

INVESTMENT CASE STUDY

SUBMISSION

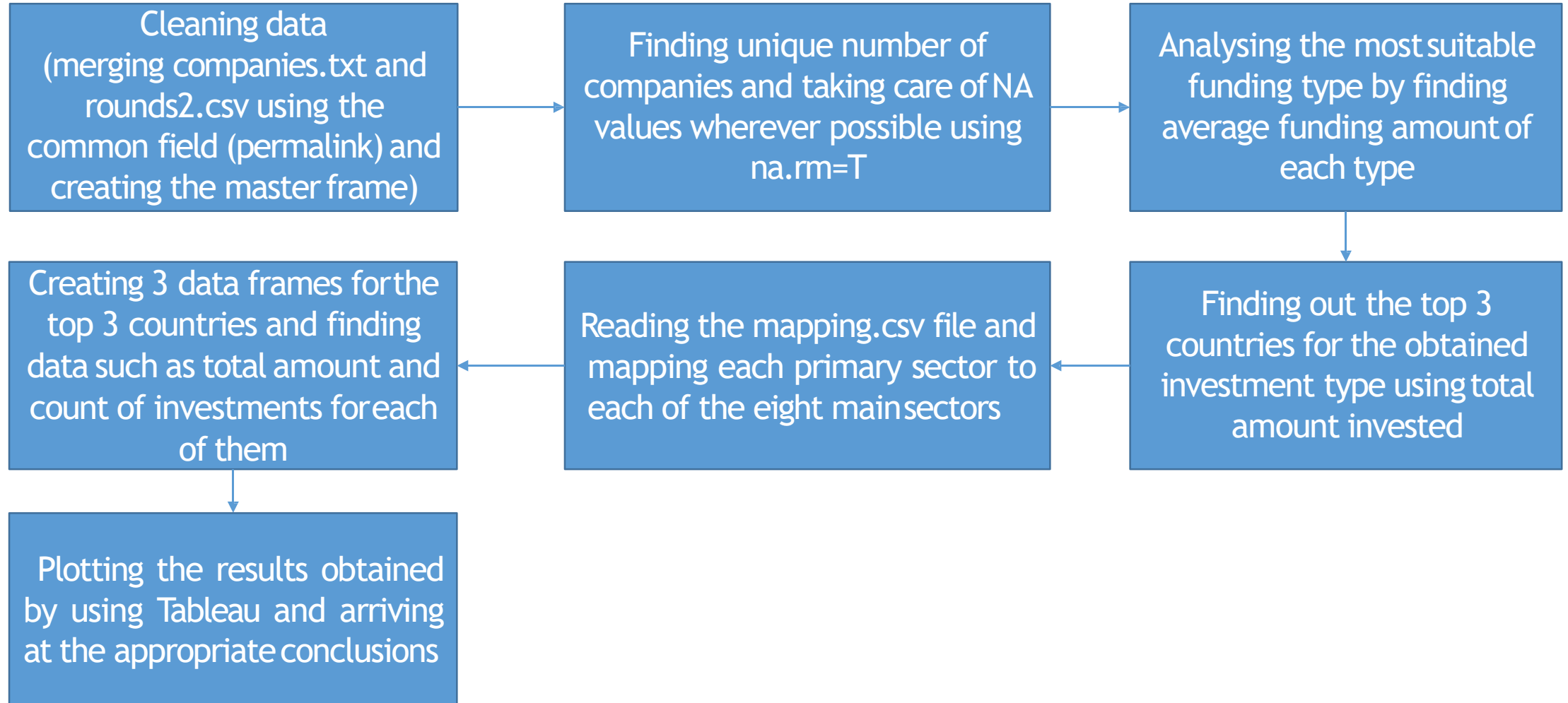
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Objective of Case Study and Constraints Involved

- The main objective of this case study is to find out the most suitable type of investment, countries and sectors for Spark Funds.
- This is done by analysis of the rounds2 and companies data files to find out where and how investment is to be done effectively.
- However, there are two major constraints involved.
 - Spark Funds wants to invest only between 5 and 15 million USD per funding round.
 - Due to ease of communication, Spark Funds can only invest in English-speaking countries.
- Venture, seed, angel and private equity are the major types of investments involved in this data analysis.

Problem Solving Methodology



Preliminary Analysis

The analysis involves the following major goals:

- Given the constraints, determining which funding type is most suitable for investment by Spark Funds.
- In the given funding type, determining the countries which have the most funded resources.
- Based on the above, determining which is the best performing sector.

The two main files used for data analysis are:

- Companies.csv – contains data regarding companies and their categories
- Rounds2.csv – contains data regarding investment amount and type of investment (investment preferences)

Data Modelling and Analysis

- The two major tools used in this case study are:
 - R and Rstudio (for data cleaning and modelling)
 - Tableau (for plotting data graphs and visualizing data)
- After analysing data in both the files, it was found that:
 - 66368 unique companies and 8 main sectors are involved in funding of investment
 - 114949 different rounds of investment are involved
- Based on the flow chart mentioned in Slide 3 and the different stages involved in the same, we can do appropriate analysis to get the desired results.

Result Analysis

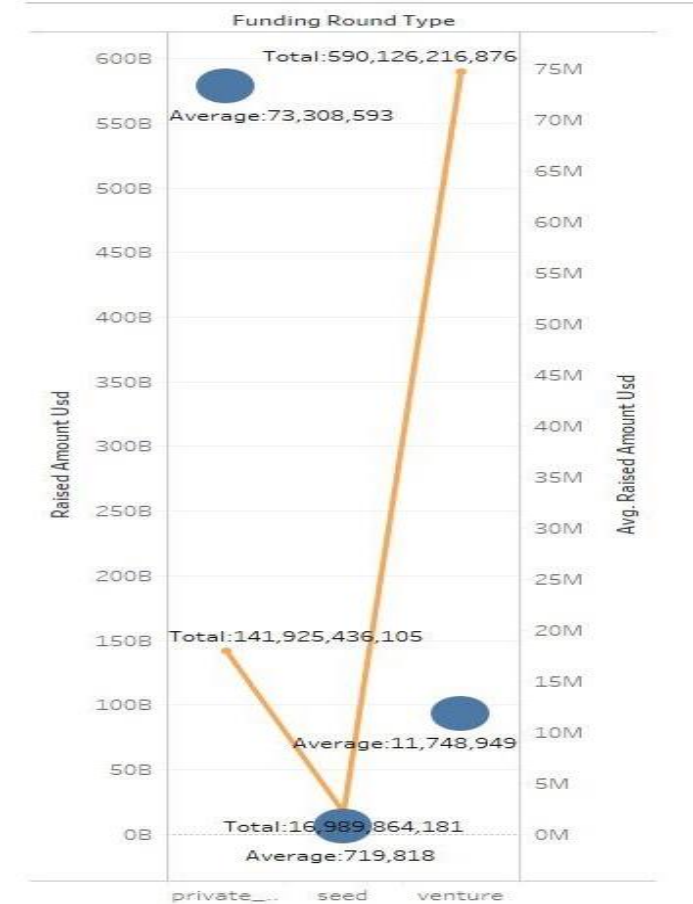
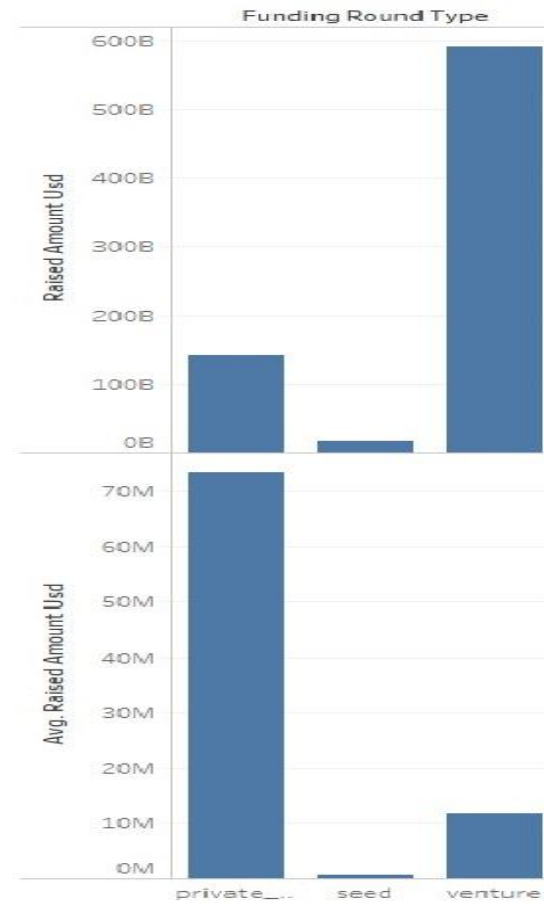
Thus, based on the analysis described in the previous slides, we can easily determine and handle various information regarding the data, such as:

- Determining unique number of companies in each file and handling NA values (using `na.rm=T`)
- Average investment amount for different types of funding
- Total number of investments for the top 9 countries
- Total count of investments made for a particular country
- Top 3 countries for the preferred investment type
- Top, second and third best sectors based on the investment count

The modelling of data for analysis can be done using various data manipulation functions in R, such as `filter`, `group by`, `aggregate` and `summarize`.

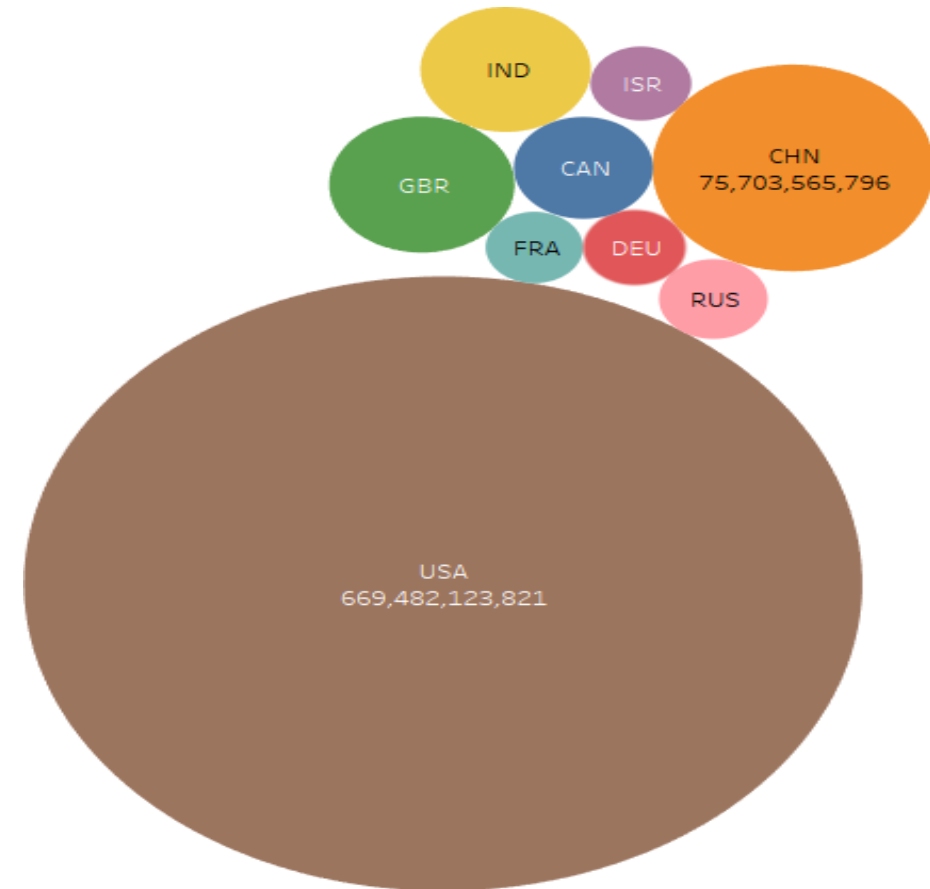
Results

Based on the average investment amount and the fact that it should be between the range of 5 and 15 million USD, venture funding is found to be the preferred investment type for Spark Funds.



Results

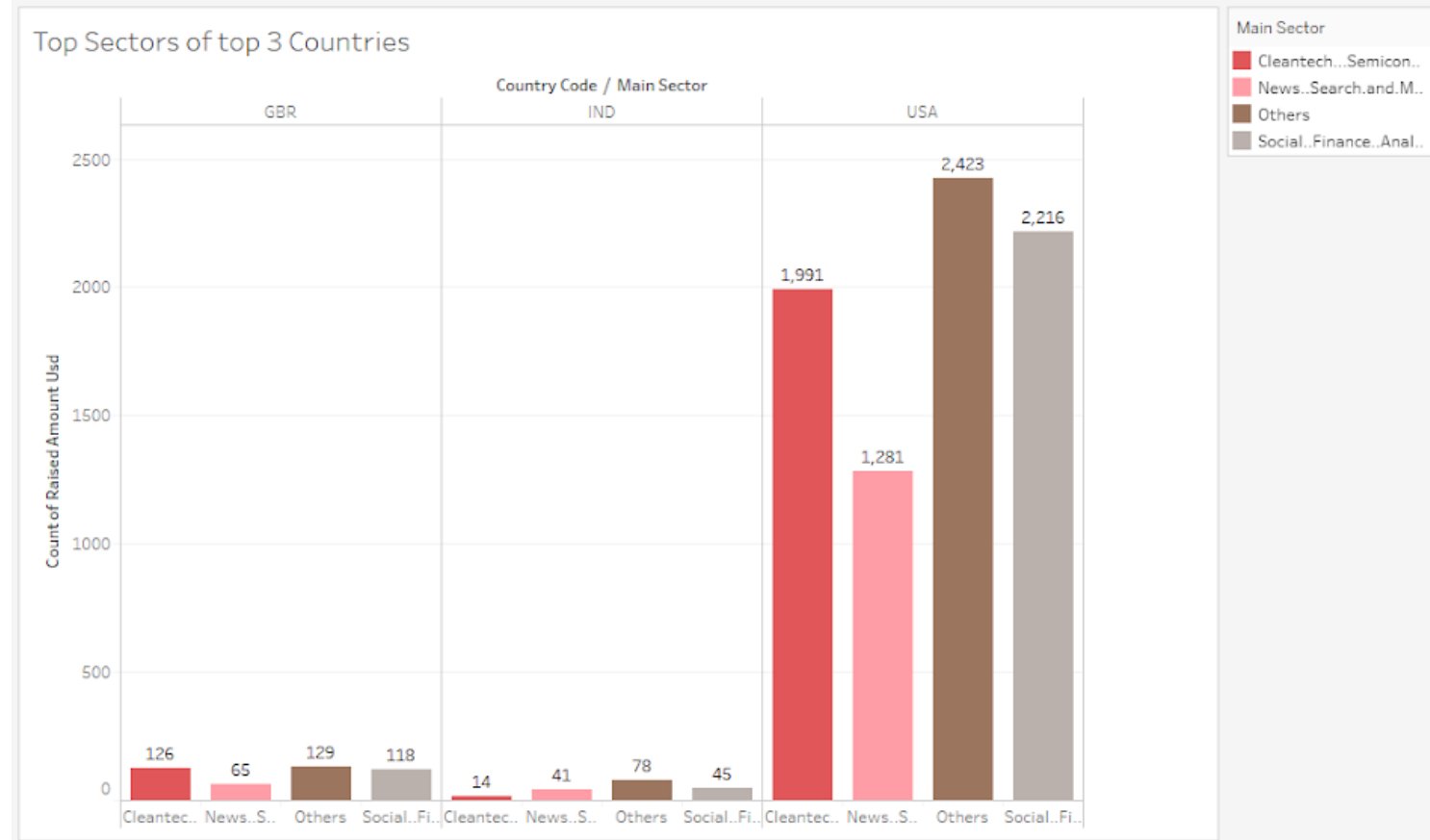
Based on the Tableau plots, it is shown that the top 3 English-speaking countries based on total funding are USA, GBR and IND.



Results

Based on the Tableau plots, the top investment sectors involved in the top 3 countries are:

- Cleantech...semiconductors
- News, search and marketing
- Social, finance, analytics and advertising



Conclusions

The following conclusions can be inferred from the case study:

- Since the preferred investment range is between 5 and 15 million USD, venture funding is the most suitable funding type for Spark Funds.
- The top 3 English-speaking countries in terms of total funding are USA, GBR and IND.
- The top investment sectors are:
 - Others
 - Social, finance, analytics and advertising
 - Cleantech / Semiconductors
 - News, search and marketing
- The top investment companies are

SpiderCloud Wireless, MyOptique Group , FirstCry.com HomeShop18 Myntra
EximSoft-Trianz , Flite, Onyvax and inTarvo