

# INVESTMENT CASE STUDY

## SUBMISSION

Group Name:

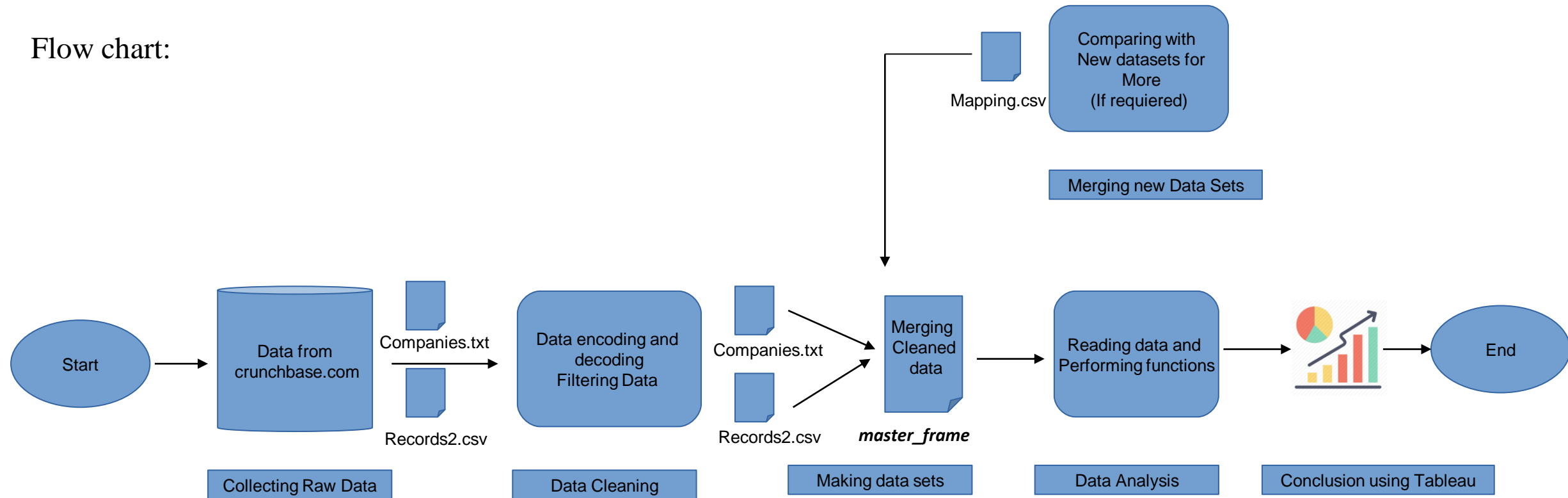
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# ABSTRACT

- The purpose of this study is to take the investment decisions effectively, identify the best sectors, countries, and a suitable investment type for making investments.
- For understanding the global trends in investment, a real investment data from crunchbase.com has been used.
- We have used python commands to process data, achieve results and tableau to represent those results through plots.
- With the analysis of patterns achieved we were able to see through the desired output required for investment decision, and by analyzing on the basis of best funding type, best countries to be invested in and the top invested sectors in all those countries we are able to recommend sectors/countries/investment type.

# Problem solving methodology

Flow chart:



Flow Chart representing the steps involved in the case study for identifying investment for company Spark Funds.

## Analysis (Part-1)

### Funding Type Analysis:

- Objective: For every potential investment, there are many types of investment present in the market namely seed, angel, venture, private equity, etc.
- Average funding amount of venture type - \$11,724,222.69
- Average funding amount of angel type - \$971,573.89
- Average funding amount of seed type - \$747,793.68
- Average funding amount of private equity type - \$73,938,486.28
- Considering the constraints of Spark Funds to invest in between \$5M to \$15M, the most suitable type of investment for Spark Funds is – **Venture**.

## Analysis (Part - 2)

### Country Analysis:

- Objective: Spark Funds wants to invest in the mostly invested countries which have English as one their official language.
- Analyzing the Top 3 English-Speaking Countries (By creating a data frame of top nine highly invested country and getting top 3 countries which have English as their official language.)

Top English-speaking country - **USA** (United States of America)

Second English-speaking country - **GBR** (Great Britain)

Third English-speaking country - **IND** (India)

- Considering the requirements of Spark Funds the top three countries where investments can be made are concluded as above.

## Analysis (Part -3)

### Sector Analysis:

Objective: The aim is to find out the most heavily invested main sectors in each of the three countries, that we found in country analysis.

Analysing points	(USA)	(GBR)	(IND)
Total number of Investments (count)	12064	621	328
Total amount of investment (USD)	107766584223	5379078691	2949543602
Top Sector name (no. of investment-wise)	Others	Others	Others
Second Sector name (no. of investment-wise)	Social, Finance, Analytics, Advertising	Social, Finance, Analytics, Advertising	Social, Finance, Analytics, Advertising
Third Sector name (no. of investment-wise)	Cleantech / Semiconductors	Cleantech / Semiconductors	News, Search and Messaging
Number of investments in top sector (3)	2950	147	110
Number of investments in second sector (4)	2714	133	60
Number of investments in third sector (5)	2300	128	52
For point 3 (top sector count-wise), which company received the highest investment?	Virtustream	Electric Cloud	FirstCry.com
For point 4 (second best sector count-wise), which company received the highest investment?	SST Inc. (Formerly ShotSpotter)	Celltick Technologies	Manthan Systems

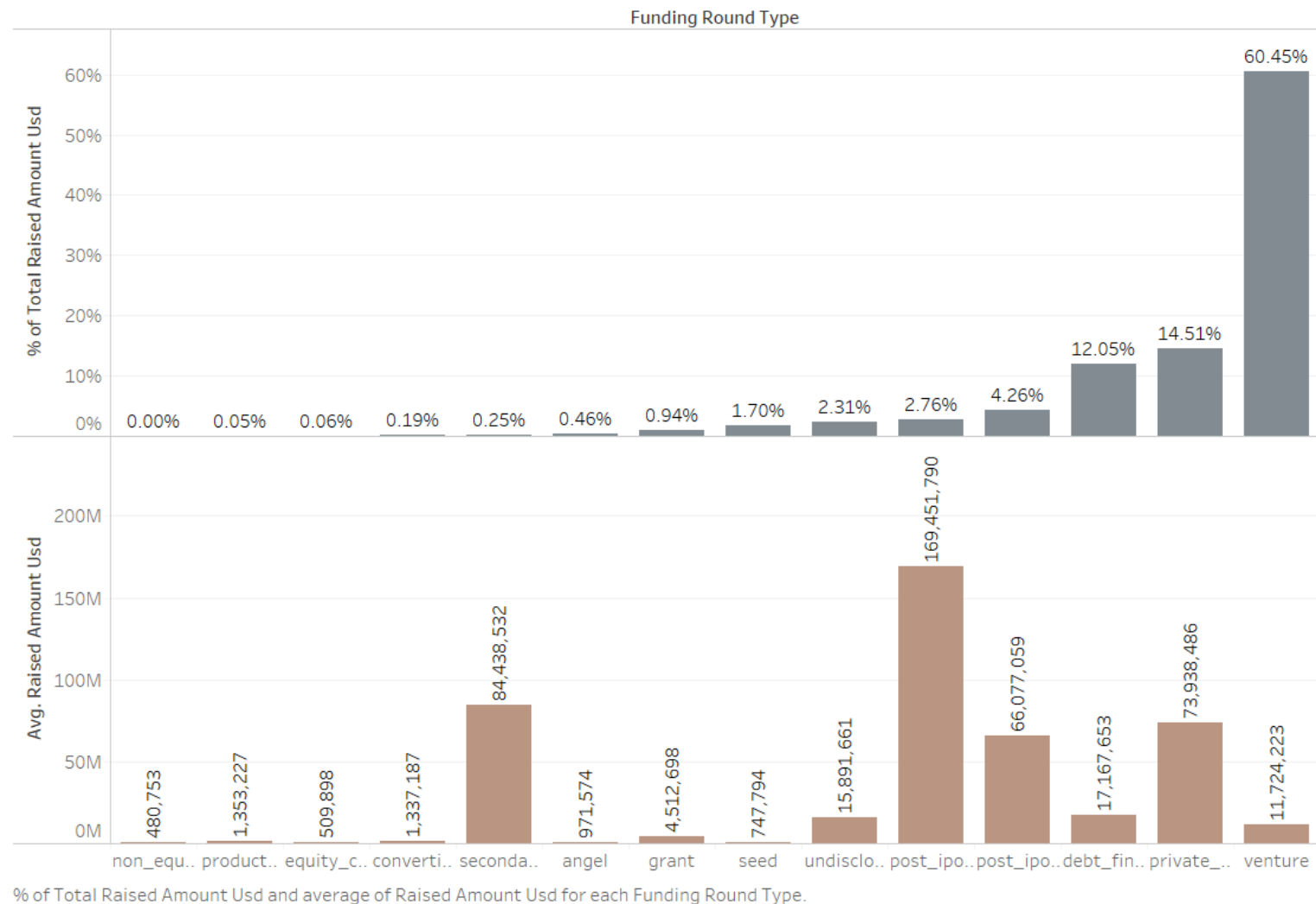
- Tabulated the most heavily invested main sectors in each of the three countries.

# Results

A plot showing the fraction of total investments (globally) in different funding types and the average amount of investment in each funding type.

## Understanding from plot:

1. Venture type is has the highest % of total raised amount among other investment types.
2. Venture type avg. amount invested also lies in the \$5M-\$15M range making it most suitable investment type.

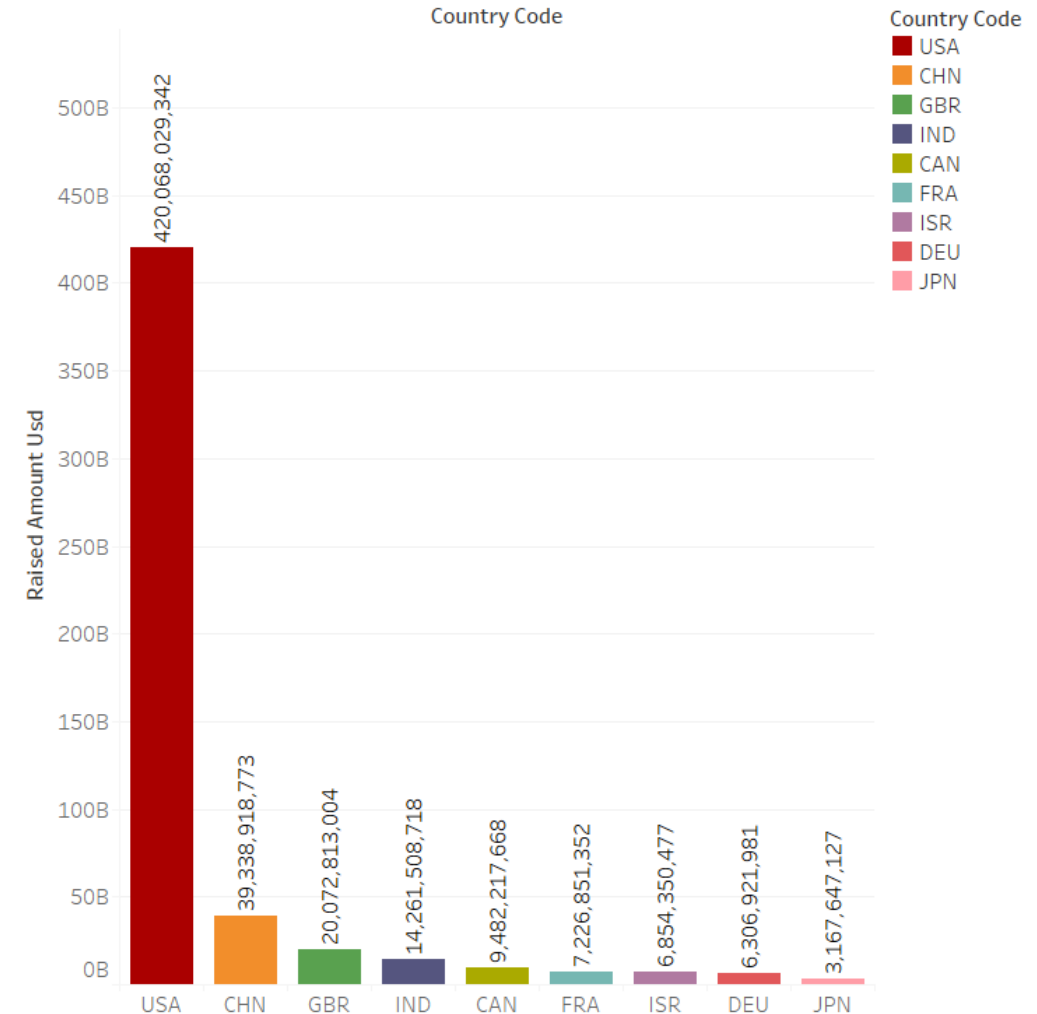


# Results

A plot showing the top 9 countries against the total amount of investments of funding type FT.

## Understanding from plot:

1. From these top 9 highly invested countries, USA, GBR, IND are top countries where English is official language. So we will consider these 3 countries for investment.



Sum of Raised Amount USD for each Country Code. Color shows details about Country Code.

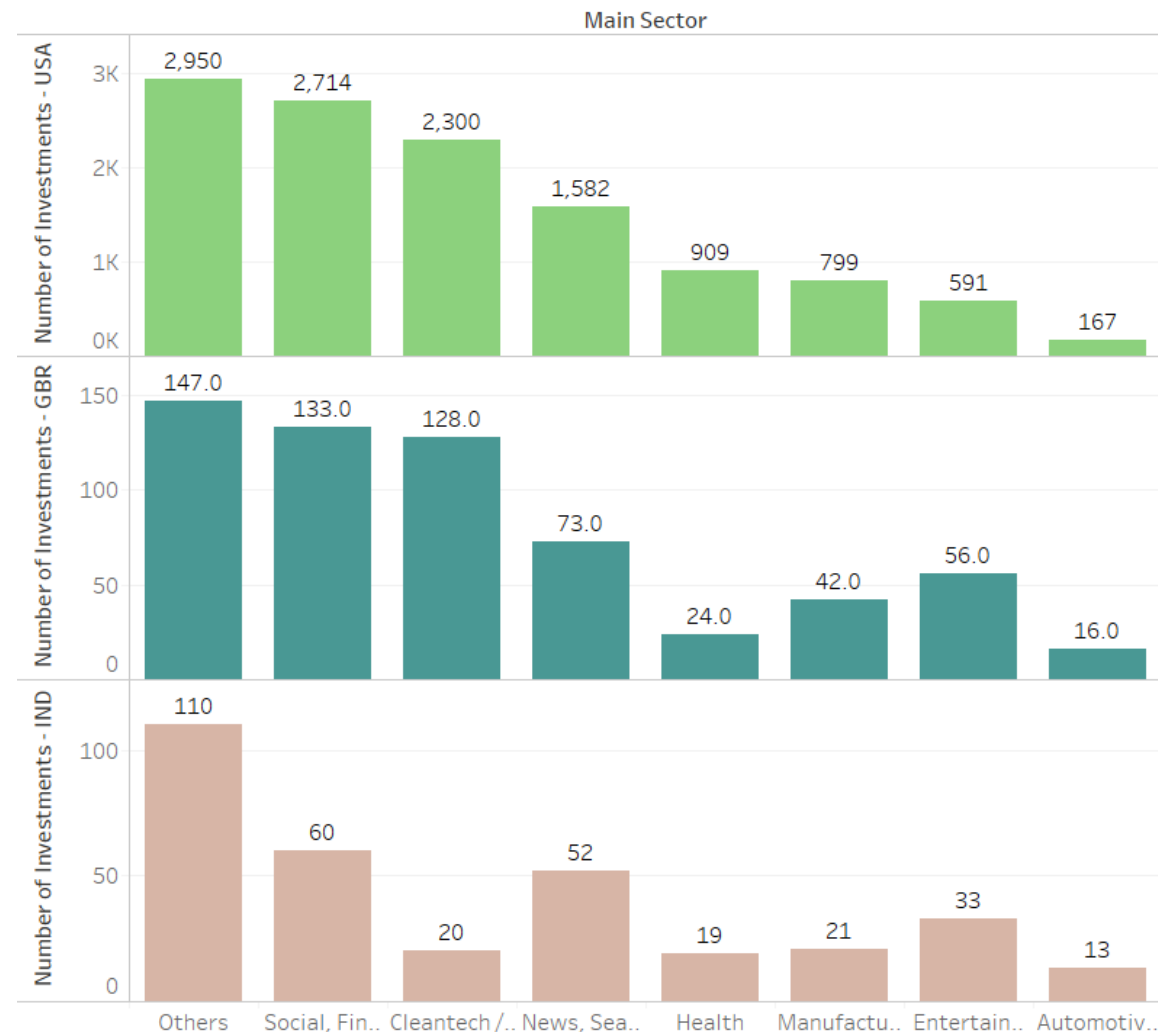


# Results

A plot showing the number of investments in the top 3 sectors of the top 3 countries on one chart.

## Understanding from plot:

1. In USA, top 3 invested sectors are “Others”, “Social, Finance, Analytics, Advertising” and “Cleantech / Semiconductors”
2. In Great Britain, top 3 invested sectors are “Others”, “Social, Finance, Analytics, Advertising” and “Cleantech / Semiconductors”
3. In India, top 3 invested sectors are “Others”, “Social, Finance, Analytics, Advertising” and “News, Search and Messaging”



Raised Amount Usd Count as an attribute, Raised Amount Usd Count (D2) as an attribute and Raised Amount Usd Count (D3) as an attribute for each Main Sector. The view is filtered on Main Sector, which excludes Null.

## Conclusions

On the basis of previous analysis and plots achieved using tableau, we conclude with following points:

- Investment type analysis: Comparing the investment amounts of all investment types, the most suitable funding type for Spark Funds is to invest in **Venture** type capital funding.
- Country analysis: After identifying all the top invested countries and filtering with English as their official language, **USA, Great Britain** and **India** came as top three countries.
- Sector analysis: The companies which received most investment in top sector are Virtustream, Electric Cloud, FirstCry.com.
- Sectors preferred to invest are – **Others** and **Social, Finance, Analytics, Advertising**