

SPARKS FUND INVESTMENT CASE STUDY

SUBMISSION

Group Name:Upgrad Pune- Bhubaneswar Cohorts

1. Rishabh Srivastava
2. Vinod Jha
3. Saurav Kumar
4. Amitabha Banerjee

Project Brief & Business Understanding

Brief Summary of the company –

Sparks Funds is an asset management company trying to make profitable investments in different companies across the world in various sectors

Constraints –

- ☐ Wants to invest only 5-15 M USD per round of investment
- ☐ Wants to invest only in English speaking countries
- ☐ Real investment data source – Crunchbase.com

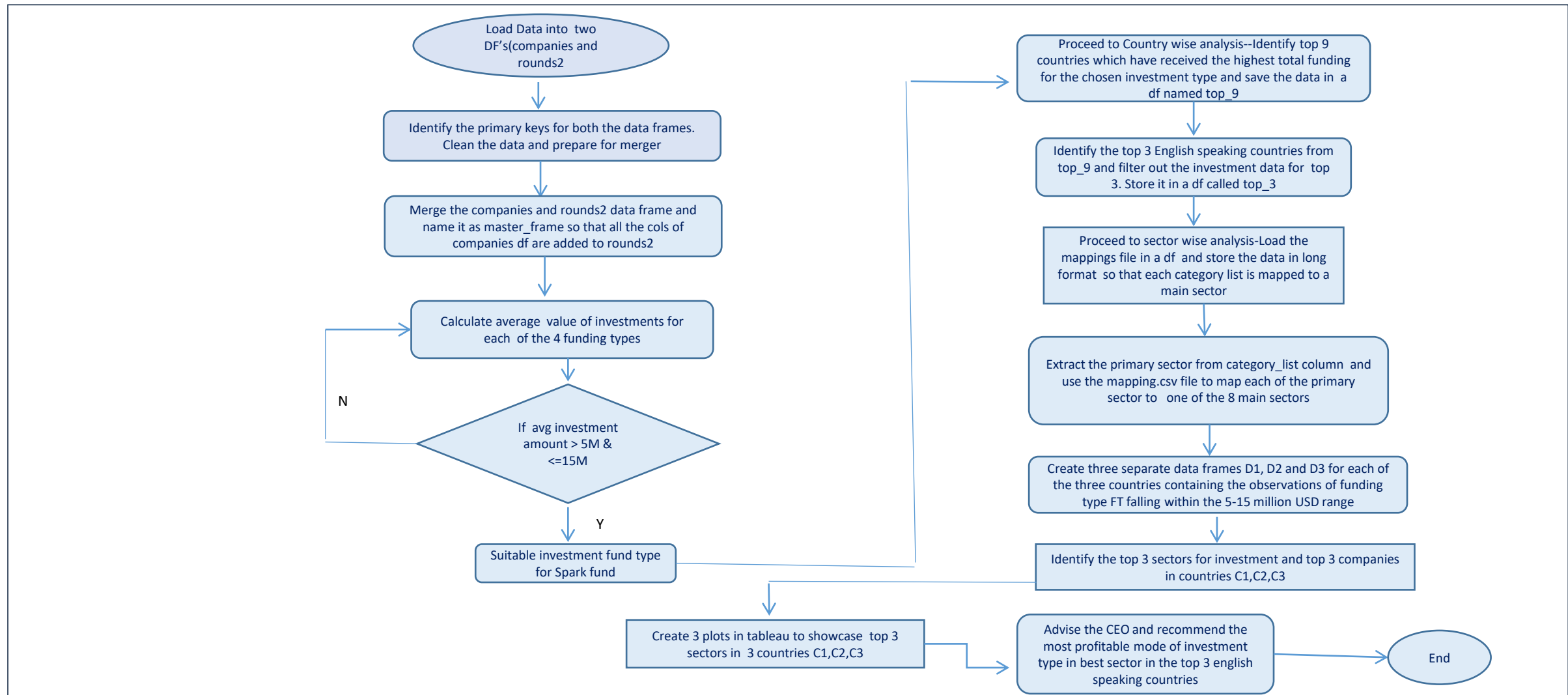
Business Objectives –

The objective is to identify the best sectors, countries, and a suitable investment type for making investments. The overall strategy is to invest where others are investing

Major deliverables from Data analysis-

- ☐ Investment type analysis -Understanding investments in venture, seed/angel, private equity categories so Sparks Fund can choose an appropriate strategy
- ☐ Country analysis –Choosing the appropriate countries by understanding which one have had the most investments in the past. Focussing on top 3 English speaking countries
- ☐ Sector analysis- Understanding the distribution of investments across 8 main sectors and choosing the most profitable sector

Problem solving methodology-Flow chart



Investment Type Analysis

Broad funding types	Description
Seed/Angel	refer to early stage startups(funded startups etc)
Venture	funding occurs after seed or angel stage/s and involves a relatively higher amount of investment as compared to startups
Private Equity	Investments are associated with much larger companies and involve much higher investments than venture type

Average Values of Investments for Each of these Funding Types		
Sl.No	Questions	Answer
1	Average funding amount of venture type	\$ 1,17,48,949.10
2	Average funding amount of angel type	\$ 9,58,694.50
3	Average funding amount of seed type	\$ 7,19,818.00
4	Average funding amount of private equity type	\$ 7,33,08,593.00
5	Considering that Spark Funds wants to invest between 5 to 15 million USD per investment round, type of investment most suitable for them-	venture

Observations-

- ✓ Venture equity type funding is the most favourable across all sectors ~ 73.3 M USD
- ✓ Second highest average funding is of venture type ~ 11.7 M USD
- ✓ Depending on the funding constraints of Sparks fund the most suitable investment type which fits its budget is venture type

Country wise Analysis

Investment strategy in Countries
Spark Funds wants to invest in countries with the highest amount of funding for the chosen investment type. This is a part of its broader strategy to invest where most investments are occurring.
Spark Funds wants to see the top nine countries which have received the highest total funding (across ALL sectors for the chosen investment type)
Out of the top 9 they want to confine to the top 3 English speaking countries as they are most investment friendly

Top 9 countries in terms of total investment across all sectors
IND
USA
CHN
CAN
GBR
FRA
JPN
DEU
ISR

Top 3 countries in terms of total investment across all sectors
IND
USA
GBR

Analysing the Top 3 English-Speaking Countries		
Sl.No	Questions	Answers
1	Top English speaking country	USA
2	Second English speaking country	GBR
3	Third English speaking country	IND

Observations-

- ✓ Top 3 English speaking countries are USA,GBR and India and they are most suitable for investments by Spark Funds
- ✓ Out of the top 3 ,USA is the most preferred destination for investments across all sectors as they have the highest amount of total investment received from all companies.

Sector Wise Analysis

Main sectors for Investment
Automotive...Sports
Cleantech...Semiconductors
Entertainment
Health
Manufacturing
News. Search.and.Messaging
Others
Social..Finance..Analytics..Advertising

Top 3 Countries	Top 2 Main Sectors	Top 2 Companies which received the highest investment
C1-USA	Others	Virtustream
	Social..Finance..Analytics..Advertising	SST Inc. (Formerly ShotSpotter)
C2-GBR	Others	Electric Cloud
	Social..Finance..Analytics..Advertising	Celltick Technologies
C3-IND	Others	FirstCry.com
	Social..Finance..Analytics..Advertising	Manthan Systems

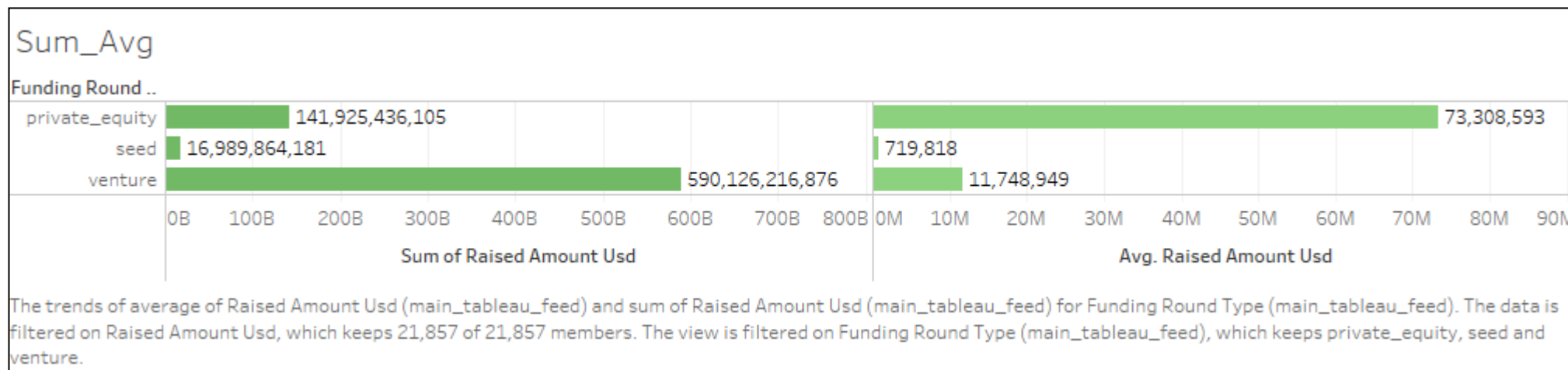
Sector-wise Investment Analysis				
Sl.no	Questions	C1	C2	C3
1	Total number of Investments (count)	12063	621	328
2	Total amount of investment (USD)	\$ 1,07,75,70,97,294.00	\$ 5,37,90,78,691.00	\$2,94,95,43,602.00
3	Top Sector name (no. of investment-wise)	Others	Others	Others
4	Second Sector name (no. of investment-wise)	Social..Finance..Analytics..Advertising	Social..Finance..Analytics..Advertising	Social..Finance..Analytics..Advertising
5	Third Sector name (no. of investment-wise)	Cleantech...Semiconductors	Cleantech...Semiconductors	News..Search.and.Messaging
6	Number of investments in top sector (3)	2950	147	110
7	Number of investments in second sector (4)	2714	133	60
8	Number of investments in third sector (5)	2350	130	52
9	For point 3 (top sector count-wise), which company received the highest investment?	Virtustream	Electric Cloud	FirstCry.com
10	For point 4 (second best sector count-wise), which company received the highest investment?	SST Inc. (Formerly ShotSpotter)	Celltick Technologies	Manthan Systems

Observations-

- ✓ Top main sectors for investments are others, Cleantech...Semiconductors, Social..finance..analytics..Adverstising & News..Search & Messaging
- ✓ In the Others sector maximum amount was invested by the companies in all the three countries

Funding Types chart

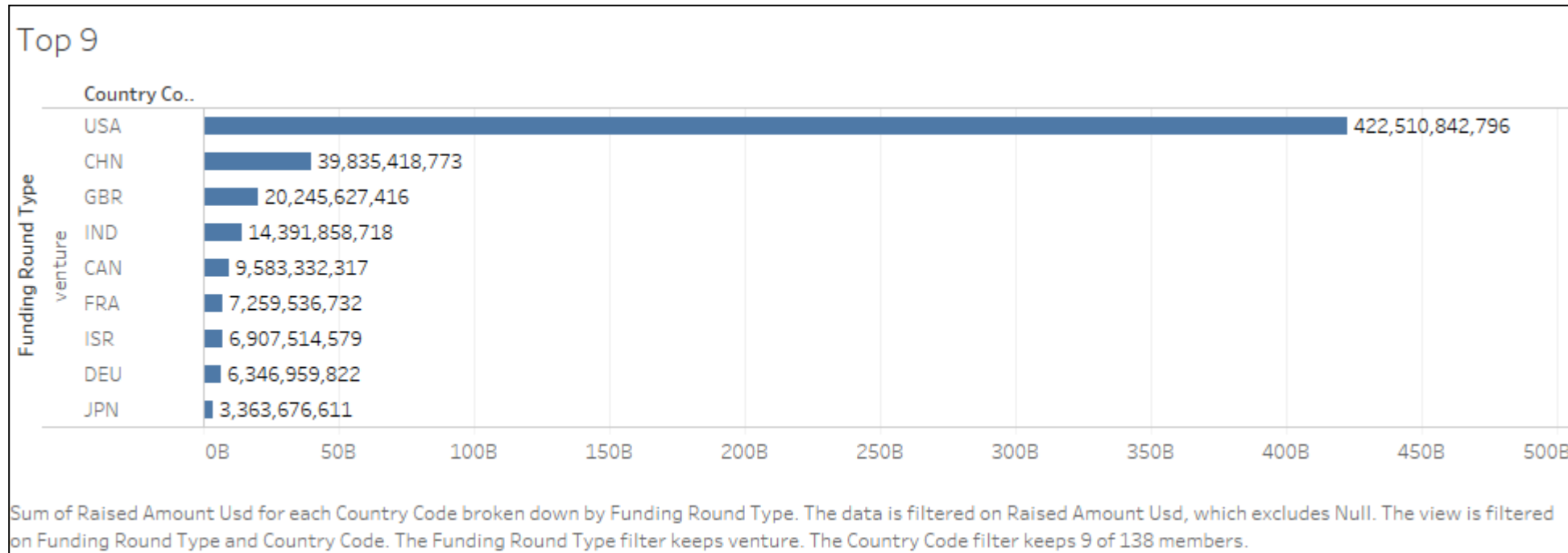
Plot 1



Observations –

Private equity funding type is the most popular and it has received the maximum average investment across all the sectors from all the companies but as far as total investment is concerned venture type is the number one.

Top 9 Country wise investments against the funding types

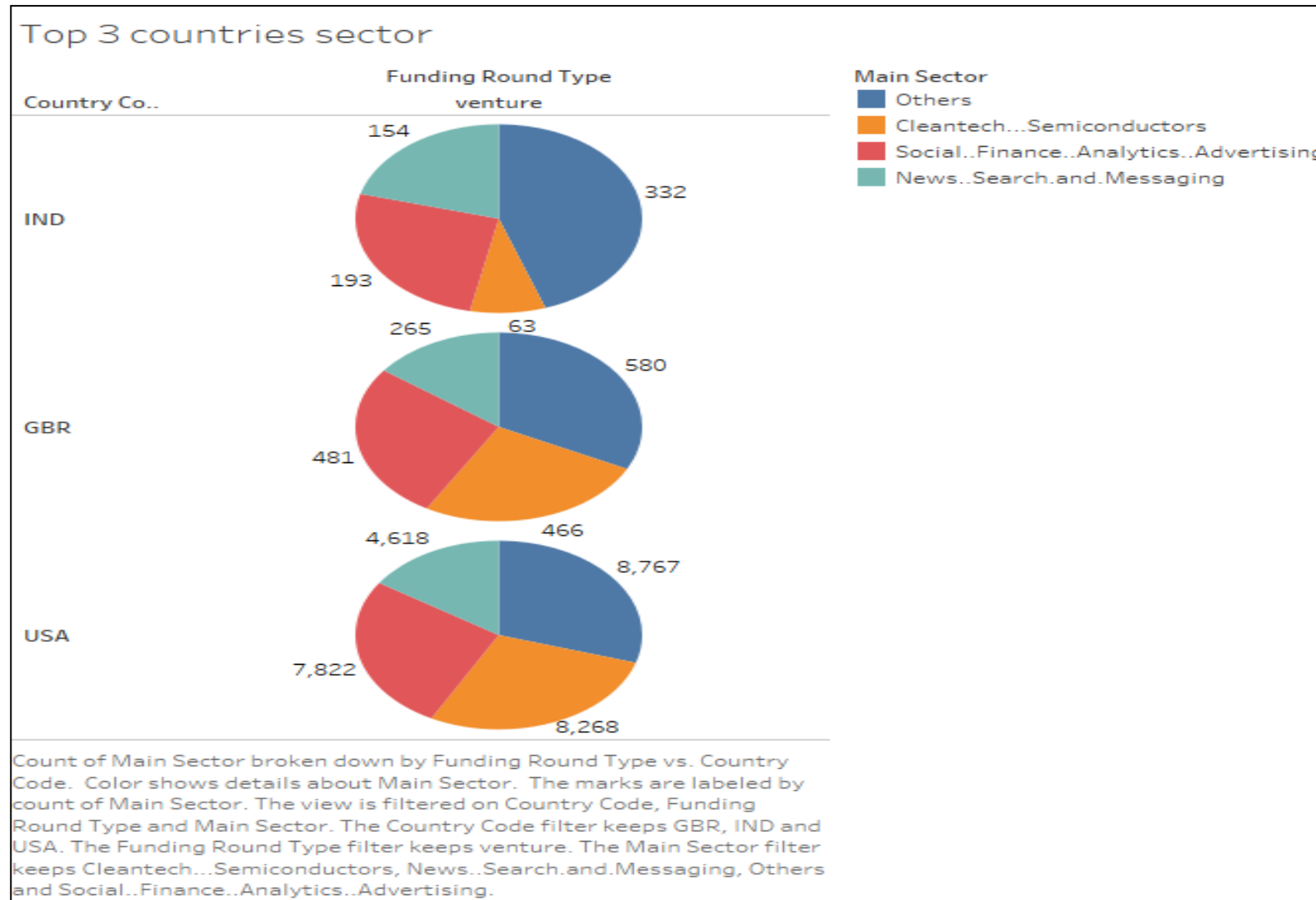


Observations –

USA, GBR & IND are the top 3 countries for investments in venture funding type.

Number of Investments in the top 3 sectors of the top 3 countries

Plot 3



Observations –

Others sector is the most favourable for investments in all the 3 English speaking countries

Conclusions

Recommendations to CEO of Spark Funds-

- ☐ Private equity type funding is the most favourable across all sectors ~ 73.3 M USD. Most of the companies have invested in this funding type
- ☐ Depending on the funding constraints of Sparks fund(5 -15 M USD) the most suitable investment type which fits its budget is venture type
- ☐ Top 3 English speaking countries are USA,GBR and India and they are most suitable for investments by Spark Funds
- ☐ Out of the top 3 ,USA is the most preferred destination for investments across all sectors as they have the highest amount of total investment received from all companies ~ 108 Billion USD
- ☐ Top main sectors for investments are Others, Cleantech. Semiconductors, Social ..finance..analytics. .Adverstising & News.. Search & Messaging
- ☐ In the Others sector maximum amount was invested by the companies in all the three countries
- ☐ Most profitable sectors in all the three countries to put money in –Others
- ☐ Most profitable companies to invest -Virtustream(USA) , Electric Cloud(GBR), FirstCry.com(India)

Assumptions – English speaking countries are investor friendly

Tools used – R for data analysis and scrubbing, Tableau as BI tool for plotting graphs