

# 1)Project Description

Name: Video Game Sales Analysis

## Problem Statement:

The global video game industry has become one of the most lucrative entertainment sectors, with billions of dollars in annual revenue. However, the factors that drive video game sales remain complex and multi-faceted, varying significantly by platform, genre, and region. Publishers and developers often struggle to predict market trends and optimize their strategies to maximize revenue.

This project aims to analyze the **"Video Game Sales"** dataset to uncover insights into global and regional sales trends, platform performance, and genre popularity. By understanding these trends, stakeholders in the gaming industry can make data-driven decisions to enhance their market strategies, increase profitability, and cater to evolving consumer preferences.

## Possible Impact of Your Analysis:

The insights derived from analyzing this dataset could lead to significant benefits for various stakeholders in the gaming industry:

- **Publishers and Developers:** Gain insights into successful game genres and platforms to align production strategies with market demand.
- **Marketers:** Develop targeted marketing campaigns based on regional preferences and popular genres.
- **Platform Owners:** Identify platform-specific sales trends to make informed decisions about game exclusivity and partnerships.
- **Investors:** Use sales trends to identify profitable opportunities in the gaming sector.

## Dataset(s):

(Include information on where your dataset is from, the license for using the dataset, and a brief description of the variables included in your dataset.)

This dataset contains a list of video games with sales greater than 100,000 copies. It was generated by a scrape of [vgchartz.com](https://www.vgchartz.com).

and can be found on:

<https://www.kaggle.com/datasets/gregorut/videogamesales/data>

The **"Video Game Sales"** dataset contains comprehensive data on video game sales globally. The dataset includes the following key attributes:

- **Name:** Title of the video game.
  - **Platform:** Gaming console or platform (e.g., PS4, Xbox One, PC).
  - **Year:** Year of release.
  - **Genre:** Category of the game (e.g., Action, Adventure, Sports).
  - **Publisher:** Company responsible for publishing the game.
  - **NA\_Sales:** Sales in North America (in millions).
  - **EU\_Sales:** Sales in Europe (in millions).
  - **JP\_Sales:** Sales in Japan (in millions).
  - **Other\_Sales:** Sales in other regions (in millions).
  - **Global\_Sales:** Total worldwide sales (in millions).
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## 2)Project Scoping Document

Name: Video Game Sales Analysis

### Business Problem:

The video game industry has grown into one of the largest entertainment sectors globally, and there are so many factors that affect sales. Things like the platform (PS4, Xbox, etc.), game genre, and where people live all play a role. For this project, I want to figure out what makes certain games sell better than others, both globally and in specific regions. This kind of analysis could help game companies make smarter decisions about what games to make and where to market them.

### Business Impact:

Figuring out what drives video game sales, could be really helpful to a lot of people in the industry. For example:

- **Game publishers:**By analyzing which genres and platforms perform best, they can optimize their strategies for future releases.
- **Marketing teams:** The findings can help design region specific marketing campaigns to target the right audience for specific genres or games.
- **Investors:** They can use the results to identify high growth areas to guide their investments.

## Dataset(s):

### Video Game Sales Dataset

#### Key Variables:

- Platform, Genre, Release Year, Publisher
- Regional Sales(North America, Europe, Japan)
- Global Sales

#### Strengths:

- This dataset covers several decades, providing opportunities to analyze long term trends.
- Regional sales data allows for comparative analysis of preferences across markets.

#### Weaknesses:

- Some missing values in columns (Publisher, Year).
- Lack of contextual data such as marketing budgets or player demographics which could provide additional insights.

#### Additional Data Needs:

- Regional demographics information(e.g. age groups, income level).
- Marketing budgets.

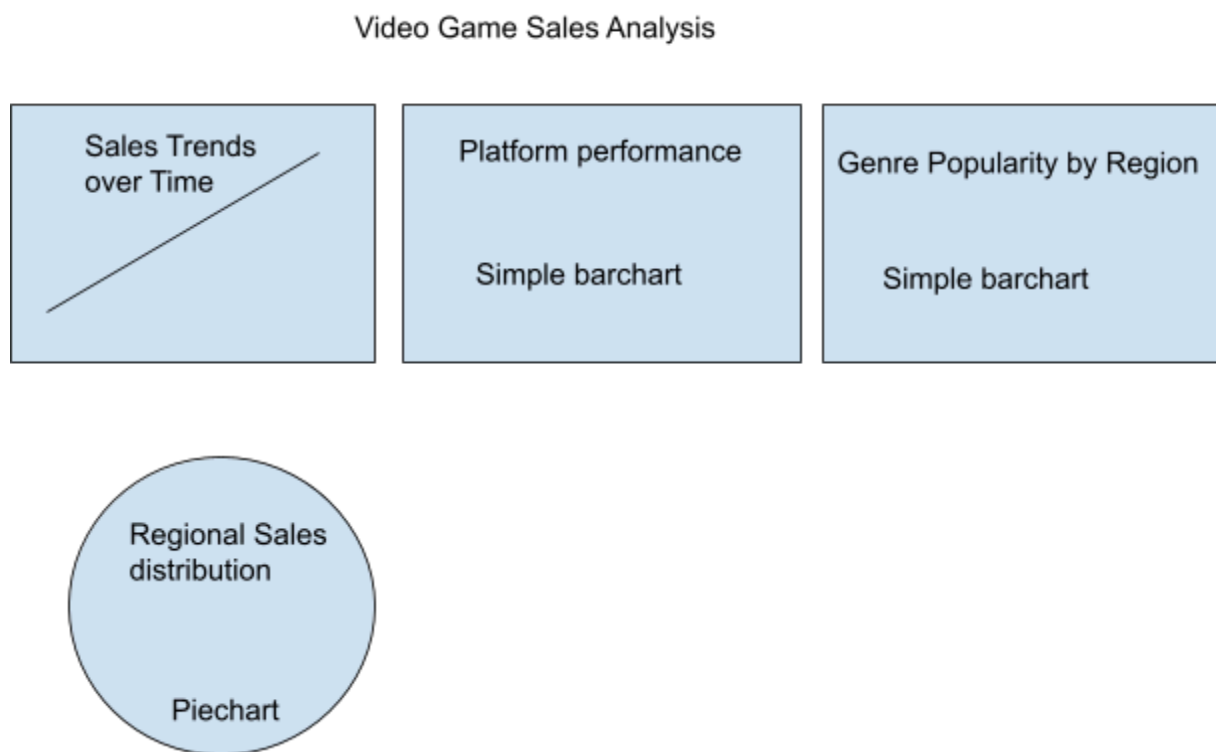
## Methods:

To analyze the dataset, I will focus on identifying relationships between variables such as:

- Platform and Global Sales: Which platform is the best?
- Genre and Regional Sales: What genres are most popular in each region?
- Release Year and Sales Trends: Sales evolution over time.
- Publisher and Global Sales: Which publishers consistently perform well?

## Dashboard

Build an interactive dashboard using Tableau to present the results effectively.



## Milestones

Week	Tasks
Week 1	<ul style="list-style-type: none"> <li>● Familiarize myself with the dataset and explore it.</li> <li>● Clean the data.</li> <li>● Identify key variables to analyze</li> <li>● Feature Engineering if possible(Creating new features from existing features)</li> </ul>
Week 2	<ul style="list-style-type: none"> <li>● Conduct EDA</li> <li>● Create visualizations</li> <li>● Identify trends and relationships between variables</li> </ul>
Week 3	<ul style="list-style-type: none"> <li>● Develop the dashboard</li> <li>● Write and finalize the project report</li> </ul>