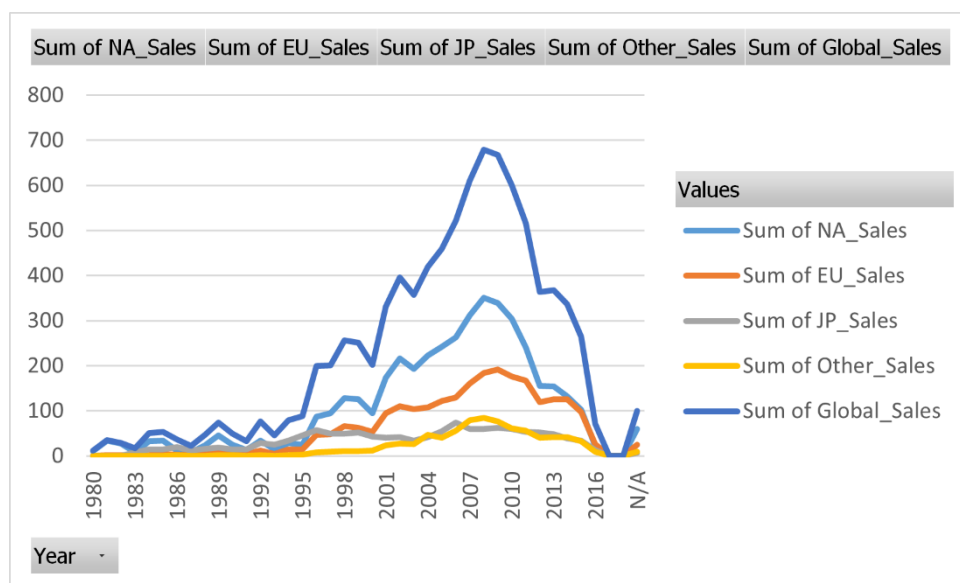


## Project Reflections

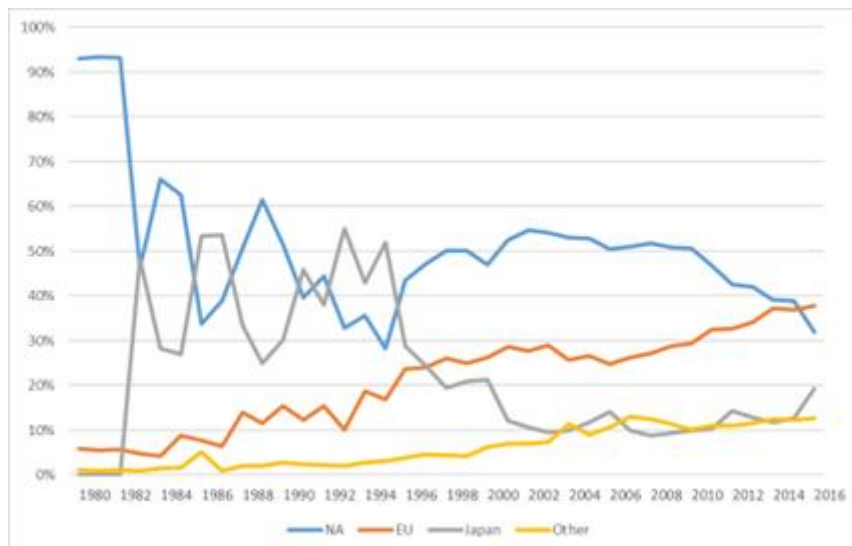
### Step 1

The aim of this project is to provide a formal proposal to Game co executive board, which will offer practical insights into the marketing budget plan for the year 2017. The executive board holds the expectations that sales in various geographic regions have remained consistent over a period of time. Hence, our main objective is to verify or question this assumption by utilising data, in order to reveal the true sales patterns over time. Before initiating the analysis, I have made the decision to carry out a comprehensive evaluation of the limitations imposed on the data. As stated in the methodology, the dataset solely consists of retail sales data. Although retail sales data can provide valuable insights, it is crucial to acknowledge that the broader gaming market also includes digital sales, which have become increasingly prominent in recent years. Therefore, we will proceed with the development of recommended actions under the assumption that retail sales data can reasonably represent the larger gaming market, while remaining mindful of this limitation in the data.

Moreover, it is crucial to emphasize that our analysis is carried out with the confidence that all game sales are attributed to their corresponding release years. Although that raw data lacks a detailed breakdown of sales by specific years, we can still derive valuable insights and provide well-informed recommendations based on the available information.

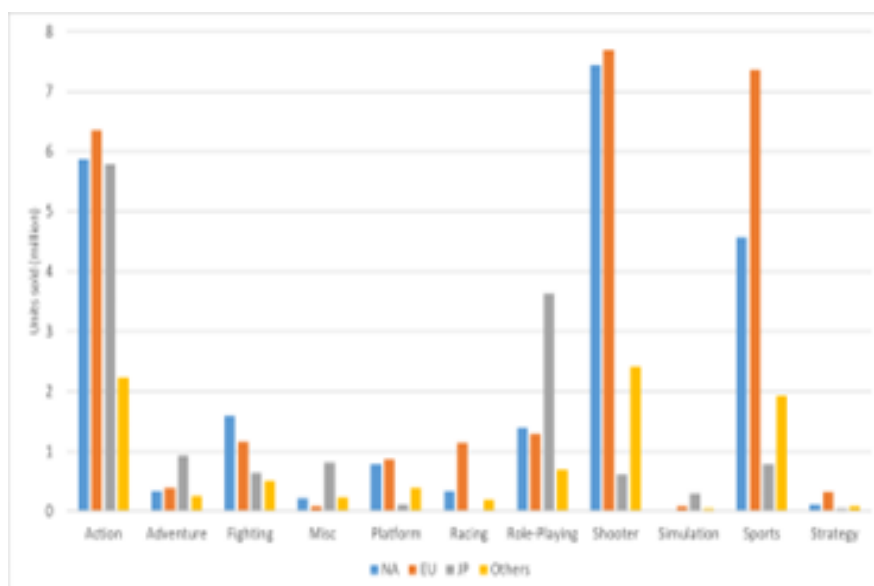


I confidently decided to utilize a line chart to effectively showcase the sales trend over time for both the individual regions and global sales. The raw data provided for this analysis is structured in a way that each observation represents a single game. To aggregate the annual total sale for each region, I employed a pivot table technique. By placing "Year" in the Row field and NA\_sales, EU\_sales, JP\_sales, and Global sales in the value field, I successfully obtained the desired results. With these aggregate data, I proceeded to create a visually appealing line chart. The x-axis represents the years, while each line represents the sales for the respective regions and global sales.



The line chart shows that the initial hypothesis is not correct. Sales change over time and there are signs of a shift in market dominance. To study this further, I created another line chart shows the proportion of sales in each region, This chart reveals an important insight into the change in market dominance over time. NA\_sales, which has been the leading market since 1995, lost its position to EU in 2016. This change is mainly due to larger decrease in NA\_Sales compared to EU\_Sales.

#### Step 4



After finding out which markets are popular , the next step is to give advice on how to do well in each market. I used a clustered bar chart to visualize genre popularity by region. This make it easy to see which types of games are the most popular in each region.This chart is simple and easy to understand ,with only four regions amnd nine genre of games .It makes easy fo people to get the information they need without any confusion.