

**Project Design Phase-I**  
**Proposed Solution Template**

Date	24 September 2022
Team ID	PNT2022TMID15311
Project Name	Project – DemandEst –AI Powered Food Demand Forecaster
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)	The challenge is to forecast demand for the upcoming 10 weeks because the majority of raw materials must be replenished on a weekly basis and are perishable, making procurement planning crucial.
2.	Idea / Solution description	This project's primary goal is to develop a suitable machine learning model to predict the volume of orders needed to procure raw materials over the following ten weeks.
3.	Novelty / Uniqueness	The client will be able to keep perishable raw supplies if the demand for the following 10 weeks can be accurately predicted. Second, precise demand estimates are quite beneficial when it comes to staffing the centres.
4.	Social Impact / Customer Satisfaction	A warehouse with too much inventory runs the danger of wastage, while one with too little could experience out-of-stocks, which would force clients to turn to your rivals for assistance. Therefore, our model will be able to address these issues with food delivery service centres.
5.	Business Model (Revenue Model)	By precisely forecasting the number of orders for the upcoming 10 weeks, this project will assist food delivery service centres in making the required preparations, such as purchasing perishable raw ingredients and staffing the centres, to prevent any form of losses.
6.	Scalability of the Solution	In order to support short- to medium-term production planning, the project focuses on applying methods to estimate consumer demand for products of a food company that targets the food service market.