

INVESTMENT ASSIGNMENT SUBMISSION

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Abstract:

Spark Funds is an asset management company. The CEO of Spark Funds wants to understand the global trends in investments so that she can take the investment decisions effectively and make investments in a few companies.

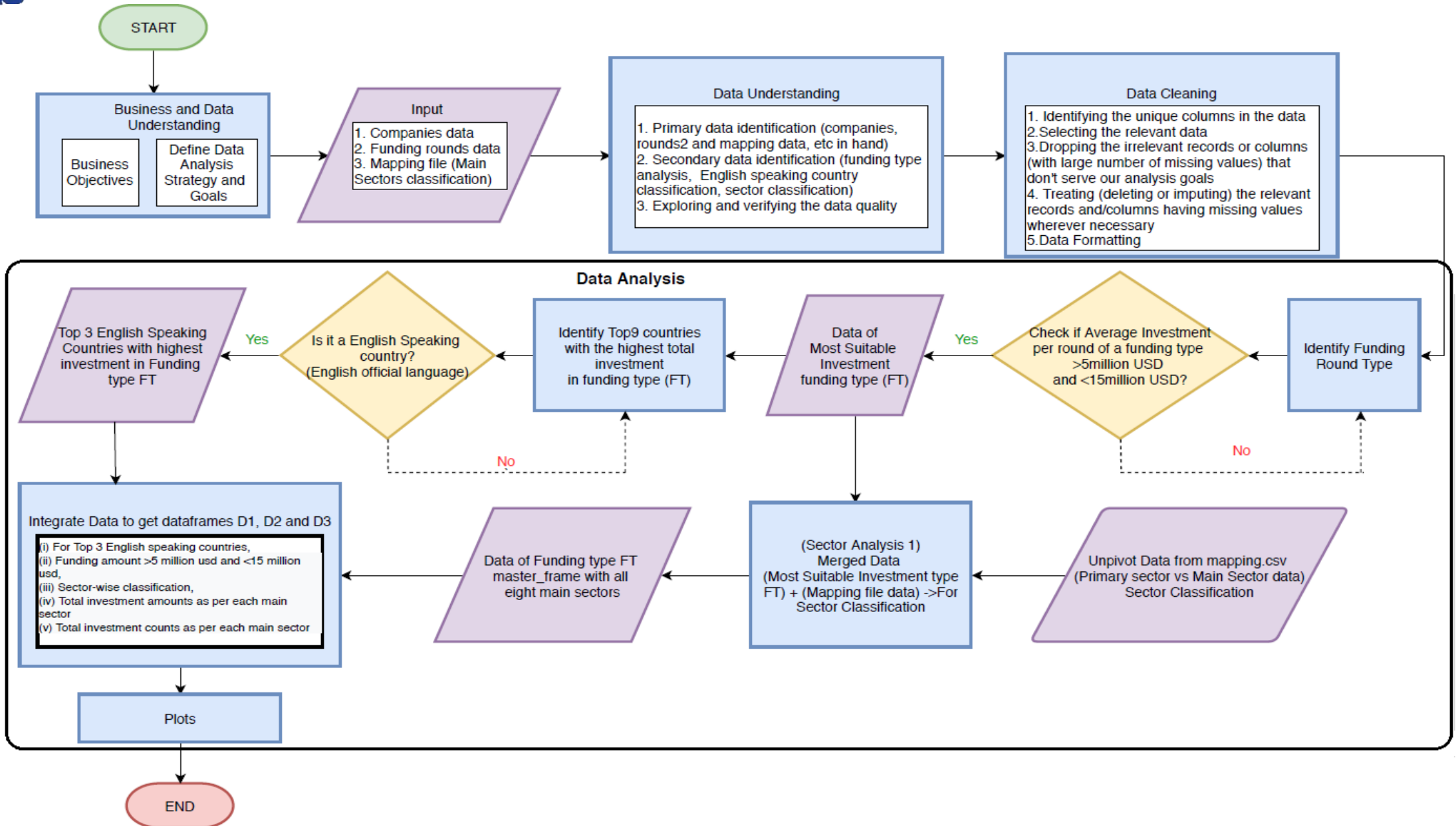
Business Understanding:

The strategy is to invest where most other investors are investing. There are two minor constraints for the investments:

- Invest between 5 to 15 million USD per round of investment.
- Invest only in English Speaking countries for the ease of communication with the companies it would invest in.

Data Understanding:

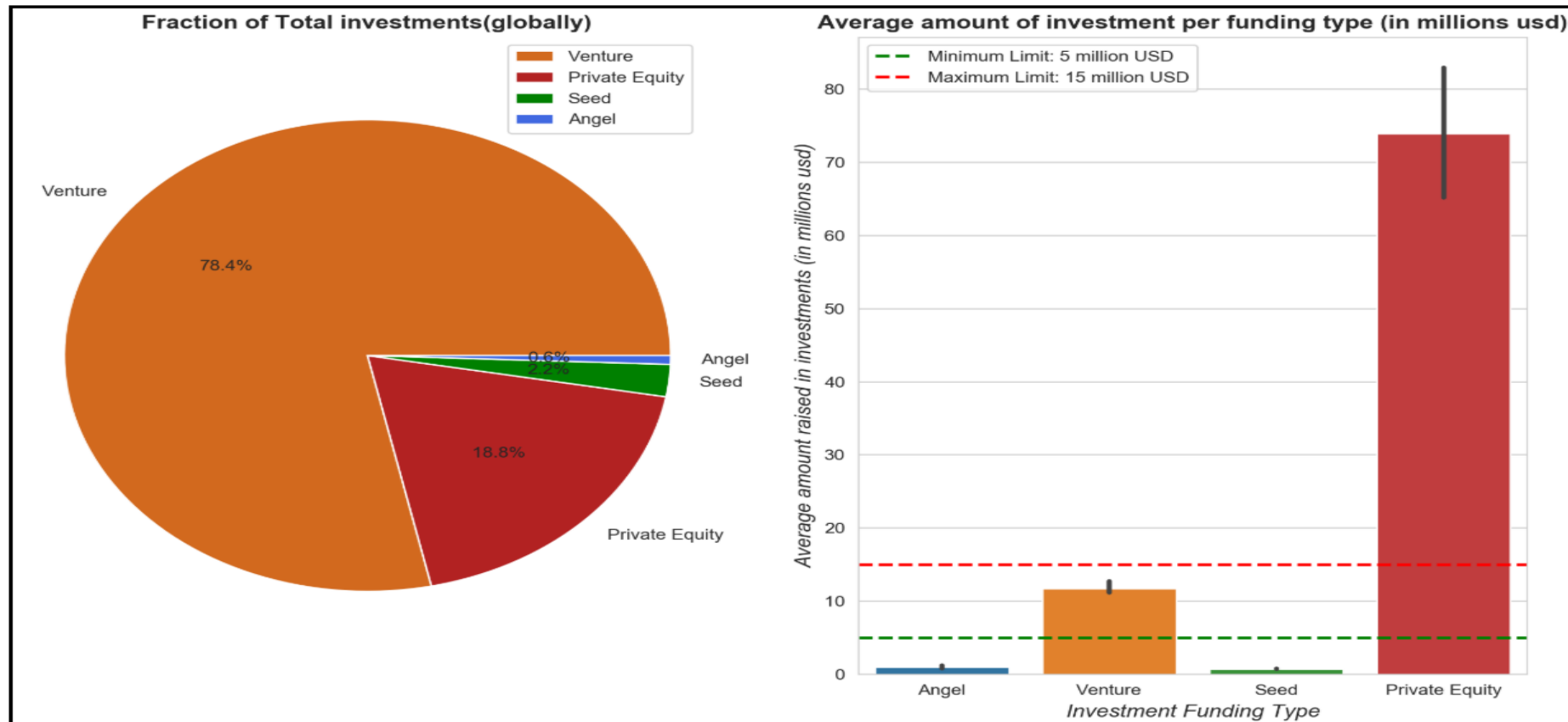
- ❖ Company based details: Details of 66,368 unique companies with unique IDs, company name, country code, category list, etc.
- ❖ Funding round details: Relevant funding round related information pertaining to unique company IDs is given in rounds2 file with details such as funding round types, raised amount in funding, primary sector (category list), etc. Total number of observations are 114949.
- ❖ Sector Classification: Mapping of primary sectors (category list) to its main sectors using mapping data. The main sectors are broadly classified into eight different sectors.



Funding Type Analysis:

- Based on one of the constraints, Spark Funds wants to **invest between 5 and 15 million USD** per investment round
- The subplot 1 (pie-chart) below clearly shows that the fraction of total investments (globally) is highest for '**venture**' funding round type, meaning more amount of investments are happening in 'venture' type globally.
- The subplot2 (bar-plot) illustrates that **only 'venture' type falls within Spark Funds desired range of investment per investment round** (i.e. within 5 to 15million USD). 'Private equity' has an average investment amount larger than the range constraint, and other funding types like 'seed' and 'angel' fall below the funding range.
[Average Investment amount for 'venture' type= 11.724million USD]
- Hence, the most suitable type of investment for Spark Funds in '**Venture**' type investment.

Funding Round Type	Raised amount(usd)
private_equity	73938486.275
venture	11724222.690
angel	971573.891
seed	747793.682

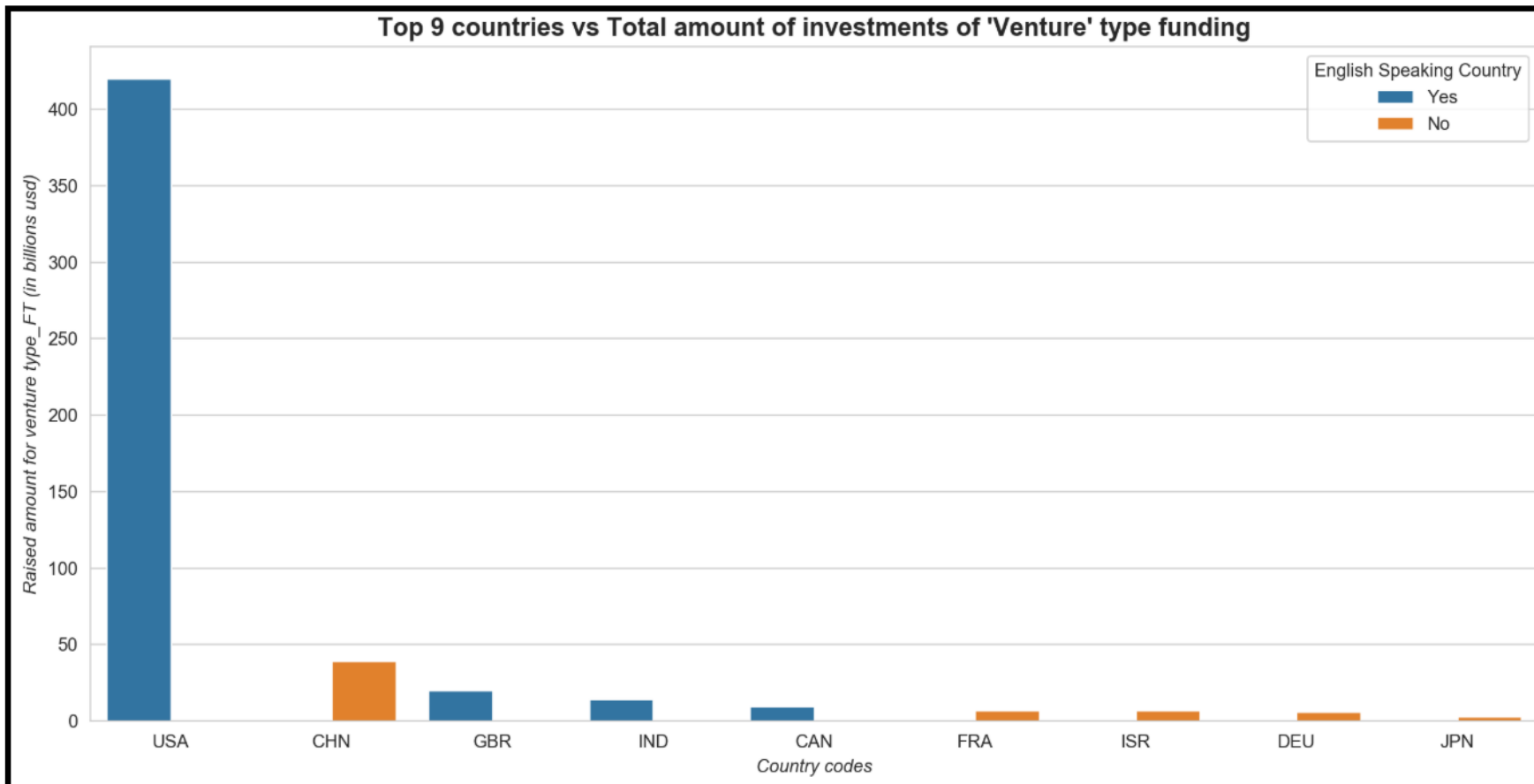




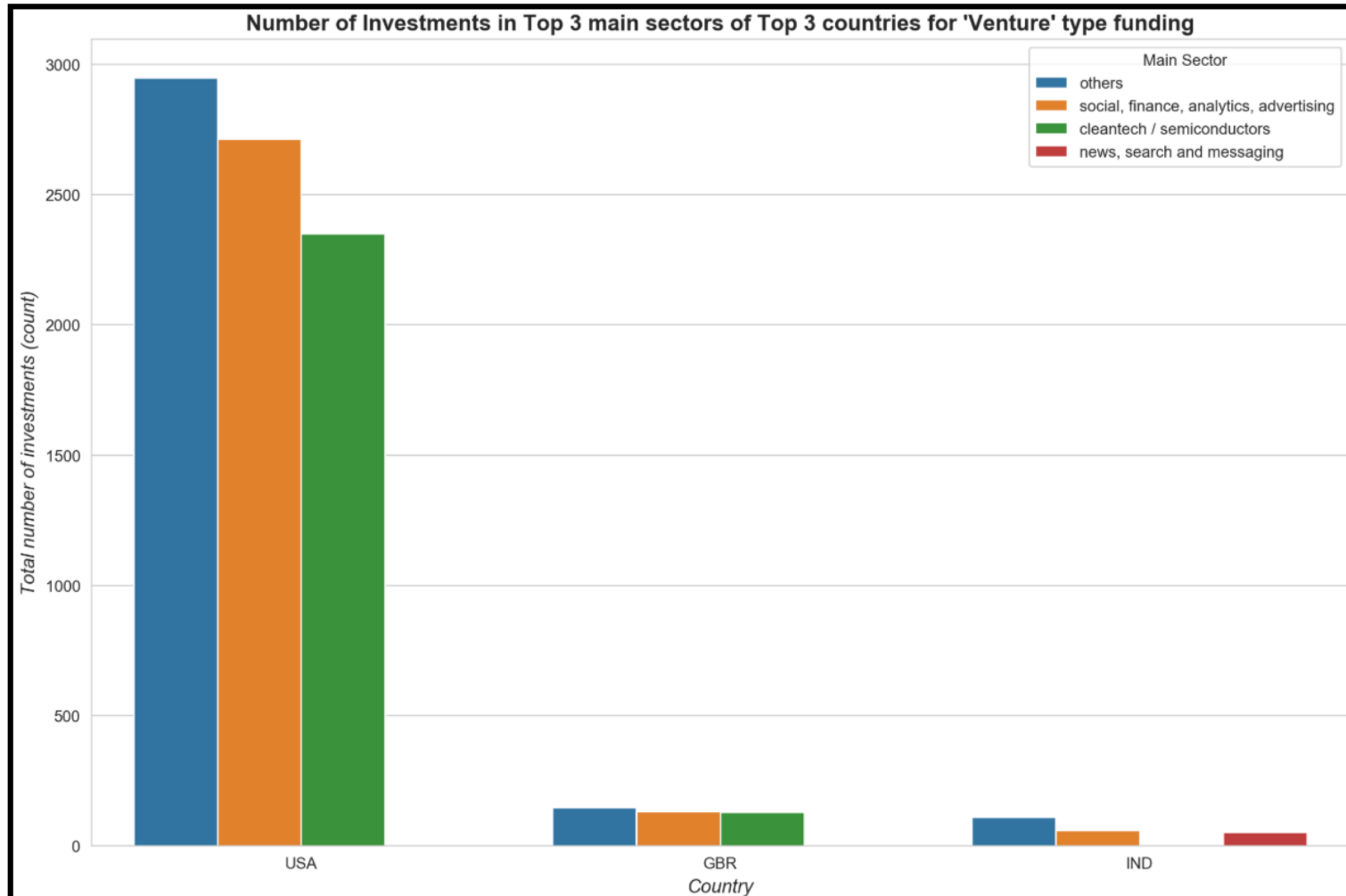
Country Analysis:

- Spark Funds wants to invest in countries which have been heavily invested in past but they should also be only English Speaking countries for the ease of communication.
- Based on the data analysis for the venture type investment, the top 9 heavily invested countries are: *USA, China, Great Britain, India, Canada, France, Israel, Germany and Japan.*
- Out of which, the *top 3 English speaking ones* are **USA (United States)**, **(GBR) Great Britain** and **(IND) India**. Hence, Spark Funds should invest in these 3 countries.

Country Code	Total Investment Amount(usd)
USA	420068029342.000
CHN	39338918773.000
GBR	20072813004.000
IND	14261508718.000
CAN	9482217668.000
FRA	7226851352.000
ISR	6854350477.000
DEU	6306921981.000
JPN	3167647127.000



- Based on sector analysis, the plot below shows top 3 main sectors where most other investors are investing in the Top 3 English Speaking countries selected earlier.
- Note that the results are based on the 'Venture' type investment where the range of funding preferred by Spark Funds is 5 to 15 million USD.



Main Sector	Total Investment Counts	Country
others	2950	USA
social, finance, analytics, advertising	2714	USA
cleantech / semiconductors	2350	USA
others	147	GBR
social, finance, analytics, advertising	133	GBR
cleantech / semiconductors	130	GBR
others	110	IND
social, finance, analytics, advertising	60	IND
news, search and messaging	52	IND

Conclusions

Based on the data analysis done, we conclude that **Spark Funds** should

- ❖ Invest in `**Venture**` type investment.
- ❖ The best Top 3 English speaking countries to invest in, are **USA (United States)**, **GBR (Great Britain)** and **IND (India)**.
- ❖ The best top-two main sectors within these countries for the venture type investment are '**Others**' and '**Social, Finance, Analytics, Advertising**'.