

INVESTMENT CASE STUDY

SUBMISSION

Group Name: Team Avengers

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Spark Funds –Investment Strategy

Spark funds, an asset management company, is looking for a strategic investment options based on global trends.

A solution needs to be drawn keeping below limitations and business objectives in mind.

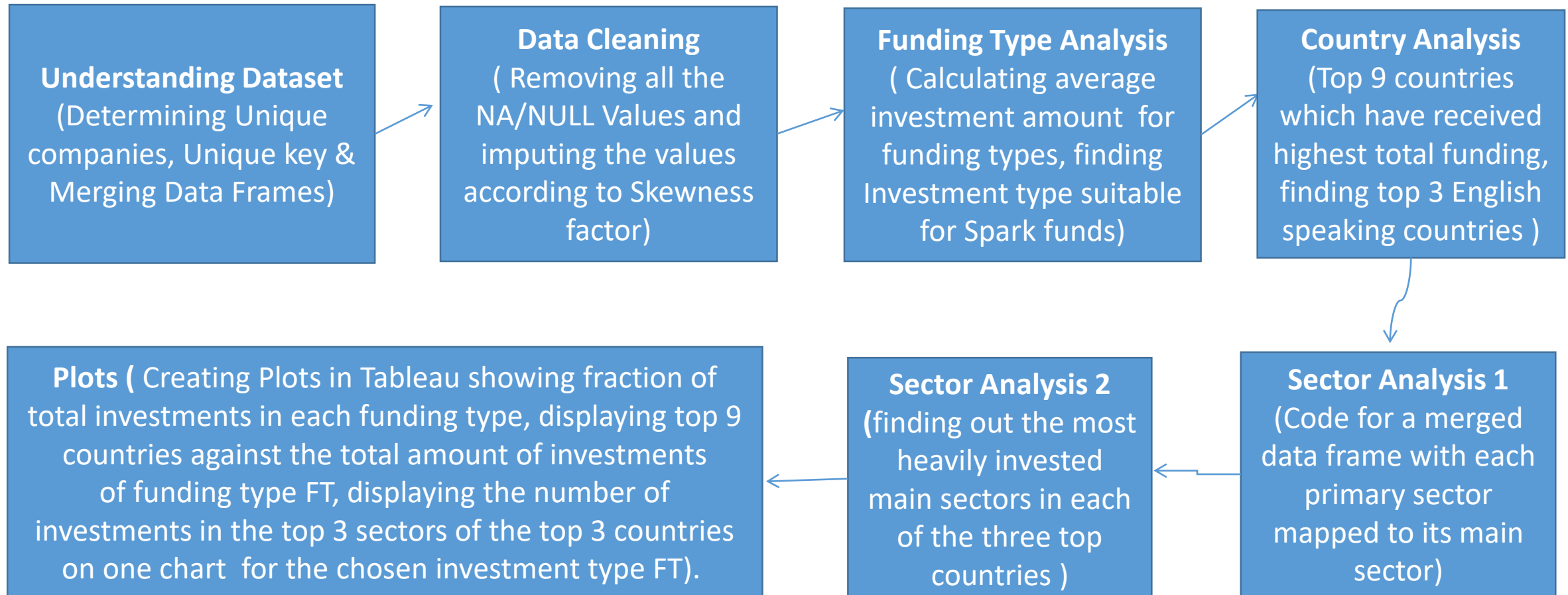
Limitations:

- 1.5 to 15 million USD will be investment per round.
2. Investment will be only in English speaking countries for ease of communication.

Business Objectives:

1. Identifying best sectors, countries and investment type for making investment.
2. Extensive analysis of Investment type, sector and country needs to be done.

Flowchart depicting the problem solving methodology





Problem Analysis

To ideate a workflow we had brainstorming session among team. This led to building up of a stream-lined workflow keeping business objectives in view and understanding data.

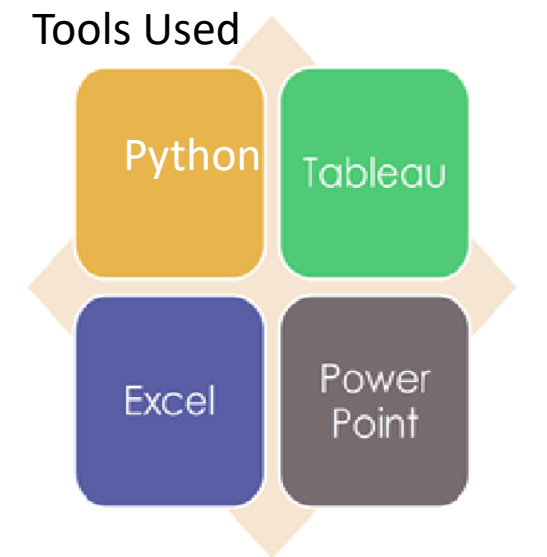
Understanding Data:

Companies –this dataset has information about companies and their categories

Rounds –Investment preferences of the companies. Like amount, investment type, etc.,

On high level following are stages in the workflow:

- Gather data for the analysis
- Clean the data for readability
- Collate data in to a model
- Filter model based on Investment type, Country and Sector
- Identify best possible investment options
- Plot on the option for graphical representation.
- Account for missing mappings in the mapping file.



Analysis

- Invested lots of effort in understanding preliminary data and cleaning it to make sure that we get accurate insights out of the data.
- Identify unique companies from companies and rounds2 dataframe and handle NA values for raised_amout_usd
- Merged the companies and rounds2 data set so that we have all the required columns in a single data file(master_frame). The attribute company_permalink in rounds2 and permalink in companies was used as the common key for merging.
- Initially while merging , the merge was not successfully because of presence of noise like encoding issue, NaN, etc. white spaces in companies_permalink column in rounds2.
- To overcome this, we cleaned the data by using proper encoding technique in permalink column in both companies and rounds. Merged both the files after converting the attribute values to lowercase.

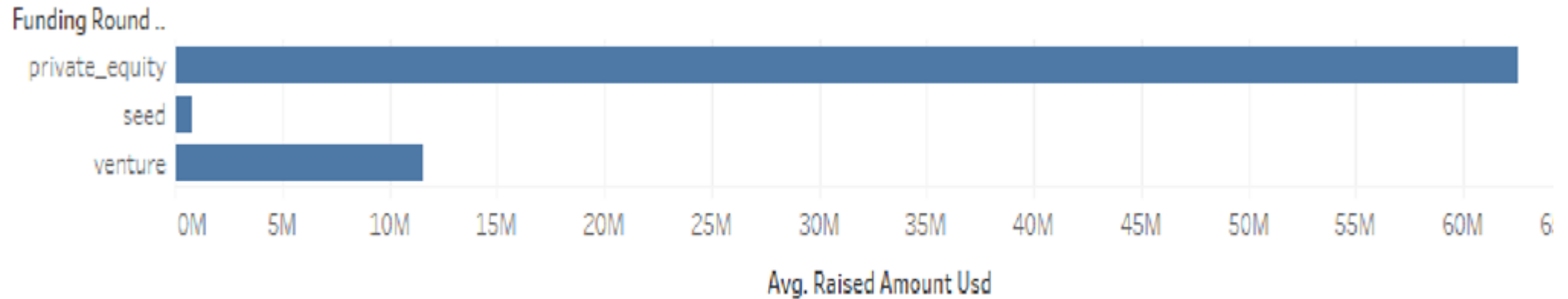
Analysis

- List average funding for each of investment types. (Venture, Angel, Seed and Private Equity type).
- Country-wise funding in sectors for any chosen investment type. List top 9 countries for investment type chosen.
- List top 3 English speaking countries for identifying investment-friendly options.
- Sector-wise investment in each country. Total number of investments and total value of investment in USD.
- Top, second and third best sectors based on count of investments.
- Number of investments in top, second and third best sectors.
- Which companies received highest investment in top and second best sectors.
- Graphical representation done in Tableau and displayed in next sections of the presentation.

Results

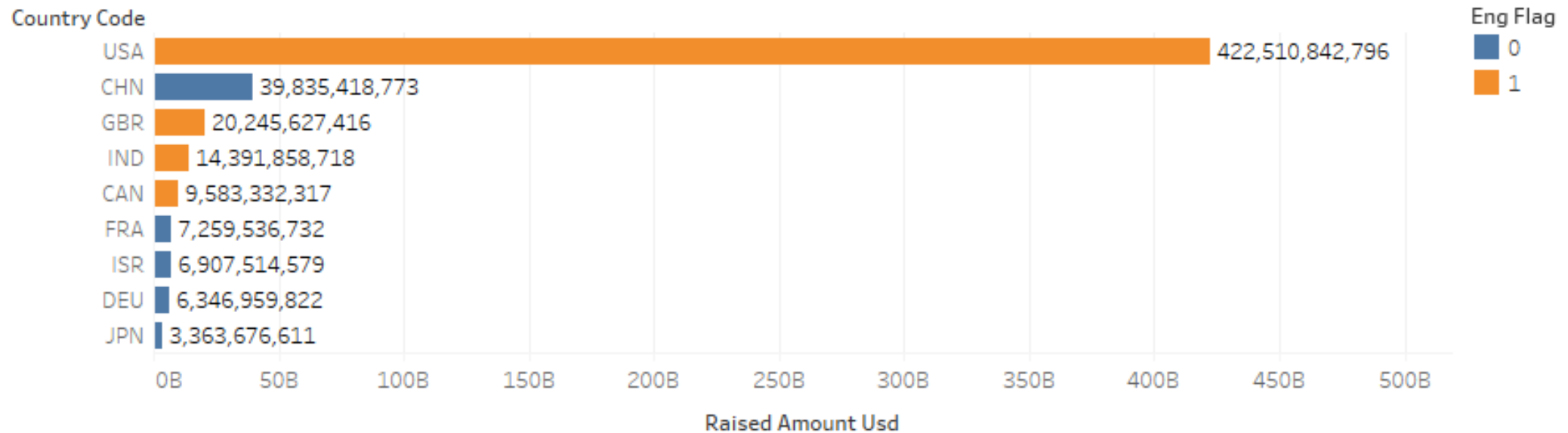
Plot 1

A plot showing the fraction of total investments (globally) in venture, seed, and private equity, and the average amount of investment in each funding type.



Results

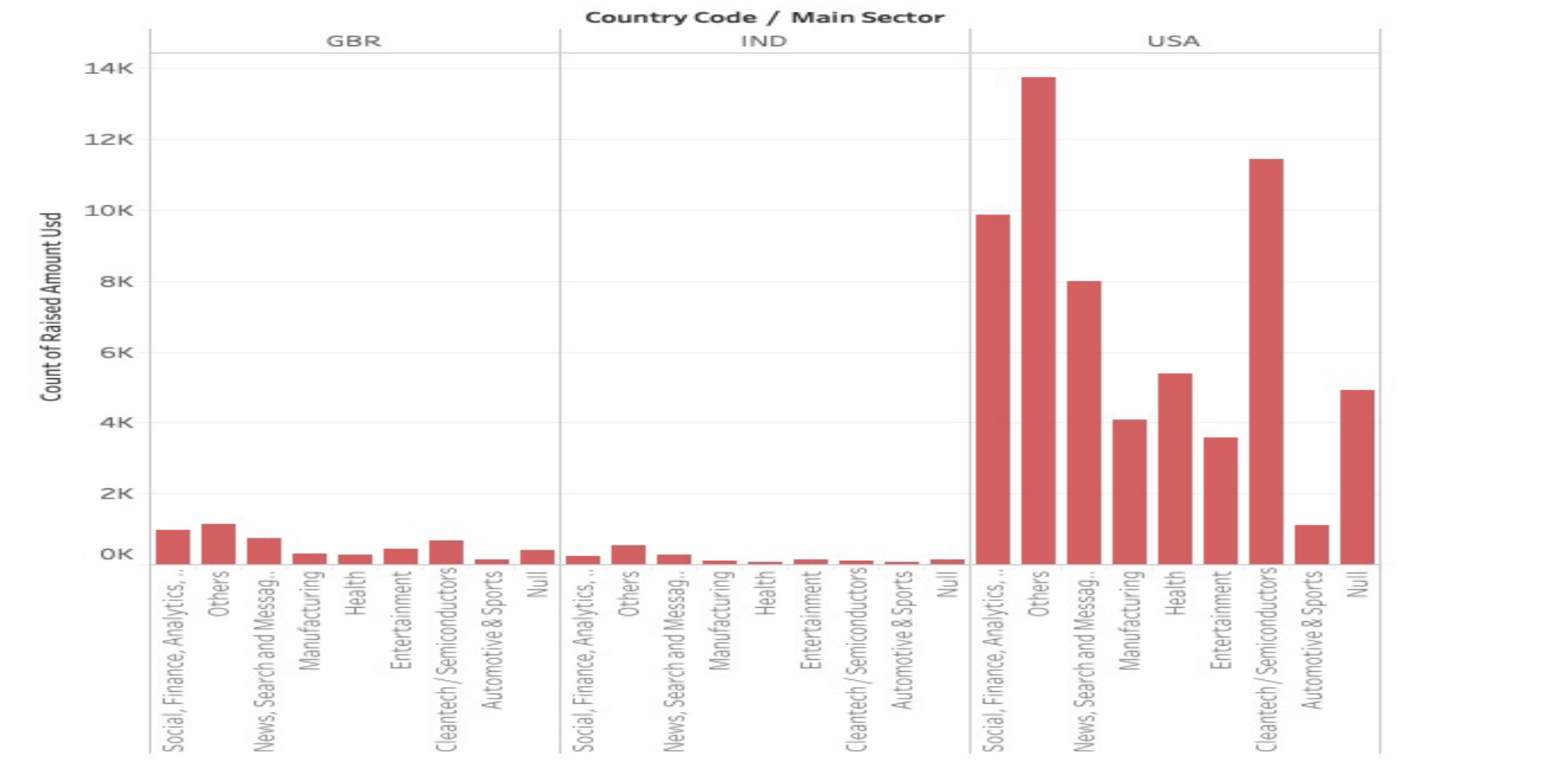
Plot 2 A plot showing the top 9 countries against the total amount of investments of funding type FT.



Sum of Raised Amount Usd for each Country Code. Color shows details about Eng Flag.

Results

Plot 3 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).



Conclusions

The key findings out of our analysis is:

- The preferable funding type for investment is **venture**
- The top 3 English speaking countries where investment can be done is USA, GBR and IND.
- The top 3 Sectors in each country

1) USA

1. Others
2. Cleantech/Semiconductors
3. Social/Finance/Analytics/Advertising

2) GBR

1. Others
2. Cleantech/Semiconductors
3. Social/Finance/Analytics/Advertising

3) IND

1. Others
2. News, Search and Messaging
3. Entertainment