Retail Store Stock Inventory Analytics

Literature Survey

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PNT2022TMID21488

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Selected Papers for Review:

1) A Literature Review on Models of Inventory Management under Uncertainty
2) An Informative Literature Review on Inventory Control System
3) Study and Analysis of Inventory Management Practices in Small Scale Industry
4) Inventory Management for Retail Companies: A Literature Review and Current Trends

Detailed Review of Papers:

1) A Literature Review on Models of Inventory Management under Uncertainty

Author: Serhii Ziukov

Published On: ISSN 2029-8234 (online) VERSLO SISTEMOS ir EKONOMIKA BUSINESS SYSTEMS and ECONOMICS Vol. 5 (1), 2015

DOI: 10.13165/VSE-15-5-1-03

Summary:

Inventories are raw materials, work-in-process goods and completely finished goods that are considered to be the portion of business's assets that are ready or will be ready for sale. Formulating a suitable inventory model is one of the major concerns for an industry. The earliest scientific inventory management researches date back to the second decade of the past century, but the interest in this scientific area is still great. Again, considering the reliability of any process is an important feature in the research activities. Values of some factors are very hard to define or almost unreal. In such cases, fuzzy models of inventory management take an important place. This paper analyzes possible parameters of existing models of inventory control. An attempt is made to provide an up-to-date review of existing literature, concentrating on descriptions of the characteristics and types of inventory control models that have been developed.

2) An Informative Literature Review on Inventory Control System

Authors: Rashmi Mishra, Puneet Shukla

Published On: 2018 JETIR August 2018, Volume 5, Issue 8 (ISSN-2349-5162)

Summary:

In supply chain management & inventory control is a challenging problem. To fulfil customer demand, companies require to have sufficient inventories in stock meanwhile these inventories have holding costs and this is frozen fund that can be lost and burdens the company's account. Therefore, the task of inventory management & inventory control is one of the key activities of business logistics. The main purpose of inventory control is to ensure uninterrupted supplies for ongoing operations and to find the quantity of inventories that will fulfil the demand, avoiding overstocks.

3) Study and analysis of inventory management practices in small scale industry

Authors: Dr. Nagendra Sohani, Ajay Pagare

Published On: JETIR Volume 1 Issue 1 (ISSN-2349-5162)

Summary:

     Stock Inventory analysis is the first step in this process is to gather and understand product demand data. This is accomplished by generating a cumulative Pareto percentage by volume of all products stock keeping units. These data items originate at the customer and provide a baseline by which to begin demand behavior analysis. Annualized product stock keeping unit demand data should be segregated on a monthly/ weekly/ daily, demand basis. The source of this information usually comes from the business plan forecast (in units) and covers a time horizon of 6 to 12 months. By displaying the cumulative percentage, both high and low volume products begin to presents themselves. In addition to the forecast data, it is important to consider the actual customer order sales data, doing so account for actual demand volume and mix variation which is important input for the takt time calculation.

4) Inventory management for retail companies: A literature review and current trends

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

Published On: 2021 Second International Conference on Information Systems and Software Technologies (ICI2ST)

DOI: 10.1109/ICI2ST51859.2021.00018

Summary:

     The correct management of inventories has become a fundamental pillar for achieving success in enterprises. Unfortunately, studies suggesting the investment and adoption of advanced inventory management and control systems are not easy to find. In this context, this article aims to analyze and present an extensive literature concerning inventory management, containing multiple definitions and fundamental concepts for the retail sector. The primary outcomes of this study are the leading inventory management systems and models, the Key Performance Indicators (KPIs) for their correct management, and the benefits and challenges for choosing or adopting an efficient inventory control and management system.