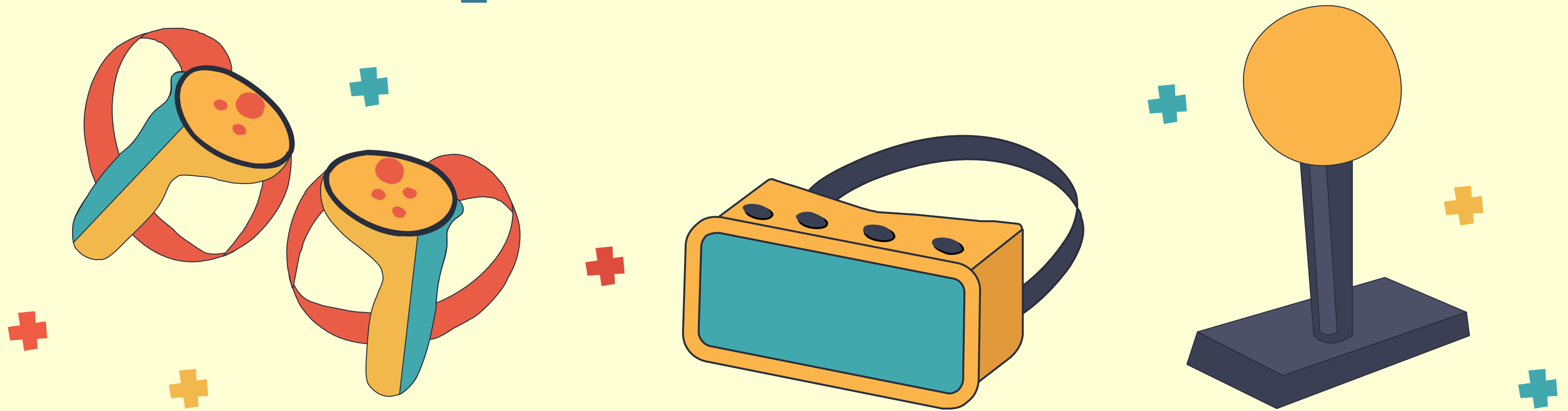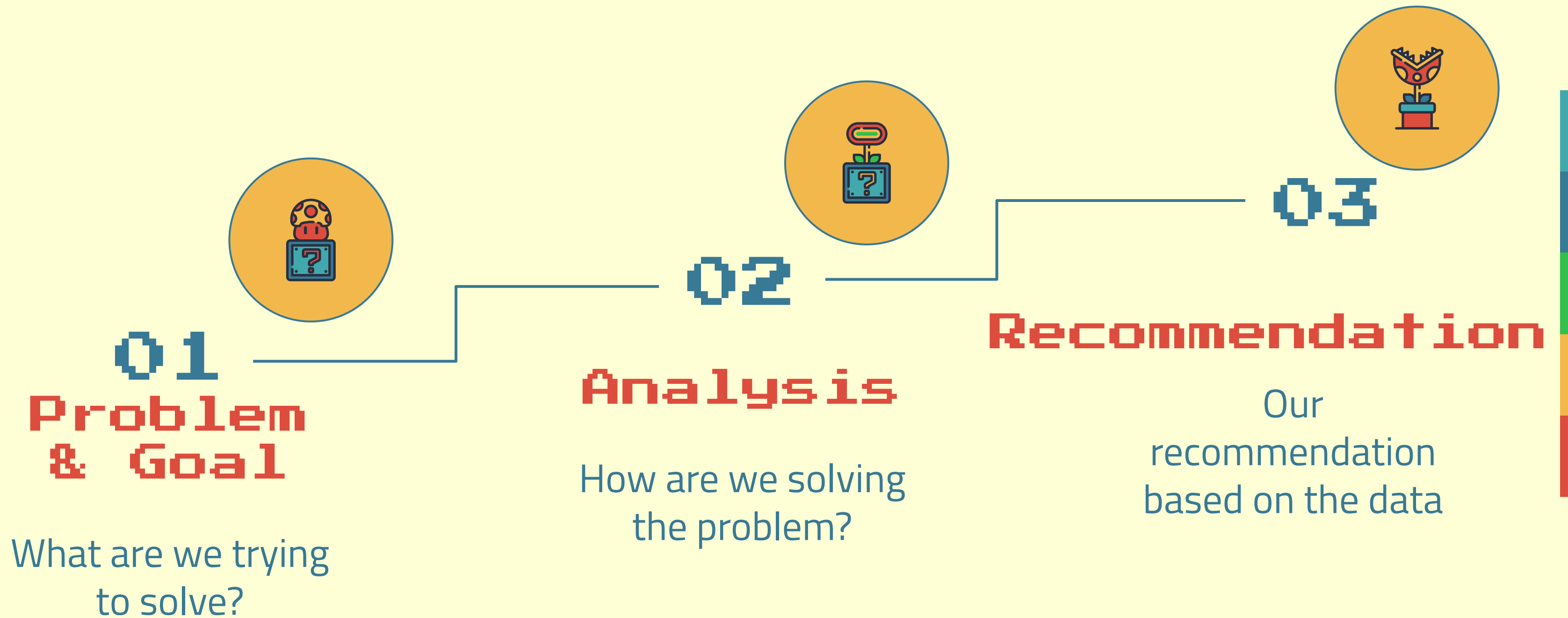# Ready, Set, Go!

Data Analysis: The Video Game Market
Kyle Brinker and Janie Ha

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What are we trying to solve?

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Our recommendation based on the data

Our Problem & Goal

Our Problem

A Video Game Production company is looking to launch their **next big product**. Given the size of the market and the overwhelming amount of data available, our firm was hired to analyze all video games currently available in the market.

Goal

Our goal is to recommend what **video game genre** will be most profitable for the production company to launch next.

Our Data Set

Why did we choose our Data?

Reason 1

Revenue

- Global Revenue
- Regional Revenue

Reason 2

Genre

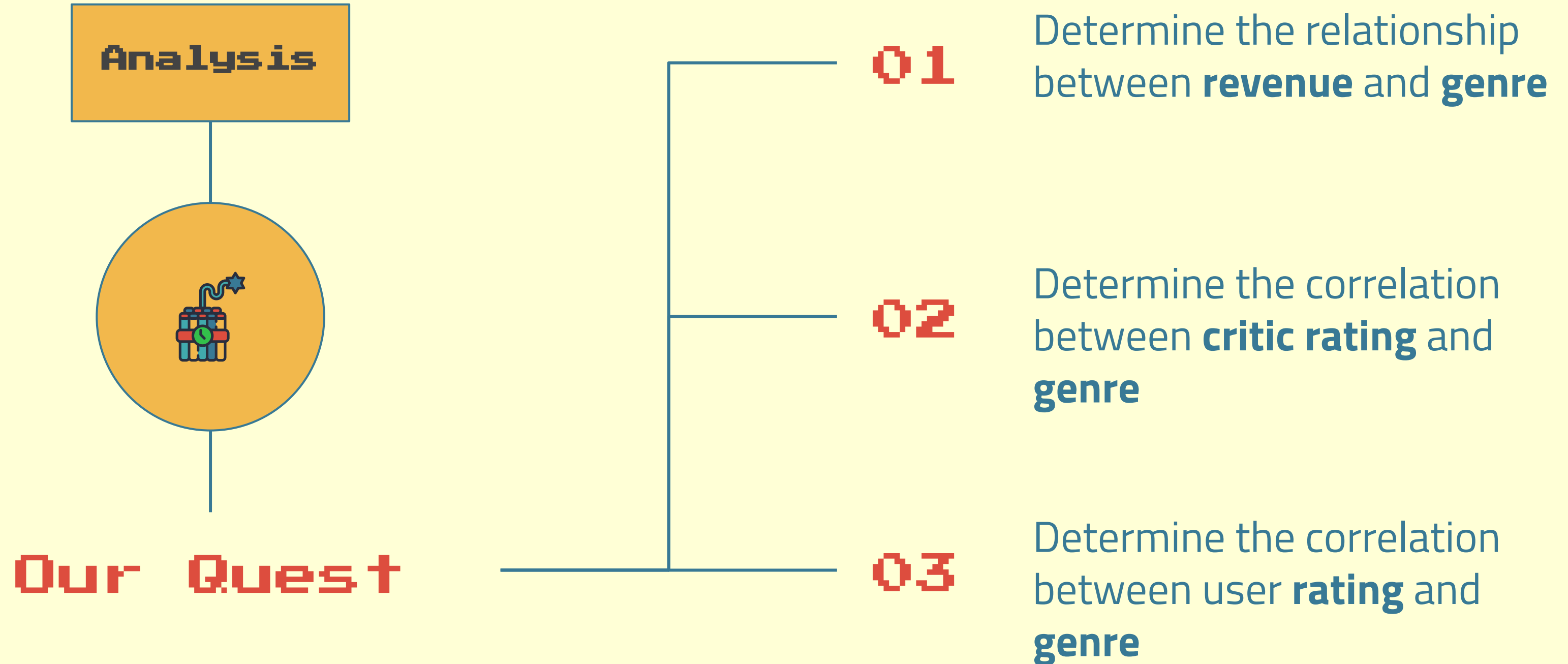- Games classified by different genres

Reason 3

Rating

- User Rating
- Critic Rating

What Are We Trying to Achieve?

Analysis

Our Quest

01 Determine the relationship between **revenue** and **genre**

02 Determine the correlation between **critic rating** and **genre**

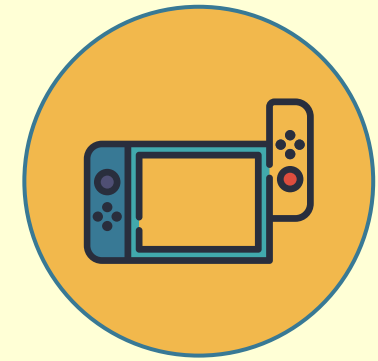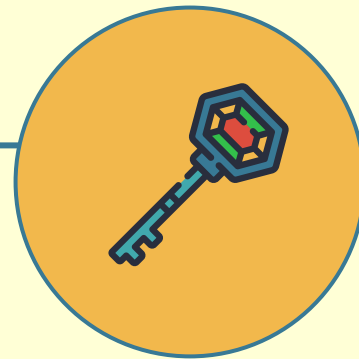**03** Determine the correlation between user **rating** and **genre**

Step 1: Data Cleaning

Trim Names

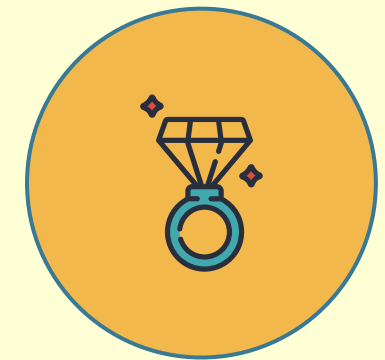Trimmed extra spaces in names of game titles and genre

Reformat Numbers

Updated number format from 00.00 -> 00,000

Step 2: Statistical Analysis (SQL)

Genre and Revenue

1. Calculated the **total revenue** across **different regions and globally** for each video game genre- providing insights into which video game genres have the **highest total sales globally.**

Genre and Critic Score

2. Analyzed the relationship between **average critic scores, total critic counts,** and **total global sales** across genres to understand the **correlation** between critic data and global sales within each genre.
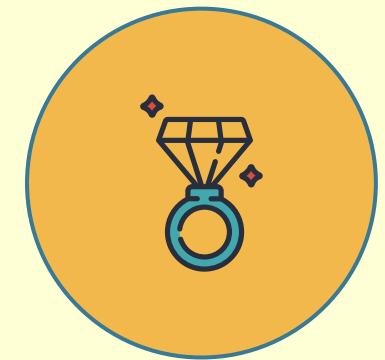
Step 2: Statistical Analysis (SQL)

Games and Ratings

3. Identified the **top 10 rated video games** based on critic scores and their genre to confirm trend in top-rated games by genre.

Games and Users

4. Reviewed the **top 10 popular video games** based on **user counts and user scores** to identify the most popular games among users and understand the trend in genres.
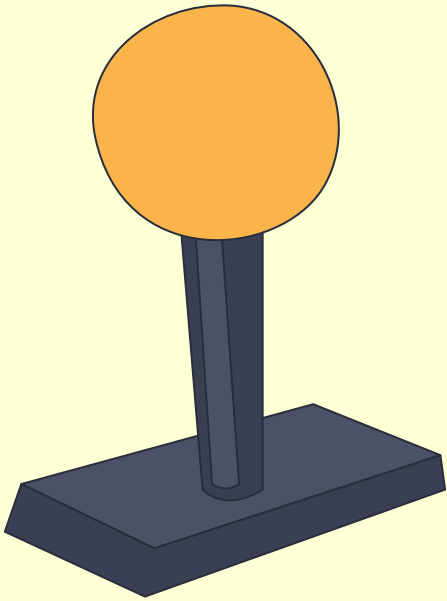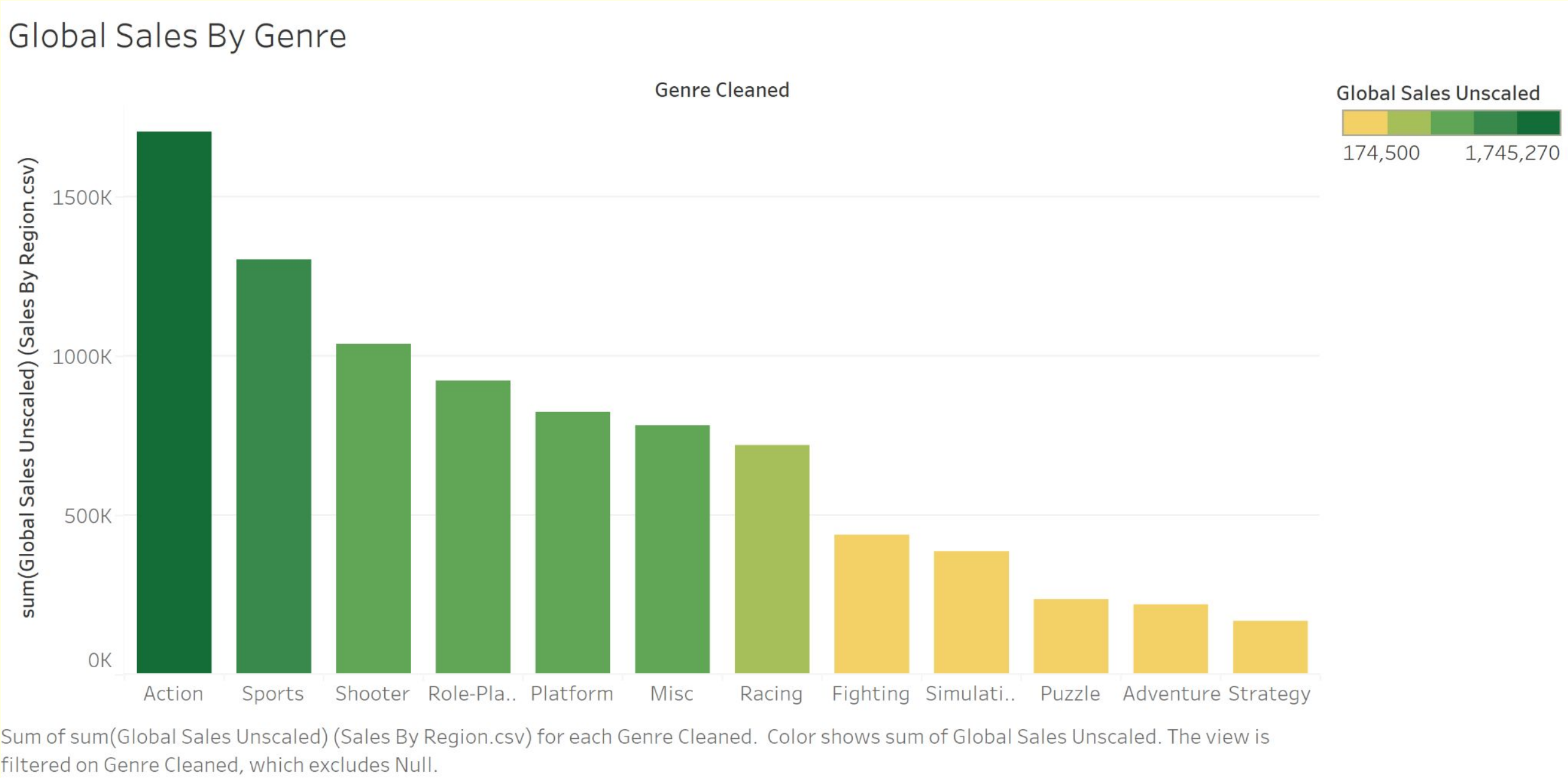
Step 3: Results

Genre vs. Revenue

Result: Games with the genre of "Action" had highest sales across the globe.

Global Sales By Genre

Genre Cleaned

Global Sales Unscaled

174,500   1,745,270

Sum of sum(Global Sales Unscaled) (Sales By Region.csv) for each Genre Cleaned. Color shows sum of Global Sales Unscaled. The view is filtered on Genre Cleaned, which excludes Null.
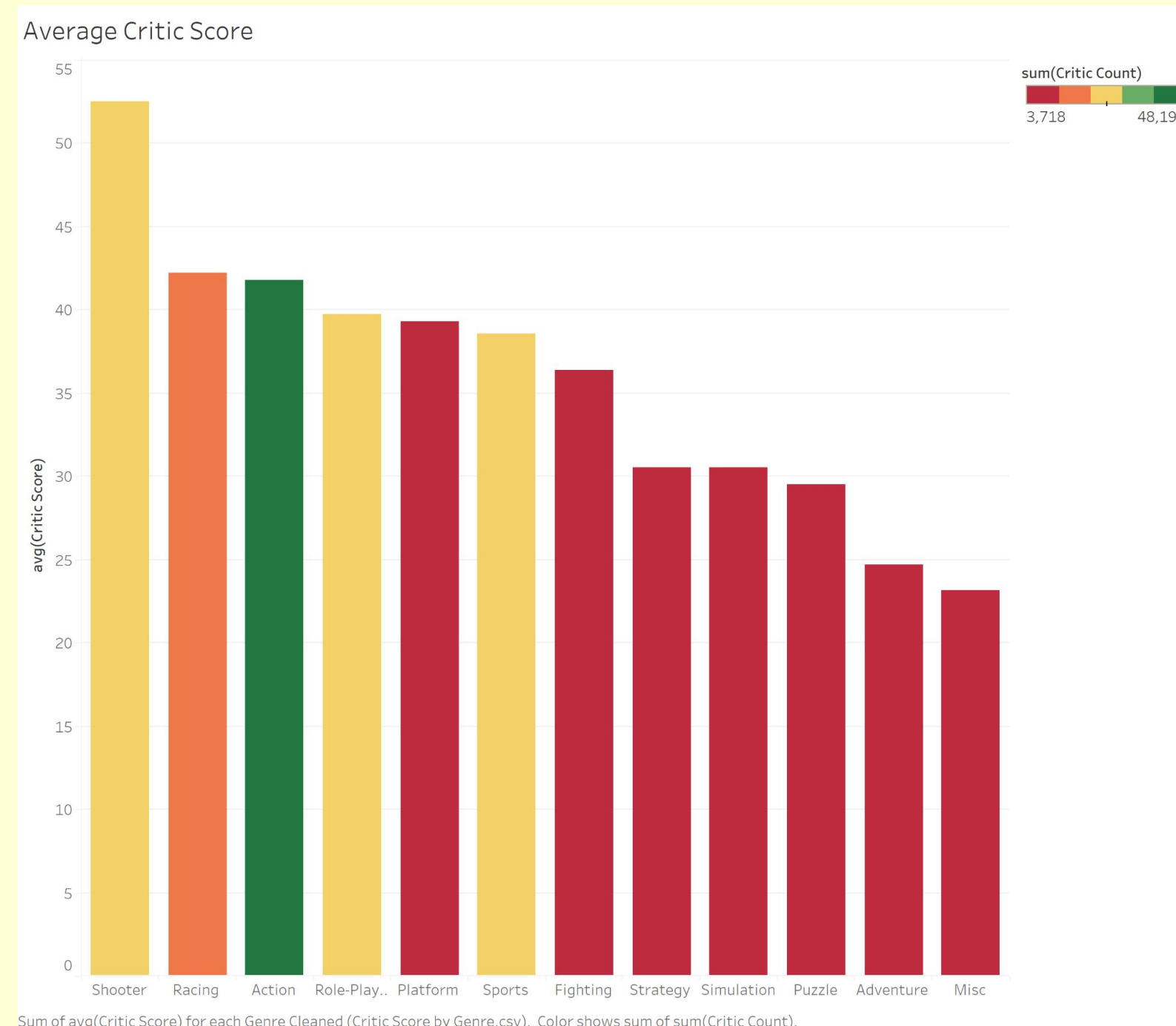
Step 3: Results

Genre vs. Revenue

Result: Action had the highest revenue across North America, EU, and other countries with the exception of Japan.

Genre Sales By Region

Sum of sum(Global Sales Unscaled) (Sales By Region.csv), sum of EU Sales Unscaled, sum of sum(JP Sales Unscaled), sum of sum(NA Sales Unscaled) and sum of sum(Other Sales Unscaled) for each Genre Cleaned (Sales By Region.csv). Color shows sum of sum(Global Sales Unscaled) (Sales By Region.csv). The view is filtered on Genre Cleaned (Sales By Region.csv), which excludes Null.

Step 3: Results

Genre vs.Critic Rating

Result: Action had the **highest critic count** and came in **third** in terms of rating.

Sum of avg(Critic Score) for each Genre Cleaned (Critic Score by Genre.csv). Color shows sum of sum(Critic Count).

Step 4: Results

Genre vs.User

Result: Based on user count, we **extracted top 10 games** which showed that the top two games with the most user count was in the **Action category** for genre.

Breakdown of Genre by User Count

Sum of User Count for each Names Cleaned broken down by Genre Cleaned. Color shows sum of User Score.
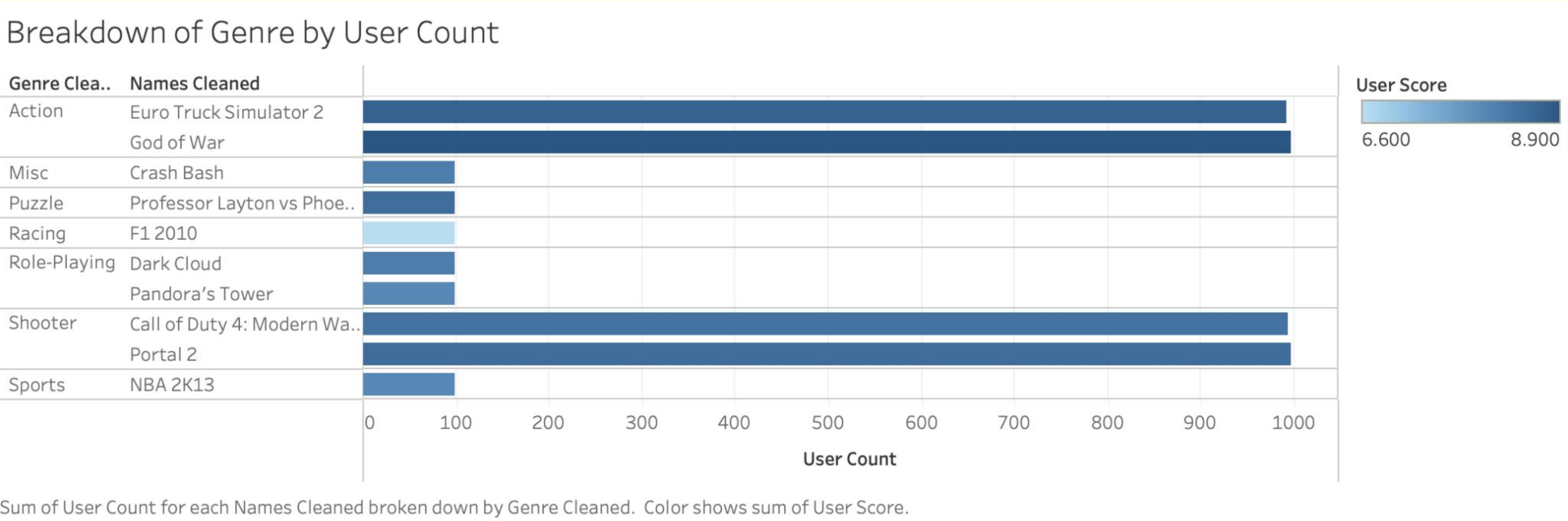
Recommendations Summary

Market

What regions do we focus on?

Product

What genre of games would be successful?

Recommendation: Product

Action! ──────────────────────→ Play!

The next product, to gain the most profitability across the globe, is to be an **action-based** game.

This recommendation is being made based on global sales revenue that shows strong correlation with the specific genre across North America, the EU and other countries.

Recommendation: Market

North America(NA)

Given the popularity of Action games in North America, marketing and brand recognition initiatives should be focused here
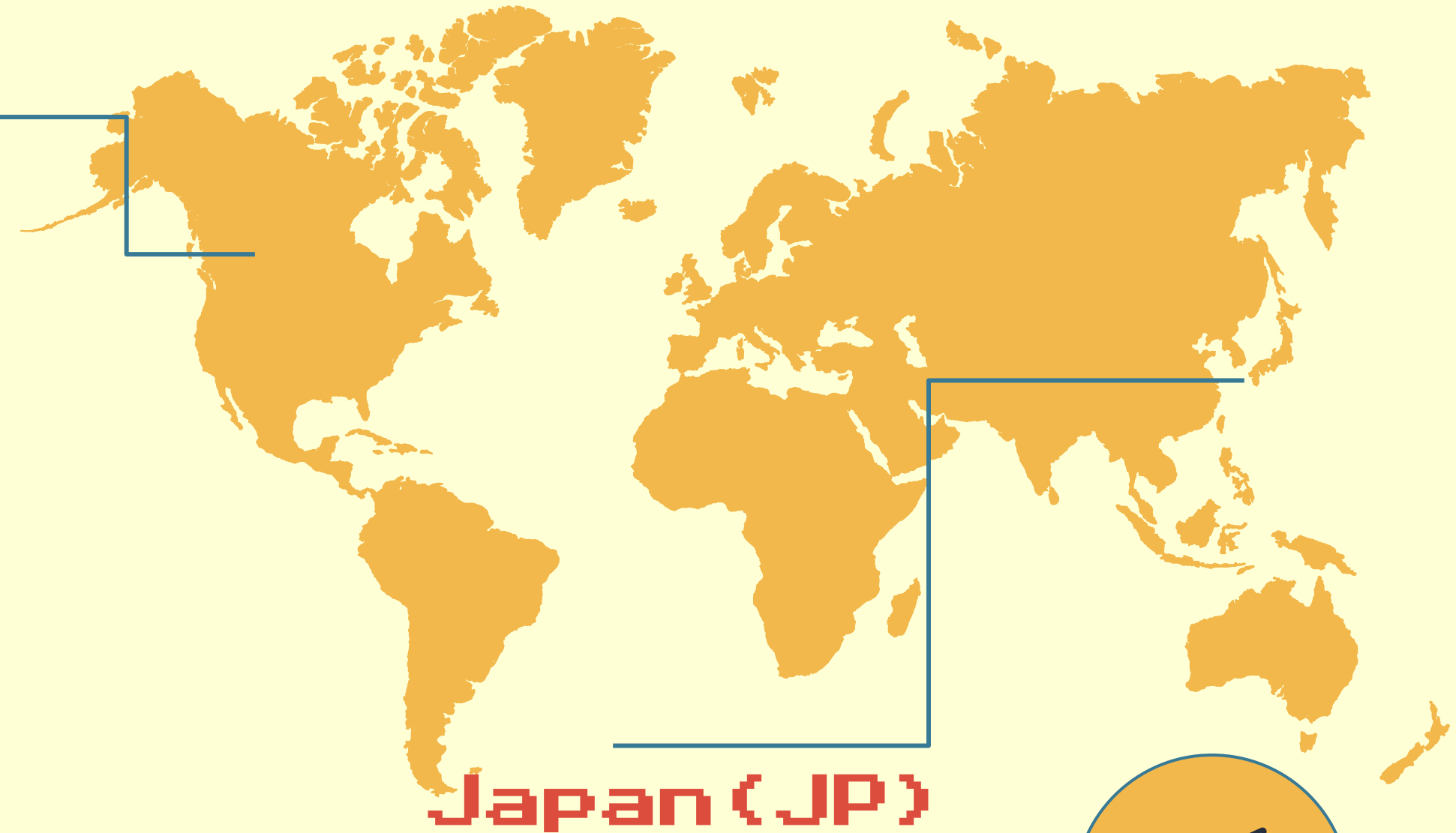
Japan(JP)

With heavy cultural influence and the region's liking of RPG, we will focus on this region less.

Refrences

- Popular Video Games 1980 - 2023. Kaggle. (2023). https://www.kaggle.com/datasets/arnabchaki/popular-video-games-1980-2023/data
- SID_TWR. (2019b, May 10). *Video games sales dataset*. Kaggle. https://www.kaggle.com/datasets/sidtwr/videogames-sales-dataset
- W3Schools. (n.d.). MySQL Joins. https://www.w3schools.com/mysql/mysql_join.asp
- Japan Nakama. (2023, January 4). *The cultural impact of Japanese video games*. https://www.japannakama.co.uk/the-cultural-impact-of-japanese-video-games/#:~:text=Designing%20new%20video%20game%20genres,creation%20of%20several%20other%20RPGs.

Thank you!