

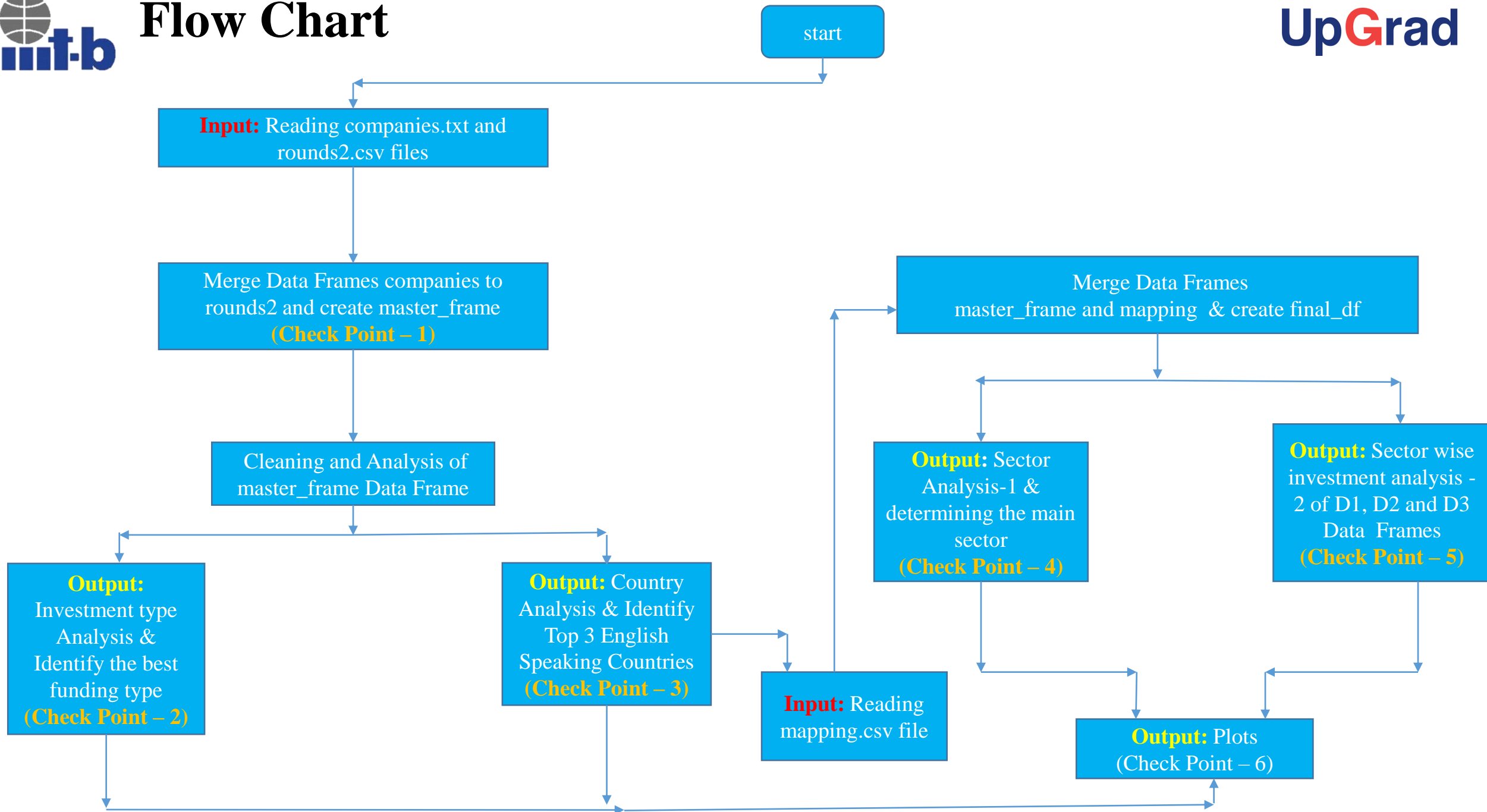
INVESTMENT CASE STUDY

SUBMISSION

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In this present project, we work for Spark Funds an asset management company. Spark Funds wants to make investment in a few English speaking countries between 5 to 15 million USD per round of investment. To take the investment decision effectively, Spark Funds is to identify the best sectors, countries and suitable investment type where other investors are investing. As part of the analysis, we have done Investment type analysis to identify the best funding type, Country analysis to choose the best country which has been invested heavily in the past and Sector analysis to pinpoint the finest sectors for distribution of investments across eight main sectors. For doing analysis and visualization we use PYTHON and TABLEAU respectively.



- Spark Funds wants to choose one of the four investment types **Seed**, **Angel**, **Venture** and **Private equity** whose average values of investments between 5 to 15 million USD.
- We have calculated the average values of investments for each of four funding types from the **master_frame** data frame
- Clearly, from the Table-1, Venture Funding Type shows 11.73 million USD which falls under 5 to 15 million USD and is the most suitable funding type where Spark Funds can invest.

Funding Type	Average Funding Amount (million USD)
Seed	0.75
Angel	0.97
Venture	11.73
Private Equity	73.93

Table 1: Average values of Investments for each of Funding Types

- Spark Funds wants to invest in countries with the highest amount of funding for the chosen investment type **Venture**.
- For the chosen investment type **Venture** We have identified top 9 countries based on the total investment amount each country has received.
- As Spark Funds has a constraint to invest only in English-speaking countries, we select first three English-speaking countries among the top 9 countries.

Funding Type	Average Funding Amount (million USD)
Top English Speaking Country	USA (United State of America)
Second English Speaking Country	GBR (Great Britain)
Third English Speaking Country	IND (India)

Table 2: Top 3 English Speaking Countries

- In Sector Analysis, the main objective is to achieve Spark Funds invest in eight of one sectors listed in the mapping.csv file where maximum number of people are investing.
- The **category_list** column in **master_frame** DF, has multiple sub-sectors separated by a pipe (vertical bar |) and the first string before the vertical bar will be considered as **primary_sector**.

category_list	primary_sector
Application Platforms Real Time Social Network Media	Application Platforms

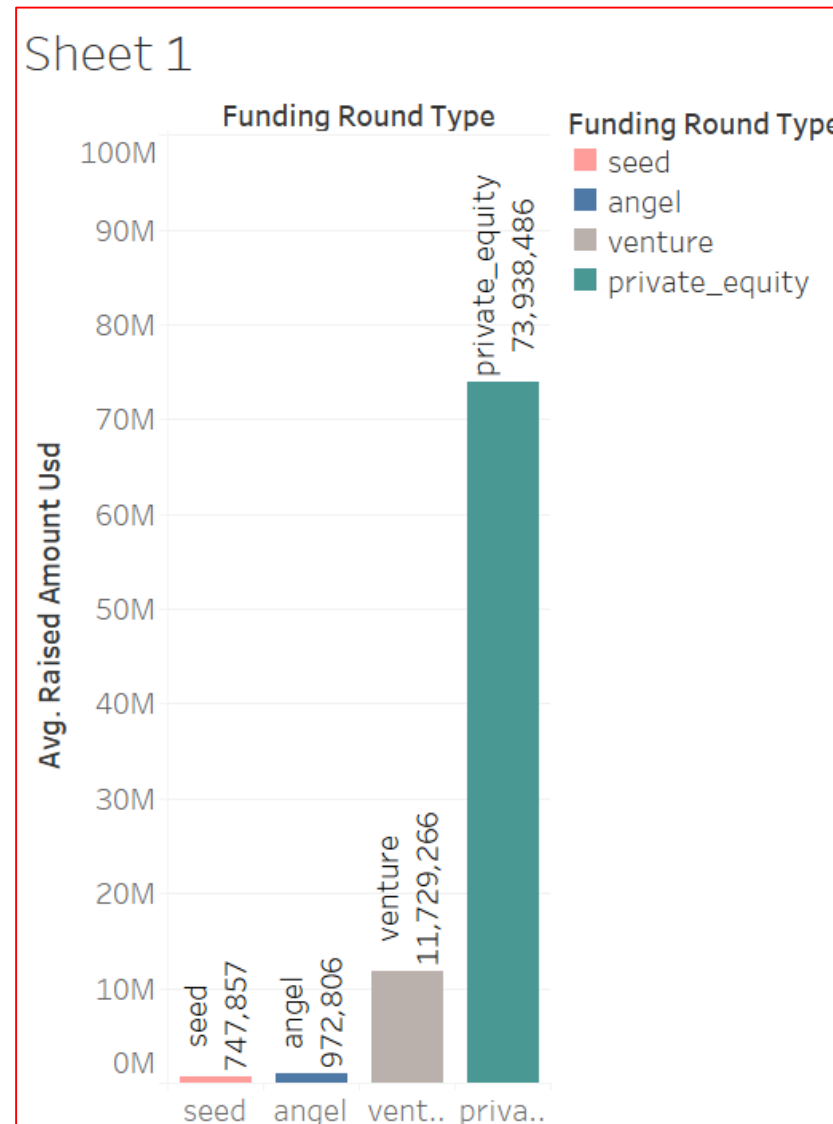
- From the above table **Application Platforms** will be considered as **primary_sector**
- We have extracted each the **primary_sector** of each category list from the **category_list** column
- Then we have merged **mapping.csv** file to map each **primary_sector** of **master_frame** DF to on of the eight main sectors



- Now we know that the top three English-speaking countries (USA, GBR and IND) and the most suitable funding type (Venture) for Spark Funds.
- Our aim is to find out the most heavily invested **main sectors** in each of the three countries for **Venture** funding type and investment range of **5 – 15 million USD**.
- For this we have created three data frames **D1**, **D2** and **D3** for each of the three countries containing the observations of **Venture** funding type falling within the **5 – 15 million USD** range.

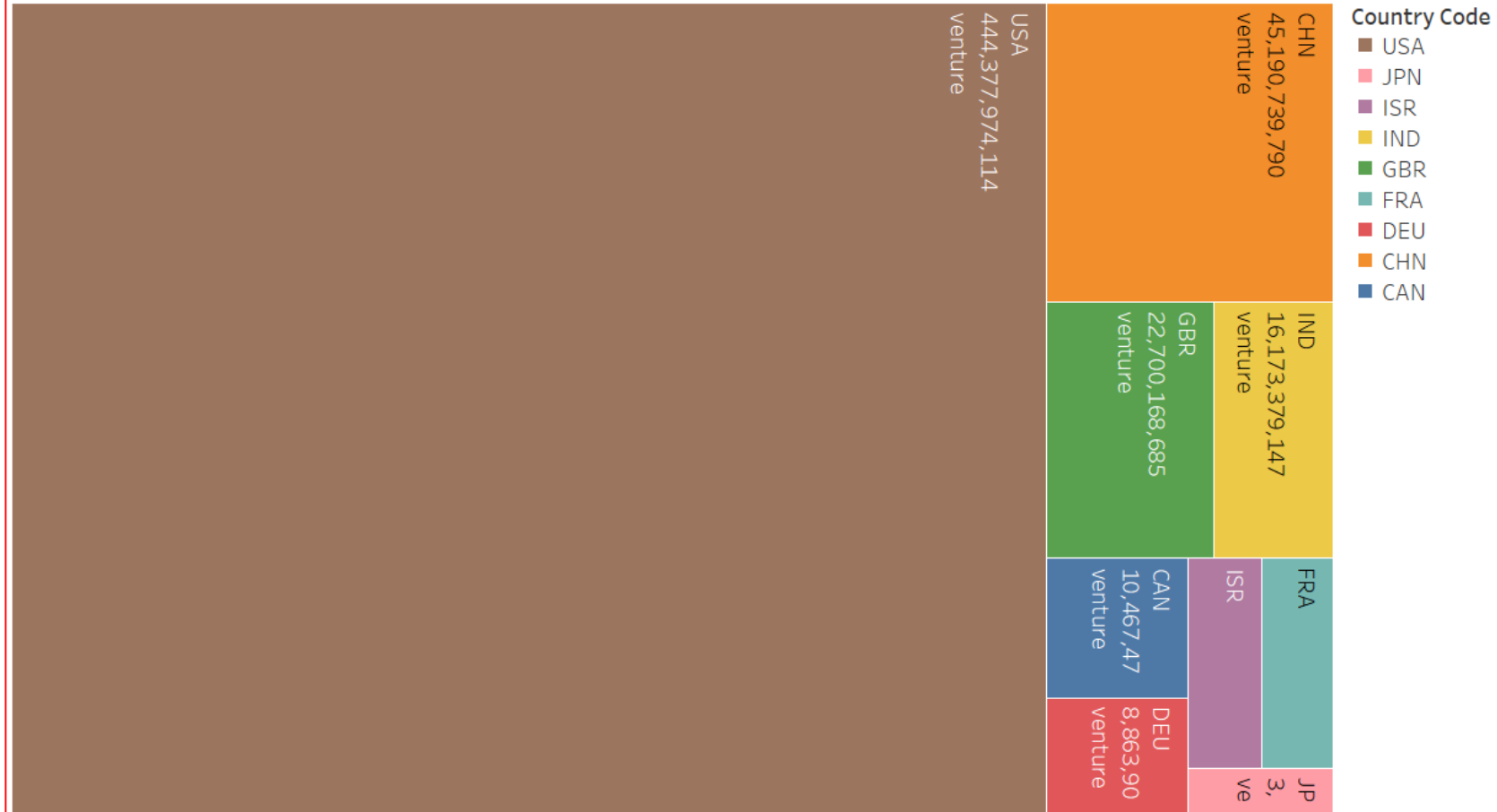
	USA	GBR	IND
1. Total Number of Investments	37996	2265	982
2. Total amount of investment	444377974114.21	22700168685.37	16173379146.85
3. Top Sector	Others	Others	Others
4. Second-best Sector	Cleantech/Semiconductors	Social, Finance, Analytics, Advertising	Social, Finance, Analytics, Advertising
5. Third-best Sector	Social, Finance, Analytics, Advertising	Cleantech/Semiconductors	News, Search and Messaging
6. Number of Investments in the Top Sectors	8772	581	332
7. Number of Investment in the Second-best Sector	8263	481	193
8. Number of Investment in the Third-best Sector	7811	466	154
9. For the Top count-wise, which company received the highest investment?	SoFi	OneWeb	Flipkart
10. For the second-best sector count-wise, which company received the highest investment?	Freescale Semiconductor	Mereo	ShopClues.com

Table 3: Sector-wise Investment Analysis



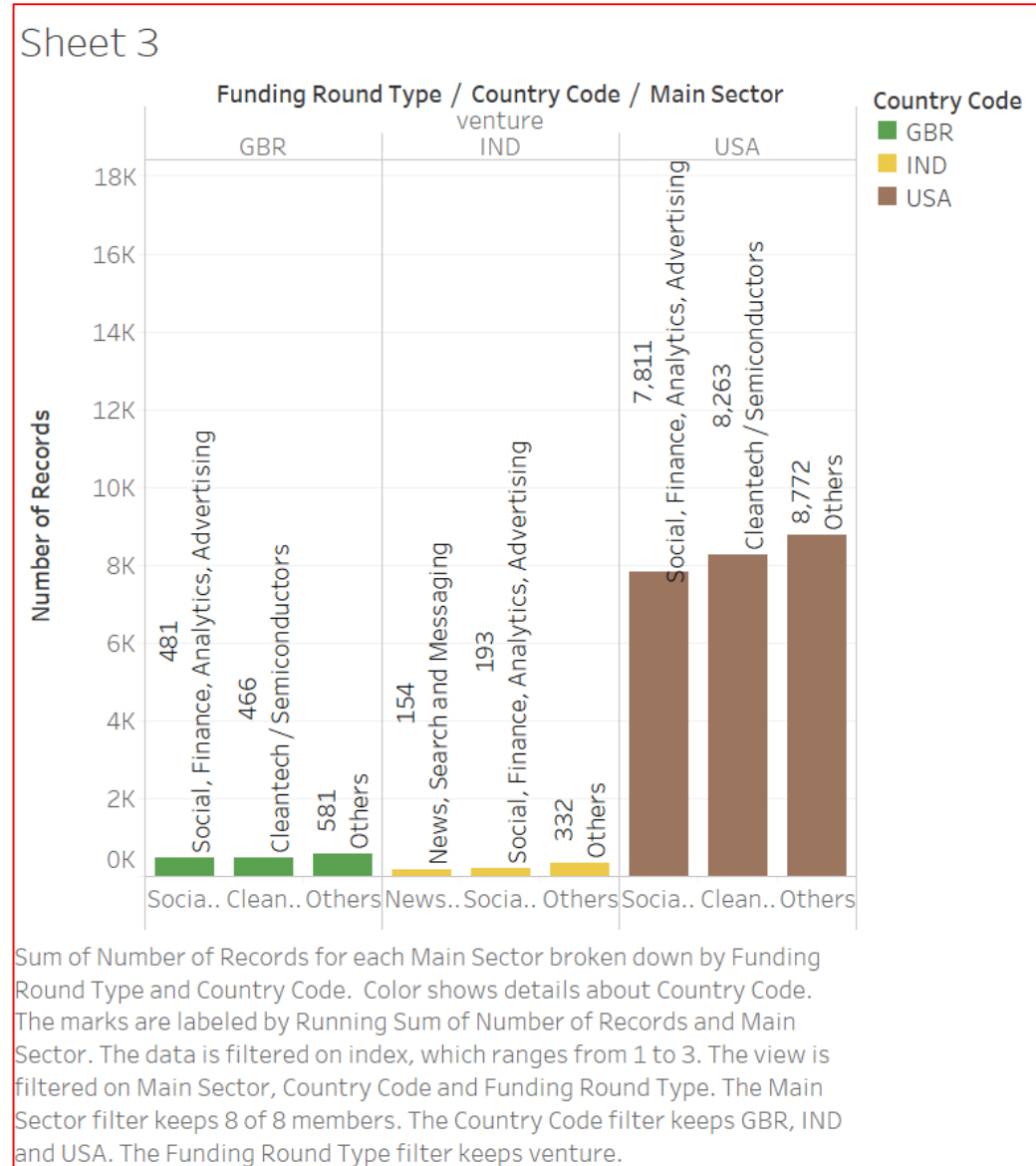
Plot 1: Investment type and Avg. raised amount USD

Sheet 2



Country Code, sum of Raised Amount Usd and Funding Round Type. Color shows details about Country Code. Size shows sum of Raised Amount Usd. The marks are labeled by Country Code, sum of Raised Amount Usd and Funding Round Type. The view is filtered on Country Code and Funding Round Type. The Country Code filter keeps 9 of 137 members. The Funding Round Type filter keeps venture.

Plot 2: Country wise raised amount USD in venture funding type



Plot 3: Sector wise investment of each country USA, GBR and IND

- For the investment type, Spark Funds should invest in venture funding as they only want to invest in between 5-15 million.
- Spark funds can invest in United states of America, Great Britain and India for the venture funding type as they are the top 3 English speaking countries with the highest investment.
- We choose the Others Sector for all the 3 countries and venture funding type to invest in. As it has highest number of investments in all the 3 countries.