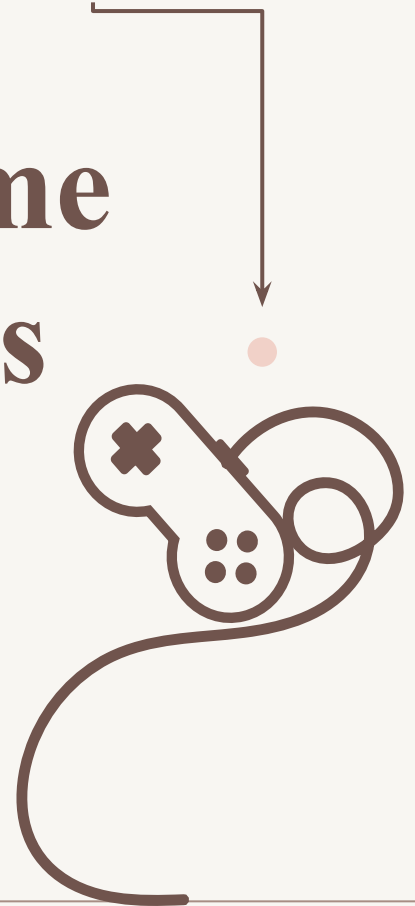


# GameCo Video Game Sales Data Analysis

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**Assumption:** Games sales for various geographic regions have stayed the same over time.

### **Questions To Answer:**

- Which geographical region sold the most games
- Data trends in the past years up until 2016
- Game Genres and Publishers that sell the most in each geographical region.
- Games that were the most popular/sold the most in each geographical region
- How many games have decreased and/or increased in popularity over time

# PROCESS



## Data Exploration

- Data was recorded from 1980 to 2020
- 16598 rows and 11 columns

## Data Cleaning

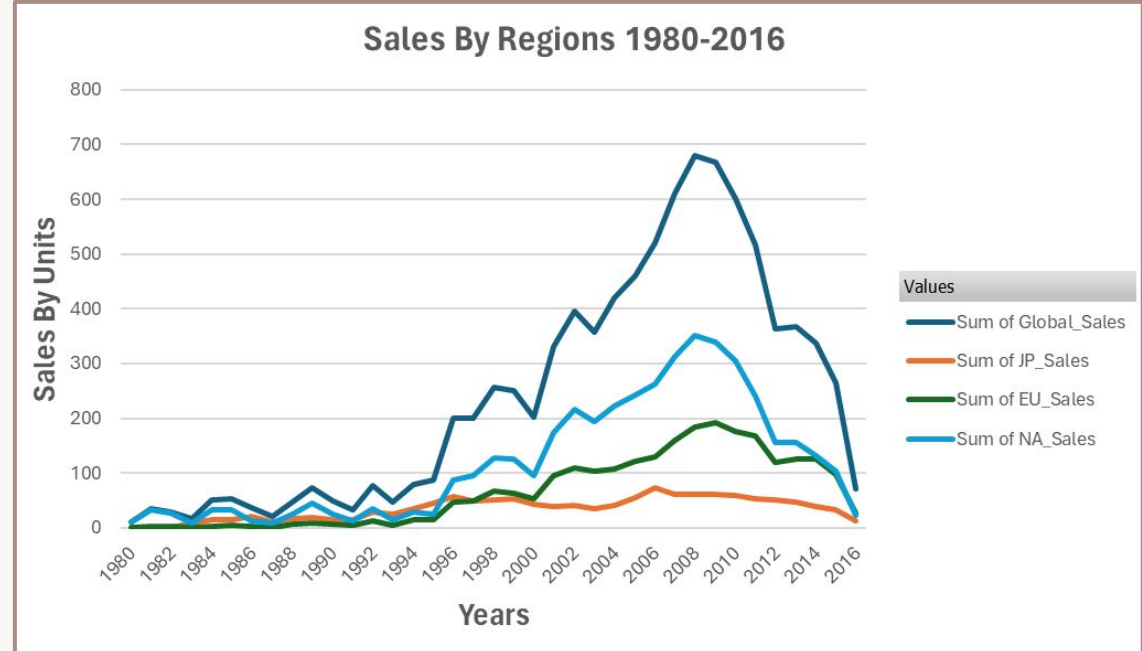
- Removed 16 rows
- Filtered and Cleaned blank spaces

## Data Analysis

- Visualization
- Summarizing
- Exploratory Analysis

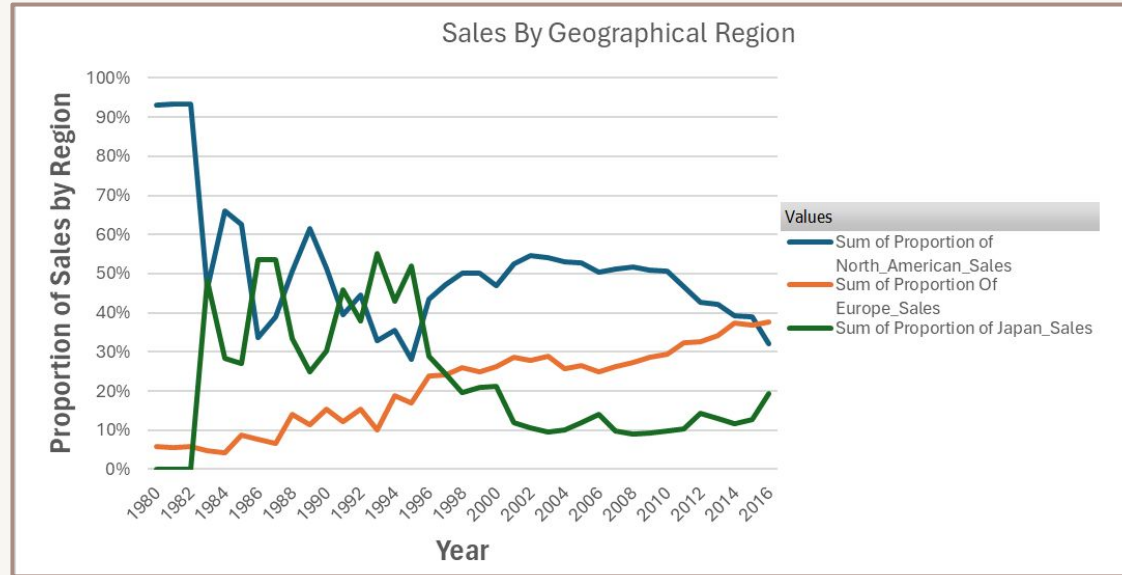
# Video Game Sales From 1980 - 2016 By Geographical Region

- ❖ Sales in all geographical regions increased from 1995 to 2008.
- ❖ Sales in all geographical regions decreased from 2009 to 2016
- ❖ North America had the largest amount of sales from 1996 to 2014
- ❖ Europe surpasses North American Sales in 2014 by 4.10 million

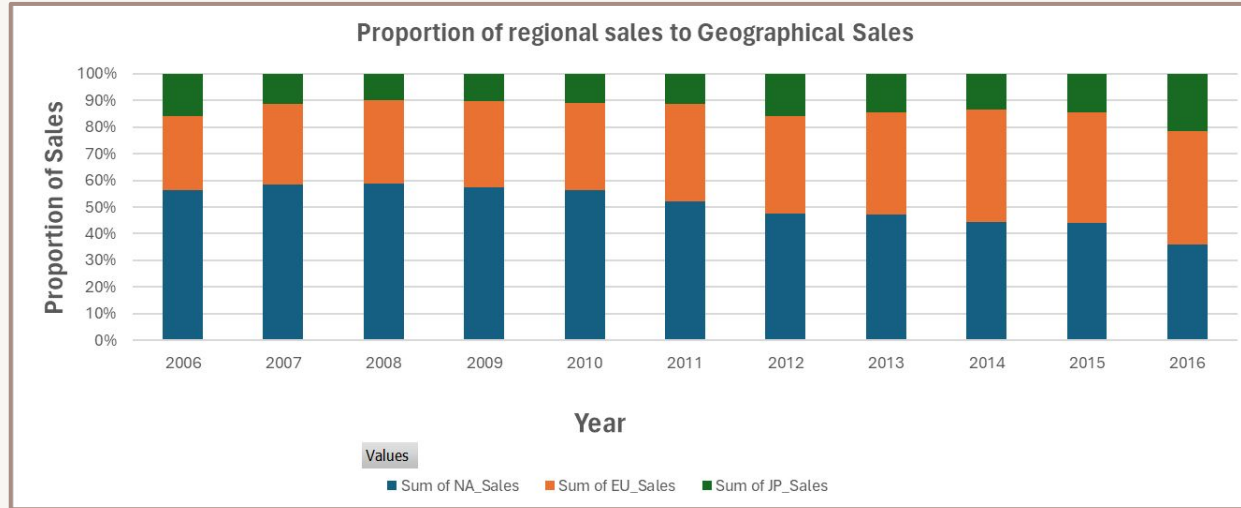


## Proportion of Sales From 1980 - 2016 By Geographical Region

- ❖ Japan lowest proportion of sales was 10% in 2008, and their highest was 55% in 1993.
- ❖ Europe's lowest proportion of sales was 5% in 1984, and their highest was 29% in 2004.
- ❖ North America's lowest proportion of sales was 28% in 1995, and their highest was 93% in 1982.
- ❖ European sales consistently increase over the years and surpass Japanese and North american Sales.



# Proportion of Regional Sales Compared to Global Sales

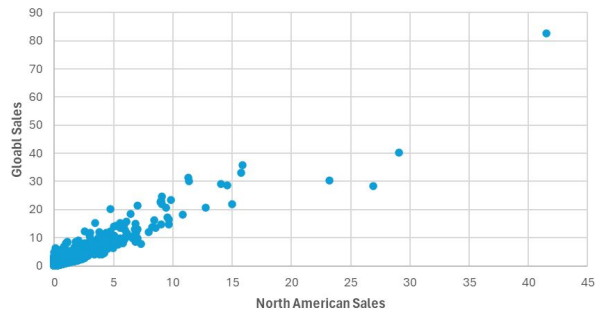


Japanese and European sales have been increasing in the past 6 years relative to global sales, whereas North American Sales have been decreasing.

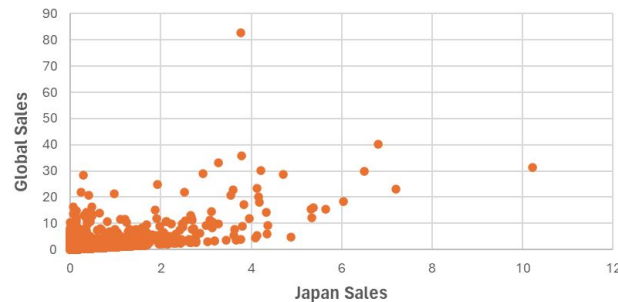
# Correlation of Geographic Region Sales to Global Sales

Looking at the scatter plot below, we can conclude that there is a positive correlation between all of the geographical regions to global sales.

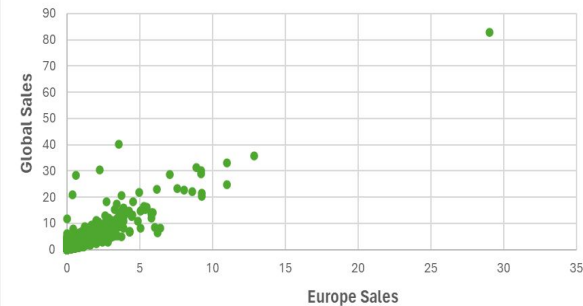
Correlation between North America and Global sales



Correlation Between Japan Sales and Global Sales

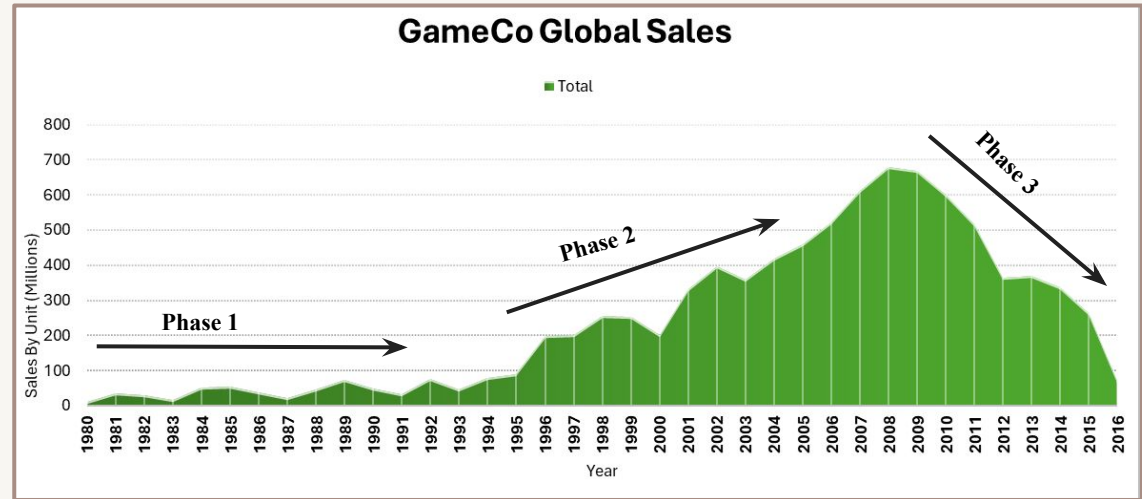


Correlation Between Europe Sales and Global Sales



# Proportion of Sales From 1980 - 2016 By Geographical Region

- ❖ Despite that European and Japanese sales have a slight increase in sales in the recent years, there has been a decline in global sales because there is a decline in north american sales, and North america is the top seller in GameCo
- ❖ The data has three distinctive phases:
  - Phase 1: Years 1980 - 1994, slow growth
  - Phase 2: Years 1996 - 2008, Rapid Growth
  - Phase 3: Years 2009 - 2016, Rapid decline





# Summary

Our early expectations would need to be revised. Video game sales have varied dramatically across areas over the years. More crucially, by 2016, the proportion of each region's share in the market has changed.

The data between 2006 to 2016 shows a steady increase in European sales, and during 2015 Europe has dominated the market and is very likely to continue to do so. In 2016, Europe has accounted for over  $\frac{1}{3}$  of the global sales.

After 2009, North America has shown a constant decline in sales, and has not show a possibility of becoming the leading seller in the near future.

Japanese sales had shown a slight decline since 2009, but they have started to sell more in 2015 and 2016. Japan may not sell as much as Europe, but looking at the proportion of sales, they will most likely surpass North America.

Globally, the sales have been declining slowly after 2008. This is the result of North America's decline in sells because North America had been the leading seller for many years. After 2016, it is very possible for there to be a steady increase in sales because Europe and Japan have been showing an upwards trend in sales.

# Next Step

To improve the amount of sales, we can take a look at other factors and/or contributors of the sales. Looking and analyzing data of top genres, games, and publishers in each geographical regions can give us an idea of actions to take to insure a positive incline in sales overall.



# Game Genres in each Geography Region

## ❖ North America's top selling genres are

- Action
- Shooter
- Sports

## ❖ Europe's top selling genres are:

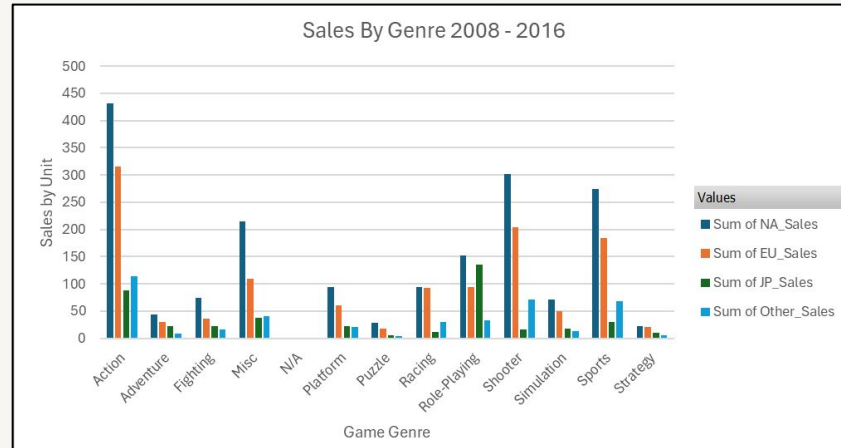
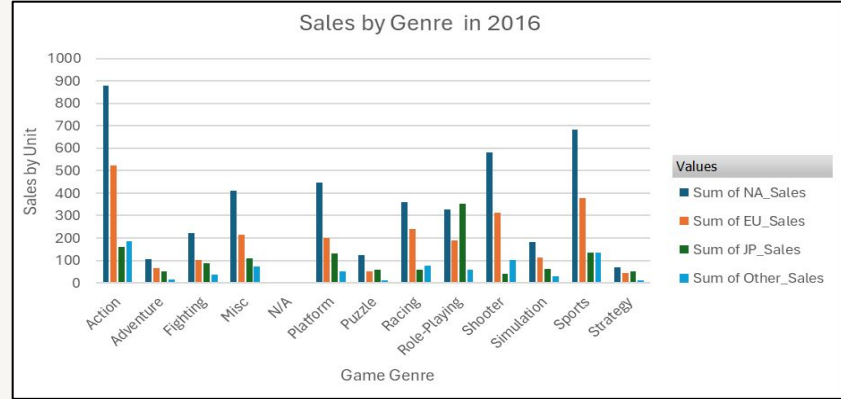
- Action
- Sports
- Shooter

## ❖ Japan's top selling genres are:

- Role-Playing
- Action
- Sports

## ❖ Other Sales top selling genres are:

- Action
- Shooter
- Sports



## Top Ten Selling Games in Each Region (in order)

North America	Europe	Japan	Other	Global
Wii Sports	Wii Sports	Pokemon Red/Pokemon Blue	Grand Theft Auto: San Andreas	Wii Sports
Super Mario Bros	Grand Theft Auto V	Pokemon Gold/Pokemon Silver	Wii Sports	Grand Theft Auto V
Duck Hunt	Mario Kart Wii	Super Mario Bros.	Grand Theft Auto V	Super Mario Bros.
Tetris	FIFA 15	New Super Mario Bros.	Gran Turismo 4	Tetris
Grand Theft Auto V	Call of Duty: Modern warfare 3	Pokemon Diamond/Pokemon Pearl	Call of Duty: Black Ops II	Mario Kart Wii
Call of Duty: Black Ops	FIFA 16	Tetris	FIFA Soccer 08	Wii Sports Resort
Super Mario world	FIFA 16	Pokemon Black/ Pokemon White	Pro Evolution Soccer 2008	Pokemon Red/Pokemon Blue
Mario Kart Wii	Call of Duty: Black Ops II	Dragon Quest VII: Warriors of Eden	Call of Duty: Black Ops 3	Call of Duty: Black Ops
Wii Sport Resort	Wii Sport Resort	Pokemon Ruby/Pokemon Sapphire	Call of Duty: Black Ops	Call of Duty: Modern Warfare 3
Call of Duty: Modern Warfare 3	Nintendogs	Animal Crossing: Wild World	Call of Duty: Modern Warfare 3	New Super Mario Bros.

# Platform in each Geography Region

❖ North America's top selling platforms are:

- PS4
- XOne
- WiiU

❖ Europe's top selling platforms are:

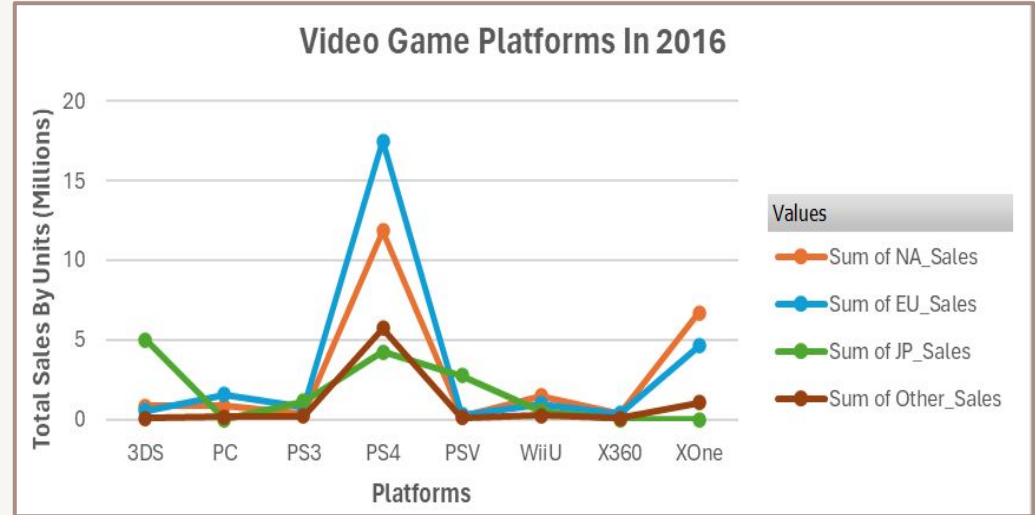
- PS4
- XOne
- PC

❖ Japan's top selling platforms are:

- 3DS
- PS4
- PSV

❖ Other Sales top selling platforms are:

- PS4
- XOne
- WiiU



# Actions and Recommendations

## **Actions:**

- ★ The top three platforms in all regions are currently PS4, XOne, and WiiU. This means that the company should probably make and/or invest in games that work well in these platforms.
- ★ The top selling genre in all regions are action, shooter, and sport games. This means that GameCo should invest and/or make more games that are in these three genres.
- ★ The top selling games in all regions are Super Mario Bros and Wii sports. GameCo should release more of these games into more platforms to boost the sales in each region.

## **Recommendations:**

- ★ Send out customer surveys so customers can provide feedback for ways that the company can improve.
- ★ Advertise games that do well in each region.
- ★ Invest in games and genres that are popular in each region.

# THANK YOU

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