**INVENTORY MANAGEMENT SYSTEM FOR RETAILERS**

**Domain :** Cloud Application Development

**Team ID :** PNT2022TMID16711

**Batch No :** B1-1M3E

**Team Members :**

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**Paper 1:** The relationship between capacity utilization and inventory investment.

**Publication Year:** 1957

**Authors:** Abramovitz , Odiglian

They highlighted the relationship between capacity utilization and inventory investment. Existing stock of inventories was expected to adjust to the desired levels. Thus the variable, existing stock of inventories, was essential to be negatively related with the desired stock. The result was that there is positive relation among the ratio of inventory to sales and inventory investment. High ratio of stocks to sales in the past suggests requirement of high levels of inventories in the past and promising high investment in inventories in the current period also.

**Paper 2:** Study on manufacture inventories

**Publication Year:** 1970

**Authors:** Krishnamurty and Sastry

This is the most comprehensive study on manufacturers’ inventories. They used the CMI data and the consolidated balance sheet data of public limited companies published by the RBI, in order to analyze each of the major components, like the raw materials, goods-in-process and finished goods, for 21 industries over the period ranging from 1946-62. The study was a time series one although there were some inter-industry cross-section analyses that were carried out in the analysis. The Accelerator represented by change in sales, bank finance and short-term interest rate was found to be an important determinant. The utilization of productive capacity and price anticipations was also found to be relevant in the study.

**Paper 3:** Inventory management for retail companies: A literature review and current trends.

**Publication Year:** 2021

**Authors:** Cinthya Vanessa Muñoz Macas , Jorge Andrés Espinoza Aguirre, Rodrigo Arcentales – Carrión Mario Peña

They focused on solving all the retail issues that happened from 2015 to 2019 through different systems and software. They addressed almost 22 issues that retailers faced. All the software and methodologies they suggested were not cost effective and couldn't be used by small scale retailers.

**Paper 4:** Two-stage inventory management with financing under demand updates.

**Publication Year:** 2021

**Authors :** Tianyun Li, Wei guo Fang, MelikeBaykalGürsoy

The paper presents a recourse approach to solve the two-stage optimization problem and derive the optimal inventory/financing policies .This research incorporates the financial and operational decisions into demand updates, and brings new managerial results and insights. Due to the complexity of the objective function, we do not have simple formulas for the optimal procurement policies , we provide the complete analytical description of the optimal solutions.