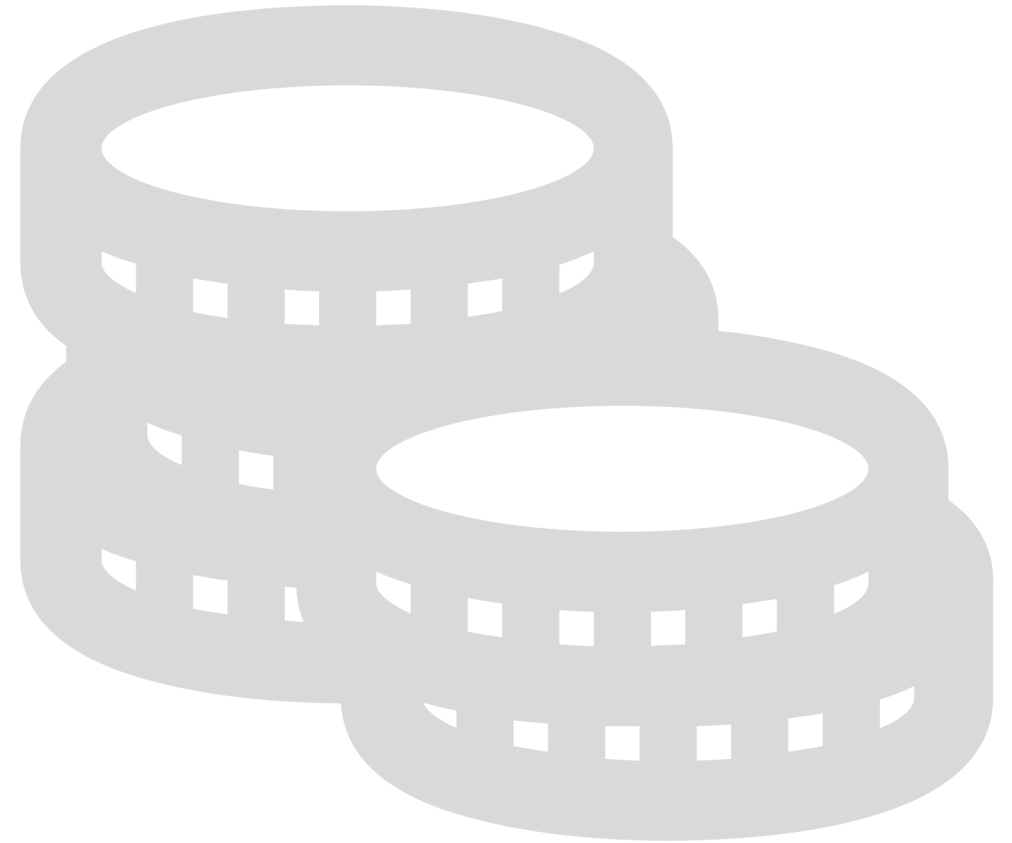


# Case Study:

## Spark Funds Investment

Debasis Garabadu  
January 4, 2019



## Business Objectives:

For making investments, identify the:

- Best Sectors
- Most Heavily Invested Countries
- Suitable Investment Type

## Data Analysis Goals:

- Investment type analysis
- Country Analysis
- Sector Analysis

## Constraints:

1. Investment Amount must be between 5 to 15 million USD per round of investment
2. Only English Speaking Countries

## Data Understanding:

Data Available:

- Company Details
- Funding Round Details
- Sector Classification

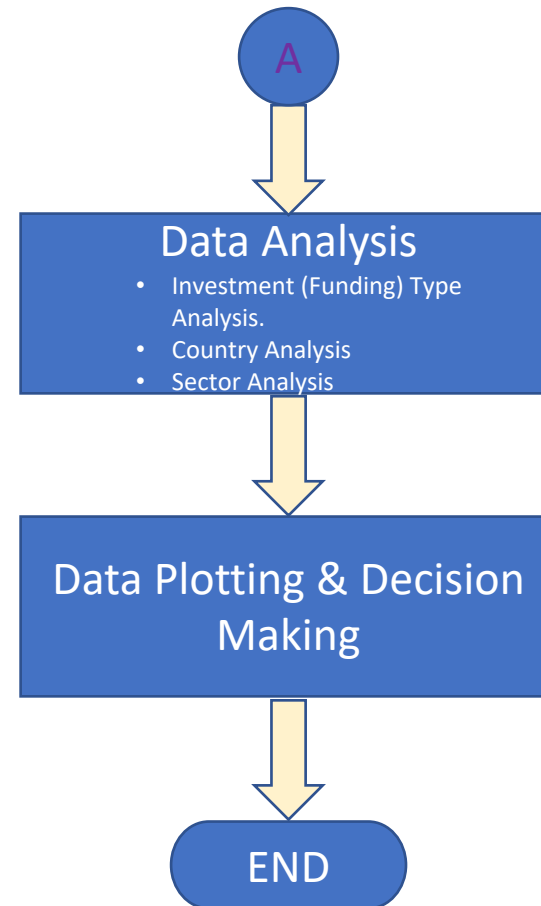
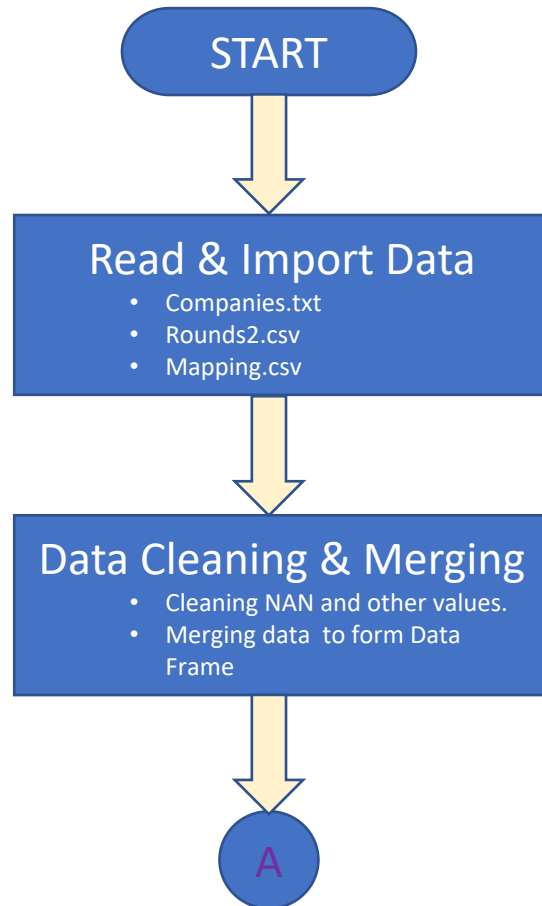
## Data Preparation and Analysis:

- Data Selection
- Data Merging
- Data Cleaning
- Investment/Funding Type Analysis
- Country Analysis
- Sector Analysis

## Data Visualization:

- Bar Plots
- Sub plots

# Problem Solving Methodology



## Investment Analysis

Average Funding Amount for Four Investment Types – Seed, Angel, Venture and Private Equity

Seed	556,662.91
Angel	764,564.35
Venture	10,634,246.07
Private Equity	62,111,788.23

✓ Venture Type comes within 5 to 15M USD

# Country Analysis

Top 9 Funding Amount Countries with Venture investment type

Country Code	Funding Amount
USA (United States of America)	422,510,842,796
CHN (China)	39,835,418,773
GBR (Great Britain)	20,245,627,416
IND (India)	14,391,858,718
CAN (Canada)	9,583,332,317
FRA (France)	7,259,536,732
ISR (Israel)	6,907,514,579
DEU (Germany)	6,346,959,822
JPN (Japan)	3,363,676,611

- ✓ Top English Speaking Country is USA
- ✓ Second English Speaking Country is GBR
- ✓ Third English Speaking Country is IND

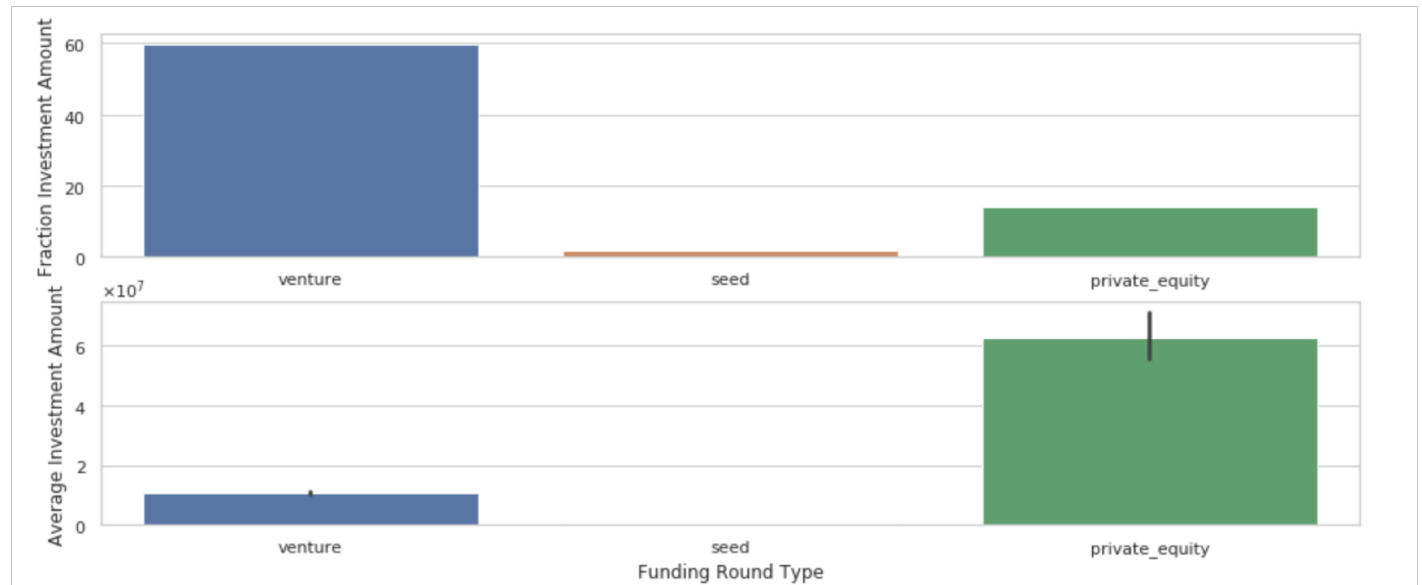
# Sector Analysis

Sector Wise Analysis of  
Venture Funding Type for Top  
3 Countries (USA, GBR & IND)

Analysis	USA	GBR	IND
Total number of Investments (count)	12,012	619	328
Total amount of investment (USD)	107,318,294,664	5,365,228,300	2,949,543,602
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	2950	147	110
Number of investments in second sector	2714	133	60
Number of investments in third sector	2300	128	52
For top sector count-wise, which company received the highest investment?	Virtustream	Electric Cloud	FirstCry.com
For second best sector count-wise, which company received the highest investment?	SST Inc. (Formerly ShotSpotter)	Celltick Technologies	Manthan Systems

# Data Visualization – Plot 1

Fraction of total investments (globally) in venture, seed, and private equity, and the average amount of investment in each funding type.

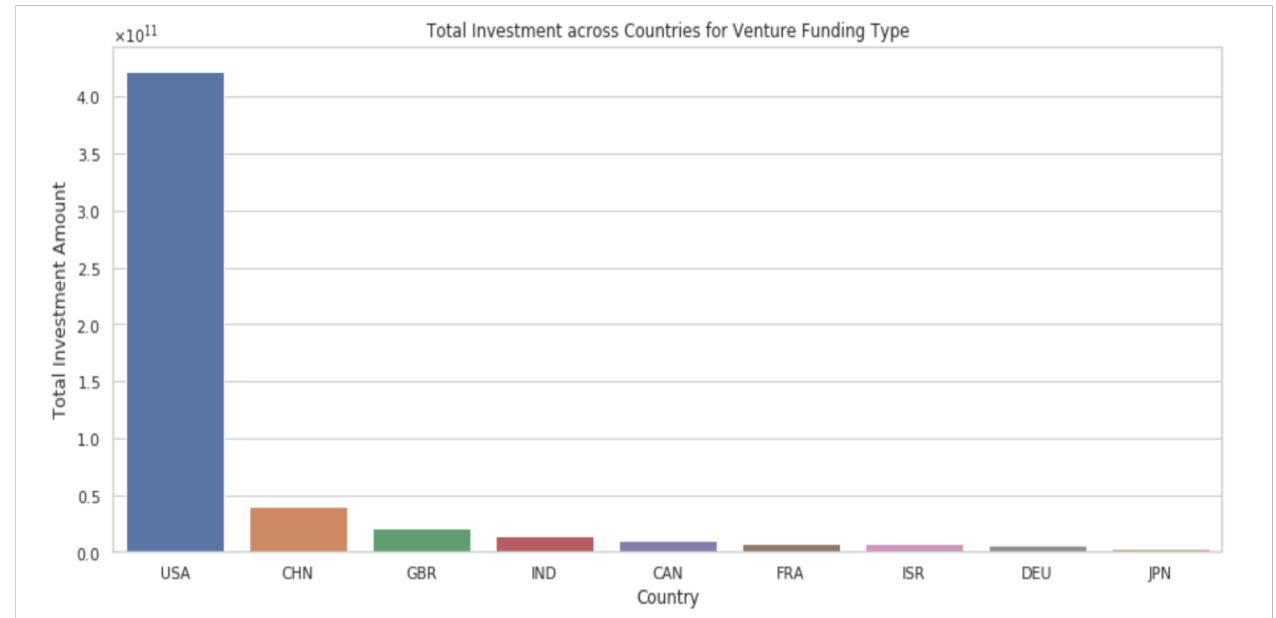


# Data Visualization – Plot 2

Top 9 countries against the total amount of investments of funding type Venture

Top 3 English Speaking Country

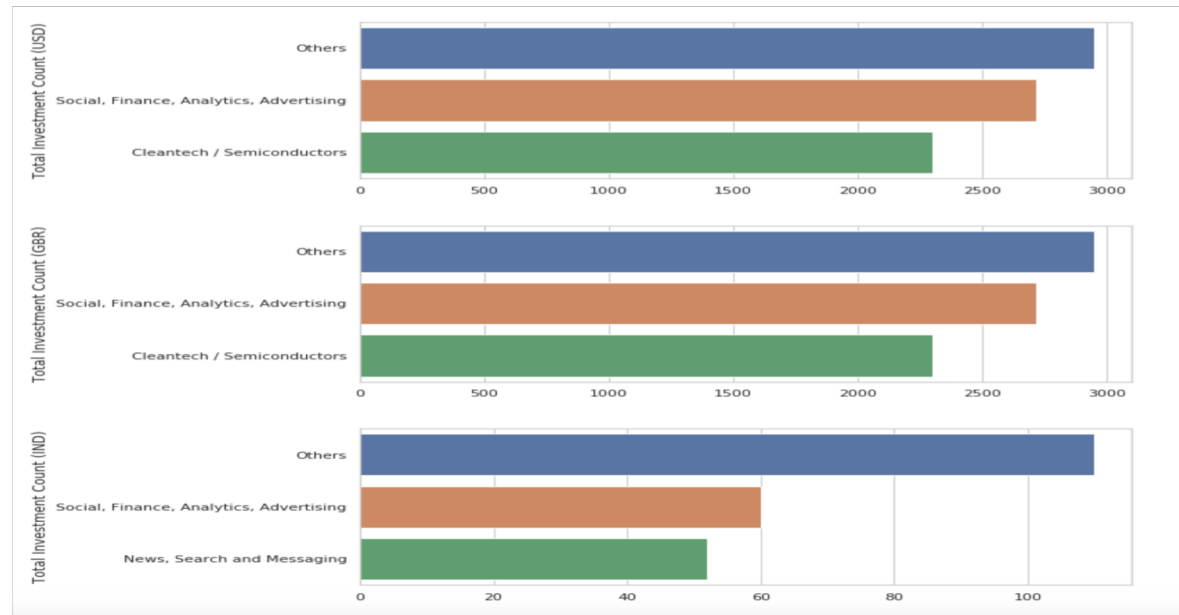
- ✓ USA (United States of America)
- ✓ GBR (Great Britain)
- ✓ IND (India)





# Data Visualization – Plot 3

Number of investments in the top 3 sectors of the top 3 countries (USD, GBR, IND)



## Conclusion

- Most Suitable Investment Type is Venture
- Top 3 English Speaking Countries are:
  - ❖ USA (United States of America)
  - ❖ GBR (Great Britain)
  - ❖ IND (India)
- Top 3 Sectors to Invest are:
  - ❖ For US and GBR:
    - ✓ Others
    - ✓ Social, Finance, Analytics, Advertising
    - ✓ Cleantech / Semiconductors
  - ❖ FOR IND:
    - ✓ Others
    - ✓ Social, Finance, Analytics, Advertising
    - ✓ News, Search and Messaging