



INVESTMENT CASE STUDY

SUBMISSION

Group Name:

1. Pritha Banerjee
2. Priyanka Kapoor
3. Kanchan Kumari
4. Munish Bansal

Spark Funds Investment Decision – Business Objective and Strategy

Business Objective

To make investment in the best sectors, countries, and a suitable investment type.

Strategy

To understand the global trends in investments and invest in the best sector and countries where most investments are happening.

Goals of Data Analysis

- ***Investment type analysis***: Understanding investments in different categories to help Spark Funds decide on the best suited funding type for its strategy.
- ***Country analysis***: Understanding which countries have had the most investments in the past.
- ***Sector analysis***: Understanding the distribution of investments across the eight main sectors.

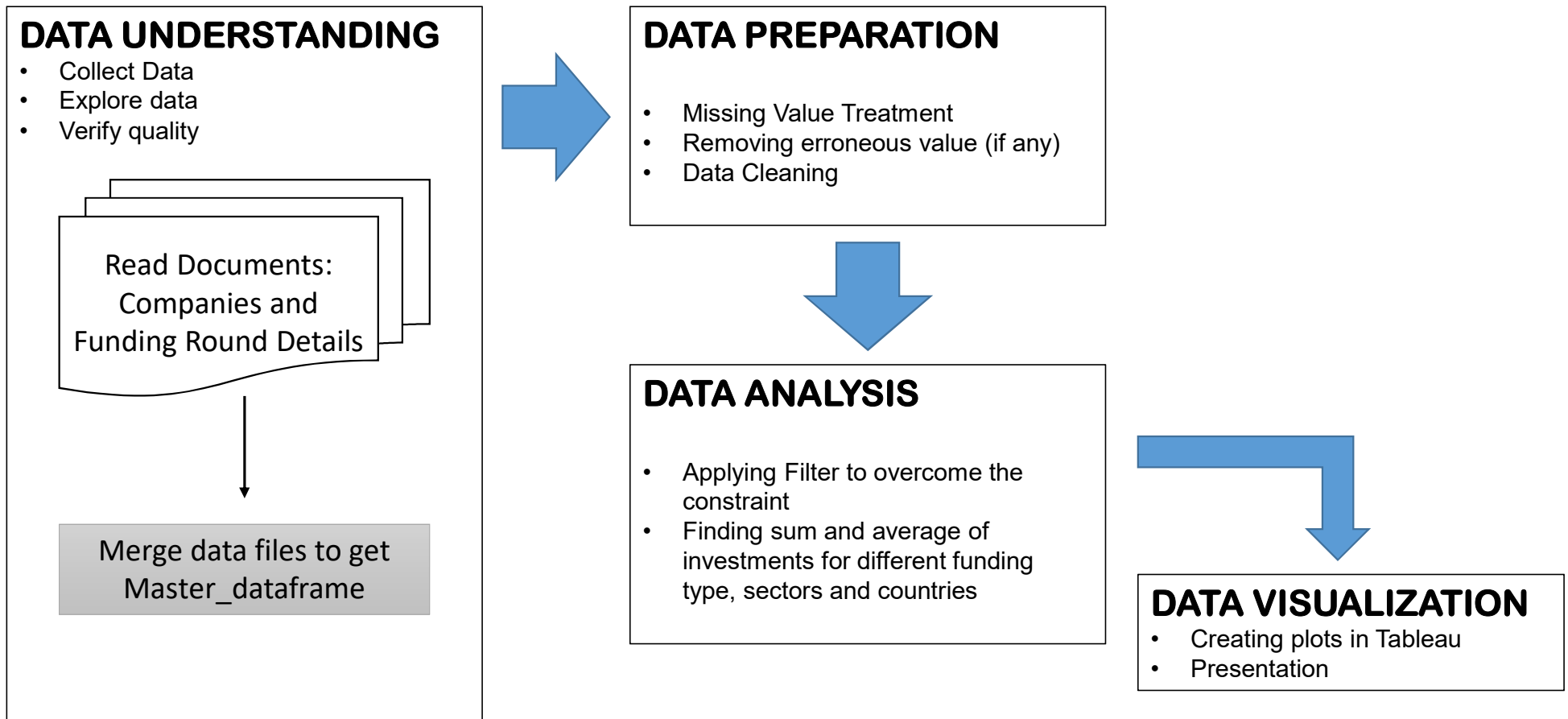
Investment Constraints:

The two minor constraints for investments are:

- Invest between 5 to 15 million USD per round of investment.
- Invest only in English-speaking countries because of the ease of communication with the companies.

Spark Funds Investment Analysis

Process flow





Spark Funds Investment Analysis

Process flow

After a brainstorming session among team, we have build up a stream-lined workflow to achieve business objectives of Spark Funds.

Data Understanding :

Companies – This dataset has basic information about companies.

Rounds2 – This dataset has basic information about Funding rounds like amount raised, funding round type, etc.

Mappings – This file maps the numerous category names in the companies table to eight broad sector names.

Data Preparation :

- Collect data for the analysis
- Clean the data
- Merge data in to a master dataframe
- Filter based on Investment type, Country and Sector

Data Analysis :

- Identify best possible investment options for Spark Funds based on the data available

Data Visualization:

Plot for graphical representation.

Tools for the workflow:

- RStudio is used for data cleansing and analysis
- Tableau is used for plotting the results
- MS excel for preparing data table
- Presentation is prepared using MS PowerPoint

Funding Type Analysis

1. The best funding type based on the highest average investment amount amongst the four options in which Spark Funds wants to choose for each potential investment:

- Angel
- Seed
- Venture
- Private Equity

Average funding for each of investment types (Venture, Angel, Seed and Private Equity type) is obtained from the data available.

2. Spark Funds wanted to invest between 5 to 15 million USD per round.

So the best suitable option is Venture Type



Country Analysis

- Countries have been filtered based on:
 - Investment type : Venture
 - Total Investment in the country
 - English speaking countries

Spark Funds wanted to find the top 3 countries. Since CHN (China) is not an English speaking country, the top three countries are :

1. **USA**
2. **GBR**
3. **IND**



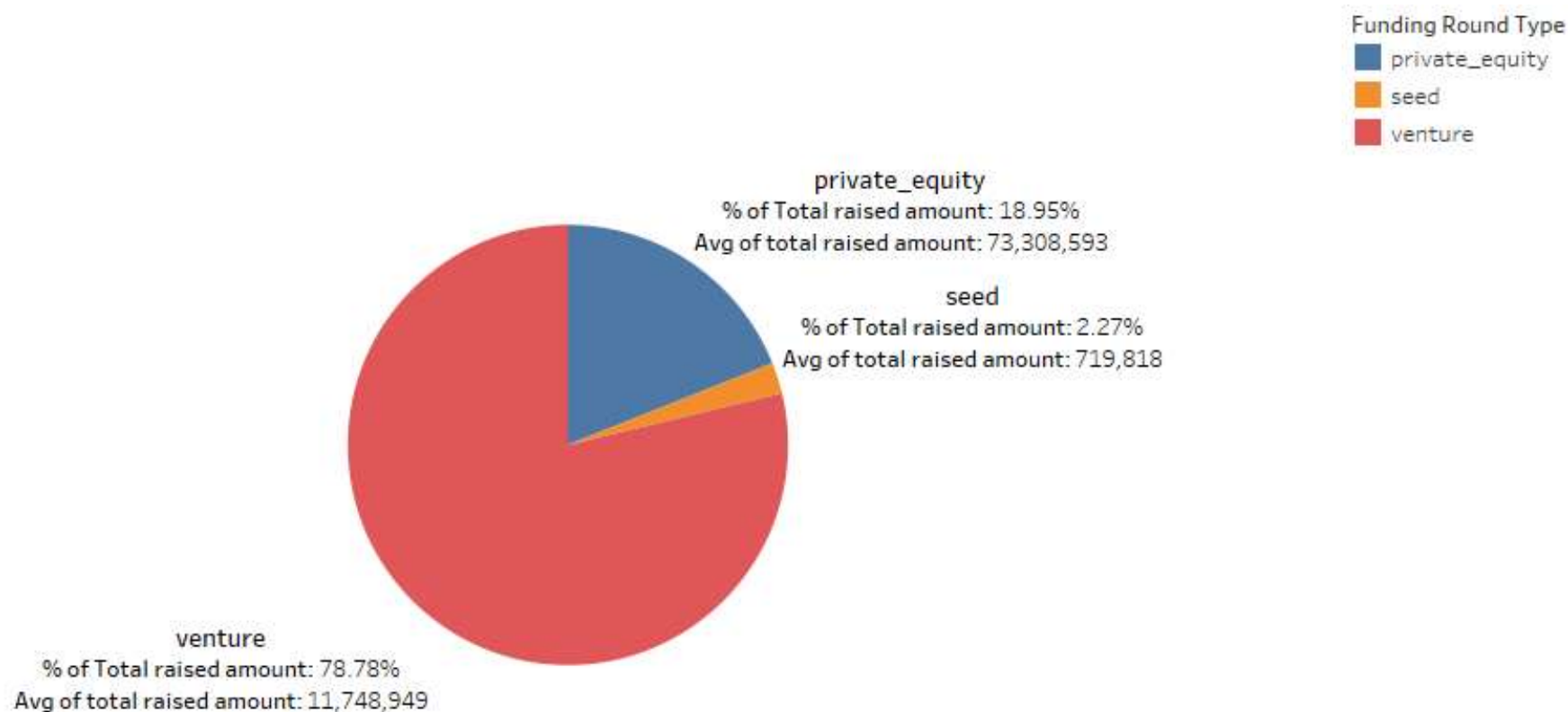
Sector Analysis

Based on the top 3 countries i.e.

- USA
 - GBR
 - IND
-
1. **Others** Sector is the most number of times invested sector in all top 3 countries
 2. **Social, Finance, Analytics, Advertising** Sector holds the second place in all top 3 countries.
 3. **Cleantech / Semiconductors** holds 3rd place in USA and GBR, whereas in IND the **News, Search and Messaging** category holds 3rd place.

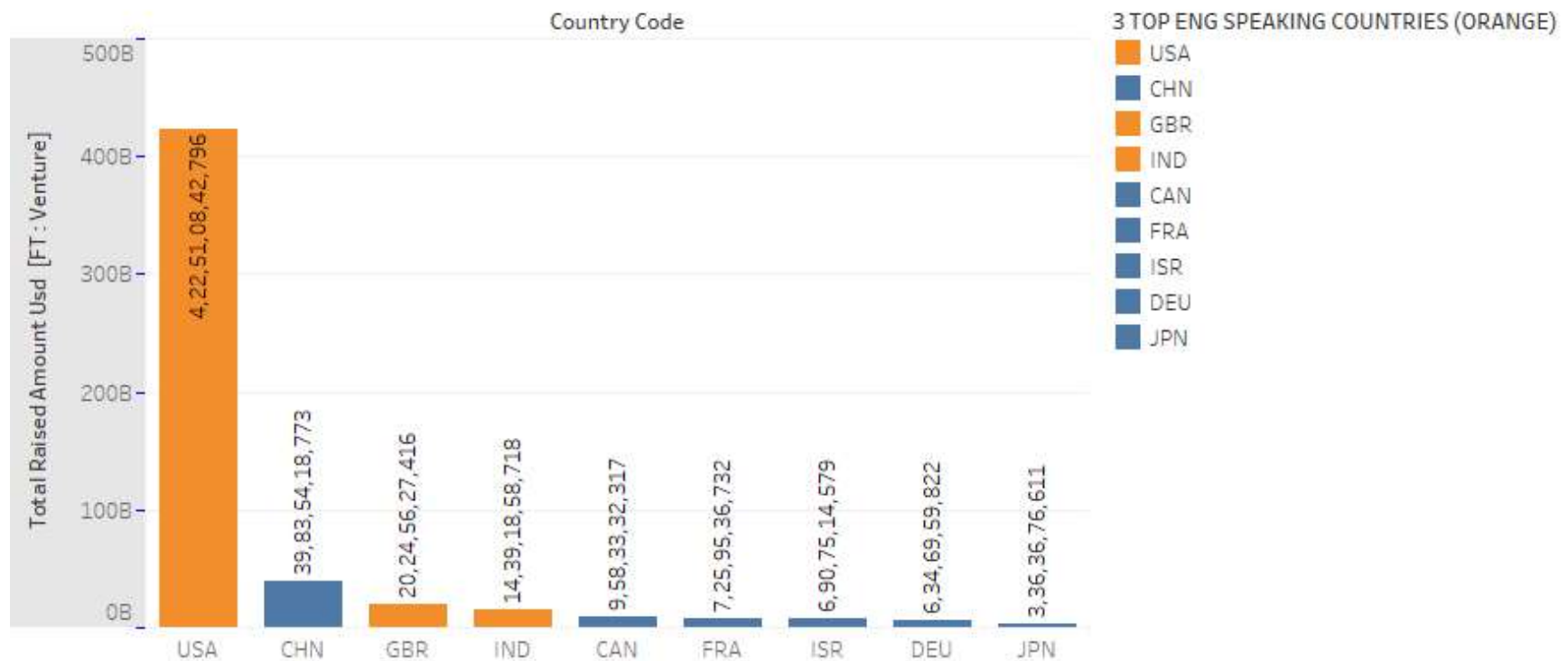
Best Funding Type

Since Spark Funds wanted to invest between 5 to 15 million UDS, VENTURE funding type is the most suitable funding type.



Best Countries to invest

Top 9 Countries based on Total Raised Amount (USD)



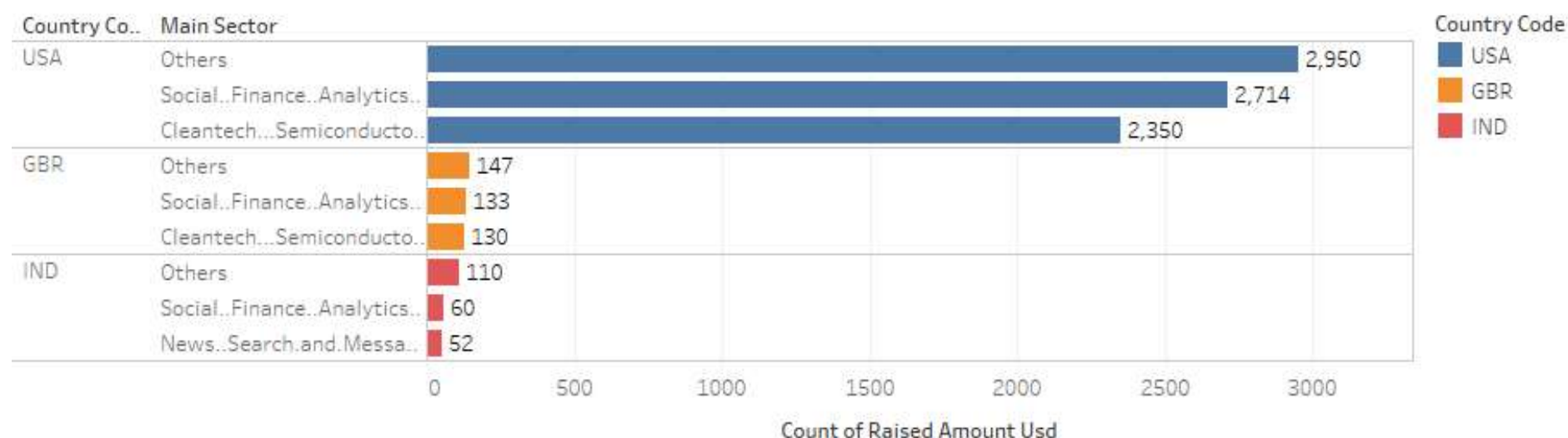
Sum of Raised Amount (USD) for each Country Code. Color shows details about Country Code. The marks are labeled by sum of Raised Amount (USD). The data is filtered on Funding Round Type, which keeps venture. The view is filtered on Country Code, which keeps 9 members.



Best sector

Since Spark Funds wanted to invest between 5 to 15 million USD, VENTURE funding type is the most suitable funding type. So number of investments in the top 3 Sectors and top 3 countries are obtained keeping in my mind that Spark Funds want to invest where most investment is taking place.

Number of Investments in Top 3 Countries for Top 3 Sectors



Count of Raised Amount Usd for each Main Sector broken down by Country Code. Color shows details about Country Code. The marks are labeled by count of Count Rasied Amount Usd. The data is filtered on Funding Round Type, which keeps venture. The view is filtered on Main Sector and Exclusions (Country Code,Main Sector). The Main Sector filter has multiple members selected. The Exclusions (Country Code,Main Sector) filter keeps 25 members.



Conclusions

1. **Venture** funding type is the most suitable funding type which Spark Funds should consider.
2. **USA, GBR** and **IND** are the top 3 English speaking countries where most of the investors invest.
3. In all the 3 countries the **top 2 sectors** are
 - a. Others
 - b. Social, Finance, Analytics, Advertising
4. In USA and GBR the **third** most promising sector is Cleantech...Semiconductors whereas in IND it is News..Search.and.Messaging



Thank You !