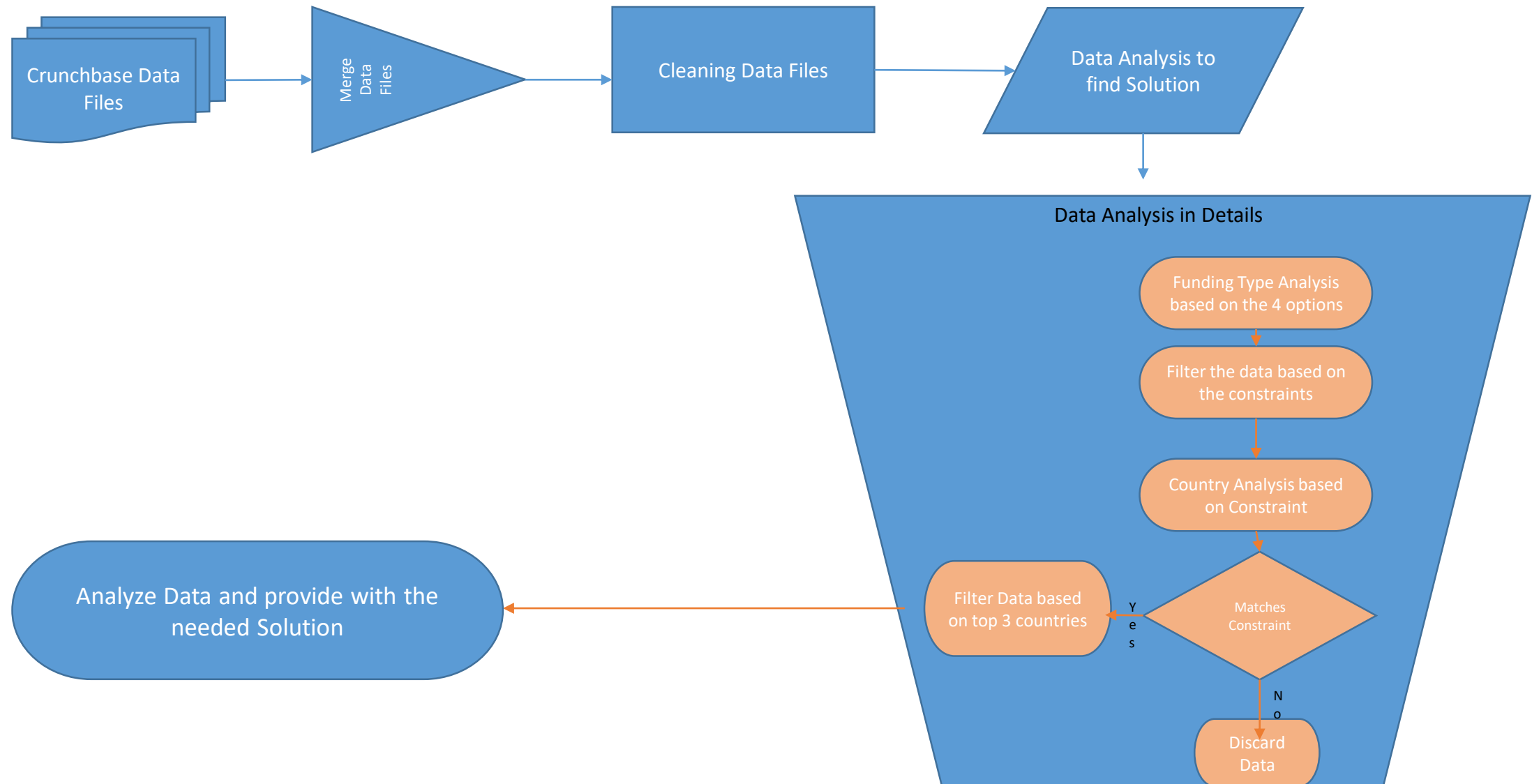


INVESTMENT ASSIGNMENT SUBMISSION

Debojyoti Mallick

Spark Funds – Investment Analysis

- Spark Funds, an [asset management company](#) wants to make investments in a few companies.
- Spark Funds wants to invest where most **other investors are investing**.
- The objective is to identify the best sectors, countries, and a suitable investment type for making investments.
- **Goals of data analysis:**
 1. Investment type analysis
 2. Country analysis
 3. Sector analysis



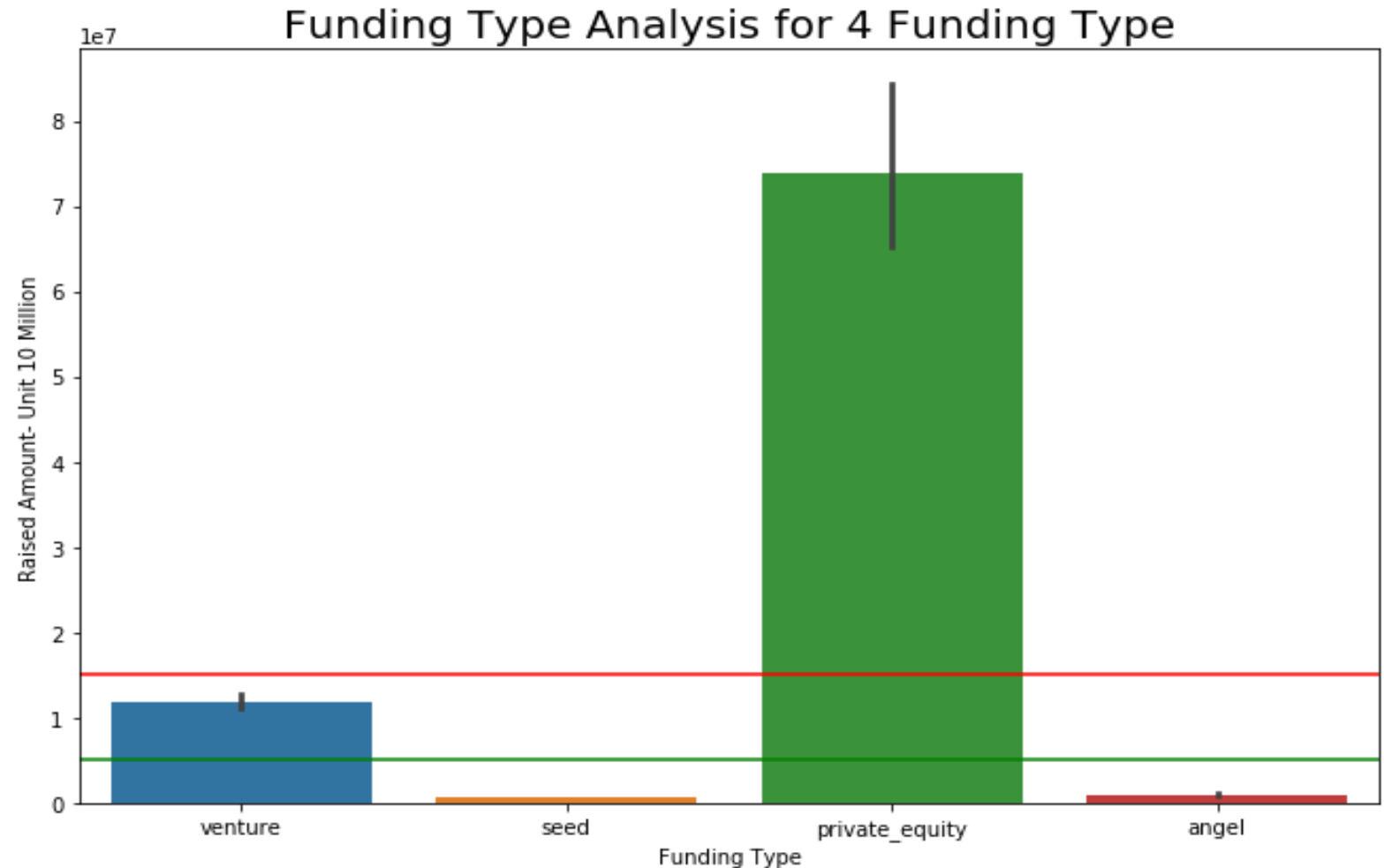
The data needed for analysis was acquired from multiple sources as below:

- rounds2 – Data from crunchbase.com which has the details of investment.
 - companies – Data which has the details of each company in rounds2.
 - mapping – Data about which company maps to which overall broad 8 category list.
 - english_speaking_country_list – Wikipedia link which contains the list of countries where English is official language.
-
- **Data Cleaning**
 - 1. Columns which are not directly related to the analysis eg: website_url has been dropped for the ease of analysis.
 - 2. rows with Null values for important columns have been discarded as they constitute a very small percentage of total data and removal of which will not impact the analysis.
 - 3. mapping data has been cleaned of spelling mistakes so that it can match correctly to the correct data.

Based on the analysis on the right :

1. Angel funding type mean is \$0.97 million.
2. Private Equity funding type is \$73.93 million.
3. Seed funding type is \$0.74 million.
4. Venture funding type is \$11.72 million.

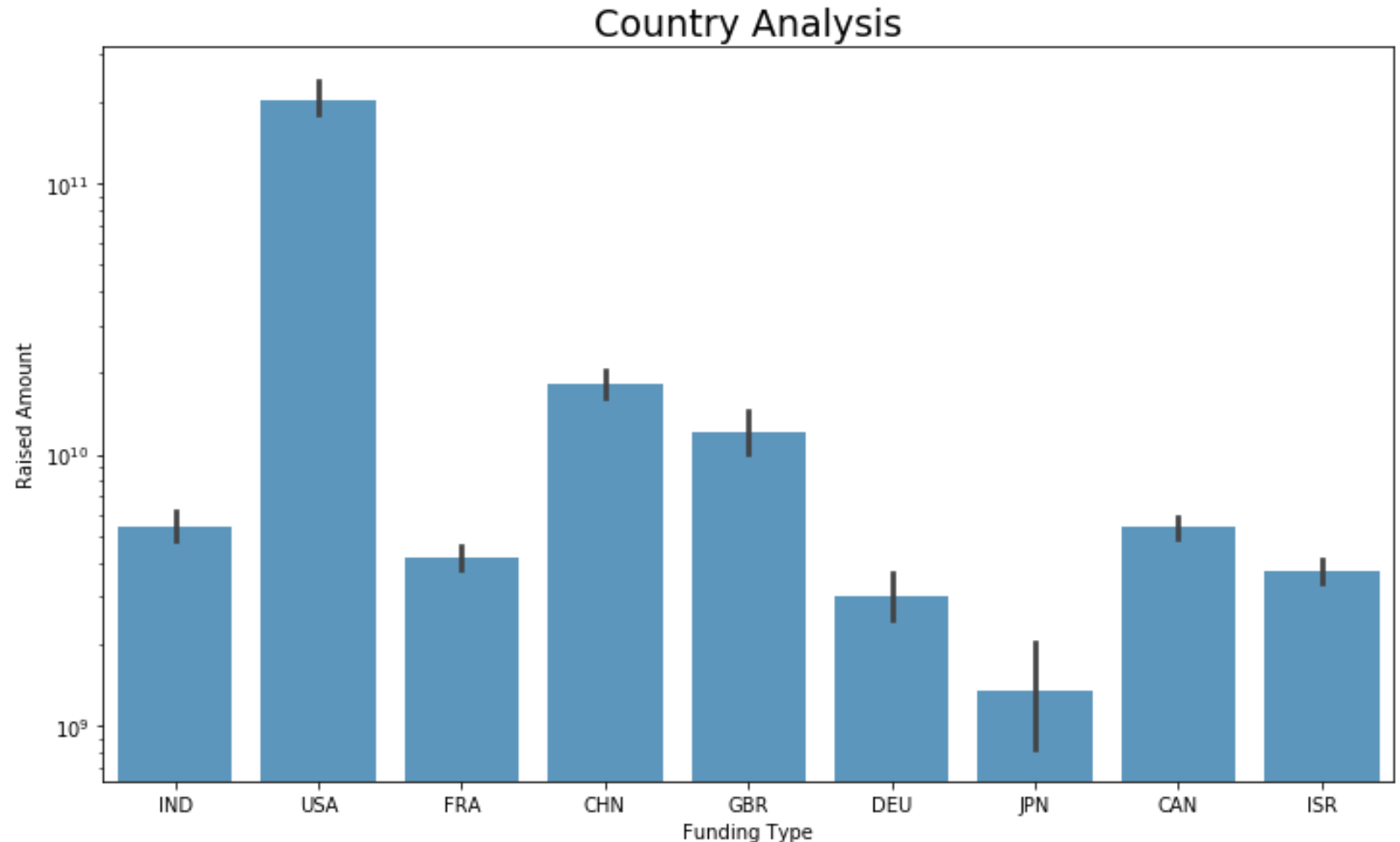
Clearly based on the data its evident for Spark Funds to invest in only venture type funding as one of the constraint.



Based on the analysis on the right :

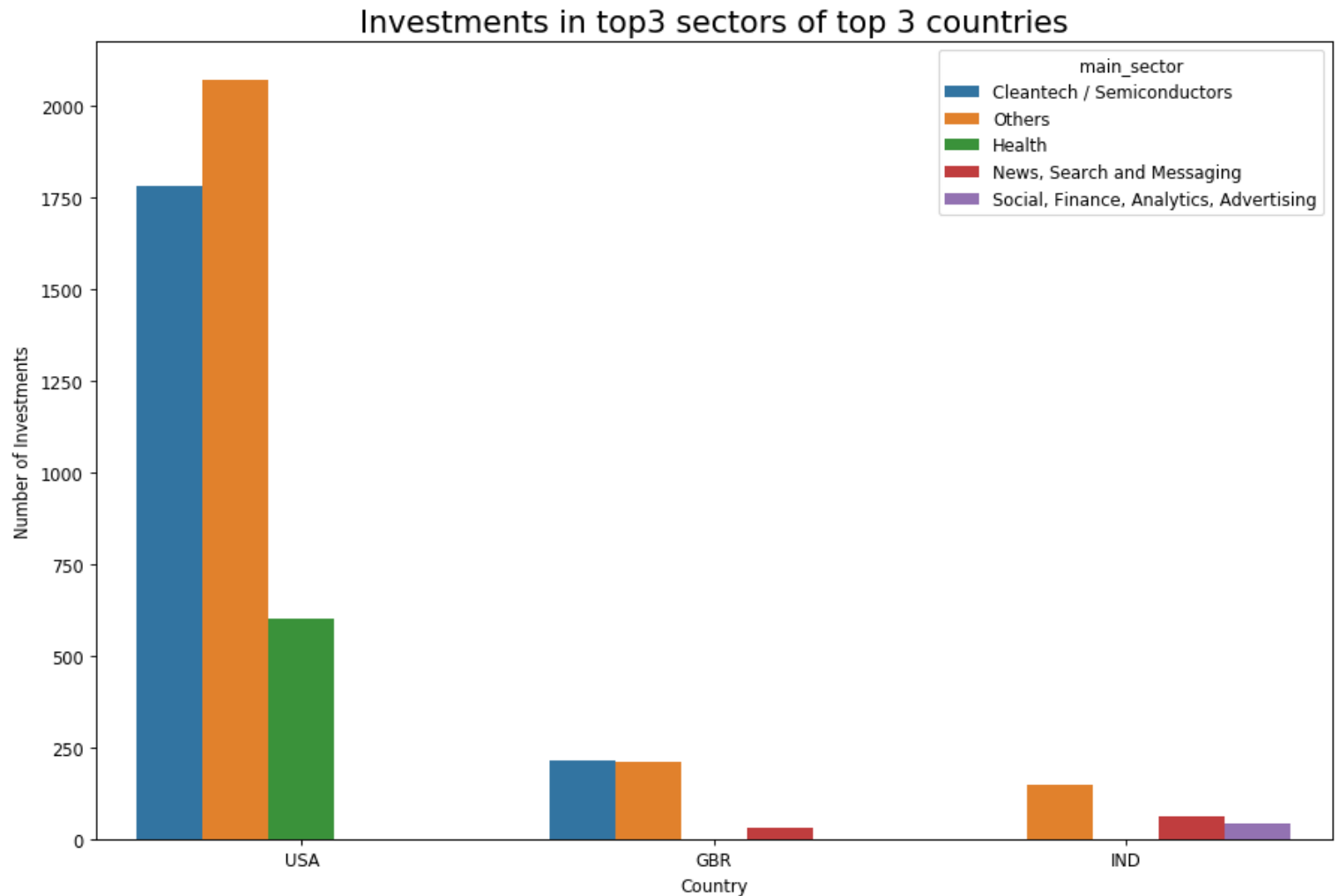
1. USA is the Top English speaking country that received Venture funding at \$ 4.22068×10^{11} .
2. GBR is the second English speaking country that received venture funding at \$ 2.00728×10^{10} .
3. IND is the third English speaking country that received venture funding at \$ 1.42615×10^{10} .

Clearly based on the data its evident for Spark Funds to invest in only venture type funding as one of the constraint.



Based on the analysis on the right :

1. USA has the following as the top 3 sectors which has Venture as investment :-
 1. Others
 2. Cleantech / Semiconductors
 3. Health
2. GBR has the following as the top 3 sectors which has Venture as investment :-
 1. Cleantech/Semiconductors
 2. Others
 3. News, Search, Messaging
3. IND has the following as the top 3 sectors which has Venture as investment :-
 1. Others
 2. News, Search, Messaging
 3. Social, Finance, Analytics, Advertising



Based on all the analysis, Spark Funds will consider investing in the following sectors :

Country	Sector
USA	Others
	Cleantech / Semiconductors
	Health
GBR	Cleantech/Semiconductors
	Others
	News, Search, Messaging
IND	Others
	News, Search, Messaging
	Social, Finance, Analytics, Advertising