, it demonstrates an increase in sales in the European and Japanese markets in recent times, as well as a gradual increase in other regions over time. On the other hand, it shows a decrease in the proportion of global sales in North America, especially after the year 2010.

I also wanted to highlight the relationship between each region and global sales. To do this, I created a line graph (Slide 4) that shows the global and regional sales figures over time. This data illustrates how the North American market is the biggest market for GameCo, driving overall global sales. By presenting this graph to my audience, I hope to convey the significance of this market and encourage further investigation into the reasons for the recent decrease in sales in North America.

To gain a deeper understanding of recent trends, I focused on data from 2008 onwards, the year when global sales started to decline. I grouped the data according to the global proportions of regional sales from 2008 to 2016 to determine how much each region contributed to global sales (Slide 5). I presented the data using clustered columns, allowing for easy comparison of values within each regional category while keeping them visually separate from each other. My graph explicitly shows the decrease in North American sales and the growing European market. It is interesting to note that the European market surpassed the North American sales proportion in 2016. Additionally, the data indicates a more gradual increase in the proportion of Japanese

sales in recent years. This information is crucial for allocating more resources to the European and Japanese markets, as they show growth potential.

To fully realize our growth potential, it is essential that we understand the market's needs. I chose to analyze regional market needs by studying preferences for genre and platform. To analyze genre preferences, I examined global proportions for each region over time (slide 6), and also focusing on recent trends by analyzing data from 2016 (slide 7). I depicted each genre category as a single bar in a 100% stacked column graph, which was segmented to represent sub-categories or regional sales proportions. I found this approach to be most effective in showing the composition of each genre category and the relative contributions of different regions to global sales. To aid viewer comprehension, I included percentage values for each sub-regional category. I applied the same strategy to display platform preference data, focusing on the three major markets: North America, Europe, and Japan (slide 8).

After gaining insights from GameCo's sales data, I recommend that executives focus on the growing European and Japanese markets by making popular genres and platforms more available in these regions. Additionally, they should allocate resources to further investigate the decline in North American sales and develop a more customized solution that better meets market needs. The company should also prioritize emerging markets around the world and support games with local preferences in these markets.