



INVESTMENT ASSIGNMENT SUBMISSION

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Abstract

The idea of this presentation is to show global trends in Investments. As the objective of Spark Funds is to identify best sectors, countries and suitable Investment type and invest where others are investing. Based on the investment Spark Funds wants to make the best Investment type is decided based on the number of investments that are made in this type. Along with the best investment type the presentation also focuses on the top English speaking countries with most Investments for this Investment type. The presentation explains how Investment type and countries have been chosen based on the given Investment data. It also show cases the number of Investments and total Investment for a chosen Investment in a top English speaking country.

Finally, the presentation has various plots which make it clear about the Investment type, Top English Speaking country and main sectors of Investment in these countries.





Master data

Companies

Rounds

• Merge data frames from input files to master_frame

Venture

• Get Average investments in angel, seed, venture and private equity types

• Decide the best investment type for Spark Funds(5-15 million)-Venture.

USA,GBR,IND

• Get the top 9 countries

• Get the top 3 English Speaking countries.

Merged data

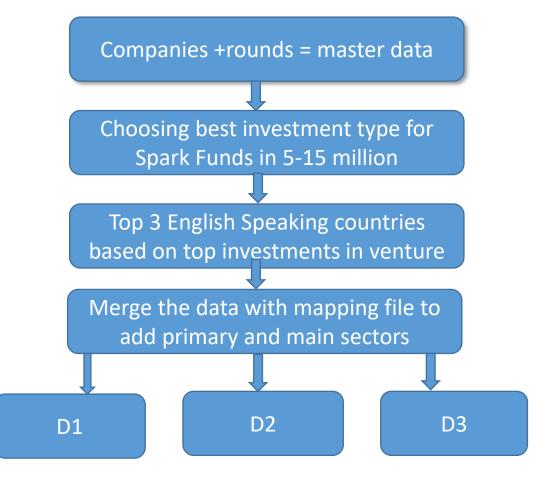
• Merge the data with the mapping file to get primary sector and the main sectors i.e master frame merged inner

D1,D2,D3.

- Get the number of investments and total investment for the venture investment type in top 3 countries.
- Prepare separate data frames for 3 counties.

Plots

• Use the data from 3 countries to decide on top 3 areas where Spark Funds can invest and plot graphs to picturize them.







Analysis

- > From the Given data prepare master data with Company and Investments.
- ➤ In the Rounds data there are duplicated values for 2 companies due to junk characters which is making the companies number different hence assumed they are same. The number is 66368.
- > From the master data ,data is cleaned to remove unused columns with null values.
- > The rows with null raised amount are deleted.
- > The Best investment type in 5-15 million is decided-Venture.
- > The top 9 countries with maximum investment is decided by grouping the data based on the countries.
- Primary Sector is extracted from category list.
- > The mapping file is used to decide the main sector using the primary sector of each company.
- ➤ The top 3 English speaking countries is decided based on the list of English-speaking countries and top investments –USA, UK, India.





USA

Total number of Investments (count)	
	9227
Total amount of investment (USD)	82391524549
Top Sector name (no. of investment-wise)	Others
Second Sector name (no. of investment-wise)	Cleantech / Semiconductors
Third Sector name (no. of investment-wise)	Social, Finance, Analytics, Advertising
Number of investments in top sector	2400
Number of investments in second sector	1950
Number of investments in third sector	1550

- > The best country to invest is USA with the greatest number of investments in venture type.
- ➤ The top 3 sectors in USA to invest are Others, Cleantech / Semiconductors, Social, Finance, Analytics, Advertising with 2400,1950,1550 investments in venture Investment type respectively.
- As USA is also English-speaking country it would be best for Spark Funds to Invest in USA and in the above-mentioned Sectors.





UK

Total number of Investments (count)	
	524
Total amount of investment (USD)	4593704358
Top Sector name (no. of investment-wise)	Others
Second Sector name (no. of investment-wise)	Cleantech / Semiconductors
Third Sector name (no. of investment-wise)	Social, Finance, Analytics, Advertising
Number of investments in top sector	126
Number of investments in second sector	123
Number of investments in third sector	89

- ➤ UK is the second English-speaking country in the list with 524 investments in Venture type.
- > The top 3 sectors in UK are Others, Cleantech / Semiconductors, Social, Finance, Analytics, Advertising with 126,123 and 89 Investments, respectively.
- ➤ If Spark Funds wants to invest outside USA ,UK would be the best option.

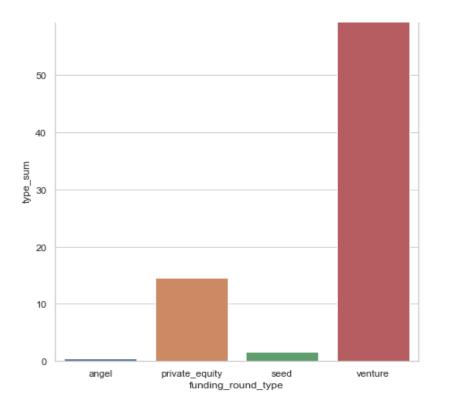


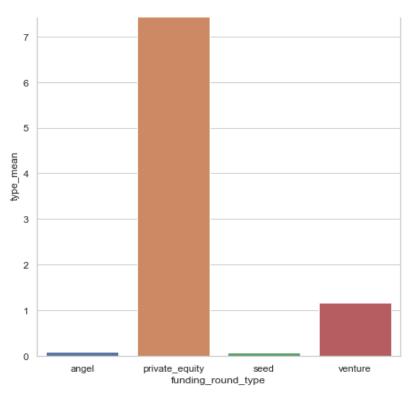


India

Total number of Investments (count)	222
Total amount of investment (USD)	1998537552
Top Sector name (no. of investment-wise)	Others
Second Sector name (no. of investment-wise)	News, Search and Messaging
Third Sector name (no. of investment-wise)	Social, Finance, Analytics, Advertising
Number of investments in top sector	77
Number of investments in second sector	41
Number of investments in third sector	25

- > India is the Third English-speaking country in the list with 222 investments in Venture type.
- ➤ The top 3 sectors in India are Others, News, Search and Messaging, Social, Finance, Analytics, Advertising with 77, 41 and 25 Investments, respectively.
- > If Spark Funds wants to invest India would be third best option.





- Type_sum: Percentage of investments in each type in total investments
- Venture has the greatest number of investments
- Type_Mean: Average Investment in Each type in 1e7.
- Venture has average investment around 1 million which is in between 5-15 million range of Spark Funds

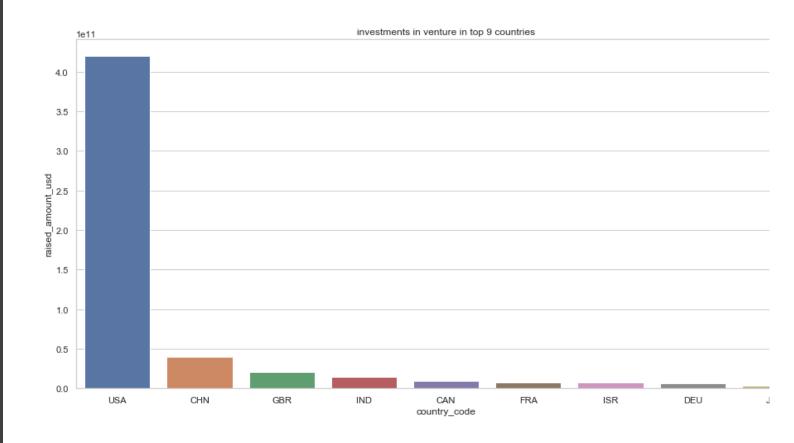
The top 9 countries with maximum number of investments in Venture Investment type.
USA has maximum number of investments.

China is a non-English Speaking Country.

Hence UK(GBR) and India are 2nd and 3rd

best countries to invest.

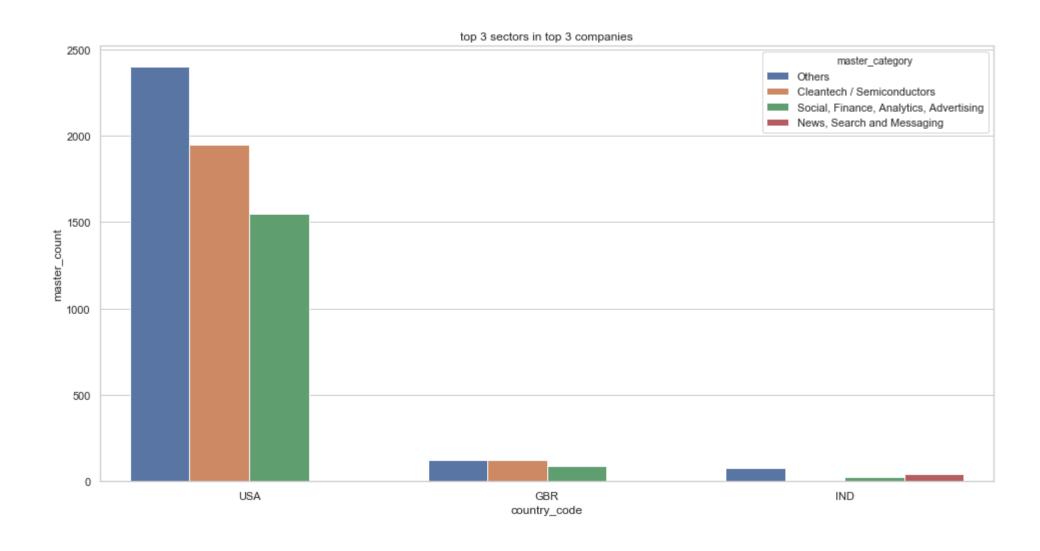








Plot 3







Conclusions

- > Top Investment type is Venture with average investment 11724222(between 5-15 million)
- > Top 3 English Speaking Countries: USA, UK, India
- > The best country to invest is USA.

Top 3 sectors: Others, Cleantech / Semiconductors, Social, Finance, Analytics, Advertising.

➤ The second option is UK.

Top 3 sectors: Others, Cleantech / Semiconductors, Social, Finance, Analytics, Advertising.

➤ The 3rd option is India.

Top 3 sectors: Others, News, Search and Messaging, Social, Finance, Analytics, Advertising

➤ Looking at the Number of Investments made.

The top 3 sectors to invest are Others, Cleantech / Semiconductors, Social, Finance, Analytics, Advertising.