

Project Design Phase-I

Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID49238
Project Name	Retail Store Stock Inventory
Maximum Marks	2 Marks

Proposed Solution Template

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Retail store stock inventory analytics is implemented to analyze the historical sales data of a Brazilian top retailer. By deeply understanding the dataset, identifying pattern, relationships and connection using IBM cognos analytics and building visualizations of stock inventory to create meaningful dashboards. The final dynamic dashboard helps retailers by providing detailed product listing, easy categorization, inventory reports, satisfying customer needs and meet variation in product demand.
2.	Idea / Solution description	Effective retail inventory analytics results in lower costs and a better understanding of sales patterns. Using Cognos analytics tools information like, 1. Product locations 2. Quantities of each product type 3. Which stock sells well and which doesn't, by location and sales channel. 4. Profit margin by style, model, product line or item

		<p>5. Ideal amount of inventory to have in back stock and storage</p> <p>6. How many products to reorder and how often</p> <p>7. When to discontinue a product</p> <p>8. How changing seasons affect sales</p> <p>Can be analysed which help them increasing profits while avoiding overstock and minimizing expenses.</p>
3.	Novelty / Uniqueness	<p>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.</p>
4.	Social Impact / Customer Satisfaction	<p>Good inventory management allows businesses to answer the questions of their customers about the product, which could lead them to purchase the item. Having visibility of the activities of your inventory gives customer support the data they need.</p>

5.	Business Model (Revenue Model)	<p>Step 1: Create a centralized record of all products</p> <p>Step 2: Identify Stock location</p> <p>Step 3: Do regular and accurate stock counts</p> <p>Step 4: Combine Sales data with inventory data to simplify reporting</p> <p>Step 5: Purchasing process description</p> <p>Step 6: Establish process for markdown and promotions</p> <p>Step 7: Create Stock Receiving procedures</p> <p>Step 8: Provide description of return procedure</p> <p>Step 9: Determine Dead stock procedure</p> <p>Step 10: Provide Profitable inventory value</p>
6.	Scalability of the Solution	<p>1. This idea will predict the most selling product during season sales which can optimize overstocking and understocking</p> <p>2. This model can be scaled from corner shop retailers to supermarket retailers</p>