Investment Analysis Assignment

SUBMISSION

Name: Tushar Prasad

Course: PGDML

Batch: Jan 2021

Business Objective

- The objective is to identify the **best sectors, countries, and a suitable investment type** for making investments. The overall strategy is to invest where others are investing, implying that the 'best' sectors and countries are the ones 'where most investors are investing' .

- Goals of data analysis: The goals are divided into three sub-goals:

    - Investment type analysis: Comparing the typical investment amounts in the venture, seed, angel, private equity etc. so that Spark Funds can choose the type that is best suited for their strategy.

    - Country analysis: Identifying the countries which have been the most heavily invested in the past. These will be Spark Funds' favorites as well.

   - Sector analysis: Understanding the distribution of investments across the eight main sectors.
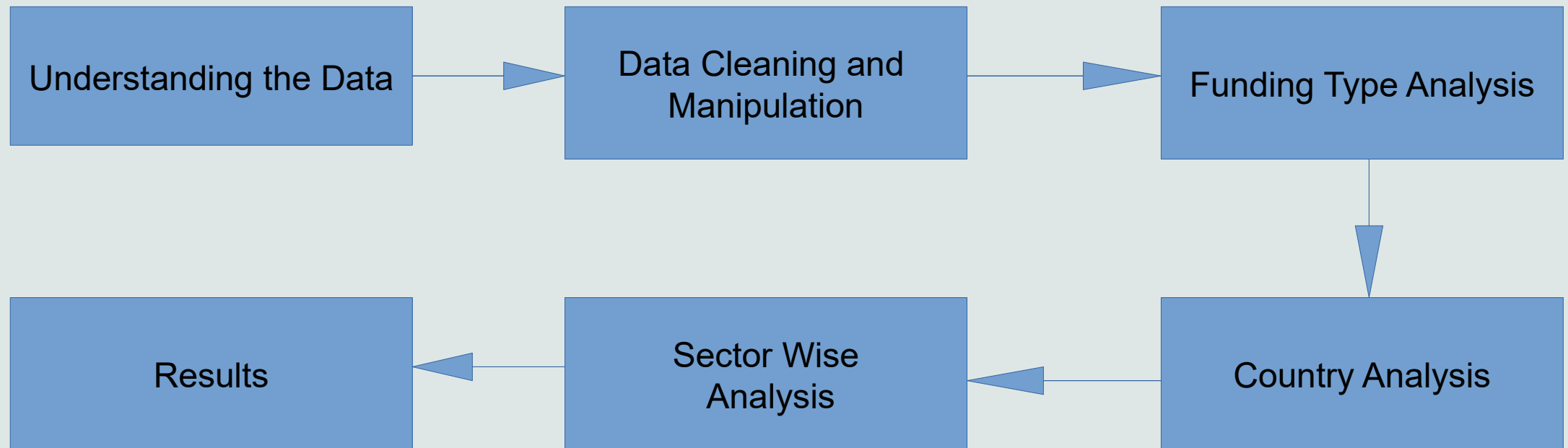
<u>Data Inspection and Cleaning</u>

- Number of unique companies present are 66368.

- Total number of investments are 1,14,949.

- After dropping rows having null values we retain 77% of the total information for our analysis.

- Important features found in the data are country code, funding_round_type, and category_list which are used to subsequent analysis.

Funding Type Analysis

Funding Type vs Raised Amount in Million USD
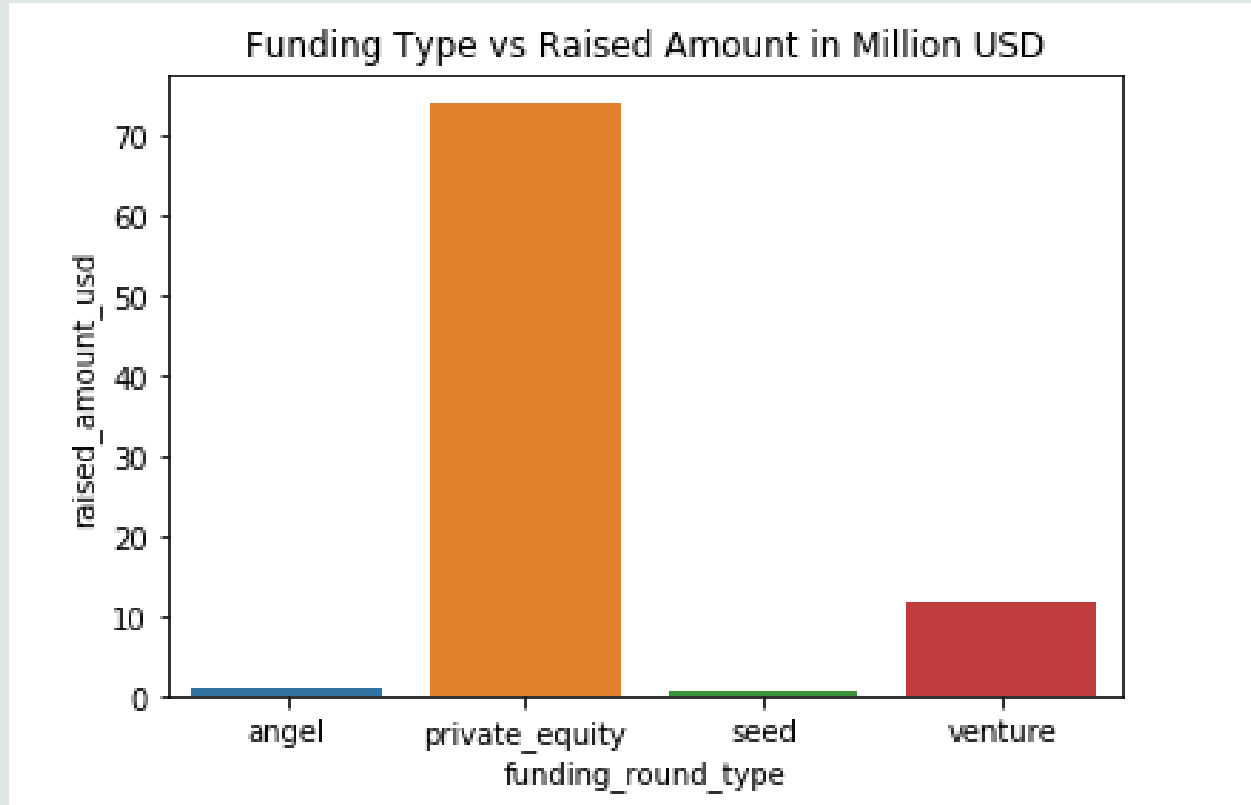
1) There are four funding types which we are looking at namely, venture, angel, seed, and private equity.
2) We will choose a particular funding type depending on the representative values of the investment amount.
3) Spark Funds wants to invest between 5 Million to 15 Million USD per investment round to a particular funding type.
4) The graph shows which particular funding type we should select according to the representative amount and out constraints.

From the graph we can see that **venture** funding type lies between the representative value of the investment amount of 5 Million and 15 Million. Hence, we will choose Venture as the funding type to invest in and do the subsequent analysis accordingly.

# Country Analysis

Country vs Raised Amount in Million USD
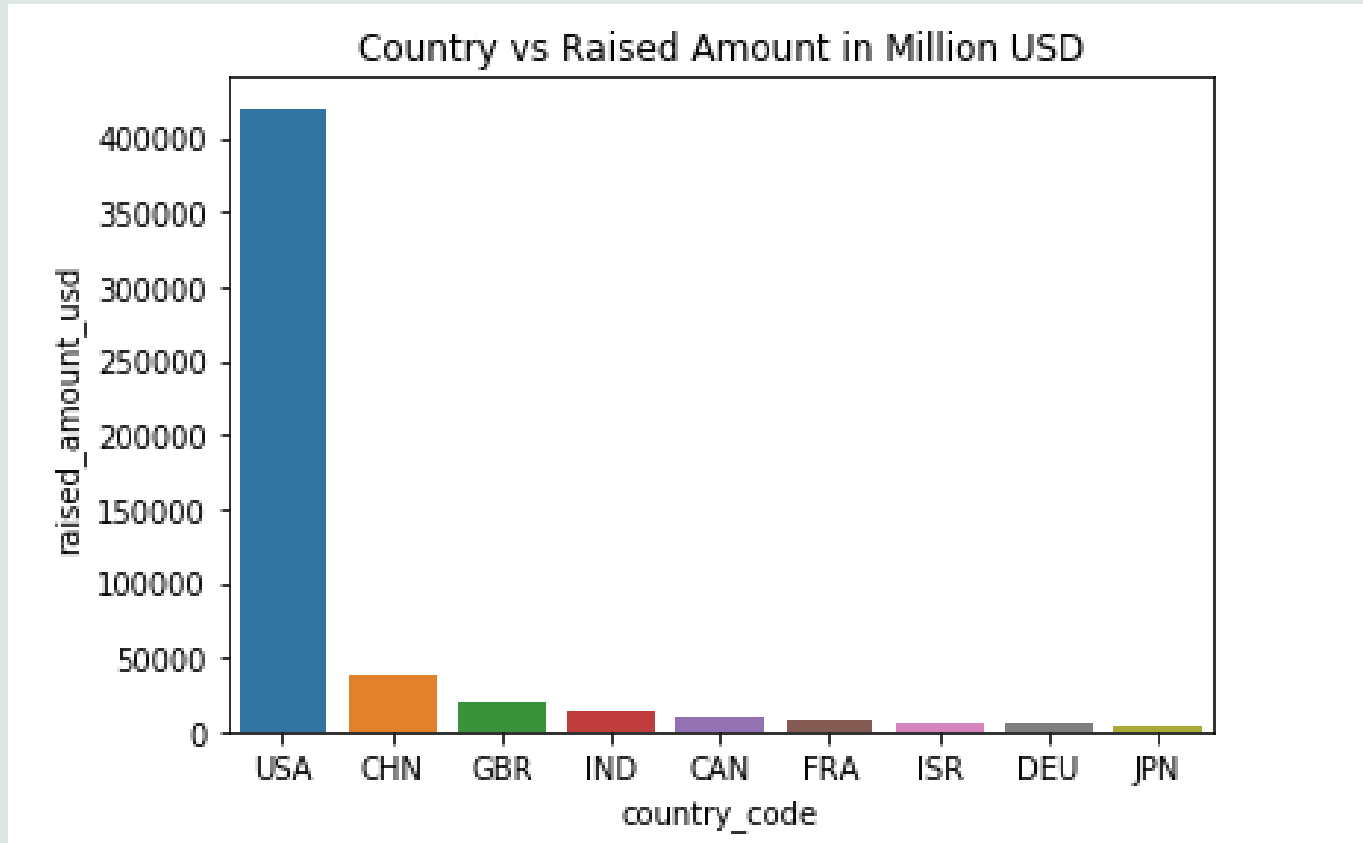
1) Spark Funds wants to invest in countries where other most investments are occurring.

2) The graph shows the top 9 countries by the Raised Amount in Million USD.

3) We want to select the top 3 countries to invest in.

4) We also need to take care about the fact that the top 3 countries are English-Speaking countries.

From the Graph we can see that USA, China and Great Britain are the top 3 countries according to the Raised Amount, but since China is not an English-Speaking country, we will ignore that and select India as the 3rd Country. Hence, we will select **USA, GBR and India** as our three countries to invest in and use them for the subsequent analysis.
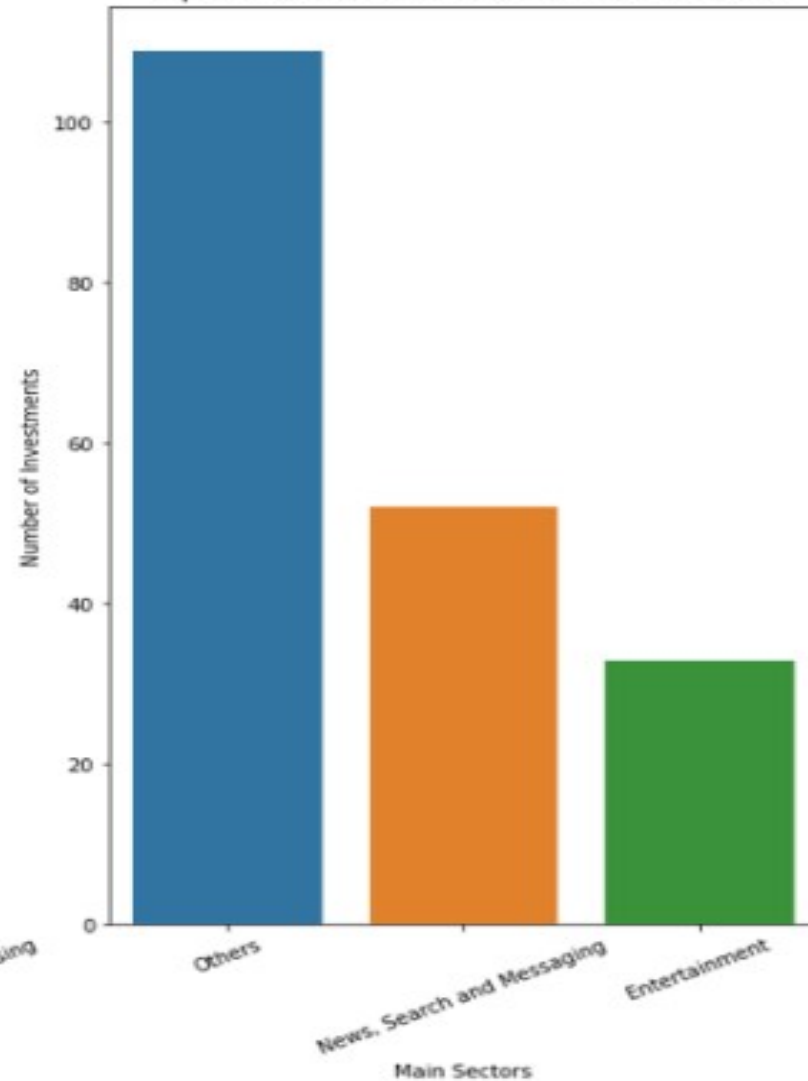
Top 3 Sectors vs Number of Investments for US
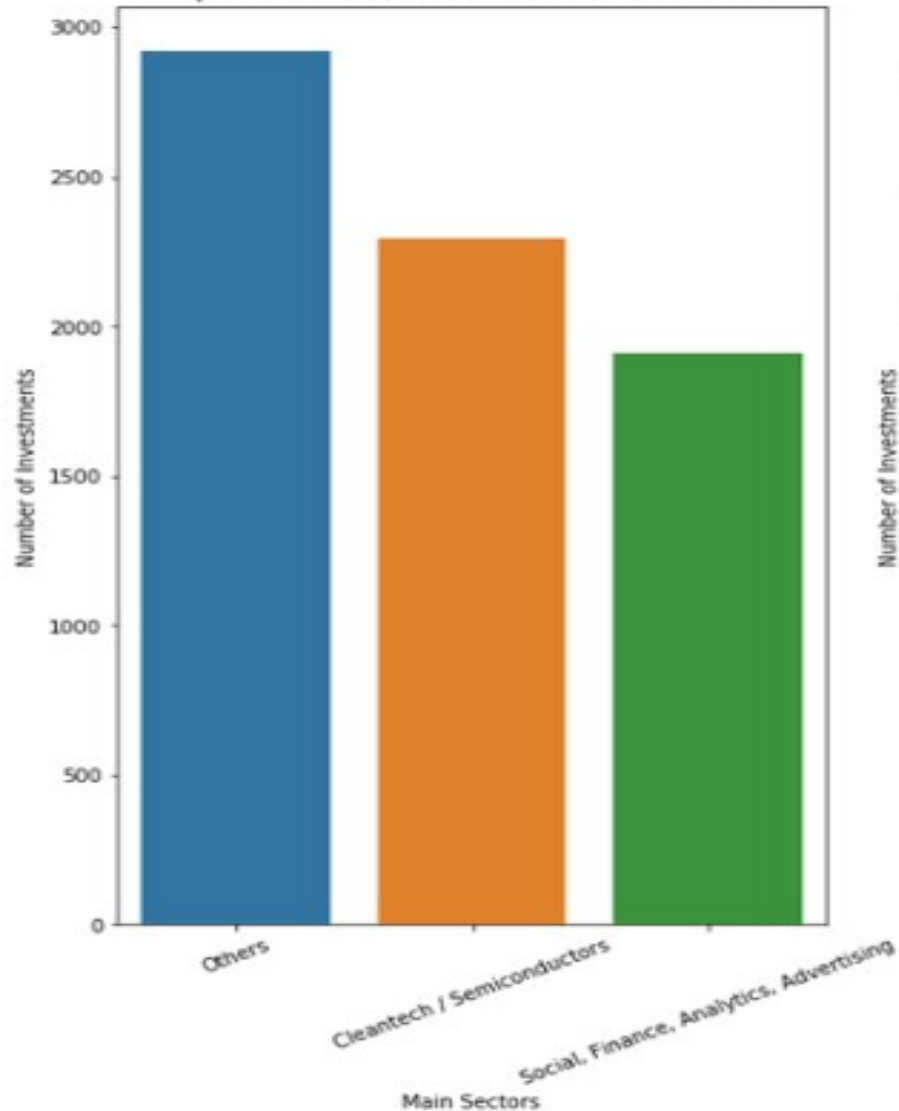
Top 3 Sectors vs Number of Investments for GBR
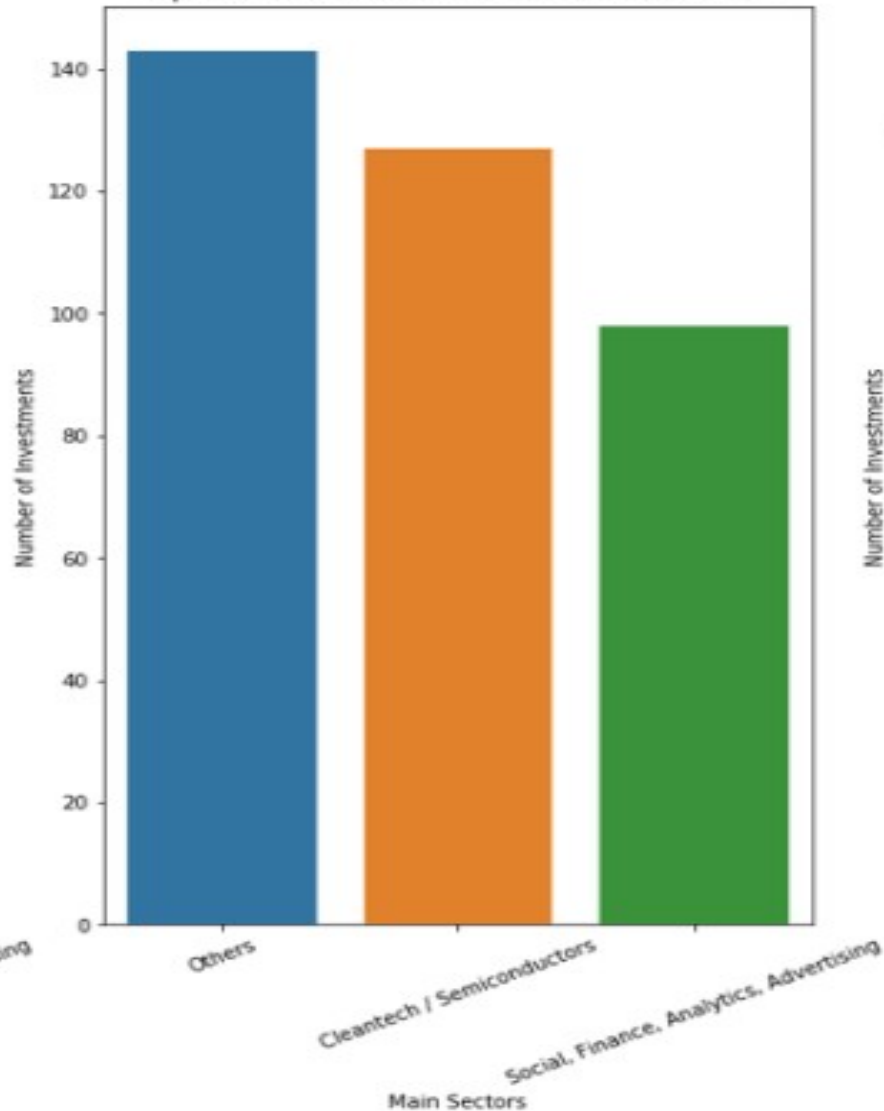
Top 3 Sectors vs Number of Investments for IND

Sector-Wise Analysis(Contd.)

1) For the sector analysis, we extracted the primary sector from the category list and then found out the main sectors for the consequent primary sectors from the mapping data.

2) We will then find the most heavily invested main sectors across the three countries which we selected earlier.

3) The plot on the previous pages shows the top 3 sectors per each countries according to the total count of investments.

For US and GBR, the top 3 sectors are 'Others', 'Cleantech/Semiconductors' and 'Social, Finance, Analytics, Advertising', whereas for IND, the top 3 sectors are 'Others', 'News, Search and Messaging' and 'Entertainment'. Hence, we should look to invest here.

<u>Results and Conclusions</u>

- Funding Type Analysis Results – We got to know that we should invest in ventures.

- Country Analysis Results – We got to know that we should invest in USA, Great Britain and India.

- Sector Wise Analysis Results – We got to know the top 3 sectors for each countries to invest in.

    Hence in conclusion, according to all the analysis, Spark Funds should invest in Venture funding type in countries of US, GBR and India within sectors like "Others" ,"Cleantech/ Semiconductors","Social, Finance, Analytics, Advertising" for US and GBR whereas for India, one can invest in "Others", "News, Search and Messaging" and "Entertainment".