

Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID21488
Project Name	Project - Retail Store Stock Inventory Analysis
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)	Poor maintenance of stocks in the inventory results in customer dissatisfaction and increased decline in the profit of the business. Therefore analyzing stocks in inventory to reduce stock management problems such as understock / overstock is mandatory for the successful movement of the business.
2.	Idea / Solution description	To provide analysis and simplify the process of stock inventory management in retail stores and to develop a system that allows retailers to satisfy customer demands without carrying an excess supply or running out of inventory. Identifying useful patterns from the past sales data and providing the retailer with proper suggestions of products and those which benefits the most in the business in terms of profit and market demand so as to increase the .
3.	Novelty / Uniqueness	Algorithm is faster, efficient and immediately alerts the user when there is a problem in the inventory i.e when there is a shortage of stocks and predicts the amount of stocks required from previous sales history to avoid overstock.
4.	Social Impact / Customer Satisfaction	Due to our efficient algorithmic analysis, our stocks are available to customers every time and hence it eliminates the mental stress on the consumers who might go worrying about the availability of their desired products.

5.	Business Model (Revenue Model)	Examining Gross Margin Trends and Analyzing the stock ratio and calculating stock availability & notifies the retailer on periodic stock availability.
6.	Scalability of the Solution	<p>Solution can be implemented and adjusted depending on whether it is on a small scale or a large scale.</p> <p>For small scale to medium scale retailers, profit margin can be low whereas for a large scale retailer, reputation and customer satisfaction are two most important factors driving the profitable business.</p>