

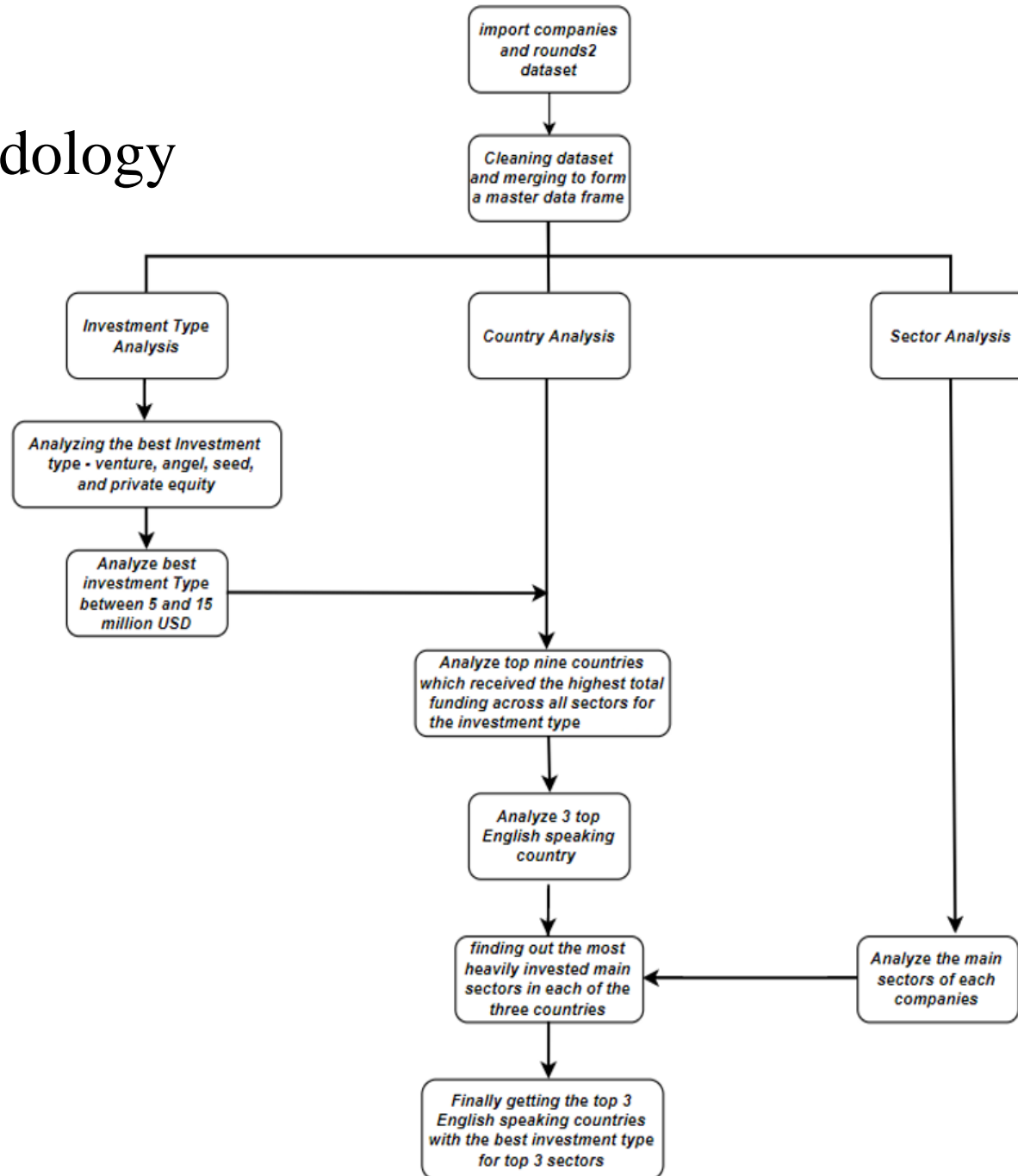
INVESTMENT ASSIGNMENT SUBMISSION

Name: Sandeep Singh

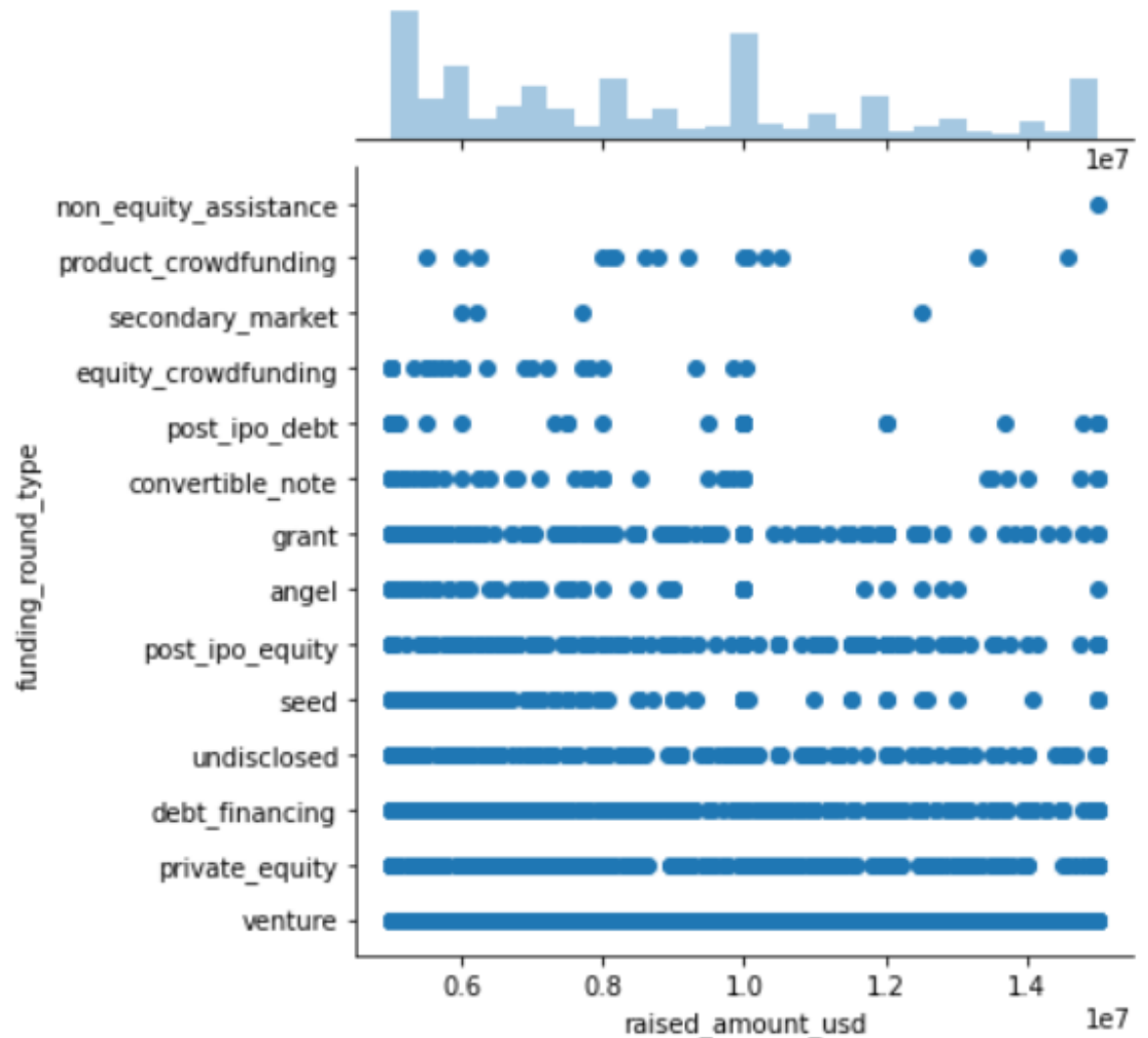
Abstract

- The project is to study the global trends in investments and assist the CEO of Spark Funds to the investment decisions effectively, keeping in mind three constraints: investment type (seed, venture, angel, Private equity), willingness to invest between 5 to 15 Mn USD and invest only in English speaking countries.
- A real investment data is taken from crunchbase.com that gives various insights on investment patterns.
- With a business objective of identifying the best sectors, countries and investment type to invest, Spark Funds wants to follow the same pattern as other investors and thus the data analysis goal focuses on investment type, country and sector analysis.

Problem solving methodology



Investment type analysis.

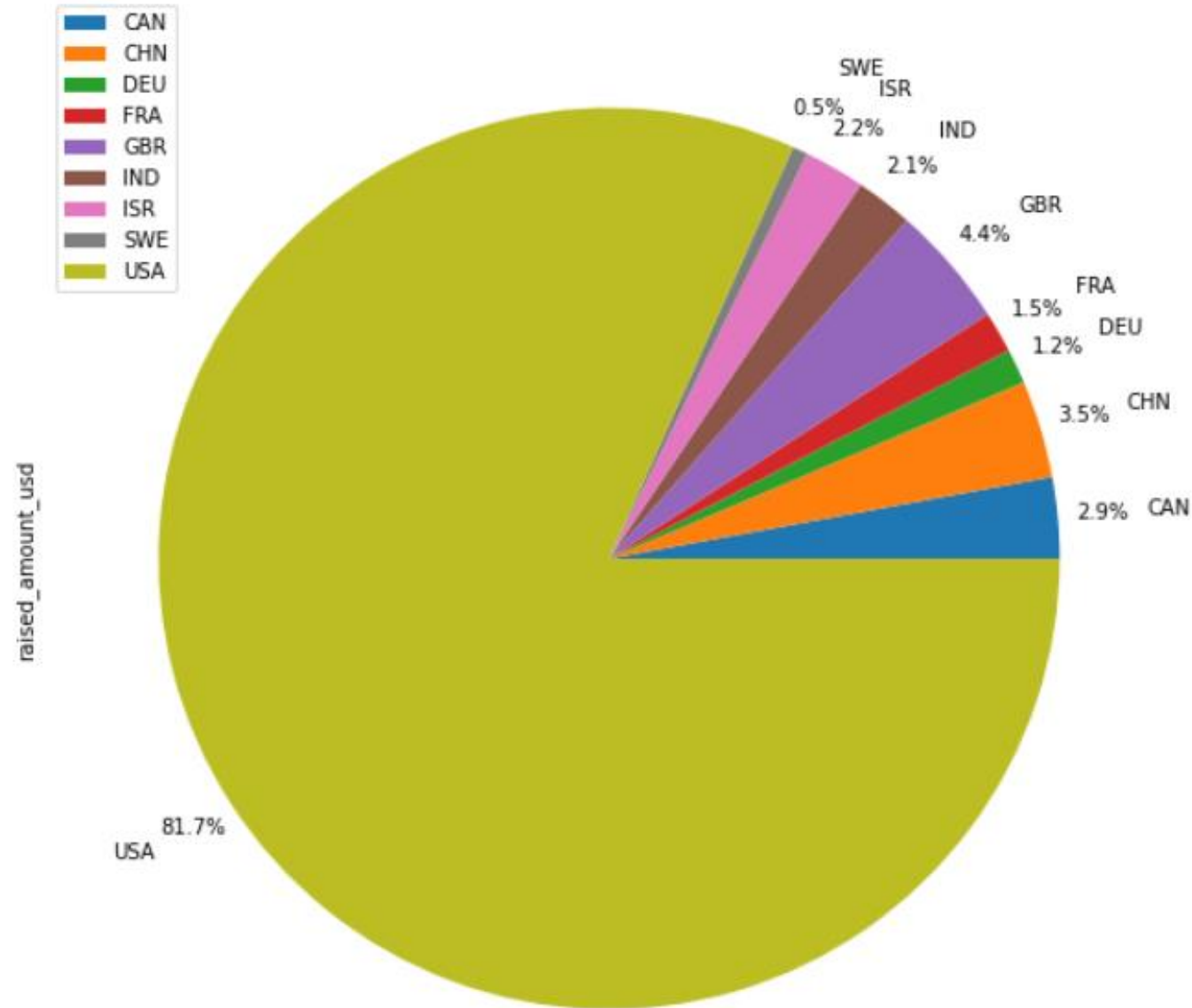


From the **Scattered plot** we see that for 5 to 15 Mn USD investment, *Venture* funding type is used by most investors, closely followed by *Private Equity* and *Debt Financing*

We can also analyze from the graph that *Non equity assistance* is the least used funding type.

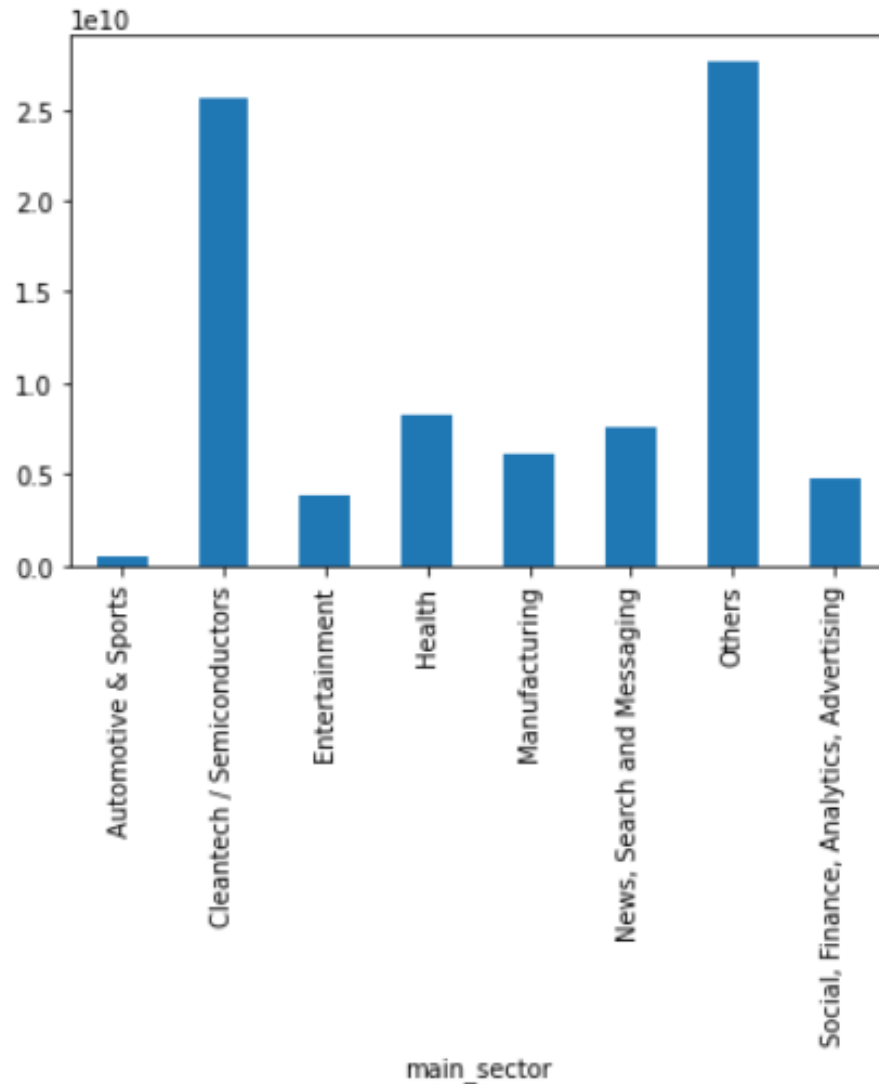
In further analysis of most representative value out of four interested investment type (seed, venture, angel, Private equity) we will analyse which is the best Investment Type for Spark Funds

Country analysis

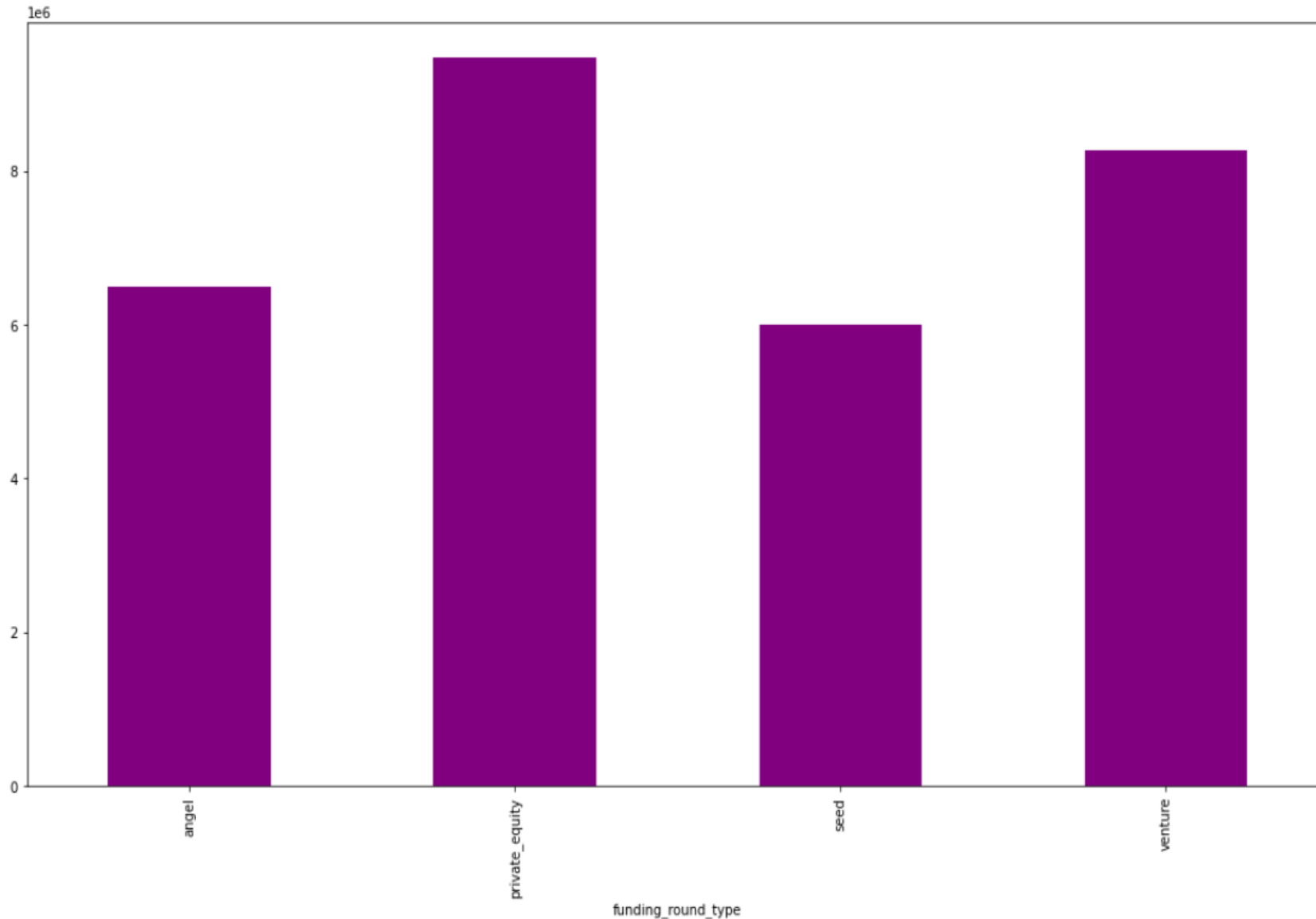


We analyzed the investments in different countries through a ***Pie chart*** and can clearly see that most investments in terms of value is done in *USA* which gets **81.7%** of total investments

Sector analysis



The Sector wise investment is analyzed using the **Bar Graph** and from the graph we analyze that *Others* gets maximum investments closely followed by *Cleantech/Semiconductors*

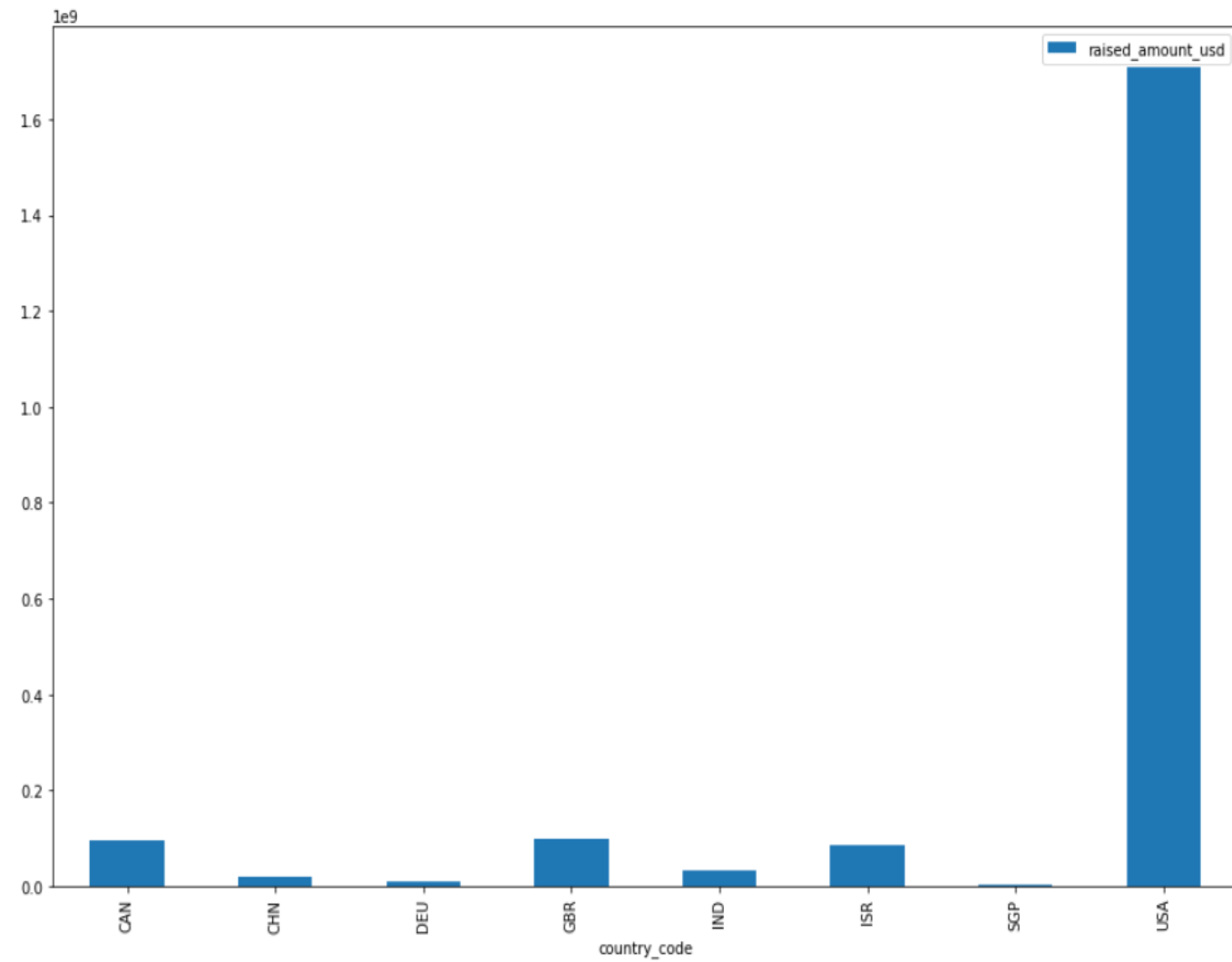


The Funding type *Private Equity* is best suited for Spark Funds.

From the **Bar plot** we see that for 5 to 15 Mn USD investment, *private equity* funding type is used by most investors, closely followed by *venture* and *angel*.

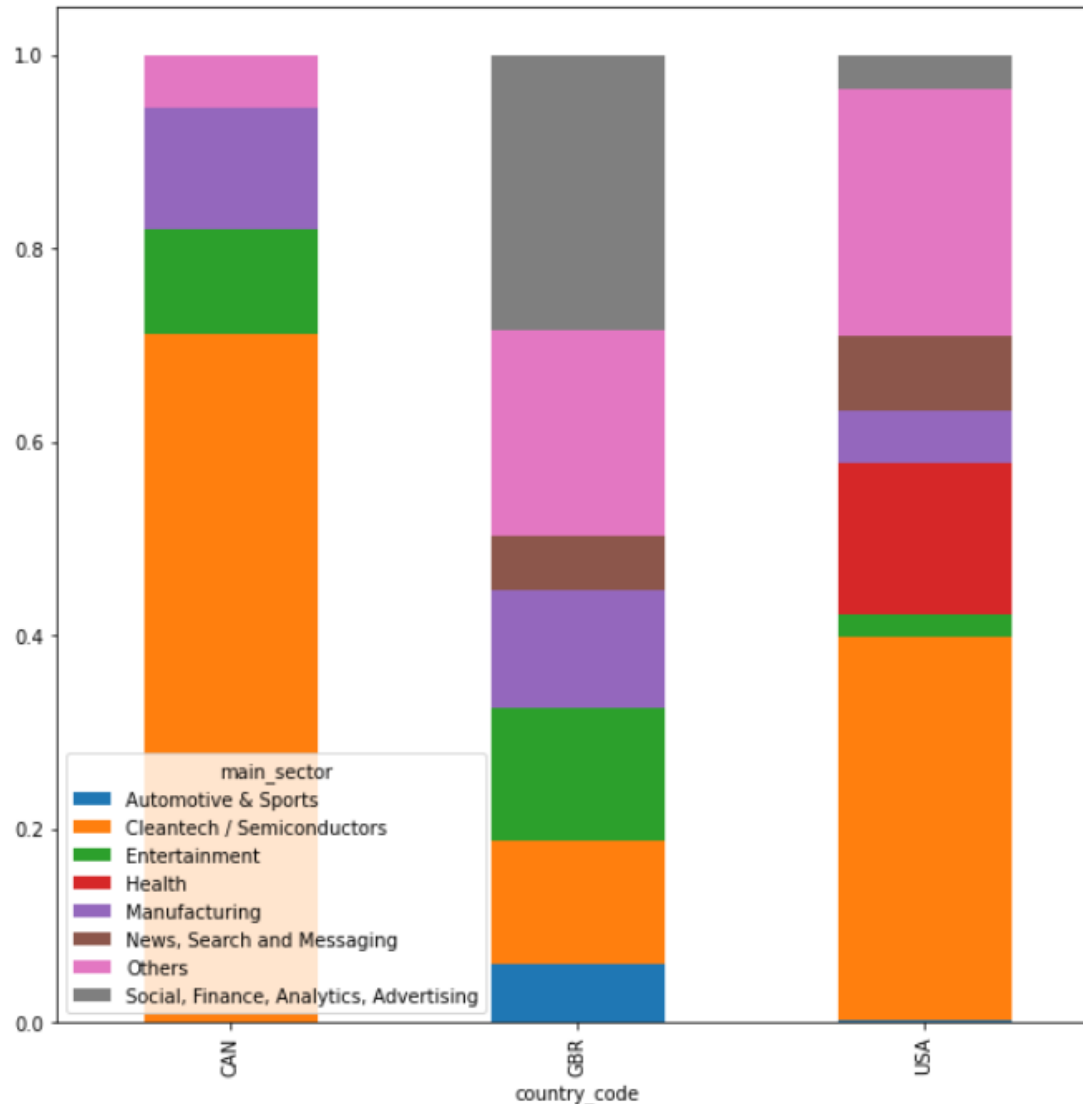
We can also analyze from the graph that *seed* is the least used funding type

Results Plot 2: Top 9 countries



The graph shows top 9 countries against the total investments for the interested investment type (seed, venture, angel, Private equity) , however, the invents of Spark Funds should be in only in English speaking countries, therefore, USA, GBR and CAN are the countries where investments should be done.

Results Plot 3: Top 3 sectors of the top 3 countries



The graph shows top 3 sectors of the top 3 countries for the interested investment type Private equity and investment amount between 5 and 15 Million.

We see that for:

- USA, top 3 sectors are Cleantech/Semiconductors, Others, and Health
- GBR, top 3 sectors are Social Finance Analytics Advertising, Others and Automotive & Sports
- CAN, top 3 sectors are Cleantech/Semiconductors , Manufacturing and Entertainment

Conclusion

The data was analysed using Scattered Plot, Pie Chart and Bar graphs for Funding type, Sector and Country analysis, respectively. From this analysis we can conclude the below points:

- The funding type *Private Equity* is best suited for Spark Funds
- Spark Funds should invest in USA, GBR and CAN as these are the top 3 English speaking countries
- The top 3 sectors of the top 3 countries where Spark Funds should invest are:
 - USA, top 3 sectors are Cleantech/Semiconductors, Others, and Health
 - GBR, top 3 sectors are Social Finance Analytics Advertising, Others and Automotive & Sports
 - CAN, top 3 sectors are Cleantech/Semiconductors , Manufacturing and Entertainment