INVESTMENT CASE STUDY SUBMISSION

Akshay Rohankar

Spark Funds – Investment Analysis

Spark Funds, an asset management company, is looking for investment.

The overall strategy is to invest where others are investing, implying that the 'best' sectors, countries and investment type where most investors are investing.
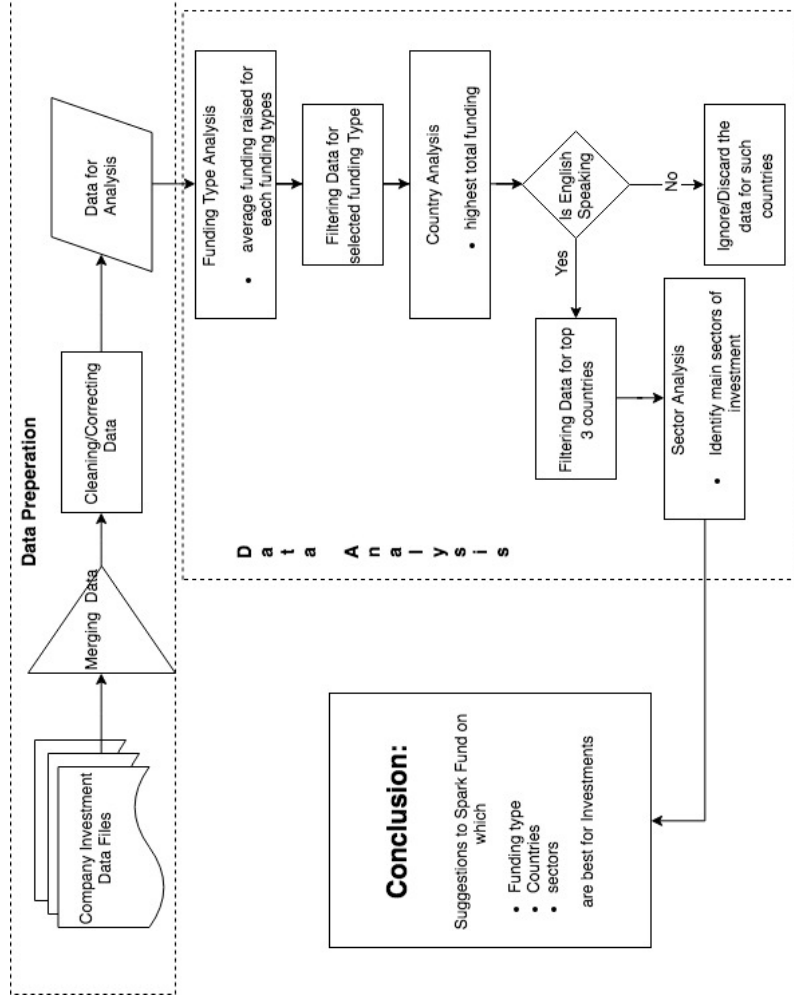
Business constrains:

- It wants to invest between **5 to 15 million USD** per round of investment

- It wants to invest only in **English-speaking countries**

Business objective: To identify the best sectors, countries, and a suitable investment type for making investments.

Goals of data analysis:

- Investment type analysis
- Country analysis
- Sector analysis

Problem solving methodology

Data Preperation

Company Investment Data Files → Merging Data → Cleaning/Correcting Data → Data for Analysis

Data Analysis

Funding Type Analysis
- average funding raised for each funding types

↓

Filtering Data for selected funding Type

↓

Country Analysis
- highest total funding

↓

Is English Speaking

- Yes → **Filtering Data for top 3 countries** → **Sector Analysis**
  - Identify main sectors of investment
- No → **Ignore/Discard the data for such countries**

↓

Conclusion:

Suggestions to Spark Fund on which

- Funding type
- Countries
- sectors

are best for Investments

Data For Analysis

Source of Data for analysis is real investment data from **crunchbase.com.**

1. Company Data, A file with basic data of companies

2. Investment Rounds Data, companies past investment round details

3. Mapping File, category to main sector mapping

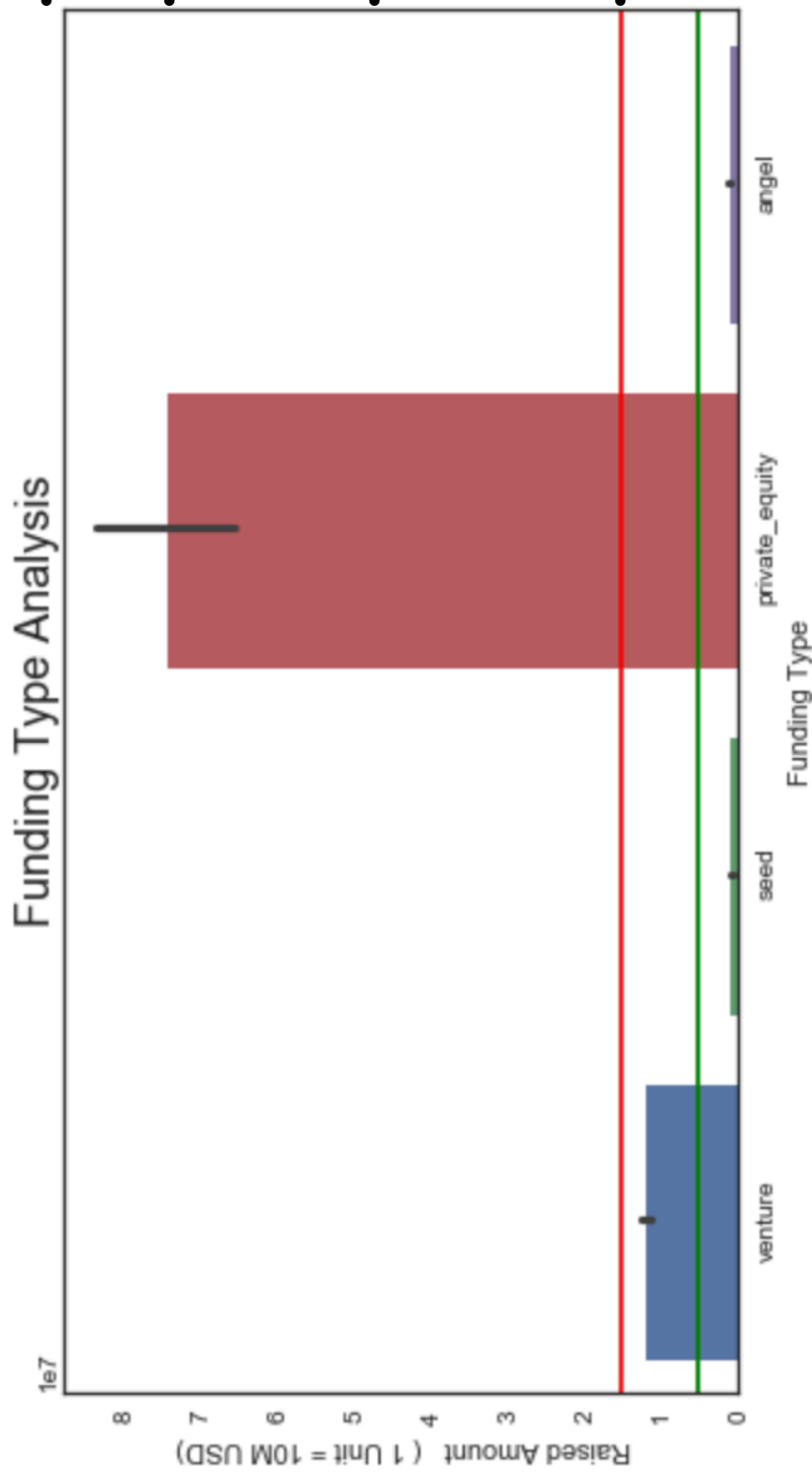4. English-speaking countries reference document.

Assumptions:
- All the information provided within the 3 files is a trusted source for analysis.

Data cleaning performed:
- Removing columns having null values which are not required for the current analysis.
- Removing rows having null value in the required analysis fields.
- Correcting incorrect or missing data wherever required to make data clean for analysis.

Funding Type Analysis

Funding Type Analysis

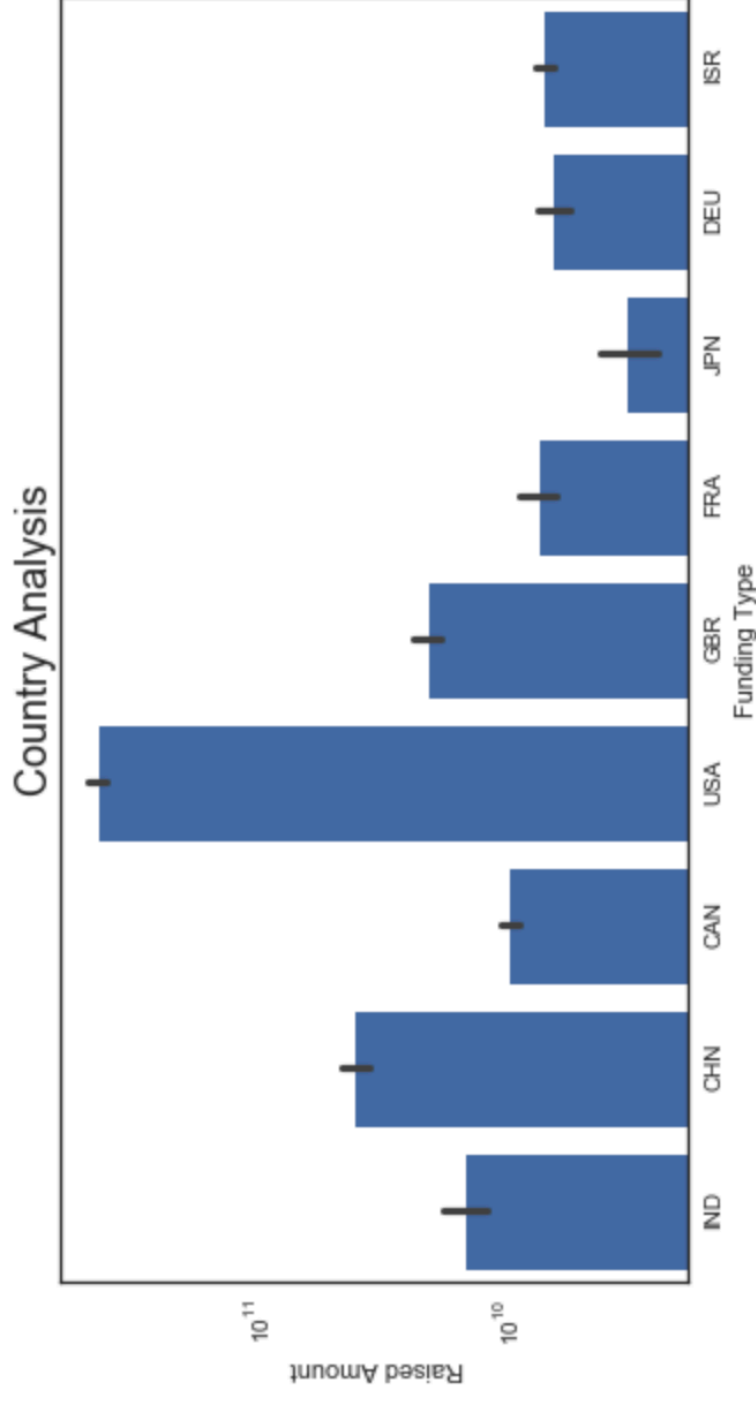There are 14 different type of investments.

Avg. amount invested in private equity is beyond the 15M USD investment limit.

Avg. investment amount for seed and angel type are well below the 5M USD starting limit of Spark Fund.

Venture is the only investment funding type which is >=5M and <= 15M USD.

Country Analysis

- USA amounts as the most invested county with a total of 420,068,000,000 USD.

- China follows USA, but is **NOT** a English speaking country.

- United Kigdom and India are among the Top 3 countries to attract investments.

- Canada, France, Germany, Israel and Japan are other among the top 9 invested countries.

*** Only for venture type investment*

Country Analysis

Country Analysis

Identifying the top 9 prospect countries based on the total amount invested received.

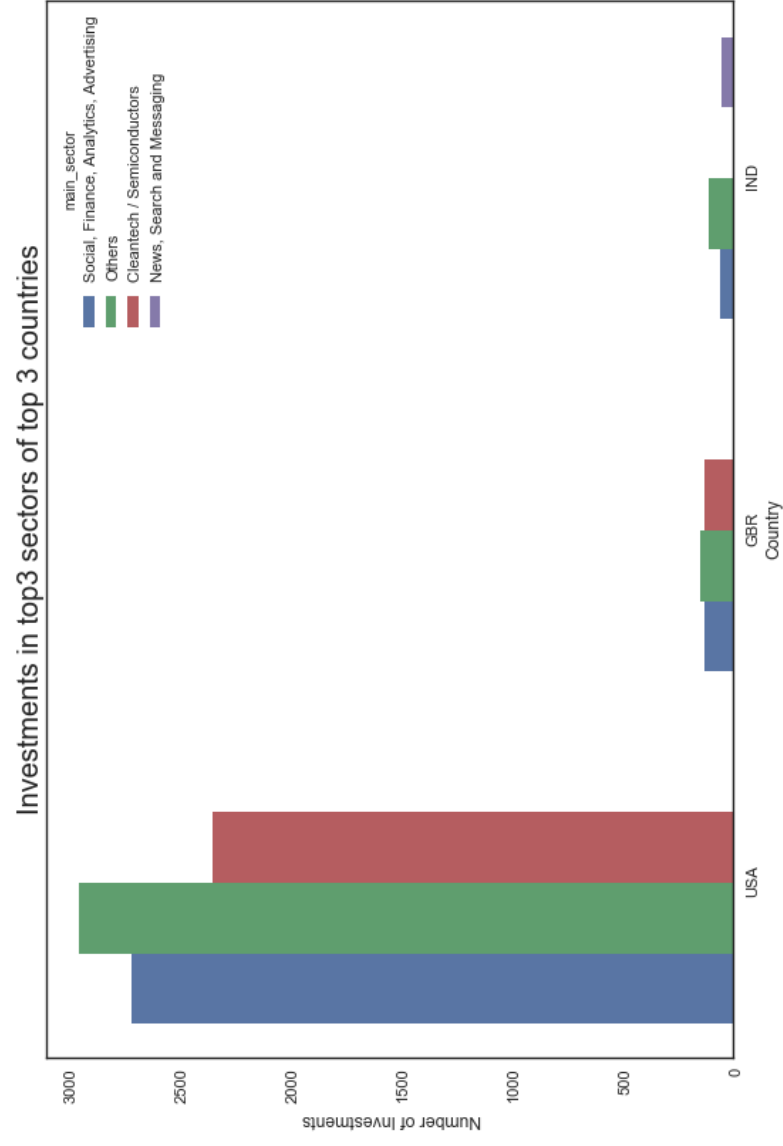| Country	Total Investment Amount Received in USD
USA	420,068,000,000.00
CHN	39,338,920,000.00
GBR	20,072,810,000.00
IND	14,261,510,000.00
CAN	9,482,218,000.00
FRA	7,226,851,000.00
ISR	6,854,350,000.00
DEU	6,306,922,000.00
JPN	3,167,647,000.00

- USA receives the highest investment amount (approx. 420k Million USD)

- Top 3 English-speaking countries with most investment amount are
  - USA
  - GBR
  - IND

*** Only for venture type investment*

Sector Analysis

Country Name	Top 3 sectors	Count of Investments	Best Company Name(Highest Amount)
USA	Others	2950	virtustream
	Social, Finance, Analytics, Advertising	2714	shotspotter
	Cleantech / Semiconductors	2350	biodesix
GBR (United Kingdom)	Others	147	electric-cloud
	Social, Finance, Analytics, Advertising	133	celltick-technologies
	Cleantech / Semiconductors	130	eusa-pharma
IND	Others	110	firstcry-com
	Social, Finance, Analytics, Advertising	60	manthan-systems
	News, Search and Messaging	52	gupshup-technology-india-pvt-ltd

Number of Investment in top 3 Sectors among the top 3 countries.

Investments in top3 sectors of top 3 countries

main_sector
- Social, Finance, Analytics, Advertising
- Others
- Cleantech / Semiconductors
- News, Search and Messaging

Conclusions

Based on the analysis, Spark Fund consider investing in the following countries.

Funding type: Venture

Country to Invest	Investing Sector
USA	• Others • Social, Finance, Analytics, Advertising • Cleantech / Semiconductors
GBR (United Kingdom)	• Others • Social, Finance, Analytics, Advertising • Cleantech / Semiconductors
IND	• Others • Social, Finance, Analytics, Advertising