

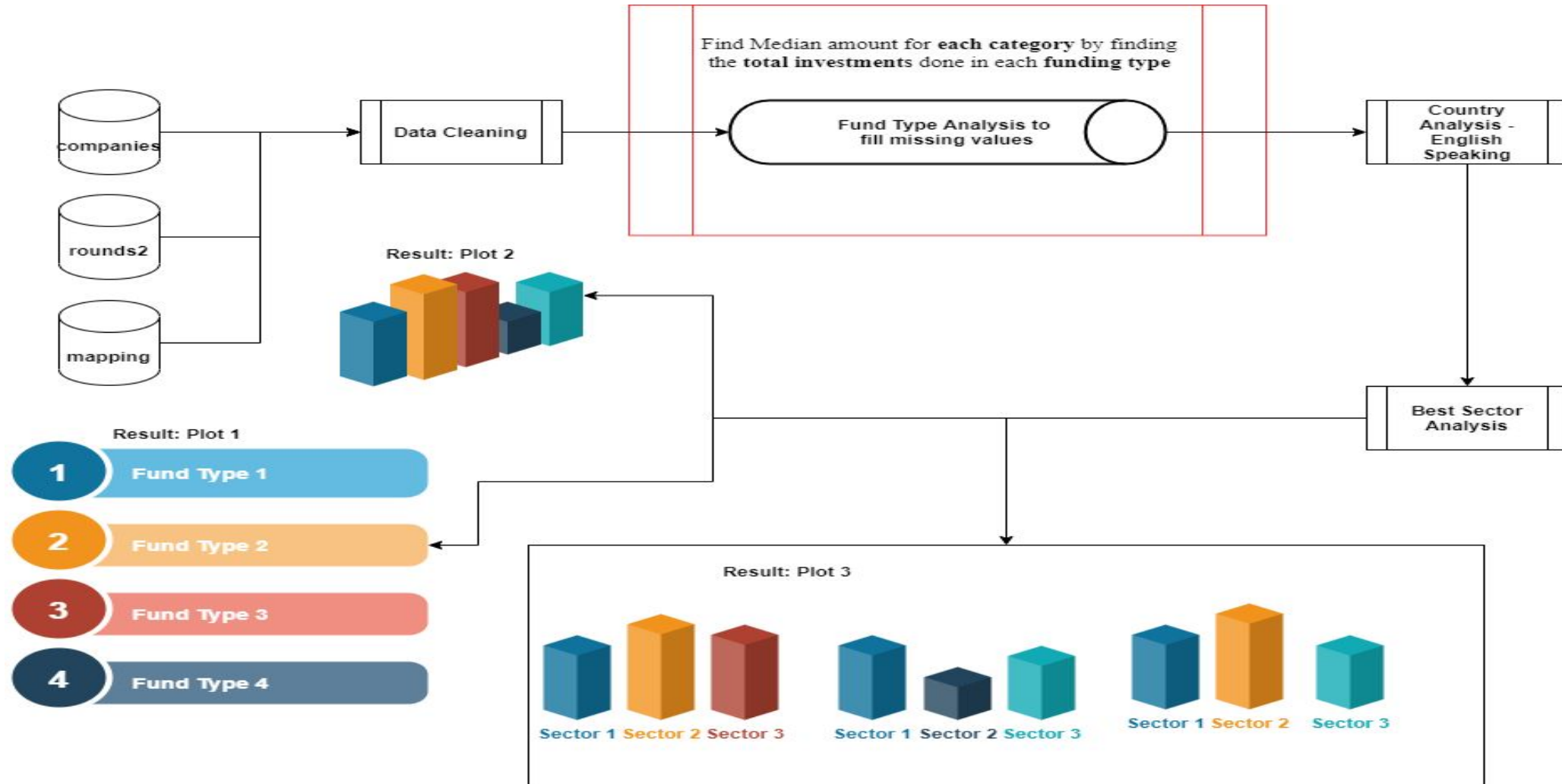
INVESTMENT ASSIGNMENT SUBMISSION

Name: Kaliraj Balakrishnan

Abstract

- The dataset under study shows the funding that each of the companies received in their respective funding rounds.
- The funding investment data had null valued cells which were filled with appropriate representative values by identifying the closest neighbour analysis technique.
- The above mentioned impute technique brought in a noticeable change in results.
- This emphasizes the need for data cleaning and data engineering needed for better analysis
- Up on filling the missing values the opinion from Venture as best type changed to Private Equity as appropriate in the given funding range of 5-15M USD
- The proof that private equity is best has been proven using the best possible rational justifications.

Methodology



Methodology

In the above shown flow diagram, I have used the below mentioned technique to fill the values.

Step 1: For **each category**, find the **total investments** done in each **funding type**

Step 2: Find the **median investment amount** in for each funding type in each category

Step 3: Fill the rows of missing values with the median value obtained from groupby

main_category	funding_round_type	Access
3D	angel	850000.0
	convertible_note	205000.0
	debt_financing	750000.0
	grant	50000.0
	private_equity	200000000.0
mkv	product_crowdfunding	83000.0
	seed	350000.0
	undisclosed	300000.0
	venture	170000.0
	venture	170000.0
3D Printing	angel	250000.0
	convertible_note	27699.0
	debt_financing	530000.0
	grant	150000.0
	product_crowdfunding	186000.0
3D Technology	seed	7500.0
	undisclosed	250000.0
	venture	4500000.0
	angel	250000.0
	convertible_note	100000.0
	debt_financing	250000.0
	grant	50000.0
	private_equity	60000000.0
	seed	50000.0
	undisclosed	3049871.0
	venture	250000.0
	venture	250000.0

Step 1 Result

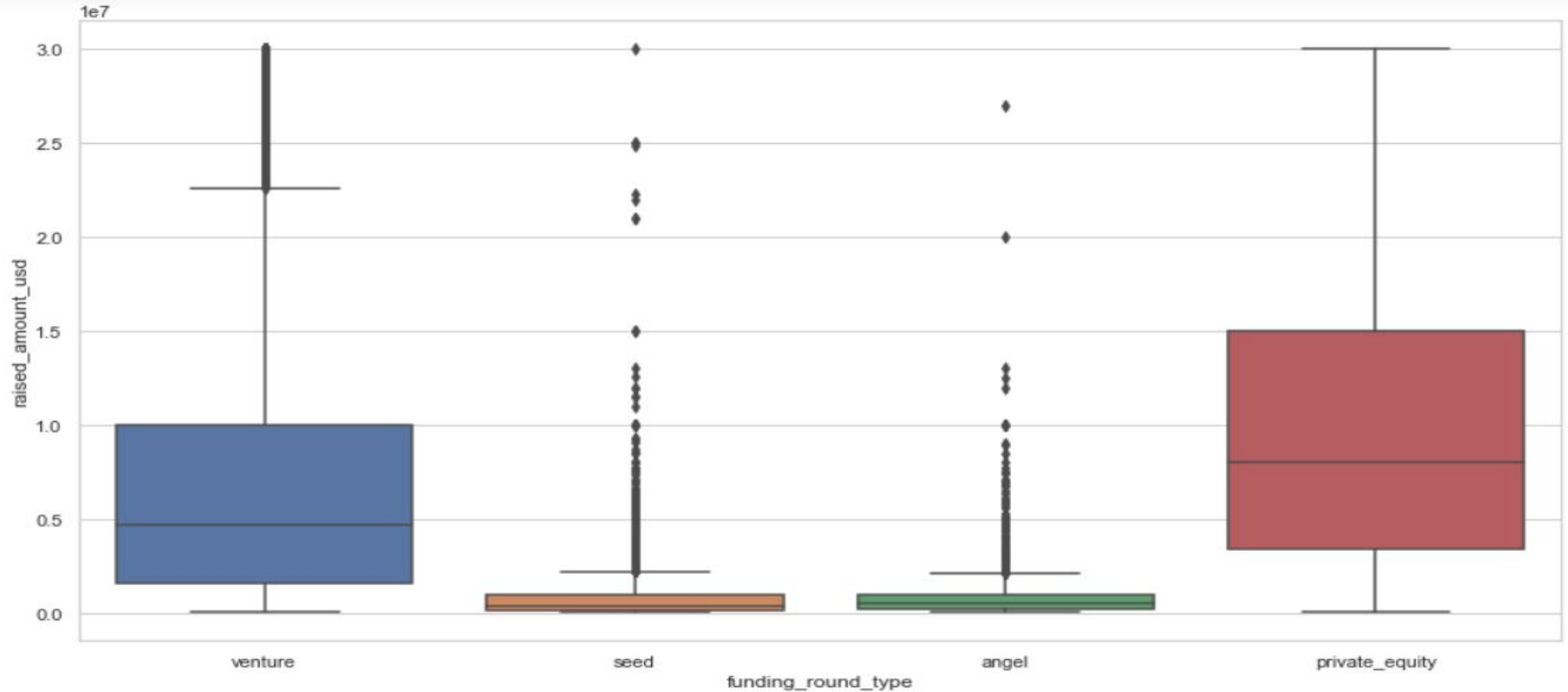


<Analysis>



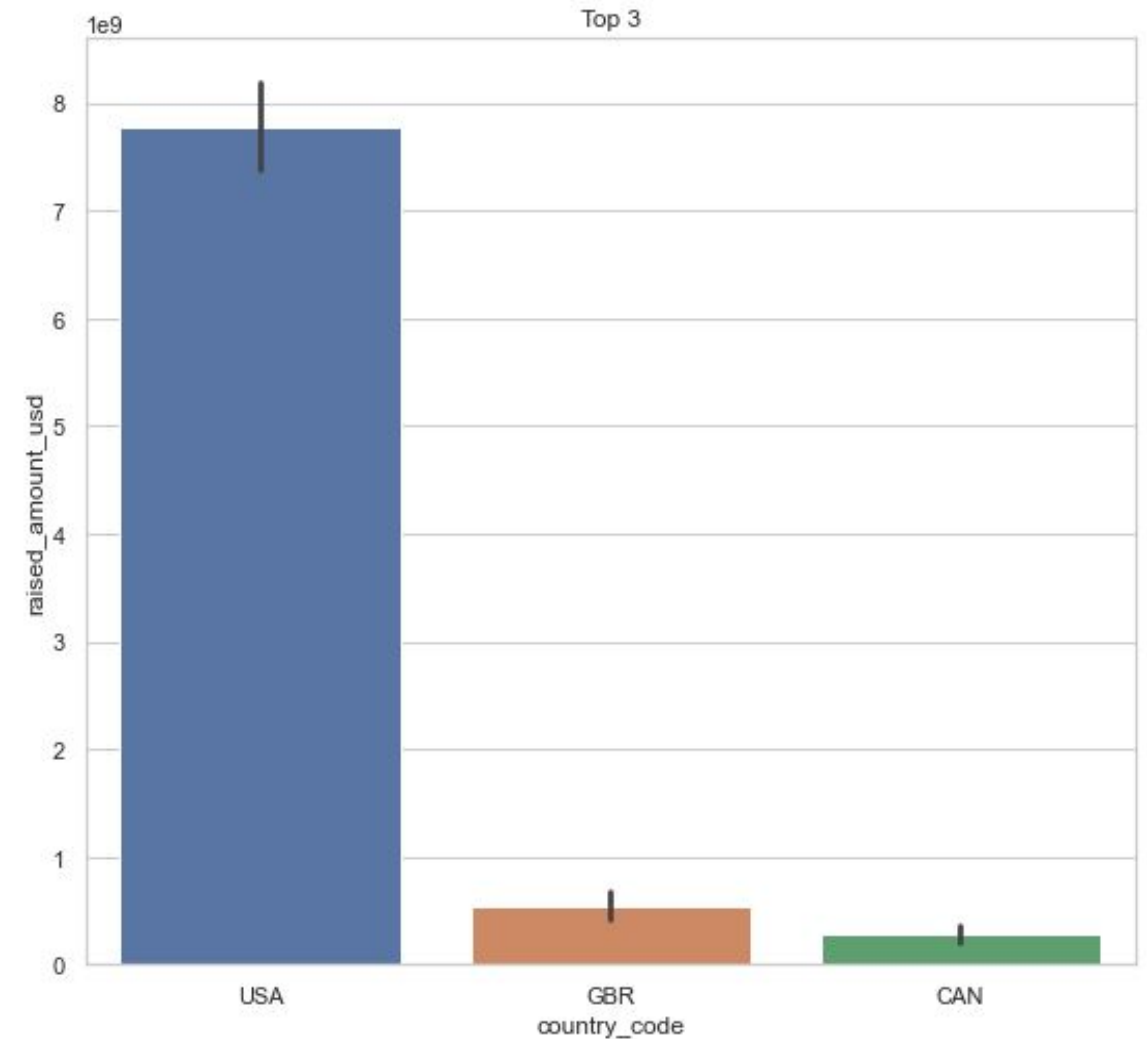
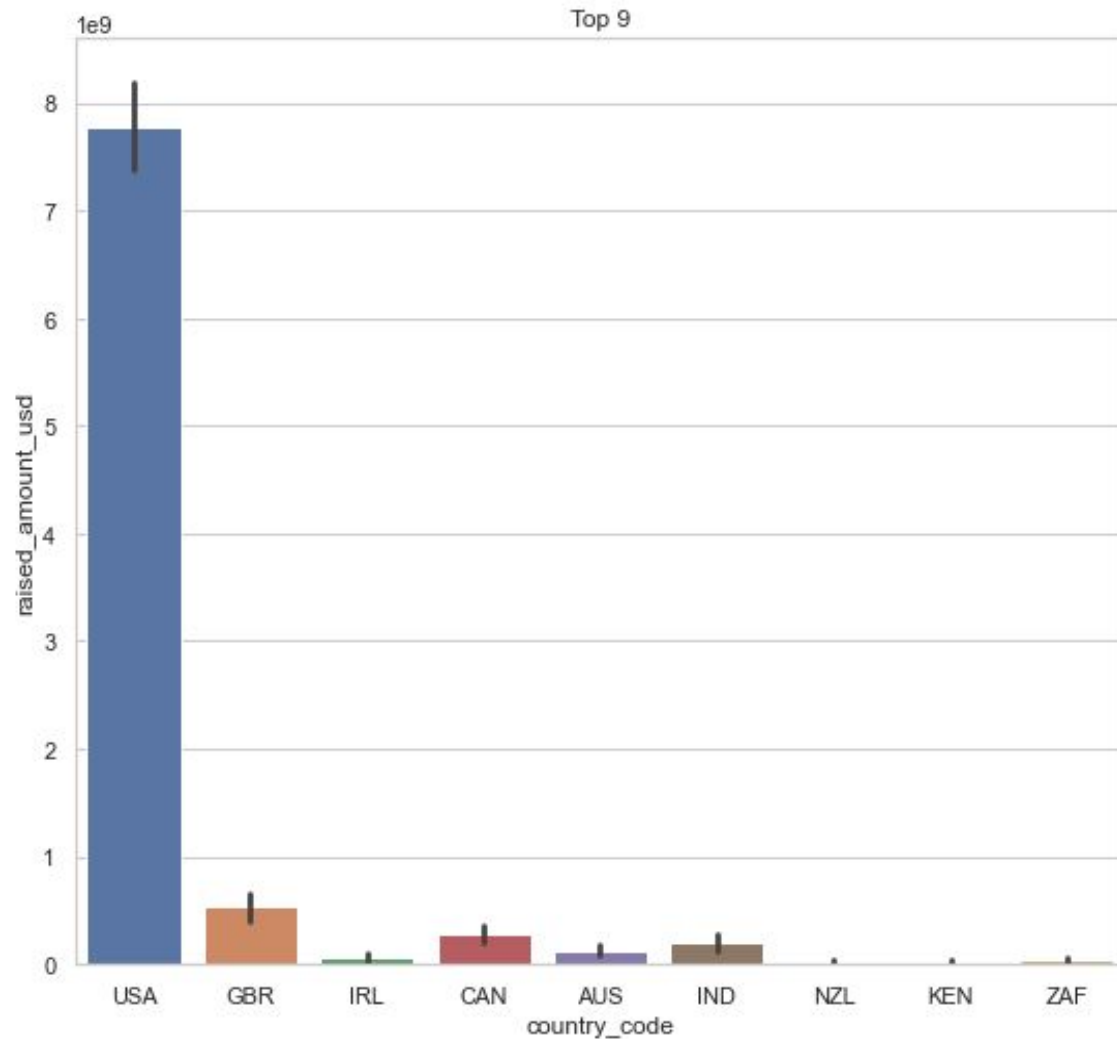
<Analysis>

Results : Plot 1 - Funding Type Comparison

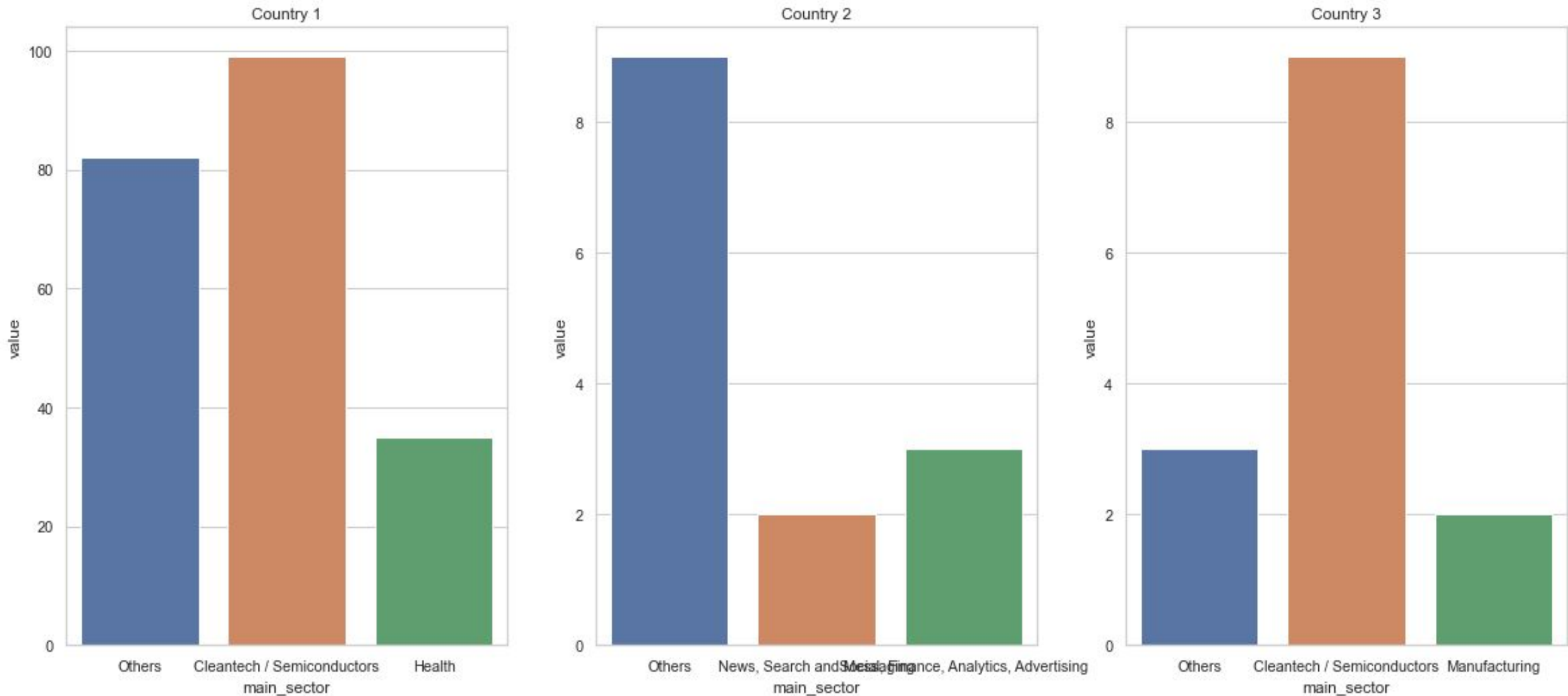


Fund Type **private_equity** - representative **median** amount is suitable in range of **5-15 M USD**.

Results : Plot 2 - Top 3 English speaking countries for chosen FT



Results : Plot 3 - Top 3 sectors in each of top 3 countries in investment



Results & Discussion

- The private equity funding type seems to be the appropriate choice for Spark Funding.
- USA, Great Britain and Canada are the top 3 english speaking countries in private equity investments.
- The process of finding the closest tuple to fill the null values