

# INVESTMENT CASE STUDY

## SUBMISSION

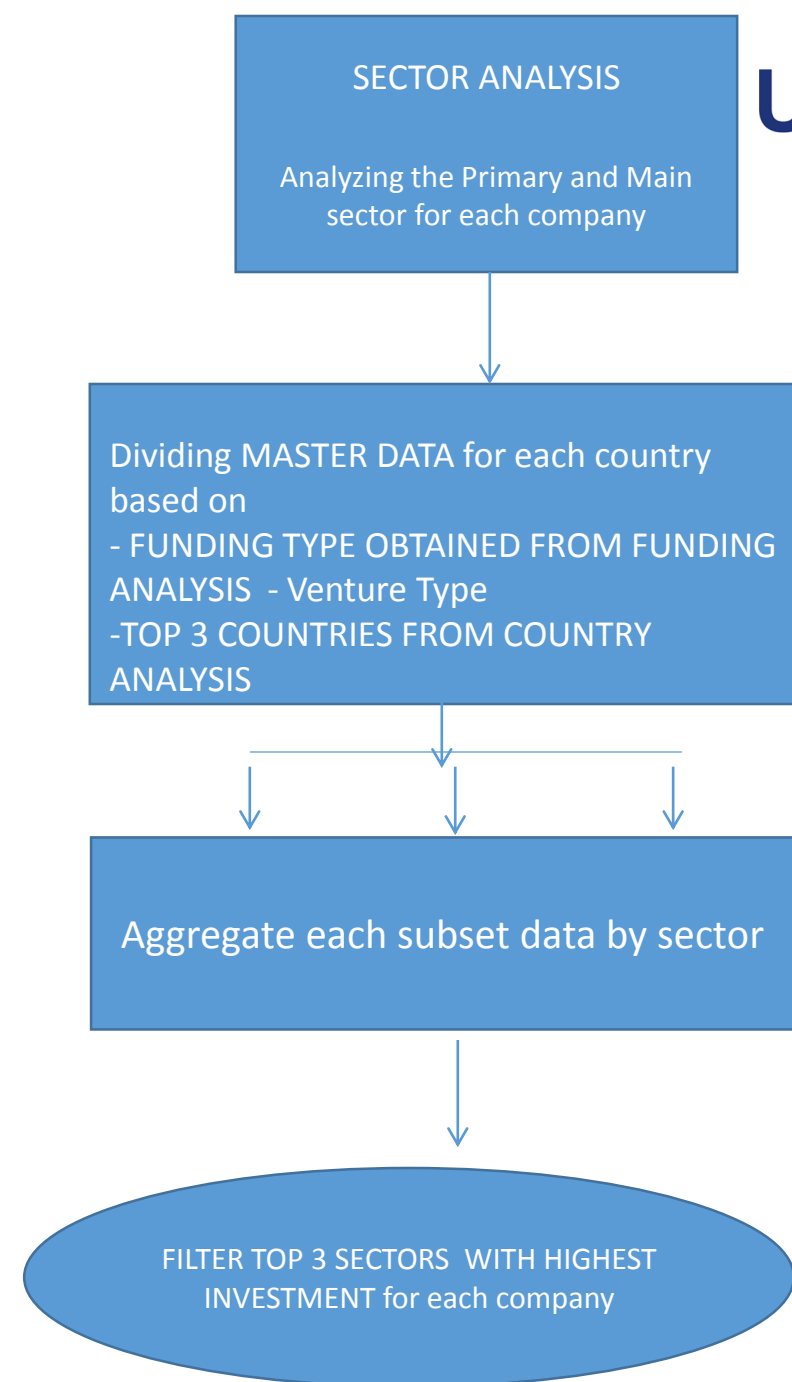
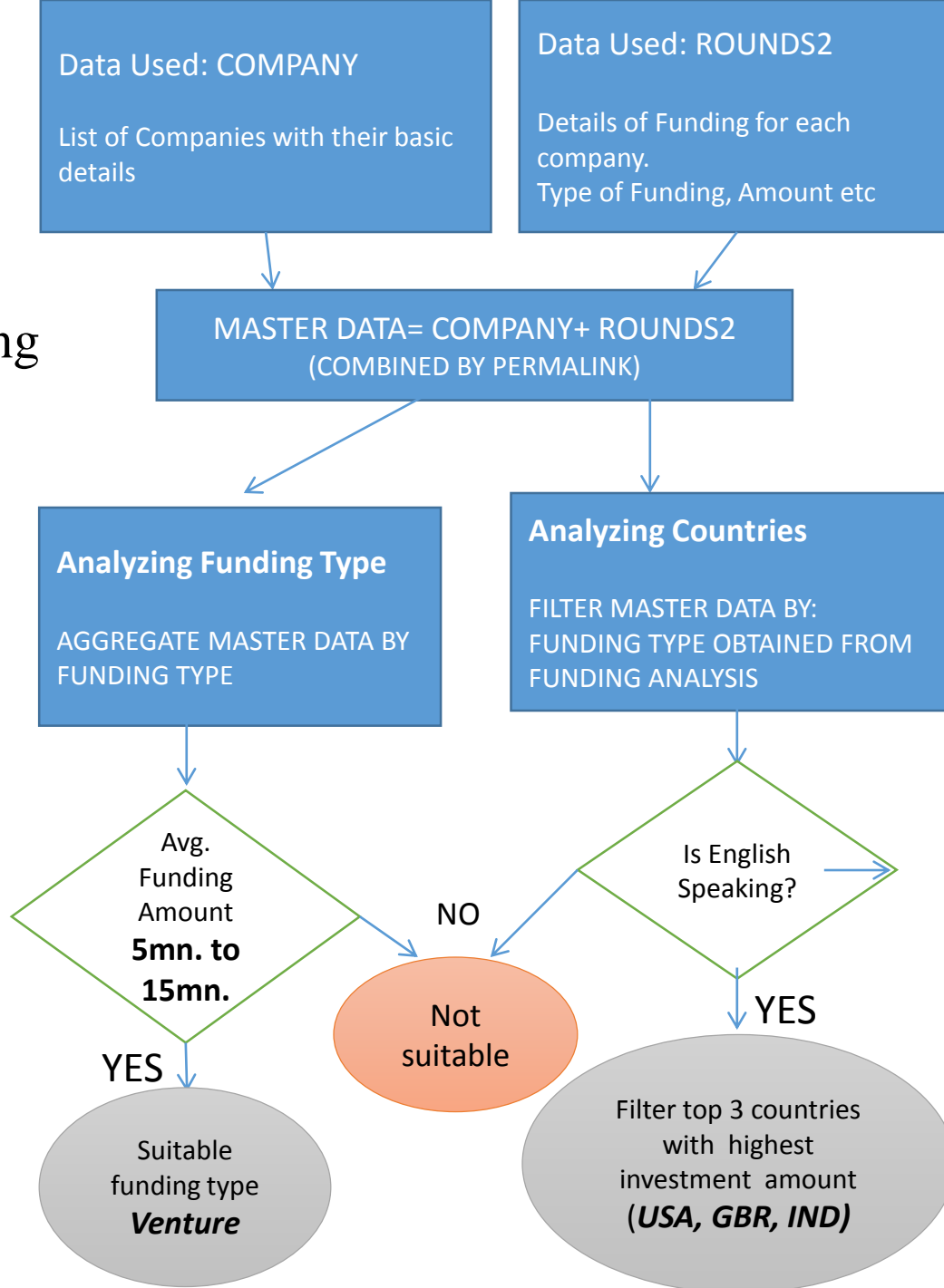
Group Name:

1. Savita Upadhyay
2. Vishnu Poddar
3. Vividh Garg
4. Mohit Mamgain

## <Abstract>

We have analysed the model of a multi-stage project that captures many features like sector, funding type and companies. The important feature is that Sparks funds which is an asset management company wants to invest between **5 to 15 million USD** per round of investment only in English Speaking Countries which have had most investment in the past. Among the eight main sectors we have narrow down the analysis to top three sectors along within top three English speaking country with venture funding. Companies with most number of investment in topmost sector for top three English speaking countries i.e. usa, gbr and ind is also concluded.

## Problem solving methodology



## <Analysis>

Our Data Analysis is divided into three parts:

- (1) Investment Type Analysis
- (2) Country Analysis
- (3) Sector Analysis

### **INVESTMENT TYPE ANALYSIS:**

Sparks funds wants to choose one out of the four investment types i.e. Seed, Angel, Venture and Private equity for each potential investment.

We have calculated the average investment amount for each of four funding types as shown below:

S. No.	Funding Type	Average investment amount (USD)
1.	Angel	958,694.5
2.	Seed	719,818
3.	<b>Venture</b>	<b>11,748,949.1</b>
4.	Private equity	73,308,593

As Sparks Funds wants to invest between 5-15 million USD, “**VENTURE**” funding type is most suitable for investment.

## <Analysis>

### COUNTRY ANALYSIS:

Sparks funds wants to invest in with the highest amount of funding for the chosen investment type i.e. venture.

We have identified top 9 countries based on the total investment amount each country has received.

S.No.	Country	Country Code	Total Investment Amount
1	America	usa	422,510,842,796
2	China	chn	39,835,418,773
3	United Kingdom	gbr	20,245,627,416
4	India	ind	14,391,858,718
5	Canada	can	9,583,332,317
6	France	fra	7,259,536,732
7	Israel	isr	6,907,514,579
8	Germany	deu	6,346,959,822
9	Japan	jpn	3,363,676,611

As Sparks funds wants to invest in only English Speaking countries with most amount of funding, here is list of Top three English Speaking Countries:

Top English Speaking country	usa
Second English Speaking country	gbr
Third English Speaking country	ind

## <Analysis>

### SECTOR ANALYSIS:

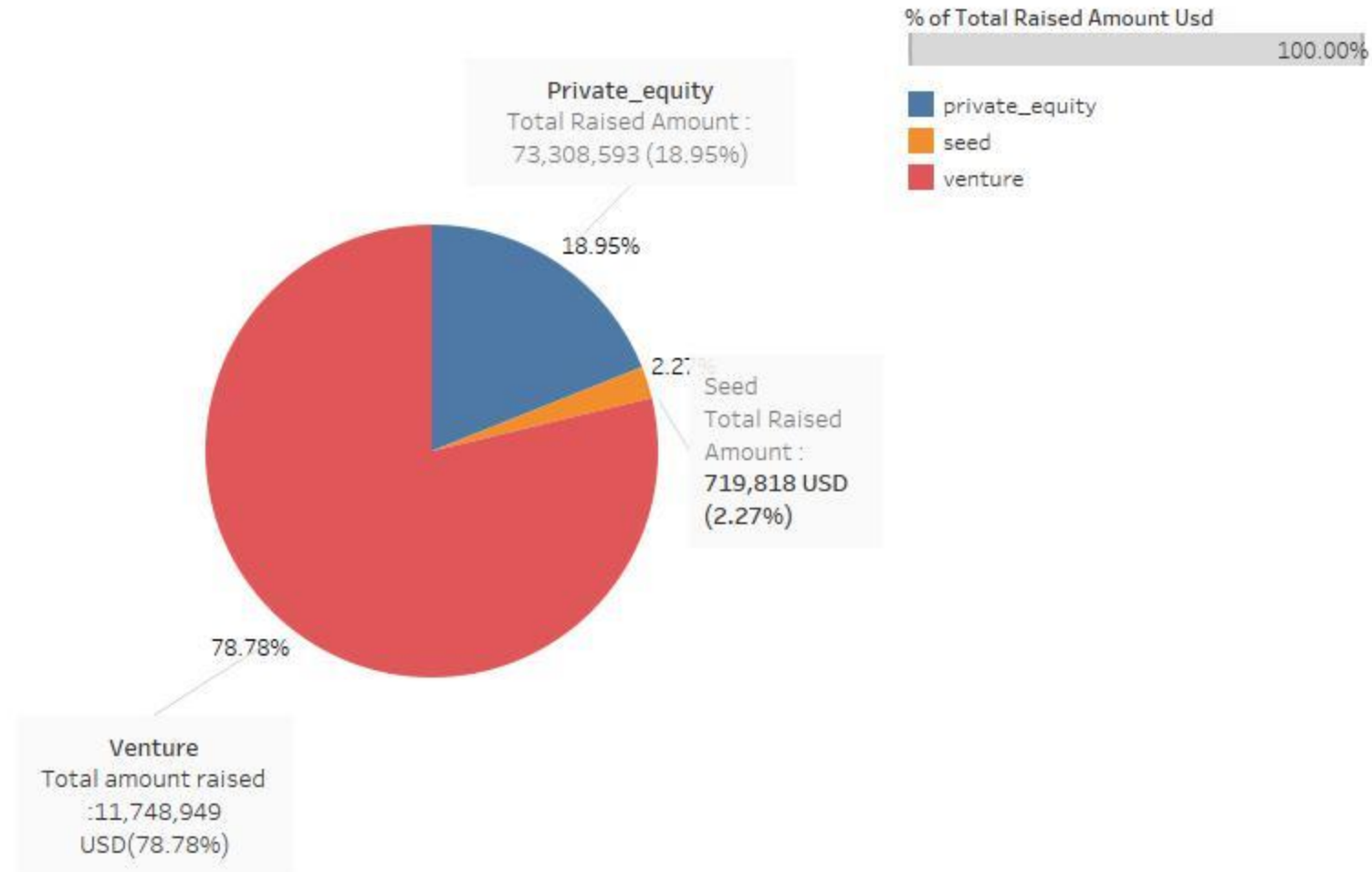
When we say sector analysis we refer to one of the eight main sectors. Based on the sector-wise investment analysis with venture funding type, investment amount b/w 5-15 million usd and top 3 countries i.e usa, gbr and ind, we have made following observation:

S. No.	Observation	Country 1 = usa	Country 2 = gbr	Country 3 = ind
1.	Total number of Investments (count)	12063	621	328
2.	Total amount of investment (USD)	1.07757E+11	5379078691	2949543602
3.	Top Sector name (no. of investment-wise)	<b>others</b>	<b>others</b>	<b>others</b>
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	2950	147	110
7.	Number of investments in second sector	2714	133	60
8.	Number of investments in third sector	2350	130	52
9.	For top sector count-wise, which company received the highest investment?	<b>virtuestream</b>	<b>electric-cloud</b>	<b>firstcry-com</b>
10.	For second best sector count-wise, which company received the highest investment?	SST Inc(Formerly Shotspotter)	celltick technologies	manthan-systems

## <Results>

Sheet 4

- Plot 1 showing the fraction of total investment in venture, seed and private equity and the average amount of investment in each funding type.
- Pie chart shows average amount of investment in venture, seed and private equity type.
- Fraction of total investment w.r.t all sectors is also shown in figure.
- As Sparks Funds wants to invest between 5-15 million USD, “**VENTURE**” funding type is most suitable for investment.

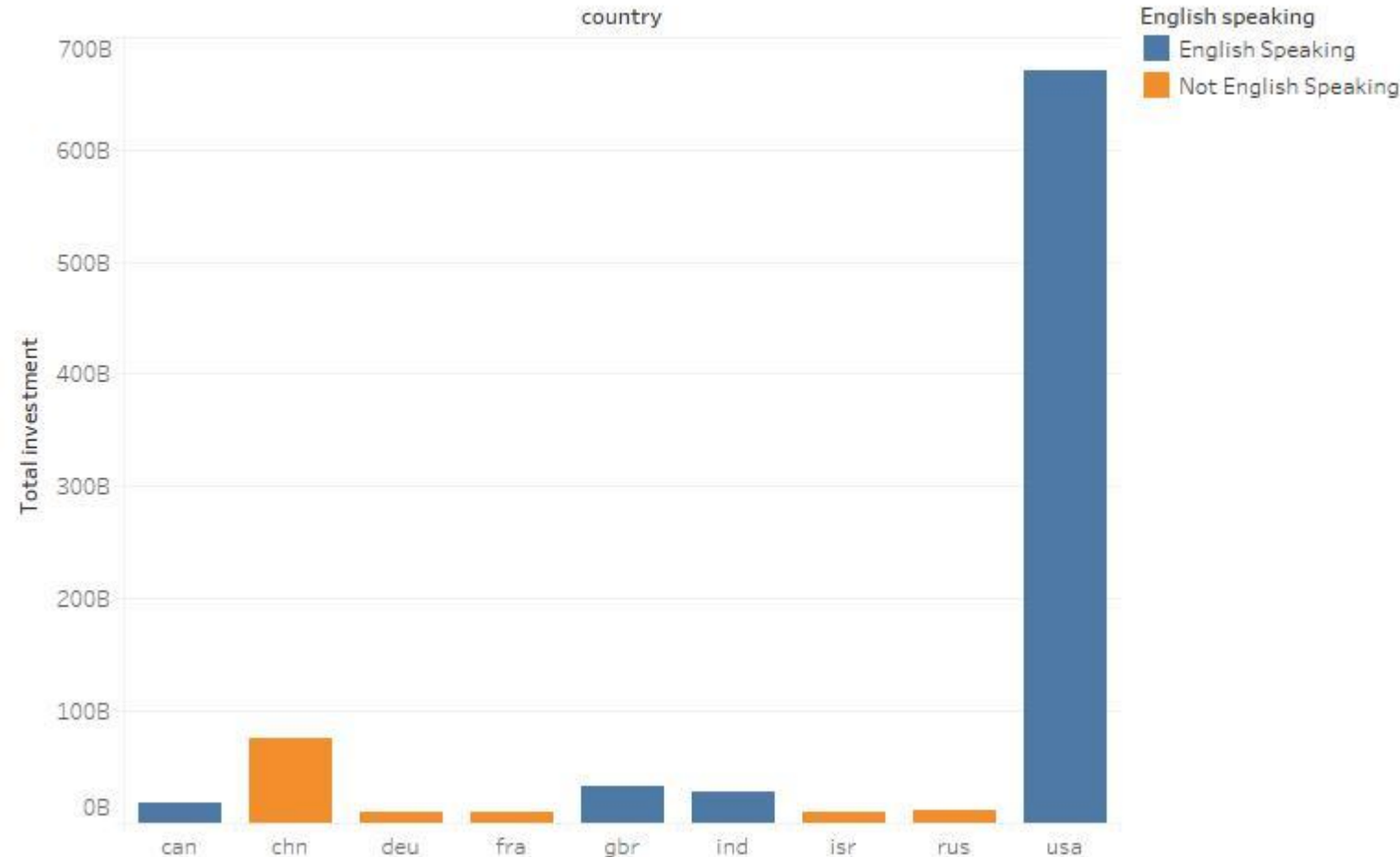


% of Total Raised Amount Usd. Color shows details about Funding Round Type. Size shows % of Total Raised Amount Usd. The marks are labeled by % of Total Raised Amount Usd. Percents are based on each column of the table.

## <Results>

- Plot 2 showing the top 9 countries and the total amount of investment for venture funding type.
- As clearly shown usa, china, united kingdom and india are among the top countries with highest amount of investment.
- As Sparks funds wants to invest in only English Speaking countries with most amount of funding, top three countries are:
  1. United State of America (usa)
  2. United Kingdom (gbr)
  3. India (ind)

Plot 2

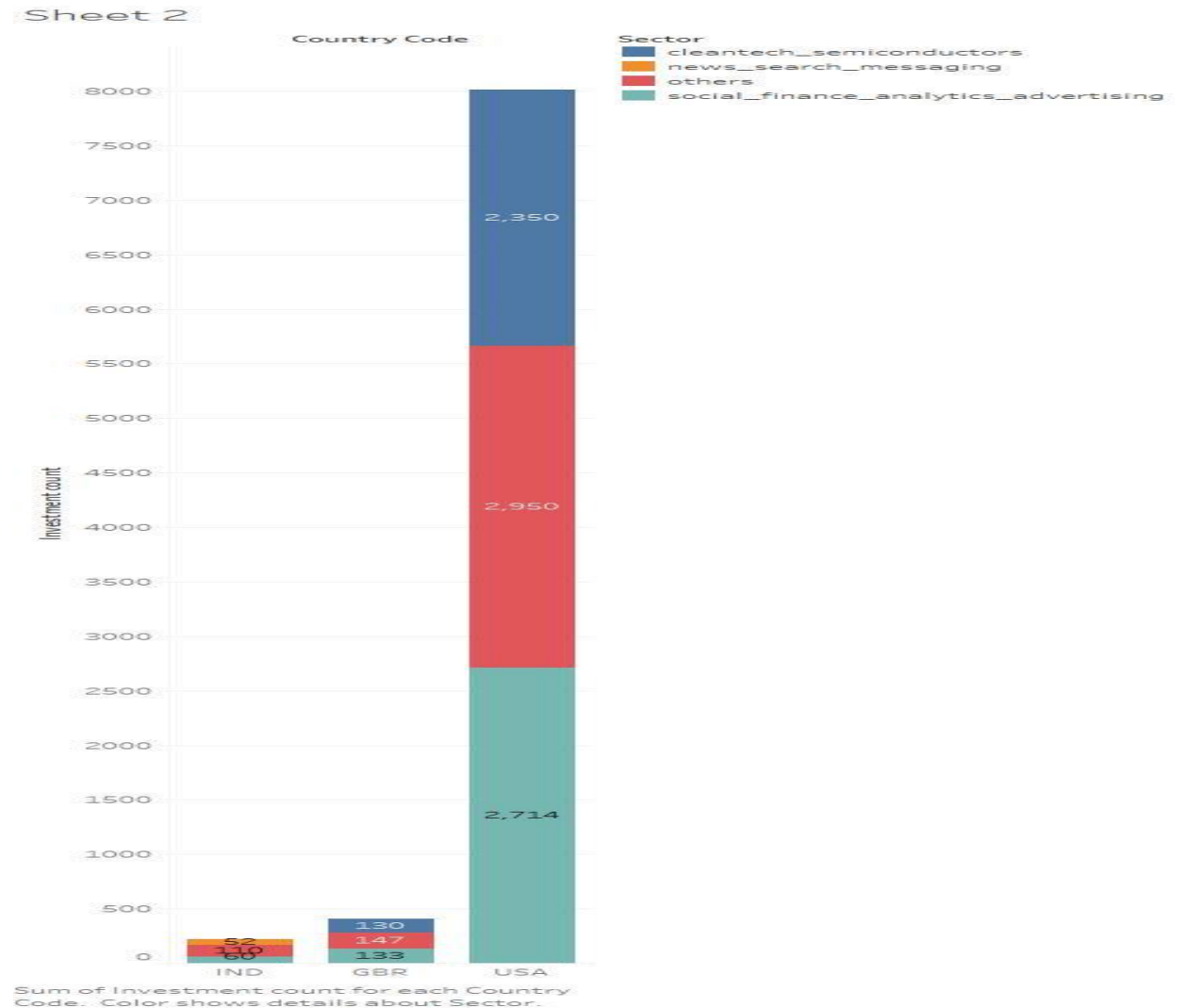


Sum of Total investment for each country. Color shows details about English speaking.



## <Results>

- Plot 3 showing the number of investment in the top 3 sectors of the usa, gbr and ind for venture funding type.
- Top three sectors for usa and gbr are **others**, **Social\_Finance\_Analytics\_Advertising** and **Cleantech\_Semiconductors**.
- For ind top three sectors are others, Social\_Finance\_Analytics\_Advertising and News\_Search\_and\_Messaging.



## <Conclusions>

1. **Venture** is the most suitable funding type for sparks funds to invest.
2. **America, United kingdom** and **India** are top three English speaking companies which have had most investment.
3. **Others** is the topmost sector for all three countries.
4. For the topmost sector company which received highest investment is **Virtustream** for **United State of America**, **Electric Cloud** for **United Kingdom** and **Firstcry.com** for **India**.