Sales Analysis for the Video Game Market in North America

1. Project Description

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. The technologies I used were Google Colab (Python), BigQuery Console (SQL), and the Tableau Application (Tableau).

2. Problems for Video Game Publishers

Publishers must identify trending genres, popular consoles, and shifts in consumer behavior in order to remain competitive.

3. Project Objectives

- Analyze key trends in the North American (NA) video game market
- Identify the top games, publishers, and genres
- Examine console usage patterns

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
- Build an interactive dashboard in Tableau, using the SQL Queries made for each visualization.

5. Project Findings

Genre popularity: Sports and action video games dominated the NA market, generating around 600 million sales, according to the dataset. North America's strong sports culture, including major leagues such as the NBA, MLB, and NFL, explains the high demand for sports titles.
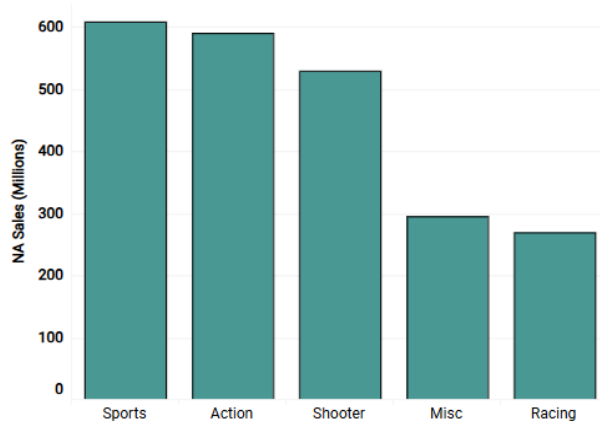
Highest Selling Video Games (Individual): Grand Theft Auto and Call of Duty titles lead individual sales in the North American market. This strong appeal reflects the popularity of action-oriented gameplay and large multiplayer modes.

Console Usage: At the time of data collection, the PlayStation 4 was the most used console in North America, with about 192 million users, surpassing PC and Xbox One. With the release of the PlayStation 5, PlayStation still remains the dominant console family.
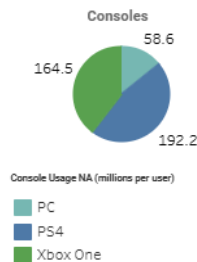
6. Recommendations from Analysis

Strategic priorities for video game publishers targeting the North American market:

● **Focus on Action and Multiplayer Gameplay**
Action games present strong opportunities because they are popular and less saturated than sports games. Emphasizing action-oriented gameplay and engaging multiplayer modes can help new titles stand out.

- **Prioritize PlayStation Releases**

  PlayStation remains the leading console family. Releasing games on PlayStation, and developing PlayStation-exclusive content can expand reach and drive sales.

- **Capitalize on the Current Market**

  Overall, video game sales show signs of slowing, but this creates opportunities for well-timed new releases. Publishers that monitor market trends can act quickly to capture consumer attention.

7. Project Deliverables

SQL Queries - BigQuery scripts for sales aggregation.
Python Data Cleaning - Data cleaning in Google Colab
Visuals - Screenshots of Tableau dashboards and charts
Interactive Dashboard - Tableau Public link for exploration.
Video Games Sales Analysis - Analysis report summarizing project purpose, methods, and key findings.

8. Conclusion

Publishers releasing games in North America should focus on three key market insights:

- **Platform** – PlayStation remains the most widely used console.
- **Genres** – Action and sports dominate overall sales.
- **Gameplay** – Top-selling titles typically feature action elements and robust multiplayer modes.

By designing games around these factors, publishers can improve their chances of market success.