# Business Understanding

## Purpose of the Project

The purpose of the Data Analytics Project appears to be to explore and understand the Indian start-up ecosystem with a specific focus on analyzing the funding received by start-ups in India from 2018 to 2021.

The project aims to leverage data analysis to identify trends, patterns, and key insights that can help inform the team's decision-making process when venturing into the Indian start-up ecosystem.

The skills that will be developed and utilized in this project through

1. asking SMART and effective questions,
2. structuring thinking,
3. summarizing data,
4. connecting business objectives to data analysis,
5. identifying clean and dirty data,
6. cleaning datasets using Python,
7. documenting data-cleaning processes,
8. substantiating data analysis processes,
9. seeking feedback and support from others during data analysis,
10. creating visualizations with Python,
11. telling a data-driven story,
12. presenting data to others, and
13. answering questions about data.

Completing this project is expected to provide several benefits, including

1. building a strong portfolio showcasing data analytics knowledge,
2. enhancing employability in the field of data analytics, and
3. demonstrating technical expertise and skills in the context of data analysis.

This project can also contribute to a better understanding of the dynamics and trends within the Indian start-up ecosystem, which can guide the team's strategy and decision-making process effectively.

The business understanding level of the project purpose suggests that the team aims to gain valuable insights into the Indian start-up ecosystem's funding landscape. By analyzing the funding received by start-ups in India from 2018 to 2021, the team seeks to comprehend the dynamics of investment in the Indian start-up space. This understanding can provide crucial information for making informed business decisions related to potentially entering or investing in this ecosystem.

Moreover, the project purpose indicates an intention to identify the trends and patterns in funding activities, potentially to recognize sectors or types of start-ups that have been particularly successful in securing investments during the specified period. Understanding these trends can help the team assess the potential risks and opportunities associated with entering the Indian start-up market.

Additionally, the project aims to equip the team with the necessary skills and knowledge to effectively analyze and interpret the data, enabling them to make data-driven decisions that align with their strategic business goals. The goal is to leverage data analytics as a tool for informed decision-making, enhancing the team's overall business understanding and capacity to navigate the complex landscape of the Indian start-up ecosystem.

The four data sets have the following columns which are indirectly the variables:

The 2018 dataset have the following columns

Company Name Industry Round/Series Amount fund Location, About Company

The 2019 dataset have the following columns

Company/Brand Founded HeadQuarter Sector What it does Founders Investor Amount($) Stage

The 2020 dataset have the following columns

Company\_Brand Founded HeadQuarter Sector What\_it\_does Founders Investor Amount Stage

The 2021 dataset have the following columns

Company\_Brand Founded HeadQuarter Sector What\_it\_does Founders Investor Amount Stage

## Purpose of the Analysis

Based on the columns in the datasets, the purpose of the analysis could be formulated as follows:

The analysis aims to understand and assess the dynamics of funding in the Indian start-up ecosystem from 2018 to 2021. By examining the various variables such as company name/brand, industry, round/series, amount funded, location, about the company, founders, investors, stage of funding, and other related information, the analysis seeks to achieve the following objectives:

1. Identify trends and patterns in the funding landscape over the four-year period, focusing on changes in the amounts funded, the types of funding rounds or series, and the sectors or industries that attracted the most investment.
2. Evaluate the performance and growth of start-ups based on their funding stages and assess how these stages impact their development and success within the ecosystem.
3. Determine the key investors and their roles in shaping the funding landscape, understanding their preferences and strategies regarding investment in different sectors and stages.
4. Analyze the geographical distribution of funded start-ups and assess whether specific locations or regions in India have emerged as hubs for start-up activity and investment.
5. Gain insights into the characteristics and profiles of successful start-ups, including their founding details, the services or products they offer, and the backgrounds of their founders.
6. Identify any notable shifts or trends in the start-up ecosystem between 2018 and 2021, such as emerging sectors, changing investor preferences, or shifts in the geographical distribution of start-up activities.

By achieving these objectives, the analysis aims to provide a comprehensive understanding of the Indian start-up ecosystem's funding dynamics, enabling informed decision-making and strategic planning for potential entry or investment in this market.

## Basic Questions

Some basic questions that could be answered at the end of the analysis:

1. What were the overall trends in funding amounts for Indian start-ups from 2018 to 2021?
2. Which industries or sectors received the highest amounts of funding during this period?
3. How did the distribution of funding rounds or series change across different years, specifically from 2018 to 2021?
4. What were the key stages of funding that start-ups typically went through during this period?
5. Who were the prominent investors involved in funding Indian start-ups, and what were their investment patterns?
6. Which regions in India exhibited the highest levels of start-up activity and funding?
7. What were the common characteristics and backgrounds of successful start-ups in terms of founding details and product/service offerings?
8. Were there any notable shifts or emerging trends in the Indian start-up ecosystem during the four-year period?
9. How did the presence of specific founders or founding teams impact the funding and success of start-ups?
10. What were the major factors influencing the success or failure of start-ups based on their funding data and stages?

Answering these questions can provide a comprehensive understanding of the Indian start-up ecosystem's funding dynamics, offering valuable insights for strategic decision-making and potential investment opportunities within this market.

## Hypothesis

Based on the data provided, several hypotheses can be proposed for testing at the end of the data analysis:

Hypothesis 1: The average amount of funding received by Indian start-ups increased steadily from 2018 to 2021.

Hypothesis 2: Certain industries or sectors, such as technology or healthcare, received a significantly higher amount of funding compared to others throughout the four-year period.

Hypothesis 3: The distribution of funding stages shifted towards later-stage funding rounds or series, indicating a maturing start-up ecosystem in India.

Hypothesis 4: Start-ups based in specific regions, such as metropolitan areas or tech hubs, received more funding compared to start-ups located in other regions of India.

Hypothesis 5: Certain investors or investment firms consistently contributed a significant portion of the total funding received by Indian start-ups, suggesting a dominant presence in the Indian start-up investment landscape.

Hypothesis 6: Start-ups with a larger founding team or with founders possessing prior entrepreneurial experience tended to secure higher amounts of funding compared to start-ups with smaller or less experienced teams.

Hypothesis 7: The average funding amount for start-ups in certain sectors, such as e-commerce or fintech, was significantly higher than the average funding amount for start-ups in other sectors.

Hypothesis 8: The number of funding rounds or series increased over the years, indicating a growing interest and support for Indian start-ups among investors.