

## Ideation Phase

### Brainstorm & Idea Prioritization

Team ID	LTVIP2026TMIDS87645
Project Name	Prosperity Prognosticator
Maximum Marks	4 Marks

## Brainstorm & Idea Prioritization:

### Brainstorming

In the modern startup ecosystem, thousands of new startups are launched every year across different industries. However, a large percentage of these startups fail within the first few years due to reasons such as insufficient funding, poor market fit, weak business models, and lack of strategic planning. At the same time, investors and entrepreneurs face high uncertainty while making decisions related to funding and expansion.

During the brainstorming phase of the **Prosperity Prognosticator** project, the core idea was to identify a real-world problem that can be effectively addressed using **data analysis and machine learning techniques**. After analyzing various problem areas in business and technology, startup success prediction was chosen as the focus area due to its high relevance and practical importance.

The brainstorming process involved analyzing questions such as:

- Why do some startups succeed while others fail?
- Can historical startup data help in predicting future outcomes?
- How can technology assist investors in making informed decisions?
- Is it possible to reduce investment risk using predictive analytics?

Based on these discussions, the idea emerged to build a system that uses **historical startup datasets** and **machine learning models** to predict whether a startup is likely to be **Acquired** or **Closed**. Such a system can provide valuable insights to investors, startup founders, and analysts by converting raw data into meaningful predictions.

The brainstorming phase also considered the feasibility of the project in terms of available datasets, implementation complexity, and real-world applicability. Machine learning algorithms such as Random Forest were identified as suitable due to their high accuracy and ability to handle complex datasets.

Thus, the brainstorming phase laid a strong foundation for the project by clearly defining the problem domain, identifying the stakeholders, and finalizing the idea of developing a **machine learning-based startup success prediction system** named **Prosperity Prognosticator**.

### Idea Prioritization

After completing the brainstorming phase, multiple project ideas were identified and discussed based on real-world relevance and technical feasibility. Some of the ideas considered during this stage included:

- Student performance prediction system
- Online fraud detection system
- Healthcare disease prediction system
- Startup success prediction system

Each idea was carefully evaluated using specific prioritization criteria to select the most suitable project topic.

## **Criteria Used for Idea Prioritization**

The ideas were prioritized based on the following factors:

- 1. Real-World Relevance**

The problem should address a real and current issue faced by industries or society.

- 2. Availability of Data**

The project should have access to reliable and sufficient datasets for analysis and model training.

- 3. Feasibility of Implementation**

The idea should be achievable within the given time frame and skill set.

- 4. Use of Emerging Technologies**

Preference was given to projects involving machine learning and data-driven decision-making.

- 5. Impact and Practical Value**

The solution should provide meaningful insights and help users in decision-making.

## **Final Idea Selection**

Based on the above criteria, the **Startup Success Prediction System** was selected as the final project idea. This idea was prioritized because:

- Startup failure is a major concern for investors and entrepreneurs.
- Historical startup datasets are available for training machine learning models.
- Machine learning can effectively identify patterns related to startup success or failure.
- The project has strong practical and business relevance.
- The solution can be deployed as a web application for real-time predictions.

## **Reason for Choosing Prosperity Prognosticator**

The selected idea was finalized and named **Prosperity Prognosticator**, as it aims to forecast the future outcome of startups by analyzing key business parameters. The idea stands out because it combines **machine learning**, **data analysis**, and **web development**, making it both technically strong and practically useful.

Through systematic idea prioritization, the project team ensured that the chosen problem is innovative, feasible, and impactful, thereby increasing the overall value and effectiveness of the project.

### **Objectives:**

- Analyze startup data
- Build ML prediction model
- Provide web-based prediction system

### **Technologies:**

Python, Flask, Machine Learning, Random Forest, HTML, CSS