

INVESTMENT CASE STUDY

SUBMISSION

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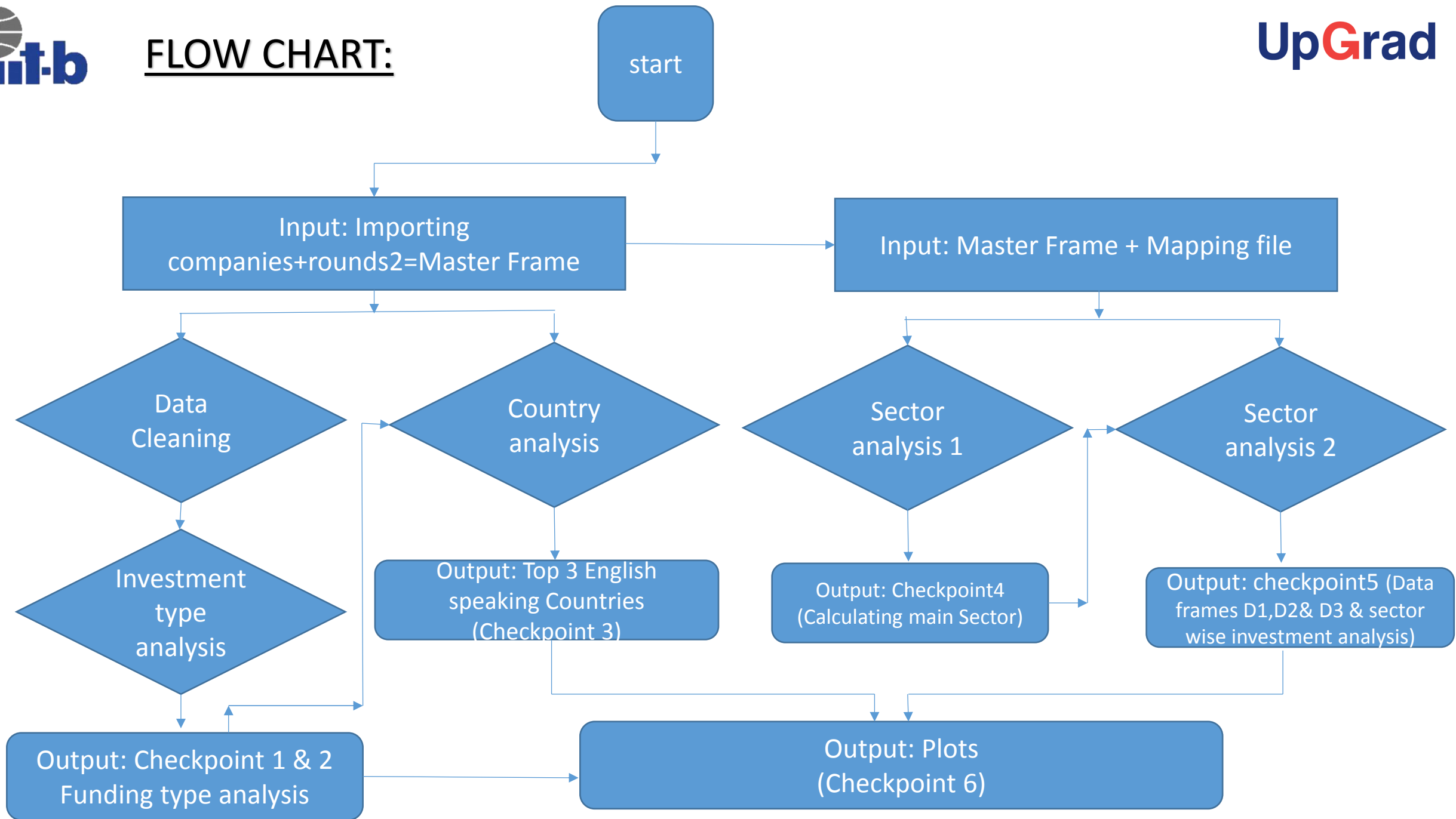
Abstract

We work for Spark funds, an asset management company, As Spark funds wants to invest between 5 to 15 million USD per round of investment in English speaking countries where most other investors are investing, we have taken real investment data from crunchbase.com to understand the global trends in investment to take investment decisions effectively Based on data analysis, it was divided into three sub-goals:

- (1) investment type analysis to choose the best companies for investment
- (2) country analysis to choose where most investments are occurring
- (3) sector analysis for distribution of investments across different sectors

Based on analysis we identified best sectors, countries, and a suitable investment type for making investments for Spark Funds.

FLOW CHART:



Investment type Analysis

- Calculate the **average investment amount** for each of the **four** funding types (**venture, angel, seed, and private equity**) from the given “**master_frame**” dataset.
- Pick one suitable investment type for “**Spark Funding Company**” whose average falls under **5 to 15 million USD**.
- Based on averages received for each investment Type. Choose one Funding Type.
- “**Venture**” Funding type is most suitable Investment type where “**Spark Funding**” Company can invest.

Country Analysis

Spark Funds want to know the top 9 countries with Highest Funding for the chosen Funding Type:-

- Narrow down the data frame and take the rows only with “**Venture**” Investment Type .
- Group the “data frame” based on country wise and “**sum of raised_investment_usd**”
- Create the a new dataframe “**top9**” and take only top 9 records of it .
- Get the **top 3 English speaking countries** for further analysis.

Sector Analysis

- Load the mapping.csv as a new “**mapping**” dataframe.
- In “**master_frame**” for some records “**category_list**” column have multiple sub-sectors separated by “|” . Take the first sector string as “**primary_sector**” for data set merging .
- Merge the “**master_frame**” and “**mapping**” dataframes based on “**category_list**” column.
- Created three dataframe “**D1**” , “**D2**” , “**D3**” containing the observations of funding type FT falling within the **5-15 million USD** range.
- This Dataframe consist of all the columns of the “**master_frame**” along with the **primary sector** and the **main sector**.
- Using this **three** Dataframes Below parameter are analyzed
 - ❖ The total number (or count) of investments for each main sector.
 - ❖ The total amount invested in each main sector

Total Investments in Venture, Seed, Priv Equity vs Avg Amount of Investment

- Consistent to the **Spark Funds strategy**, we identified the “**Ventures**” funding type to be most invested funding type.
- To arrive at the above conclusion, we have analysed the amount invested globally by each of the **Private Equity, Seed** and **Venture funding** type and identified the fraction of the average investment for each funding type.

Top9 Countries for Ventures Funding Type

- We identified the Top9 Countries for “**Ventures**” Funding type by leveraging a ‘**Tree map**’ visual.
- In the **Tree Map**, the largest and the shade of the colour depict the highest invested country.
- As per the visual, consistent to the Sparks Investment’s of investing only in English Speaking countries
 - **USA** is the highest investment favoured country, **CHN** (though **China is non-english**, it is the second highest)
 - **GBR** is the second highest English speaking investment favoured country.
 - **India** is the third highest English speaking investment favoured country.

Investments in Top 3 Sectors in Top 3 Countries

- We have identified the **Top 3 Countries** and then further identified the **Top 3 sectors** in terms of the **Number of investments**.
- For this purpose, we leverage a **stacked bar chart**, each stack representing a **Main sector** for the respective country.
- Our principal insight from this visual is, sector “Others” has the highest number of investments in USA, followed by **Cleantech Semi Conductors** and **News, Search & Messaging**.
- Across all the **top3 countries**, sector “**Others**” commonly appears to be having the highest number of investments.

Conclusion

After analyzing the data set based on below factors . We got tableau plots .Which can be used by Spark Fund Company Team for their investment.

- Investment
- Country
- Sector