REPORTI

Business Intelligence

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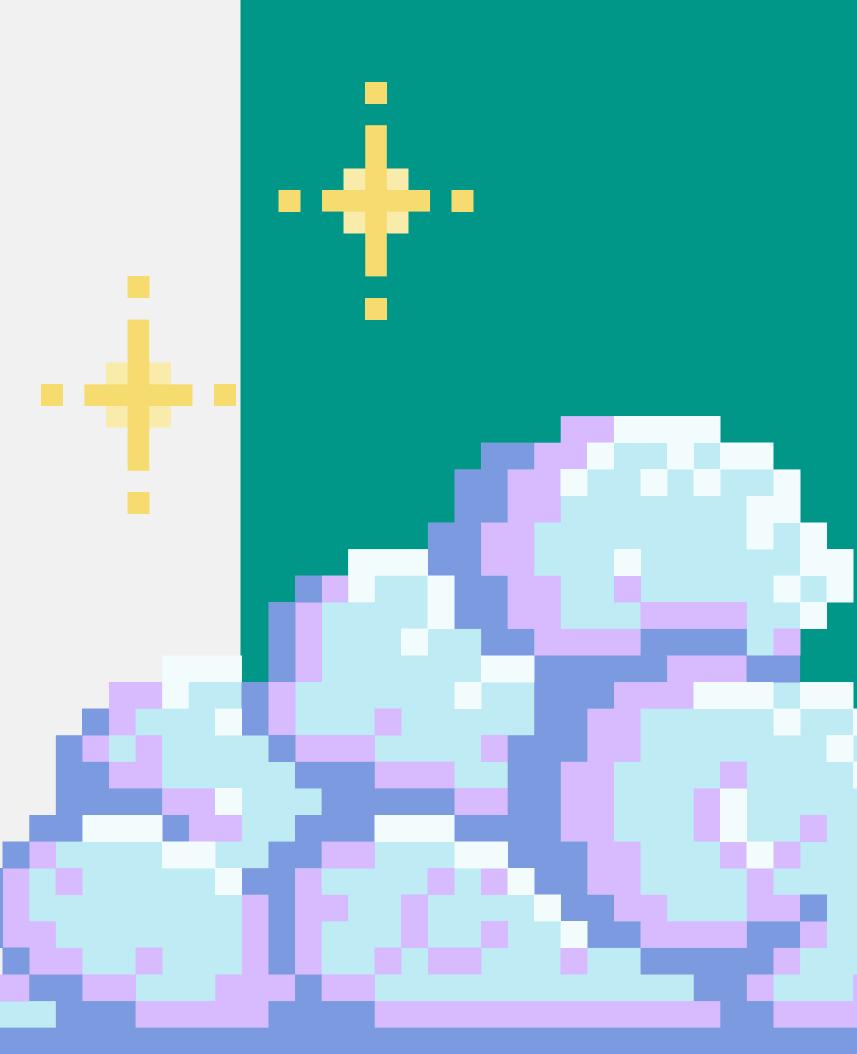


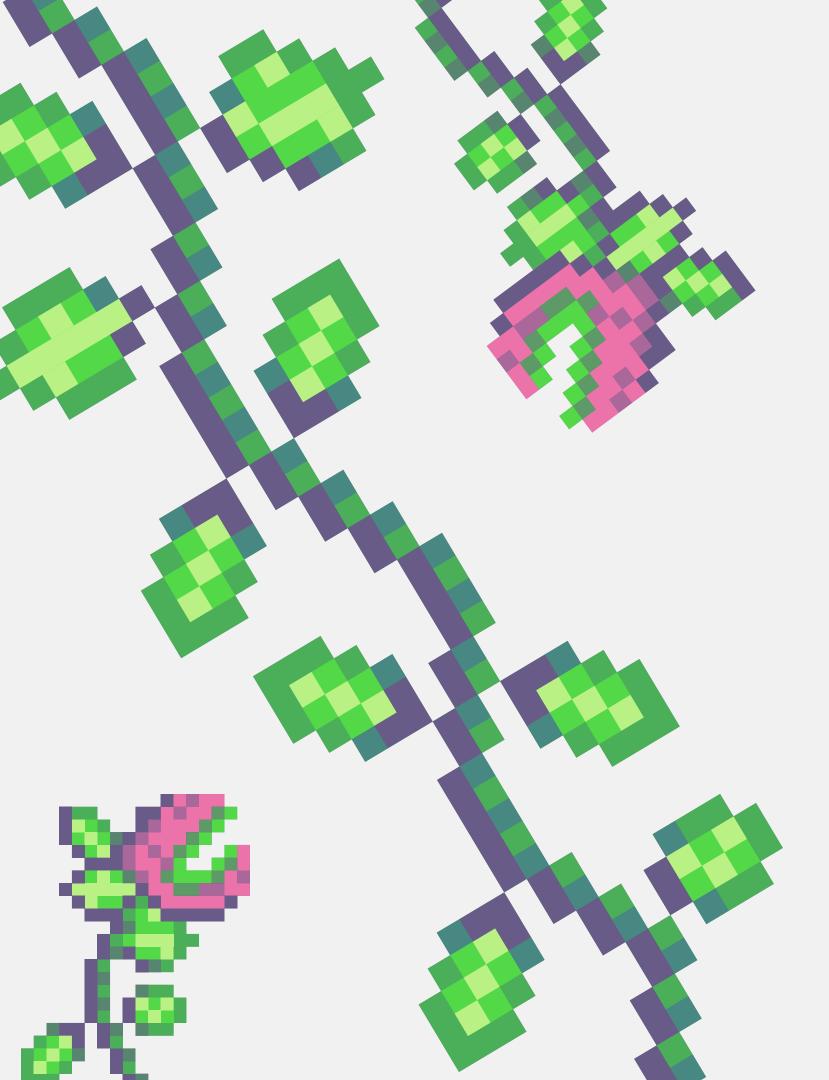
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Introduction

The video game industry is one of the most dynamic and profitable entertainment sectors globally, surpassing music and cinema combined. From a strategic perspective, identifying consumption trends, optimizing marketing strategies, and personalizing player experiences are crucial. For this reason, video game data analysis is an essential tool to understand and enhance the impact and growth of this sector.

This project uses the "Video Game Sales" dataset, which contains historical information on 16,500 video games with a minimum of 100,000 units sold.





Description of the data

The dataset is presented in a tabular format, structured with categorical variables (such as platform, genre, etc.) and quantitative variables (sales in different regions). The main features of this dataset are as follows:

- Name: Title of the video game
- Year: Year of release
- Genre: Type of game
- Platform: Device on which it was released
- Publisher: Responsible distribution company
- Rank: Global position of the title in terms of sales
- Sales Metrics: Regional and global sales



Average Sales per Game

Publisher Market Share

Regional Sales by Platform

Top Genre by Global Sales

Total EU Sales

Total JP Sales

Total NA Sales

Total Other Sales

Total Sales

Collapse 🛆

Data loading and preparation

Import and Cleaning

The data in .csv format was loaded into Power BI. During the import process, I cleaned duplicates (particularly useful in the 'Platform' and 'Year' sections), removed null values, and eliminated unnecessary columns.

Preparation

I created a new table for the regions by unpivoting the regional sales columns. Additionally, I created a metrics table with the following indicators, as shown in the image and described in the next slide.

Indicators

Average Sales

Measures the global performance of the project (adjusted to average per game).

Top Genre

Identifies the most profitable genre in terms of global sales.

Market Share

Determines the competition and market share of the publishers.

EU Sales

Analyzes the importance of the European market.

Regional Sales

Compares regional performances by platform.

JP Sales

Analyzes the importance of the Japanese market.

Indicadors

NA Sales

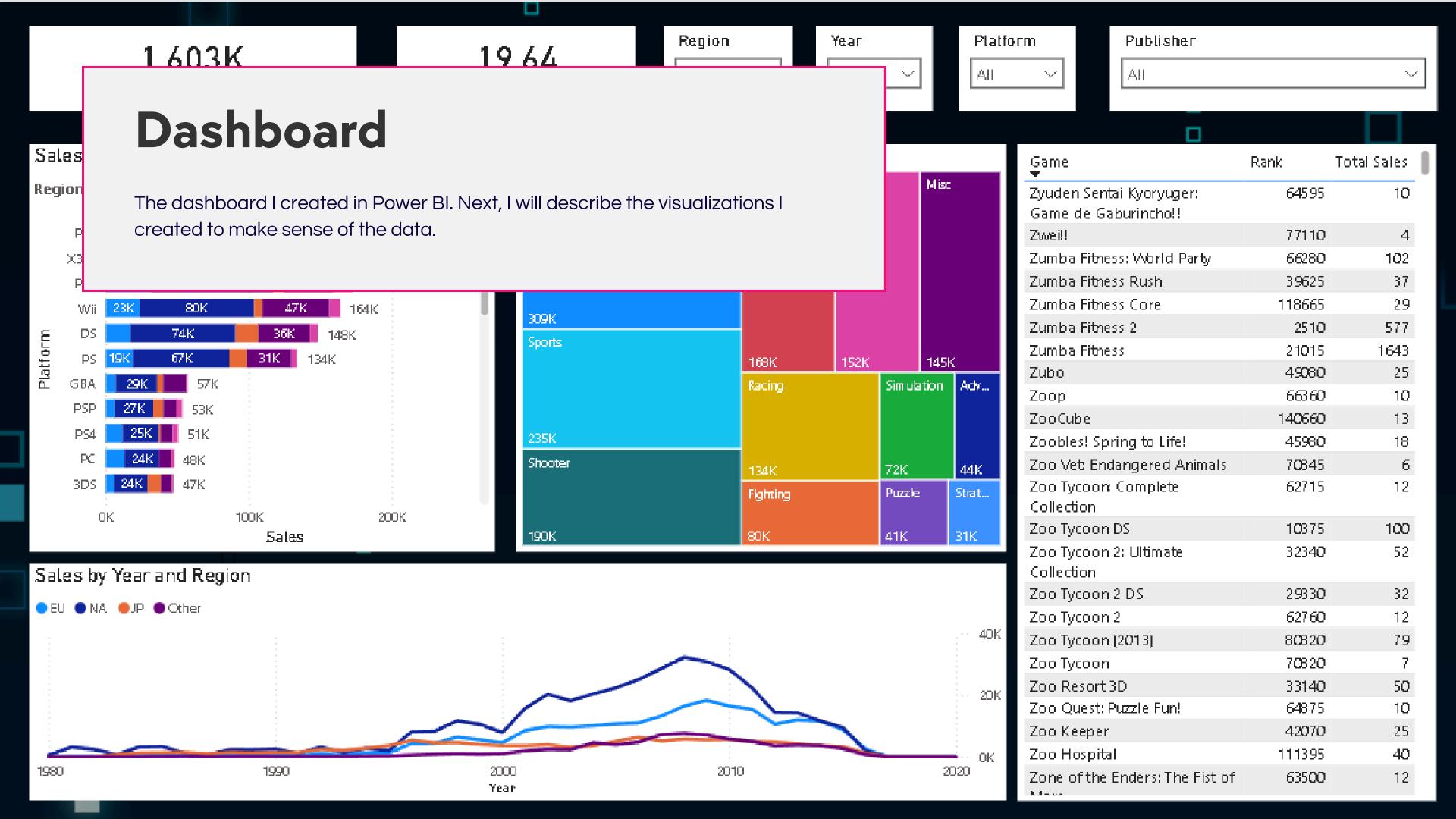
Analyzes the importance of the North-American market.

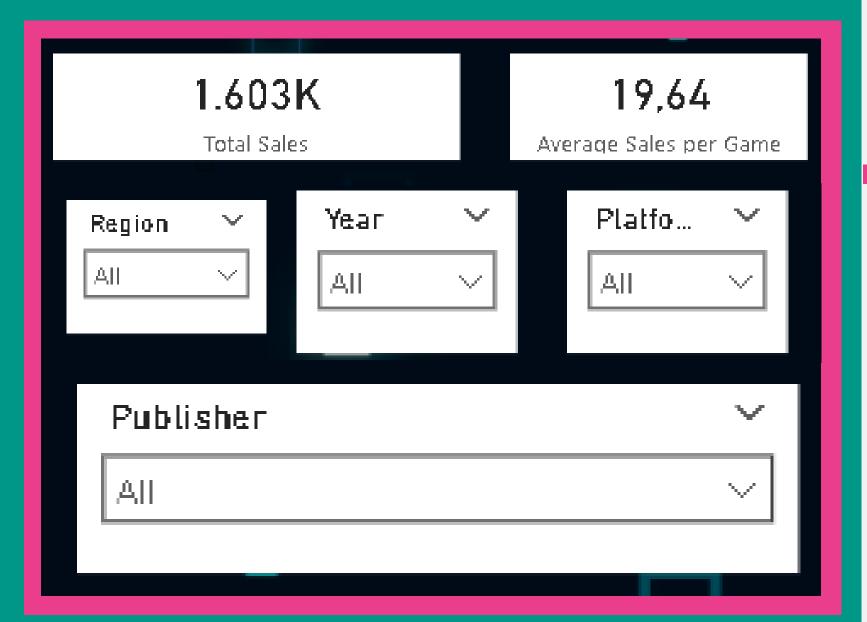
Other Sales

Analyzes the importance of other unspecified markets.

Total Sales

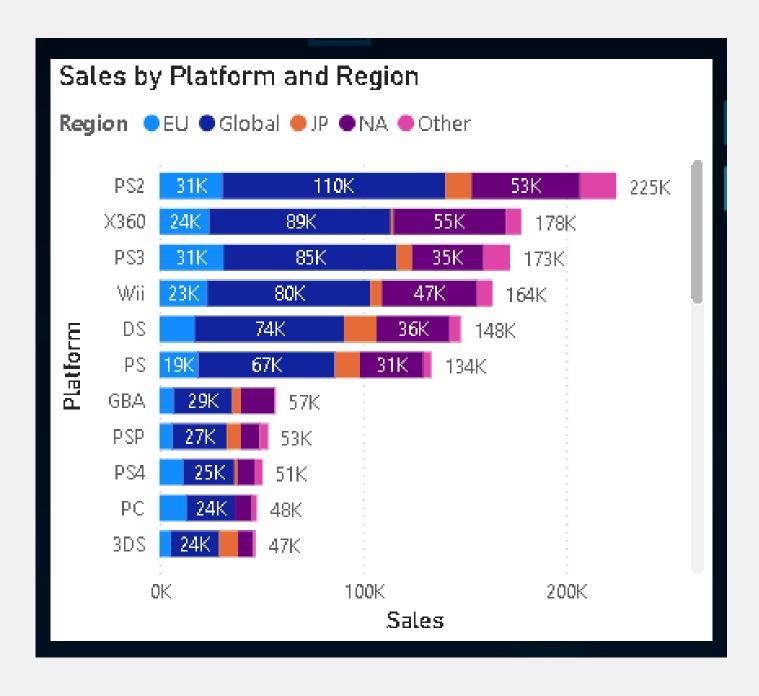
Measures the global performance of the video game.





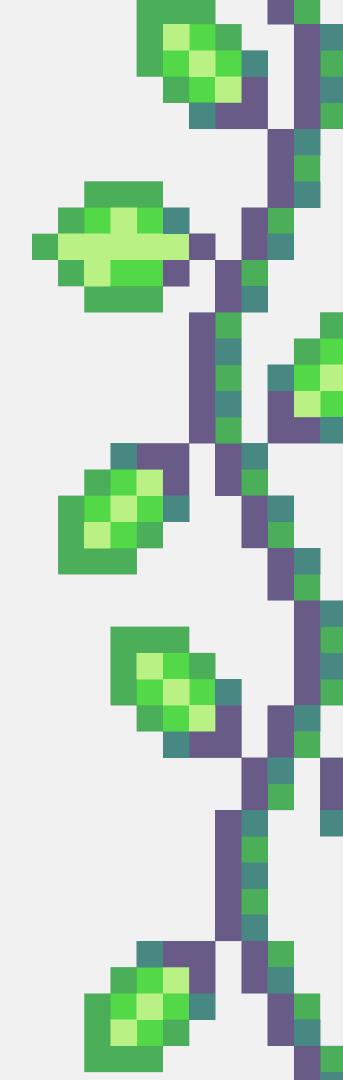
Filters

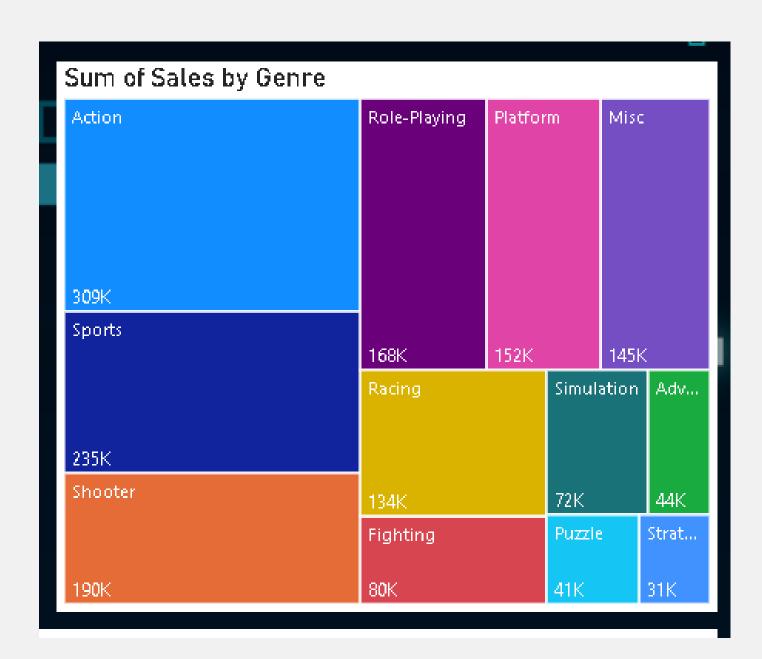
The user can segment the data by region, release year, and company, and in addition to modifying the visualizations, it displays the total sales and the average sales per title as metric cards.



Regional Sales Platform

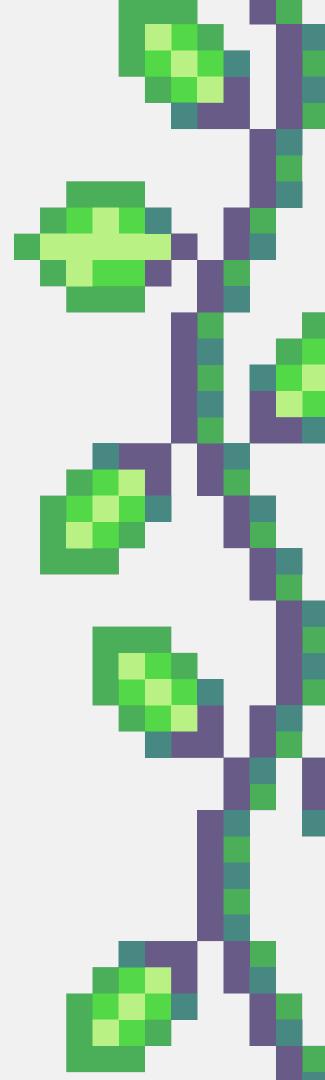
A stacked bar chart displays sales by region and platform, highlighting the units sold.





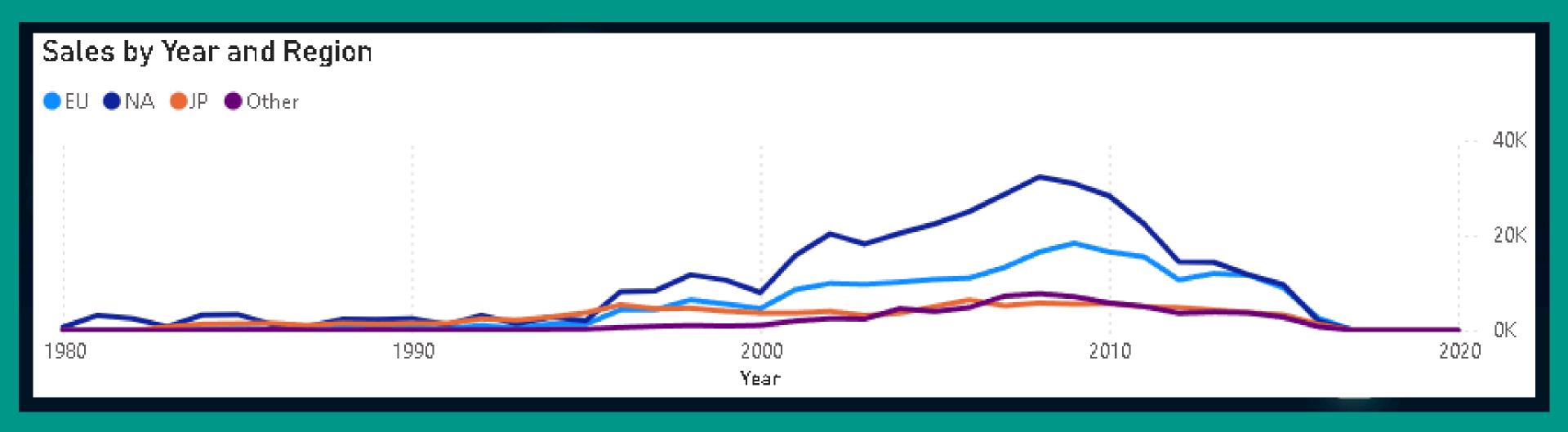
Most Popular Genres

A Treemap shows the distribution of sales by genre.



Sales by Year and Region

A line chart shows the trend and annual comparison of sales by region.



Game	Rank	Total Sales
Wii Sports	5	16548
Grand Theft Auto V	10910	8916
Super Mario Bros.	1015	8639
Mario Kart Wii	15	7165
Pokemon Red/Pokemon Blue	25	6176
Call of Duty: Modern Warfare 3	17295	6113
Call of Duty: Black Ops	23335	5755
Duck Hunt	50	5662
Call of Duty: Black Ops II	29230	5558
Call of Duty: Ghosts	45025	5475
New Super Mario Bros. Wii	45	5300
Super Mario World	920	5198
New Super Mario Bros.	35	5156
Tetris	810	5080
Call of Duty: Modern Warfare 2	12210	5019
Wii Play	40	4975
Grand Theft Auto: San Andreas	64220	4736
Mario Kart DS	60	4685
Super Mario 64	535	4463
Call of Duty: Black Ops 3	45790	4405
Kinect Adventures!	80	4364
Wii Fit	70	4220
Grand Theft Auto IV	12340	4217
Brain Age: Train Your Brain in Minutes a Day	100	4044
Super Mario Bros. 3	1030	4011
Minecraft	32070	3920

Rankand Total Sales

A table that allows users to view the ranking of titles in alphabetical order, by global position, and by sales.



Sony, Microsoft, and Nintendo are the three companies that have dominated the video game industry, with the PlayStation, XBOX360, and Wii consoles.



The North American audience leads in title consumption, followed by Europe. The most popular console in both regions is PlayStation, with XBOX being especially popular in North America.



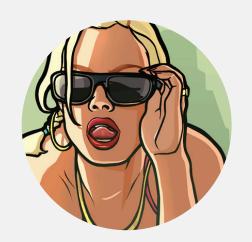
Portability, in the blink of an eye

It is noteworthy that the portable versions of Sony (PSP) and Nintendo (DS) experienced a rise and fall between 2004 and 2012. This is likely related to improvements in internet connectivity and mobile games. Games that became extremely popular on mobile phones, such as Minecraft Mobile (2011) and Candy Crush Saga (2012), emerged during this period.



The "death" of consoles

According to the data, since 2010, sales across all consoles have been decreasing. 2008 was the golden year, with a historical peak. Similarly to portable consoles, it would be interesting to analyze the improvements in internet connectivity and mobile phones, which have enhanced accessibility to many more titles and ways to connect through gaming.



Grand Theft Auto, a lucrative business

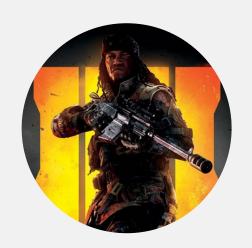
The Grand Theft Auto series leads sales in the most popular genre: action. Four of its titles top the list of the top 10 best-selling games in this category



Sports, digitized

Nintendo found the cash cow with Wii Sports and Wii Fit, making up 40% of the top 10 in the second most popular genre: sports. Their innovative motion controls allowed people of all ages to practice sports at home, becoming one of the flagship features of the Wii.

On the other hand, almost the entire remainder of the top 10 is dominated by the FIFA series, which has proven that football is popular both in physical and digital formats.



Competition and realism

In the third most popular genre, we find first-person shooters (FPS). The Call of Duty series occupies 80% of the top 10. The appeal of FPS games lies not only in their mechanical demands on the player but also in their ability to immerse players in historical military situations and moments. Being one of the most popular genres, and given its position on the list, it can be said that the Call of Duty series is one of the best-selling and most well-known sagas of all time.



Nintendo's legacy

Video game sales began to gain significant weight in the early 90s. Games like the Pokémon series, Super Mario Bros, and Kirby top the rankings of these periods, so even though Nintendo is not the most popular company today, it must be said that it set a precedent.





Technological changes influence consumer preferences.

Franchises

The creation of popular franchises ensures a loyal audience and increases the longevity of companies.

Innovation

The case of the Wii highlights how disruptive proposals can be a key to success.

Connectivity

The online and multiplayer mode has changed the industry, fostering the emergence of competition and creating new social spaces.

Conclusions

ons

And now, what?

The data suggests that it is important to focus on the online world and closely follow the evolution of smartphones as consoles, as well as the emergence of new devices that allow for previously unseen ways of gaming.

About the dashboard

The presented insights are just a few examples of the vast amount of information that could be extracted, highlighting their usefulness in making strategic decisions, depending on what stakeholders aim to find out.

REFERENCES

Kelly, Christian & Johnson, Paul (2021). Gaming Is the Next Superplatform. ACCENTURE: Software & Platforms. Available on: https://www.accenture.com/us-en/insights/software-platforms/gaming-the-next-super-platform

BAIN & COMPANY (2024). El mercado de los videojuegos reporta ganancias de \$196 mil millones. Avaliable on: https://www.bain.com/es/about/media-center/press-releases/south-america/2023/el-mercado-de-los-videojuegos-reporta-ganancias-de-%24196-mil-millones/