

ABSTRACT

IMPROVEMENT OF RAW MATERIAL INVENTORY MANAGEMENT IN THE FLAVOUR INDUSTRY (CASE STUDY IN PT. XYZ)

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Flavour is an additional ingredient to enhance the taste of food and drinks. Following consumer desires by modifying flavours causes companies to use a make to order production strategy, so companies tend to accumulate inventory due to concerns about running out of stock of raw materials. The aim of this research is to determine optimum ordering and streamline raw material inventory costs. This research uses raw material data over a 12 month period. Total of 441 items were classified using the FSN-ABC method, then the category that contributed the highest inventory value was taken, fast moving A 30.37% (5 items), slow moving A 29.98% (12 items), and non moving A 18.96% (21 items). Continuous Review System (Q System or Q Model) and Periodic Review System (P System or P Model) are compared with the existing ones carried out by the company currently. The research results show that the application of the Q System can determine the minimum order quantity per order (EOQ), safety stock (SS), re-order point (ROP), and order frequency (F). The P System can determine the time between reviews (P), target inventory level (T), and safety stock (SS). Q System has differences with the existing: fast moving of 74.99%, slow moving of 69.92%, and non moving of 79.94%. P System has differences with the existing: fast moving 73.89%, slow moving 69.55%, and non moving 79.76%. Continuous Review System (Q System or Q Model) is recommended for application in the flavour industry to control raw materials.

Keywords: flavour industry, raw material inventory management, FSN-ABC, continuous review system, periodic review system

ABSTRAK

PERBAIKAN MANAJEMEN PERSEDIAAN BAHAN BAKU DI INDUSTRI FLAVOUR (STUDI KASUS DI PT. XYZ)

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Flavour atau dikenal sebagai perisa merupakan bahan tambahan untuk menambah cita rasa makanan dan minuman. Mengikuti keinginan konsumen dengan modifikasi rasa menyebabkan perusahaan menggunakan strategi produksi *make to order*, sehingga perusahaan cenderung menumpuk persediaan karena kekhawatiran kehabisan stock bahan baku. Tujuan penelitian ini adalah mengetahui pemesanan optimum dan mengefiesiensikan biaya persediaan bahan baku. Penelitian ini menggunakan data bahan baku selama periode 12 bulan. Sebanyak 441 item diklasifikasikan dengan metode FSN-ABC, kemudian diambil kategori yang menyumbang nilai persediaan tertinggi yaitu fast moving A 30.37% (5 item), slow moving A 29.98% (12 item), dan non moving A 18.96% (21 item). *Continous Review System* (Q System atau Q Model) dan *Periodic Review System* (P System atau P Model) dibandingkan dengan eksisting yang dilakukan perusahaan saat ini. Hasil penelitian menunjukkan diterapkannya Q System dapat menentukan jumlah pemesanan minimum sekali pesan (EOQ), persediaan pengaman (SS), waktu pesan kembali (ROP), serta frekuensi pemesanan (F). P System dapat menentukan waktu antar tinjauan (P), target tingkat persediaan (T), dan persediaan pengaman (SS). Q System menghasilkan selisih dengan existing: fast moving sebesar 74.99 %, slow moving sebesar 69.92 %, dan non moving sebesar 79.94 %. P System menghasilkan biaya persediaan yang selisih dengan existing: fast moving 73.89%, slow moving 69.55%, dan non moving 79.76%. Secara keseluruhan, *Continous Review System* (Q System atau Q Model) direkomendasikan untuk diterapkan di industri flavour untuk mengendalikan bahan baku.

Kata kunci: industri flavour, manajemen persediaan bahan baku, FSN-ABC, *continous review system*, *periodic review system*