

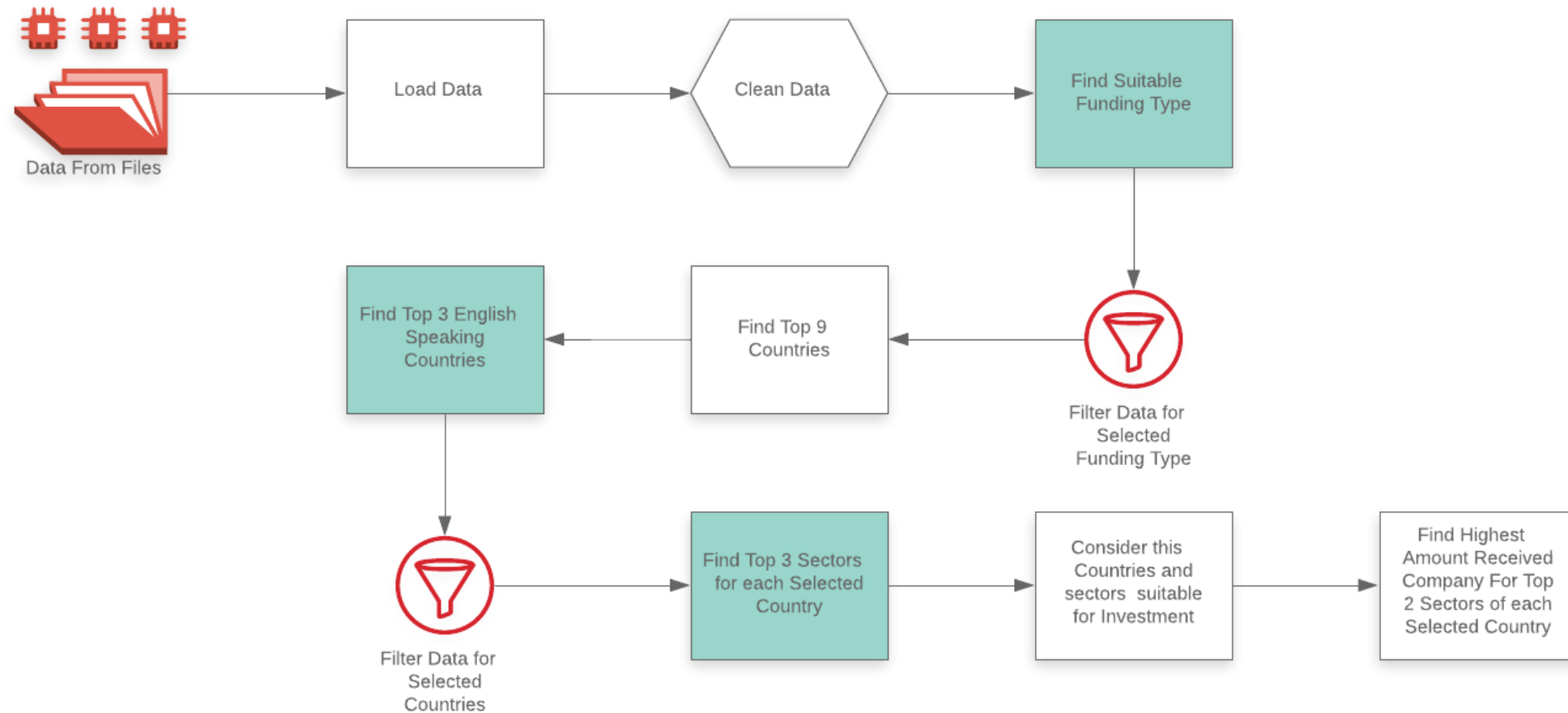
INVESTMENT ASSIGNMENT SUBMISSION

Yogita K. Bhor

Analysis for Spark Fund Investment Plan

Spark Funds wish to invest where the majority of other investors invest. For ease of communication they only want to target English-speaking countries. In addition to that, they have decided to invest between USD 5-15 million in each investment transaction to help diversify their investment portfolio. This presentation shows how to figure out best investment plan using analysis of countries, sectors and investment types using data of global trends.

Flow Chart



As per Spark Fund's objective and constraints we will divide the analysis into steps –

1. Identify Suitable funding type for investment.
2. Identify top 3 English speaking countries for suitable funding type which we found in step 1.
3. Identify top investment sectors for suitable funding type in those English speaking countries

Tools to be used -

1. Python for data cleaning and exploring.
2. Seaborn/Matplotlib for plotting charts.

Data Analysis

Understanding Data:

1. Funding Type:

Funding Types are based on the form of company, its stage and funding amount.

Venture happens after seed or angel and requires relatively higher investment, while private equity is associated with much bigger investments

2. Country:

We will consider a country to be English speaking only if English is one of the official languages in that country

3. Sectors:

Investments in companies are divided across the eight main sectors.

Data Cleaning:

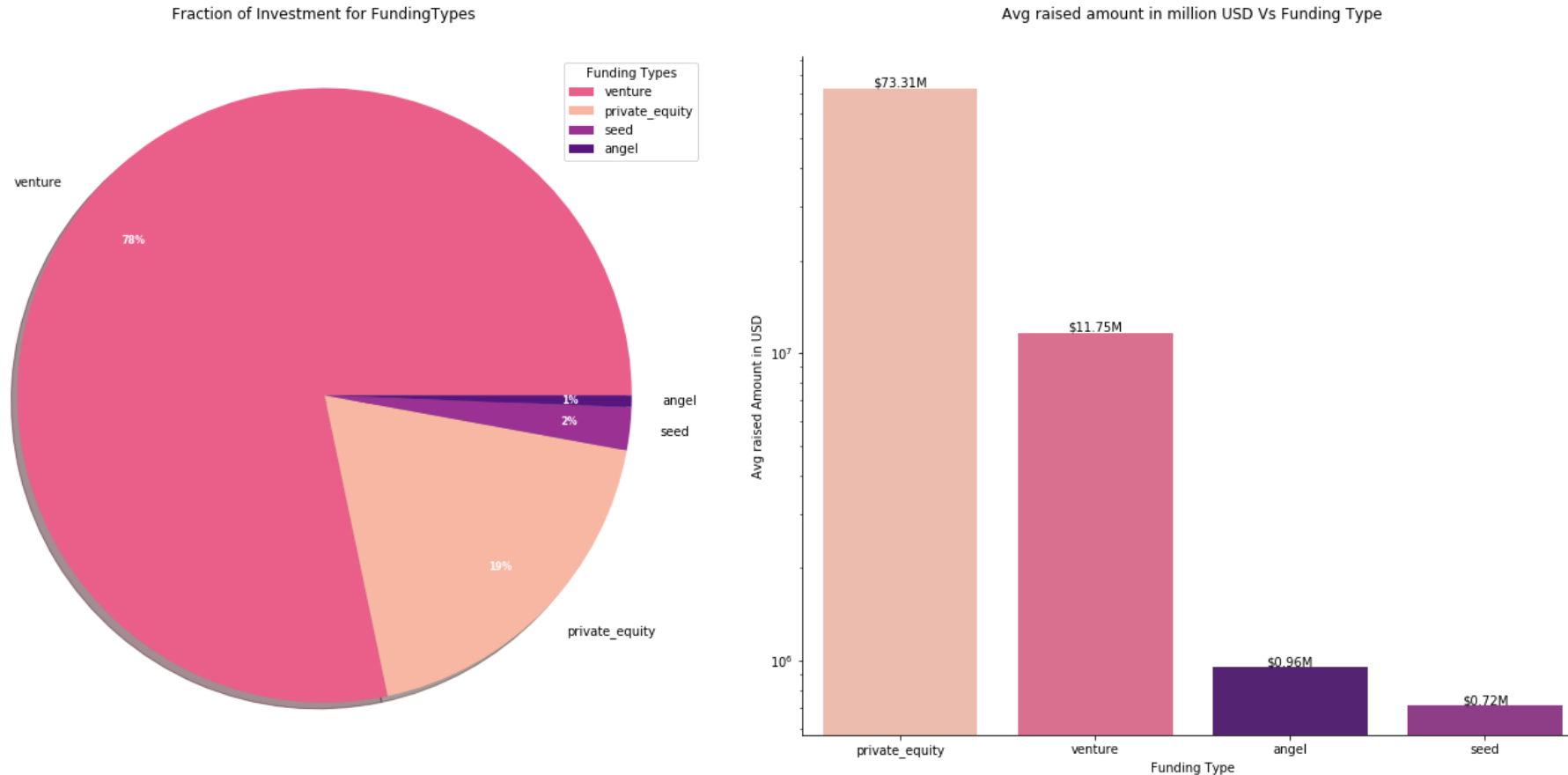
1. All Files are decoded with correct format and removed any ascii values.
2. Value for primary columns converted in same case Upper/lower.
3. Columns having 70-80% null values are dropped as they will not be useful in analysis
4. Mapping file have Human errors like 0 instead of 'na'. Corrected human errors by replacing correct values.
5. Null data analysis for all files.

Methodology

We followed below approach to find the Best plan for Spark Fund's Investment strategy-

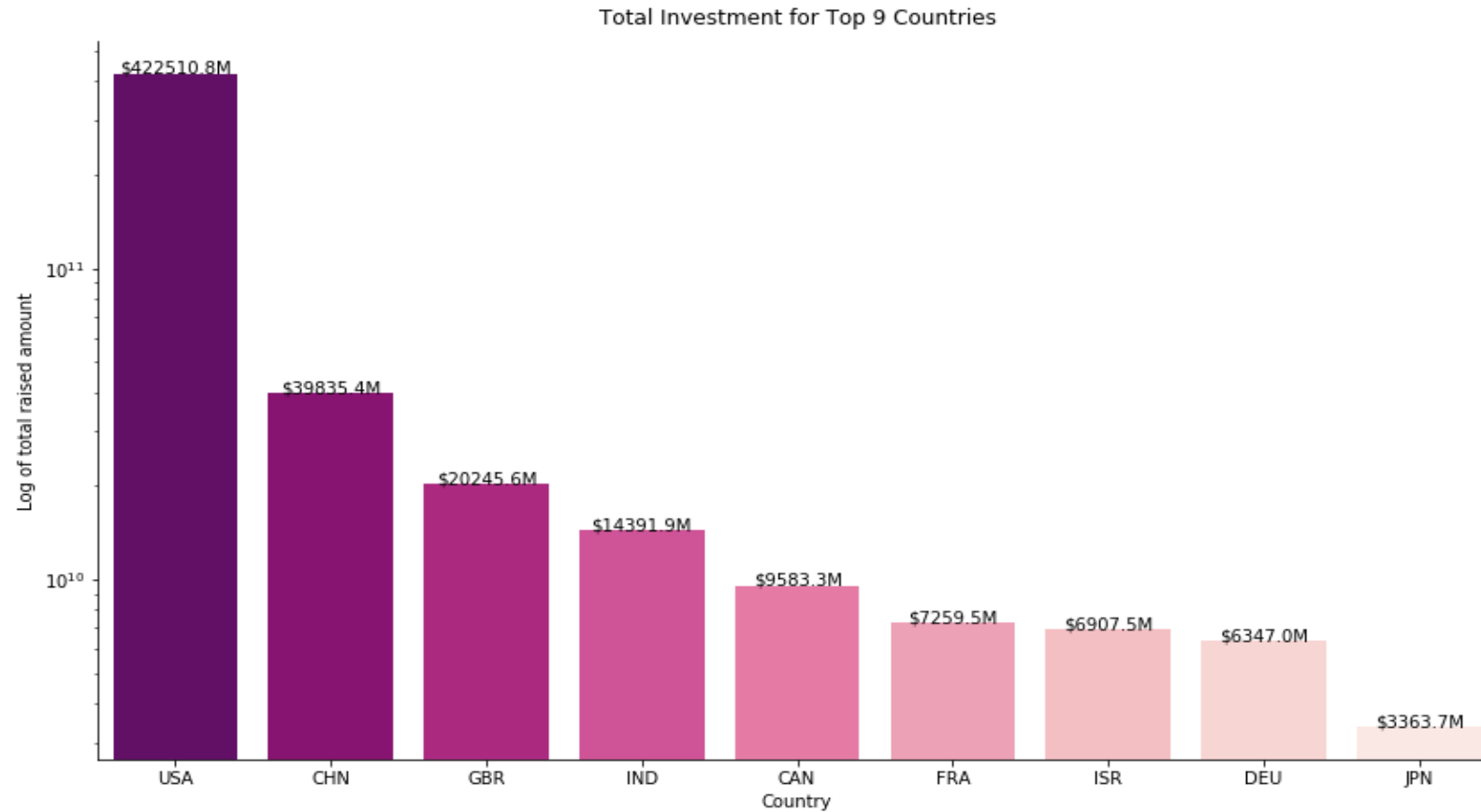
1. Based on average funding amount for each Funding Type. We found Suitable Funding Type for Investment whose range is within USD 5-15 million.
2. Then we analyzed Top 9 countries for the suitable investment type.
3. As spark fund want to invest in only English speaking countries we took Top3 English speaking countries from Top 9.
4. For Top 3 Countries We found Top 3 Sectors where no of investment is large.
5. For Top 2 sectors of Top 3 Companies we found which Company received highest amount of Investment.

Best Funding Type



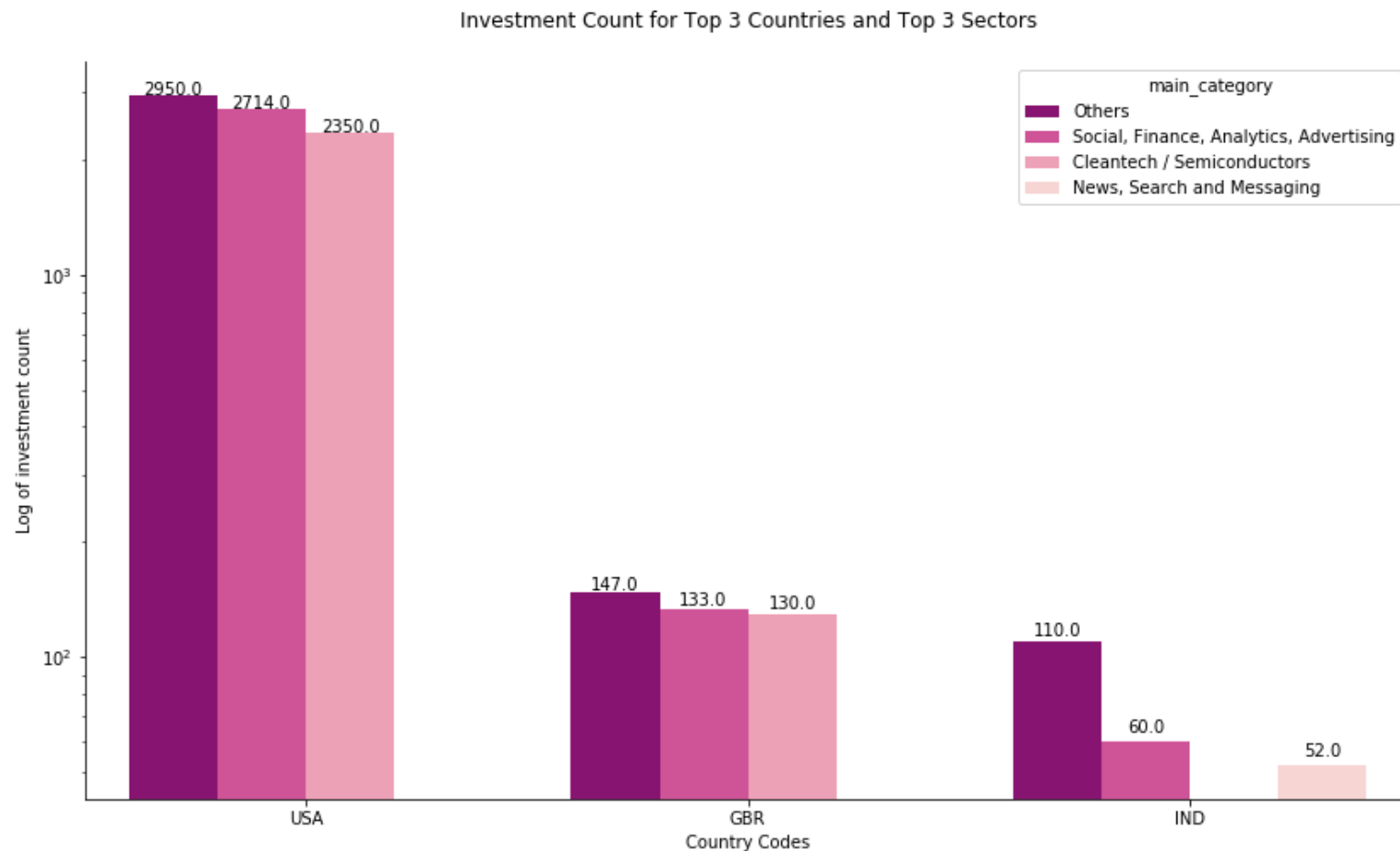
1. 78% of Total Investment is done in Funding Type Venture
2. Average Investment for Venture is \$ 11.75 million.
3. “Venture” is Best Suitable Funding Type of Spark Funds Investment.

Top 9 Countries for Venture



From the Top 9 Countries USA, GBR, IND are Top3 English speaking Countries.

Top 3 Sectors For Top 3 Companies.



Based on analysis we found that below Countries and Sectors are suitable for Spark Funds Investment.

Country	Sectors
USA	<ul style="list-style-type: none">• Others• Social, Finance, Analytics, Advertising• Cleantech / Semiconductors
GBR	<ul style="list-style-type: none">• Others• Social, Finance, Analytics, Advertising• Cleantech / Semiconductors
IND	<ul style="list-style-type: none">• Others• Social, Finance, Analytics, Advertising• News, Search and Messaging