

PROJECT DESIGN

PHASE-I

PROPOSED

SOLUTION

Date	23 September 2022
Team ID	PNT2022TMID40162
Project Name	Retail Store Stock Inventory Analytics

S.No	Parameter	Description
1.	Problem Statement (Problem to be solved)	To develop a retail store stock inventory management system that allows retailers to meet customer demand without running out of inventory or carrying an excess supply.
2.	Idea / Solution description	Retail store stock inventory analytics is used to analyze a retailer's historical sales data. By thoroughly understanding the dataset, identifying patterns, relationships, and connections using python libraries such as pandas, and using IBM Cognos analytics to create stock inventory visualizations and meaningful dashboards. The final dynamic dashboard assists retailers by

		providing detailed product listings, easy categorization, inventory reports that meet customer needs, and product demand variations.
3.	Novelty / Uniqueness	This solution entails analyzing the sales ratio and calculating stock availability. It identifies the retailer of out-of-stock commodities as well as the most popular products among customers. It also involves the use of both IBM Cognos analytics tool and python libraries for visualization.
4.	Social Impact / Customer Satisfaction	All products needed by the customer will be available and hence customer satisfaction is increased.
5.	Business Model (Revenue Model)	<ul style="list-style-type: none"> • Improve the decision-making process with the goal of lowering costs and increasing revenue. • Retailers can understand the most intimate customer needs and tailor their offerings to meet their customer needs.