

# **INVESTMENT ASSIGNMENT SUBMISSION**

**Name:** Anisha Sharma

# Abstract

- Spark Funds wants to make investments in a few companies and the CEO is interested in understanding the global trends for making the investment.

- It has 2 constraints –

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

- 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'.

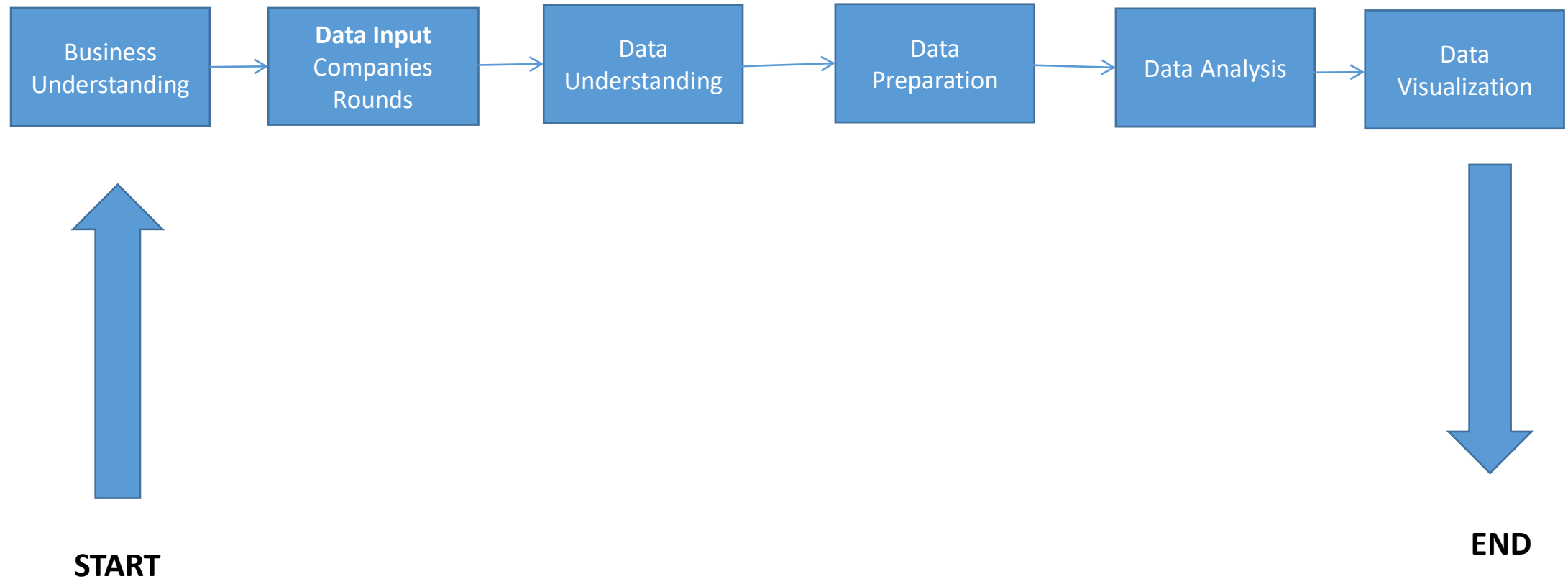
- Data Understanding –

The data has 'Company details' of 66,368 unique companies including Company ID, Company Name, Category Name(s), Country, etc.

- Data Analysis –

1. **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.
2. **Country analysis:** Identifying the countries which have been the most heavily invested in the past. These will be Spark Funds' favourites as well.
3. **Sector analysis:** Understanding the distribution of investments across the eight main sectors. (Note that we are interested in the eight 'main sectors' provided in the **mapping file**. The two files — **companies** and **rounds2** — have numerous sub-sector names; hence, you will need to map each sub-sector to its main sector.)

# Problem solving methodology



# Analysis

## 1. Understanding 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 <i>companies</i> data frame, which column can be used as the unique key for each company? Write the <b>name of the column</b> .	permalink
4	Are there any companies in the rounds2 file which are not present in <i>companies</i> ? Answer <b>Y/N</b> .	N
5	Merge the two data frames so that all variables (columns) in the <i>companies</i> frame are added to the <i>rounds2</i> data frame. Name the merged frame <i>master_frame</i> . How many observations are present in <i>master_frame</i> ?	114949

## Analysis – Funding Type Analysis

### 2. Representative Values of Investments for Each of these Funding Types

Sl.No	Questions	Answer
1	Representative funding amount of venture type	11748949.13
2	Representative funding amount of angel type	958694.47
3	Representative funding amount of seed type	719818
4	Representative funding amount of private equity type	73308593.03
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

## Analysis – Country Analysis

### 3. Analysing the Top 3 English-Speaking Countries

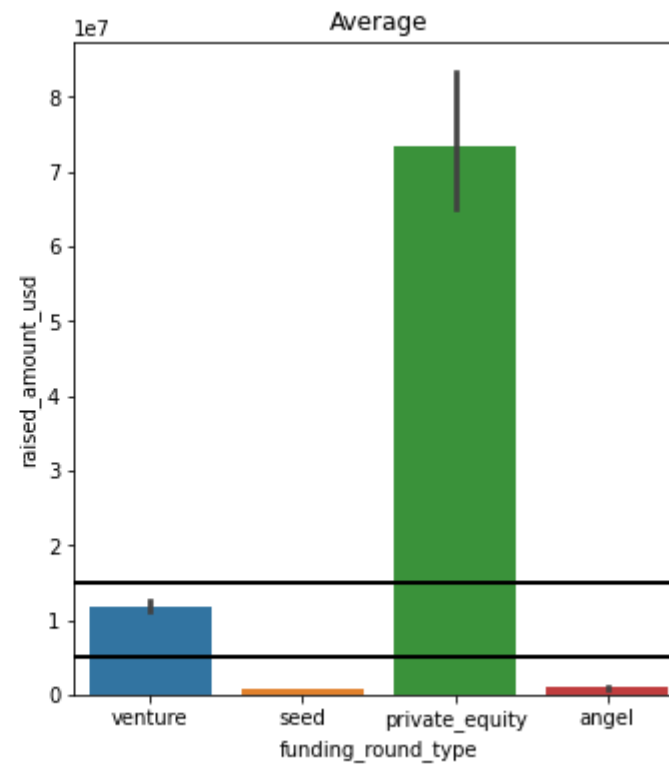
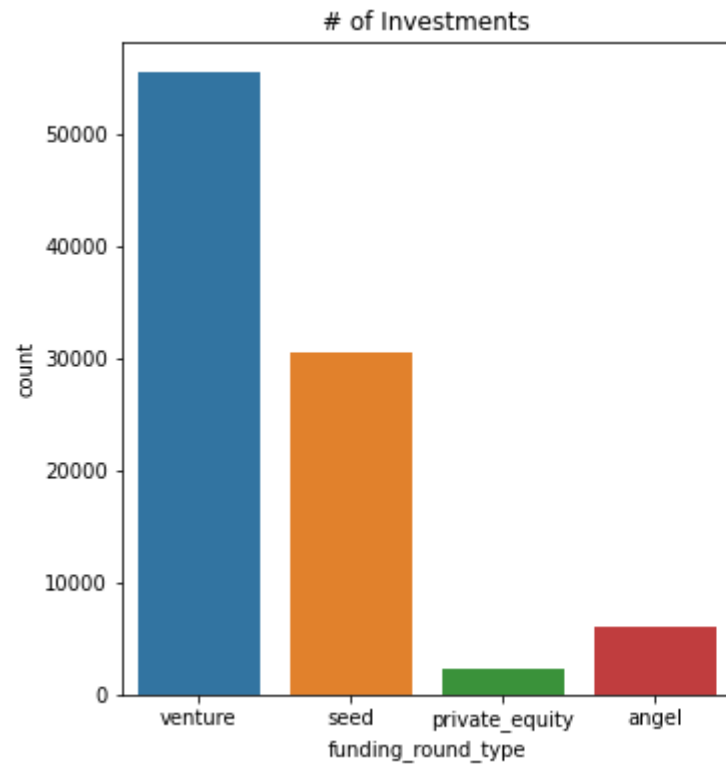
Sl.No	Questions	Answers
1	Top English speaking country	USA
2	Second English speaking country	GBR
3	Third English speaking country	IND

# Analysis – Sector Analysis

## 4. Sector-wise Investment Analysis

Sl.no	Questions	C1	C2	C3
1	Total number of Investments (count)	12012	619	328
2	Total amount of investment (USD)	107318294664.00	5365228300.00	2949543602.00
3	Top Sector name (no. of investment-wise)	Others	Others	Others
4	Second Sector name (no. of investment-wise)	Social, Finance, Analytics, Advertising	Cleantech / Semiconductors	Social, Finance, Analytics, Advertising
5	Third Sector name (no. of investment-wise)	Cleantech / Semiconductors	Social, Finance, Analytics, Advertising	News, Search and Messaging
6	Number of investments in top sector (3)	2950	147	110
7	Number of investments in second sector (4)	2714	128	60
8	Number of investments in third sector (5)	2300	133	52
9	For point 3 (top sector count-wise), which company received the highest investment?	/ORGANIZATION/VIRTUSTREAM	/ORGANIZATION/N/ELECTRIC-CLOUD	/ORGANIZATION/FIRSTCRY-COM
10	For point 4 (second best sector count-wise), which company received the highest investment?	/ORGANIZATION/S/HOTSPOTTER	/ORGANIZATION/N/CELLTICK-TECHNOLOGIES	/ORGANIZATION/GUPSHUP-TECHNOLOGY-INDIA-PVT-LTD

# Results

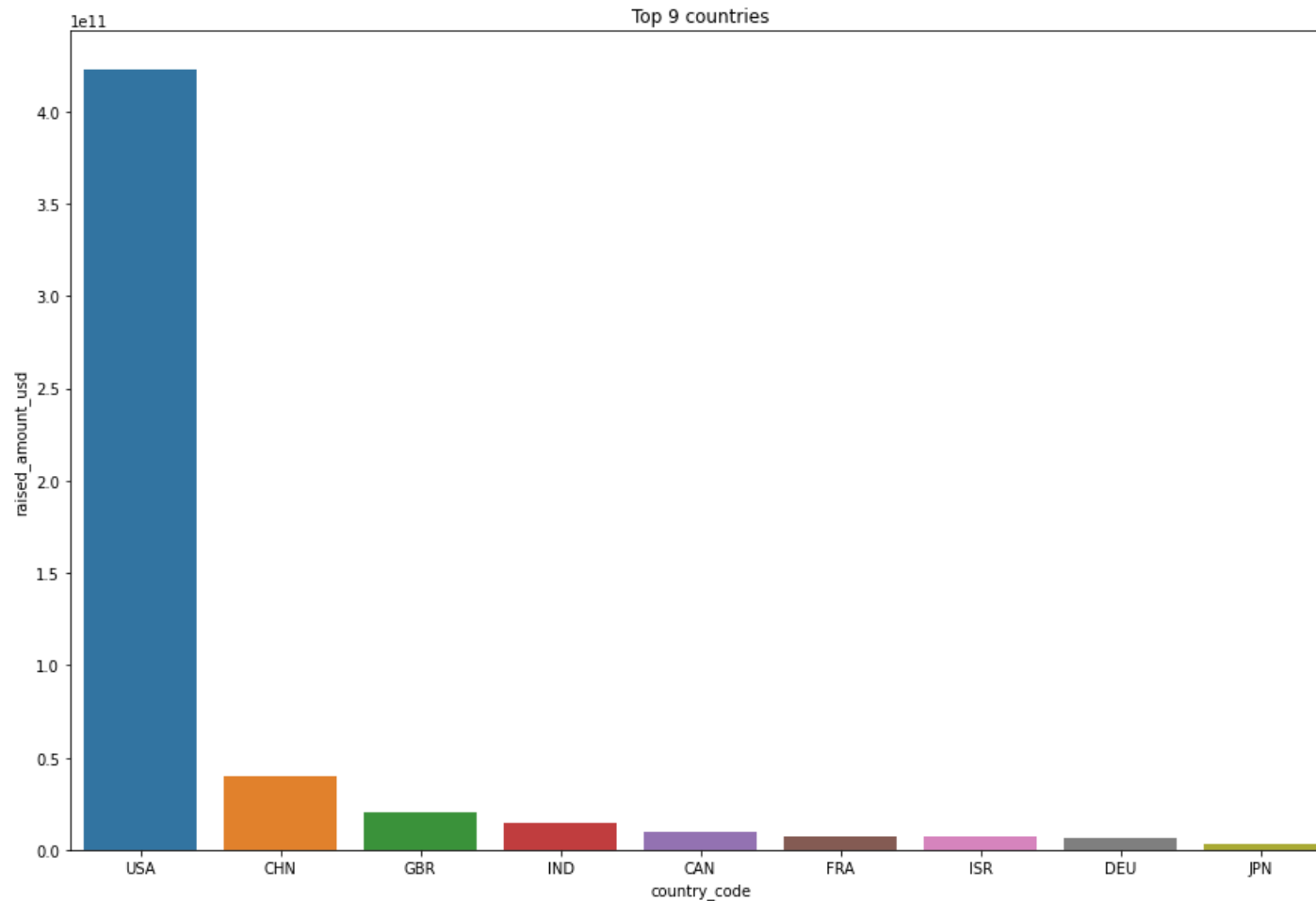


•Spark Funds wants to invest between 5 to 15 million USD per round of investment.

•‘Venture’ looks most suitable as its average funding amount lies between the range.



# Results

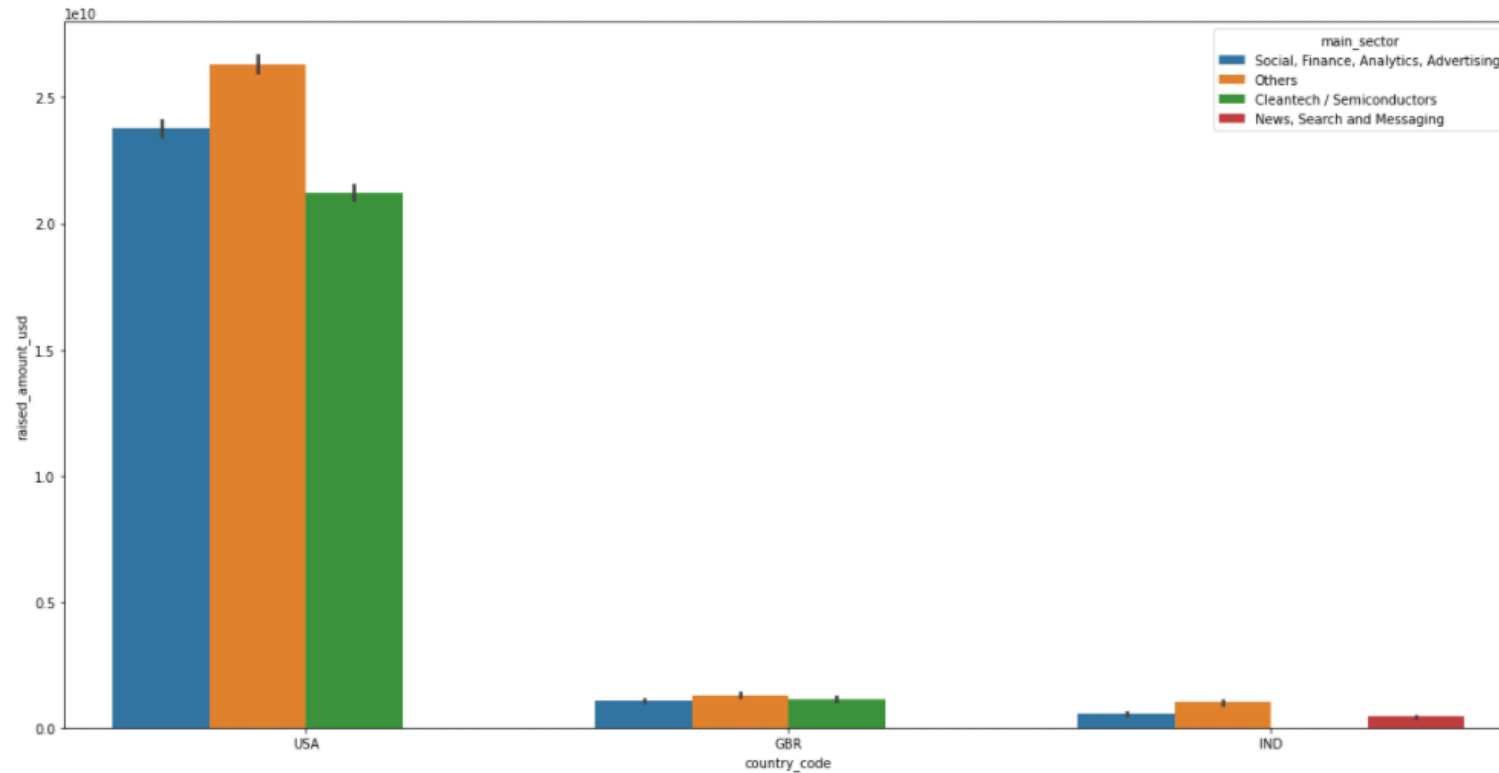


•Spark funds wants to invest in countries which have been heavily invested in past but they should only be English-speaking countries.

•Based on the analysis, we can see that top heavily invested countries are USA, China, Great Britain, India, Canada, France, Israel, Germany and Japan.

•But the top 3 English speaking countries are USA, Great Britain and India in which Spark Funds should plan to invest money.

# Results



Based on sector analysis, the graph shows top 3 sectors for top 3 countries where the investors are investing.

# Conclusions

•Below can be the investment strategy for Spark Funds considering all the business understandings –

1. Spark Funds should consider investing in funding type 'Venture' in 'Other' main sector in 'USA' as there is where the most heavy investments from the other investors are happening.
2. Sparks funds should consider investing in mainly 3 countries which are USA, Great Britain and India as they are heavily invested and are English speaking as well.
3. Based on the sector analysis, in USA, Spark Funds should invest in Virtustream and Shotspotter.