Video Game Sales Data Analysis

An In-Depth Analysis of Sales Across Regions and Genres

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Introduction

Content:

Brief Introduction to the Project:

The video game industry has seen tremendous growth and transformation since its inception. This project aims to analyze the sales data of video games from various regions over several decades. By examining trends, patterns, and correlations, we aim to gain insights into the factors driving the industry's evolution and success.

Objectives of the Analysis:

- •Identify the top-selling video game titles worldwide.
- •Determine the year with the highest sales and track the industry's growth over time.
- •Explore the specialization of consoles in particular genres.
- •Analyze regional popularity and performance of video game titles.
- •Correlate the development of video game controllers and GPUs with genre and sales trends.

Data Overview

Content:

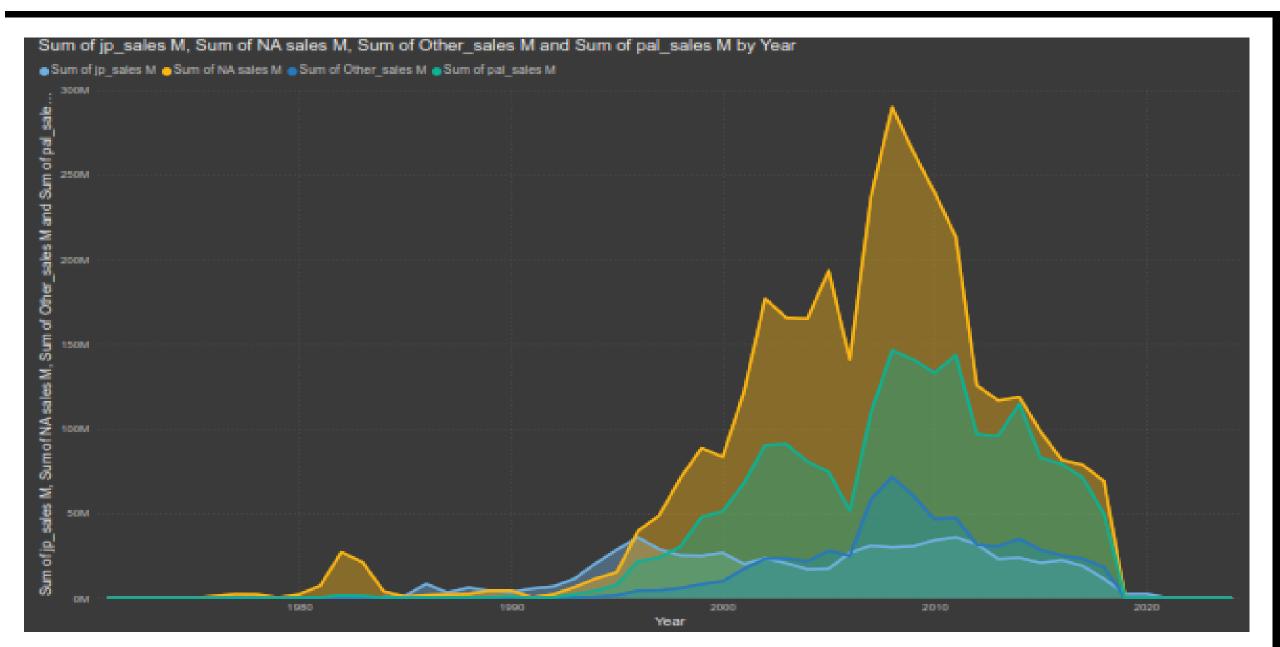
- •Total number of titles analyzed: 64,016
- •**Key attributes:** title, console, genre, publisher, developer, critic score, total sales, regional sales, release date
- •Regions covered: North America, Japan, EU, Africa, and the rest of the world

Analysis Focus Areas

Content:

- •Which titles sold the most worldwide?
- •Which year had the highest sales? Has the industry grown over time?
- •Do any consoles specialize in particular genres?
- •What titles are popular in one region but flop in another

Genre Sales by Region



Total Sales by Region

01

North America: Highest sales across most genres, indicating a large market for video games. 02

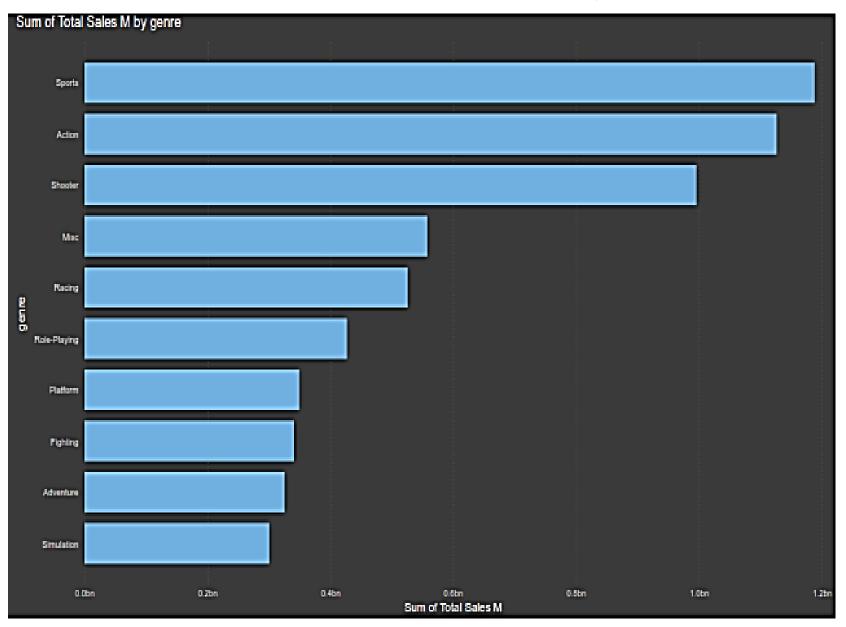
Europe and Africa (PAL region): Strong sales, particularly in genres like Action, Sports, and Racing. 03

Japan: Significant sales in genres like Action, Role-Playing, and Sports, but generally lower sales compared to NA and PAL regions.

04

Other Regions: Lowest sales across all genres, suggesting a smaller market presence.

Sales by Genre



Key Insights:

Dominance of Action

Games: 37.28%

Popularity of Sports

Games: 17.98%

•Diverse Market:

Racing (7.96%), Role-

Playing (6.46%),

Platform (5.29%)

•Niche Markets:

Music (0.78%),

Miscellaneous

(0.23%), MMO

(0.14%

Sales by Genre

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Dominance of Action Games: Action games lead the market with 37.28% of total sales, indicating a strong preference for high-energy and engaging gameplay.

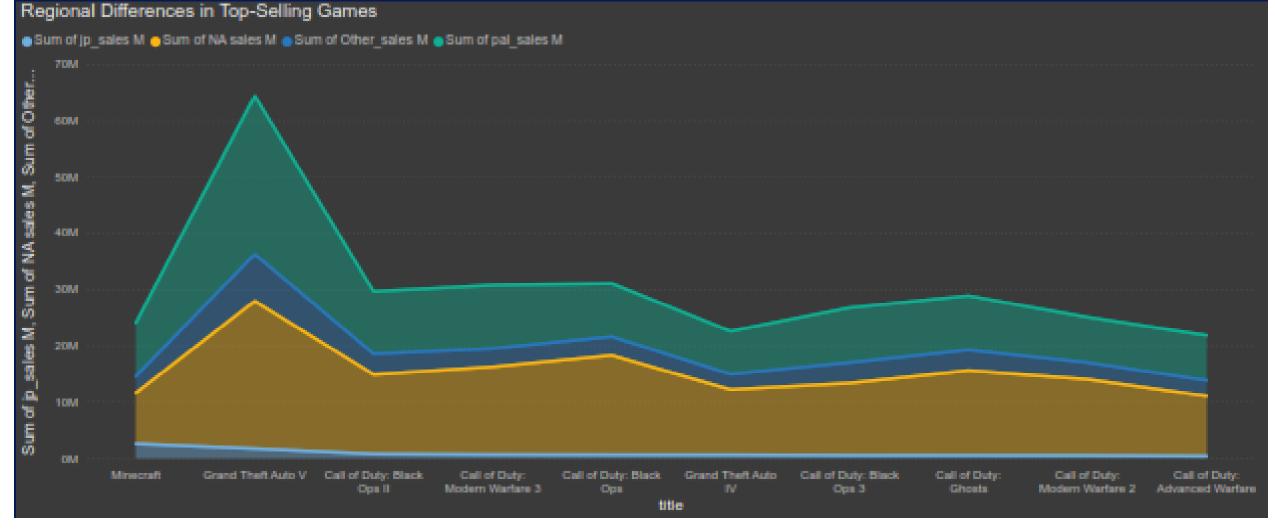
Popularity of Sports Games: Sports games account for 17.98% of total sales, showing a significant market share and widespread appeal across different regions. Diverse Market: Other genres such as Racing (7.96%), Role-Playing (6.46%), and Platform (5.29%) also hold notable market shares, highlighting the diversity in player preferences.

Niche Markets: Genres like Music (0.78%), Miscellaneous (0.23%), and MMO (0.14%) have smaller market shares, indicating niche but potentially loyal audiences.

Regional Differences in Top-Selling Games







Regional Differences in Top-Selling Games

- Key Points:
- North America (NA): Dominates sales for all top titles, indicating a strong market presence.
- PAL (Europe and Africa): Significant sales, particularly for Grand Theft Auto V and Call of Duty series.
- Other Regions: Generally lower sales compared to NA and PAL, with Minecraft showing relatively higher sales.
- Japan (JP): Lower sales overall, but notable for titles like Minecraft and Grand Theft Auto V.



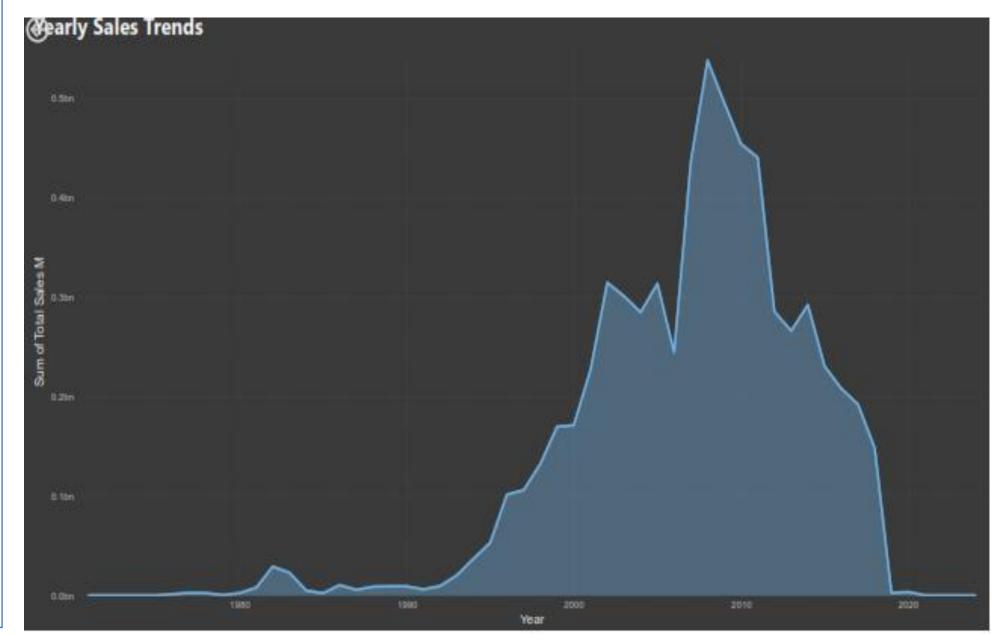




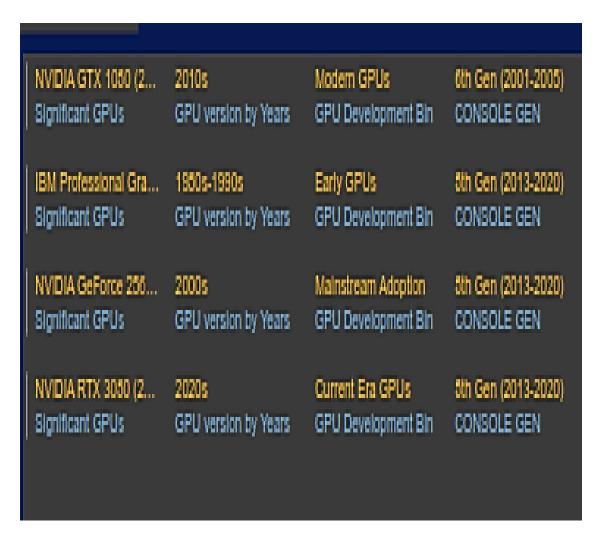
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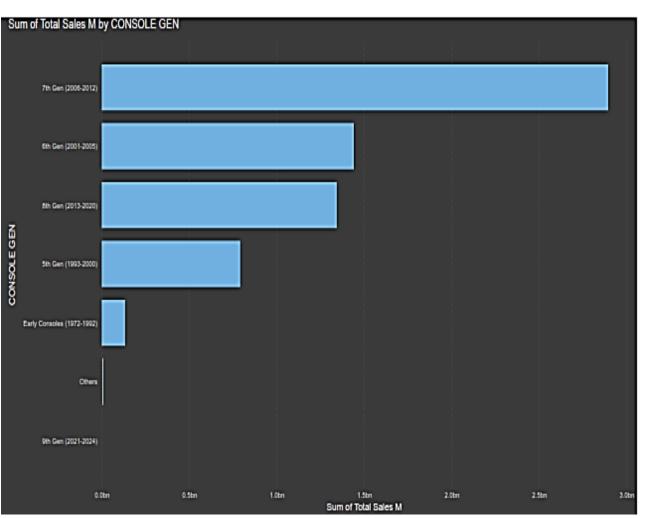
- •Early Years (1971-1980):
- Sales were minimal, with a notable spike in 1981.
- •1980s Growth (1981-
- **1989):** Significant growth in 1982 and 1983, followed by fluctuating sales.
- •1990s Boom (1990-1999):
- Steady increase, with substantial growth starting in 1994 and peaking in 1999.
- •2000s Peak (2000-2009):
- Rapid growth, reaching the highest sales in 2008, followed by a slight decline.
- •2010s Decline (2010-
- **2019):** Gradual decline in sales after 2011, with a notable drop in 2018.

Yearly Sales Trends



Console Generation and GPU Developments





Console Generation and GPU Developments

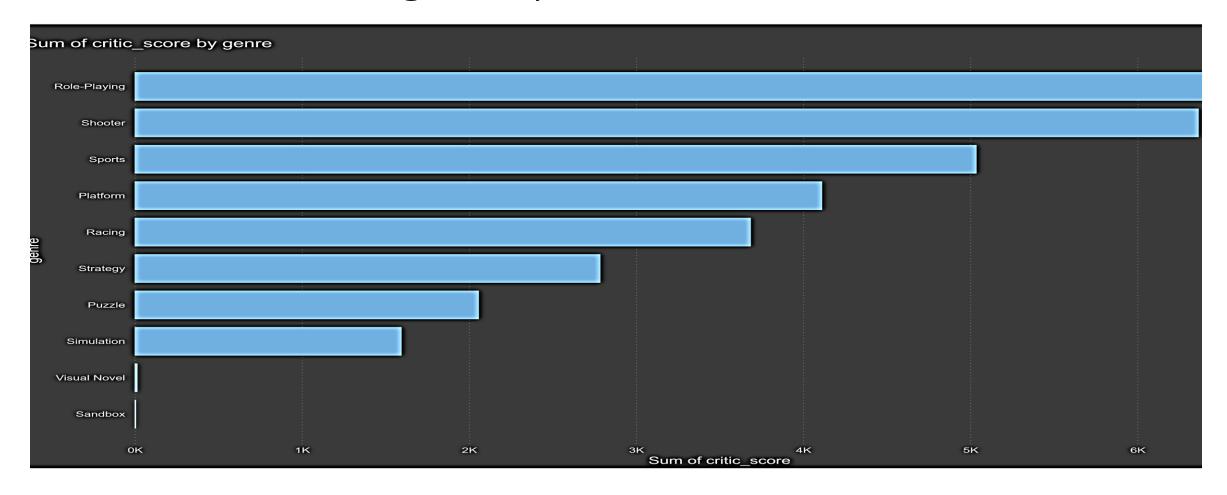
•Early GPUs (1980s-1990s):

- •Introduction of GPUs handling 2D and 3D graphics acceleration.
- •Console Generation: Laid the foundation for early gaming consoles with basic graphical capabilities.
- Mainstream Adoption (2000s):
- •Significant advancements with real-time shading, programmable shaders, and improved performance.
- •Console Generation: Supported 6th Gen consoles (2001-2005), enhancing graphical quality and gaming experience.
- •Modern GPUs (2010s):
- •Revolutionary changes with real-time ray tracing and AI-enhanced graphics.
- •Console Generation: Enabled 8th Gen consoles (2013-2020) to deliver high graphical fidelity and immersive gaming experiences.





Critic Score Insights by Video Game Genre



- Key Insights:
- Role-Playing games have the highest sum of critic scores, indicating high critical acclaim.
- Shooter and Sports games follow closely, suggesting strong critical reception.
- Sandbox and Visual Novel games have the lowest sum of critic scores, indicating lower critical acclaim.

Final Recommendations

1

Focus on North America and PAL regions. 2

Prioritize
Action and
Sports game
genres.

3

Target Role-Playing and Racing genres. 4

Leverage modern and current GPU technologies.

5

Expand into emerging video game markets.

6

Develop strategies for increasing market presence.

Questions & Answers



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