

## INTRODUCTION

This write-up aims to analyse sales data from more than 16,500 games. The dataset contains a list of video games with sales greater than 100,000 copies. Fields include:

- Rank - Ranking of overall sales
- Name - The games name
- Platform - Platform of the games release (PC, PS4, etc.)
- Year - Year of the game's release
- Genre - Genre of the game
- Publisher - Publisher of the game
- NA\_Sales - Sales in North America (in millions)
- EU\_Sales - Sales in Europe (in millions)
- JP\_Sales - Sales in Japan (in millions)
- Other\_Sales - Sales in the rest of the world (in millions)
- Global\_Sales - Total worldwide sales.

These are the **5** questions I seek to answer with my analysis of this dataset:

- 1. What are the most popular video games globally, and how do they compare in terms of revenue?**
- 2. How have video game revenue trends evolved over the past decades, and what are the primary factors influencing these changes?**
- 3. a. How do regional preferences, publisher strategies, and platform performance influence global video game sales?**  
**b. Do multi-platform releases result in higher revenue compared to games released on a single platform?**

4. How does video game revenue distribution vary across major geographical regions (North America, Europe, Japan, and others)?
5. How do factors like the number of publishers, genre diversity, and platform availability affect revenue trends over time?

## ANALYSIS

### 1. Popular Video Games and Revenue Comparison:

- Notable top-grossing games include **Wii Sports**, **Grand Theft Auto V**, **Super Mario Bros**, **Tetris**, **Call of Duty: Black Ops**, and **Pokemon Red/Blue**. Each of these titles has made a significant impact on the global market. For instance, **Wii Sports** generated **\$82.74 million**, contributing **1%** of the total global revenue. **GTA V** stands out with over 150 million copies sold worldwide, benefiting from its availability on multiple platforms such as PlayStation, Xbox, and PC.

### 2. Revenue Trends and Influencing Factors Over Time:

There has been a notable shift from physical copies to digital downloads and in-game purchases. **Pokémon** games offered additional content or features through in-game purchases. This model was part of the broader trend toward monetizing games through microtransactions and downloadable content (DLC). This transition is evident in the growing success of games with microtransactions and subscription models.

However, note that **missing** sales data from 2017-2020 and some earlier years creates a gap in understanding recent performance trends, making it difficult to compare older consoles like the **PS2** with newer models like the **PS4**. I decided to keep it because removing this would have cut out about a third of the dataset.

### 3. Regional Preferences, Publisher Strategies, and Platform Performance:

- Genre Preferences:

**North America:** **Action** and **shooter** games dominate, reflecting the region's interest in fast-paced, competitive experiences. High-speed internet has also supported the growth of online multiplayer games. While similar to North America in action and sports games, **Europe** has a strong tradition of **simulation** games like **The Sims**, likely due to a preference

for realistic and detailed experiences. The **Japanese market** favors **Role Play** games and **adventure** games, driven by a cultural love for immersive stories and character development. handheld consoles like the **Nintendo Switch** have further supported these genres, In **Other** regions, **action** and **sports** games are popular globally, but local preferences influence the specific genres that dominate in different areas.

#### - Publisher Strategies:

**Nintendo** is known for its successful first-party franchises such as **Mario**, **Zelda**, and **Pokemon**. **Nintendo's** innovative hardware, including the **Wii** and **Switch**, has also played a key role in its success. **Electronic Arts (EA)** dominates the **sports** genre with franchises like **FIFA** and **Madden NFL**, thanks to high-quality annual releases and partnerships with sports leagues. EA has also diversified into other genres to broaden its appeal. **Activision Blizzard** achieves success through its **Call of Duty** series, a major global seller. The company has also expanded by acquiring other successful studios like **Blizzard** and **King**. Also, **Sony** leverages exclusive games such as **God of War** and **The Last of Us** to drive sales for the **PlayStation** consoles. This strategy helps differentiate Sony's platform from competitors.

#### - Platform Performance:

**Platforms** such as the **PlayStation 2**, **PlayStation 4**, and **Nintendo Switch** have historically been strong performers. **The Switch**, for example, has sold over 90 million units, largely due to successful exclusive titles. Multi-platform games like **GTA V** and **Minecraft** often generate more revenue because they are accessible to a broader audience across different devices unlike **Personal Computer FX** and **Game Gear**. Multi-Platform releases generally do better than single-platform releases.

#### 4. Revenue Distribution Across Regions:

**North America** leads global game revenue with **\$4.93 billion** of global revenue, driven by high sales in action, shooter, and sports games. **Europe** contributes **\$2.43 billion** of total revenue, with strong performance in action, sports, and simulation genres. **Japan** accounts for **\$1.29 billion** of global revenue, with role play games and handheld gaming being significant contributors. **Other regions** make up **only 2%** of the market, with regional preferences influencing genre popularity.

Cultural and genre preferences significantly impact video game revenue distribution across regions. For example, **North American** gamers, who favor action-packed and competitive genres like first-person shooters and sports simulations, might not spend as much on games like **Final Fantasy XV**, a Japanese role play game known for its complex narratives and cultural elements. These diverse preferences can lead to uneven revenue distribution, with games that align with local tastes generating higher revenue in their preferred regions while struggling in markets with different gaming interests.

## **5. Impact of Publishers, Genre Diversity, and Platform Availability on Revenue**

### **Trends:**

The increase in publishers over the decades has intensified competition. A platform like **3DS** has expanded market access for diverse game offerings. The gaming industry has evolved from niche genres to mainstream popularity. For example, battle royale games like **Fortnite** have become widely popular. The shift from physical consoles to digital and mobile platforms has influenced revenue trends. **Street Fighter II** started in arcades and later became available on digital platforms like **Xbox Live Arcade** and **PlayStation Network**. **The Legend of Zelda: Ocarina of Time** was also first released on Nintendo 64 and later came out on the **Nintendo eShop for Wii, Wii U, and 3DS**. The growth of mobile and cloud gaming shows changing player preferences and technological advancements in the industry. **Tetris Ultimate** was launched for PlayStation 4, Xbox One, and PC. It featured multiple game modes, including Marathon and Battle, and offered online multiplayer, modernizing the classic game for contemporary gaming platforms.

## **CONCLUSION**

**North America** remains the leader in global video game sales, particularly with **action, shooter, and sports genres**. **Japan** excels in **role play games** and handheld **gaming**, while **Europe** shows strong interest in **simulation** games. Top publishers like **Nintendo, EA, Activision Blizzard, and Sony** have successfully used strategies such as exclusive content and multi-platform releases to drive their success. The relationship between **publishers, platforms, and genres** varies significantly depending on the **region**. Understanding these

dynamics helps display how video games evolve in response to market demands. Future growth opportunities for low publishers include **expanding into digital and mobile platforms, addressing regional genre preferences, and leveraging new technologies like cloud gaming and subscription services to reach a broader audience.**