INVESTMENT CASE STUDY

SUBMISSION

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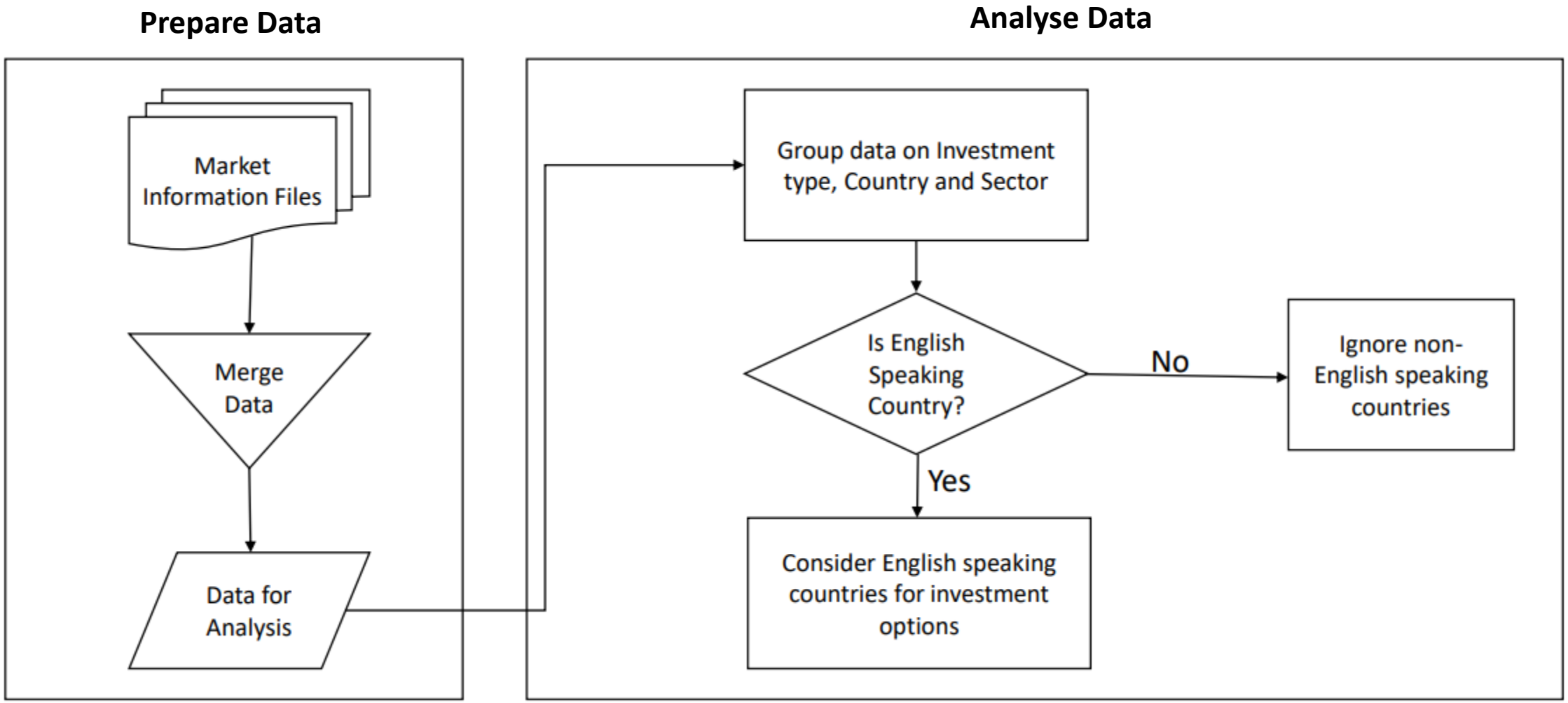
Investment Strategy – SPARK FUNDS

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

- An investment strategy needs to be drawn keeping below restraints and business objectives.
- Per round investment amount will be 1. 5 to 15 million USD.
- Investment will be in English speaking countries ONLY.
- Identifying the best sectors, countries and investment type for making investment.
- Analysis of Investment type, sector and country is expected to be done

Flowchart – Sparks Fund Investment Decision



Analysing the Problem

We, have tried to follow the CRISP-DM for Business understanding, Data Understanding and Data Preparation and we had several team sessions to discuss and freeze on the overall workflow.

Data:

Companies – this dataset has information about companies and their categories

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

Workflow Stages :

- Gather data for the analysis
- Data cleasning
- Data collation – model building
- Filter model based on Investment type, Country and Sector
- Identify best possible investment options
- Visualize through Plots.

Tools used :

- RStudio (Data preparation / analysis)
- Tableau (Visualization / reports)

Analysing the Data

We have companies, rounds and mapping information in files. This needs to be cleansed and built into a model for data analysis.

RStudio is extensively used with the following stages :

- Data Import – Import data from files (countries, rounds, mapping).
- Data Cleansing –Removing or correcting dirty data, converting data into lower case.
- Data Merging – Merge companies and investment round data to get fully readable dataset based on unique key (permalink).
- Data Mapping – Mapping dataset for identifying sectors and investment preferences.
- Filtering – To identify preferred investment options for Spark Funds to invest.
- Exporting Data – For tableau plotting data is exported.

Model Objectives – based on above model, goals to be achieved are as follows.

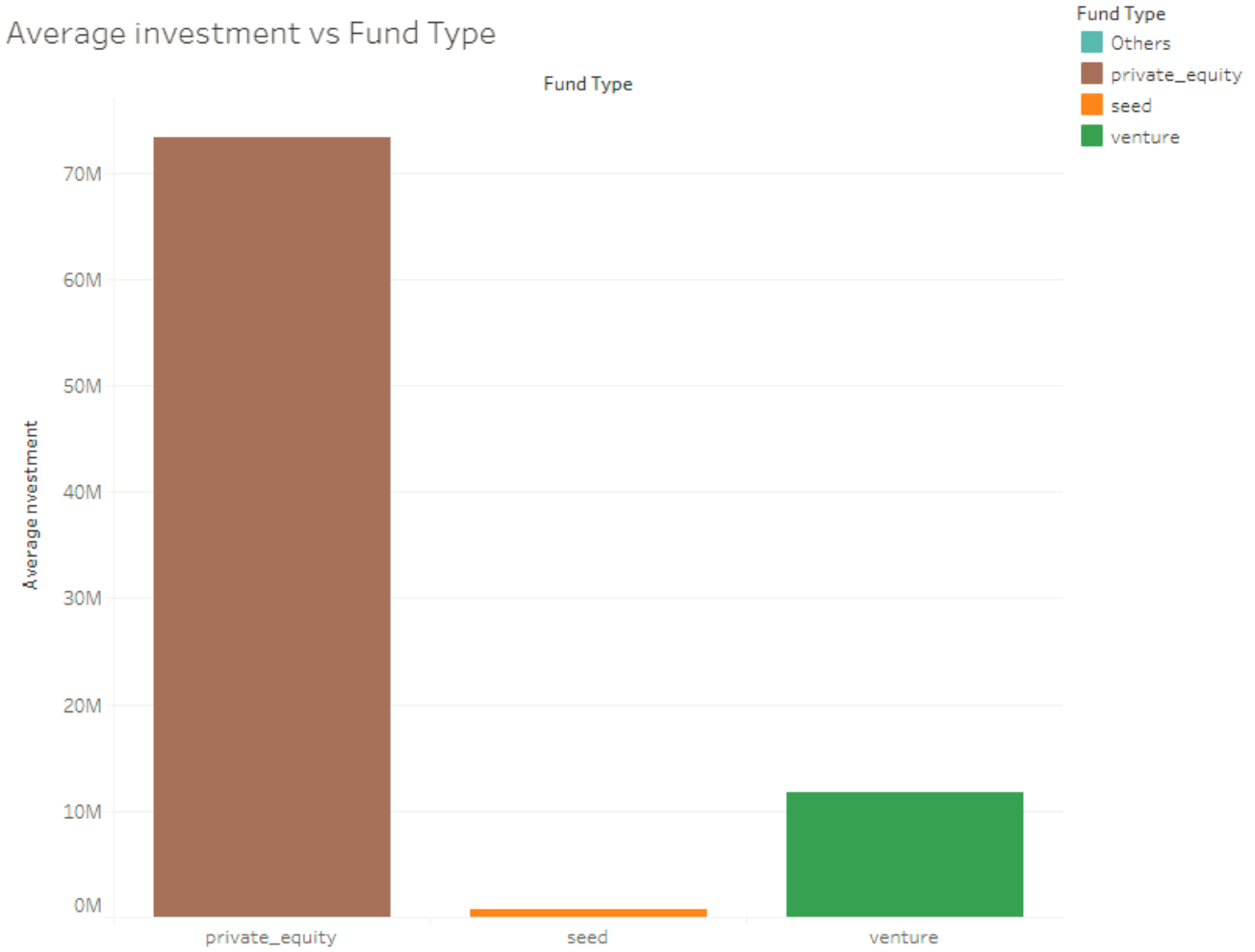
- Analysis of Investment Type: ability to identify best suited categories for the investment.
- Country Analysis: list out countries having most investment in the past.
- Sector Analysis: understanding investment distribution among sectors.

Analysing the Results

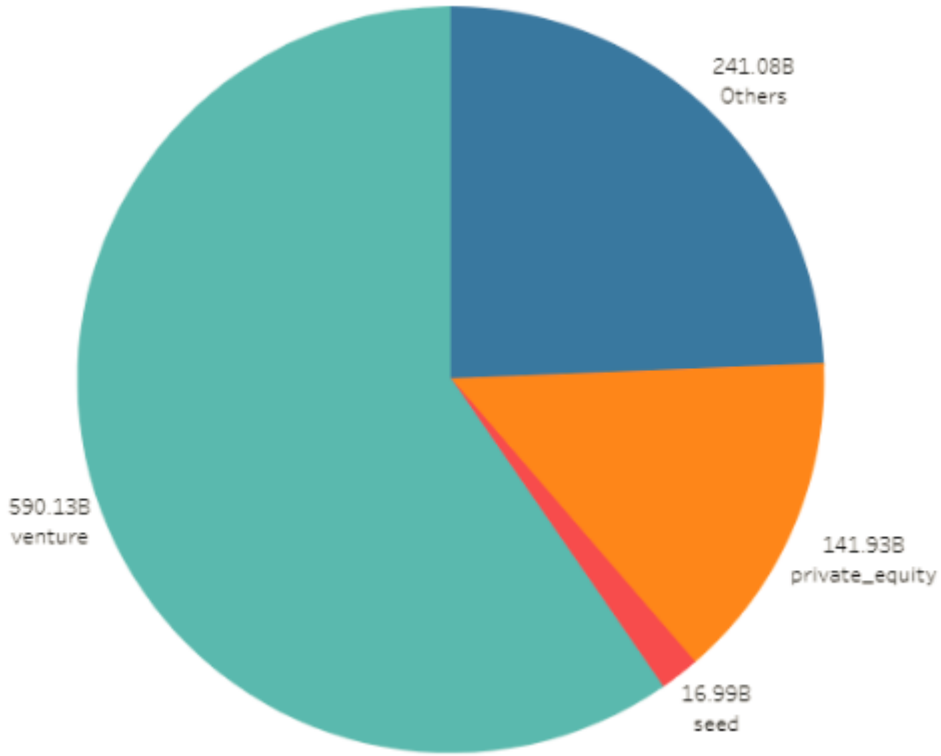
Based on the model created and studied, below are the representations done. Spark Funds can easily deduce required results form the mode.

- Identify unique companies
- 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 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.
- Find companies that received highest investment in top and second best sectors.
- Visual representation done in Tableau.

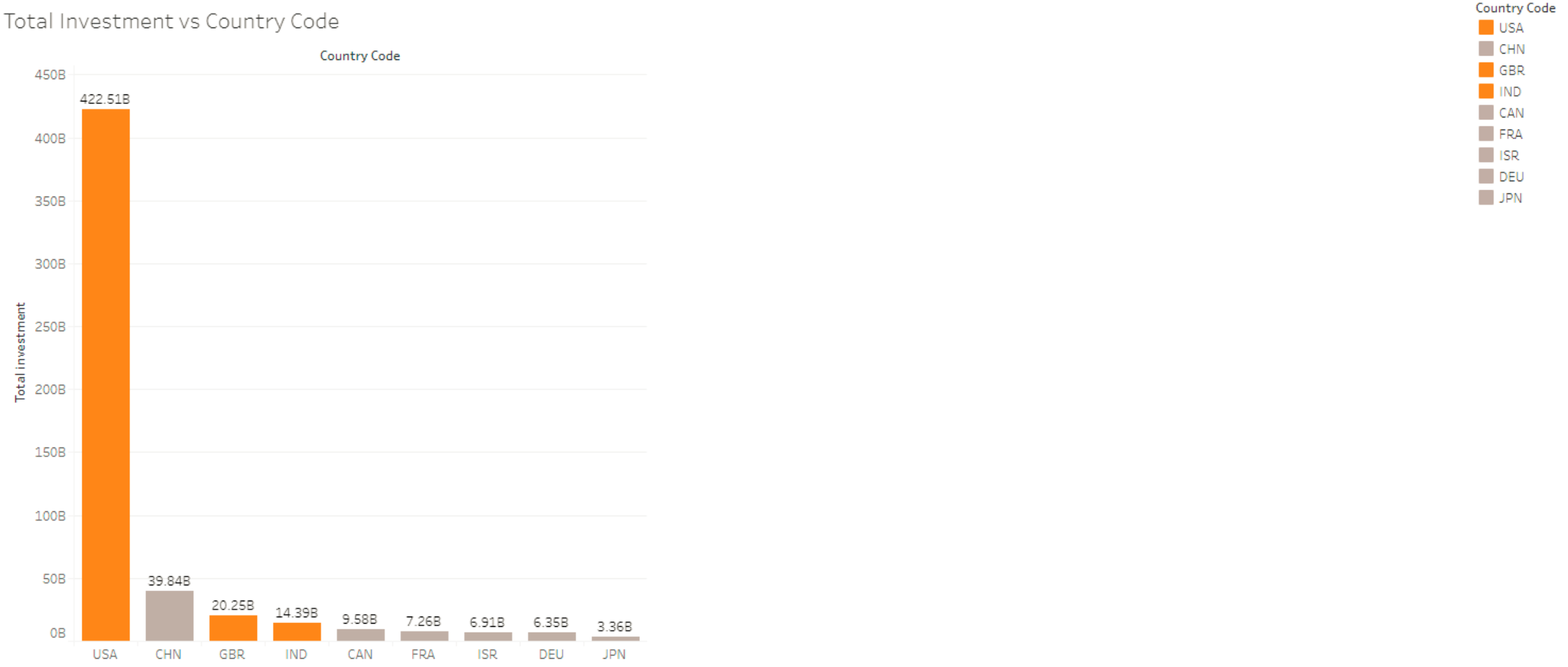
Average Investments



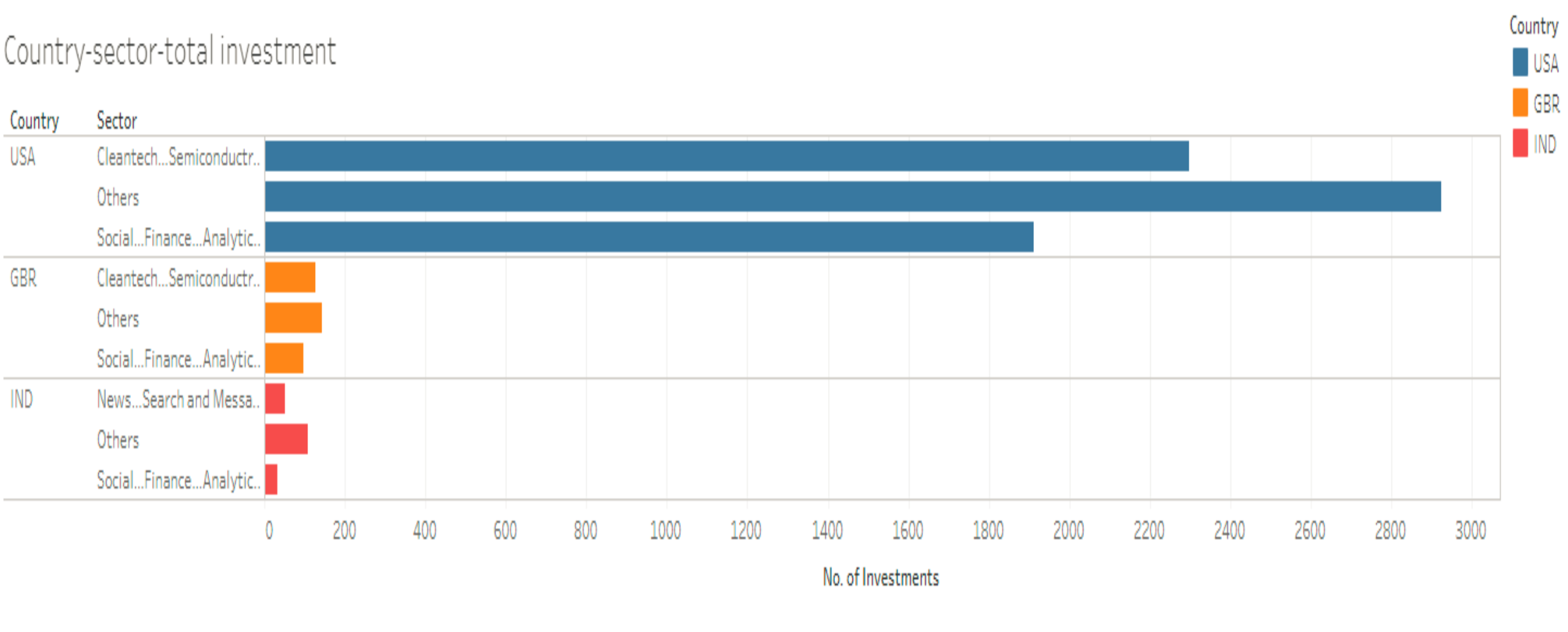
Total Investments



Top 9 countries – Total Investments



Investments – Top 3 Main Sectors vs Top 3 Countries



Strategic Solution for Spark Funds Investments

Countries to Invest vs Investment Main Sectors

USA	GBR	IND
Others	Others	Others
Cleantech…SemiConductors	Cleantech…SemiConductors	News…Search and Messaging
Social…Finance…Analytics…Advertising	Social…Finance…Analytics…Advertising	Entertainment

- Based on our data analysis, Spark Funds should consider investing in the above mentioned 3 countries
- The top 3 countries have English as their official language
- Country wise top sectors have been listed that helps Spark funds to decide