

Project Design Phase-I
Proposed Solution Template

Date	20 September 2022
Team ID	PNT2022TMID30228
Project Name	Retail Store Stock Inventory Analytics
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)	To predict the stockouts and overstocking.
2.	Idea / Solution description	<ul style="list-style-type: none">• The overstocking and stockout can be predicted using Linear Regression or Logistic Regression and Random Forest Algorithm.• Along with the algorithm certain parameters like Past sales performance data, No.of stock to reorder, Cost of goods sold, Stock cards etc., used for prediction.• IBM Cognos is used for analytics purposes.
3.	Novelty / Uniqueness	<ul style="list-style-type: none">• Frequent updates on the stock sold, stockout, and accurate prediction of the profit/losses.• Gives the status of Best sellers and Slow sellers too.
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none">• Proper planning of selling the product based on which they can calculate the profit & losses.• Improve purchasing with accurate demand forecasting.• Reduction of business losses.• Individual product profits.
5.	Business Model (Revenue Model)	<ul style="list-style-type: none">• This system can be used by any kind of retailer which helps them to increase profit.• Activities – Stockout and overstocking prediction.• Key Resource – Previous inventory data.
6.	Scalability of the Solution	This model will predict the best sellers and slow sellers to optimize buying which avoids overstock and stockout.