







## **Abstract & Objectives**



#### **Abstract:**

In this assignment, we will try to understand global trends in investments & using it for 'Spark Funds' as an investment advise.

#### **Objectives:**

To identify the best sectors, countries, and a suitable investment/funding type for making investments

#### **Business Understanding:**

Overall strategy is to invest where most investors are investing with 2 more hard requirements:

- Invest between 5 to 15 mn USD per round of investment
- Invest in only English speaking countries (for ease of communication)

#### **Data Understanding:**

**Source**: crunchbase.com

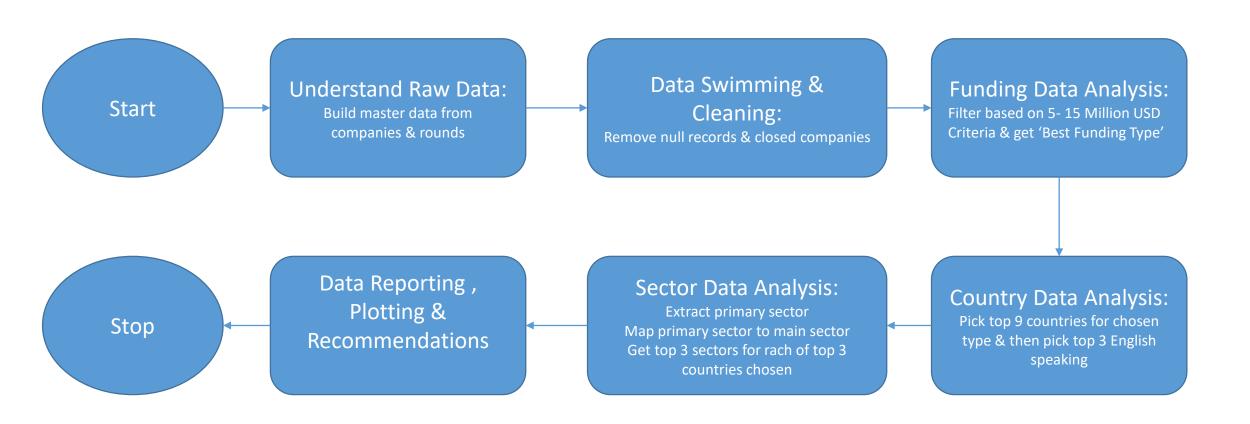
Tables:

- Company details: Basic details of 66,368 companies with Unique company Id
- Funding round details: Important details Unique company Id, Funding Type, money raised in Funding etc. - Total observations are 114,949
- Sector Classification: Mapping of category names in the companies table to 8 broad sector names



# **Problem Solving Methodology**







## **Analysis**

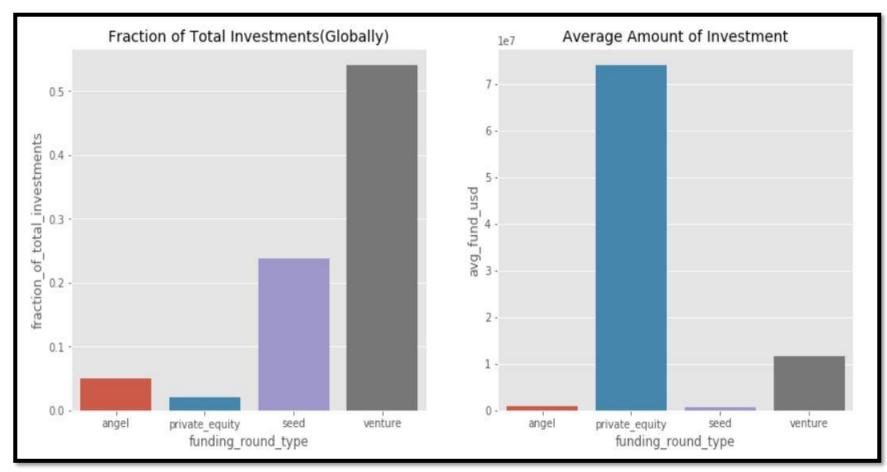


- ❖ Data Cleaning: Unnecessary columns were dropped & defective rows were removed which included null values.
- ❖ This case study was mainly divided into 3 categories.
  - Funding Type Analysis
  - Country Analysis
  - Sector Analysis
- ❖ The flow of the analysis is as follows:
  - 1. The Suitable Funding Type for Sparks Funds was analyzed first.
  - 2. For this particular funding type only, the countries were studied.
  - 3. And finally decided the best suitable sector to invest into.



### **Funding Type Analysis**

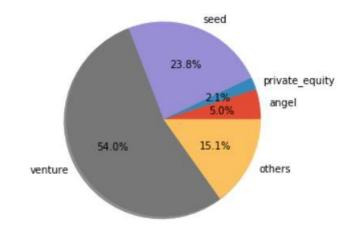




(Remark: Numbers are in millions USD)

Funding Round Type	Median of Raised Amount	Mean of Raised Amount
Venture	5.0	11.7242
Angel	0.4	0.97157
Seed	0.3	0.74783
Private equity	20.0	73.9385

Investments Distribution over Types (Count)



#### From above bar plots:

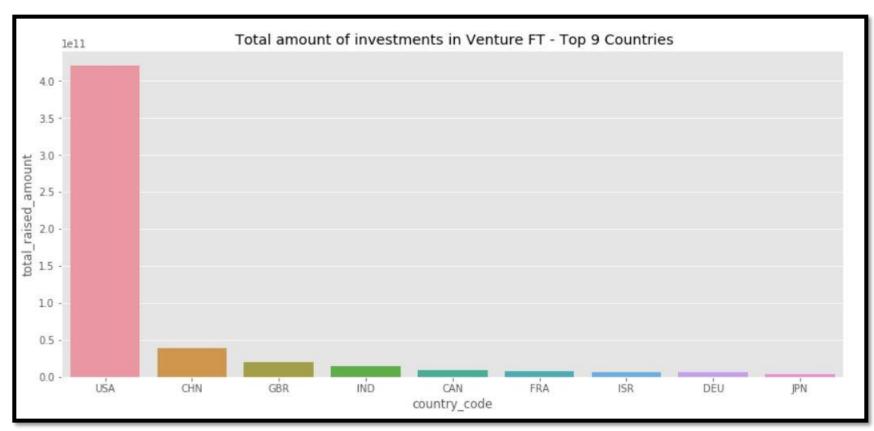
- ❖ it's very clear that ~60% of investments are being made in venture type.
- ❖ Besides 'Venture funding type' looks most suitable as its average funding amount is \$11.7m USD between 5m to 15m USD.

Hence, we should pick 'Venture' funding type.



### **Country Analysis**





country_code	total_raised_amount	is_english_speaking
USA	4.20068E+11	TRUE
CHN	39338918773	FALSE
GBR	20072813004	TRUE
IND	14261508718	TRUE
CAN	9482217668	TRUE
FRA	7226851352	FALSE
ISR	6854350477	TRUE
DEU	6306921981	FALSE
JPN	3167647127	FALSE

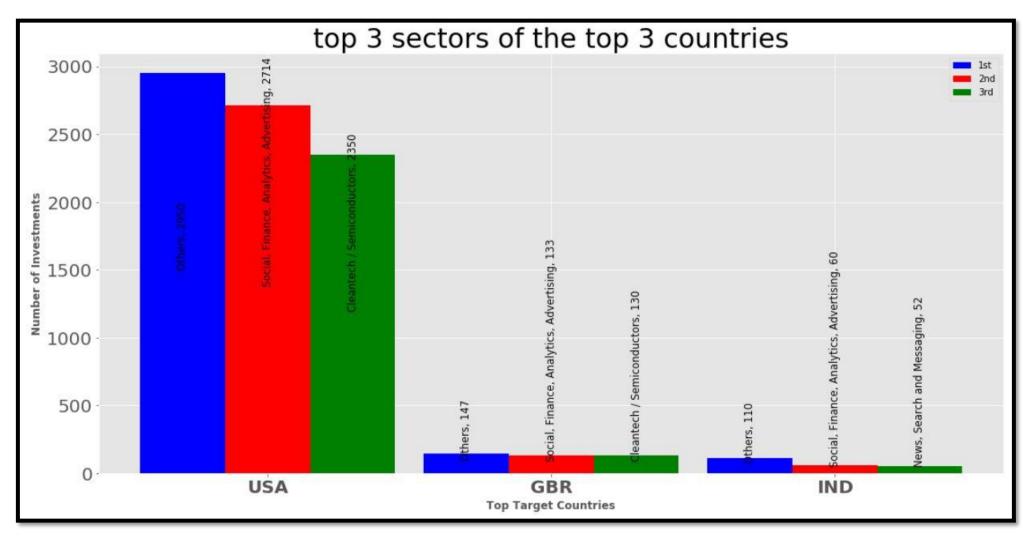
- Spark Funds wants to invest in counties which have been *heavily invested* in past but they should be only *English-speaking* countries
- ❖ Based on analysis, heavily invested top 9 courtiers as listed in above table & plot.
- ❖ But top 3 English speaking countries from above are *USA*, *United Kingdom* and *India*.

Spark Funds should invest in these countries: {USA,GBR,IND}



## **Sector Analysis**





Based on sector analysis, above plot shows top 3 sectors where most investors are investing for top 3 countries selected earlier. (Above plot self explanatory.)



### **Conclusion**



Below can be the investment strategy for Spark Funds considering all the objectives, constraints and strategy:

- ❖ Spark Funds should consider investing in funding type *Venture* in *USA* in *Others* main sector; as that is where most investments are occurring.
- ❖ If Spark funds wants to minimize risk & take advantage of diversification, then it should invest in USA, United Kingdom and India respectively in funding type Venture and Others main sector.
- ❖ If Spark Funds wants to further reduce risk by investing in different sectors along with different countries in *Venture* funding type, then please refer plot on Slide 7 for *top 3 country* wise *top 3 sectors*.





Q & A

Thank You!

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