

# **VIDEO GAME SALES ANALYSIS**

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## Introduction

- **Objective:** This project aims to analyse video game sales data to reveal actionable insights for strategic decision-making in the industry. We'll uncover sales trends, top genres, and factors driving player preferences.
- **Dataset:** We utilize a comprehensive dataset from Kaggle containing video game sales details, including titles, platforms, regions, and sales figures. The dataset covers the years 1980-2020.

## Key Research Questions

1. **Overall Market Landscape:** What genres drive the highest revenue, and do regional preferences exist?
2. **Platform Dominance:** Which platforms have historically been most successful, and are there noticeable shifts in dominance?
3. **Genre-Platform Synergy:** Do specific platforms excel in the sales of certain genres?
4. **Changing Trends:** Why do some top-performing genres experience sales declines in the latter part of the analysed timeframe?

## Findings & Insights

### Overall Market Landscape

Figure 1: Global Sales by Genre

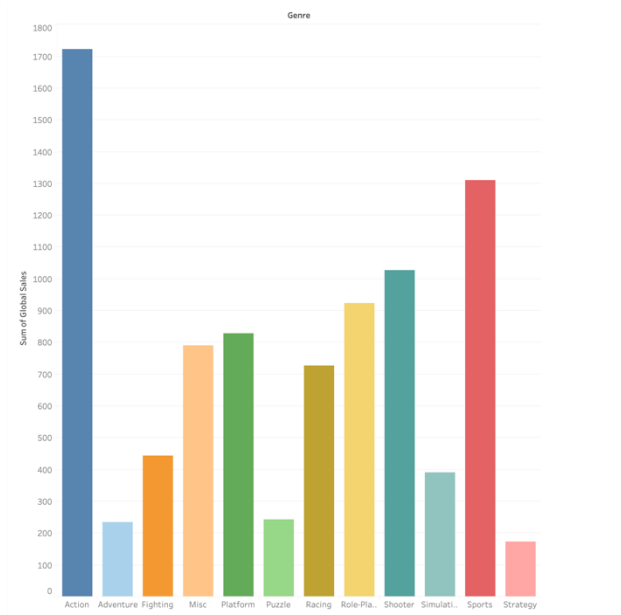
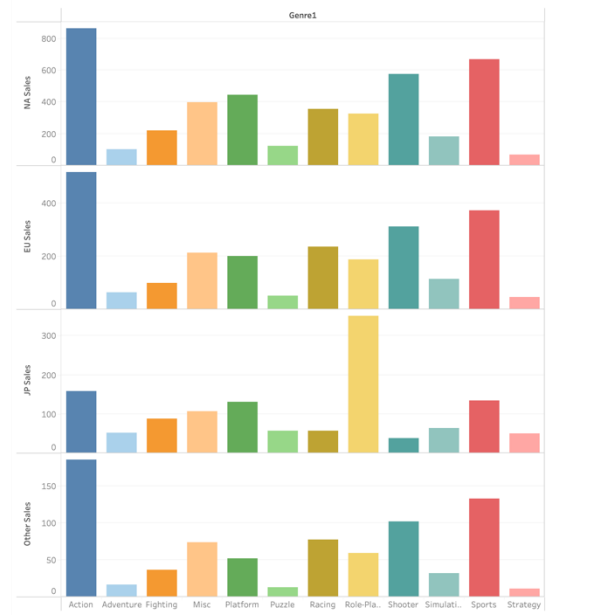


Figure 2: Regional Sales by Genre



### Results:

- Action and Adventure games perform strongly across all major regions, indicating their widespread global appeal.
- Role-Playing Games (RPGs) have a particularly strong presence in the Japanese market.
- Some genres (e.g., Racing, Sports) hold consistent, but smaller market shares overall.

## Insights & Interpretations

- **Global Appeal:** Certain genres like Action Adventure cater to a broad, global audience.
- **Targeted Potential:** Significant regional differences in genre preference suggest opportunities for tailored game development or focused marketing strategies.
- **Understanding Niches:** Exploring genres with steady, if smaller, market share across regions could identify underserved player interests.
- **Context Matters:** To fully understand the sales impact of regional preferences, further analysis correlating market share percentages with total regional sales volumes is needed.

## Suggestions:

- **Deep Dive into Regions:** Investigate overall sales figures within major regions to understand the true volume potential behind varying market share percentages.
- **Explore Niche Success:** Analyse factors contributing to the consistent, if smaller, performance of certain genres.

## Platform Dominance

Figure 3: Market Share by Platform



## Results

- PlayStation platforms (PS2, PS3, PS) demonstrate significant market share throughout the analysed period.
- Handheld consoles (Nintendo DS, GBA) had substantial market share, especially in the earlier part of the dataset.
- PC gaming maintains a consistent, albeit smaller, market share compared to consoles.

Insights & Interpretations:

PlayStation's Success: This likely reflects a combination of a large user base and successful games or platform-specific strategies.

The Rise and Fall of Handhelds: Understanding this decline in relation to the rise of mobile gaming would offer valuable insights into portable gaming preferences.

Resilience of Consoles: Further investigation is needed into why older consoles maintain sales figures long after their initial release.

Suggestions:

- Platform-Specific Analysis: Conduct deeper dives into the success factors of PlayStation and handheld platforms.
- Understanding Longevity: Analyse best-selling titles on older platforms to pinpoint potential reasons for their sustained popularity.

Genre-Platform Synergy (Focus on Top Platforms: DS, Wii, Xbox 360, PS, PS2, PS3)

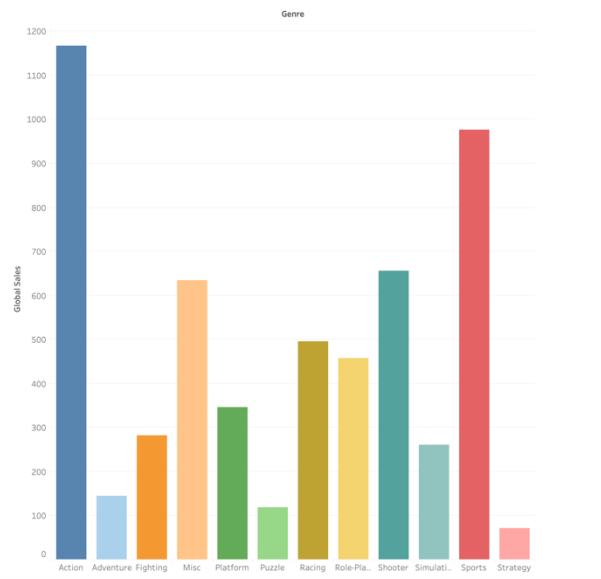


Figure 4: Top Platforms Top Genres (All Platforms)

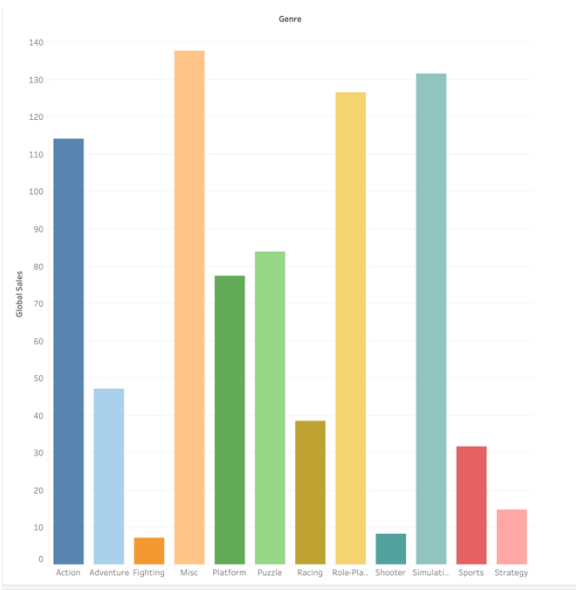


Figure 5: DS (Top Genres)

Figure 6: Wii (Top Genres)

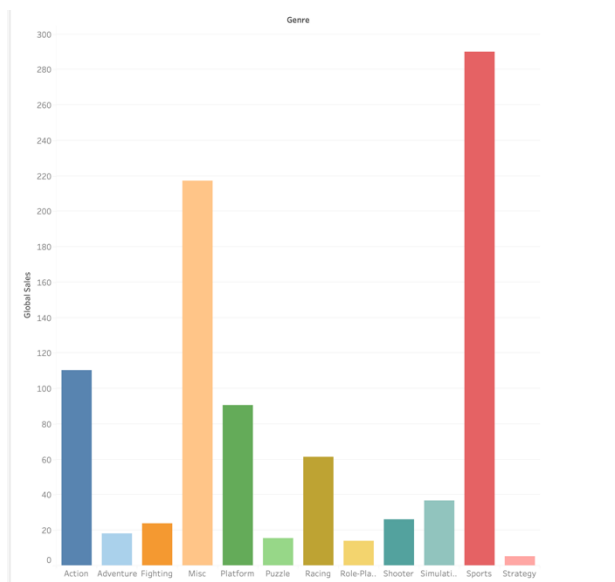


Figure 7: Xbox 360 (Top Genres)

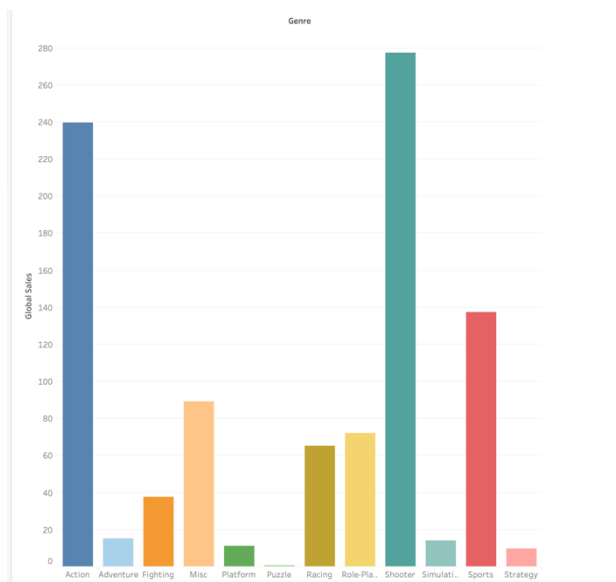


Figure 8: PS(Top Genres)

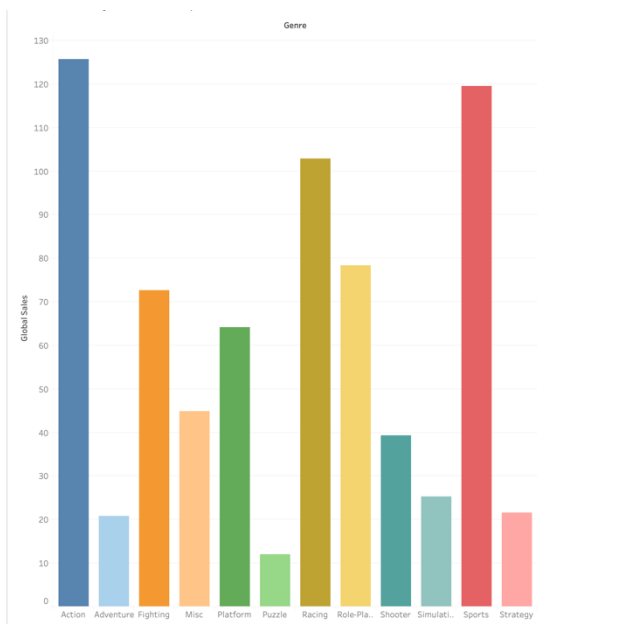


Figure 9: PS2(Top Genres)

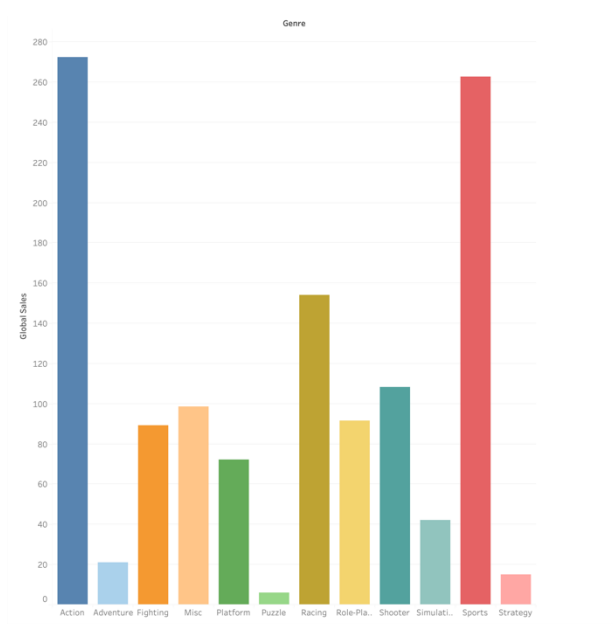
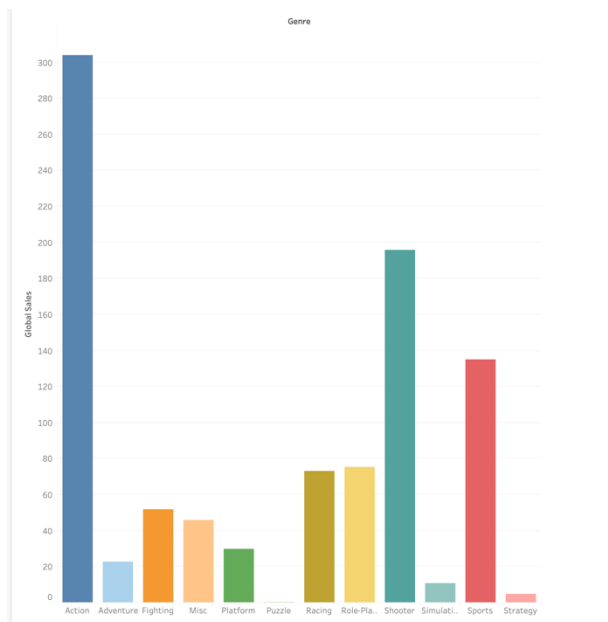


Figure 10: PS3(Top Genres)



## Results

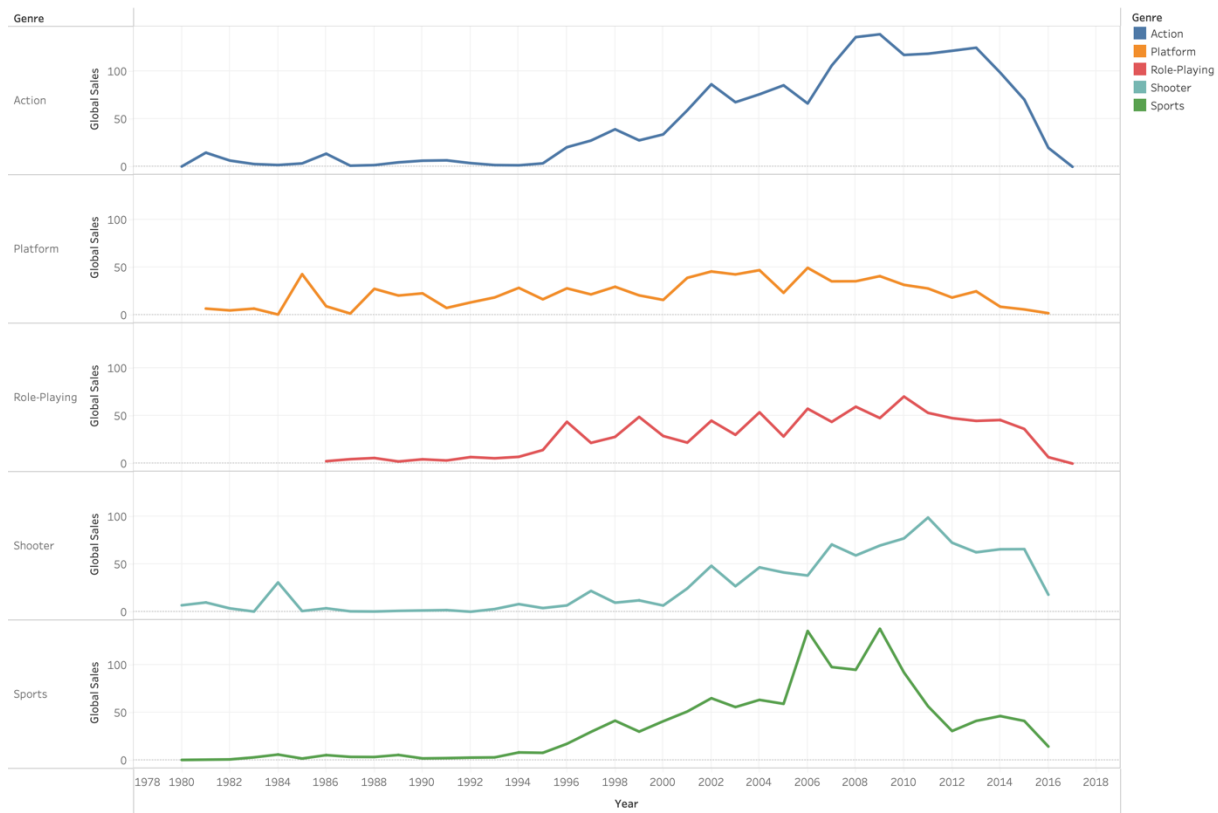
- Overall: Action and Sports consistently dominate across multiple platforms.
- DS: Misc., RPG, and Simulation genres achieve remarkable sales figures, far exceeding their typical performance.
- Wii: Strong correlation between Sports genre and motion-control features, likely due to the popularity of Wii Sports.
- Xbox 360 Dominance in the Shooter genre, aligned with the rise of popular shooters during that era.
- PlayStation (PS & PS2): Balanced genre distribution, with Action and Sports holding leading positions.
- PS3: Noticeable decline in Racing genre sales compared to predecessors. Interestingly, the PS3 launched in the same generation as the shooter-dominant Xbox 360, but did not see the same level of shooter success.

## Insights & Interpretations:

- Handheld Niche: The DS's unique genre preferences indicate a distinct market segment. Possible factors include demographics, innovative game design, or titles tailored to portable play sessions.
- Wii's Impact: Highlights how platform features can boost the performance of genres that offer engaging player experiences.
- Shooter Rise & Competition:
  - Did significant shooter franchises or platform exclusives drive the Xbox 360's success?
  - Did the PS3 focus less on shooters compared to its predecessors, or were there technical or design factors that made the Xbox 360 a more appealing platform for shooter enthusiasts?
- PlayStation Evolution: The PS3's genre shift warrants investigation. Causes could include console technology changes, audience composition, or even competitor strategies.

## Investigating Sales in Top Genres

## Sheet 1



The trend of sum of Global Sales for Year broken down by Genre. Colour shows details about Genre. The view is filtered on Genre, which keeps Action, Platform, Role-Playing, Shooter and Sports.

## Results

Notable decline in sales figures for top genres (Action, Sports, Shooter, RPG) in the dataset's final years (approximately 2016 onwards).

## Insights & Interpretations

### Dataset Considerations:

- **Incomplete Data:** Recent year sales might be underrepresented. Verifying the dataset's timeframe is crucial.
- **Genre Categorization:** Hybrid game designs (action-RPGs, etc.) might dilute sales concentration within traditional genre classifications.

### External Market Forces:

- **Mobile Gaming Boom:** Accessible, often free-to-play mobile games could impact console/PC sales within some genres.
- **Live-Service Dominance:** Successful games with continuous updates and online features might lengthen player engagement with fewer new purchases, especially within the same genre.
- **Changing Audience Tastes:** Evolving preferences, expectations, etc., could impact the appeal of once-strong genres.

#### Recommendations for Further Investigation:

- **Verify Dataset Completeness:** Clearly state the dataset's timeframe, acknowledging any gaps.
- **Industry Analysis:** Research relevant market reports/articles focusing on the period of observed decline to understand trends.
- **Expand Dataset (If Possible):** Sourcing more recent data would be ideal to confirm if the decline persists or a rebound is occurring.

#### Conclusion

This analysis delves into video game sales data, revealing a dynamic market shaped by evolving consumer preferences, technological innovation, and platform competition. Here's a summary of our key findings:

#### Key Takeaways:

- **Genre Landscape:** Action and Adventure titles enjoy consistent global appeal. Significant regional preferences exist, especially the Japanese market's fondness for RPGs.
- **Platform Success:** PlayStation platforms hold a historical position of market dominance. It's important to consider the evolving handheld market and the consistent presence of PC gaming.
- **Genre-Platform Relationships:** Successful synergies exist, such as the Wii and Sports. The Xbox 360 era saw a surge of interest in shooters.
- **Changing Trends:** Some once-dominant genres experienced sales declines in the later years of the analysis. Understanding potential causes (mobile gaming, live-service models, audience shifts) is crucial.

#### Strategic Implications

- **Global & Regional Focus:** Tailor strategies based on the global success of Action Adventure and strong regional preferences within other genres.
- **Platform Awareness:** Consider release platforms based on proven genre-platform synergies.
- **Adapting to Change:** Constant market analysis helps to stay ahead in a dynamic market.

#### Future Directions

- **Mobile Gaming Impact:** Deeper analysis comparing traditional vs. mobile gaming sales trends.
- **Granular Genre Exploration:** Examine specific subgenres/franchises to uncover trends within larger categories.
- **Publisher Analysis:** Analyse top PlayStation publishers' strategies and potential role in the platform's success.