INVESTMENT CASE STUDY

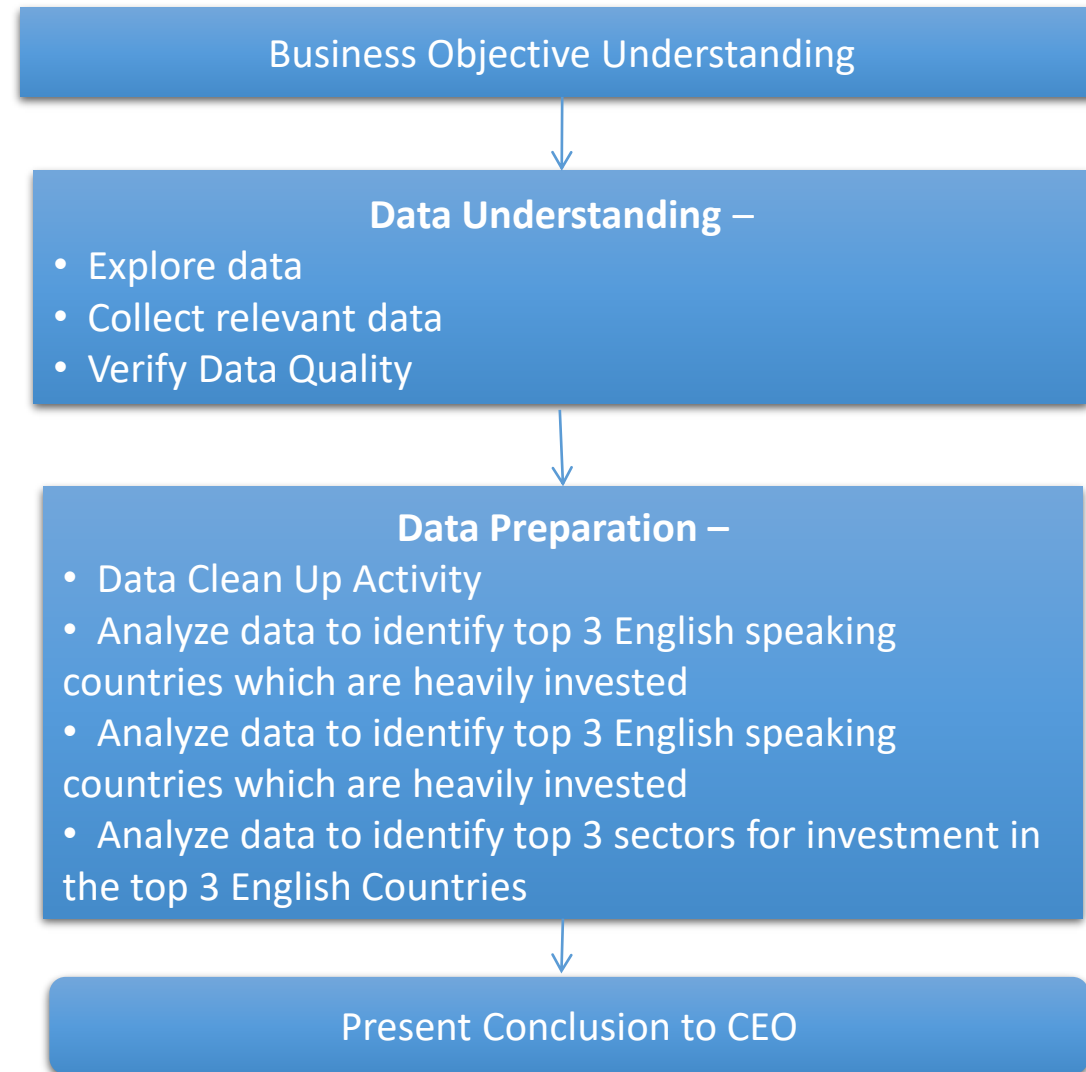# SUBMISSION

Group Members Name:

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Business Objective

Spark Funds, an asset management company wants to make investments in the companies of highly demanding and competitive sectors across the English speaking countries in the world using widely implemented investment types.

The *objective* is to identify the best sectors, countries, and a suitable investment type for making investments. The overall strategy is to invest where others are investing, implying that the best sectors and countries are the ones where most investments are happening.

Flow Chart for finding Data Insights using CRISP - DM Framework

Business Objective Understanding

Data Understanding –
- Explore data
- Collect relevant data
- Verify Data Quality

Data Preparation –
- Data Clean Up Activity
- Analyze data to identify top 3 English speaking countries which are heavily invested
- Analyze data to identify top 3 English speaking countries which are heavily invested
- Analyze data to identify top 3 sectors for investment in the top 3 English Countries

Present Conclusion to CEO

Data Clean Up Activity

Performed the following data clean up :-

1. Mapping File : the column Category List has some data issue, where digit '0' is present instead of character i.e. 'na'. So we have replaced the digit '0' by 'na' for the entire data in Category list column.

    For example - 0notechnology was present instead of Nanotechnology and so on.

2. Round2 File: the column Raised_Amount_Usd has 'NA' instead of digit. So we replaced 'NA' by '0' so that we can perform the calculations

Analyze data to identify the investment type

Right Questions to ask while identifying the top investment type

1. Average funding amount of venture type

2. Average funding amount of angel type

3. Average funding amount of seed type

4. Average funding amount of private equity type

5. Considering that Spark Funds wants to invest between 5 to 15 million USD per investment round, which investment type is the most suitable for them?

S.No	Questions	Answer
	Average Values of Investments for Each Funding Types	
1	Average funding amount of venture type	10634054.4 (ten million, six hundred thirty-four thousand, fifty-four and four tenths)
2	Average funding amount of angel type	764564.3 (seven hundred sixty-four thousand, five hundred sixty-four and three tenths)
3	Average funding amount of seed type	556606.7 (five hundred fifty-six thousand, six hundred six and seven tenths)
4	Average funding amount of private equity type	62111788.2 (sixty-two million, one hundred eleven thousand, seven hundred eighty-eight and two tenths)
5	Considering that Spark Funds wants to invest between 5 to 15 million USD per investment round, which investment type is the most suitable for them?	Venture

Analyze data to identify top 3 English speaking countries

Right Questions to ask while identifying the English speaking countries

1. Top English speaking country
2. Second English speaking country
3. Third English speaking country

Analyzing the Top 3 English-Speaking Countries		
S.No	**Questions**	**Answers**
1	Top English speaking country	USA (United States)
2	Second English speaking country	GBR (United Kingdom)
3	Third English speaking country	IND (India)

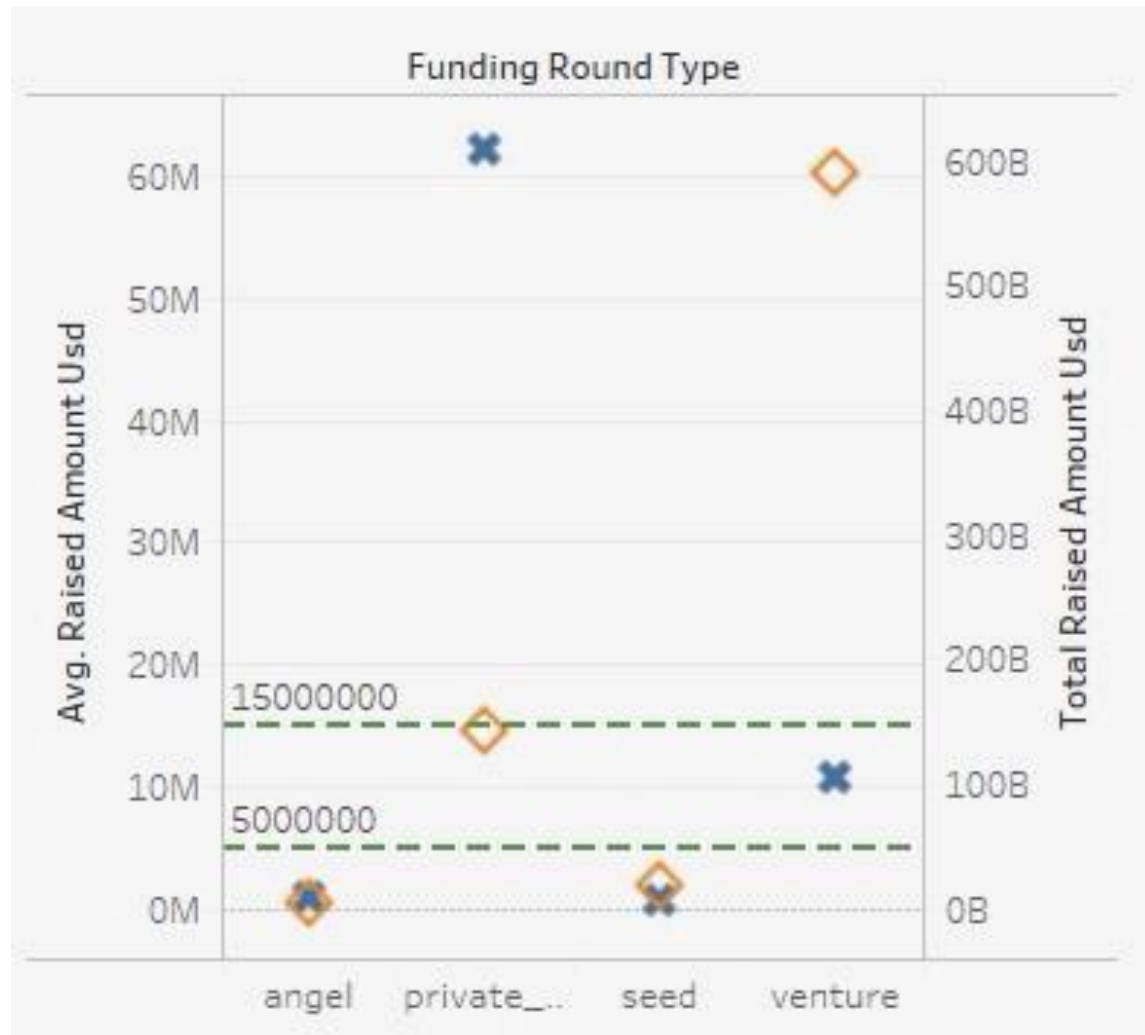# Analyze data to identify top 3 sectors for investment

Right Questions to ask while identifying the investment sectors

1. Total number of Investments (count)
2. Total amount of investment (USD)
3. Top Sector name (no. of investment-wise)
4. Second Sector name (no. of investment-wise)
5. Third Sector name (no. of investment-wise)
6. Number of investments in top sector (3)
7. Number of investments in second sector (4)
8. Number of investments in third sector (5)
9. For point 3 (top sector count-wise), which company received the highest investment?
10. For point 4 (second best sector count-wise), which company received the highest investment?

Sector-wise Investment Analysis

S.No	Questions	C1	C2	C3
1	Total number of Investments (count)	8478	507	265
2	Total amount of investment (USD)	108531347515	5436843539	2976543602
3	Top Sector name (no. of investment-wise)	Others	Others	Others
4	Second Sector name (no. of investment-wise)	Social, Finance, Analytics, Advertising	Social, Finance, Analytics, Advertising	Social, Finance, Analytics, Advertising
5	Third Sector name (no. of investment-wise)	Cleantech / Semiconductors	Cleantech / Semiconductors	News , Search and Messaging
6	Number of investments in top sector (3)	2950	147	110
7	Number of investments in second sector (4)	2714	133	60
8	Number of investments in third sector (5)	2350	130	52
9	For point 3 (top sector count-wise), which company received the highest investment?	Avere Systems	EnvironmentIQ	CaratLane
10	For point 4 (second best sector count-wise), which company received the highest investment?	Conviva	SimilarWeb	Manthan Systems

Identification of Investment Type

Avg. Raised Amount Usd and Total Raised Amount Usd for each Funding Round Type. Color shown above about Avg. Raised Amount Usd and Total Raised Amount Usd. The view is filtered on Funding Round Type i.e. angel, private_equity, seed and venture.
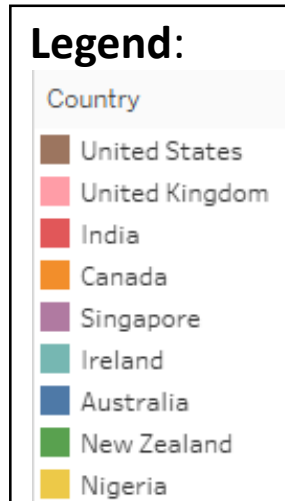
Result

As per the analysis we found "Venture" as the investment type meets the Business requirement criteria as the Average Raised Amount falls between 5 to 15 billion USD.

Top 9 countries against the total amount of investments of funding type "Venture"
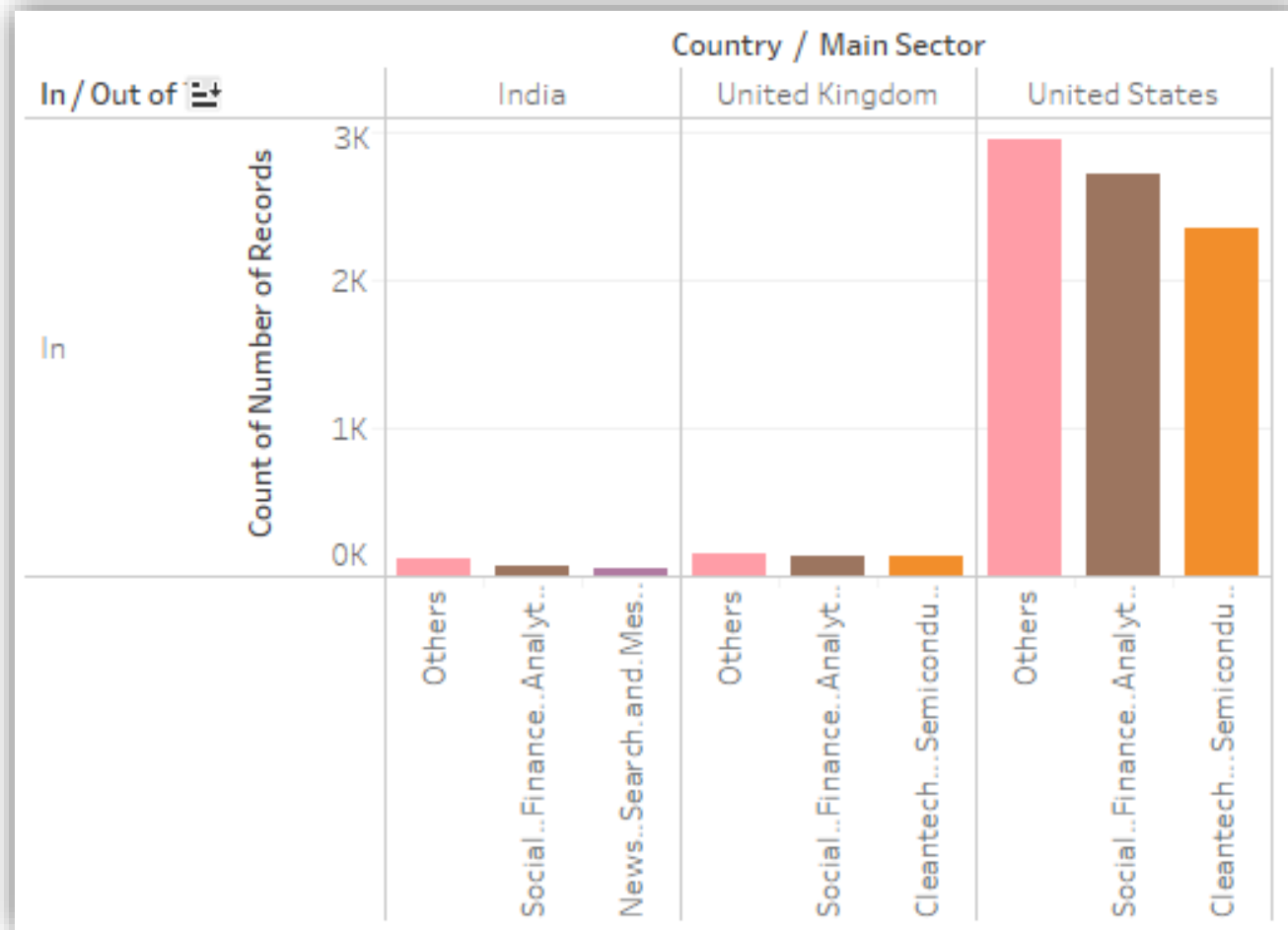

A plot showing the top 9 countries against the total amount of investments of funding type "Venture".

Legend:

Country

- United States
- United Kingdom
- India
- Canada
- Singapore
- Ireland
- Australia
- New Zealand
- Nigeria

Map based on Longitude (generated) and Latitude (generated). Color shows details about Country. Size shows sum of Raised Amount Usd. Details are shown for Country.

The number of investments in the Top 3 sectors of the Top 3 countries

Count of Investments for each Main Sector broken down by Country. i.e. USA, UK and India. Color shown below details about Main Sector. The view is filtered on Country and Main Sector. The Country filter keeps India, United Kingdom and United States. The Main Sector filter has multiple members selected.

Legend:

Main Sector

- Others
- Social..Finance..Analytics..Adver..
- Cleantech...Semiconductors
- News..Search.and.Messaging

Conclusion

As per the business requirements and the case study analysis the best suitable Investment type is '*Venture*' in the top 3 sectors i.e. '*Others*', ' *Social, Finance, Analytics, Advertising*' and '*Cleantech / Semiconductors*' of countries i.e. '*USA*', '*UK*', '*India*'.

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