

INVESTMENT CASE STUDY

SUBMISSION

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Abstract

- Spark Funds is an asset management company.
- Spark Funds wants to make investments in a few companies.
- **Business objective:** The objective is to identify the best sectors, countries, and a suitable investment type for making investments.
- **Investment strategy:** The Overall strategy is to invest where others are investing.
- **Investment Amount:** 5 to 15 Million USD
- **Goals of data analysis:**
 1. Investment type analysis
 2. Country analysis
 3. Sector analysis

Problem solving methodology

Data Files Import

Real-time investment data captured from crunchbase.com

Data Cleansing

Using trim(), tolower(),round() to bring down differences in permalink / names.

Granularity

Lowest level of information stored in the fact table

It is addressed as it profoundly affects the volume of data

Duplicate value Treatment

Removal of duplicate values based on certain key variables present in the dataset

Data Merge

Merging means joining 2 datasets / dataframes using a unique column from each DS / DF

Outlier Data Analysis

Outliers may be due to variability in measurement

Most of the unnecessary values are excluded from the data set (basis analysis)

Outlier Data Replacement

Replace values of the outliers with the nearest value (ex: Rounding off)

NaN / Null checks

Check for NaN and replace with appropriate values

Workable dataframe / excel file

After all the sequential steps, we land up with a final file which is ready for our analysis

Investment Type Analysis

- Spark Funds wants to invest between **5 to 15 million USD** per investment round.
- We are concern about 4 major investment types. The average funding amount in investment types are as below:
 1. Angel : 0.968341 Million USD
 2. Private equity type: 73.618572 Million USD
 3. Seed: 0.748105 Million USD
 4. Venture: 11.737642 Million USD
- From observations Spark Funds should invest in **venture type**

Country Analysis

- Spark Funds wants to invest in countries with the highest amount of funding and English speaking countries .

Top 3 English Speaking Countries and the amount invested is as below:

Country	Total Amount Invested(M USD)
USA	422506.41
UK	20216.15
INDIA	14391.87

- Spark Fund Should Invest in USA, UK ,INDIA as they are most investment friendly countries for Venture Type of funding.

Sector Analysis

- There Are Main 8 Sectors in which investments are done.

Country wise Main Sectors and No. of investment done in that sectors are as below:

Country	Sector	No. of Investment
USA	Cleantech / Semiconductors	6037
	Others	5935
	Health	2180
UK	Others	368
	Cleantech / Semiconductors	340
	News, Search and Messaging	107
INDIA	Others	180
	News, Search and Messaging	72
	Social, Finance, Analytics, Advertising	59

Results - Plot 1

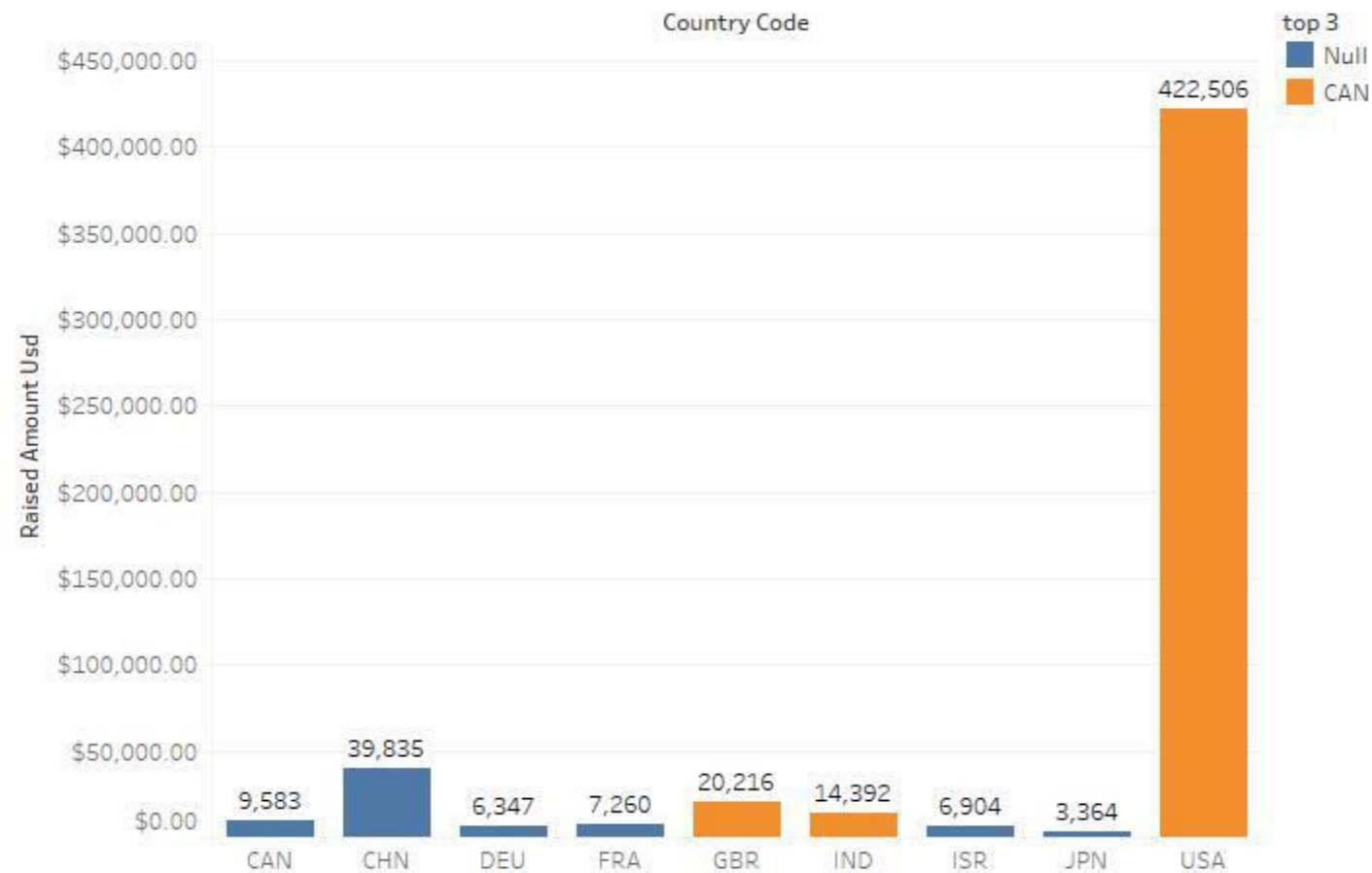
A plot showing the fraction of total investments (globally) in **Venture**, **Seed**, and **Private** equity and the average amount of investment in each funding type. This chart makes it clear that a “venture” funding type is best suited for Spark Funds



Sum of Raised Amount Usd and average of Avg_raised_Amount for each Funding Round Type. The view is filtered on Funding Round Type, which keeps private_equity, seed and venture.

Results - Plot 2

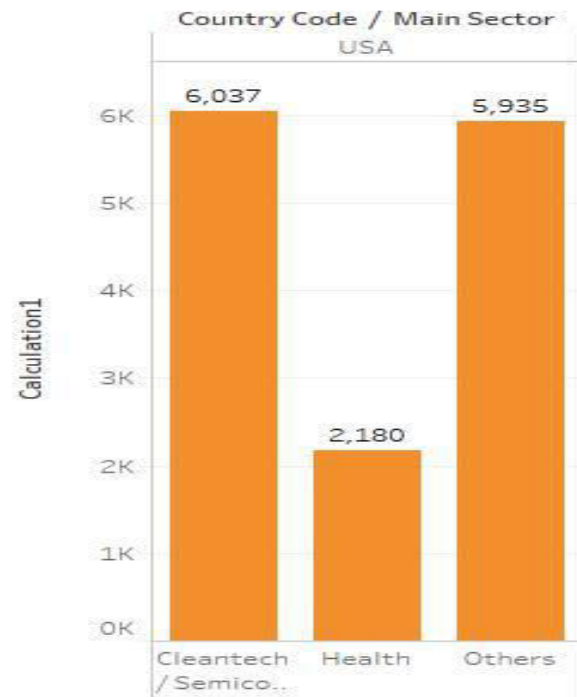
Sheet 1



Sum of Raised Amount Usd for each Country Code. Color shows details about top 3.

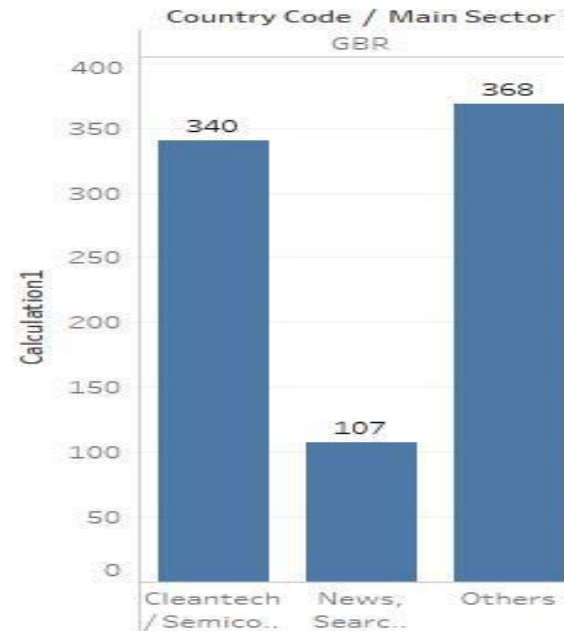
Results- Plot 3

Sheet 1



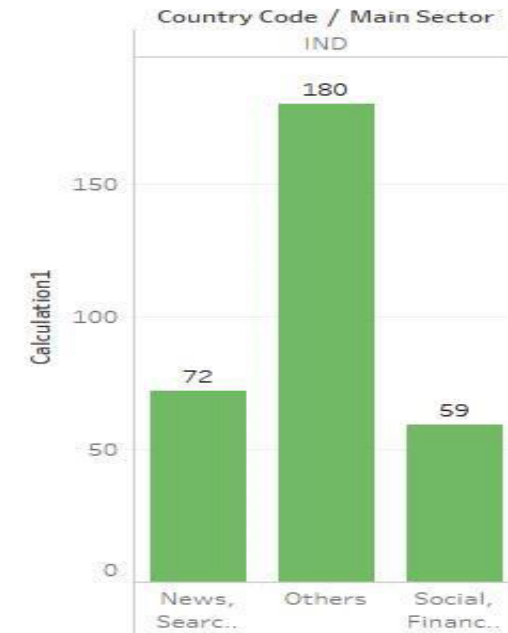
Calculation1 for each Main Sector broken down by Country Code. The view is filtered on Main Sector, which keeps Cleantech / Semiconductors, Health and Others.

Sheet 1



Calculation1 for each Main Sector broken down by Country Code. The view is filtered on Main Sector, which keeps Cleantech / Semiconductors, News, Search and Messaging and Others.

Sheet 1



Calculation1 for each Main Sector broken down by Country Code. The view is filtered on Main Sector, which keeps News, Search and Messaging, Others and Social, Finance, Analytics, Advertising.

Conclusions

After analysis we come to the conclusion That

- The most suitable fund investment type is "Venture".
- Investment friendly countries for venture type are USA,UK,INDIA.
- And the sector where highest investment done are Cleantech / Semiconductors,.