LITERATURE SURVEY

The relationship of Financial and Inventory Performance of Manufacturing

Management of inventory for firms' efficiency- a study on steel manufacturing industry,2022.

Authors: Rashmi ranjan panigrahi,Rodrigo Padma charan mishra.

Purchase is becoming a more difficult cum tactical decision which affects the cost factor, quality factor, time factor, responsive factor of the buy and maintains them. The purpose of this study is to investigate the effect of inventory management (IM) practices on operational efficiencies (OE) in Indian steel manufacturing firms. Design/ Methodology/ Approach: The study is based on a quantitative research design that has collected information from 321-key officials of Indian steel manufacturing firms. The analyses are carried out with the use of statistical techniques such as confirmatory factor analysis and structural equation modeling (SEM). Findings: The paper finds inventory management (IE) has a considerable impact on the operational efficiency (OE) of steel manufacturing firms in India. The manufacturing industry must highlight the significance of IMP for enhancing firm efficiencies in a volatile environment with the help of management teams. Understanding the impact of IE practices on firms' OE would be helpful for company shareholders and investors. Practical Implications: The paper suggests the manufacturing industry to emphasize the role of Inventory management practices to have better productivity of the firm.

A Case Study of Inventory Management System for an International Lifestyle Product Retailer in Bolivia

Second South American International Conference on Industrial Engineering and Operations ManagementAt: Sao Paulo, Brazil, April 2021

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Developing countries are characterized by trade imbalances with developed countries due to process inefficiencies, bureaucracy, and communication problems. This leads to longer lead times and supply uncertainty. Consequently, firms attempt to overcome the supply uncertainty by carrying unnecessary amounts of buffer stocks. The paper analyzed the inventory management system of an international lifestyle product retailer in Bolivia and found that, as the literature predicted, the firm showed no use of basic inventory control techniques. Particularly, it did not make data-driven decisions, lacked an effective inventory management system, or knew which products had higher consumer demand, and thus worked under a high level of supply uncertainty and inventory management illiteracy. Therefore, to reduce supply uncertainty, we developed a new inventory management system based on two strategies: (a) strategies to reduce demand uncertainty; and (b) strategies to reduce process uncertainty. Specifically, the paper implemented triple exponential smoothing for product demand forecasting, ABC segmentation to identify the most important products in the firm's portfolio, the newsvendor model to determine optimal inventory levels, powers-of-two policies, to optimize reorder times, and Turnover Based Metrics to arrange SKUs in the warehouse. Overall, the results suggest the significance of taking into account the country in which any firm operates.

Research paper on Inventory management system

A Study of Inventory Management System of Linamar India-2018

Authors: Anajali Mishra & Harshal Anil Salunkhe

The aim of the study is to examine the inventory management process. The significance of this research is based on the benefits that can be obtained by identifying the issues of inventory control. The methodology used are unstructured interviews, on-site study, and annual report analysis. Inventory management is an important area of manufacturing industry. If company fails to manage inventory, they will face failure. It is a challenge for the company to maintain fair inventory. There are various inventory management techniques available for maintaining fair inventory level in the company. The basic objective of this paper is to study about inventory management techniques used in Linamar India Pvt. Ltd. and find out some measures for improvement on inventory management process of the concerned company. The present system of inventory management of the company is good. For improvement of the present inventory management system, company should adopt other inventory management techniques.

Inventory Management using Machine Learning

International Journal of Engineering Research & Technology (IJERT),
Volume 09, Issue 06 (June 2020)

Authors: Praveen K B, Pradyumna Kumar, Prateek J, Pragathi G, Prof. Madhuri J; Computer Science & Engineering Bangalore Institute of Technology Bengaluru, India

This paper tells the plan of using artificial intelligence into inventory management.. The transitioning from the traditional ways of managing inventory, which is the direct result of the availability of the huge amounts of real-time data that are now routinely generated on the internet and through the interconnected world of enterprise software systems and smart products. Managers need to make effective use of this newly available data, by redesigning their inventory management process, to stay in the competition against several other E-commerce businesses. Optimum inventory should be maintained by all organization so that under inventory can be eliminated which disrupt the financial figures. Careful evaluation of internal and external factors through better planning can improve the status of inventory. Demand forecasting is a systematic process of anticipating the demand of a product or service offered by the organization in the future under a set of unpredictable and competitive forces. In this paper XGBoost regression model is used to perform demand predictions. XGBoost is a machine learning algorithm which uses decision trees. In prediction problems that have the data unstructured Neural networks outperform other prediction algorithms, but in our case the data is structured and tabulated, and decision tree algorithms are considered best for structured.

A Review of Inventory Management Research in Major Logistics Journals

The International Journal of Logistics Management 19(2):212-232

Authors: Brent D. Williams, University of Arkansas; Travis Tokar, Texas Christian University

The purpose of this paper is to provide a review of inventory management articles published in major logistics outlets, identify themes from the literature and provide future direction for inventory management research to be published in logistics journals. Design/methodology/approach – Articles published in major logistics articles, beginning in 1976, which contribute to the inventory management literature are reviewed and cataloged. The articles are segmented based on major themes extracted from the literature as well as key assumptions made by the particular inventory management model. Findings – Two major themes are found to emerge from logistics research focused on inventory management. First, logistics researchers have focused considerable attention on integrating traditional logistics decisions, such as transportation and warehousing, with inventory management decisions, using traditional inventory control models. Second, logistics researchers have more recently focused on examining inventory management through collaborative models. Originality/value – This paper catalogs the inventory management articles published in the major logistics journals, facilitates the awareness and appreciation of such work, and stands to guide future inventory management research by highlighting gaps and unexplored topics in the extant literature.

INVENTORY MANAGEMENT AND CONTROL

A Study On Inventory Management And Control Vol-3 Issue-5 2017
Authors: Pratap Chandrakumar. R, Gomathi Shankar.

This research propose to get exposure in inventory and it is very important to the company. It is to ensure quality in business that control the transaction between the consumer goods. It is important to do proper inventory management and control in the production company. This project is to analyse the inventory control in the leading brake manufacturing company (WABCO INDIA). This study shows the analysis of ABC items in the inventory, SAP, stock policy followed. It deals with entire process carried in inventory department. Also it was found that there no proper demand forecasting by the company it is done only by suppliers and supply materials to the company along with the demand forecasted in SAP. This affecting the production process in the company. It is suggested that to develop communication between the suppliers and properly forecast the demand. This will result in managing inventory and use man-power according to the demand in order to produce more and control the inventory space. It leads to reduce the inventory of finished products. ABC analysis has shown that the management must have more control on C items than A & B because C class as a highest in number that occupies more space in inventory. This is done through maintaining routine check in orders in SAP, by maintaining proper forecasting it will result reducing the dead stock in inventory.

A STUDY ON INVENTORY CONTROL AND MANAGEMENT TECHNIQUES

International journal of science technology and management
vol.no.5,issue-.no.1-2016

Authors: Manthan Pagare, Santosh Kumar Yadav, Mahendra Pawar.

This theory is concerned with the expansion of an intellectual inventory management system. The mean of the system is to link the extensive gap between the theory and the practice of inventory management and to assist industrial inventory managers to achieve an efficient and successful inventory management. The planned system attempts to accomplish this by providing regular pattern recognition and model assortment facilities. In order to integrate the system into the established computer-based intellectual inventory management structure and make easy the function of the pattern identifier, a data administrator has been developed to influence the history data necessary for arithmetical analysis and to load the data keen on the system from other applications. In order to establish the system's model base, the swot up of the modelling of inventory and the type and growth of professional systems are reviewed. The published models which deals with similar inventory trouble have been compared based on its applicability, simplicity, and being fit to be computerised. It was necessary to further enlargement and modifies published models to fill up the gaps in the model base. The overall arrangement and prominent features of the proposed system and the development of the system using ocular essential have been described. The system has been tested using actual life data supplied by the co-operating companies. At last, achievements and shortcomings of the system are discussed and some suggestions for additional study are outlined.