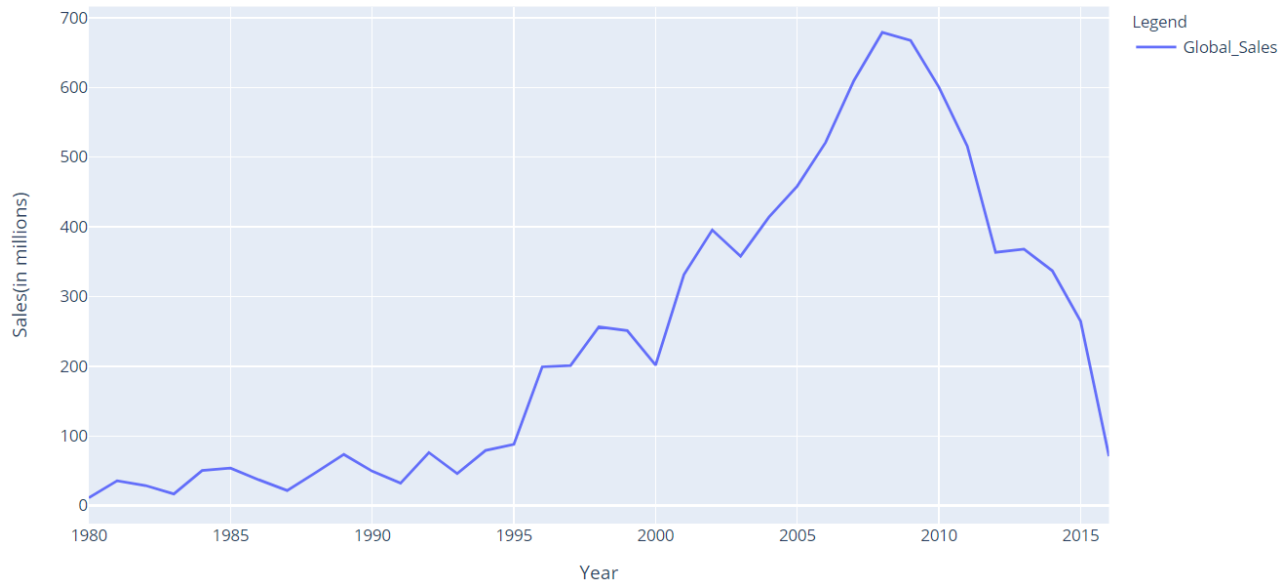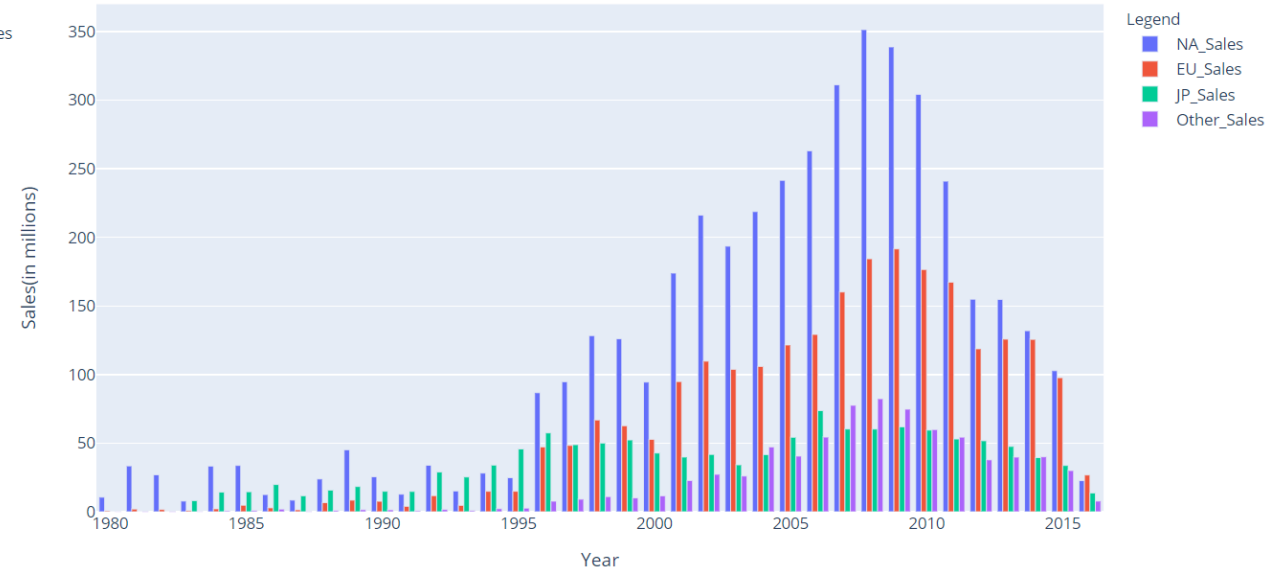# Data Visualization
Video Game Sales

Done by,

Dharineesh Karthikeyan

1.What are the global sales looking like over time?


Global Sales vs Time

Global Sales vs Time

Inferences !

- From the graph, we can clearly see that the NA sales has always been on top of the rest of the world. Indicating it has a bigger business in the NA region compared to the rest of the world.

- We can also see, the sales peaked around the 2008-2010 , this period is also known as the "golden age of gaming" when it was in the peak of business.

- After 2010, there is a visible drop in the global sales of video games around the world.

- Conclusion:
  - We can clearly see that around 2008-2010 there was a boom in the gaming industry which resulted in the popularity of games to rise and the market and demand to increase as well.

2.What is the distribution of platforms(consoles/pc) are the games being played in?

Distribution of games to different platforms
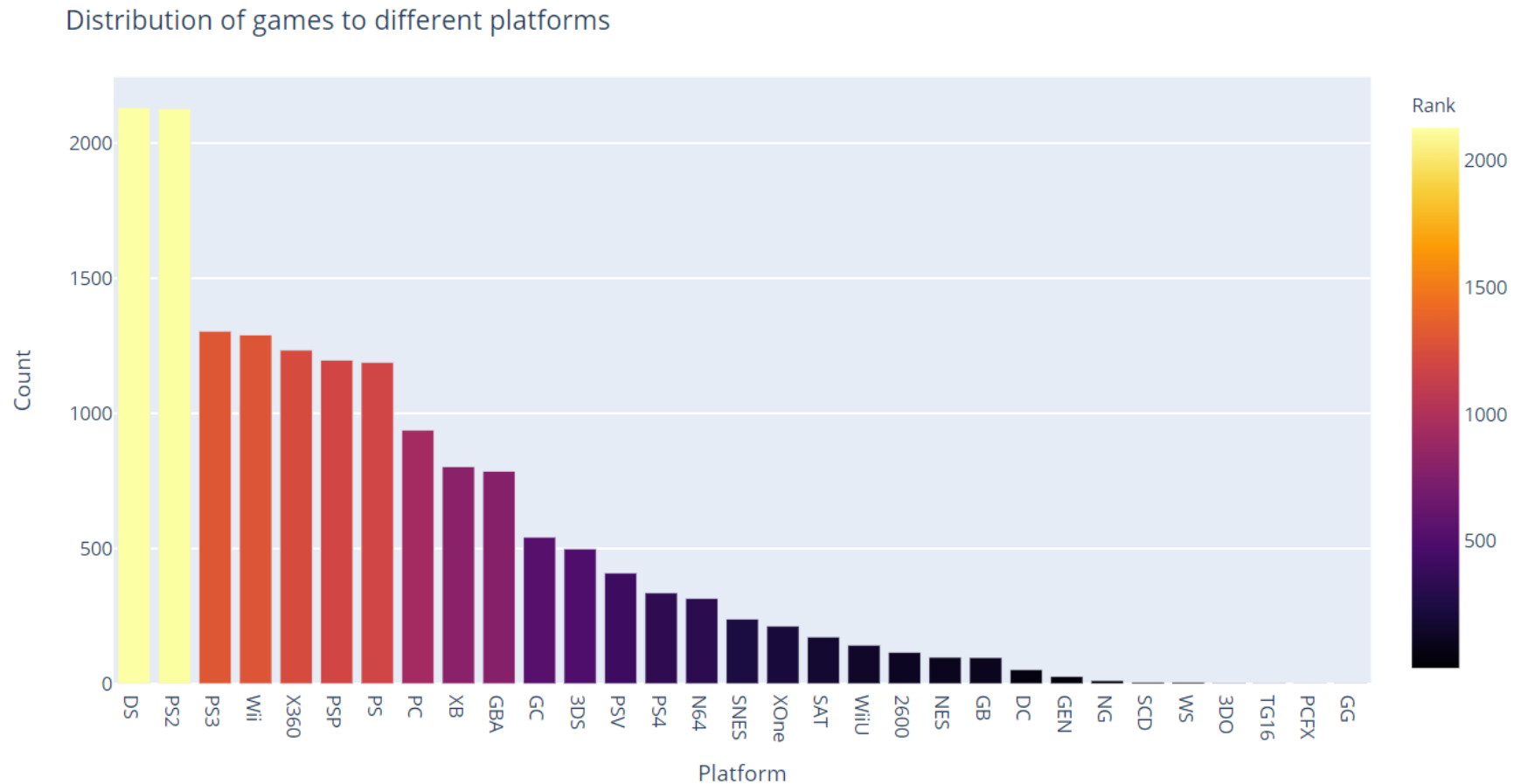
Inferences !

- From the graph we can see that DS (Nintendo) has been the most popular , closely followed by the PS2 (Sony).

- Some reasons for its success is it released in 2003-2004 globally. It is small and hand held gaming device with an affordable price and abundance of popular games owned by the same company Nintendo.

- It is followed by PS2 and PS3 which are owned by Sony which is of a different type of gaming console which are connected to a TV and not very portable but has more graphically advanced games than the DS.

- Conclusion:
  - Hence, we can see two very different types of gaming consoles the DS and PS2 both have almost equally been a popular choice for gaming companies. In spite of being on the same market, since their purposes and performance differs by much. They weren't much of a competitor between each other but based more of the person's personal preference and needs.
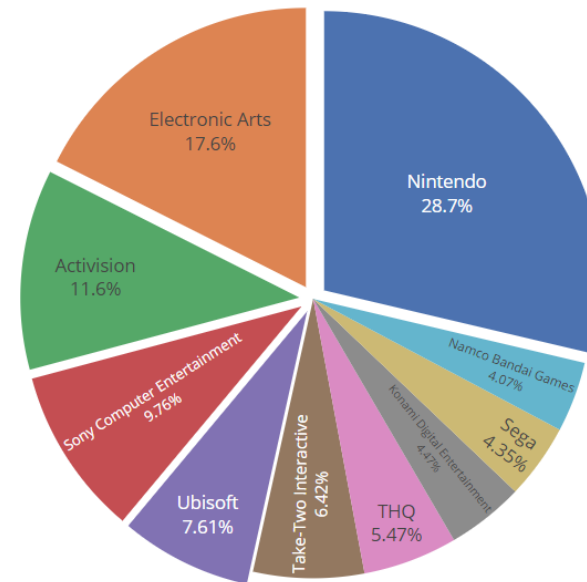
3. Who are the top publishers of games ?

Top 10 Publishers based on Number of Games Published
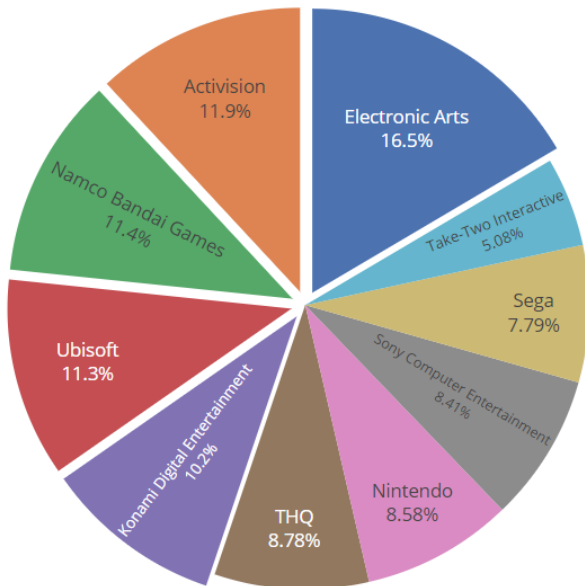
- Electronic Arts
- Activision
- Namco Bandai Games
- Ubisoft
- Konami Digital Entertainment
- THQ
- Nintendo
- Sony Computer Entertainment
- Sega
- Take-Two Interactive

Electronic Arts 16.5%
Activision 11.9%
Take-Two Interactive 5.08%
Namco Bandai Games 11.4%
Sega 7.79%
Ubisoft 11.3%
Sony Computer Entertainment 8.41%
Konami Digital Entertainment 10.2%
THQ 8.78%
Nintendo 8.58%

Top 10 Publishers based on Overall Global Sales

- Nintendo
- Electronic Arts
- Activision
- Sony Computer Entertainment
- Ubisoft
- Take-Two Interactive
- THQ
- Konami Digital Entertainment
- Sega
- Namco Bandai Games

Electronic Arts 17.6%
Nintendo 28.7%
Activision 11.6%
Namco Bandai Games 4.07%
Sony Computer Entertainment 9.76%
Sega 4.35%
Ubisoft 7.61%
Konami Digital Entertainment 4.47%
Take-Two Interactive 6.42%
THQ 5.47%

Inferences !

- Based on the number of games published, Electronic Arts is the top publisher and based on the total sales, Nintendo is the top publisher.

- In both cases, most of the top 5 publishers are common.

- Some noticeable differences are, Nintendo is at 7th place in number of games it has released but has the highest sales record of 11.1 % more sale than its competitor Electronic Arts which has the most number of games released (Almost 8% more games than Nintendo)

- Similarly, Konami Digital Entertainment has released a lot of games but didn't see any much of a sales return from it.

- Conclusion:
  - We can see that, the number of games released is not directly proportional to the amount of sales that game company makes. Hence, we can see that a game company has to maintain its consistency in delivering good games if they want to keep themselves in the market with the competitors.

# 4. What are Genre's of games that people are playing?

Genre Distribution based on Sales Records (in millions)
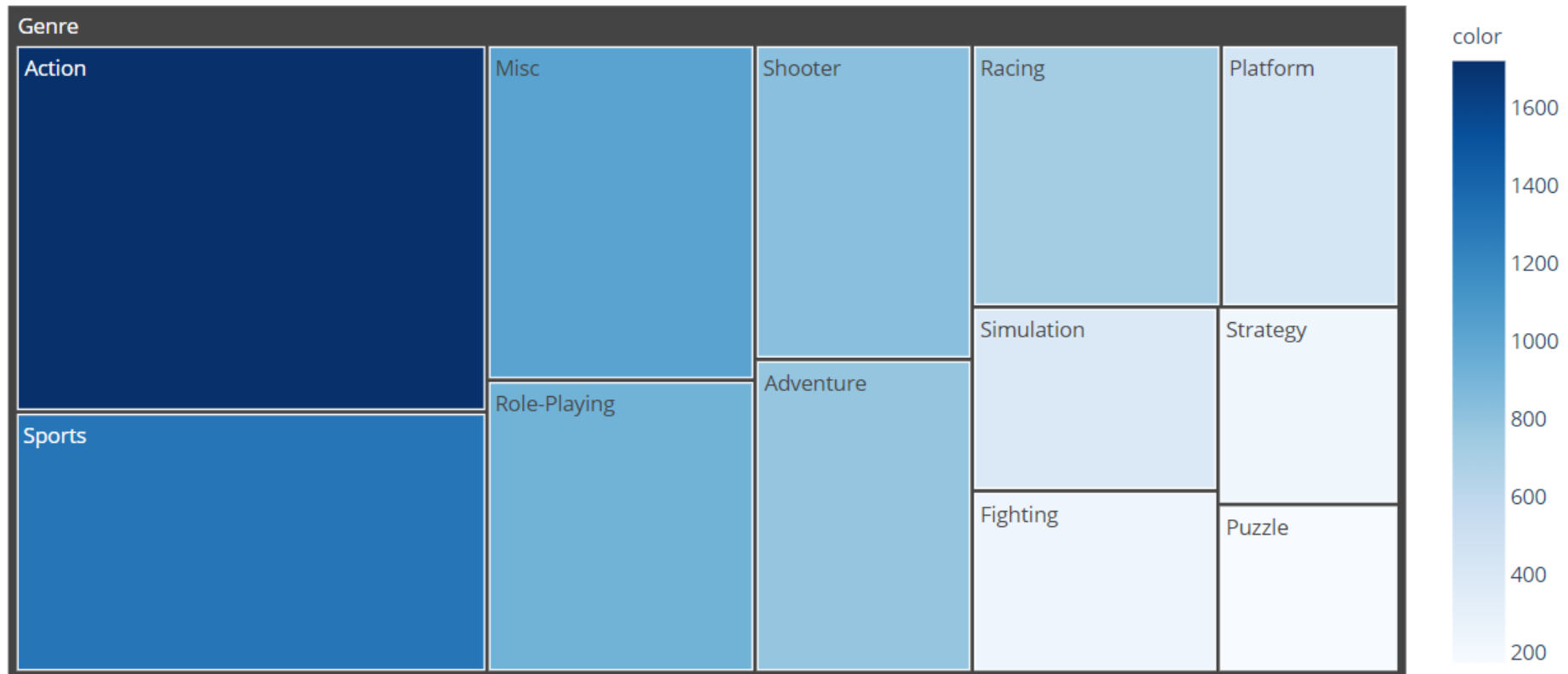
Inferences !

- From the graph, we can clearly see that the most sales generating genre are the 'Action' games and the lowest sales generating genre of games people like is 'Puzzle'

- Some genres like Puzzle, Fighting and Simulation has very comparatively lesser sales record but still it is not very bad (nearly 200-400 million in sales)

- <u>Conclusion:</u>
    - We can comfortably conclude that no genre is left out and every genre has its own set of people who like them and buy them. Every genre has potential to make money in its own way.

5. How are the sales in EU ,NA, Japan and rest of the world different for top games?

Global Sales of top 10 most sold games
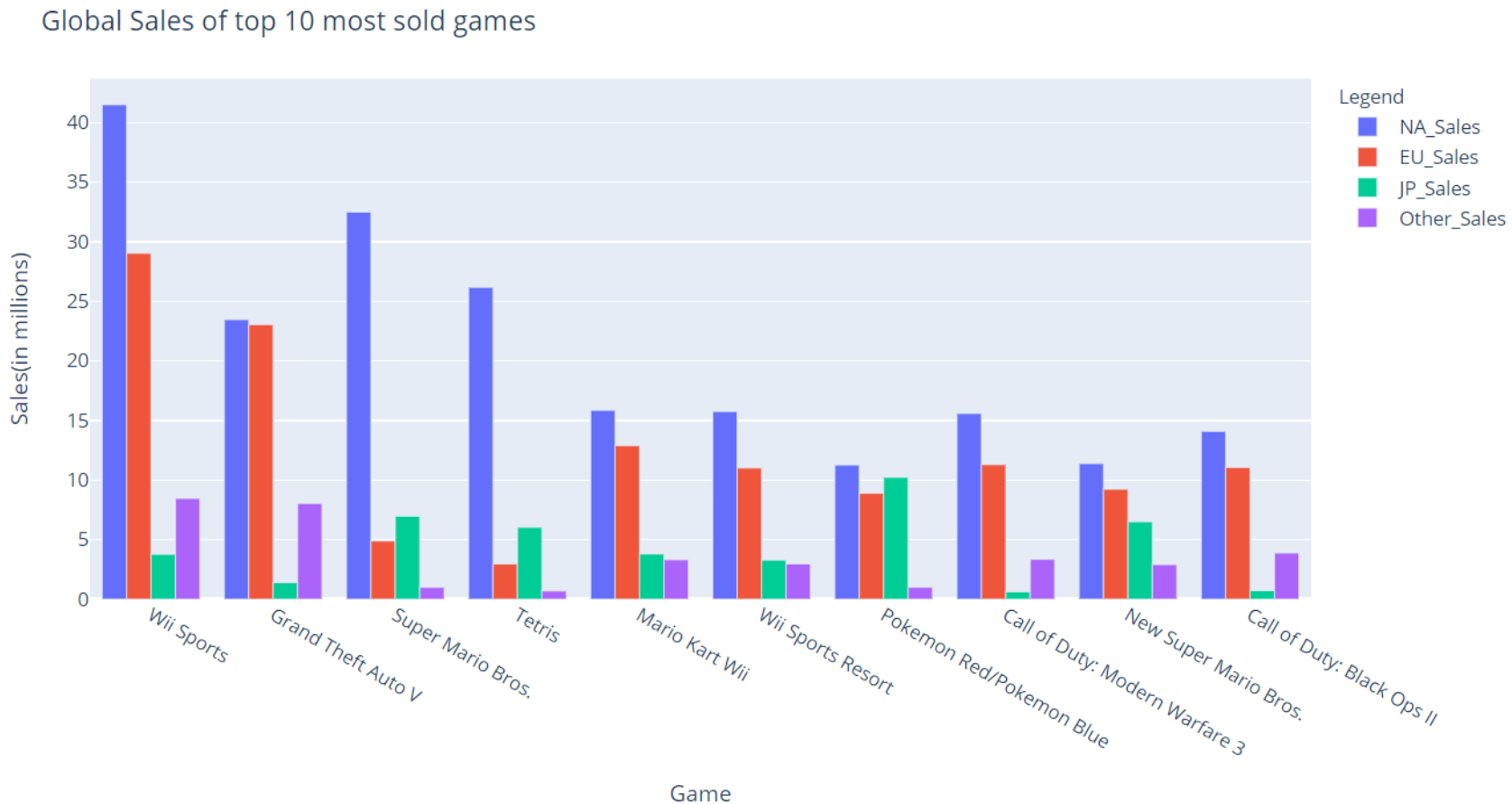
Inferences !

- For all the games, NA has the highest sale compared to the rest of the world.
- We can see that even though there are 2 Activision's Call of Duty games in the top 10 sold games, they both have sold very less in the Japan. Hence, we can see Call of Duty isn't very famous in Japan.
- Games like Tetris has only sold well in the NA, and comparatively very poor in the rest of the world
- Other games like GTA has equal sales in both NA and EU , which in turn helped it become the second most sold game in the world.
- Conclusion:
  - Hence, from these examples we can see that. There is no particular market to capture for the games to get huge sales records, but focusing on the NA market seems to be a good idea to maximize the sales.

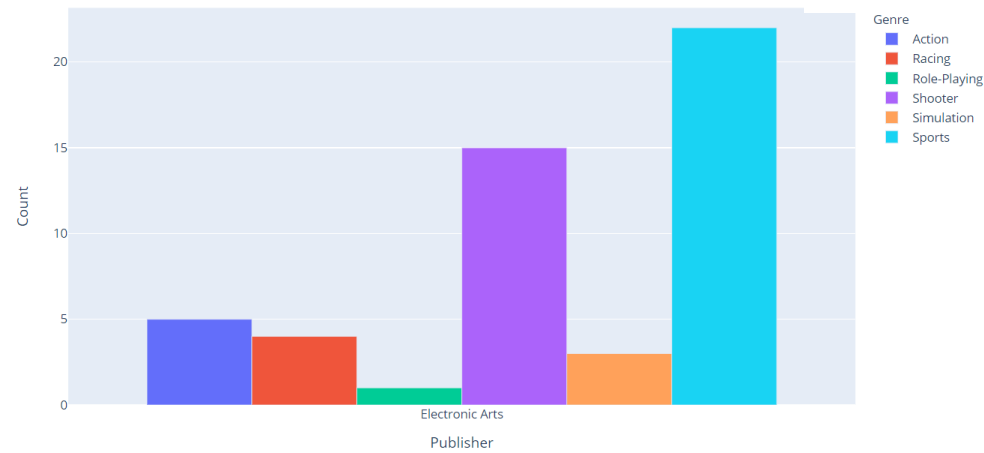# 6. Are the top publishers exceling at one or many different genres?

Genre Distribution of Top 50 Popular Games by one of the top publishers - Nintendo
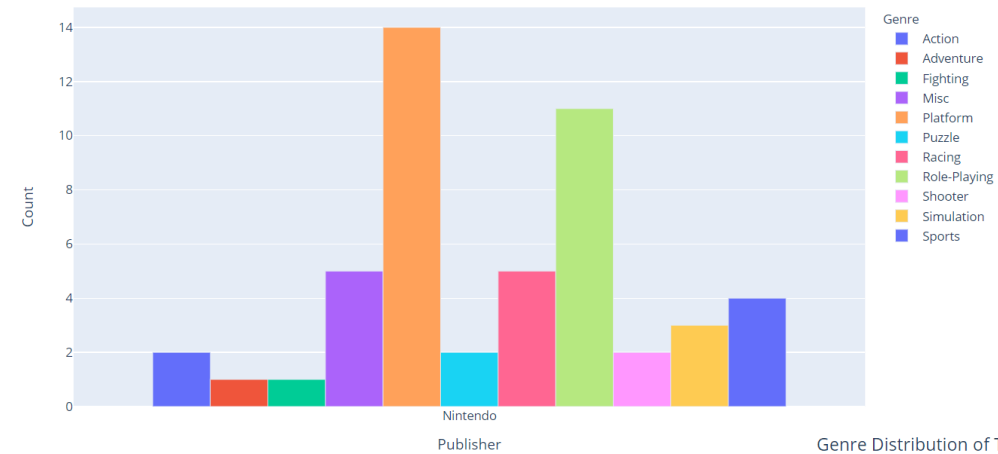
Genre Distribution of Top 50 Popular Games by one of the top publishers - Activision
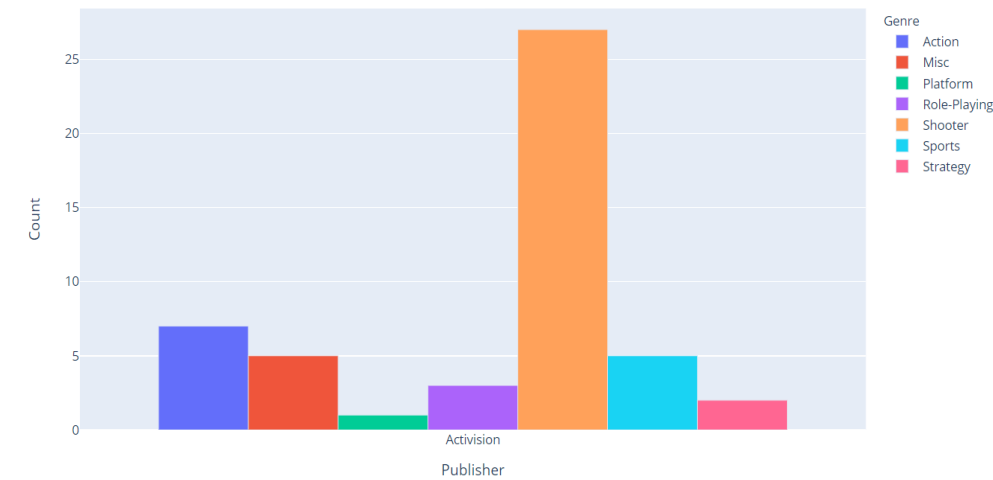
Genre Distribution of Top 50 Popular Games by one of the top publishers - Electronic Arts
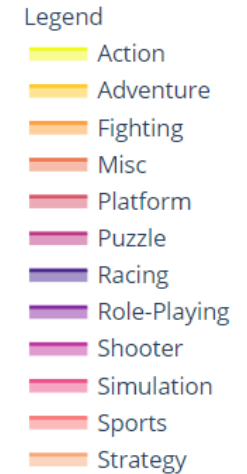
Inferences !

- We are studying the top 50 games of the top 3 game publishers
- We can see that Nintendo has more variety of genres of games with Platform games being their main area of focus.
- Whereas Activision is mainly focused on Shooter games and Electronic Arts are mainly focused on Sports games.
- Conclusion:
  - Hence, we can say that each publisher has a strong suite of genre in which they excel and they tend to focus on being the best in that particular genre of games.

7. Has the trend of games (by genre's) changed over the years ?

Trend of Genre's over the years

Inferences !

- From 1980-1995, there is a pretty flat curve. No particular has gotten rise in popularity and companies were trying out different genres of games.

- After 1995, we see the first peak in all genres of games. Mainly, strategy and sports quickly rose to the peak and till 2016 remained to be the most popularly genre of game to be produced by companies.

- In the years 2002-2012, we can see that all genres of games has been released on large scale. As the demand for games increased and a lot of new companies entered the industry during this time period.

- <u>Conclusion:</u>
  - Apart from the ups and downs in the graph, we can clearly see that the number of games in each genre being released isn't having much of a change. Hence, we can say that the trend of genre's hasn't changed much over the years.

# 8. We can study how the sales is affected depending on : Publisher ,Platform, Genre, Etc….

Affect of Publisher,Platform and Genre on Sales
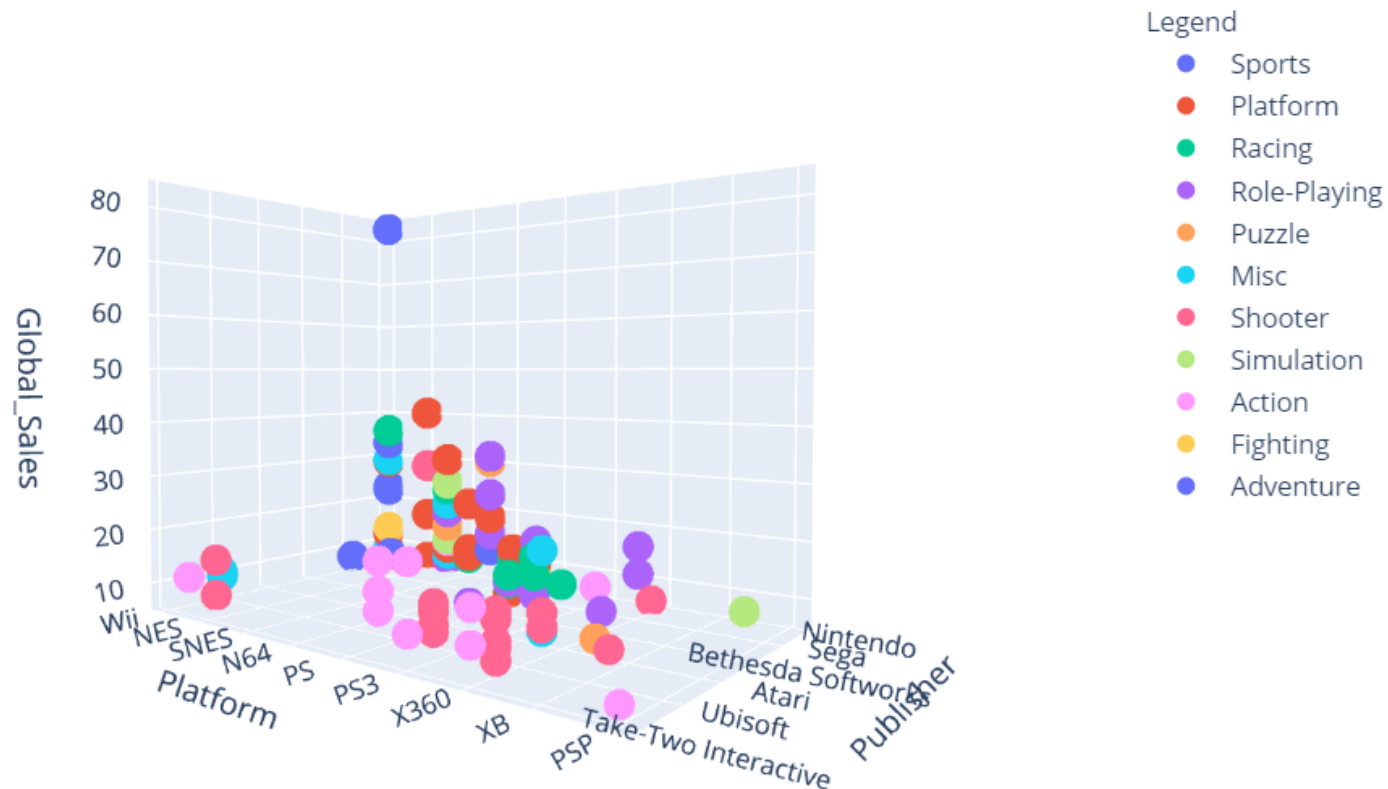
- Here, we are studying the affects of publisher, platform and genre of the top 100 ranked games on the sales.
- We can see that, just because they are ranked as the top 100 games, doesn't mean that the sales are necessarily high since the ranking is based on more than just sales.
- We can move the axis around, to see how each aspect in turn plays a role in the sales of the game.

9. We can study the successes and failures of a particular game publisher.

- We are going to study the top 10 and worse 10 games of the publisher Nintendo
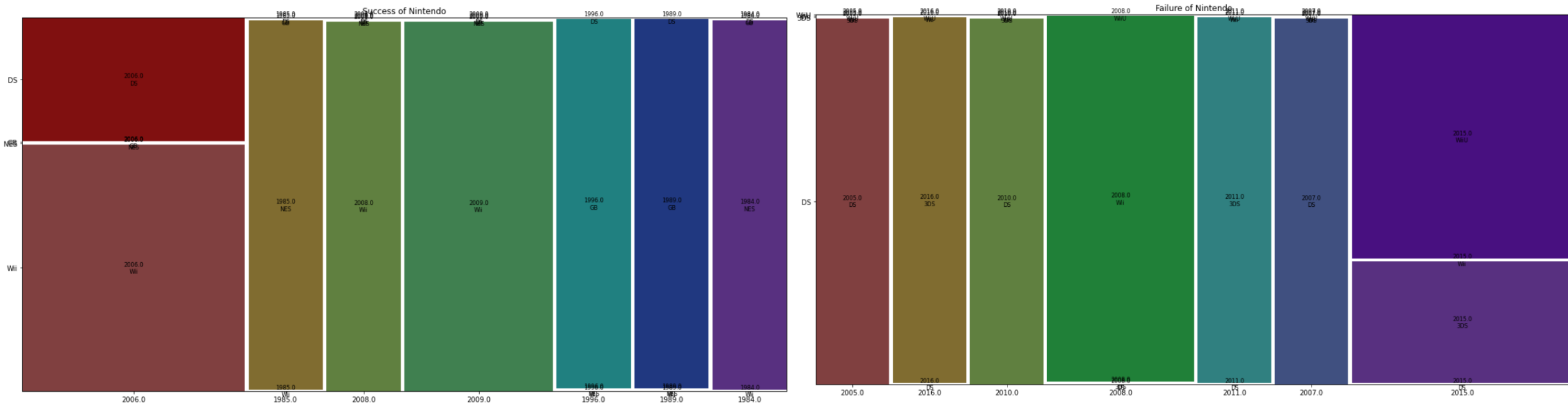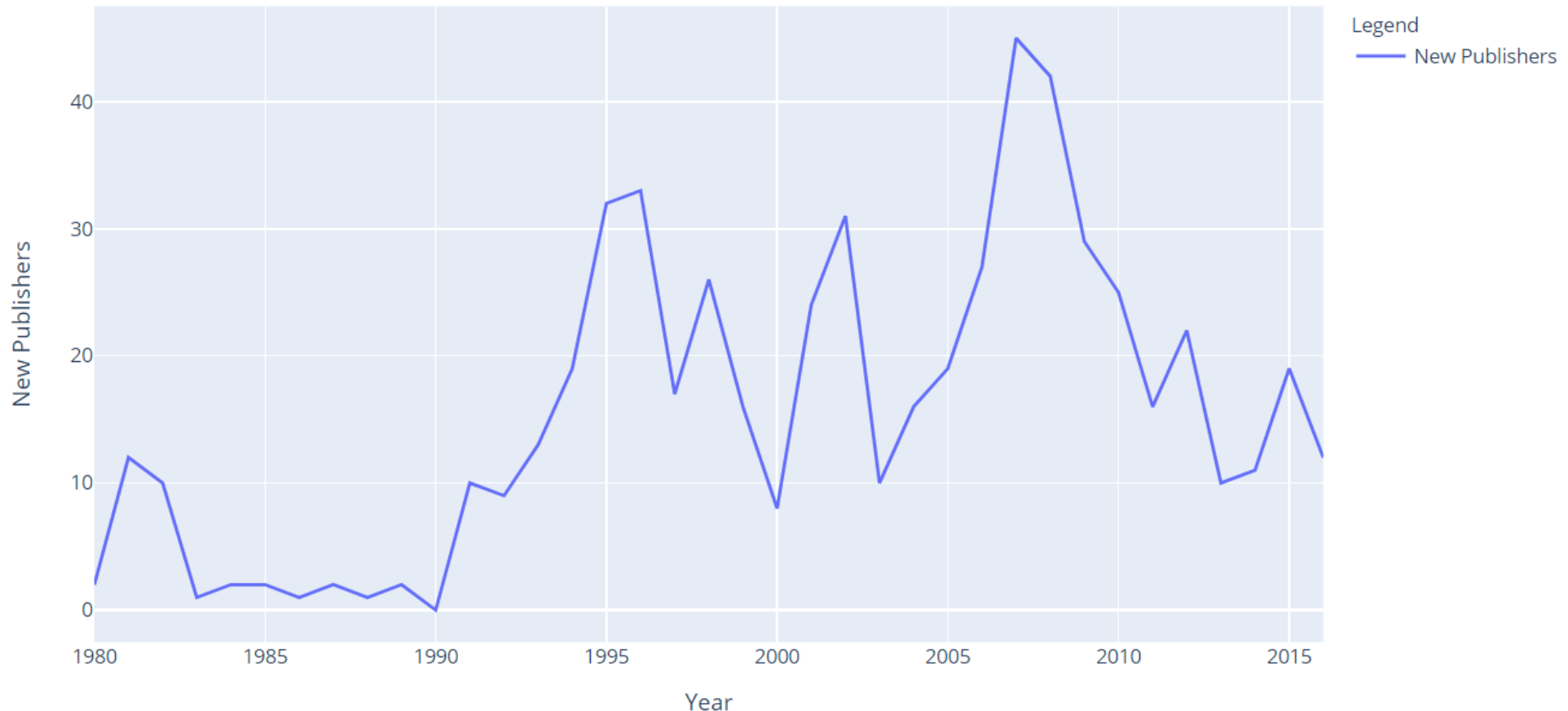
Inferences !

- Successful Games:
  - We can see that all the successful games are mostly 1990s and before 2010s. It is when the company was in its peak.
  - Out of the 10 games, 3 of them are for the Wii console.

- Failure Games:
  - We can see that most of the failure games are in 2016,2015 and after 2005.
  - There are 3 failed games in the year 2015 alone
  - We can see that most of the failed games are in the WiiU (This can be because the console itself was a failure)

- Conclusion:
  - Overall we can study that Nintendo, was at its peak mainly during the 1990s and then the company got hit after 2010s because of the competitors catching up to them.

10. Has the number of publishers increased or decreased over the years ?

Number of New Publishers over the years

Inferences !

- We can notice there a two time periods where there were a lot of new publishers entered the market with their new games.

- The first one is between 1993-1996. This was the time where Nintendo was having huge impact on the gaming industry and many got inspired by them.

- The second rise of new publishers, was between 2005-2008. This was the time when newer publishers started making new games that were as good as Nintendo and became competitors to them.

- Conclusion:
  - The number of publishers is increasing every single year. Depending on the market of the gaming industry, available opportunities and demand. The number of publishers aren't constant but we can see sudden rises here and there during the same time the global sales was pretty high showing the many are using the market of gaming industry to enter into the business

Thank You