

# **Video Game Sales From 1980 to 2016**

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## **Project Summary**

This project involved importing a dataset containing 15 columns and over 16,000 rows of information into MySQL, focusing on video game sales in North America, Europe, Japan, and globally from 1980 to 2016. The primary objective was to analyze consumer trends within the video game industry during this period.

## **Data Preparation**

The data preparation phase began with cleaning the dataset using Microsoft Excel. An unnecessary column was removed, and null values were replaced with the median values of their respective columns to ensure the integrity of the findings. The cleaned dataset was then imported into MySQL Workbench for further analysis.

## **SQL Views Creation**

Following data preparation, various SQL views were created to analyze key macro-level insights, including:

- Total global sales
- Sales distribution across different territories
- Average sales of video games over the years

Additionally, views were established to identify the video games and developers with the highest global sales. To further explore factors influencing video game sales, an SQL view was generated to assess how sales varied based on critic scores, genres, and specific consoles.

## **Power BI Dashboard Development**

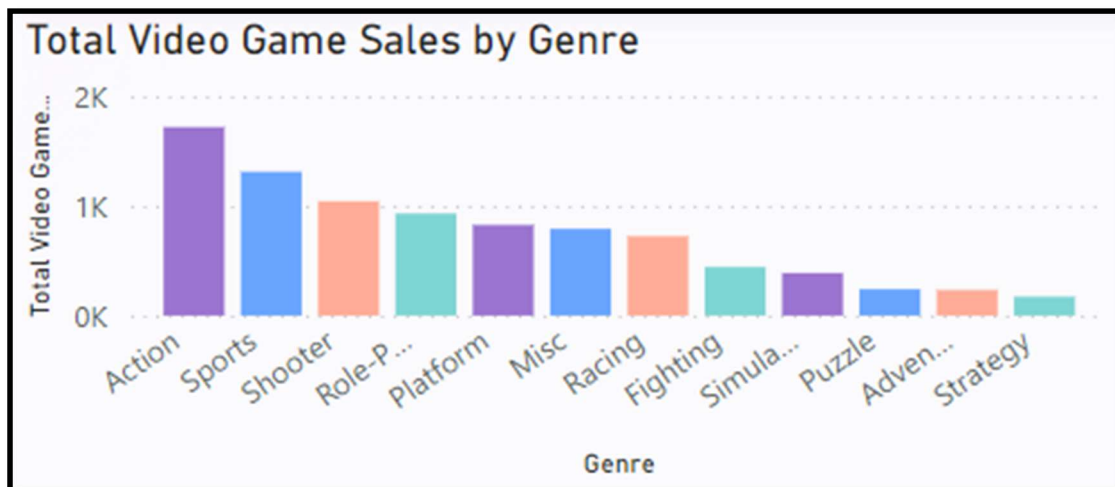
With the SQL views established, the next step involved importing the data into Power BI to create a comprehensive dashboard. This dashboard was designed to make the information more accessible and to highlight significant trends. Key components included:

- Cards: Displaying important metrics such as the top-selling console, studio, game, and genre.
- Pie Chart: Illustrating the distribution of video game sales across different regions.
- Drill-Through Feature: Enabling users to click through for more detailed information about each region, including sales by console and individual game performance.

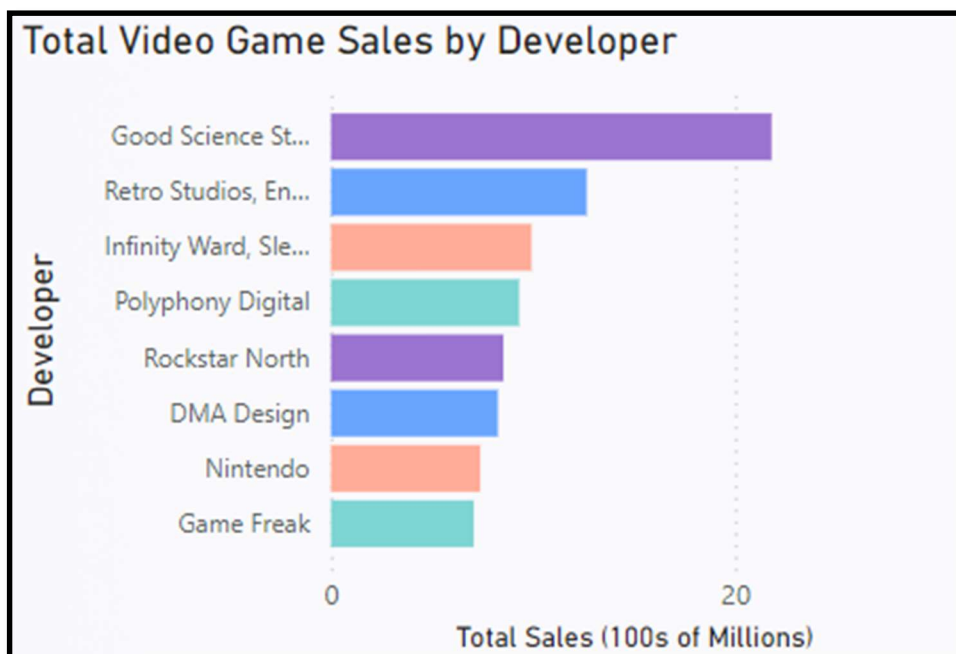
## Key Insights

The visuals presented in the Power BI dashboard effectively illustrated various trends and insights within the video game industry. Notable observations include:

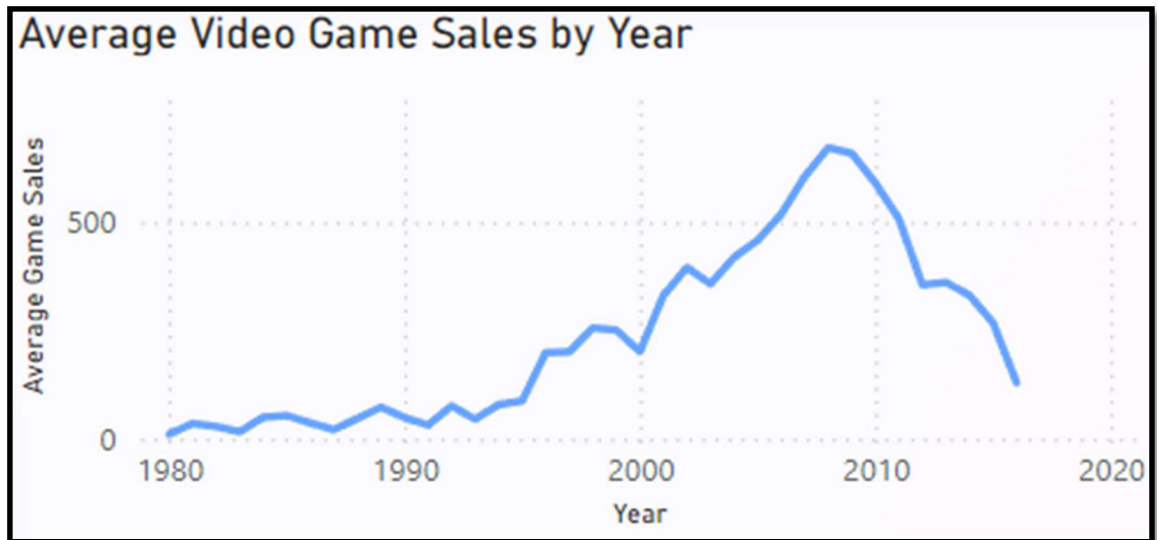
- The sales trends of different video game genres indicating that the 'Action' genre consistently sold the most titles. A slicer was incorporated, allowing users to filter by individual years. This feature suggested that specific games significantly impact sales within genres, rather than the genres themselves. For instance, clicking on top-selling games like *Wii Sports* (2006) and *Super Mario Brothers* (1985) revealed that their respective genres were the top performers during those years.



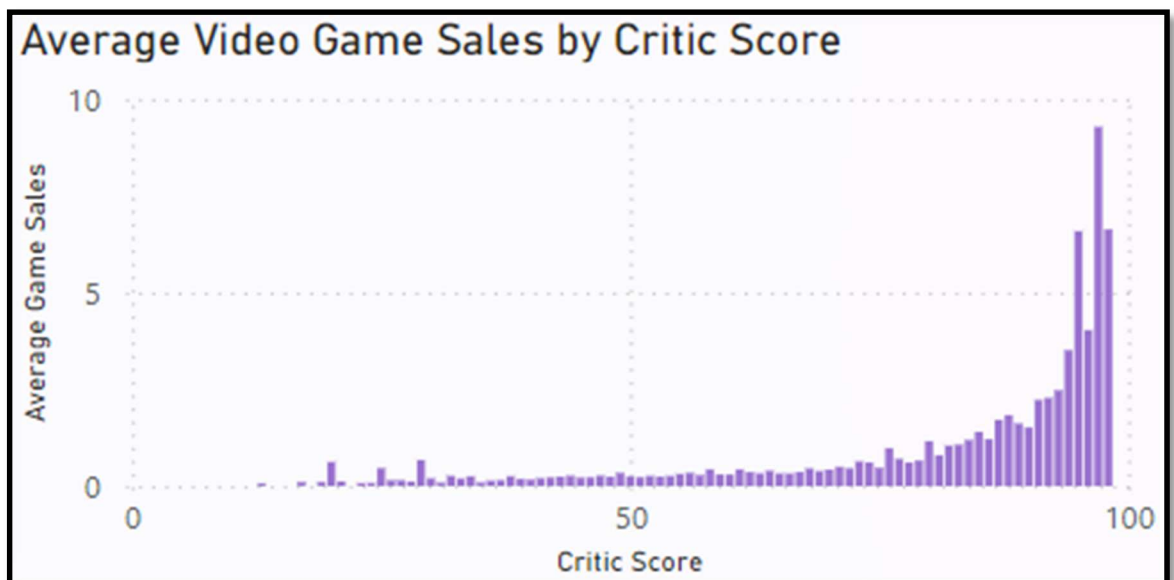
- Despite Nintendo having the four top-selling games during the analyzed period, it ranked only as the 7th bestselling studio, with three other consoles surpassing its sales figures. Interestingly, North America accounted for nearly half of all console video game sales, despite many leading games and studios originating from outside the region.



- A general increase in console video game sales over time, peaking in the late 2000s, followed by a steep decline during the 2010s. Potential factors contributing to this decline could include the rise of mobile and PC game sales, as well as the increasing popularity of alternative mobile entertainment apps. However, further data would be necessary to pinpoint a definitive cause.



- Finally, a visualization indicated a strong positive correlation between game sales and critic scores, suggesting that favorable reviews may enhance sales or that higher-quality games tend to receive better scores and consequently sell better.



## Conclusion

This analysis provided key insights into consumer trends in the video game industry from 1980 to 2016. Notably, the data revealed that specific games significantly impacted sales within their genres, with standout titles like *Wii Sports* and *Super Mario Brothers* driving success in the 'Action' genre.

Additionally, while Nintendo had the top four selling games during this time, it ranked only as the 7th bestselling studio, indicating a competitive market landscape. The analysis also underscored the dominance of North America in console video game sales, accounting for nearly half of all sales during this period and identified a strong correlation between critic scores and game sales.

Overall, these findings illustrate the dynamic nature of the video game industry and provide valuable insights into consumer preferences and market performance.