**Video Game Sales Analysis**

**Problem Description:**

With the development of technology, video games becomes a symbol of technology innovation. Special events like The Game Awards becomes one of the hottest events globally. Therefore some game players or investment companies become interested in what type of game on what platform succeed in the global market. This project is to analyze video game sales data to identify trends and factors contributing to successful global sales. The analysis will focus on why some video games have the potential to be sold successfully worldwide based on various criteria such as genre, platform, publisher, and region.

**Objectives:**

To develop a database that can show the entire information of games and provide list for sorting, the database contains 4 main classes: Game name, Publisher of the game, Platform of the game, The selling data around the world. The other 4 classes are: Game category, The publisher, The platform, Different region.

Data Schema Overview:

Game:

-game\_id(PK)

-category\_id(FK)

-game\_name

Game\_category:

game\_category\_id(PK)

category\_name

Game\_platform:

game\_platform\_id(PK)

game\_publisher\_id(FK)

platform\_id(FK)

release\_year

Game\_publisher:

game\_publisher\_id(PK)

game\_id(FK)

publisher\_id(FK)

Platform:

platform\_id(PK)

platform\_name

Publisher:

publisher\_id(PK)

publisher\_name

Region:

region\_id(PK)

region\_name

Region\_sales: (Table that can give the most popular game after sorting)

region\_id(PK,FK)

game\_platform\_id(PK,FK)

num\_sales

**The information are from two research papers:**

The Impact Of Platforms On Global Video Games Sales:

[View of The Impact Of Platform On Global Video Game Sales (clutejournals.com)](https://www.clutejournals.com/index.php/IBER/article/view/8136/8186)

What Makes a Blockbuster Video Game? An Empirical Analysis of US Sales Data:

[What Makes a Blockbuster Video Game? An Empirical Analysis of US Sales Data - Cox - 2014 - Managerial and Decision Economics - Wiley Online Library](https://onlinelibrary.wiley.com/doi/pdf/10.1002/mde.2608)

**Rules:**

* The database must store sales data for different gaming platforms, such as Nintendo's Wii, DS, Sony's PlayStation 3, Microsoft's Xbox 360, PC, PlayStation 2, PSP, and Nintendo GameCube.
* Data integrity and accuracy are paramount, ensuring that all entries are valid and up-to-date.
* The database should be user-friendly, allowing stakeholders to access and interpret the data easily for strategic decision-making.
* Every game can only have one category to define the type of the game, but one category can contain many games.
* The game publisher can publish many games, and one game can only be published by one publisher.
* The game platform can have multiple game publisher to publish games, but we assume that one publisher just make game for a certain platform.
* The region just have 4 different regions, North America, Europe, Japan and other.
* Region sales table shows all sales made for games in each region. It’s the main table used to calculate the sales for queries.

**Possible Nouns:**

Platform

Sales data

Revenue

Units sold

Market share

Technological innovations

Competition

Integration

Expansion

Mergers

Acquisitions

Trends

Analysis methods

Data integrity

User interface

**Possible Actions:**

Store

Track

Record

Analyze

Capture

Monitor

Support

Ensure

Access

Interpret

**Supporting notes**

Combining insights from both research papers, it's evident that the video game industry underwent significant changes and developments during the studied period of 2006 to 2021. The first paper discusses the impact of platform on global video game sales, highlighting the dominance of Nintendo's Wii and DS consoles, followed by Xbox 360, PlayStation 3, and PC. It emphasizes the platform-oriented nature of the market and the importance of innovations like the Wii's motion-sensing technology. On the other hand, the second paper delves into the mechanics of video game sales, considering factors like platform, genre, ratings, and critical reviews. It also explores emerging trends such as mobile gaming and online content delivery, suggesting that these developments may reshape the industry landscape in the future. By synthesizing the findings from both papers, we gain a comprehensive understanding of the video game market dynamics, including sales patterns, competitive strategies, and potential future directions.

**Keywords useful in database analysis:**

Platform: Wii, DS, Xbox 360, PlayStation 3, PC, PlayStation 2, PSP, GameCube.

Sales Metrics: Global sales, tier ranking, revenue.

Technological Innovations: Motion-sensing, HD, online delivery, human-computer interaction.

Market Dynamics: Competition, vertical integration, horizontal expansion, mergers, acquisitions.

Emerging Trends: Mobile gaming, online content delivery, cloud computing.

Research Methodology: Kruskal-Wallis test, regression analysis.