

INVESTMENT ASSIGNMENT SUBMISSION

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Abstract:

The CEO of Sparks Fund wants to understand the global trend in investments so that she can take effective investment decisions and invest in a few companies.

The objective here is to identify the suitable investment/funding type, best sector and countries to invest into.

Business Understanding:

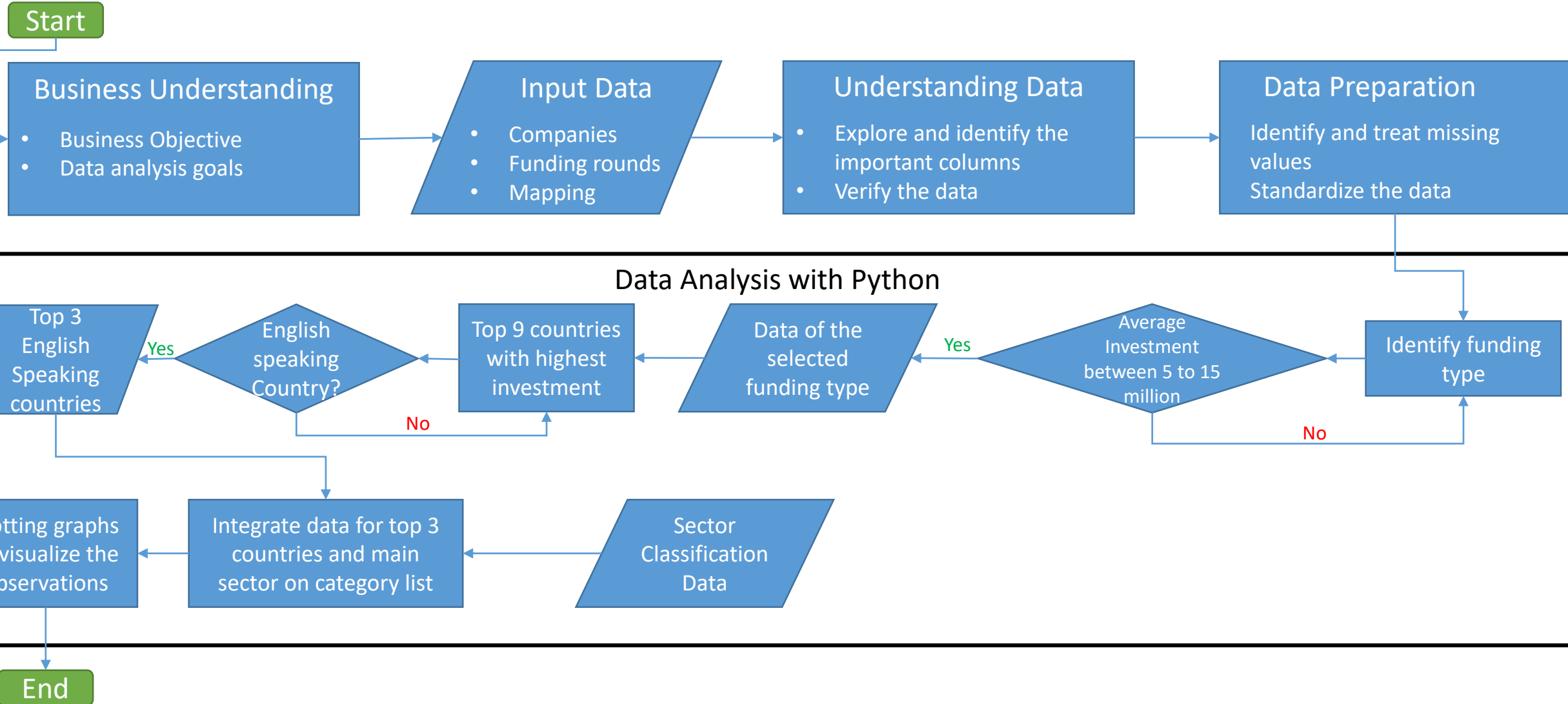
The strategy here is to invest where most of the other investors are investing.

There are however 2 restrictions placed:

- Investment amount should be between 5 to 15 Million USD per round of investment
- Invest only in English speaking countries for ease of communication

Data Understanding:

- **Company details:** Details of **66,368** companies containing a unique id for each of the companies, name of the company, country the company is based in, which category the company comes under, etc.
- **Funding Round details:** Contains a unique company id, the type of funding received by the company, money raised in that round of funding, etc. There are a total of **1,14,949** observations present.
- **Sector Classification:** Contains a map for mapping the category names in the companies table to **8 main sectors**.



Funding Type Analysis

Restrictions on Funding Type:

- For funding type, Sparks Fund is interested in one of the four funding types, namely, '**venture**', '**angel**', '**seed**' and '**private equity**'.
 - The other restriction on funding type is that Sparks Fund wants to invest between **5 to 15 million USD** per round of investment.
 - The table shows the representative amount of funding across the four funding types.
 - From the table it is clear that '**angel**', '**seed**' and '**private equity**' do not pacify Sparks Funds restriction on funding amount.
 - The representative value of 'angle' and 'seed' are way below the 5 to 15 million margin.
 - The representative value for 'private equity' is beyond the 5 to 15 million margin
 - '**venture**' is the only funding type that pacifies the 'between 5 to 15 million USD per round of investment' restriction
- ✓ Hence, the best funding type for Sparks Funds is '**venture**'.

Funding Type	Representative amount
Venture	\$5,000,000.00
Angel	\$414,906.00
Seed	\$300,000.00
Private Equity	\$20,000,000.00

*A bar plot visualizing the above table is plotted on [slide 7](#)

Country Analysis

Sparks Funds criteria for selecting the country to invest in:

- Countries which have been **heavily invested** in, in the past.
- For ease of communication invest in **English-speaking countries** only.
- The table shows the top 9 countries that have been heavily invested in.
- Based on the analysis of this table, the top 3 English-Speaking countries turn out to be **United States (USA)**, **United Kingdom (GBR)**, and **India (IND)**.

Hence the top 3 countries for Sparks Fund to invest in are:

- ✓ United States ([USA](#))
- ✓ United Kingdom ([GBR](#))
- ✓ India ([IND](#))

Country Code	Total amount invested
USA	\$420,068,029,342.00
CHN	\$39,338,918,773.00
GBR	\$20,072,813,004.00
IND	\$14,261,508,718.00
CAN	\$9,482,217,668.00
FRA	\$7,226,851,352.00
ISR	\$6,854,350,477.00
DEU	\$6,306,921,981.00
JPN	\$3,167,647,127.00

*A bar plot visualizing the above table is plotted on [slide 8](#)

Sector Analysis

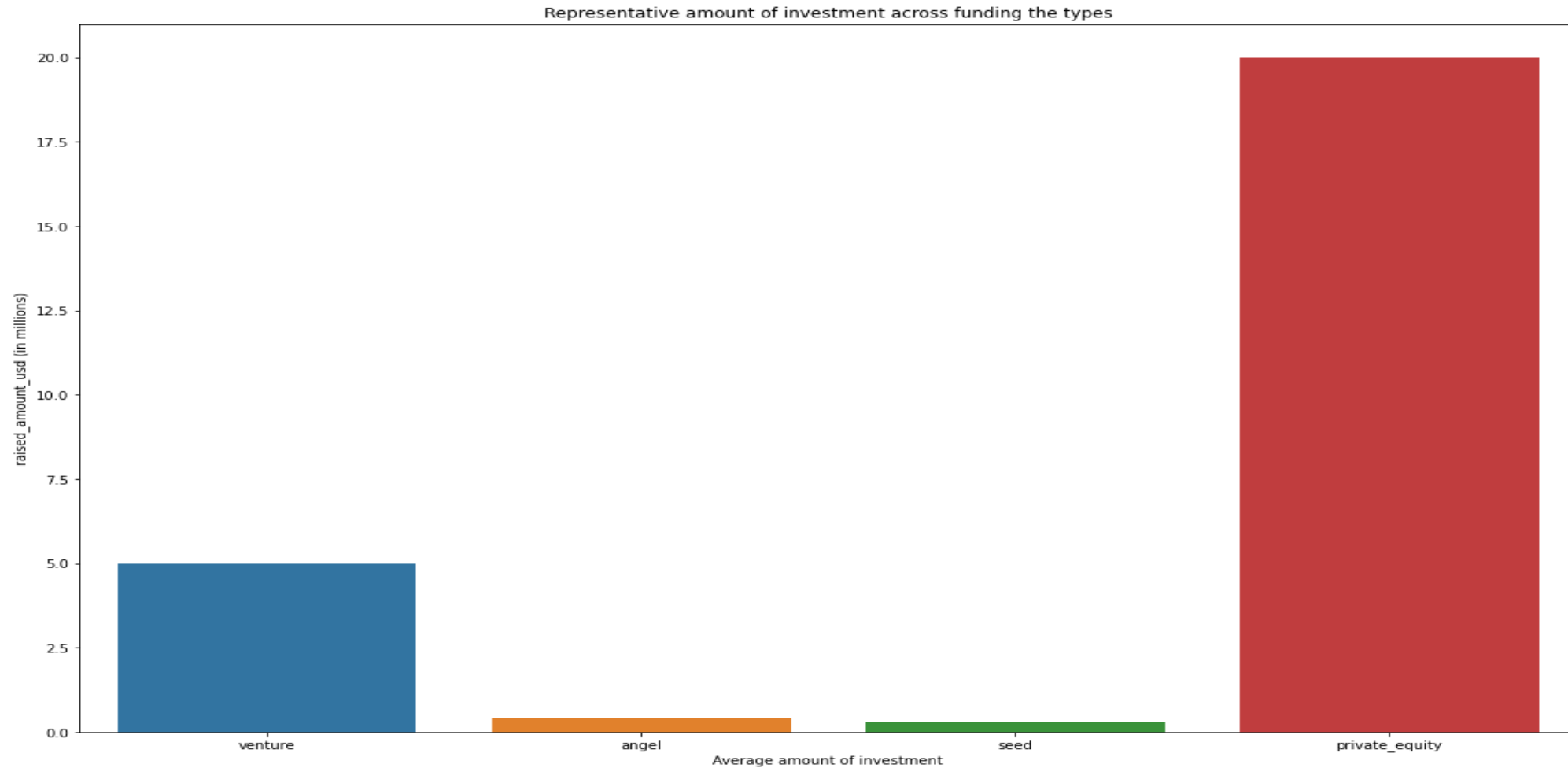
Criteria for selection of the sector:

- Sectors which have been heavily invested into in the past.
- The table shows the top 3 sectors in the top 3 countries on the basis of count.
- Based on the analysis of this table, the sector '**Others**' comes up as the most invested sector followed by '**Social, Finance, Analytics, Advertising**' for all the top 3 countries.
- The companies in the top sector 'Others' that received the highest investment are:
 - **Virtustream** in USA
 - **Electric Cloud** in GBR
 - **FirstCry** in IND

Country Code	Sector Ranking	Sector	Number of investments
USA	1	Others	2950
	2	Social, Finance, Analytics, Advertising	2714
	3	Cleantech / Semiconductors	2350
GBR	1	Others	147
	2	Social, Finance, Analytics, Advertising	133
	3	Cleantech / Semiconductors	130
IND	1	Others	110
	2	Social, Finance, Analytics, Advertising	60
	3	News, Search and Messaging	52

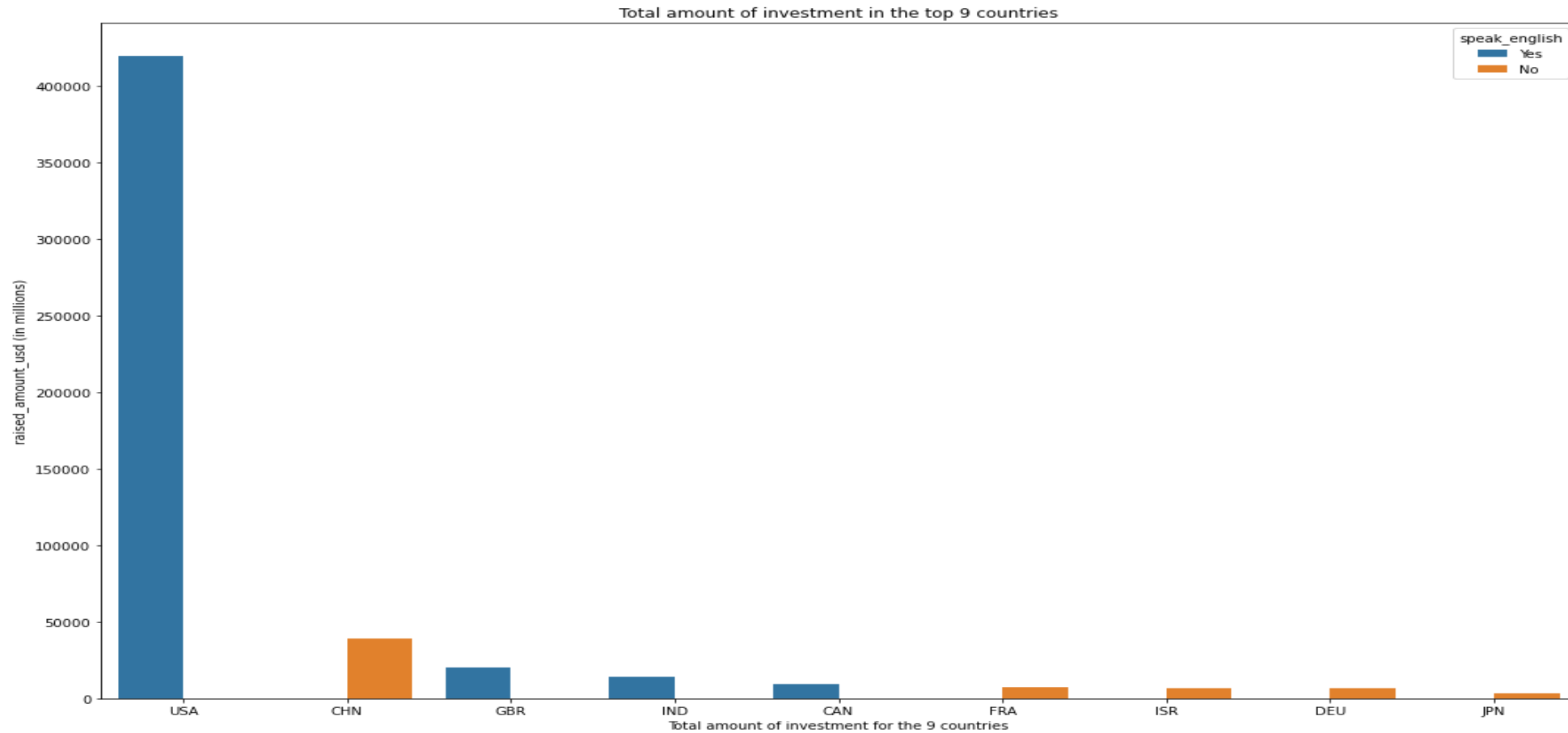
*A bar plot visualizing the above table is plotted on [slide 9](#)

Plot: Funding Type Analysis



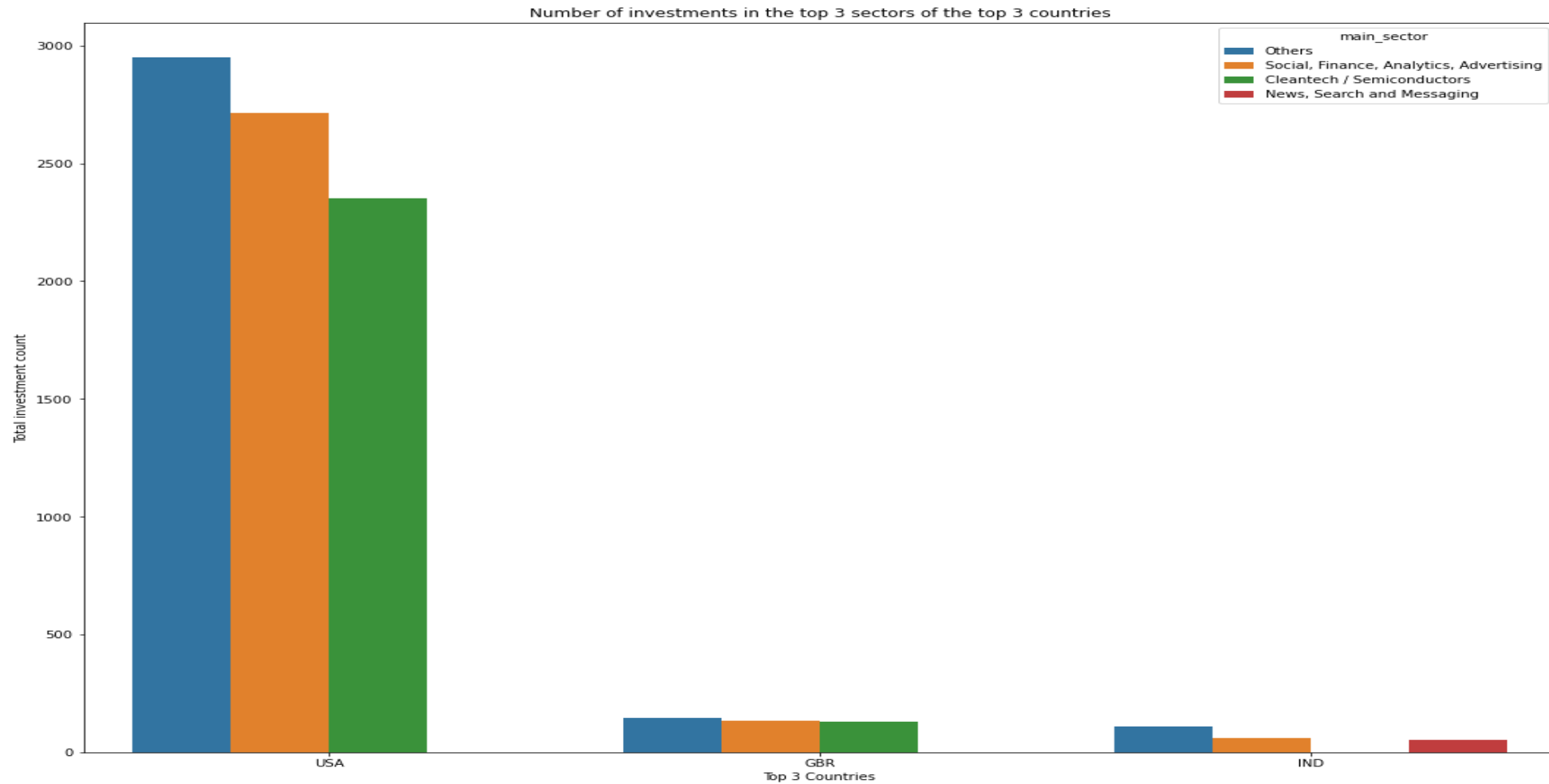
*Return to [Funding Type Analysis slide](#)

Plot 2: Country Analysis



*Return to [Country Analysis slide](#)

Plot 3: Sector Analysis



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Conclusions

Based on the analysis Sparks Fund can adopt investment strategy suggested below:

- Sparks Fund should consider investing in funding type '**venture**' for the sector '**Others**' in the country '**USA**' as that is where a bulk of the investments are happening.
- If Sparks Fund intends to invest in multiple countries to minimise the risk, then the top three countries to invest in would be '**United States (USA)**', '**United Kingdom (UK)**' and '**India (IND)**' for the investment type '**venture**' and the sector would be '**Others**'.
- Some of the companies that Sparks Fund can invest in for the sector '**Others**' are:
 - **Virtustream** in United States (US)
 - **Electric Cloud** in United Kingdom (GBR)
 - **FirstCry** in India (IND)