



# SPARK INVESTMENT ANALYSIS

## SUBMISSION

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**BUSINESS OBJECTIVE:** SPARK INVESTMENTS IS PLANNING TO MAKE POTENTIAL INVESTMENTS IN TOP PERFORMING SECTORS.

### **Spark investments criteria :**

1. Spark investments wants to invest 5 million to 15 million per investment round.
2. Spark Investments wants to know the suitable investment type based on point 1.
3. Spark investments wants to invest in the top three countries which are having high investments.
4. Spark investments want to invest only in English speaking countries.
5. Spark investments wants to invest in the top 3 performing sectors in the top 3 English speaking countries.

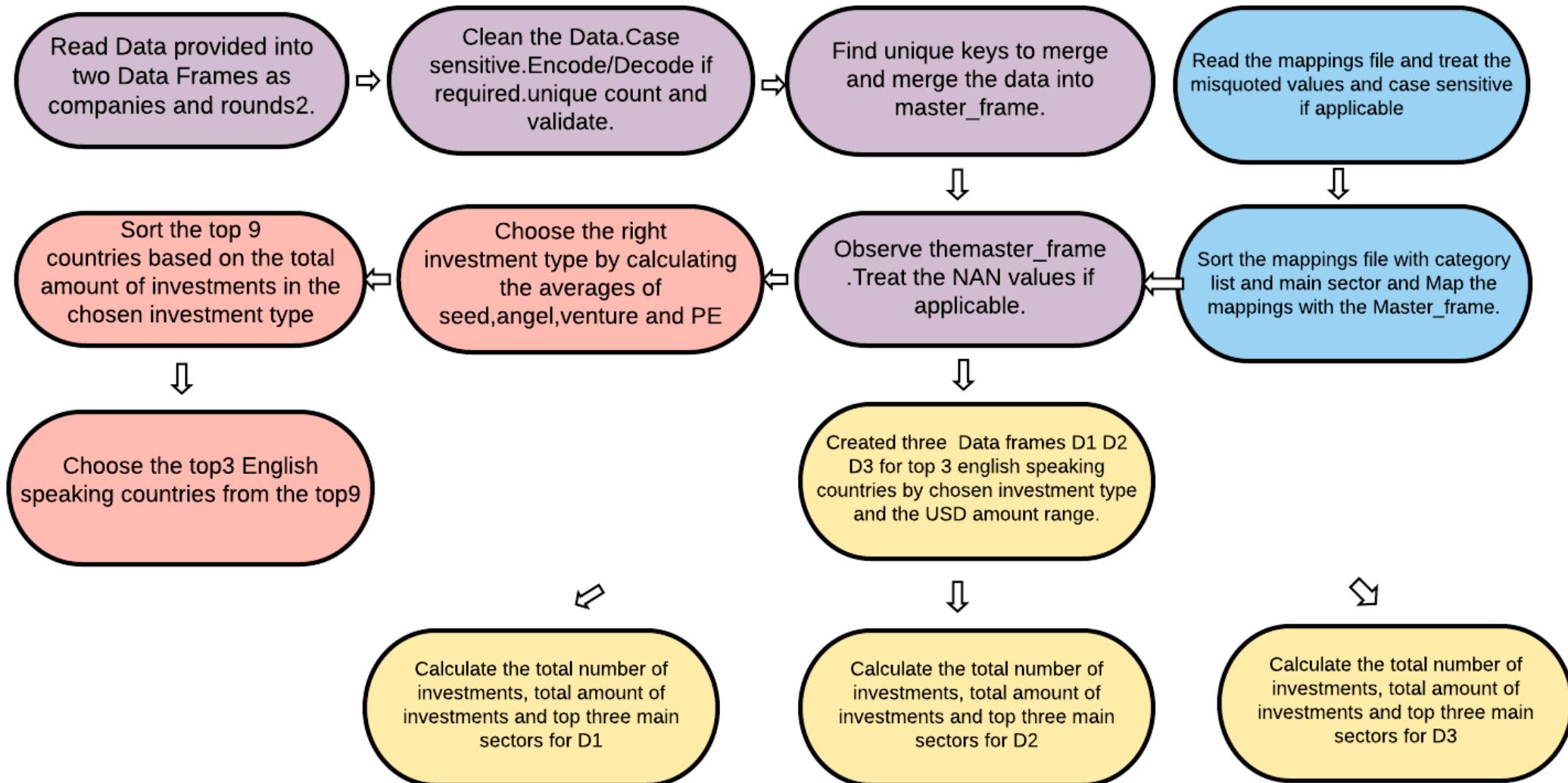
### **Resources provided to perform this investment analysis:**

Companies information provided in a companies text file.

Investment information provided in a round2 csv file.

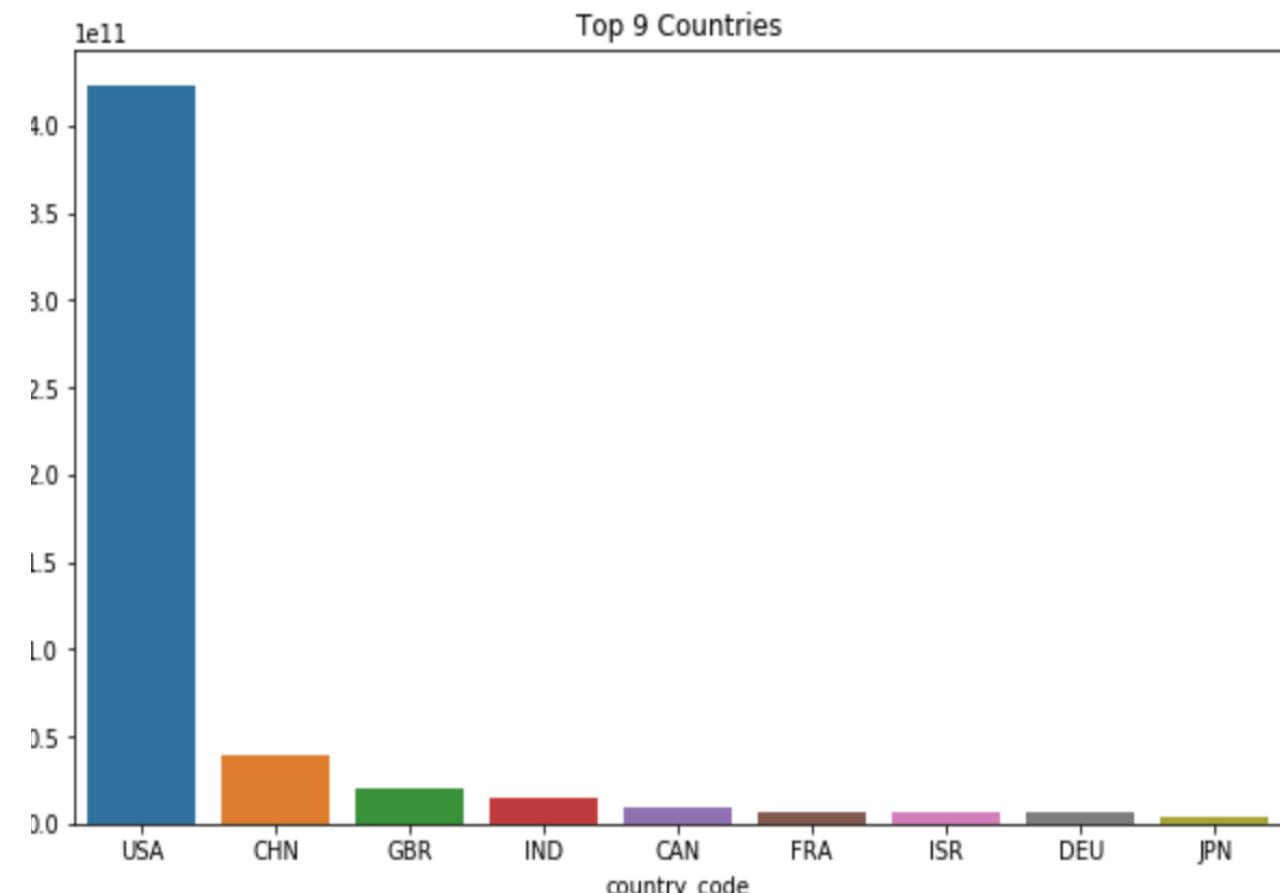
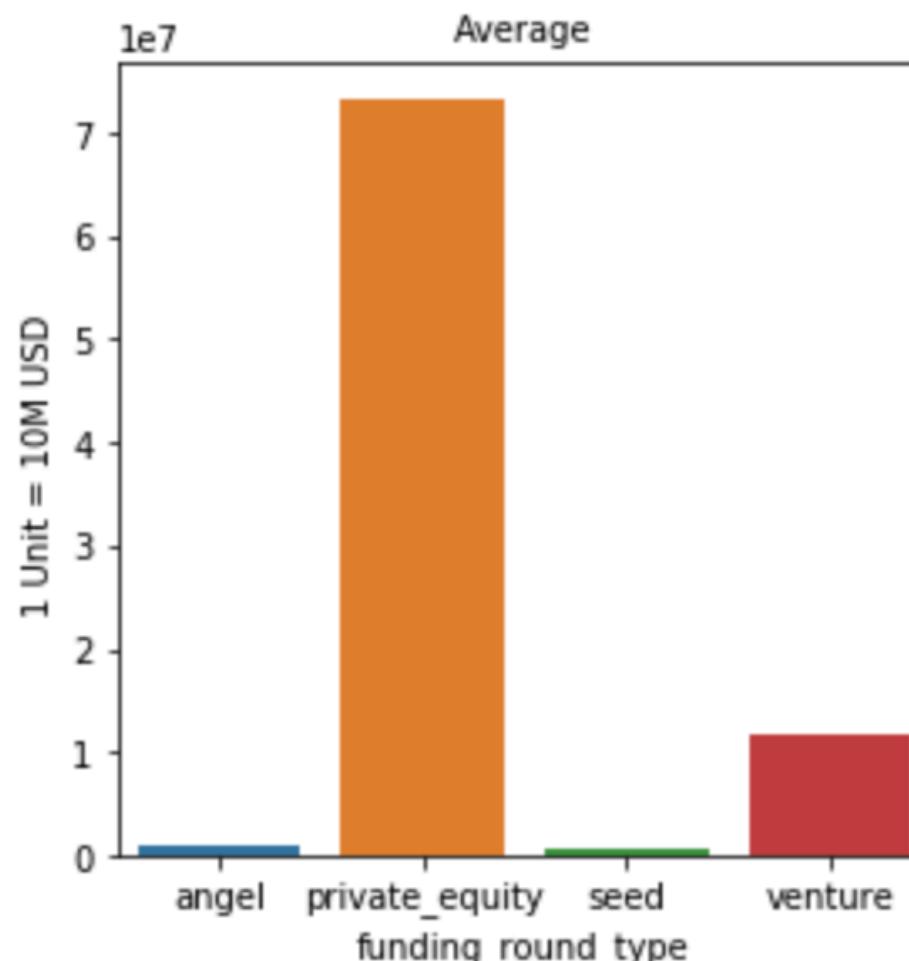
Category list with main sector in a mappings csv file.

## Flow chart for analysis

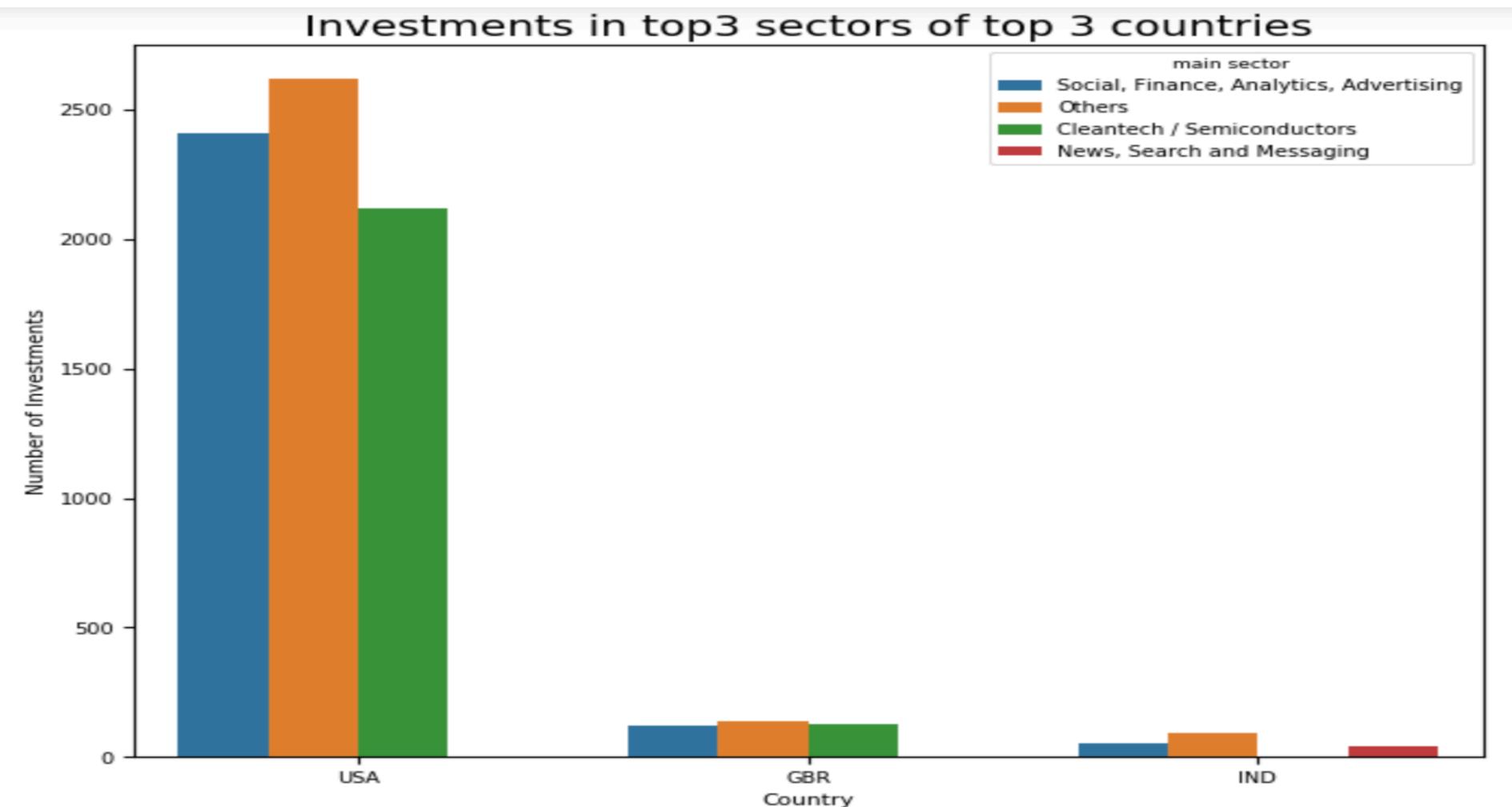


- Calculating the average funding amounts for all the four categories we observed **Venture** type Investment is best suited for Spark fund investments (based on the criteria of **5 Million to 15 Million** investment per round.)

Sorting the total investment amount in venture type for every country .We observed top three English speaking countries as **USA, GBR and IND.**(excluded China CHN as English is not the official language for China).



Top 3 main sectors to invest in top 3 English speaking countries with chosen funding type as Venture



# Checkpoint 1

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 <b>companies</b> data frame, which column can be used as the unique key for each company? Write the <b>name of the column</b> .	<a href="#">PERMALINK</a>
4	Are there any companies in the rounds2 file which are not present in <b>companies</b> ? Answer Y/N.	NO
5	Merge the two data frames so that all variables (columns) in the <b>companies</b> frame are added to the <b>rounds2</b> data frame. Name the merged frame <b>master_frame</b> . How many observations are present in <b>master_frame</b> ?	(114949,16)

# Checkpoint 2

Sl.No	Questions	Answer
1	Average funding amount of venture type	11748949.13
2	Average funding amount of angel type	958694.4698
3	Average funding amount of seed type	719817.9969
4	Average funding amount of private equity type	73308593.03
5	Considering that Spark Funds wants to invest between <b>5 to 15 million USD</b> per investment round, which investment type is the most suitable for them?	VENTURE TYPE

## 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

## Checkpoint 3

Sector-wise Investment Analysis				
Sl.no	Questions	USA(D1)	GBR(D2)	IND(D3)
1	Total number of Investments (count)	10896	586	280
2	Total amount of investment (USD)	1.02261E+11	5226843539	2726543602
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)	2618	136	93
7	Number of investments in second sector (4)	2408	126	54
8	Number of investments in third sector (5)	2117	122	42
9	For point 3 (top sector count-wise), which company received the highest investment?	VIRTUSTREAM	ELECTRIC-CLOUD	FIRSTCRY-COM
10	For point 4 (second best sector count-wise), which company received the highest investment?	SHOTSPOTTER	EUSA-PHARMA	MANTHAN-SYSTEMS