

## Sales Analysis for the Video Game Market in North America

### 1. Project Description

From the 1970s to today, video games have grown into a global industry generating millions of sales each year. With advancing technology and an expanding consumer base, North America has emerged as one of the most competitive and profitable markets. For publishers, the challenge lies in deciding which genres and platforms to prioritize to gain an edge. This project analyzes video game sales data and market trends in North America to provide insights that can help publishers identify opportunities, optimize strategies, and focus their efforts on where they matter the most.

Within this project, I built an interactive dashboard that visualizes trends in the North American market for video games. To build this interactive dashboard, I used Python, SQL, and Tableau. In terms of specific technologies, I used Google Colab (Python), BigQuery Console (SQL), and the Tableau Application (Tableau).

### 2. Problems for Video Game Publishers

Due to the constantly changing market, video game publishers must constantly keep up with the market, in order to create a successful video game. If publishers really want to dominate the market and potentially take over, they must know what types of games are trending, what types of consoles are trending, and industry specifics.

### 3. Project Objectives

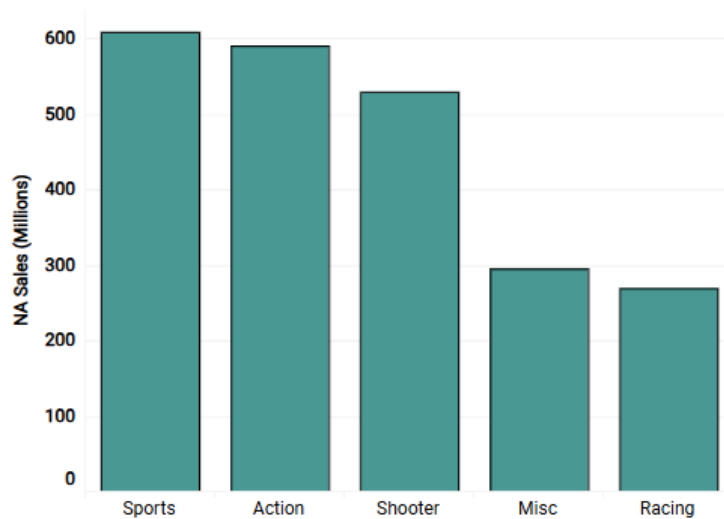
- Target information on the NA Video Game Market
- Observe the top games, publishers, and genres for video games in the NA Market
- Observe console usage

### 4. Project Workflow

- Analyze and clean videogame dataset from [Maven Analytics](#), using Google Colab and Python commands.
- Target NA market information, using SQL in BigQuery Console
- Create an interactive dashboard in Tableau, using the SQL Queries made for each visualization.

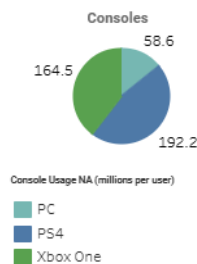
## 5. Project Findings

**Genre popularity:** Out of all the video game genres in North America, sports and action video games dominated the NA market with around 600 million sales per genre. Considering the fact that NA is the home to many of the sports markets, including the NBA, MLB, and the NFL, it makes sense as to why there have been so many sales for sports games.



**Highest Selling Video Games (Individual):** The highest selling video games in the NA Market are Grand Theft Auto games and Call of Duty games. These games do appeal to the masses of people who enjoy action in their video games, and these games also provide large multiplayer servers, which many people prefer.

**Console Usage:** According to the dataset, the most used console, when the data was retrieved, was the PS4. In comparison to PC and Xbox One, PS4 was evidently higher in NA, with 192.2 million users. Now, in 2025, with the PS5 release, the numbers are probably different, but similar in the fact that Playstation is the dominating console.



## 6. Recommendations from Analysis

There are a couple of main ideas that video game publishers should take into consideration, after the analysis. One of the main ideas is that in North America, game publishers should prioritize action in their gameplay, as well as multiplayer modes. Although sports games are the highest selling genre in North America, I think it would be quite difficult for publishers to break into this specific genre, considering that there are already highly respected sports game brands that have loyal customers. Action games, for video game publishers, would be much more easier to break into, compared to sports games. Another main idea is that video game publishers should try to prioritize releasing their games on playstation. If there is some way publishers can release playstation exclusive games, it would most likely help their sales overall, considering that most people use playstation as their console. Although video game sales have been decreasing, it doesn't necessarily mean that video game publishers will struggle. Instead, video game publishers take this as an opportunity and capitalize on the struggling market, to try their best to release the most trending game.

## 7. Project Deliverables

SQL Queries - BigQuery queries for sales aggregation.

Python Data Cleaning - Data cleaning using Python Code in Google Colab

Visuals - Screenshots of dashboards and charts made in Tableau

Interactive Dashboard - Tableau Public link for exploration.

Video Games Sales Analysis - Analysis report summarizing the purpose and findings of the project.

## 8. Conclusion

Publishers trying to release video games in North America should take into consideration certain key aspects about the video game market. These key aspects are that the most used console in NA is the playstation, the highest selling video game genres in NA are action and sports, and the highest-selling video games usually include some sort of action gameplay and multiplayer mode. With this in mind, publishers can create a game catered to these aspects to dominate the market. By using statistics, there is a higher chance that publishers will dominate the market, if they use past statistics and look at past trends, when creating their product.

