

INVESTMENT CASE STUDY

SUBMISSION

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Investing Analysis of Spark Funds

Key points for Effective Investment Plan

The objective is to identify the best sectors, countries and a suitable investment type for making investments. The overall strategy is to be with the current market trend, implying that the 'best' sectors and countries are the ones 'where most investors are investing'.

We checked real investment data from Crunchbase and based upon that performed below analysis.

•Funding Type Analysis :-

- Determine the best suitable funding type where average of total invested amount is between 5 Million Dollar and 15 Million Dollar.

•Country Analysis: -

- Identifying the countries which have been the most heavily invested in the past. These will be Spark Funds' favorites as well.

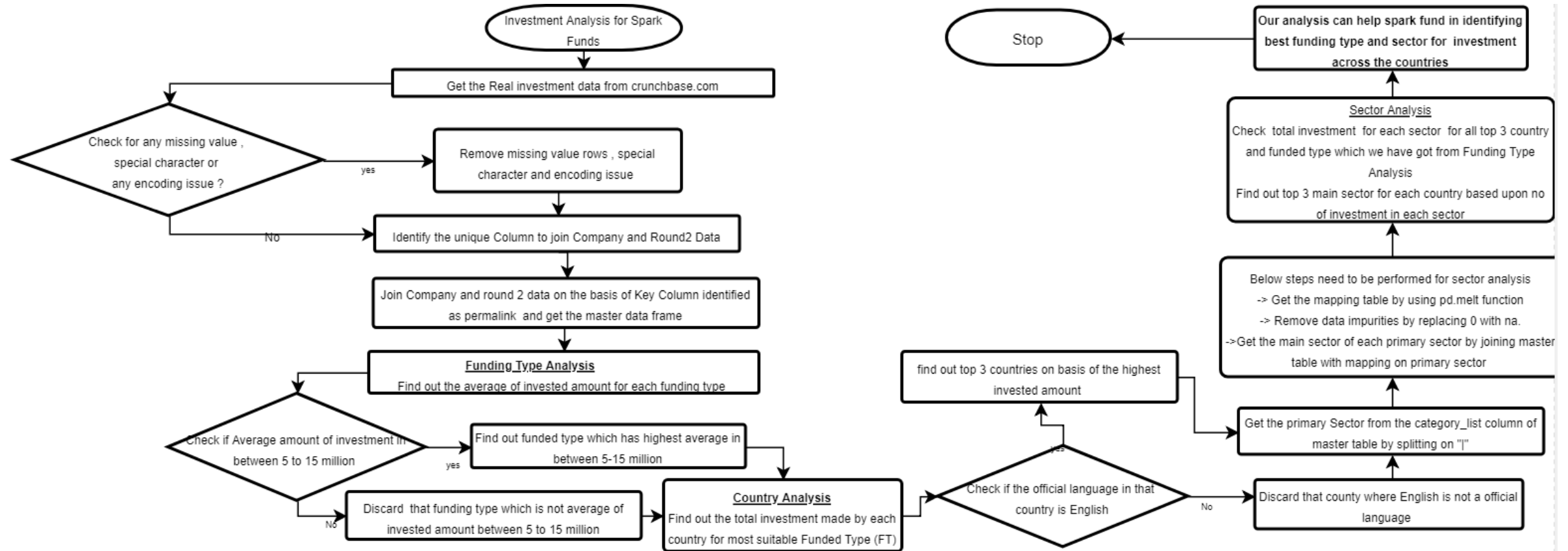
•Sector Analysis:

- Understanding the distribution of investments across the eight main sectors and find out the main sector where maximum number of investments are made.

Minor Constraints

- ☐Investment amount per round is 5 to 15 million USD
- ☐Invest only in English Speaking countries because of the ease of communication with the companies.

Flow Diagram



Understanding Data Sets

Key points

- Loading the 'companies' and 'rounds2' data set from **Crunchbase.com** with correct encoding .
- Handling the Special Characters in Data set.
- There are a total of **66,368** unique companies identified for analysis.
- Joining the two data sets based on '**permalink**' which is unique company identifier in our data.
- Total observations after joining are **114,949**, which are considered for further analysis.
- There are approximately **17.39%** observations having missing investment amount (column **raised_amount_usd**) which is a key data for our analysis.
- Performing the Data cleaning by analyzing missing values.
- Building an input file which contains the **Country code** for English speaking countries and merge it with the master data so that we can identify the investments made in the English speaking countries.

Funding Type Analysis

- **Requirement**
 - Finding the best suitable funding type
- **Constraint**
 - Investment amount per round should be between 5 to 15 million USD
- **Conclusion**
 - As per analysis **Venture type** is best suitable for Spark Funds
 - The average investment per round in this category is **11.7 million USD** which meets Spark Fund's requirement of (5-15 million USD)
 - Also this is the most popular investment sector as **59.60%** of global investment is made under this type.
 - Per round investment amount in Private Equity, Angel and Seed sections are 73.3, 0.9 and 0.7 million USD respectively which is not the intended amount to be invested.
 - Closest sector where Spark funds can invest is **Debt Financing**, where average funding is 17 million per round which is just above 15 million, and 11.5% of global investment is made under this type.

Country and Sector Analysis

- **Requirement**

- Finding the top three sectors in top three English speaking countries recommended for investment

- **Constraint**

- Investment amount per round should be between 5 to 15 million USD
- Country should be English speaking countries

- **Conclusion**

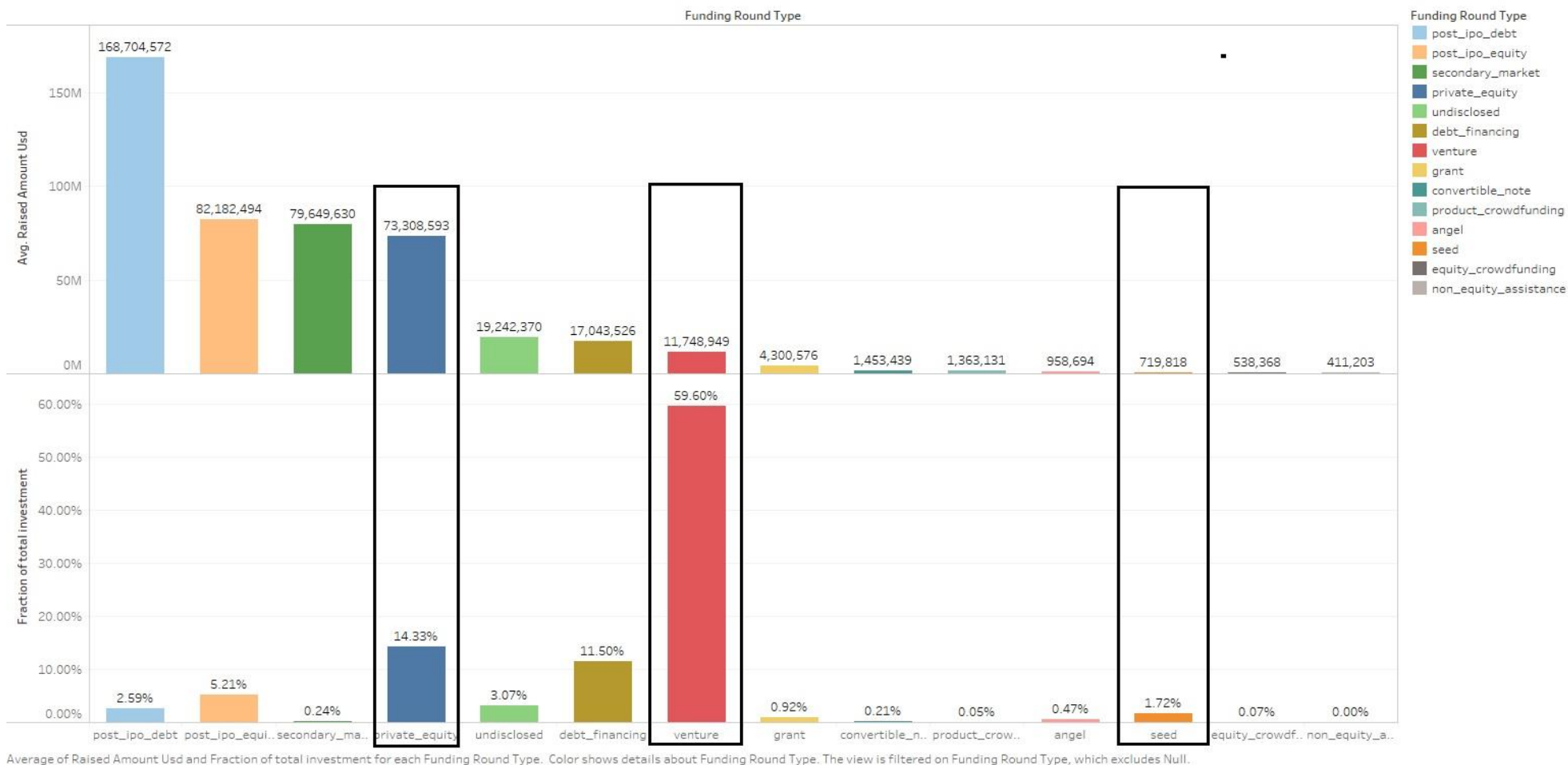
- The top 3 English speaking countries with maximum number of investments are **United States, United Kingdom** and **India** for the most suitable funding type that is **Venture**.
- **United States** is the most invested country which got almost **20 times** more investment than next popular country **United Kingdom** under the **Venture** funding.
- **Others** is the main sector with maximum number of investments for all top three English speaking countries.
- **Cleantech /Semiconductors** are the second top most sector for **USA** and **UK** while **News, Search and Messaging** is the second most invested sector for India.
- Company **Virtuestream** invested maximum in US in the **Others** sector while **Electric Cloud** in UK and **FirstCry.com** in India invested maximum amount.

Plot 1- Fraction of total investment and Average Amount of Investment

Conclusion-

Venture is the funding type Where maximum Investment is done Between 5 to 15 Million USD

Fraction of Total Investment and Average Amount of Investment



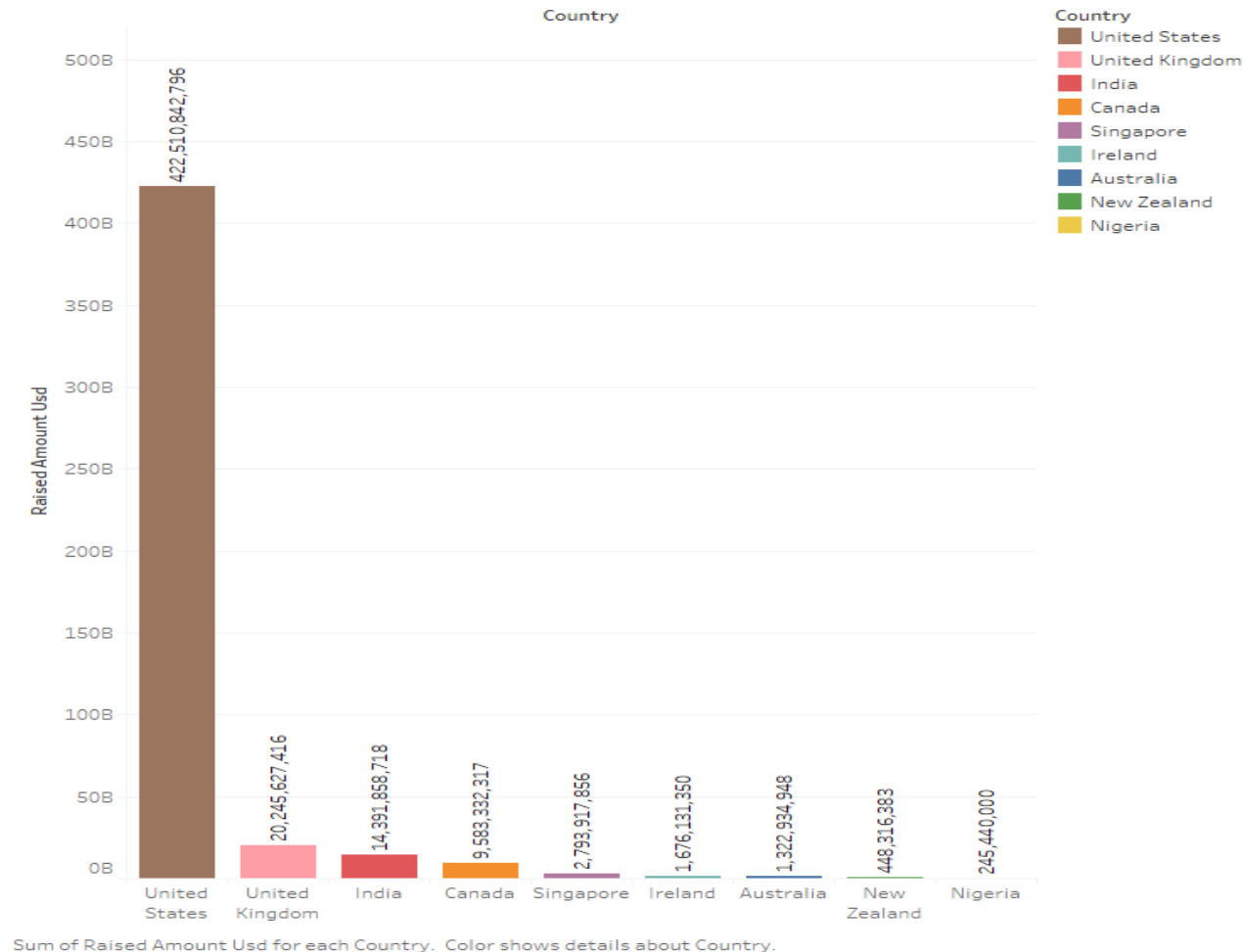


Plot 2- Top 9 Countries where most investment is done in funding type FT(Venture)

Conclusion-

US,UK and India are the top three countries where Maximum investment is done for the most suitable Funding Type.

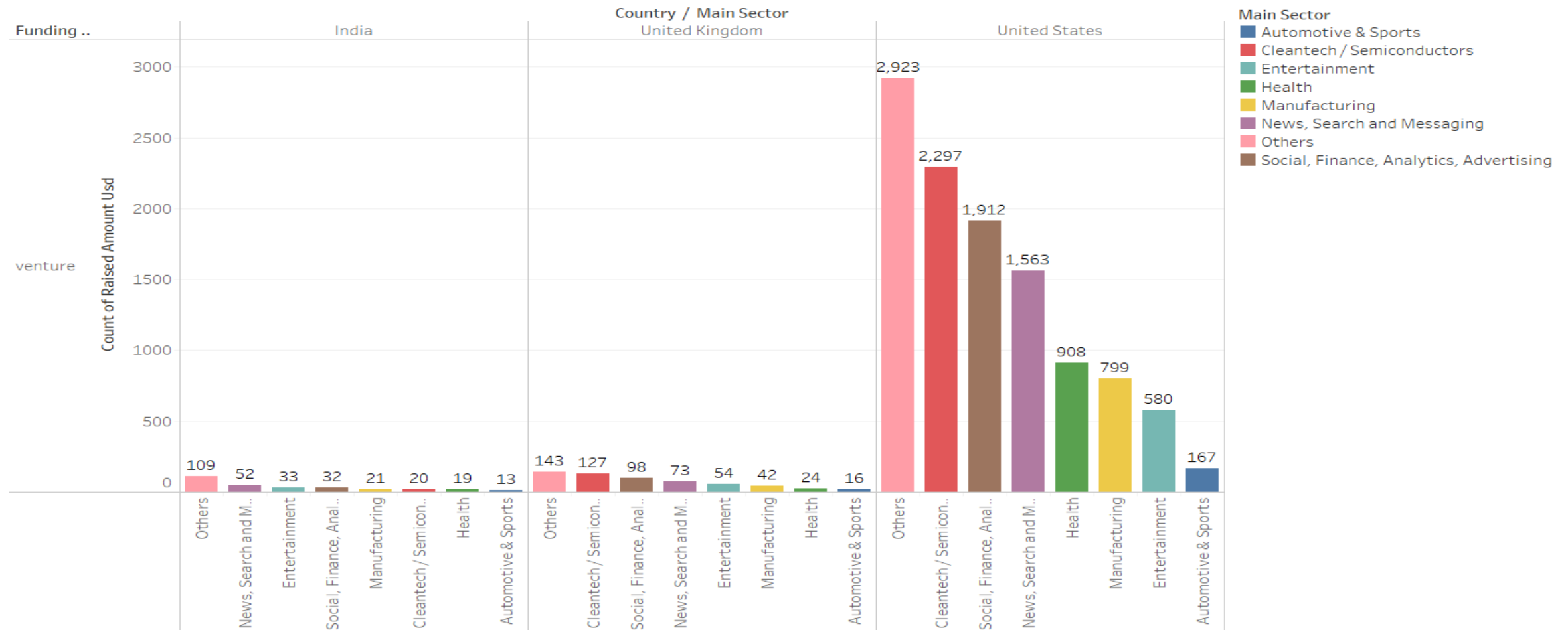
Total Invested Amount in top 9 countries under Venture Fundig



Plot 3-Number of investment in Top3 Main sector for each country

Conclusion: Others is the main sector where maximum no of investment is done in all top 3 English Speaking Countries US, UK and India for the most suitable funding type FT.

Main Sectors in Top 3 countries



Conclusion

Suggestions for Spark Funds Investment Strategy

- ☐ Spark Funds should prefer funding type **Ventures** as 60% of the total investment is done for this funding type for investment between 5M to 15M USD.
- ☐ Top three preferred countries should be **United States, United Kingdom and India** for the most suitable funding type for investment as these countries are English speaking and in past most of the investment is made in these countries in the range of 5M to 15M USD which is a constraint provided by Sparks Fund.
- ☐ Top preferred investment sector is **Others** in top three countries US, UK and India for the most suitable funding type.
- ☐ After Others Sector , they can also prefer **Cleantech /Semiconductors** in USA and UK while **News, Search and Messaging** in India.
- ☐ The third sector where Spark Funds should prefer for investment is **Social , Finance, Analytics, Advertising** in United States and United Kingdom while in India they should prefer **Entertainment** sector.
- ☐ Companies **Virtustream , Electric Cloud** and **FirstCry.com** received highest investment in United States, United Kingdom and India respectively for the top preferred sector **Others**.
- ☐ Companies **Biodesix** in United States and **EUSA Pharma** in United Kingdom received second highest investment in **Cleantech / Semiconductors** sector while **GupShup** received second highest investment in **News, Search and Messaging** sector in India.