

LITERATURE SURVEY

PNT2022TMID04517

Cloud Application Development

Real-Time application system powered by cloud Application

[1] Inventory Management Delivering Profits through Stock Management

I.A. Aarti Deveshwar and Dhawal Modi
2018

Classification, selected methods and requirements for operations and inventory management” gives the theoretical framework for the development of models and algorithms supporting order quantity and due date quoting. At first, alternative generic AATP systems will be identified on the basis of relevant classification criteria. Based upon this classification, the AATP planning mechanisms will be detailed for two generic AATP types. On the basis of the introduced AATP types and the description of selected models we finally derive requirements, which operations and inventory management have to meet in order to ensure a successful application of AATP.

Accuracy of the paper: 95%

[2] An approach to evaluate the impact of interaction between demand forecasting method and stock control policy on the inventory system performances

Lorenzo Tiacchi , Stefano Saetta
2022

Using the aim of this work is not to find or test effective DFMs, but to point out possible interactions between the choice of a forecasting method and the stock control policy. Therefore,

in this study two very simple DFMs, described in Section 3.1, will be considered: with these methods, the monthly demands of the year 2004 will be sufficient to provide forecasts for each month of 2005; the two series of demand data for this year (effective and forecasted demand) are the inputs that the simulation experiment needs. Because demand data have a monthly base, orders from central depot to suppliers can be placed only at the beginning of each period (month): for each item, at the beginning of each month, the inventory level is observed, and if the level is lower than an order point s , an order is placed to a supplier so that the inventory position reaches an order-up-to level S . Thus, the basic inventory control policy for each item is a can-order policy (R, s, S) with review period R equal to 1 month.

Accuracy of the paper: 95%

[3] Evaluate the impact of the interaction between demand forecasting method and stock control policy on the inventory system performances

João N.C. Gonçalves M. Sameiro Carvalho Paulo Cortez
2019

Research In supply chain inventory management it is generally accepted that safety stocks are a suitable strategy to deal with demand and supply uncertainty aiming to prevent inventory stock-outs. Safety stocks have been the subject of intensive research, typically covering the problems of dimensioning, positioning, managing and placement. Here, we narrow the scope of the discussion to the safety stock dimensioning problem, consisting in determining the proper safety stock level for each product. This paper reports the results of a recent in-depth systematic literature review (SLR) of operations research (OR) models and methods for dimensioning safety stocks. To the best of our knowledge, this is the first systematic review of the application of OR-based approaches to investigate this problem. A set of 95 papers published from 1977 to 2019 has been reviewed to identify the type of model being employed, as well as the modeling techniques and main performance criteria used. At the end, we highlight current literature gaps and discuss potential research directions and trends that may help to guide researchers and practitioners interested in the development of new OR-based approaches for safety stock determination and accuracy above 90% in each trained model.

[4] Maximization of the return on inventory management expenses in a system with price and stock dependent demand rate

valentin pando, Luis A. San-Jose

2020

This paper studies a deterministic inventory model where the demand rate depends on both the selling price and the stock level. A lower selling price or a higher stock level lead to a higher demand rate. Three decision variables are considered: the selling price p , the order-level S and the reorder point s . The goal is the maximization of the return on inventory management expense (ROIME), that is, the ratio between the profit and the total cost of the system.

Accuracy: 85.9%

[5] Retail inventory management with stock-out based dynamic demand Substitution

Baris Tan, Sulcuk Karabati

2020

In this sign The literature on inventory management under stock-out based substitutions studies the supplier-(or manufacturer-)controlled and customer-driven substitution schemes. In the supplier-controlled substitution scheme, in a stock-out instance, the supplier decides whether to fulfill the demand of the customer with another product. The inventory management (and/or production planning) problem is usually studied in a “one-way substitution” setting, where a higher-graded product can be substituted for a lower-graded product. The primary objective is to minimize the sum of production, inventory holding, and, in some cases, product conversions costs.

Accuracy: 85%