INVESTMENT CASE STUDY

SUBMISSION

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Basic Understanding: SPARK FUNDS

Sparks Funds, an asset management company is looking for strategic investment options. Keeping their stipulations in mind, herein are their objectives for which various observations are to be drawn.

Investment Strategy

- To understand the Global trends in investments per round between 5 to 15 Million.

- To identify the leading sectors in various countries, and suitable investment type.

- To identify the investments in English Speaking countries to ease functionality.

- Identify suitable Investment type like venture, seed, private equity etc.

- Providing country details of past investments made.

- Provide best sector investment potential under top 3 countries.

Problem Solving Analysis

The team came together to brainstorm and ideate, leading to a stream-lined workflow keeping business objectives in view and understanding data.

Understanding Data:

- Companies – this dataset has information about companies and their corresponding categories

- Rounds2 – Investment preferences of the companies. Like raised amount, investment type, etc.
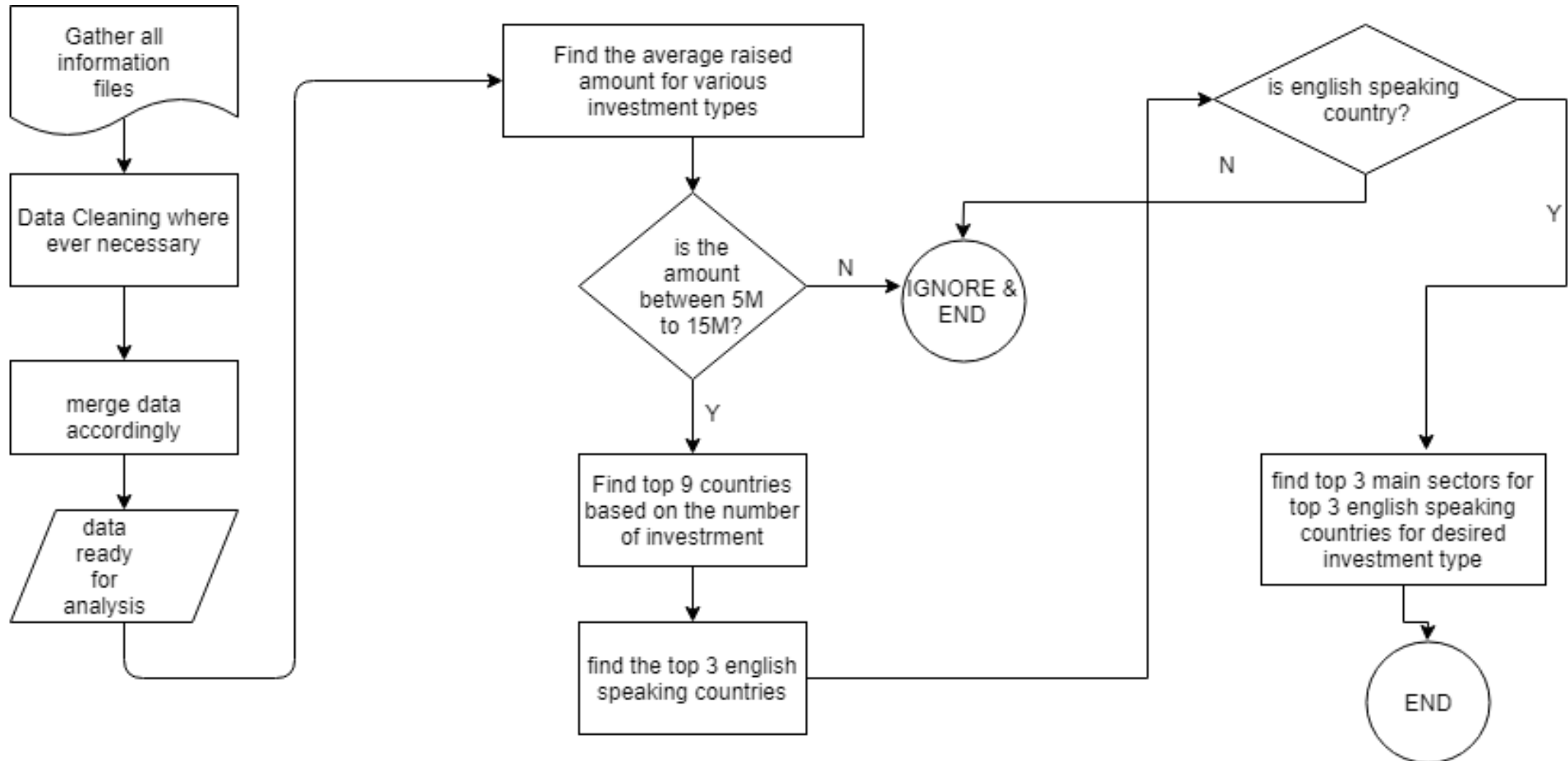
Workflow:

- 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.

Tools used:

- RStudio is used for data cleansing and modelling

- Tableau is used for plotting the results

Flowchart

Data Model Analysis

Data quality is crucial to carry out further analysis. Therefore the data needs to be cleansed and built into a suitable model.

Building the model in RStudio:

- Data Import – Importing data from files.

- Data Cleansing –Handling mostly NA values and other inapplicable data.

- Data Merging – Merge companies and investment round data to get amalgamated dataset based on the unique key.

- Data Mapping – Mapping dataset for identifying sectors and investment preferences. Working on the missing mappings by mapping the primary sectors to the nearest logical main sector.

- Filtering – To identify preferred investment options for Spark Funds to invest.

- Exporting Data – For tableau plotting, data is to be exported in required format.

Data Model Analysis

Model Objectives :

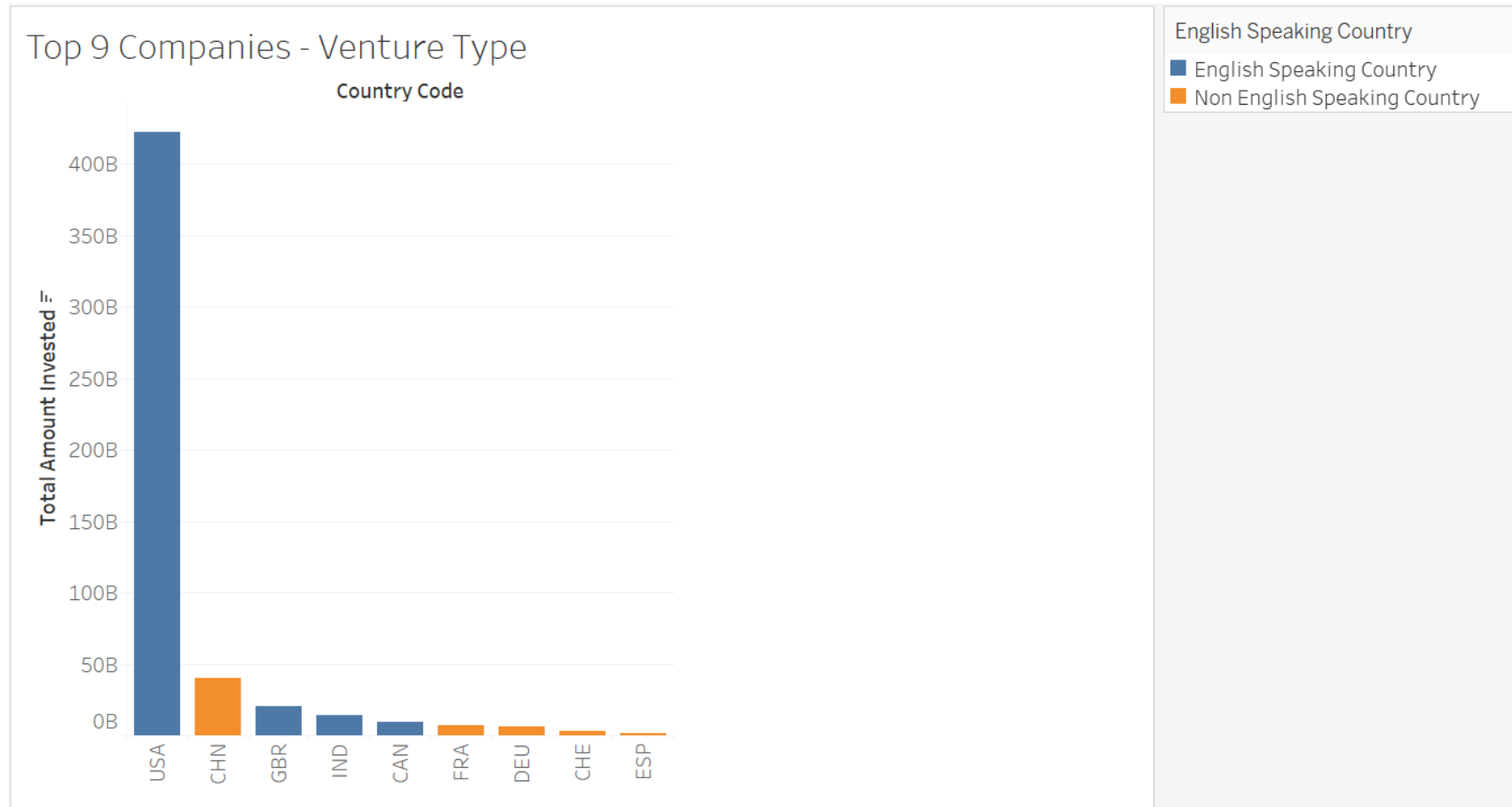Based on above model, following are the primary goals:

- Investment type analysis: Identifying best suited categories for the investment.

- Country Analysis: Listing countries having highest past investments.

- Sector Analysis: Understanding of investment distribution among sectors.

Results: 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
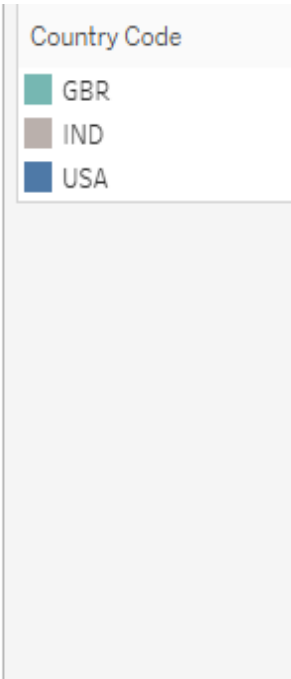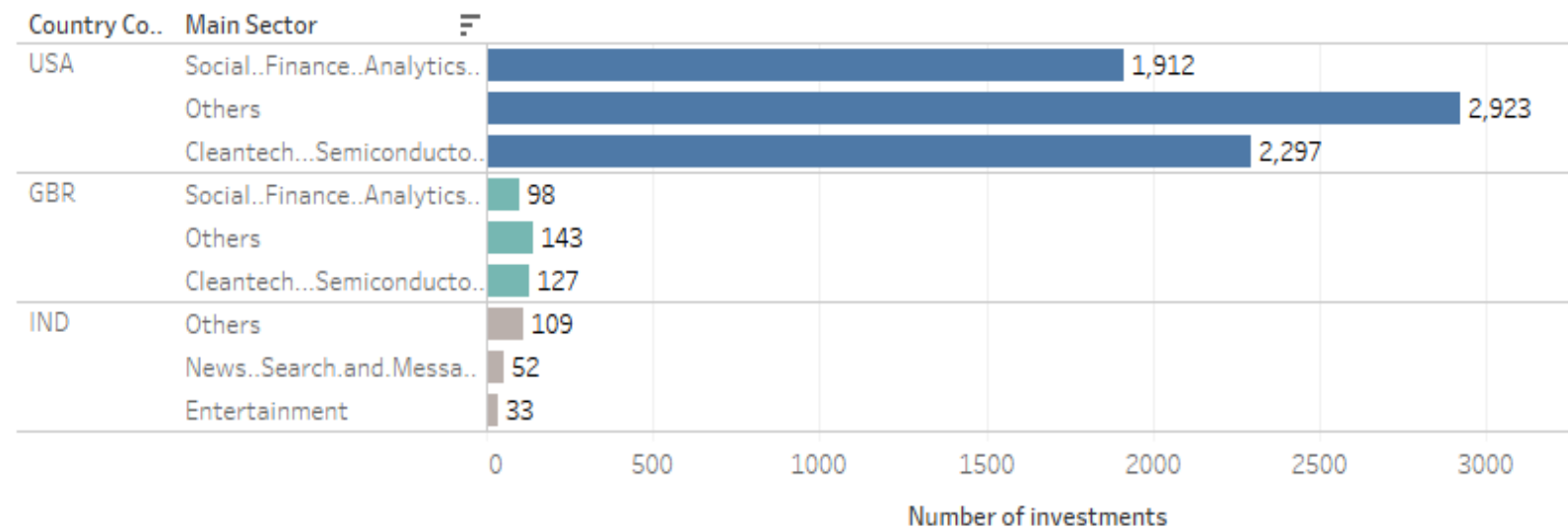
Results: A plot showing the top 9 countries against the total amount of investments of funding type FT. This should make the top 3 countries very clear.

Results: 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 - VENTURE).

Number of investments in the top 3 sectors of the top 3 countries

Country Co..	Main Sector	Number of investments
USA	Social..Finance..Analytics..	1,912
	Others	2,923
	Cleantech...Semiconducto..	2,297
GBR	Social..Finance..Analytics..	98
	Others	143
	Cleantech...Semiconducto..	127
IND	Others	109
	News..Search.and.Messa..	52
	Entertainment	33

Number of investments

Country Code
- GBR
- IND
- USA

Conclusions

Based on the model created and studied, below are the representations done:

- The Suitable option for investment type for Spark Funds within the range of 5M to 15M is the Venture Funding Type.

- The Top 3 English speaking countries are USA, UK/GBR & INDIA.

- Inferences drawn based on analysis of the suitable sectors for Funding are :

1. USA:

i. Others

ii. Cleantech/Semiconductors

iii. Social/Finance/Analytics/Advertising

2. GBR:

i. Others

ii. Social/Finance/Analytics/Advertising

iii. Cleantech/Semiconductors

3. IND:

i. Others

ii. News..Search.and.Messaging

iii. Entertainment