

### 1. What insights or patterns did you discover during your analysis?

- Best Top 5 selling games –
  - Grand Theft Auto V
  - Call of Duty: Black Ops 3
  - Red Dead Redemption
  - Call of Duty: WWII 2
  - FIFA 18
- **Action** genre has the highest global sale.
- **Activision** publishers have the highest global sale.
- **2017**, it was the highest games release year.
- **Monster Hunter: World**, this is the game which has a highest sale in **Japan in 2018** as compared to other regions
- North- America and Europe has a perfect positive correlation.
- Genre High sale b/w Action & Shooter.
  - **Action** genre has the highest sale in 2014.
  - **Shooter** genre has the highest sale in 2015.
- Distribution of global sales have right skew.
- In all regions **Europe** has a high edge on sales as compared to NA, Japan, or rest of the worlds.
- In 2015 sales touch higher mark, and in 2018 sales were drastically down. And this downfall continues till 2019.

### 2. Did anything in the data surprise you? If yes, what was it?

Nothing surprised me.

### 3. What challenges did you face, and how did you overcome them?

*Challenges:*

In data bunch of the rows have 0 regional sales, means all regions have 0 sale. This is the big challenge for me to handle it. Although 0 is not an outlier, it is a genuine value because the upper part of data has 0 value. So, when I impute the 0 value rows didn't touch any specific 0 value. I ensure that where all 0 value row comes where you impute with technique I used. I used mean, median technique because for numerical columns we used this technique frequently.

After using imputation technique, put same random values in specific columns where all rows have 0 value, this is also a problem. So, I handle it with uniform function to generate different random values.

#### **4. How do you think data analysis can help in making real-world decisions?**

Data analysis is a field which drives from real-world data. If your data has potential to give insights, data analysis plays an essential role in your decisions.

#### **5. What skills or knowledge do you feel you have improved during this project?"**

- Imputation with random values
- Imputation with condition
- Stacked bar chart
- How to interpret correlation matrix
- Replace value in column
- Imputation on year column
- Encoding for reading csv file.