Project Design Phase
Proposed Solution Template

Date	06/02/2026
Team ID	LTVIP2026TMIDS81483
Project Name	Prosperity Prognosticator: Machine Learning for Startup Success Prediction
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in the proposed solution template.

S. No	Parameter	Description
1.	Problem Statement (Problem to be solved)	Many startups fail due to lack of proper market analysis, financial planning, and risk assessment. Entrepreneurs often make decisions based on assumptions rather than data-driven insights. There is a need for an intelligent system that can predict the likelihood of startup success using historical and analytical data
2.	Idea / Solution description	The proposed solution is a web-based machine learning system that predicts startup success or failure using key business parameters such as funding, team size, market size, and revenue model. The system uses a Random Forest classification model to analyze input data and generate predictions along with a confidence score.
3.	Novelty / Uniqueness	The uniqueness of this solution lies in integrating machine learning prediction with a user-friendly web interface and real-time confidence scoring. Unlike traditional analysis tools, this system provides instant predictive insights and performance visualization using ROC and Precision-Recall metrics.
4.	Social Impact / Customer Satisfaction	The system helps entrepreneurs make informed decisions before investing time and money. It reduces financial risk, promotes smarter investments, and encourages data-driven entrepreneurship. Users gain clarity and confidence through predictive analytics and transparent performance metrics.
5.	Business Model (Revenue Model)	The system can follow a Freemium model where basic predictions are free, and advanced analytics reports are available through subscription. Additional revenue can be generated through enterprise licensing, startup consultancy partnerships, and API-based integration services.

6.	Scalability of the Solution	The solution is scalable through cloud deployment (AWS/Cloud platforms). The architecture follows a 3-tier structure, allowing independent scaling of frontend, backend, and database. The model can also be retrained with larger datasets to improve performance over time.