



Video Game Sales Analysis

Dharmik Shah

CONTENTS

Introduction

Methodology

01

02

Dashboard Overview

Visualization and
Insights

Key Insights

Conclusion and
Recommendations

03

04

05

06

01

•Introduction

Project Overview

Objective of the Project

Analyze video game sales data to uncover trends and patterns in the gaming industry, providing actionable insights for stakeholders.

Explore how factors like genre, platform, and publisher influence global sales performance.

Importance of Video Game Industry Analysis

The gaming industry is a multi-billion-dollar market with significant growth potential.

Understanding sales trends helps stakeholders optimize strategies and capitalize on emerging opportunities.

Key Questions Addressed

Which genres and platforms dominate global sales?

How do regional preferences impact sales performance?

What are the key factors driving the success of top publishers and games?

Dataset Overview

Key Variables:
Rank, Name,
Platform, Year,
Genre, Publisher

01

Dataset Size and Attributes

The dataset contains 16,598 entries with 11 attributes, including Rank, Name, Platform, Year, Genre, Publisher, and regional sales data.

Rank: Sales-based ranking of video games.
Name: Title of the game.
Platform: Gaming platform (e.g., Wii, PS4).
Year: Release year (some missing values).
Genre: Game category (e.g., Sports, Action).
Publisher: Publishing company (some missing values).

03

Regional and Global Sales Data

Includes sales data for North America, Europe, Japan, and other regions, as well as global sales totals.

Data Cleaning and Preparation

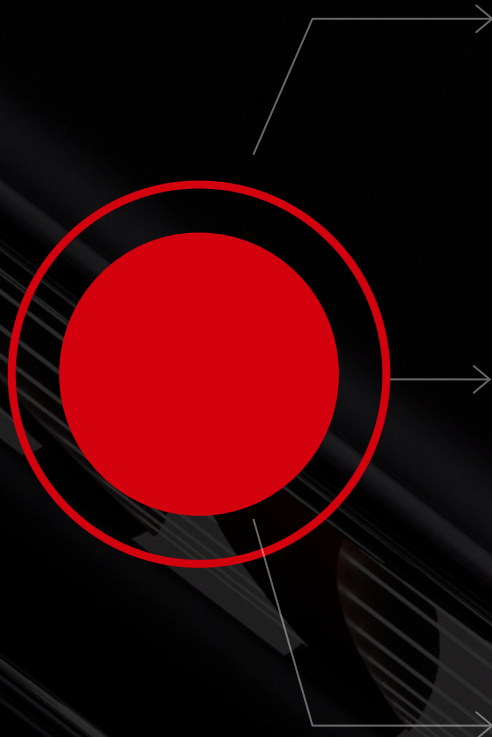
Address missing values in Year and Publisher columns.
Convert year values to integers and ensure consistent formatting for analysis.

04

02

•Methodology

Data Cleaning



Handling Missing Values

01.

Identify and address missing values in Year and Publisher columns to ensure data accuracy.

Data Formatting and Conversion

02.

Convert Year values to integers and standardize data formats for consistency.

Ensuring Data Consistency

03.

Validate data entries to ensure uniformity across attributes and regions.

Exploratory Data Analysis (EDA)

Tools Used: Tableau, Python, Power BI

Utilize Tableau, Python, and Power BI for data visualization and analysis.

1

Statistical Analysis Techniques

Apply statistical methods to identify trends, correlations, and outliers in the dataset.

2

Visualization Techniques

Use bar charts, line graphs, pie charts, and treemaps to visualize sales trends and distributions.

3

Key Insights from EDA

Identify dominant genres, platforms, and publishers. Analyze regional sales trends and their impact on global performance.

4



03

•Dashboard Overview

Filters and Controls

01

Zone Sales Dropdown

Allows users to filter sales data by specific regions (e.g., North America, Europe, Japan).

02

Genre Dropdown

Enables filtering by game genres (e.g., Action, Sports, Racing).

03

Year Range Slider

Users can adjust the start and end years to analyze sales trends within a specific time frame.

Key Sections of the Dashboard

Top 10 Publishers

A treemap visualizes the top publishers by total sales, highlighting leaders like Nintendo, Sony, and Electronic Arts.

01

Top 10 Sales Globally

A horizontal bar chart highlights the top 10 games by global sales, featuring titles like "Wii Sports" and "Super Mario Bros."

02

Summary Metrics

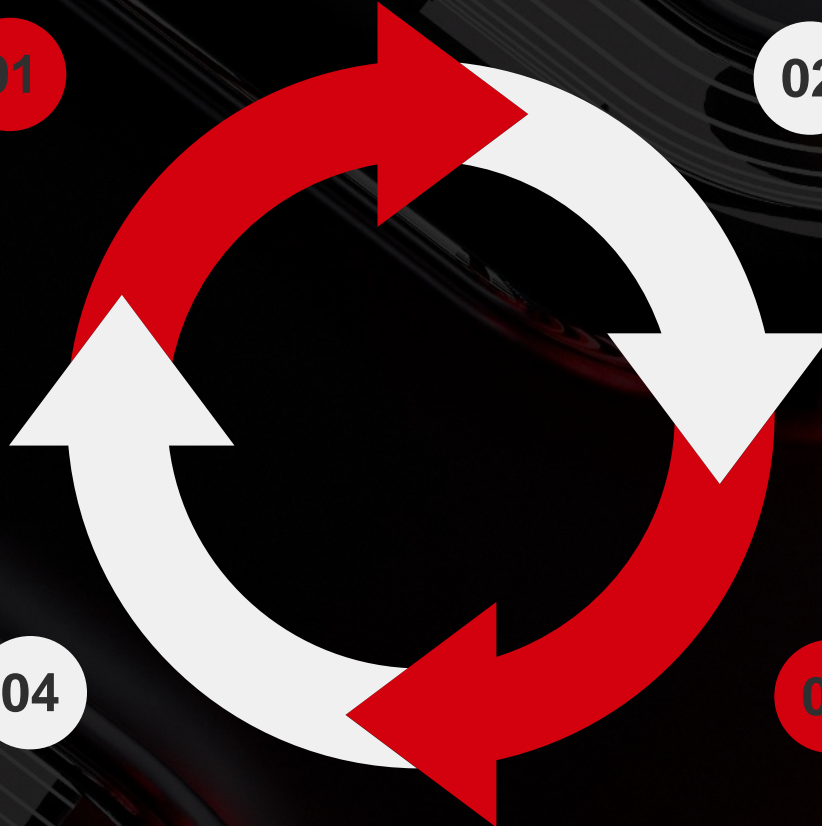
Summary cards display key metrics, including total publishers (579), game titles (11,493), platforms (31), and genres (12).

04

Top 10 Platforms

A bar chart shows platforms contributing the most to global sales, with Wii and GBA leading the chart.

03



04

•Visualization and Insights

Sales Trends Over Time

01

Yearly Sales Trends

Line graphs illustrate sales trends over time, showing growth and decline periods in the gaming industry.

02

Regional Sales Distribution

Pie charts display regional sales distribution, highlighting key markets like North America and Europe.

03

Forecast Indicators

Line charts include forecasted sales data, providing insights into potential future trends.

Genre and Platform Analysis

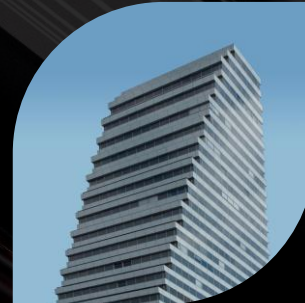
Total Sales by Genre

Vertical bar charts show sales by genre, with Action and Sports leading in popularity.



Sales by Genre Bubble Chart

Bubble charts emphasize genre performance, with bubble size proportional to total sales.



Platform Impact on Sales

Analyze how platforms like Wii and PS4 have shaped the gaming market.



Dominant Genres and Platforms

Identify the most popular genres (Action, Sports) and platforms (Wii, GBA) based on sales data.





05

•Key Insights

Dominant Publishers and Games



Nintendo's Leadership

Nintendo dominates global sales, driven by iconic titles like "Wii Sports" and "Super Mario Bros."



Iconic Titles: Wii Sports, Super Mario Bros.

These games are among the top-selling titles, reflecting their widespread popularity.



Other Leading Publishers

Sony Computer Entertainment and Electronic Arts also play significant roles in the industry.

Regional and Genre Preferences

Regional Sales Trends

Sales trends vary by region, with notable peaks during console release years.

1

Top-Selling Genres: Action, Sports

Action and Sports genres consistently perform well across all regions.

2

Genre Performance Across Regions

Analyze how genre preferences differ between North America, Europe, and Japan.

3

Impact of Console Release Years

Console release years significantly impact sales trends, driving spikes in regional and global sales.

4

06

•Conclusion and Recommendations

Summary of Findings



01

Key Trends Identified

Dominant genres (Action, Sports), platforms (Wii, GBA), and publishers (Nintendo) drive global sales.



02

Insights for Stakeholders

Stakeholders can optimize strategies by focusing on popular genres and platforms.



03

Data-Driven Decision Making

The dashboard empowers stakeholders to make informed, data-driven decisions.

Future Directions

Potential Areas for Further Research

Explore emerging markets and the impact of new gaming technologies.

Recommendations for Industry Stakeholders

Invest in popular genres and platforms while exploring untapped markets.

Enhancing Dashboard Interactivity

Add more dynamic filters and drill-down features to improve user experience.

01

02

03



• Thanks

Dharmik Shah