Ideation Phase
Brainstorm & Idea Prioritization Template

Date	02/02/2026
Team ID	LTVIP2026TMIDS81483
Project Name	Prosperity Prognosticator: Machine Learning for Startup Success Prediction
Maximum Marks	4 Marks

Brainstorm & Idea Prioritization Template:

Brainstorming provides a free and open environment that encourages everyone within a team to participate in the creative thinking process that leads to problem solving. Prioritizing volume over value, out-of-the-box ideas are welcome and built upon, and all participants are encouraged to collaborate, helping each other develop a rich amount of creative solutions.

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

1.Predicting Startup Success Using Supervised Machine Learning

Problem Statement:

Many startups fail due to poor market fit, weak financial planning, lack of funding strategy, or inexperienced founding teams. Investors and founders often rely on intuition rather than data-driven insights to evaluate startup potential.

This project aims to develop a **machine learning-based prediction system** that analyzes historical startup data (funding amount, industry sector, founder experience, team size, location, revenue growth, burn rate, etc.) to predict whether a startup is likely to:

- Succeed (profitable/acquired/IPO)
- Survive (moderate growth)
- Fail (shutdown)

ML Approach:

- Use classification algorithms such as:
    - Random Forest
    - Logistic Regression
    - Support Vector Machine
    - Gradient Boosting
- Perform feature importance analysis to identify key success factors.
- Output a probability score representing startup success likelihood.

Goal:

Help investors, incubators, and founders make informed decisions using predictive analytics.

2. Startup Growth & Risk Forecasting Using Ensemble Learning

Problem Statement:

Startup success is not binary (success/failure). It depends on multiple dynamic factors such as funding rounds, customer acquisition rate, competition intensity, and economic conditions. There is a need for an intelligent system that not only predicts success but also estimates risk levels and growth potential over time.

This project proposes building an **ensemble machine learning model** that predicts:

- Growth potential (High / Medium / Low)
- Risk score
- Estimated funding survival period

ML Approach:

- Use ensemble techniques like:
    - Random Forest
    - XGBoost
    - Voting Classifier
- Apply regression models to predict future revenue growth.
- Use clustering (K-Means) to group startups into risk categories.

Goal:

Provide a “Prosperity Score” dashboard that helps venture capitalists and entrepreneurs evaluate long-term sustainability and growth opportunities.