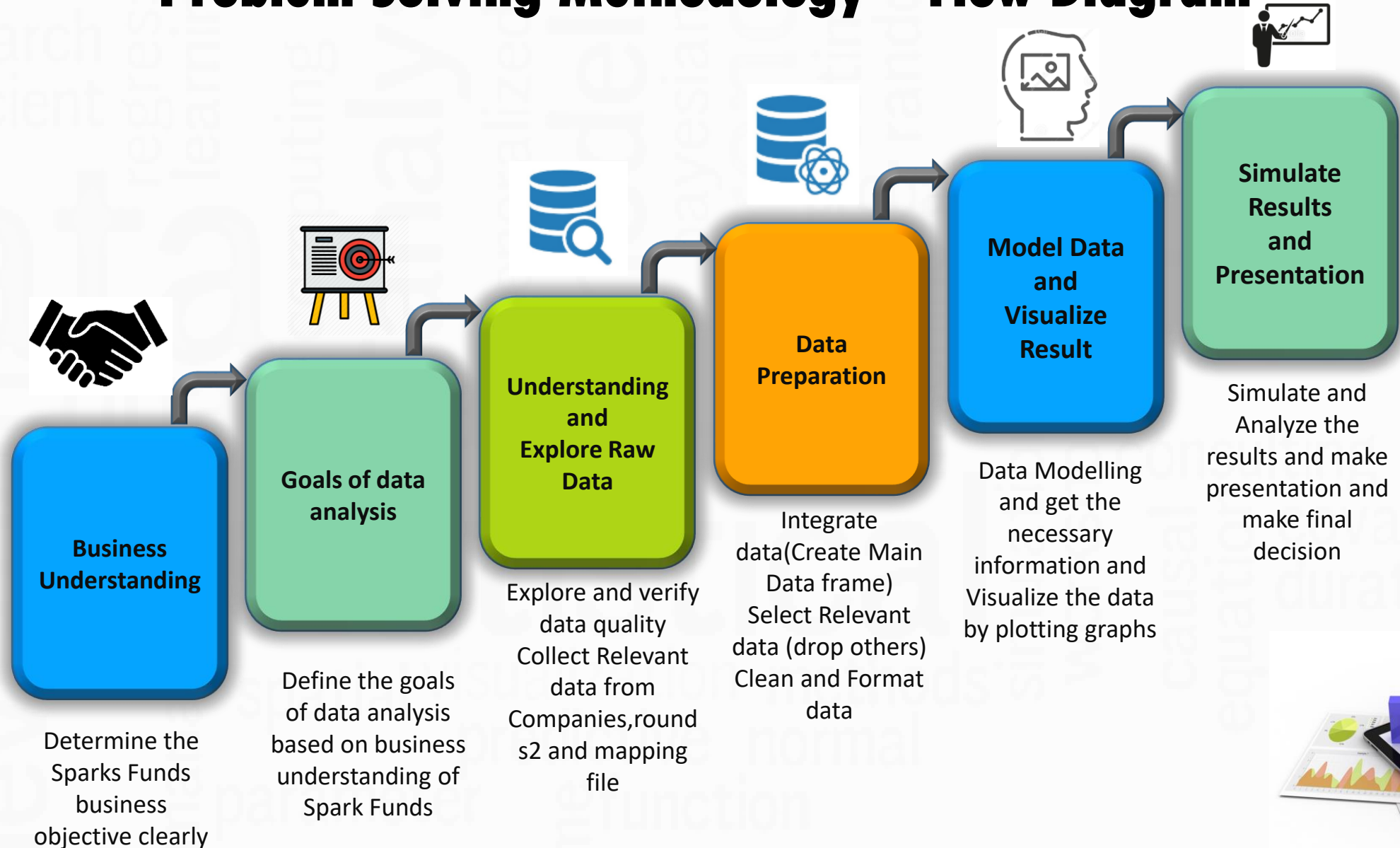


INVESTMENT ASSIGNMENT SUBMISSION

Name: Bavani Ennares Maniammai A S



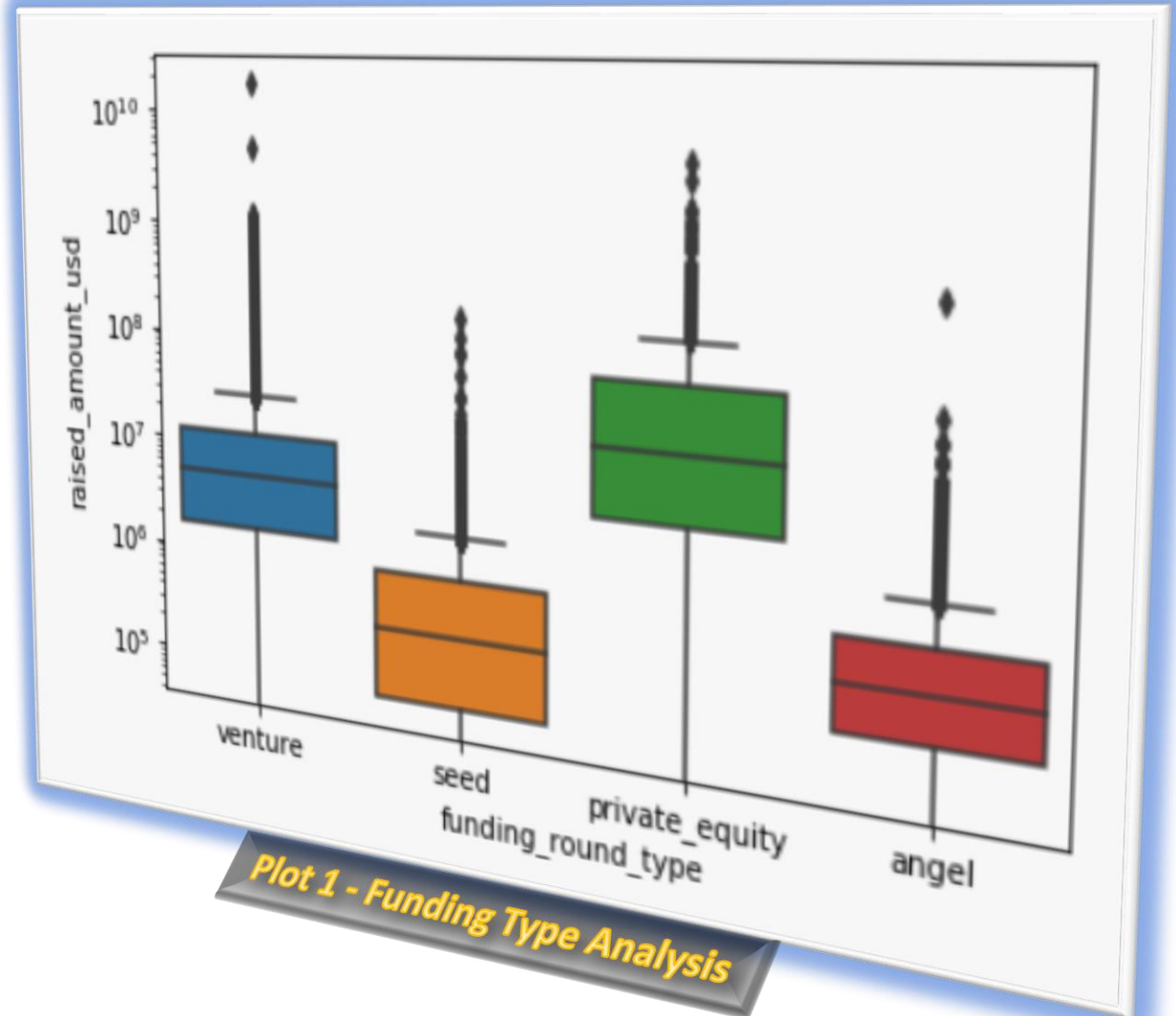
Problem Solving Methodology – Flow Diagram



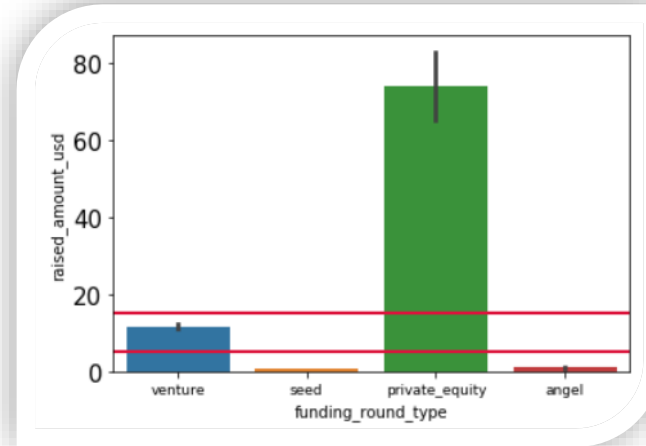
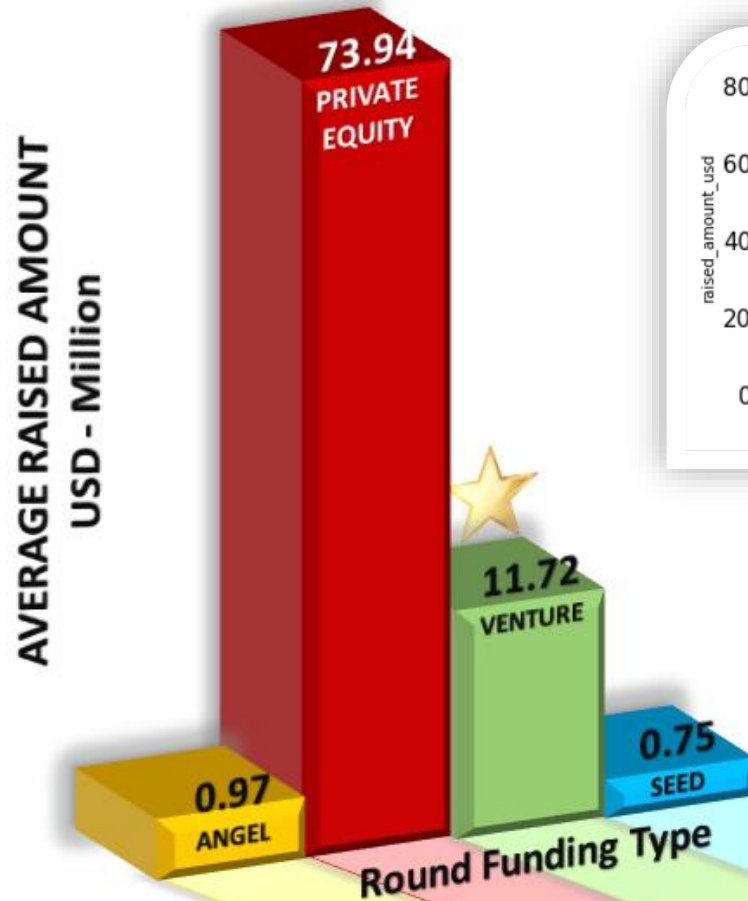
Funding Type Analysis

Plot1 - Results: Funding Type Analysis

- ☐ Box Plot - Graphical rendition of Raised Amount USD based on the Funding Round Type
- ☐ Spark Funds wants to choose one of these [Venture | Seed | Private Equity | Angel] four investment types for each potential investment they will make



Investment Based Funding Type Analysis



Plot2 – Investment Funding Type analysis

Plot2 - Results: Investment Funding Type Analysis

- Calculated the most representative value of the investment amount for each of the four funding types (venture, angel, seed, and private equity)
- Based on the most representative investment amount, ***“Venture investment type is the most suitable for Spark Funds”***. Considering that Spark Funds wants to invest between 5 to 15 million USD per investment round

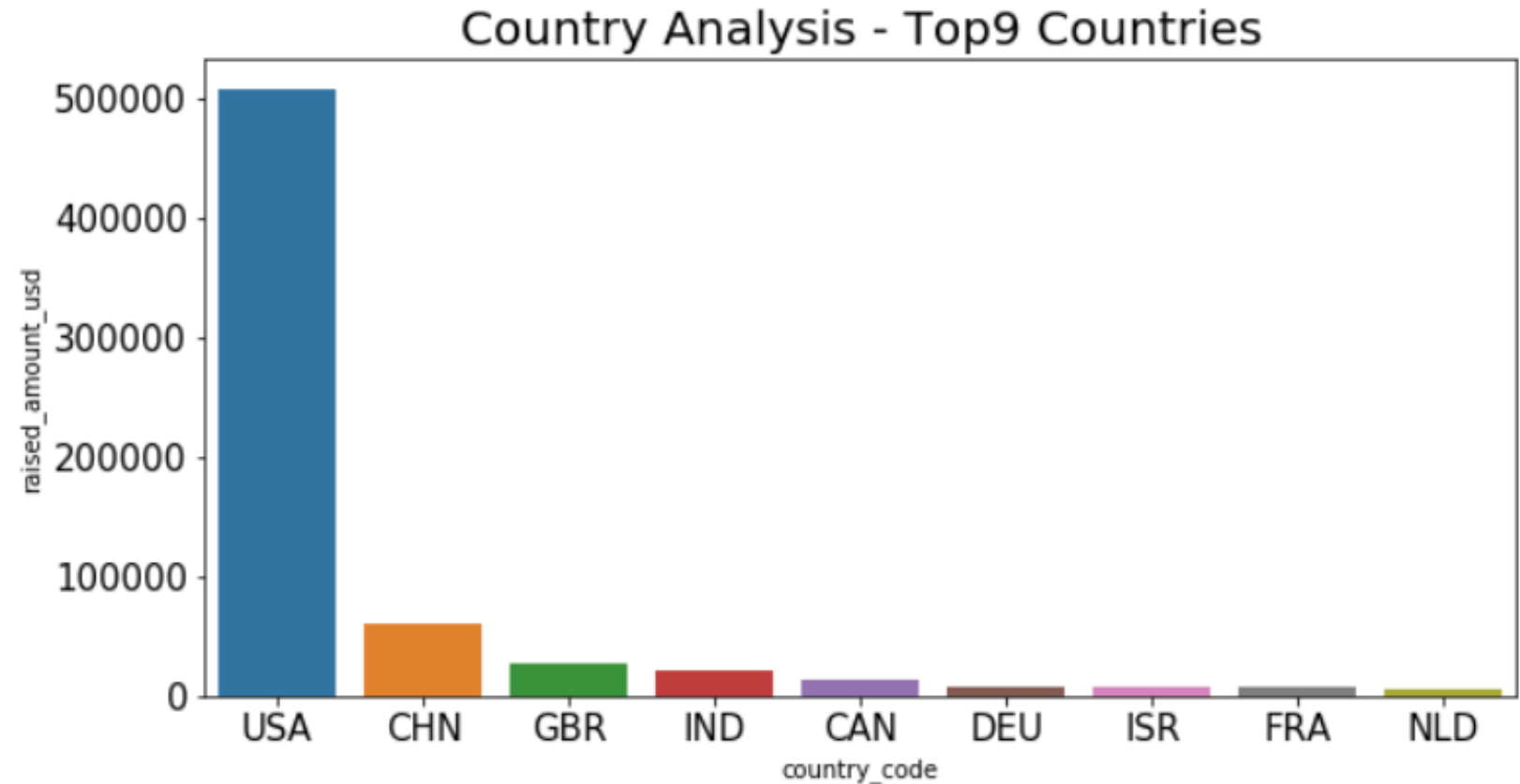
Round Funding Type	Average Funding amount USD - Million
Angel	0.97
Private_equity	73.94
Venture	11.72
Seed	0.75

Top 9 Countries – Investment Type Venture



Results: Country Analysis

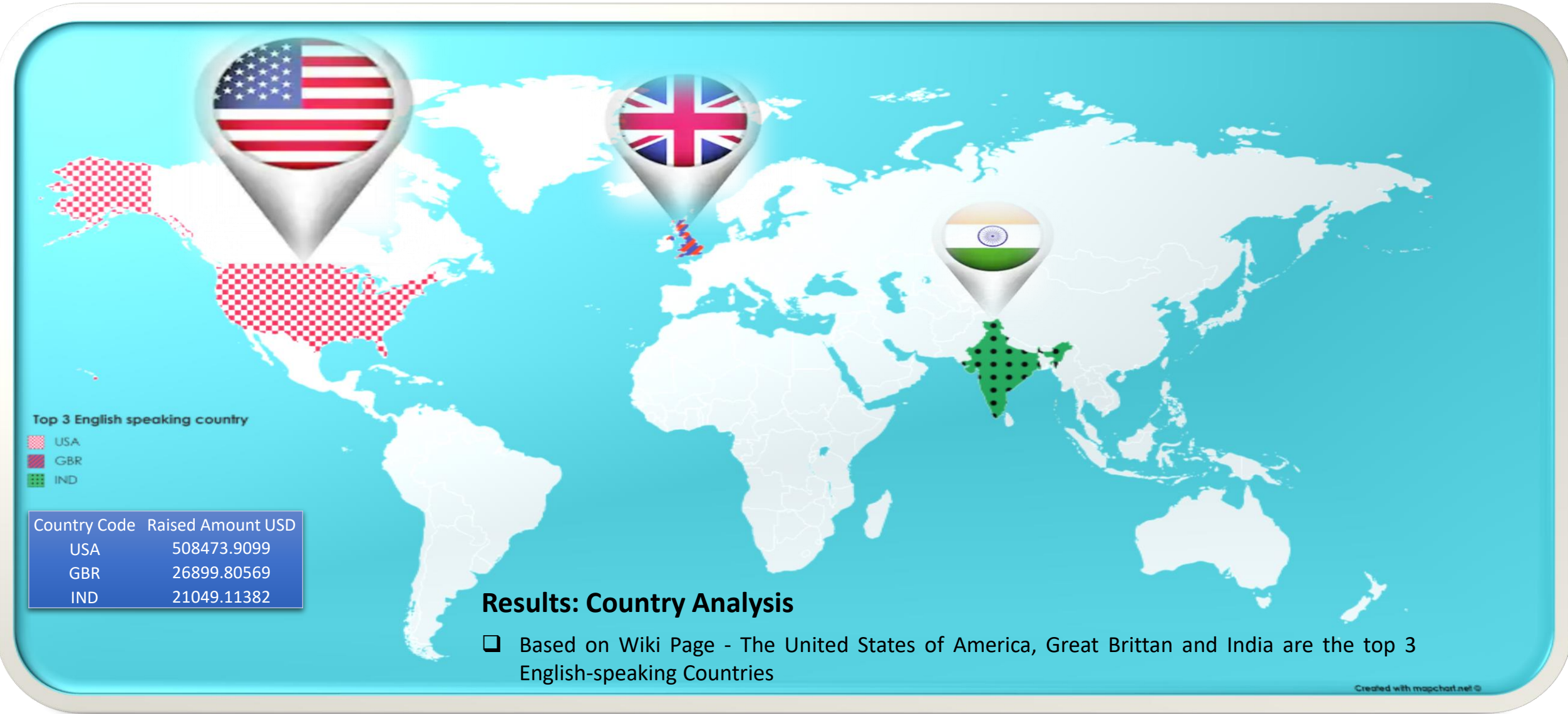
- ❑ Spark Funds wants to invest in countries with the highest amount of funding for the chosen investment type.
- ❑ *“Here are the Top 9 countries with the highest amount of funding for the chosen investment type – Venture across all sectors”*



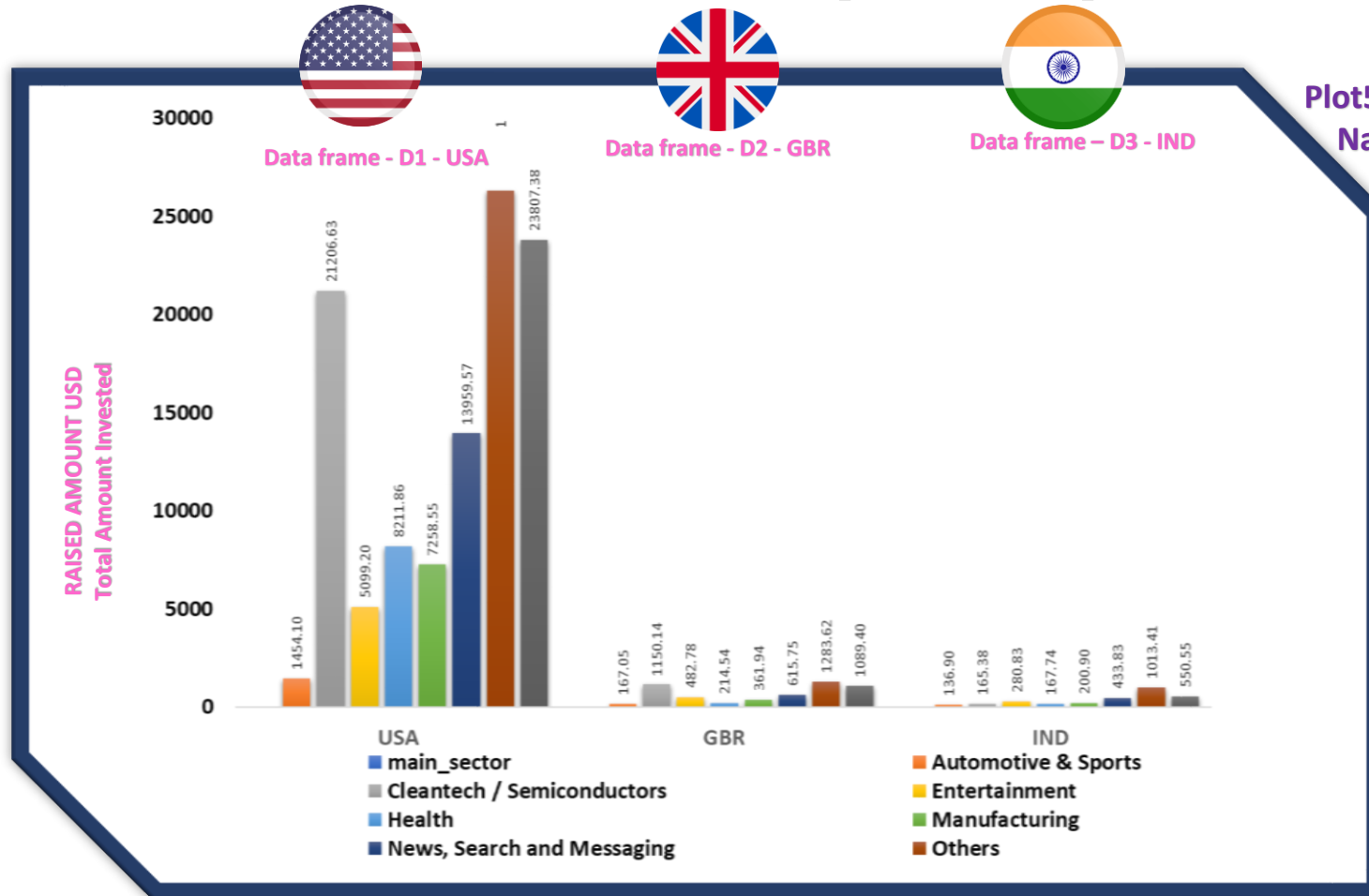
Plot3 – Top 9 Countries Analysis

Top 3 English Speaking Countries

Plot4 – World Top3 English Speaking Countries



Sector Analysis - Top3 Sector Names

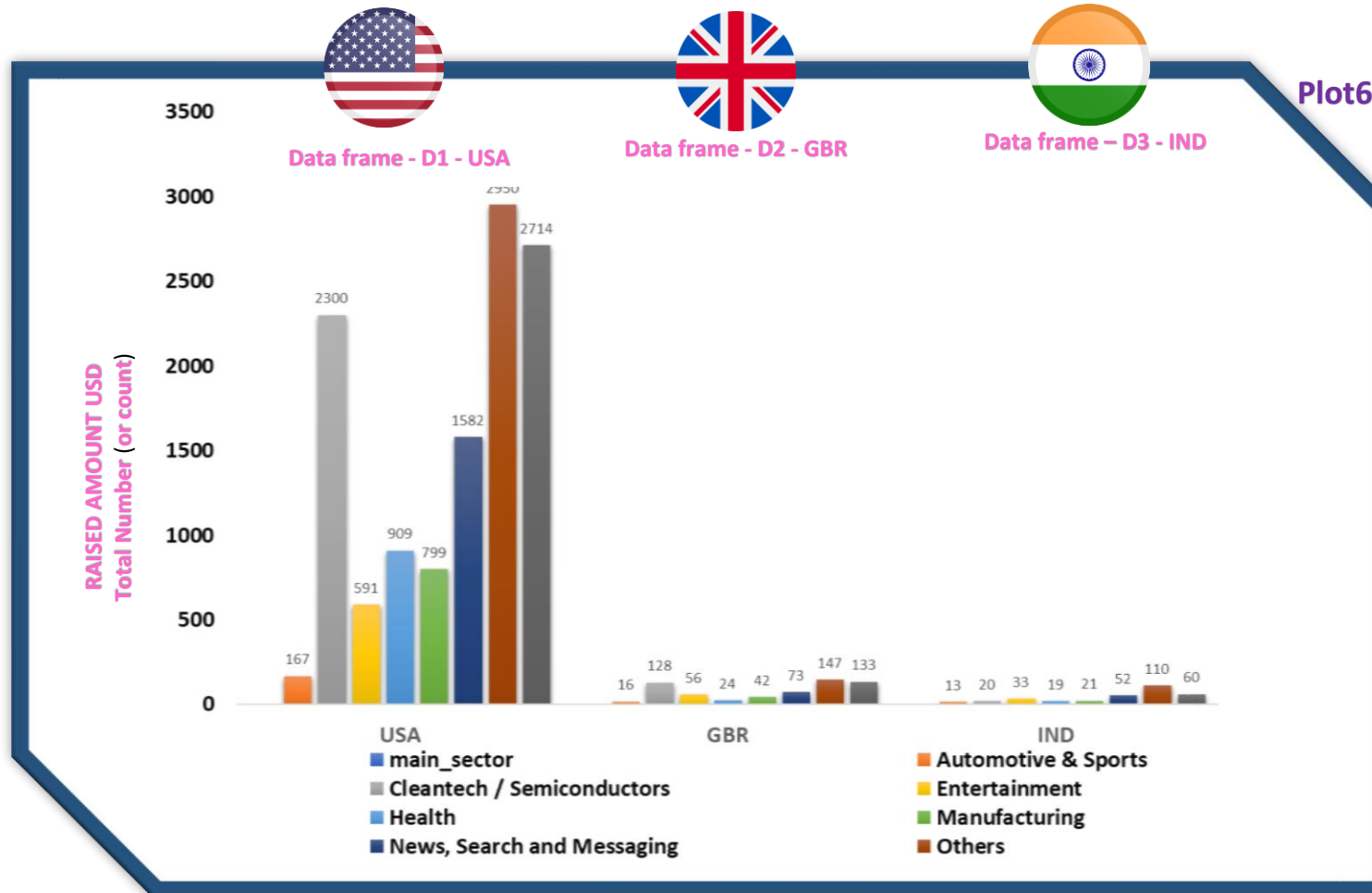


Results: Sector Analysis

- Created three separate data frames D1, D2 and D3 for each of the three countries containing the observations of funding type FT falling within the 5-15 million USD range
- “Calculated the total amount invested in each main sector and found the top 3 sectors(Below Table) in the top 3 countries”

Countries	USA	GBT	IND
Top Sector name (no. of investment-wise)	Others	Others	Others
Second Sector name (no. of investment-wise)	Social, Finance, Analytics, Advertising	Social, Finance, Analytics, Advertising	Social, Finance, Analytics, Advertising
Third Sector name (no. of investment-wise)	Cleantech / Semiconductors	Cleantech / Semiconductors	News, Search and Messaging

Sector Analysis - Number of Investment in Top3 Sectors

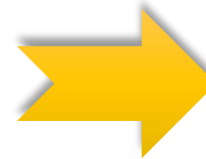
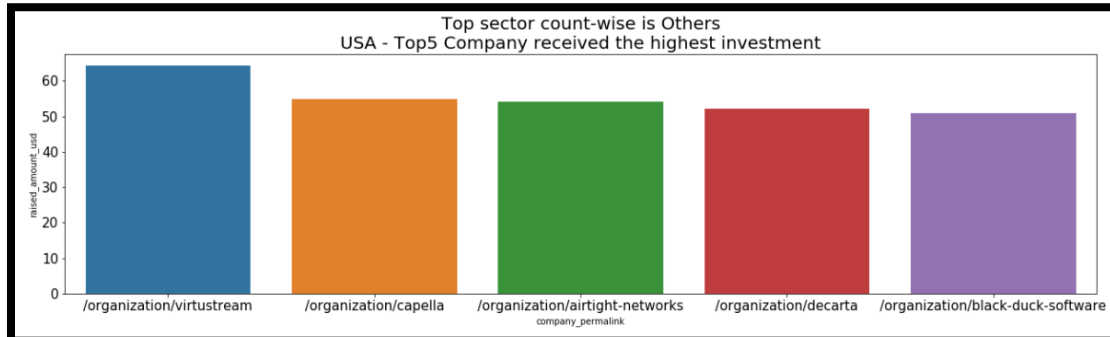


Results: Sector Analysis

- Created three separate data frames D1, D2 and D3 for each of the three countries containing the observations of funding type FT falling within the 5-15 million USD range
- “Calculated The total number (or count) of investments for each main sector and found the number of Investment in Top 3 Sectors”

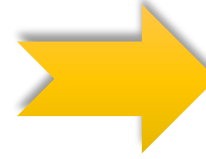
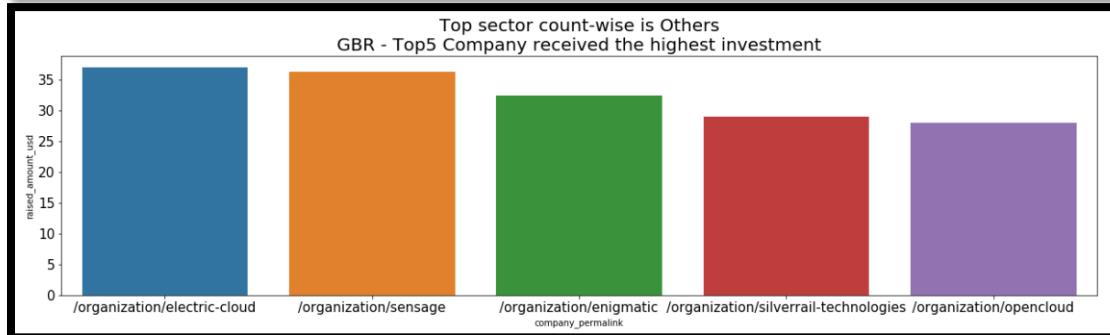
Countries	USA	GBT	IND
Number of investments in top sector (3)	2950	147	110
Number of investments in second sector (4)	2714	133	60
Number of investments in third sector (5)	2300	128	52

Sector Analysis - Top sector count-wise Company received the highest investment



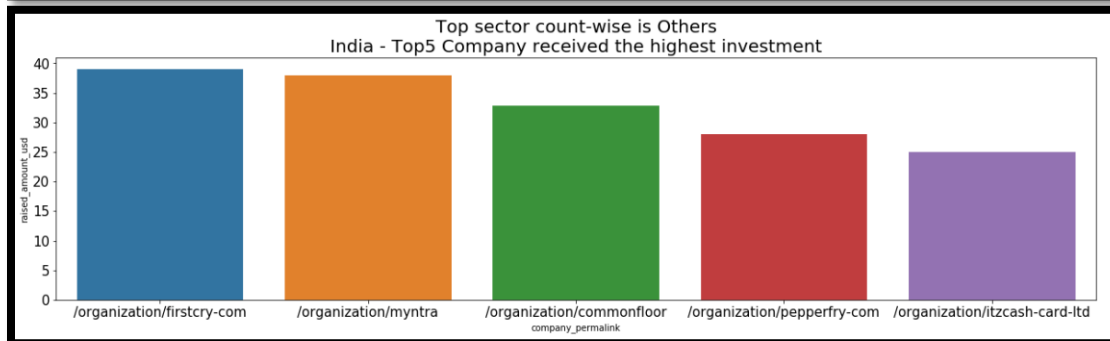
Results: Sector Analysis

- Data frame D1 -> USA - Top Sector Count-wise
- *"/organization/virtustream" company received the highest investment in USA Data frame D1"*



Results: Sector Analysis

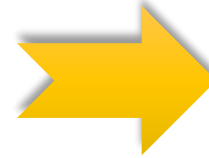
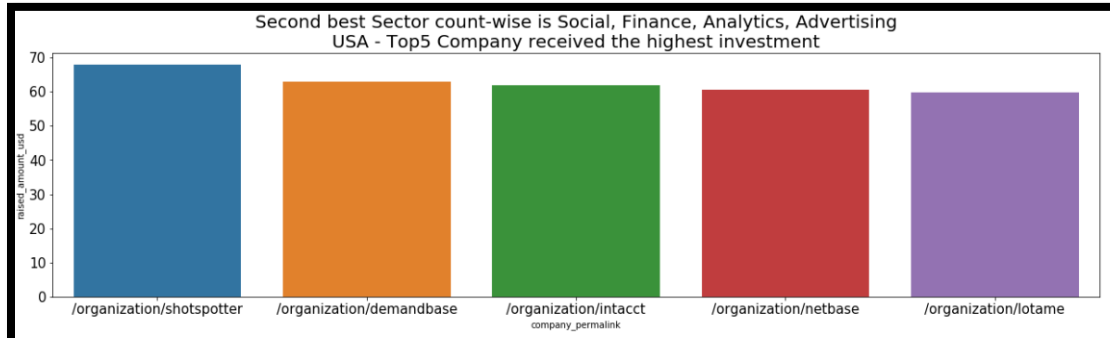
- Data frame D2 -> GBR - Top Sector Count-wise
- *"/organization/electric-cloud" company received the highest investment in GBR Data frame D2"*



Results: Sector Analysis

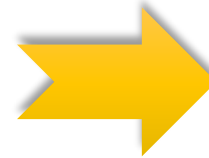
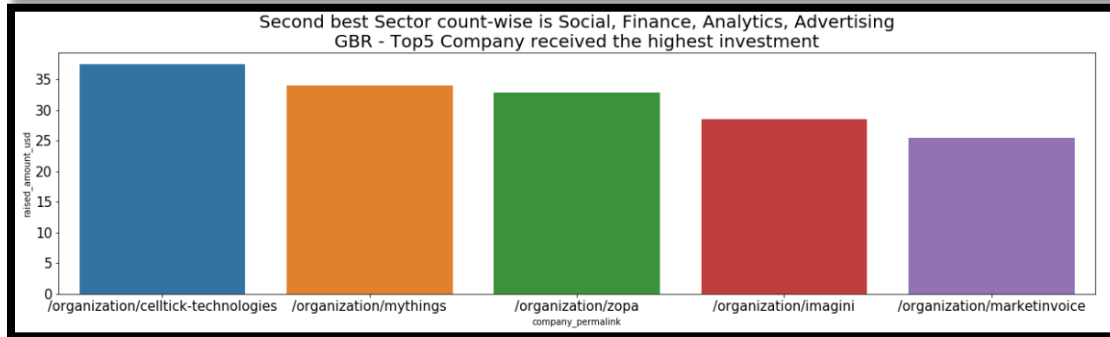
- Data frame D3 -> IND - Top Sector Count-wise
- *"/organization/firstcry-com" company received the highest investment in IND Data frame D3"*

Sector Analysis - second best sector count-wise Company received the highest investment



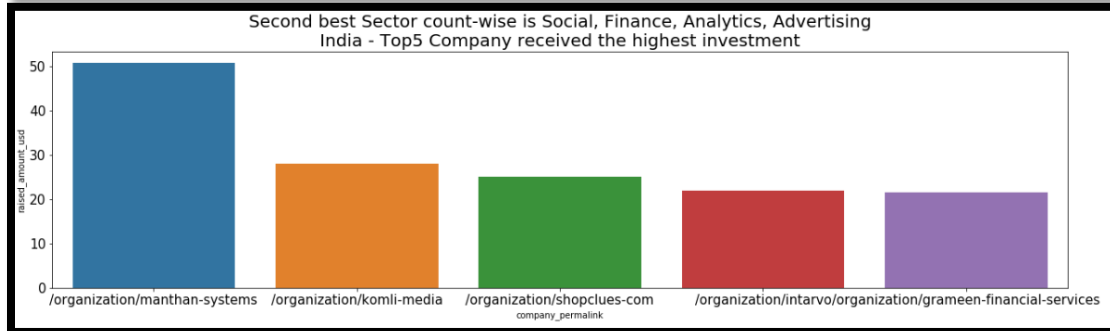
Results: Sector Analysis

- Data frame D1 -> USA - Second best sector count-wise
- *"/organization/shotspotter company received the highest investment in USA Data frame D1"*



Results: Sector Analysis

- Data frame D2 -> GBR - Second best sector count-wise
- *"/organization/celltick-technologies company received the highest investment in GBR Data frame D2"*



Results: Sector Analysis

- Data frame D3 -> IND - Second best sector count-wise
- *"/organization/manthan-systems company received the highest investment in IND Data frame D3"*

In Spark Funds Data Analysis based on business objective, defined the goals, examine the large amount of data provided, and even plot statistical models in an attempt to explain what is observed during the entire process

Based on analysis, Suggesting Spark Funds to make investments in
Funding Type - Venture(5 to 15 million USD)
Top3 English speaking countries - USA,GBR,IND

Top3 Sector Names in Selected English Speaking Countries

USA – Others | Social, Finance, Analytics, Advertising | Cleantech / SemiConductors
GBR – Others | Social, Finance, Analytics, Advertising | Cleantech / SemiConductors
IND – Others | Social, Finance, Analytics, Advertising | News, Search and Messaging

Top 2 Companies Received Highest Investment

USA – /organization/virtustream | /organization/shotspotter
GBR – /organization/electric-cloud | /organization/celltick-technologies
IND – /organization/firstcry-com | /organization/manthan-systems

