

INVESTMENT CASE STUDY

SUBMISSION

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SYNOPSIS OF THE PROJECT

□ Project Brief

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

□ Business and Data Understanding

- Following are the two constraints for Spark Funds
 - i. It wants to invest in the range of 5 to 15 Million USD per round of investment and
 - ii. It wants to invest only in English-speaking countries for the ease of communication

□ Business Objective and Strategy

- To identify the best sectors, countries, and a suitable investment type for making investments with the strategy to invest where most other investors are investing.

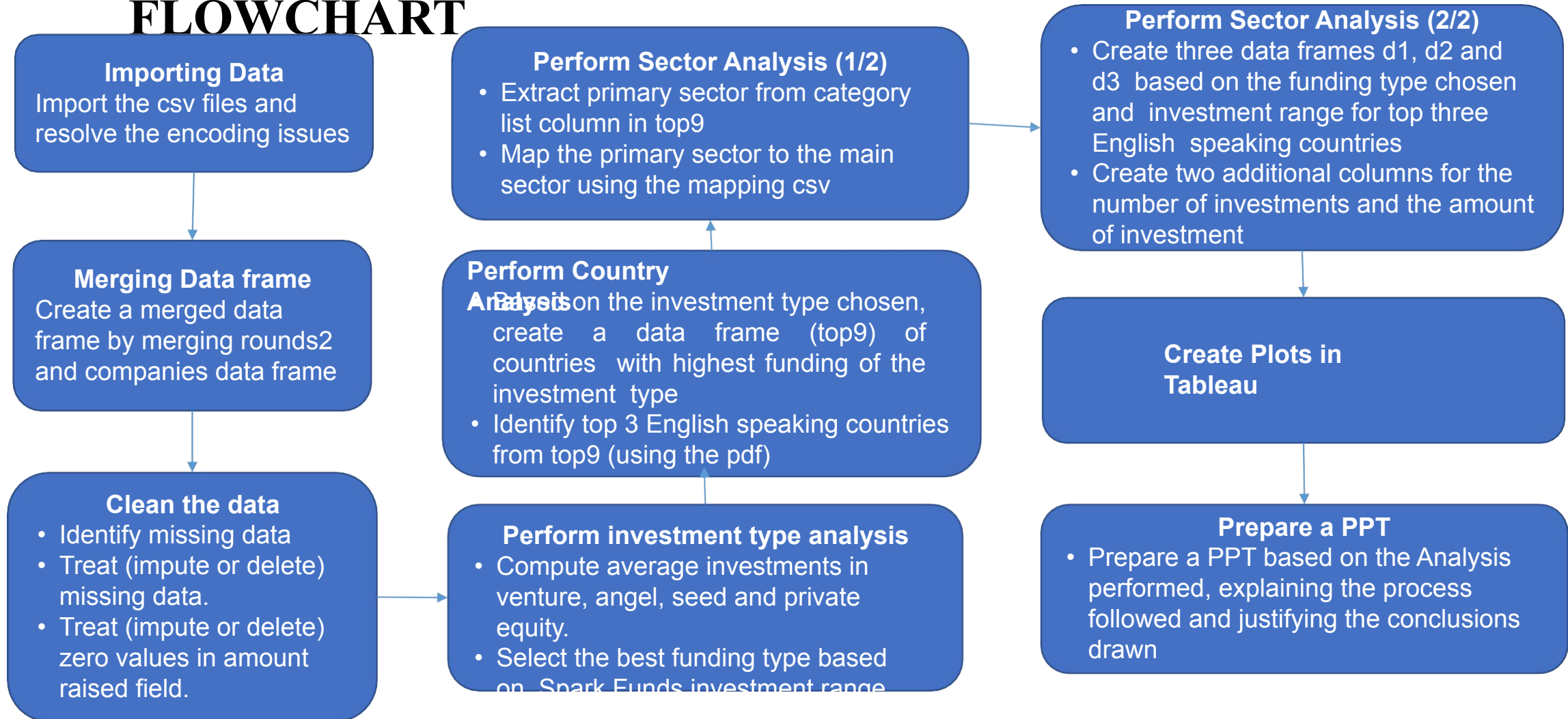
□ Goals of Data Analysis

- Investment type analysis (to choose the type that is based suited for the business strategy)
- Country analysis (to identify countries which have been heavily invested in the past)
- Sector Analysis (to understand the distribution of investment across main sector)

□ Base files used

• Companies.csv	• Mapping.csv
• Rounds2.csv	• Countries_where_English_is_an_official_language.pdf

SPARK FUNDS - PROBLEM SOLVING FLOWCHART



INVESTMENT TYPE

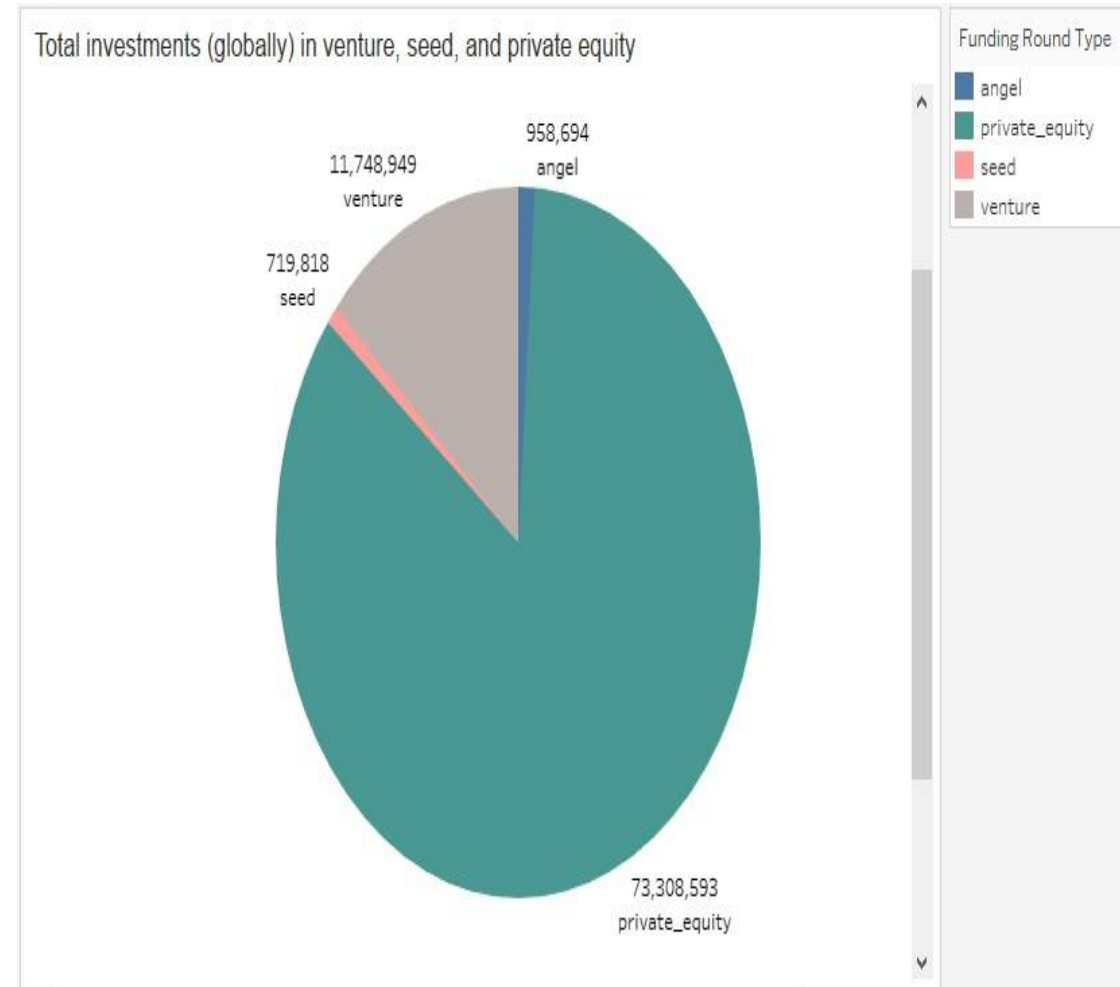
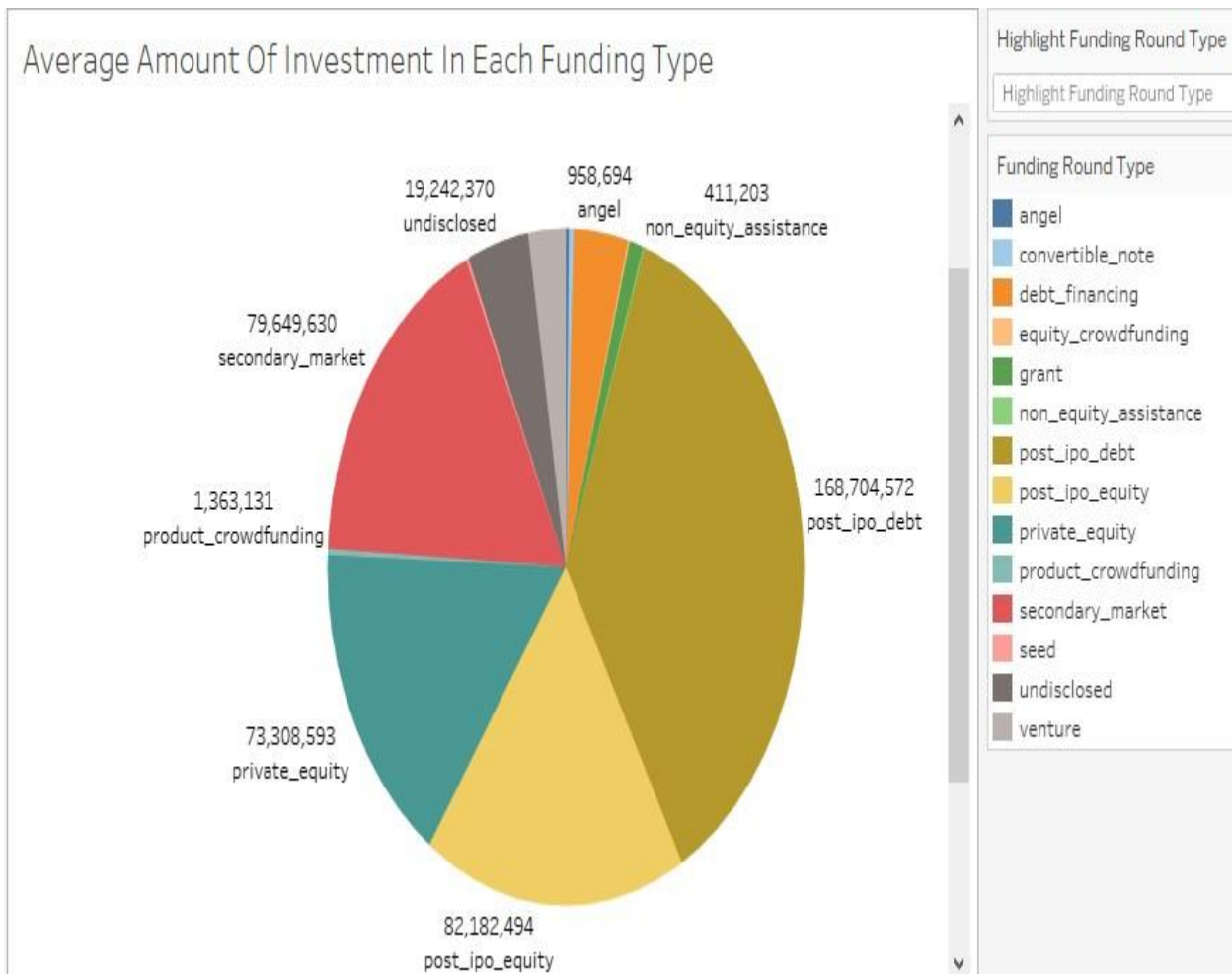
ANALYSIS

- Spark Funds wants to choose one of the following investment types for each potential investment they will make
 - Venture
 - Angel
 - Seed
 - Private Equity
- Compute the average funding amount for each of the above investment type.
- Based on the analysis, the best investment type for Spark Funds would be Private equity
- Reasons for selecting Private Equity
 - Considering Spark Funds investment range is 5 to 15 Million USD per round, we'll have to find average value of investment for each of the above investment type where the investment is in the range of 5 to 15 Million USD. As Spark Funds would want to know about investors who invest in their investment range. The resulting table would be as follows:

Investment type	Average investment (in 5-15 MM USD range)
Private equity	9,283,496
Venture	8,888,551
Angel	7,212,355
Seed	6,610,420

- Moreover, private equity type of investment is opted by larger companies or start-ups that have grown in size. Considering Spark Funds is in its early stage, it would be better to invest in large companies or grown start-ups to minimise the risk, as these companies and start-ups would have been in operation for a longer time as compared to others.

Pie Chart showing the Average Amount of Investment in each Funding type and the fraction of total investments (globally) in Venture, Seed and Private Equity and Angel.



COUNTRY ANALYSIS

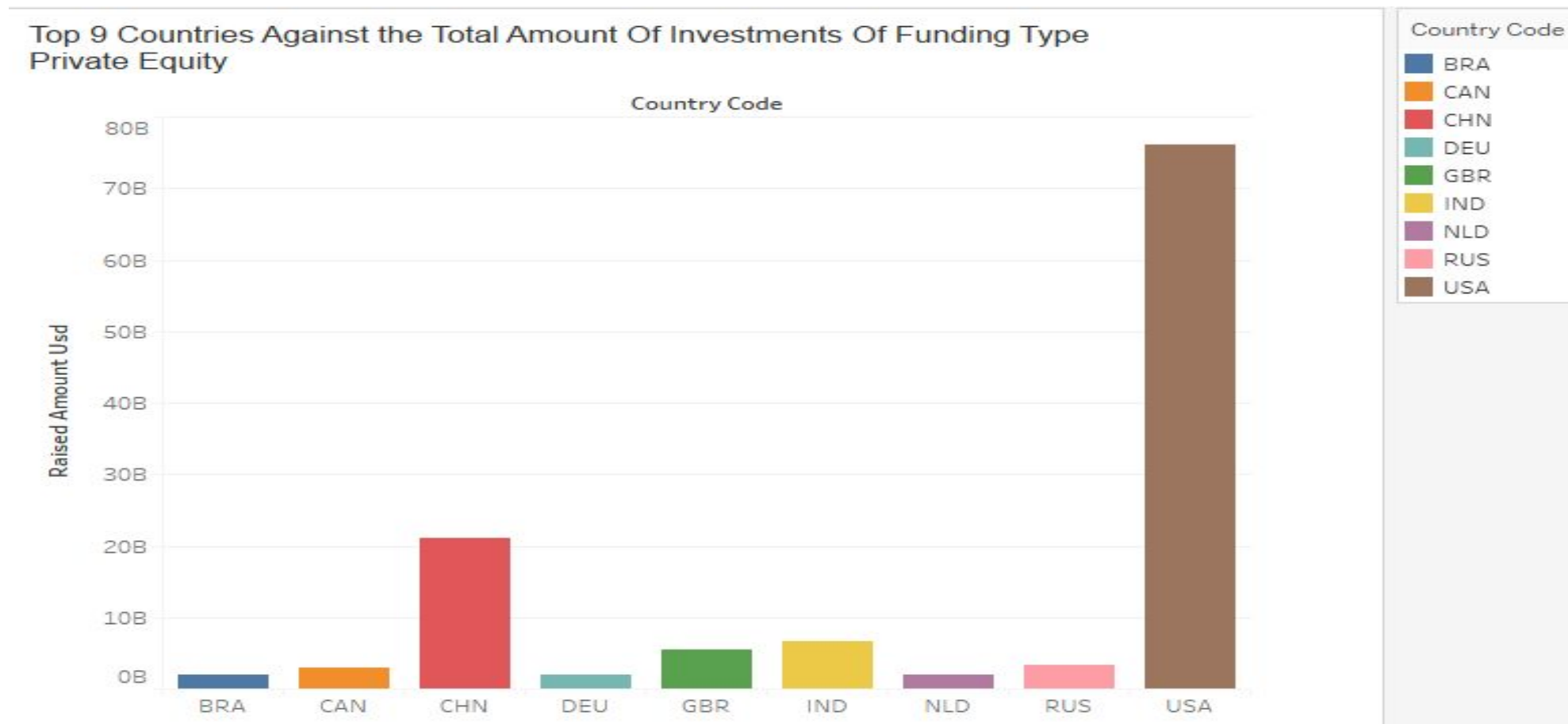
- Spark Funds wants to narrow down the countries based on the investment type chosen (i.e. private equity)
- Creating a data frame of top 9 countries based on private equity investment type and naming it top9. the resulting table would be as follows:

Country Code	Sum of amount raised in USD	Country Code	Sum of amount raised in USD
USA	76,221,276,799	CAN	2,993,348,151
CHN	21,116,648,606	NLD	2,032,735,114
IND	6,547,512,053	BRA	2,014,726,660
GBR	5,536,833,346	DEU	2,001,232,740
RUS	3,261,000,000		

Note: Investment amount of USD 6,835,371,867 does not have any country code and hence is not included in the above table

- Based on the pdf file which specifies the list of countries where English is the official language, it can be noted that the top three countries where private equity type of funding is famous and where English is the official language are:
 - USA
 - IND
 - GBR

Bar Chart showing top 9 Countries against the total amount of Investments of funding type FT. This should make the top 3 Countries very clear.



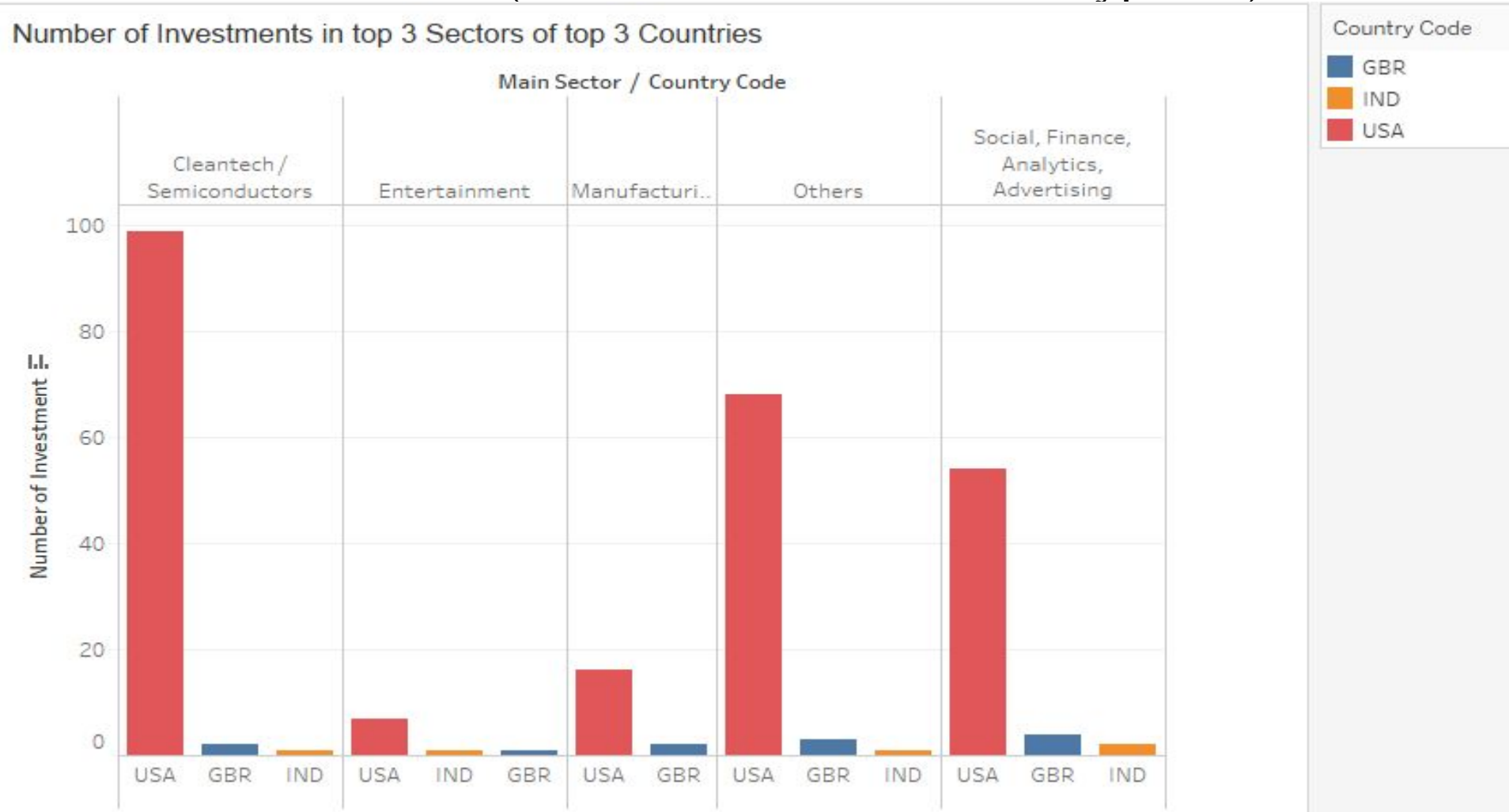
SECTOR WISE

ANALYSIS

	D1(USA)		D2 (IND)		D3(GBR)	
Sector	Total Deal Amt (in million)	No of Investment /Deal	Total Deal Amt (in million)	No of Investment /Deal	Total Deal Amt (in million)	No of Investment /Deal
Automotive & Sports	53.92	6	-	0	6.06	1
Clean tech/ Semiconductors	950.57	99	8.60	1	19.45	2
Entertainment	63.29	7	13.00	1	13.64	1
Health	314.01	34	-	0	-	0
Manufacturing	155.47	16	-	0	24.88	2
News, Search & Messaging	256.05	31	-	0	15.57	2
Others	644.13	68	10.00	1	27.22	3
Social, Finance, Analytics & Advertising	470.21	54	10.40	2	26.99	4

- Spark funds wants to narrow down to main sectors & countries where it can invest.
- Basic Strategy to Invest in sectors : Where most investments are occurring.
- Following sectors should be considered as per our Investment strategy , in USA sector-clean tech/semiconductors, others & social, finance, Analytics & Advertising. For IND, sector-social ,finance, analytics & adv. , entertainment & others. For GBR , sectors – Social, Finance, Analytics & Advertising , others & Manufacturing.

This shows the number of Investments in the top 3 sectors of the top 3 Countries on one chart (for the chosen investment type FT).



SUMMARY OF CASE STUDY

Based on Investment Strategy of Stark Funds, (slide 2-3)

Funding Type selected is **Private Equity** (slide 4-5)

For English speaking countries – **USA, IND, GBR** (slide 5-6)

with Top 3 sectors on basis of Maximum number deal. (slide 7-8)

USA	IND	GBR
Clean tech//semiconductors	Social, Finance, Analytics & Advertising	Social, Finance, Analytics & Advertising
Others	Entertainment	Others
Social, Finance, Analytics & Advertising	Others	Manufacturing