

VIDEO GAME SALES WITH RATINGS

T5 – EDA project | Elham alzahrani





ABOUT US



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INTRODUCTION:

The global video game market size was valued at USD 151.06 billion in 2019 and is expected to grow at a Compound Annual Growth Rate (CAGR) of 12.9% from 2020 to 2027.



EDA ANALYSIS:



This dataset describe a list of video games with sales greater than 100,000 copies. It was generated by a scrape of vgchartz.com. It contains 16 columns (fetcher) and 16720 rows. The data extracted from Kaggle web site and if you want to know more click [here](#).



```
: ▶ # the numbers of rows & columns in the dataframe  
project.shape
```

```
728]: (16719, 16)
```

```
: ▶ #shows the name of columns  
project.columns
```

```
729]: Index(['Name', 'Platform', 'Year_of_Release', 'Genre', 'Publisher', 'NA_Sales',  
           'EU_Sales', 'JP_Sales', 'Other_Sales', 'Global_Sales', 'Critic_Score',  
           'Critic_Count', 'User_Score', 'User_Count', 'Developer', 'Rating'],  
          dtype='object')
```

```
▶ #used to view some basic statistical details.  
project.describe()
```

]:

	Year_of_Release	NA_Sales	EU_Sales	JP_Sales	Other_Sales	Global_Sales	Critic_Score	Critic_Count	User_Count
count	16450.0000	16719.0000	16719.0000	16719.0000	16719.0000	16719.0000	8137.0000	8137.0000	7590.0000
mean	2006.4874	0.2633	0.1450	0.0776	0.0473	0.5335	68.9677	26.3608	162.2299
std	5.8790	0.8135	0.5033	0.3088	0.1867	1.5479	13.9382	18.9805	561.2823
min	1980.0000	0.0000	0.0000	0.0000	0.0000	0.0100	13.0000	3.0000	4.0000
25%	2003.0000	0.0000	0.0000	0.0000	0.0000	0.0600	60.0000	12.0000	10.0000
50%	2007.0000	0.0800	0.0200	0.0000	0.0100	0.1700	71.0000	21.0000	24.0000
75%	2010.0000	0.2400	0.1100	0.0400	0.0300	0.4700	79.0000	36.0000	81.0000
max	2020.0000	41.3600	28.9600	10.2200	10.5700	82.5300	98.0000	113.0000	10665.0000

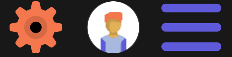
```
▶ #find sum of null values  
project.isna().sum()
```

```
: Name                2  
Platform              0  
Year_of_Release      269  
Genre                 2  
Publisher             54  
NA_Sales              0  
EU_Sales              0  
JP_Sales              0  
Other_Sales           0  
Global_Sales          0  
Critic_Score          8582  
Critic_Count          8582  
User_Score            6704  
User_Count           9129  
Developer            6623  
Rating               6769  
dtype: int64
```

```
▶ project.isna().sum()
```

```
: Name                0  
Platform              0  
Year_of_Release      0  
Genre                 0  
Publisher             0  
NA_Sales              0  
EU_Sales              0  
JP_Sales              0  
Global_Sales          0  
Critic_Score          0  
User_Score            0  
Rating               0  
dtype: int64
```

DESIGN :QUESTIONS TO ANSWER



01

Are the ratings affect the sales?



02

What is the most widely Genre on each platform?

03

What is the Top five bestseller gems?

04

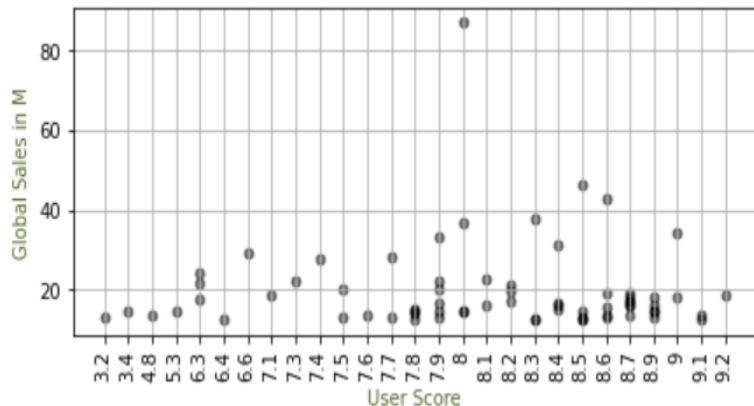
Which country has largest sales over the world?

05

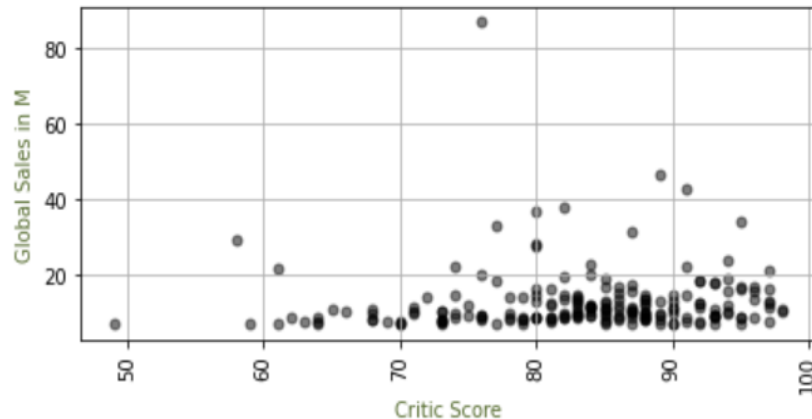
Who is the top selling publisher?

ARE THE RATINGS AFFECT THE SALES?

Relationship curve



Relationship curve



Based on previous curves;

we can say there is no real relationship between the critic and users score on sales over the world, so we can reduce the Financial investments in that field for now and focusing on other factors that affect directly to the sales. And I suggest to work with a new sample of critic and users score with detailed behaviors, which helps to understand the gaps and try to make a good improvement plans for this part of gamers community.

WHAT IS THE MOST WIDELY GENRE ON EACH PLATFORM?

Genre	
Platform	
3DS	Strategy
DC	Sports
DS	Strategy
GBA	Strategy
GC	Strategy
PC	Strategy
PS	Strategy
PS2	Strategy
PS3	Strategy
PS4	Strategy

Good analysis of the market highlight you're next step, as we can see there is Great acquisition from the Strategy Gener on the Platforms. That can be considered to games developers team

WHAT IS THE TOP FIVE BESTSELLER GEMS?



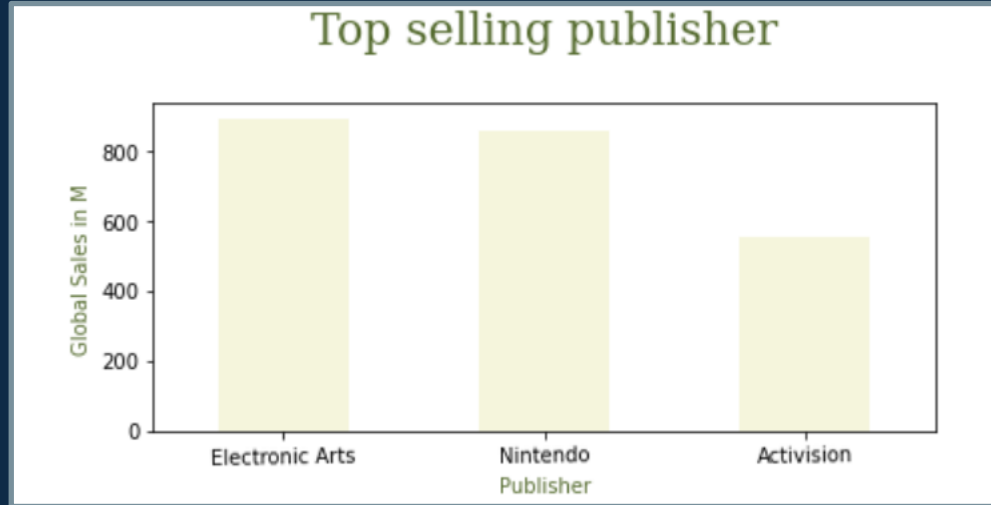
It's important to know how to reach your target audience! from Nice simple question we can obtain to many fechers in our new games developments by simply analyze each game and find good data analysis of target community, preferred type of visualization and so,on. Also we can find Similarities of all five games for example, all of them available on PS3 platform so, we can publish our new game on that platform since we know fact it have wide users over the world. All that facts can help to increase your sales by align the market needs.

WHICH COUNTRY HAS LARGEST SALES OVER THE WORLD



As you can see above, japan has the largest sales over the world in 1985 - 2016. Knowing your user demographics will be necessary for selecting the right channels for your promotions. And Exposure new Foreign Investment

WHO IS THE TOP SELLING PUBLISHER?



The Top selling publisher is Electronic Arts, Nintendo, Activation.



TOOLS

Jupyter, Python: (Matplotlib - NumPy - Pandas) ,power point ,slidesgo.



CONCLUSION

THANK YOU 😊