



## **INVESTMENT CASE STUDY**

# **Spark Funds**

Group Name: Group Project 1

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## Strategy and Business Objectives



### Business Objective

Identify best sectors, countries and a suitable invest types for making investments for Spark Funds

### Strategy

Spark Funds wants to invest where most other investors are investing

#### Constraints

Spark funds wants to invest between 5 and 15 million USD per round of investment

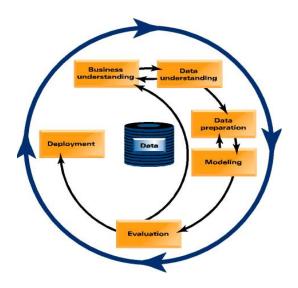
It wants to invest only in English-speaking countries for ease of communication



### Methodology



#### CRISP -DM Framework



### **Business Understanding**

**Data Understanding** 

**Collect Intial Data** 

Data already available

for download.

**Describe Data** 

Rounds2.csv

Eng speaking count.pdf

Companies.txt

Mapping.csv

**Data Preparation** 

**Modeling** 

**Evaluation** 

**Deployment** 

#### **Determine Buss Obj.**

- **Best Companies**,
  - Best Sector,
- Suitable Investment Type

#### **Assess Situation**

- Determine resources,
- Constraints.
- Assumptions

#### **Determine Buss Goals**

**Investment type analysis** 

- Country Analysis
- Sector Analysis

**Produce Project plan** 

Planning stages

Tools: 'R', Tableau

Excel

#### **Explore Data** Permalink

- Company permalink
- Category List

#### Verify Data Quality

- NA Values
- # and " "

#### **Select Data**

Data inclusion & filters

#### Clean Data

Remove white spaces, Remove NA

#### **Construct Data**

Primary and main sector functions

#### **Integrate Data**

Lookup& merge With eng spk countries

#### Format Data

Upper to lower case, **Date format** (dd/MM/yyyy),

#### **Select Modelling** Technique-

Star schema – Fact table (round 2), dimension-Companies, mapping, Eng spking

#### Generate Test design

Extract - Download files Transform - merge /massage Load - loading files in 'R

#### **Build Model**

Master\_frame D1,D2,D3

#### **Asses Model**

Verifying R code Results with excel& Tableau

#### **Evaluate result**

**Programming result** Matched with excel pivoting

#### **Review process**

**Subject oriented** Data to match constraints

#### Determine next steps

Model can be reused With next step of data

### Plan deployment

Single time Deploymentstatic data

#### Plan/Monitoring/ Maintaince

Iterative process with Checklist matching

#### Produce final report

Tableau plots charts

#### **Review project**

Code review, data Results review





## Funding Types, Countries and Sectors

- The analysis is divided into three parts:
- o Given the constraints, which funding type is the most suitable?
- In the chosen funding type, which countries have witnessed the most funding?
- o In the chosen funding type and top countries, which **sectors** have performed the best?



## **Funding Type Analysis**



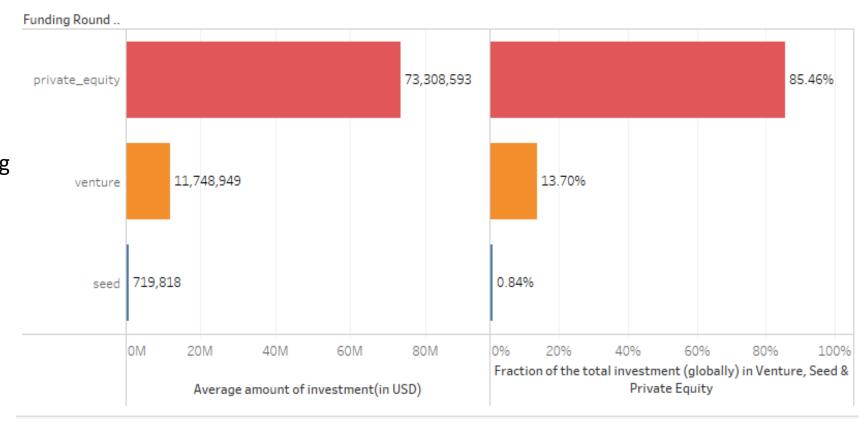
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- Plot shows fraction of total investments (globally) in venture, seed, and private equity, and the average amount of investment in each funding type.
- Venture is the most suitable funding type (FT) for investment between
  5M – 15M USD for Spark Funds.

Fraction of total investments (globally) in **venture**, **seed & private equity** & the **Average amount of investment** in each funding type





## **Country Analysis**



- Given the budget constraint, which funding type is the most suitable?
- o In the chosen funding type, which **countries** have witnessed the most funding?
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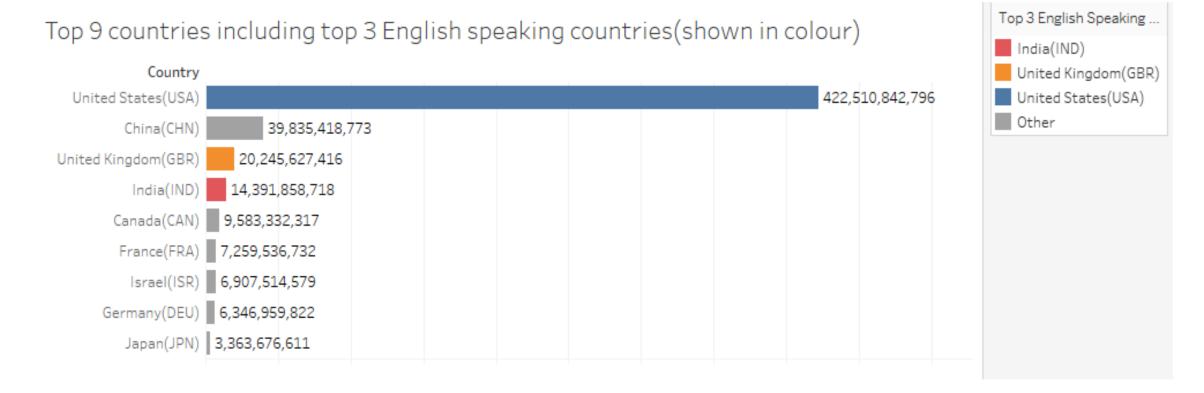


### **Country Analysis**



 Plot shows Top 9 countries against the total amount of investments of Venture funding type.

For the English speaking countries: United States has seen the highest total investments in venture capital, followed by United Kingdom and India.









o Given the budget constraint, which funding type is the most suitable?

o In the chosen funding type, which countries have witnessed the most funding?

o In the chosen funding type and top countries, which sectors have performed the best?



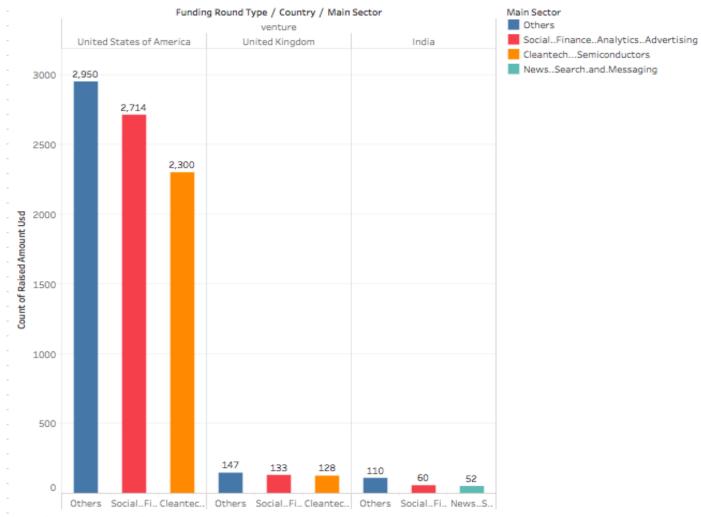
### **Sector Analysis**

- Plot shows the number of investments in top 3 sectors of top 3 English speaking countries
- Top sector in top 3 English speaking countries is Others followed by Social/Finance/Analytics/Advertising



Others

#### Number of investments in top sectors of top english speaking countries



Count of Raised Amount Usd for each Main Sector broken down by Funding Round Type and Country. Color shows details about Main Sector. The data is filtered on Calculation 1 and Rank of Count of Raised Amount 'Usd. The Calculation 1 filter keeps True. The Rank of Count of Raised Amount Usd filter keeps 1, 2 and 3. The view is filtered on Funding Round Type and Country. The Funding Round Type filter keeps venture. The Country filter keeps India, United Kingdom and United States of America.





- Venture capital is the most suited funding type
- The United States(USA), The United Kingdom(GBR) and India(IND) are the most heavily (venture capital) funded countries
- The top sectors in the respective countries are:

Countries	First Top Sectors	Second Top Sector	Third Top Sector
United States(USA)	Others	Social, Finance, Analytics, Advertising	Cleantech / Semiconductors
United Kingdom (GBR)	Others	Social, Finance, Analytics, Advertising	Cleantech / Semiconductors
India(IND)	Others	Social, Finance, Analytics, Advertising	News, Search and Messaging