INVESTMENT CASE STUDY

SUBMISSION

Group Name

1.   **Member Name – Oshin Sharma**

2.   **Member Name- Chirag Sharma**

3.   **Member Name- Pranav Haldar**
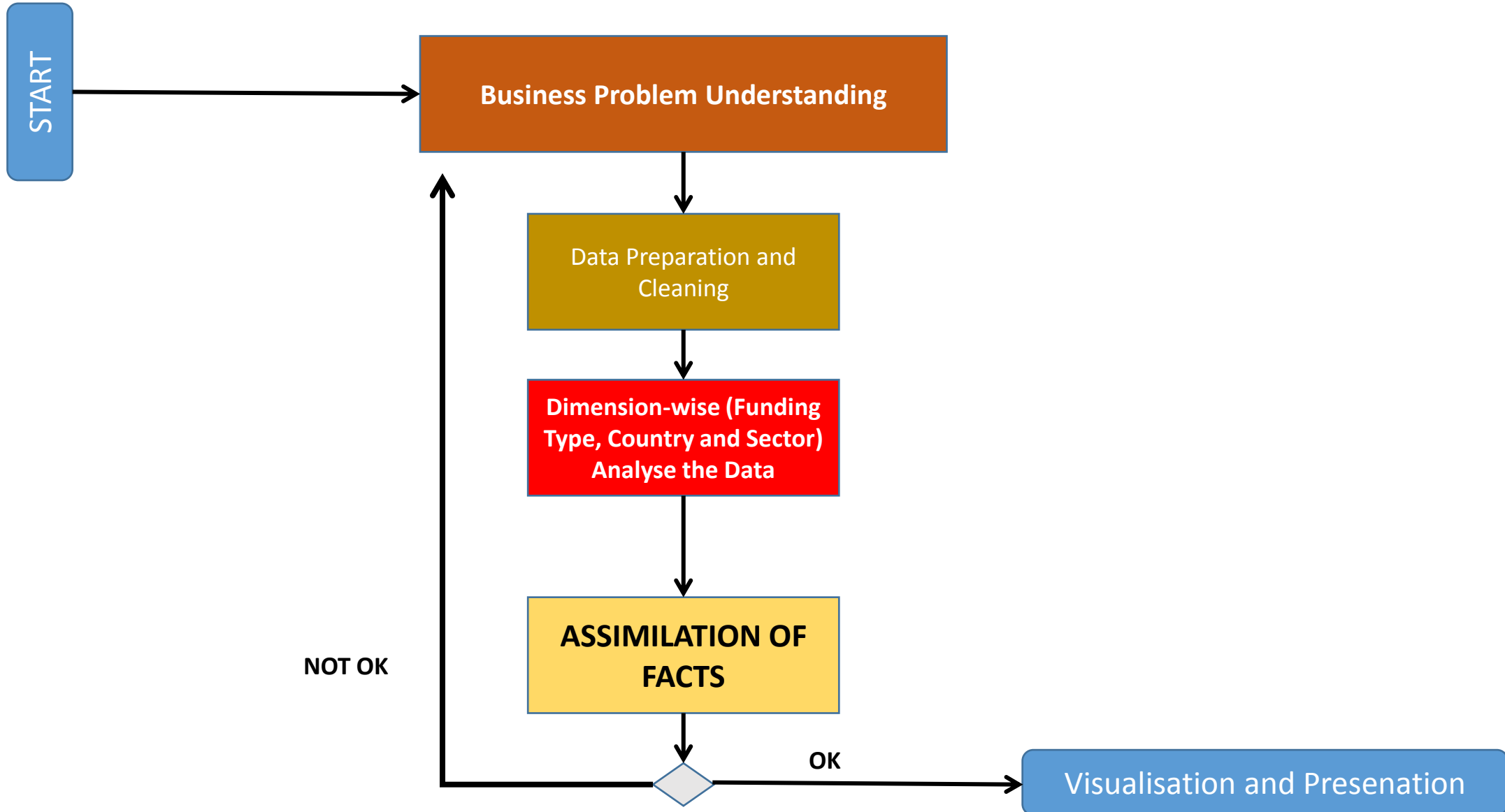
4.   **Member Name- Ashutosh Kumar Singh**

Background Of Problem

➢The CEO of Spark Funds wants to understand the global trends in investments so as to effectively take the Investment Decisions.

Terms Of Reference

➢Spark Funds Company wants to invest between **5 to 15 million USD** per round of investment

➢Company wants to invest only in **English-speaking countries** because of the ease of communication with the companies it would invest in

- **Aim of Study**   To identify the best sectors, countries, and a suitable investment type for Spark Funds for making investments in order to make maximum profit.

PROBLEM SOLVING METHODOLOGY

START

Business Problem Understanding

Data Preparation and Cleaning

Dimension-wise (Funding Type, Country and Sector) Analyse the Data

ASSIMILATION OF FACTS

NOT OK

OK

Visualisation and Presenation

Analysis - Understanding the Data

	Understand the Data Set	
Sl. No	**Questions**	**Answer**
1	How many unique companies are present in rounds2?	66368
2	How many unique companies are present in the companies file?	66368
3	In the *companies* data frame, which column can be used as the unique key for each company? Write the **name of the column**.	permalink
4	Are there any companies in the rounds2 file which are not present in *companies* ? Answer **Y/N**.	N
5	Merge the two data frames so that all variables (columns) in the *companies* frame are added to the *rounds2* data frame. Name the merged frame *master_frame* . How many observations are present in *master_frame* ?	114949

Assumptions: NA

Analysis – Investment Type and Country-Wise

SI.No	Average Values of Investments for Each of these Funding Types	
	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, which investment type is the most suitable for them?	Venture Type

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

Assumptions:
1) Companies having NA as country code assumed to be not part of English speaking countries
2) English speaking countries chosen as per the PDF provided of list of countries where English is spoken

Sector-wise Analysis

| Sl.no	Questions	C1	C2	C3
	Sector-wise Investment Analysis			
1	Total number of Investments (count)	12150	628	330
2	Total amount of investment (USD)	108531347515	5436843539	2976543602
3	Top Sector name (no. of investment-wise)	Others	Others	Others
4	Second Sector name (no. of investment-wise)	Social Finanace Analytics Advertising	Social Finanace Analytics Advertising	Social Finanace Analytics Advertising
5	Third Sector name (no. of investment-wise)	Cleantech Semiconductors	Cleantech Semiconductors	News Search and messgaing
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

Assumptions:
1) Replaced 0 with NA and NA with 0 wherever necessary to clean mapping file.
2) Range of 5 to 15 million is inclusive

Fraction of Total Investments (globally) in Venture, Seed, and Private Equity, and the Average Amount of Investment in each Funding Type

UpGrad

Funding Round Type
- Venture
- Private Equity
- Seed

Investment Type Proportion and Avg Investment amount

719,818
Seed

73,308,593
Private Equity

2%

19%

79%

11,748,949
Venture
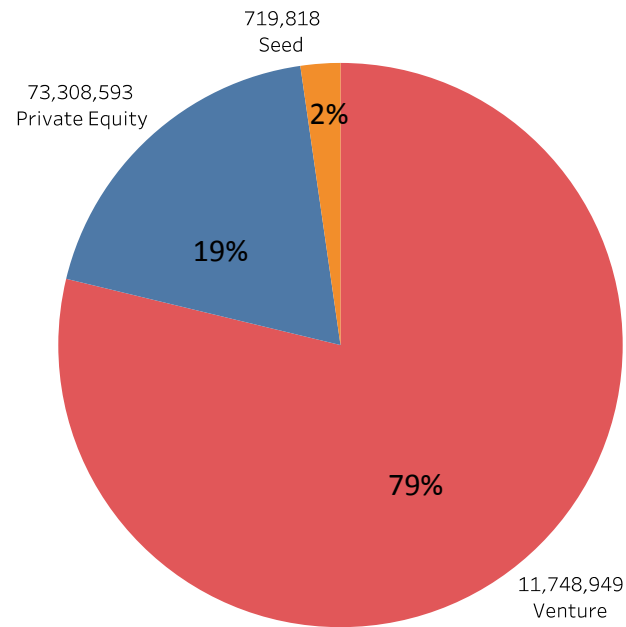
Average of Raised Amount Usd and Funding Round Type. Color shows details about Funding Round Type. The marks are labeled by average of Raised Amount Usd and Funding Round Type. The view is filtered on Funding Round Type, which keeps Private Equity, Seed and Venture.

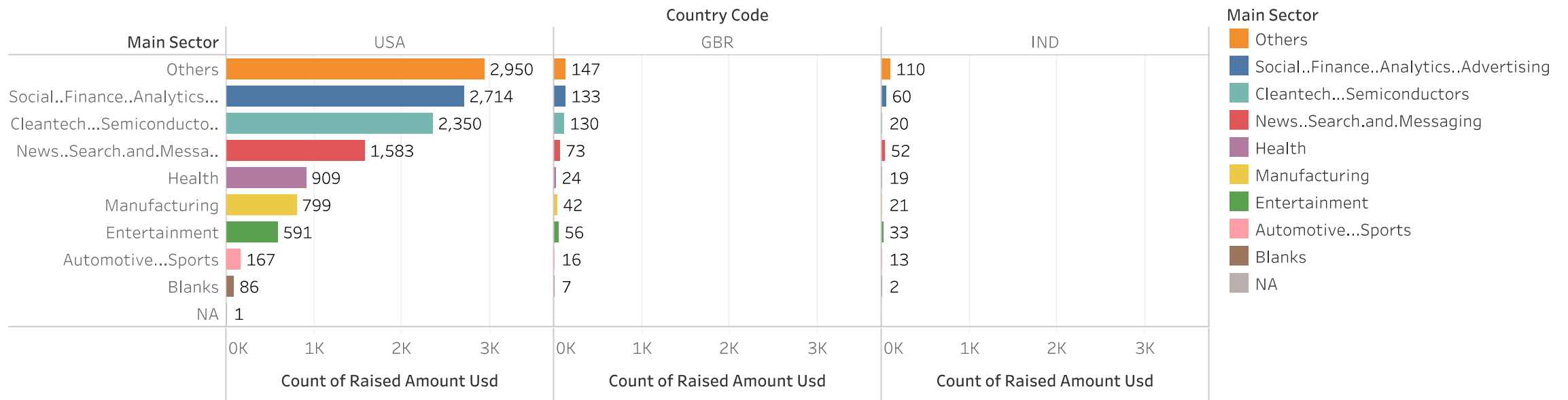# Top 9 Countries in terms of Investment Amount raised

Plot showing the Top 9 countries against the Total Amount of Investments of Venture Type Funding
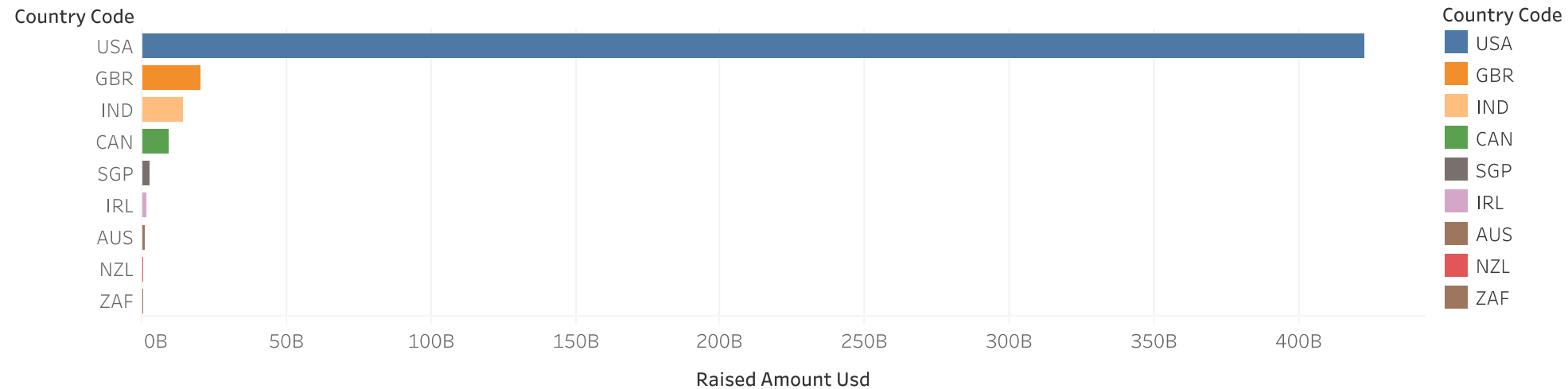
Sum of Raised Amount Usd for each Country Code. Color shows details about Country Code. The data is filtered on Funding Round Type, which keeps Venture. The view is filtered on Country Code, which has multiple members selected.

Top Sectors Investment Numbers for Top 3 Countries

Plot showing the Number of Investments in the Top 3 Sectors of the Top 3 Countries for the Venture Type Funding

Country Code

Main Sector	USA	GBR	IND
Others	2,950	147	110
Social..Finance..Analytics...	2,714	133	60
Cleantech...Semiconducto..	2,350	130	20
News..Search.and.Messa..	1,583	73	52
Health	909	24	19
Manufacturing	799	42	21
Entertainment	591	56	33
Automotive...Sports	167	16	13
Blanks	86	7	2
NA	1		

Count of Raised Amount Usd

Main Sector
- Others
- Social..Finance..Analytics..Advertising
- Cleantech...Semiconductors
- News..Search.and.Messaging
- Health
- Manufacturing
- Entertainment
- Automotive...Sports
- Blanks
- NA

Count of Raised Amount Usd for each Main Sector broken down by Country Code. Color shows details about Main Sector. The data is filtered on Funding Round Type and Raised Amount Usd. The Funding Round Type filter keeps Venture. The Raised Amount Usd filter ranges from 5000000 to 15000000. The view is filtered on Country Code, which keeps GBR, IND and USA.

Conclusion

On the basis of the analysis, refer to our recommendations below for investments by Sparks Fund:

1. Sparks Fund should invest in the venture funding rounds of the companies with an average investment of **~ 11.7 Million USD**

2. Top Countries for investments are**: USA, United Kingdom and India**
   The proportion of the investments in the countries should be (based on the selected investment strategy)
   - **USA – 92%**
   - **UK – 5%**
   - **India – 3%**

3. Top sectors to invest are**:**
   1. **Others**
   2. **Social, Finance, Analytics and Advertising**
   3. **Cleantech and Semiconductors**
   4. **News, Search and Messaging**