Project Design Phase – I

Proposed Solution

Date	23 September 2022
Team ID	PNT2022TMID31159
Project Name	Retail Store Stock Inventory Analysis

S.No.	Parameter	Description
1.	Problem Statement (Problem to be saved)	1. To predict the stock demand and give insight to retailers regarding the demand 2. To predict and visualize the season sales with help of historical sales data for the products
2.	Idea / Solution description	1. As we know Inventory management deals with stock demand and supply which helps retailers to improve their business with more profit 2. By understanding the dataset and identifying the pattern and relationship with the help of python libraries like pandas, NumPy, TensorFlow, Keras, matplotlib 3. To create meaningful dynamic dashboards with help of IBM tools like IBM Cognos, IBM cloud, etc.
3.	Novelty / Uniqueness	Season Sales: We know that season sales occur during a particular month or period of the year and some products are brought in large quantities during that period. And some products are brought along with other products. For example, During the Pongal sale if a person buys rice he/she may also buy jaggery, ghee, or dry fruits. If we analyze those records we can and supply them accordingly. As for leftover milk which has an expiry of one day we can convert the milk to other by-products like curd, ghee, butter, etc., and milk has a short lifetime for which we can fix competitive prices
4.	Social Impact / Customer Satisfaction	Retailers will know the market trends and also what products are brought frequently together
5.	Business Model (Revenue Model)	1. This business model will increase the number of sales by the quantity of stock available because the stocks are stored in the warehouse depending upon the demand from the customers 2. This idea will increase the profit because we can sell the by-products of milk which increases the profit by multi-folds than the raw product milk itself.

6.	Scalability of the Solution	1. This idea will predict the most selling product during season sales which can optimize overstocking and understocking 2. This model can be scaled from corner shop retailers