

INVESTMENT ASSIGNMENT SUBMISSION

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Spark Fund Investment Analysis

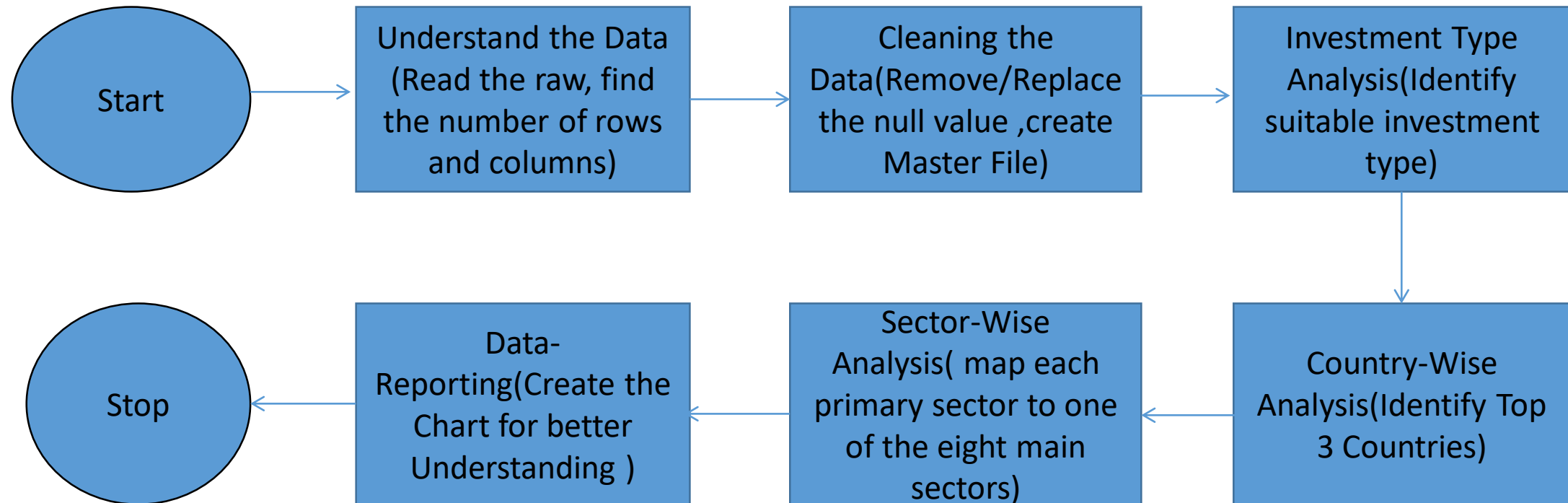
Investment Criteria for Spark Funds:

- Invest between 5 to 15 million USD per round of investment.
- Invest only in English-speaking countries means English should be one of the official languages in that country.

Strategy of Spark Fund:

- Spark Funds want to invest where most other investors are investing. This pattern is often observed among early stage startup investors.
- 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'.
- Identify and report the Top 3 Countries suitable for Spark fund Investment.
- Further analysis of the data and decide which sector is the best match for Spark Fund Investment.

Algorithm Methodology



Analysis

- 1. Understand the raw data. For this analysis, we have 2 files to study and find the relevant Information:
 - → Compaines & Rounds2 Files.
- 2. Remove/replace the Null Values from both the files to clean the data.
- 3. Merge both the files and create one master file.

Goal of the Analysis:

- Find the Investment type to invest between 5 to 15 million USD per round of investment
- Find the Top 3 English-speaking countries.
- Find the Best suited sector for Spark Funds to Invest.

Stage of data analysis:

- ☐ Funding Type Analysis
- ☐ Country Analysis
- ☐ Sector Analysis

Analysis

Investment Type Analysis:

- Seed/angel funding refer to early stage startups whereas venture funding occurs after seed or angel stage/s and involves a relatively higher amount of investment.
- Private equity type investments are associated with much larger companies and having average Investment around 76 million USD and it does not fall in range of Investment.
- Venture having average investment around 11.90 million USD which falls between **5 to 15 million USD** per investment and best suited for Spark funds to Invest.

Country analysis:

- Further analysis the data of Venture type of Investment.
- There are number of Countries involved in Investment, but only few countries where most of the potential Investor preferred to invest.
- USA have highest amount of investment around 40 Billion USD and English is the official language.
- China having second highest Investment around 10 times less than USA but china is not preferred countries of Investment because English is not the official language in China.
- USA is the most preferred countries whereas GBR & IND is second and third most preferred countries.

Analysis

Sector analysis:

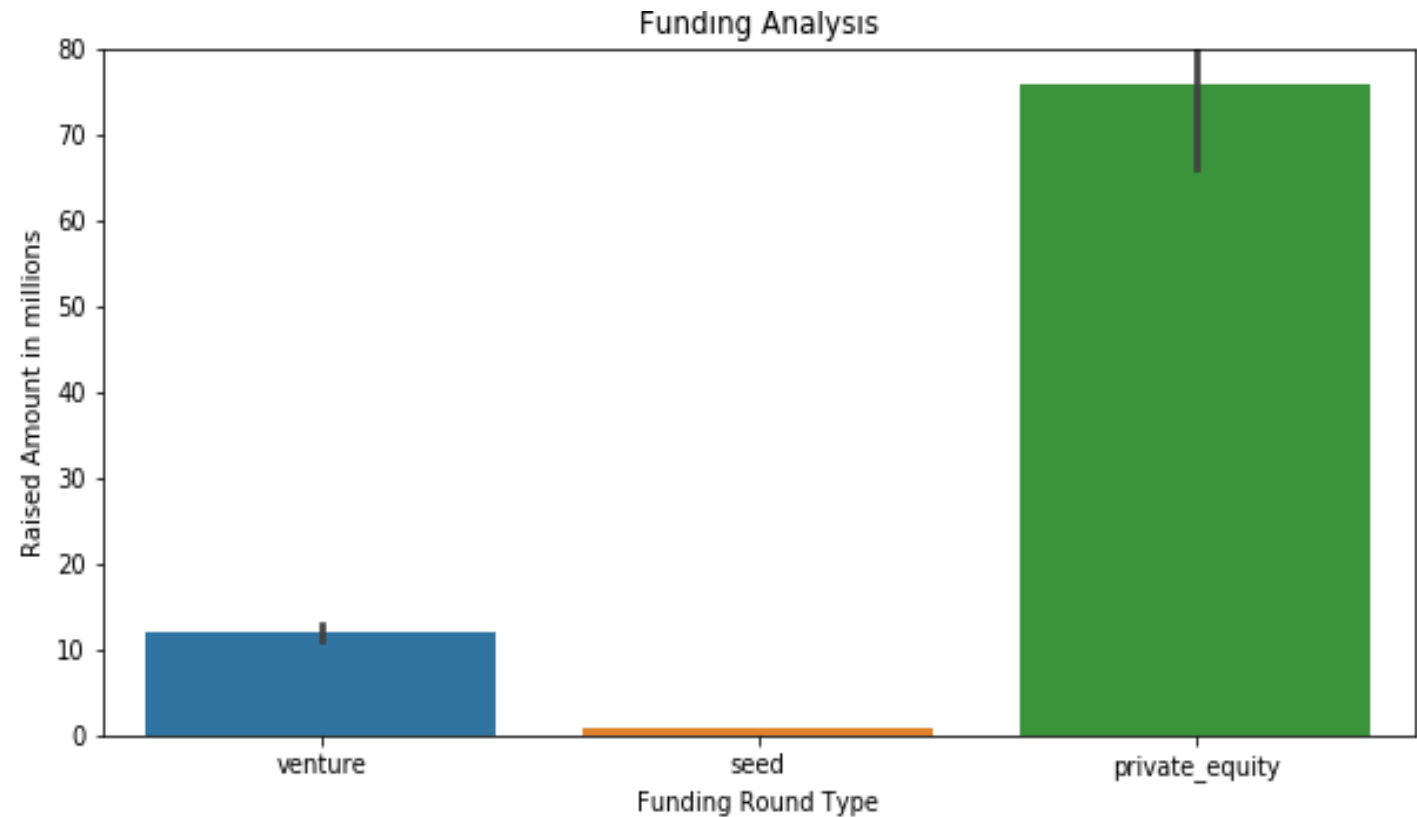
- Further analysis done on top three countries for Venture Type Investment.
- From the data provided, there are mainly 8 main sectors.
- Create three separate data frames for each of the three countries containing the observations of venture funding type FT falling within the 5-15 million USD range.
- Total number of Investment in USA is 11271 whereas GBR and IND have 582 and 315.
- Others are most preferred sector among 8 main sector across top 3 countries.
- Second top most preferred sector in all top 3 countries are Social, Finance, Analytics, Advertising.
- Cleantech / Semiconductors having third highest number of Investment in USA and GBR.

Result:

Plot showing the fraction of total investments (globally) in venture, seed, and private equity and the average amount (in million USD per Investment) of investment in each funding type:

→ Venture funding type have average Investment around 11.90 million USD whereas Private Equity have around 76 million USD.

→ Venture is best suited Investment Funding Type for Spark Funds.

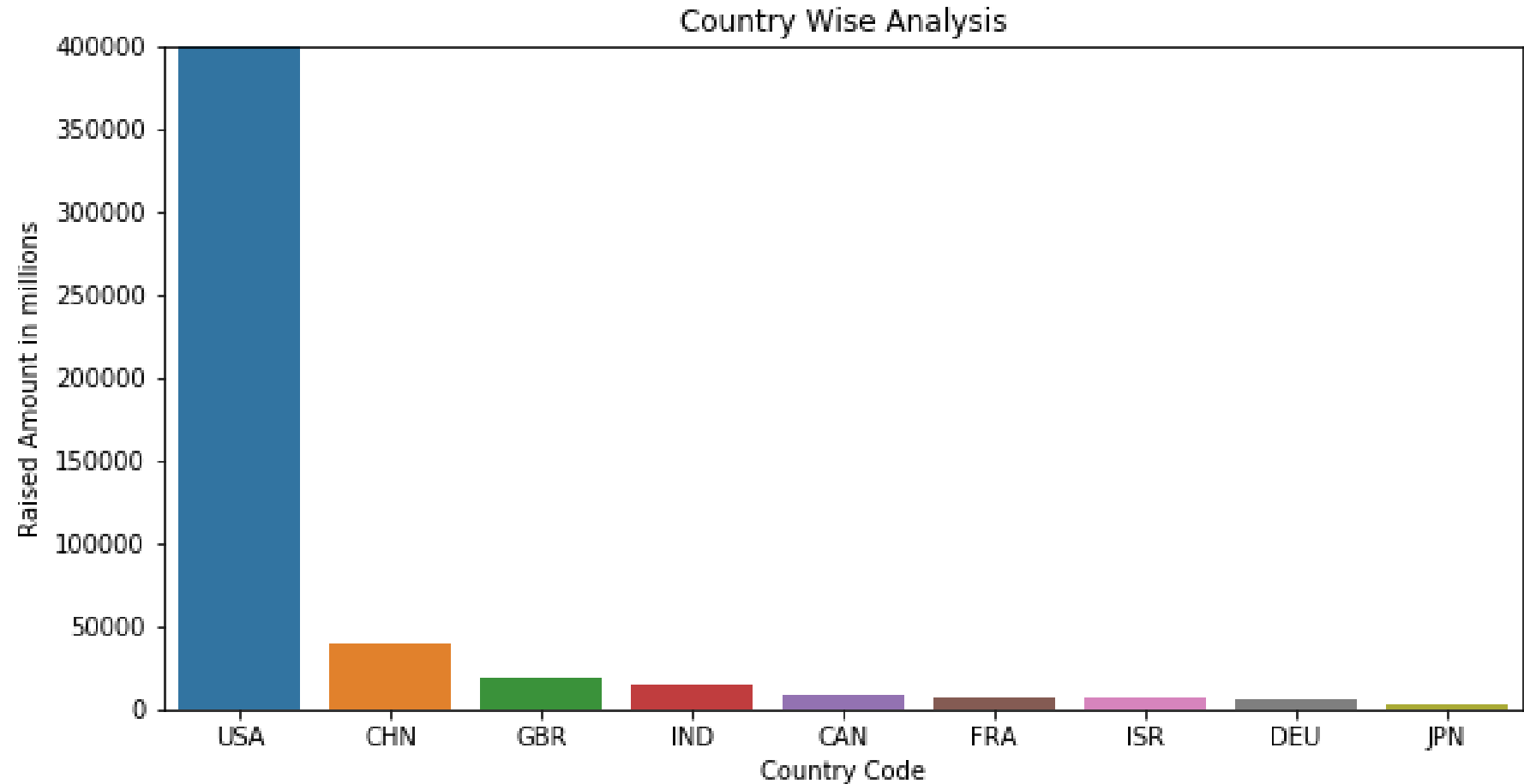


Result:

A plot showing the top 9 countries against the total amount of investments of Venture funding type:

→ From the graph, it is very Clear that USA, GBR and IND are most preferred countries.

→ USA is top Preferred country as Total Investment raised across various sector is approximately 400000 million USD.

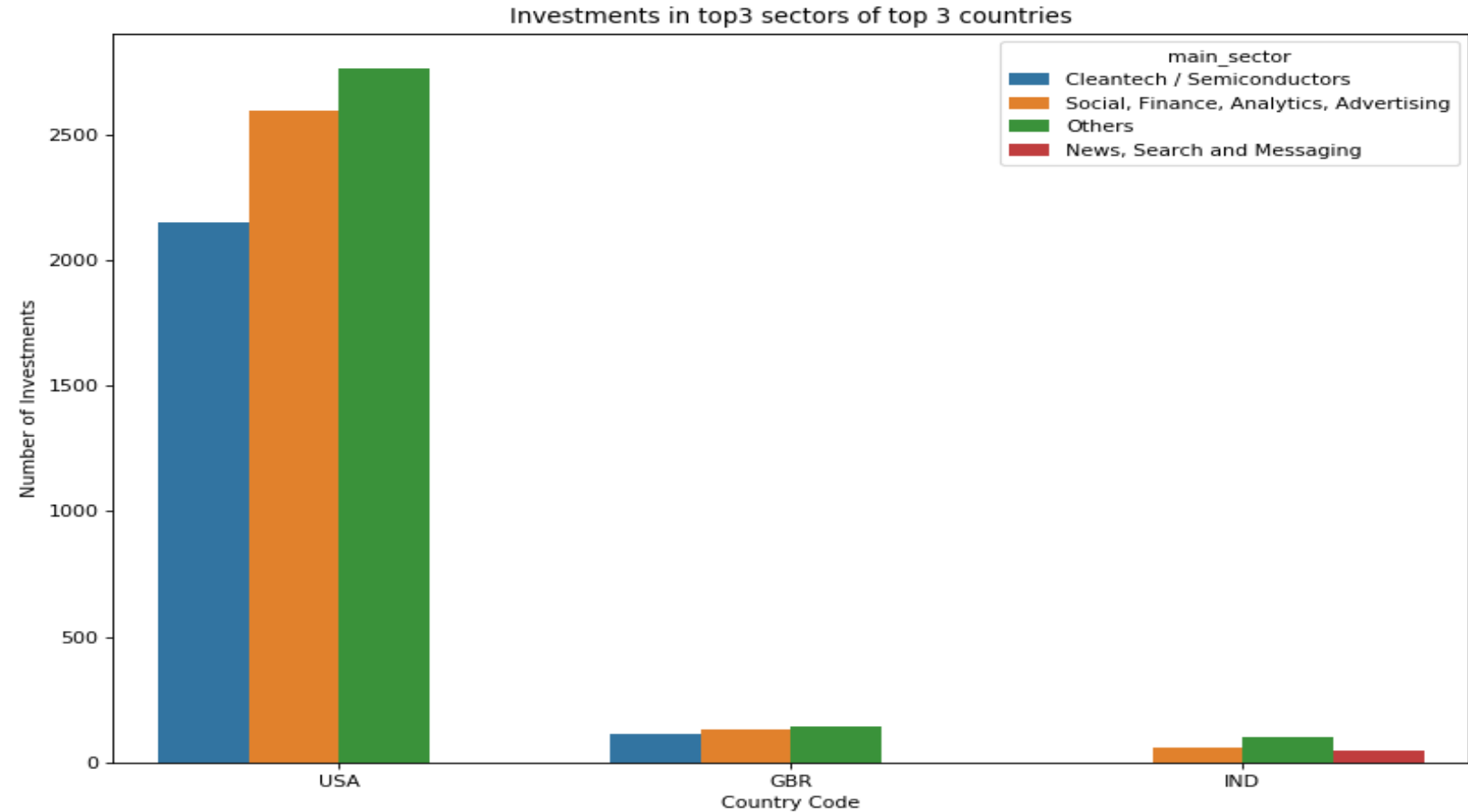


Result:

A plot showing the number of investments in the top 3 sectors of the top 3 countries on one chart (for the chosen investment type FT).

→ USA having largest number of Investment.

→ Others, Social, Finance, Analytics, Advertising and Cleantech / Semiconductors are 3 preferred main sector to Invest.



Conclusion

- ☐ Venture is best Investment as Spark Funds wants to invest between 5 to 15 million USD per investment round.
- ☐ Top three English Speaking country is USA,GBR and India.
- ☐ USA is top Preferred country as Total Investment raised across various sector is approximately 400000 million USD.
- ☐ GBR and IND is second and third Top most Preferred country for Spark Fund Investment.
- ☐ More number of companies have invested in USA.
- ☐ The amount and Number of Investment is similar in GBR and IND.
- ☐ USA is most suited place for Spark Funds to invest between 5 to 15 million USD per investment round.
- ☐ Others, Social, Finance, Analytics, Advertising and Cleantech/Semiconductors are 3 preferred main sector to Invest.