

INVESTMENT ASSIGNMENT

SUBMISSION

Name: Pratik Kumar

Project Objectives:

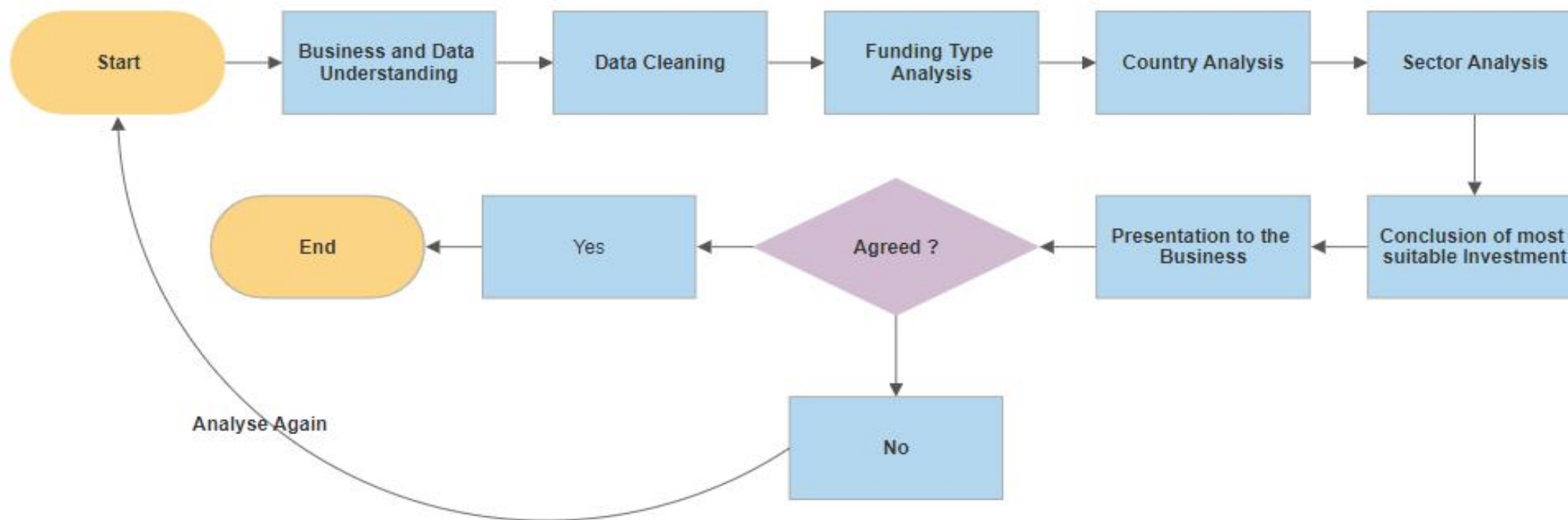
The CEO of Spark Funds wants to understand the global trends in investments so that they can take the investment decisions effectively. Spark Funds wants to invest where most other investors are investing

Constraints:

- It wants to invest between 5 to 15 million USD per round of investment
- It wants to invest only in English-speaking countries because of the ease of communication with the companies it would invest in

FlowChart :

Spark Funds Investment Plan



Data Analysis :

Understand the Data Set		
Sl. No	Questions	Answer
1	How many unique companies are present in rounds2?	66368
2	How many unique companies are present in the companies file?	66368
3	In the companies data frame, which column can be used as the unique key for each company? Write the name of the column .	permalink
4	Are there any companies in the rounds2 file which are not present in companies ? Answer Y/N .	N
5	Merge the two data frames so that all variables (columns) in the companies frame are added to the rounds2 data frame. Name the merged frame master_frame . How many observations are present in master_frame ?	114949

Assumptions: NA

Funding Analysis :

Average Values of Investments for Each of these Funding Types		
Sl.No	Questions	Answer
1	Average funding amount of venture type	11903152.59
2	Average funding amount of angel type	994755.19
3	Average funding amount of seed type	763097.33
4	Average funding amount of private equity type	75797198.41
5	Considering that Spark Funds wants to invest between 5 to 15 million USD per investment round, which investment type is the most suitable for them?	venture

Venture is most suitable investment type for requirement of 5M to 15M range.

Assumptions:

- It is only calculated only for company with operating status.
- Range of 5 to 15 million is inclusive

Country Analysis

Analysing the Top 3 English-Speaking Countries		
Sl.No	Questions	Answers
1	Top English speaking country	USA
2	Second English speaking country	GBR
3	Third English speaking country	IND

Top 3 English speaking Countries : USA, GBR and IND.

Assumptions:

- Top countries list is generated only for **Venture** type.
- Range of funding amount 5 to 15 million(inclusive).

Sector Analysis:

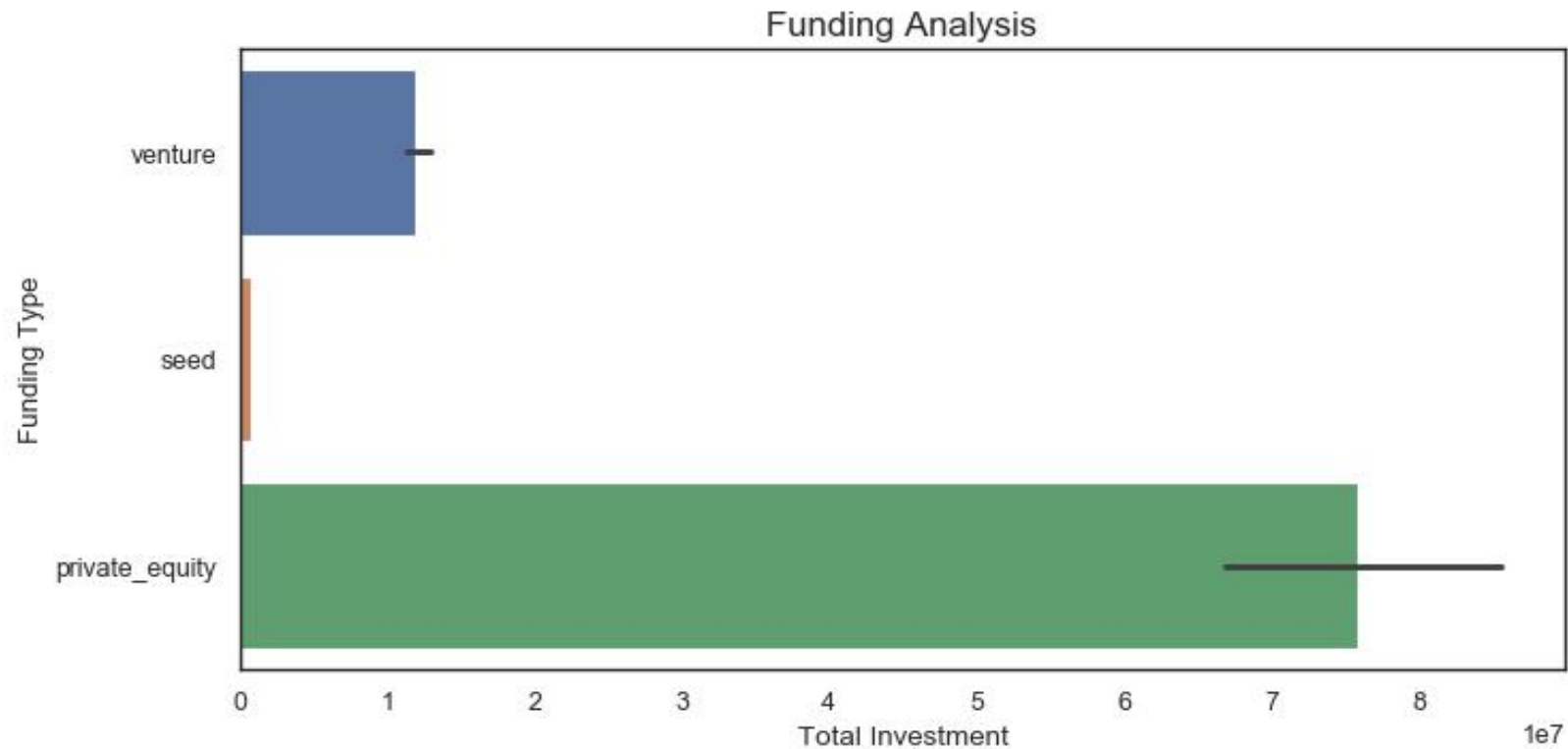
Sector-wise Investment Analysis				
Sl.no	Questions	C1	C2	C3
1	Total number of Investments (count)	10404	542	287
2	Total amount of investment (USD)	93176222534	4728734985	2569667552
3	Top Sector name (no. of investment-wise)	Others	Others	Others
4	Second Sector name (no. of investment-wise)	Cleantech / Semiconductors	Cleantech / Semiconductors	News, Search and Messaging
5	Third Sector name (no. of investment-wise)	Social, Finance, Analytics, Advertising	Social, Finance, Analytics, Advertising	Social, Finance, Analytics, Advertising
6	Number of investments in top sector (3)	2732	137	102
7	Number of investments in second sector (4)	2145	114	49
8	Number of investments in third sector (5)	1813	95	32
9	For point 3 (top sector count-wise), which company received the highest investment?	Kaminario	Notonthehighstreet	ItzCash Card Ltd.
10	For point 4 (second best sector count-wise), which company received the highest investment?	Sunverge Energy, Inc	Elixent	Mobile2Win India

Top Sectors are : Others, Cleantech / Semiconductors and Social, Finance, Analytics, Advertising

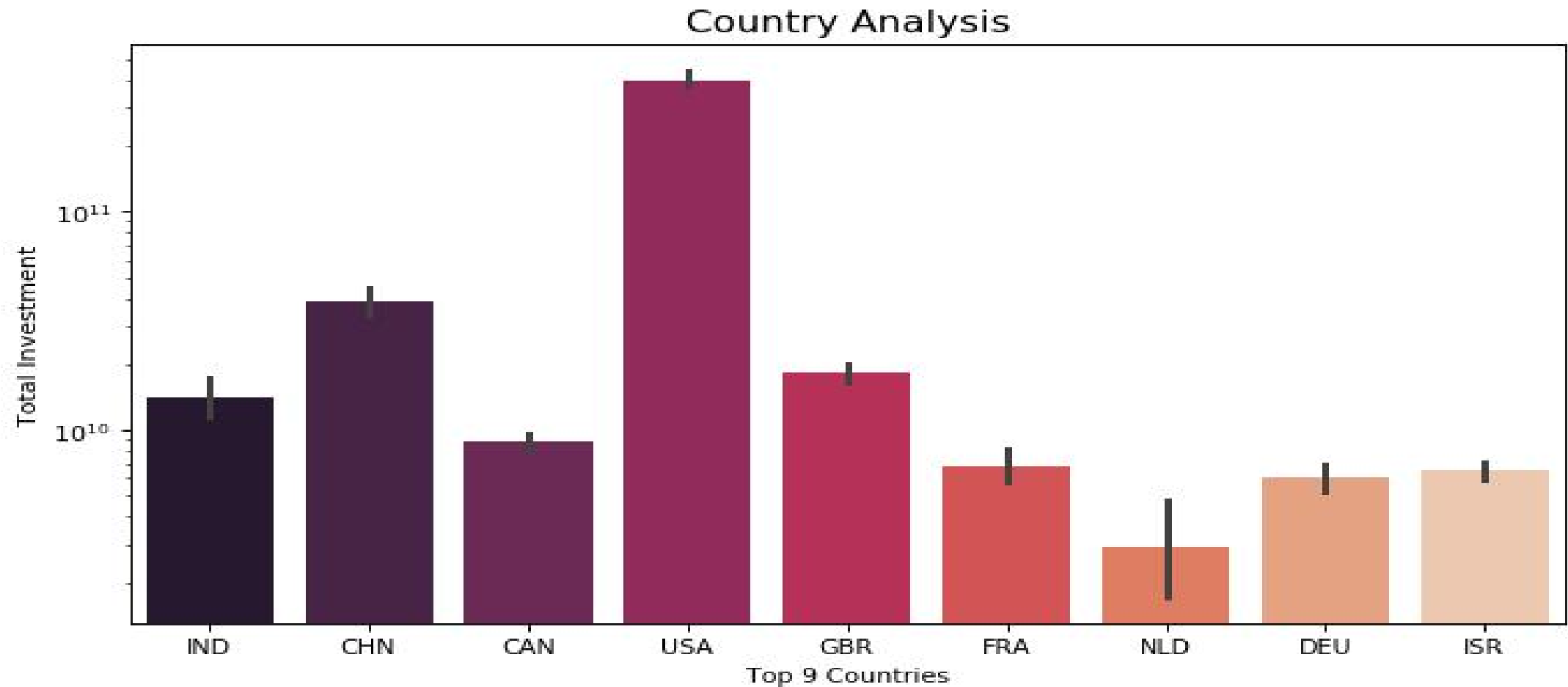
Assumptions:

- Top sector list is generated only for **Venture fund** type.
- Range of funding amount 5 to 15 million(inclusive).
- Calculated only for top 9 countries.

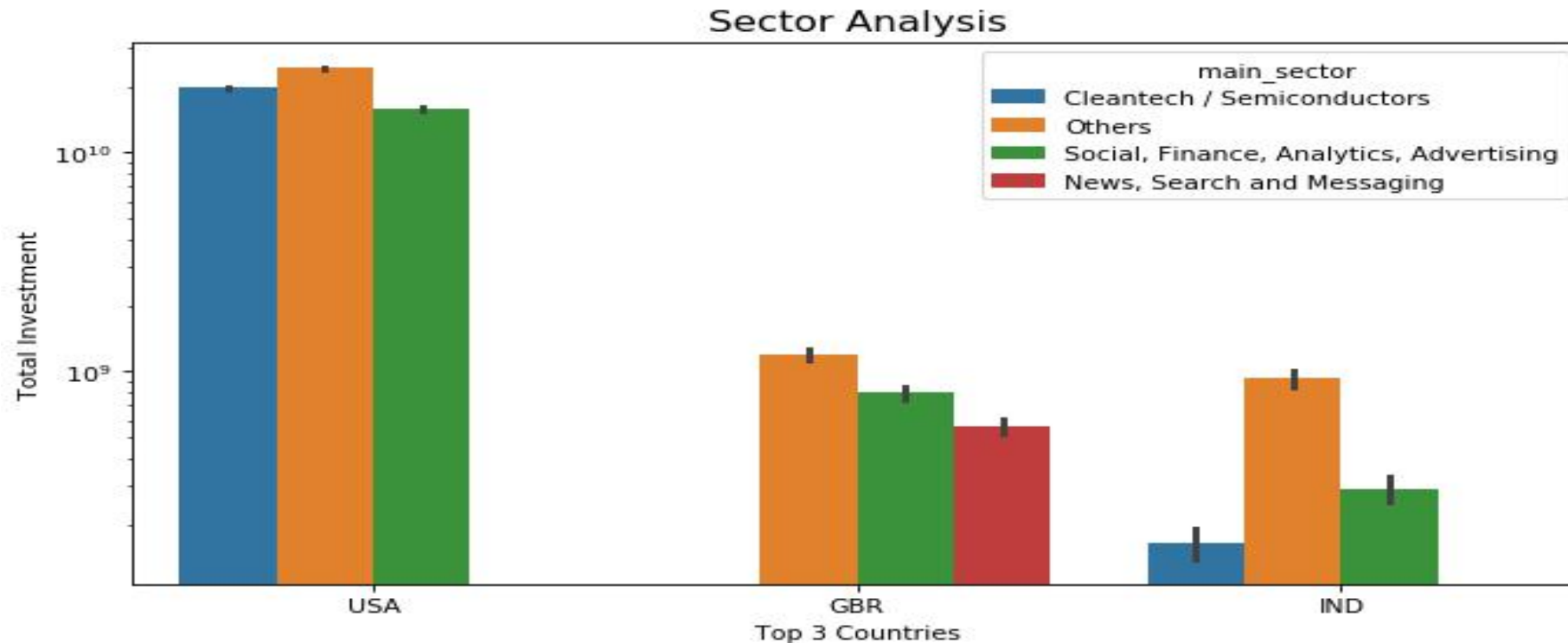
Plot-1 : Funding Analysis



Plot-2 : Country Analysis



Plot 3 :Sector Analysis:



Assumptions:

- This is plotted for top 3 sectors vs top 3 english speaking countries.
- Top main_sector is used for plotting this graph.

Conclusions:

On the basis of the analysis,below are conclusions for investments by Sparks Fund:

1.Funding Type to use:

Venture is the most suited funding type with investment of~ 11.9 Million USD

2.Top three countries to invest in:

- USA
- GBR
- IND

3.Top three sectors to invest are:

- Others
- Cleantech and Semiconductors
- Social, Finance, Analytics and Advertising