INVESTMENT CASE STUDY

SUBMISSION

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Spark Funds –Basis of Investment Strategy

Spark Funds, is looking for a strategic investment options based on global trends. A solution needs to be drawn keeping below considerations and analysis checkpoints in mind. This presentation tries to give the management an understanding of how above considerations and business objectives can be met.

Considerations:

1. 5 to 15 million USD will be investment per round.

2. Investment will be only in English speaking countries for ease of communication.

Analysis Checkpoints:

1. Identifying best sectors, countries and investment type for making investment.

2. Extensive analysis of Investment type, sector and country needs to be done.

Business Objectives:

On the basis of above analysis, as a early stage start-up investor we aim to put our investments where most other investors are putting their money.

Strategic Investment Decision – Flow Chart
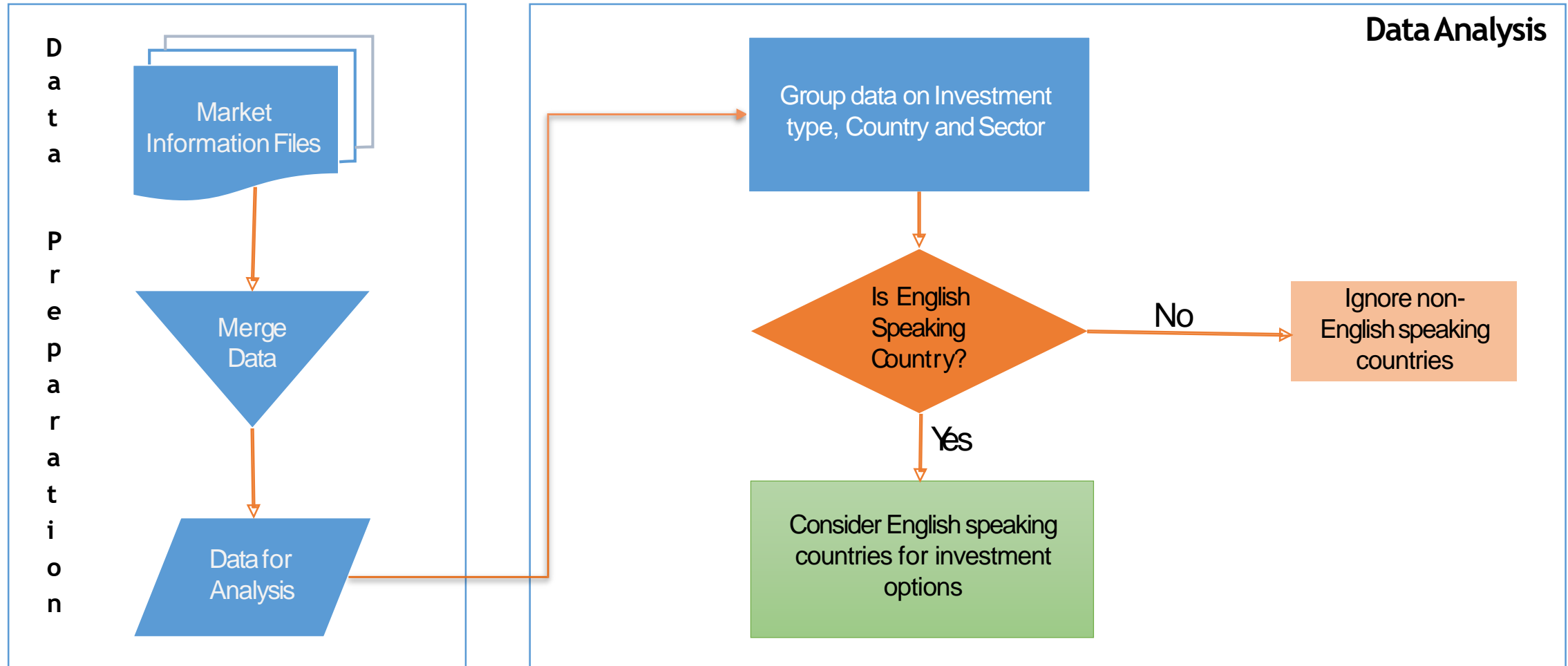
To ideate a workflow we had brainstorming session among team. This led to building up of a stream-lined workflow keeping business objectives in view and understanding data.

Understanding Data:

Real investment data from crunchbase.com was obtained , so the insights that one might get may be incredibly useful.
The following datasets were obtained:

- Companies – This dataset has information about companies and their categories
- Rounds2 – Funding type of the companies in addition to fields like amount, investment type, etc.,

On high level following are stages in the workflow:

- Gather data for the analysis
- Clean the data for readability
- Collate data in to a model
- Filter model based on Investment type, Country and Sector
- Identify best possible investment options
- Plot on the option for graphical representation.
- Account for missing mappings in the mapping file.

Tools for the workflow:

- RStudio is used for data cleansing and modelling
- Tableau is used for plotting the results

Data Model Analysis

Data quality is crucial for this step. We have companies, rounds and mapping information in files. This needs to be cleansed and built into a model.

Building model RStudio is extensively used and following stages are addressed in building model:

- Data Import   – Import data from files.
- Data Cleansing   – Removing or correcting dirty data. Handling of NA values.
- Data Merging   – Merge companies and investment round data to get fully readable dataset based on unique key.
- Data Mapping   – Mapping dataset for identifying sectors and investment preferences and also define the missing mappings by mapping the primary sectors to the nearest logical main sector.
- Filtering   – To identify preferred investment options for Spark Funds to invest.
- Exporting Data   – For tableau plotting data is exported.

Model Objectives – based on above model following are the primary goals :

- Investment type analysis   : Ability to identify best suited categories for the investment.
- Country Analysis   : List out countries having most investment in the past.
- Sector Analysis   : Understanding investment distribution among sectors.

Result Analysis

FUNDING TYPE ANALYSIS	
Average funding amount of venture type (USD)	$1,17,48,949
Average funding amount of angel type (USD)	$9,58,694
Average funding amount of seed type (USD)	$7,19,818
Average funding amount of private equity type (USD)	$7,33,08,593

SECTOR-WISE INVESTMENT ANALYSIS				
Sl No	Important Parameters	USA	GBR	IND
1	Total number of Investments (count)	10,052	567	244
2	Total amount of investment (USD)	$89,60,13,47,515	$4,94,18,43,539	$2,18,65,43,602
3	Top Sector name (no. of investment-wise)	Others	Others	Others
4	Second Sector name (no. of investment-wise)	Cleantech / Semiconductors	Cleantech / Semiconductors	News, Search and Messaging
5	Third Sector name (no. of investment-wise)	Social, Finance, Analytics, Advertising	Social, Finance, Analytics, Advertising	Social, Finance, Analytics, Advertising
6	Number of investments in top sector (3)	2,400	126	77
7	Number of investments in second sector (4)	1,950	123	41
8	Number of investments in third sector (5)	1,550	89	25
9	For point 3 (top sector count-wise), which company received the highest investment?	AirTight Networks	Eusa Pharma	Myntra
10	For point 4 (second best sector count-wise), which company received the highest investment?	Biodesix	Electric Cloud	GupShup

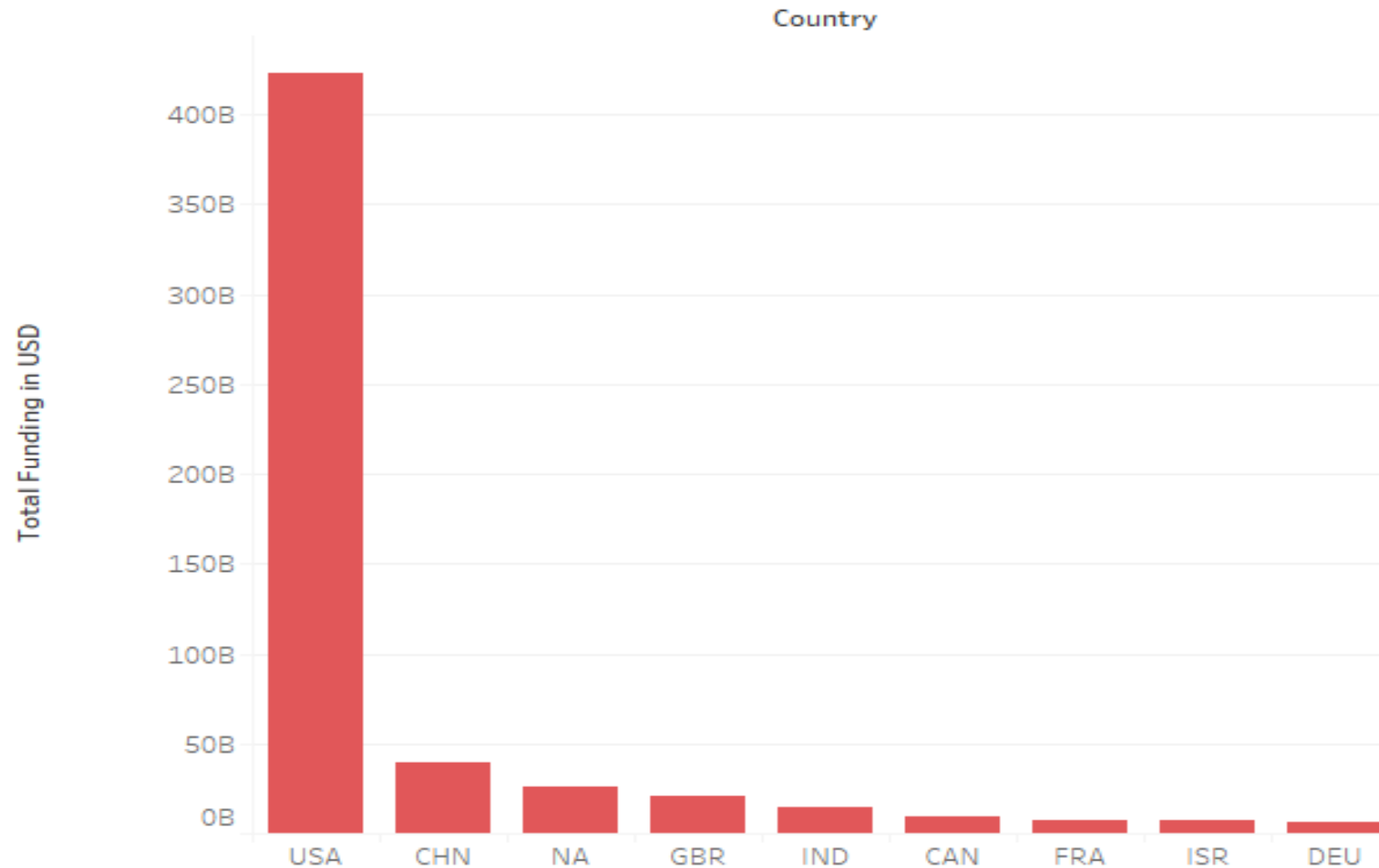Investments based on Funding Type (FT)

Percentage of Investments in Venture, Seed, and Private equity and their Average Amount
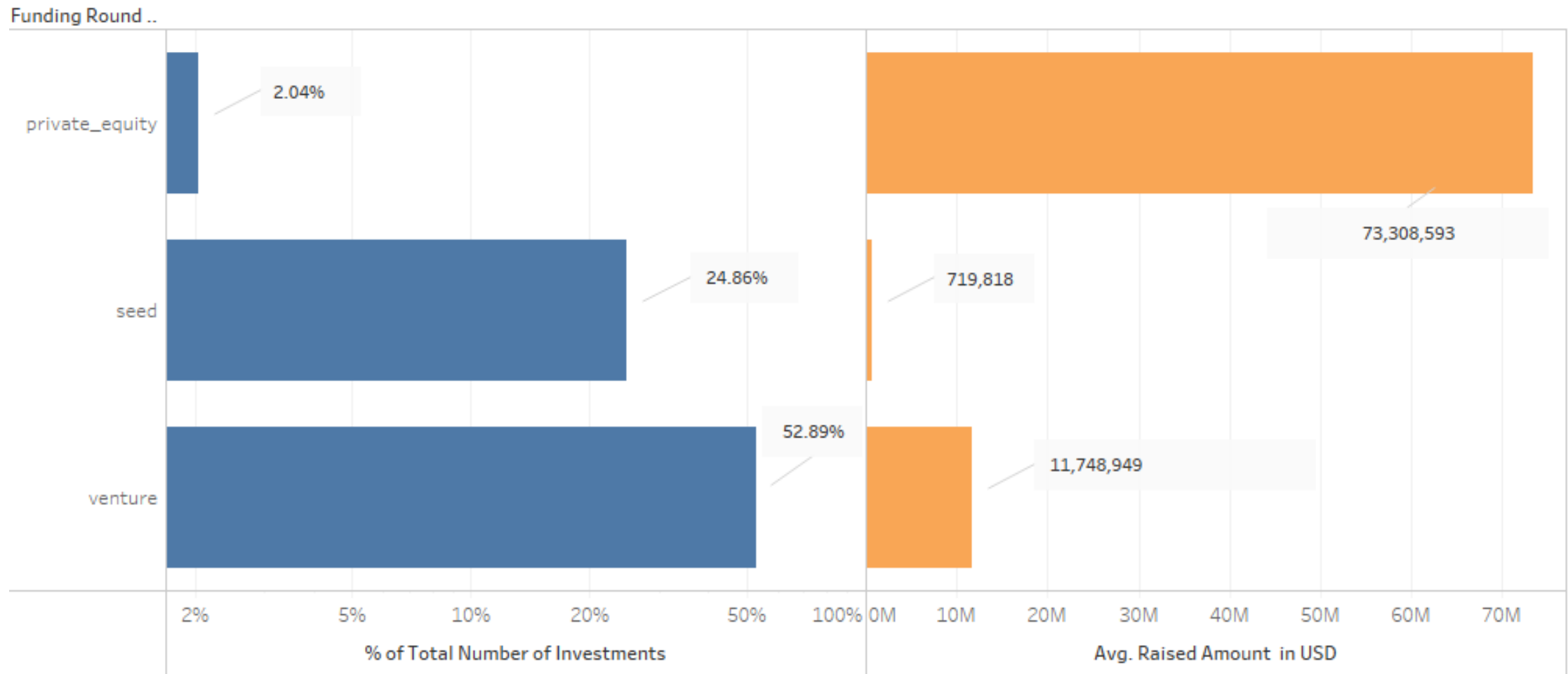
Venture Funding should be preferred as it is most prevalent and has ideal average funding amount.
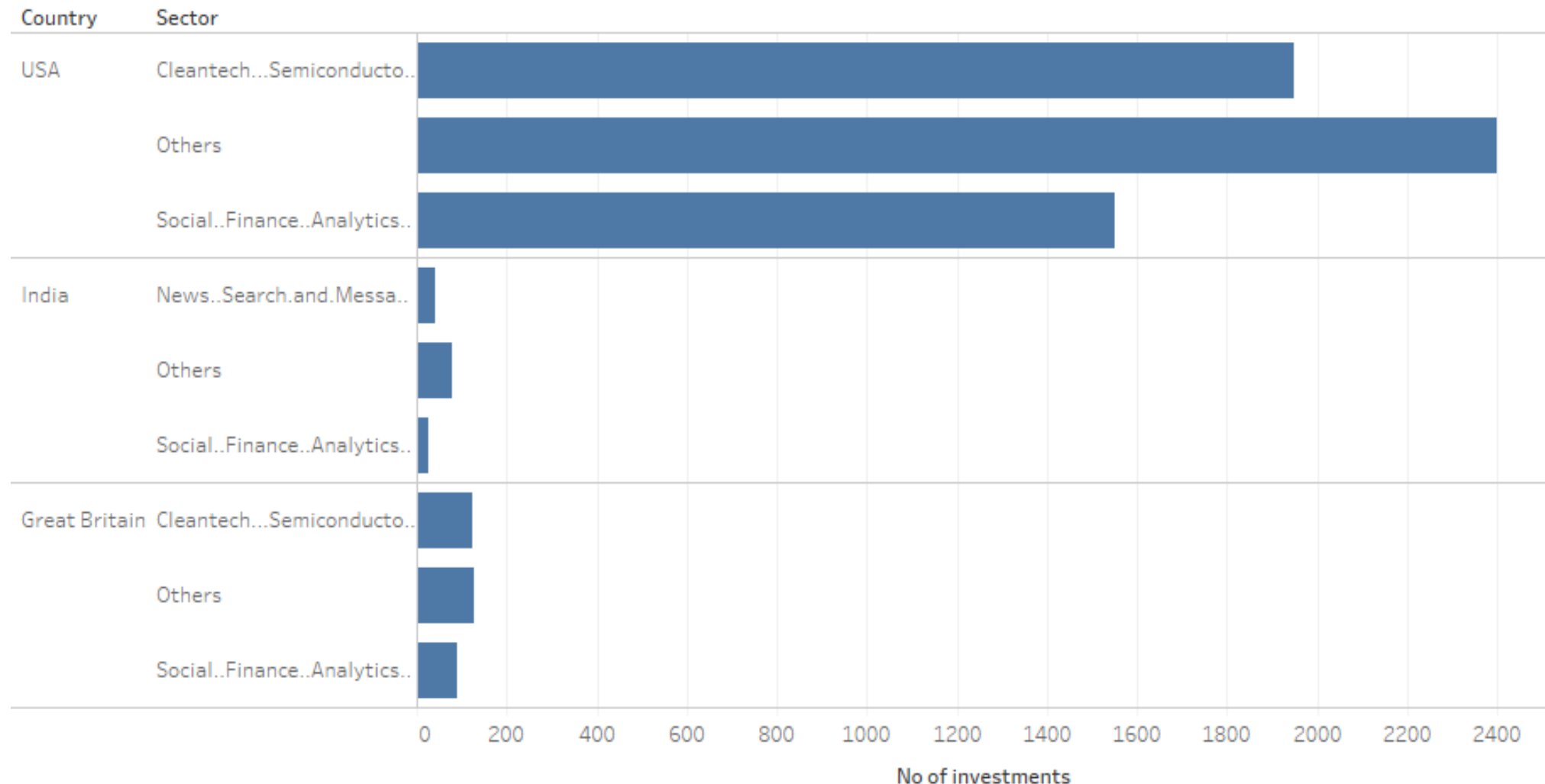
Venture Funding Investment for Top3 English Speaking Countries

Conclusion

It can be concluded based on the analysis, Spark Funds should use **Venture Funding** to invest in either of the following sectors in USA, Great Britain and India (in order of preference).

Invest in countries	Investment Sectors
USA	• Others • Cleantech/Semiconductors • Social/Finance/Analytics/Advertising
GBR (Great Britain)	• Others • Social/Finance/Analytics/Advertising • Cleantech/Semiconductors
India	• Social/Finance/Analytics/Advertising • News, Search and Messaging • Entertainment