

## Project Reflections

### **Step 1**

The purpose of this project is to support GameCo Executives in planning the marketing budget for 2017. According to their expectation, the sales for the various geographic regions have stayed the same over time. I will perform a descriptive analysis on the data available up till 2016 to find out if this is true (reality).

Figure 1 below, enables us to know the trends of each region over the years. I visualized the data using line charts for the yearly regional sales till 2016. To achieve this, in the data available to me, I cleaned it by removing empty cells with NA (Not Available), 0 (no information), and blanks, then I summarized the data by inserting a pivot table. I filtered the year by removing 2017, 2020, NA and 0, after I have selected the year and the regions, I inserted line chart to visualize the data.

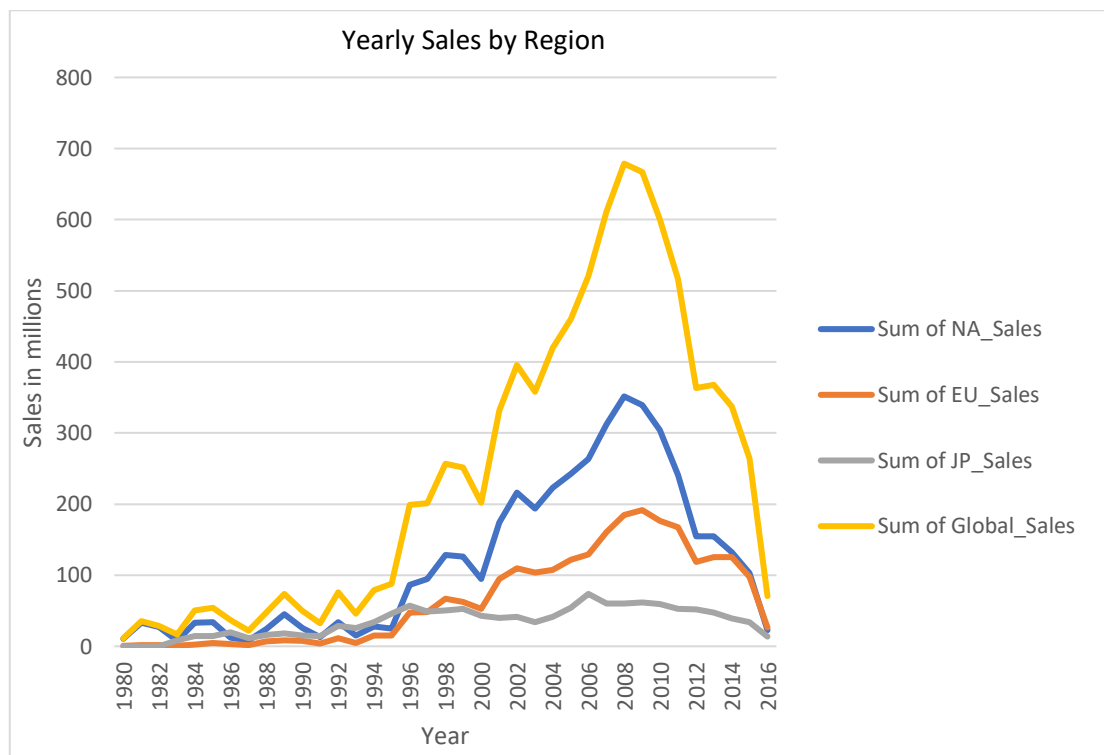


Figure 1.

The figure, is showing us a piece of different information from the expectations of GameCo Executive, as we can see, there have been changes in sales trend in all the regions over the years, they all had a massive increase in sales from 1993 till it peaked around 2006-2010 then plummeted until 2016, this could be as a result of high digital market share for software which makes it difficult to produce reliable retail estimates.

In the next insight, we will have a look at a line chart showing the Regional percentage of Global Sales, this tells us the market share of each region from the global sales by

percentage, to achieve this, I will use the pivot table in figure 1, then I will click on pivot analyze, select calculated field e.g. for NA\_Sales, I create a formula of  $\text{NA Sales} / \text{Global Sales}$ , I will repeat this for other regions, then I will insert a line chart to illustrate these data.

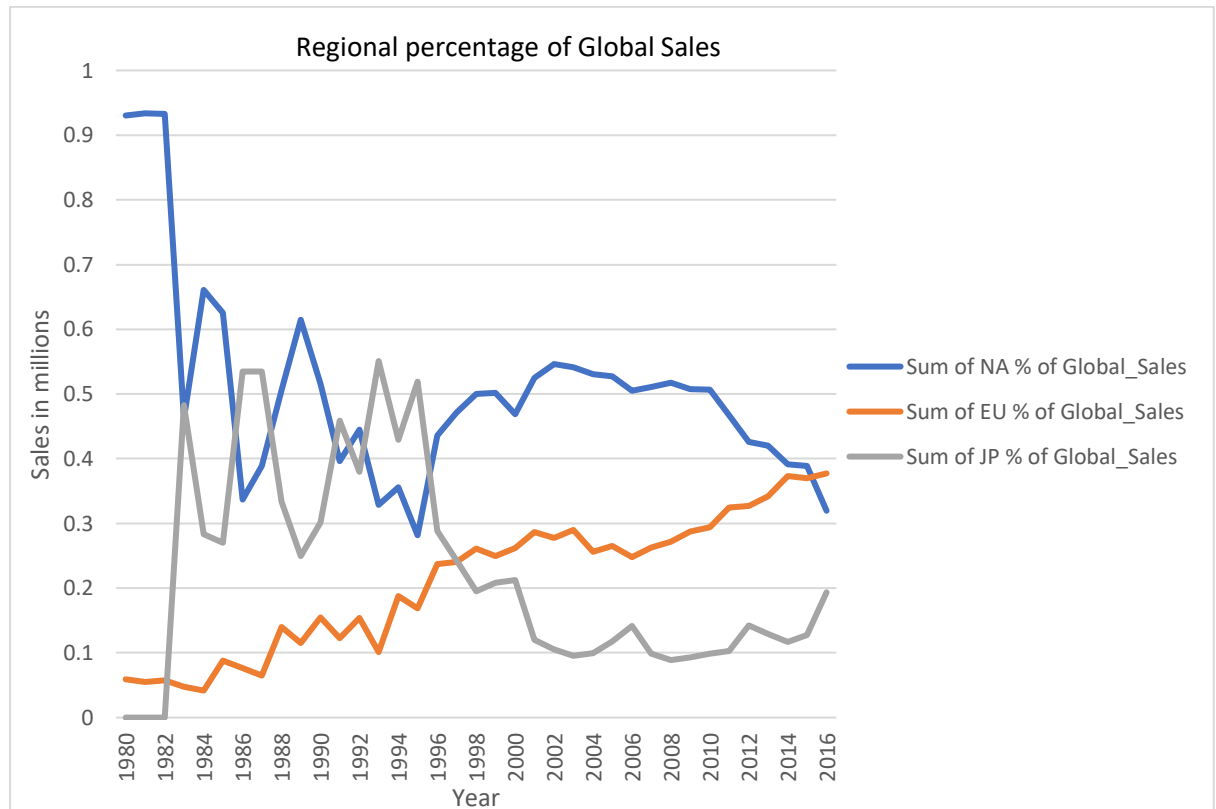


Figure 2.

As we can see in figure 2, the data(reality) tells us a different story from the Management expectations, the market dominance by sales never stayed the same and have changed over time, Japan and NA have both led and shared the first and second spot from 1983 till 1996 where NA led until 2015, EU percentage share of the Global sales have been moving up constantly from bottom in early years to claim the top spot from 2015. This tells us EU is now the most important market and needs more marketing budget to be directed there, we can dive into details to check the genre performance in each region by looking at 100% stacked column chart of Regional sales by Genre in the next illustration, Figure 3.

In Figure 3, this will enable to know the genre of games performing better / driving the game sales in each region, to be able to visualize this, I use the pivot table from Figure 2, I will remove all field and select on the genre and regional sales, then I will insert 100% stacked column chart to illustrate the data.

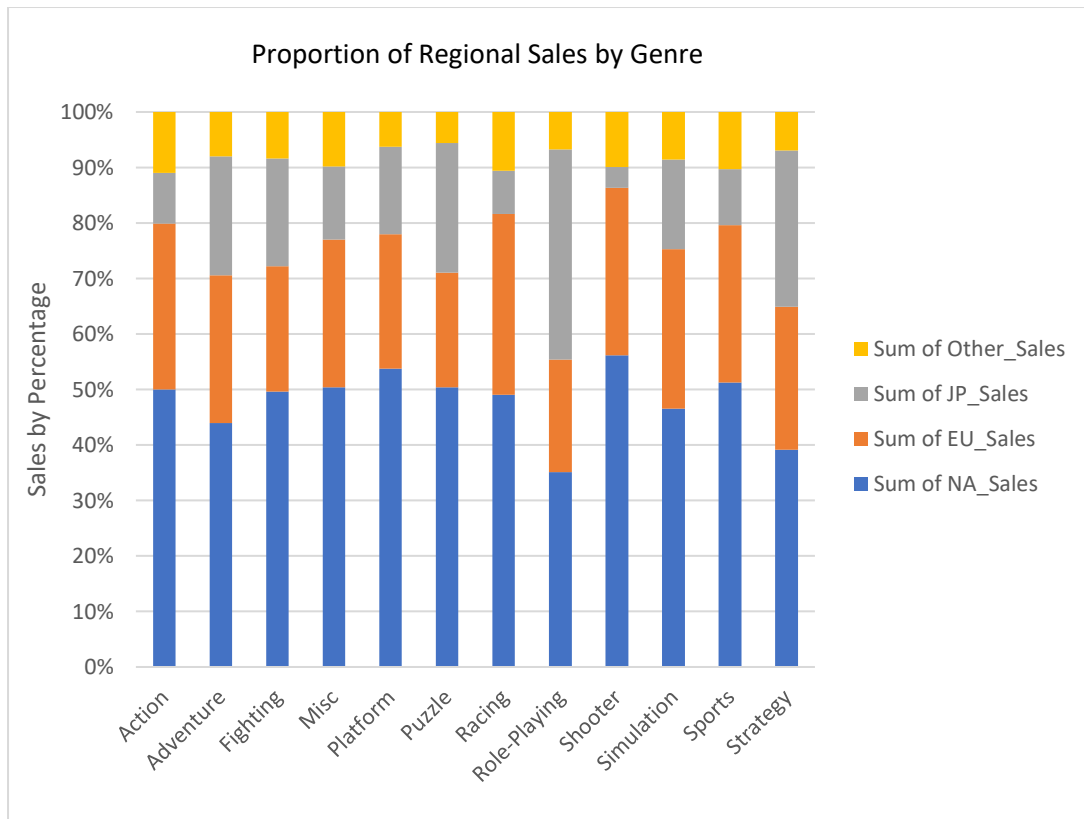


Figure 3

This Figure doesn't give us data base on yearly basis, it makes us know which region contributes more to the sales of a particular genre by percentage and which genre is more popular by region over the years, as we can see, NA leads in all the genre sold except role-playing games which sold more in Japan than other regions.

#### Step 4

In choosing my visualization I kept in mind the type of audience I want to present this to and the type of story I am trying to tell, in figure 1, I chose a line chart because it clearly display the trends in sales over the years in each region, this let us know if the management expectations are right or wrong and since it is wrong, I had to dig deep to find out why it is so, I performed diagnostic analysis, I decided to check the regional percentage of global sales over the years to know the region driving up the global sales and the one struggling, the chart shows EU has been on a steady increase to claim the top stop from 2015, it also tells us that Japan has been struggling with sales for a very long time.

The information I uncovered in figure 3, leave us with so many questions, I try to find other areas that can contribute to the sales, so I chose to look at the proportion of sales in each region by genre, I chose 100% stacked column chart because it is easy to understand and best fit for this information we are trying to consider, the chart tells us that role-playing games have sold more in Japan than other regions, we also found

out all genre except role-playing games have sold more in NA, it also uncovers that EU and NA have a market share of more than half of the global sales.

With this insight, I have been able to prove to the management that their expectations are wrong and the market has been changing over the years and there are also new business opportunities i.e EU market which has become a leader since 2015, also Japan which is performing poorly by sales are leading in term of Role-playing game, the management can ship more of role-playing games to Japan than they use to. All these will help the management to increase their sales and redistribute the marketing budget wisely.