

Pengendalian Persediaan Bahan Baku untuk Pemenuhan Permintaan Konsumen Parfum Refil pada Fadil Parfum di Desa Ogotua Kabupaten Toli-Toli

Control of Raw Material Inventory to Fulfill Consumer Demand for Refill Perfume at Fadil Perfume in Ogotua Village Toli-Toli Regency

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ABSTRAK

Penelitian ini bertujuan untuk mengetahui Pengendalian Persediaan Bahan Baku Untuk Pemenuhan Permintaan Konsumen Parfum Refil Pada Fadil Parfum yaitu menggunakan jenis penelitian kuantitatif dengan analisis metode yang digunakan pada penelitian adalah Metode *EOQ* (*Economic Order Quantity*) Berdasarkan hasil analisis yang telah dilakukan dalam penelitian ini maka di dapati adalah metode *Economic Order Quantity* memberikan hasil pengendalian persediaan bahan baku parfum refill pada toko Fadil Parfum di Desa Ogotua Kecamatan Dampal Utara Kabupaten Tolitoli lebih optimal dan ekonomis dibandingkan dengan pola penyediaan yang telah dijalankan oleh toko sebelumnya yaitu jumlah bahan baku yang lebih besar dengan frekuensi pemesanan yang lebih rendah dibandingkan pola kebijakan toko. Sehingga dapat meminimalisir biaya yang dibutuhkan untuk melakukan pemesanan.

Kata Kunci: Persediaan Bahan Baku; Stok Barang; Permintaan Konsumen

ABSTRACT

This study aimed to analyse the control of raw materials inventory to meet consumers' demands for refill perfume at Fadil Parfum, using a quantitative research approach. The analysis method applied in this research was the Economic Order Quantity (EOQ) method. Based on the analysis conducted, the EOQ method provided more optimal and economical inventory control results for refill perfume raw materials at Fadil Parfum in Ogotua Village, North Dampal District, Tolitoli Regency, compared to the inventory policy previously implemented by the store. The EOQ method resulted in ordering larger quantities of raw materials with lower ordering frequency, which helped minimise the total ordering costs.

Keywords: Raw Material Inventory, Stock, Consumer Demand

INTRODUCTION

Perfume is a fragrance that tastes. From plant extracts, flowers, woods, grains and materials in the environment that can be used as raw materials for perfume by extracting by several distillation methods or other methods. These ingredients are the source of the fragrance we breathe and can be found in many places. Using perfume can be said to be a lifestyle or habit like this has been done by various circles of society, *perfume* is used to provide fragrance and freshness for its users, besides that the fragrance can also give a distinctive aroma from a person's body and perfume can also increase the

confidence of its users to look more confident with the scent so that it can eliminate body odor.

In addition, perfume has now become an identical item for women and men, because it is an inseparable part of the lifestyle of modern women and men. Incomplete a woman and a man despite having worn good clothes and in accordance with modern developments, if there is no smell must be perfumed oil inhaled from it. Even today perfume has become a very important commodity, not inferior to the development of clothing fashion. In this case women and men spend so much money (basic needs) to satisfy the taste and desire for good, quality, and famous

perfumes. It is no secret that in order to obtain the famous perfume, many women are willing to go to the city or to other countries by paying a large fee.

So that many business actors who open perfume refill businesses both from experienced entrepreneurs and beginners starting from big cities in Indonesia and small areas in Indonesia we can find starting from small shops on the side of the road to even large malls, *Aroma refill perfume* which is fragrant and durable and has good quality, will make consumers feel satisfied, if consumers are satisfied with the product, then consumers will come back to buy the perfume refill. Perfume seeds are pure perfumes without alcohol mixture and this makes perfume seeds do not need to be applied a lot to the body or clothes to make our body spread a fragrant and fresh scent. Used just a little, the perfume scent is so strong and definitely more durable than *perfumes* mixed with *alcohol*.

Along with the rapid growth of the perfume industry, consumer demand for perfume products is increasing. One popular form of perfume is Refill perfume, which is the main choice for consumers who want convenience and economy in using their favorite perfumes. In this case, Fadil Parfum as one of the perfume manufacturers and distributors, plays an important role in meeting consumer needs for Refill perfume. and Timely and quality fulfillment of consumer demand requires effective management of raw material inventory. The raw materials used in the production of Refill perfumes have a very important role in determining the final quality of the product. Therefore, controlling the supply of raw materials is a crucial aspect that must be considered by Fadil Parfum in order to maintain smooth production and customer satisfaction.

Because one of the factors that affects the smooth production process is raw materials that are always available when needed. Sufficient inventory will be able to maintain the stability of the production process. Inventory planning has its own challenges for Fadil Parfum to provide production needs by minimizing existing *stock* to

streamline *stock* costs that are a burden on the company.

Inventory planning is one of the techniques in determining the need for raw materials based on the number of volumes, the number of order periods by paying attention to the available facilities (Arif, Supriyadi, & Cahyadi, 2017).

Raw material inventory planning has the benefit of minimizing the risk of raw material delays, and is able to provide raw material needs for production so that raw materials do not accumulate excessively (Assauri, 1999)

Thus, there are many requests from the community, both the lower middle and upper classes. from among students or campus environments and elite housing or offices. So that the process of selling and buying refill perfume is carried out every day. And this is the large level of consumer demand in Fadil perfume so that the supply of raw materials that has not been met is due to the emergence of customer demand with new perfume scent variants and the constraints of distance in the procurement of stock of goods in perfume refill at Fadil perfume which can result in distribution imbalances, this is the cause of customer dissatisfaction, decreased sales, and potentially detrimental to business sustainability.

Therefore, Refil perfume is a crucial element in understanding the context and urgency of a research. In this regard, the focus of the research aims to control the supply of raw materials to meet consumer demand and stock of refill perfume goods, especially in the product "Fadil Parfum". The development of the perfume industry shows a positive trend, but effective management of raw material inventory is a critical aspect in ensuring smooth production and business sustainability. Therefore, this study aims to explore an in-depth understanding of the influence of raw material inventory control and the fulfillment of consumer demand on refill perfume at Fadil Parfum. Thus, it is hoped that later the results of this research can contribute to improving the operational efficiency and business sustainability of the refill perfume industry as a

whole.

Based on the background that has been described, there are several problems that need to be identified in the context of "Controlling Raw Material Inventory to Meet Consumer Demand for Refil Perfume at Fadil Parfum in Ogotua Village, Toli-Toli Regency.

THEORETICAL AND HYPOTHESIS FOUNDATIONS

In general, management is an activity to achieve the goals of an organization or company. According to Syafaruddin (2005:41) in his book "Management of Islamic Educational Institutions" defines that management activities are collaborative systems between individuals, groups and other resources to achieve organizational goals. It can also be said that managerial activities can only be found in an organization, whether in business organizations, companies, schools and the like.

According to Heizer and Render (2011) in their book, operations *management* is a series of activities that produce value in the form of goods and services by converting inputs into outputs. Meanwhile, management according to Handoko (2012) is the process of planning, organizing, directing and supervising the efforts of the members of the organization and the use of other organizational resources in order to achieve the organizational goals that have been set.

A different meaning is also put forward by according to Supriyono (2008:8) in his book "Cost Accounting (Cost Collection and Cost Determination)", control is the process of reviewing, assessing and monitoring implementation reports so that they remain in accordance with the objectives. Supriyono also explained that the control process must compare the results of the projection achievement in accordance with the planning on an ongoing basis. One of them is through internal audits, which are independent assessment activities within the company's organization that aim to review and control management in accordance with management effectiveness standards to achieve goals in the company's organization from

various aspects including the recording of 18 productions, financial accounting, and other activities. Thus, management can be interpreted as a process towards results that are in accordance with the company's organizational goals that are effective and efficient in various ways including carrying out management functions of planning, organizing, *staffing*, direction, leadership. and *controlling*.

according to (Heizer, 2014: 512). Meanwhile, Rangkuti in (Veronika, 2013: 35) explained that the supply of raw materials has an important position in the company because the supply of raw materials has a great influence on the smooth production process.

According to Herjanto (in Tuerah, 2014: 526) explains that inventory is a stored material or item that will be used to fulfill a certain purpose, for example to be used in the production or assembly process, to resell, or for parts of an equipment or machine. Based on the definitions above, inventory is a material that can be in the form of raw goods, semi-finished goods, or finished goods that are managed and used to support the production process.

Inventory Record Accuracy Inventory record accuracy is a prerequisite for inventory management, scheduling, production and ultimately sales. Accuracy can be maintained with a periodic or perpetual system. The periodic system requires regular inventory (periodic) to determine the quantity of inventory at hand. Some retailers are small and where inventory facilities are managed by sellers (sellers check the quantity of inventory on hand and resupply it as necessary) use a periodic system. Nonetheless, the disadvantage of the periodic system is the lack of control between the review and the need to bring in additional supplies to protect it from a shortage of supplies. A variation of the periodic system is the two-bin system. In practice, the store manager will prepare two containers (each container with enough inventory to meet the demand of the entire time required to receive other orders) and place the order when the container is empty. Another alternative is perpetual inventory tracking 21 receipts and inventory reductions on

an ongoing basis. Inventory receipts are usually recorded in the receiving department in some semi-automated way, such as through a barcode reader, and inventory expenses are recorded when goods leave storage space or in retail establishments are recorded at the sales cashier.

Regardless of the existing inventory system, the accuracy of sales records requires good keeping of incoming and outgoing inventory records, including good security. A well-organized storage space, limited access, good housekeeping and a storage place that can store a fixed amount. In manufacturing or retail storage facilities where containers, shelves and storage parts are accurately labeled. Important decisions regarding ordering, scheduling, and shipping are only made when the company knows what inventory is on hand according to (Heizer, 2014: 515).

According to Assauri (2016) in his book, inventory control is one of the activities of a sequence of activities that are in close sequence with each other in all the company's production operations in accordance with what has been planned in advance, both in terms of time, quantity, and cost.

Inventory control systems are inventory levels by determining how many orders (*replenishment levels*) and when to place orders. There are two types of inventory systems: the first is the continuous system (fixed order quantity), and the periodic system (fixed order time). In a continuous system, orders are determined by the same amount at a constant rate when the on-hand inventory decreases at a certain level. Meanwhile, in the periodic system, orders are determined as a variable number after determining the order interval specifically according to (Russel & Taylor, 2011: 559).

The purpose of inventory control is to maintain the availability of goods in order to meet customer needs and also for cost effectiveness. Traditionally, companies manage inventory levels to maintain customer needs in the long term, to protect the market against some products and competitors. With the large number of competitors and the high diversity of the market

where new products and new product features are massively and continuously introduced, which also increases the cost of inventory from the rapid product becoming obsolete, at the same time the company continuously wants low costs in order to provide products at low prices. Because of that, inventory is very clearly one to lower the cost of the company according to (Russel & Taylor, 2011: 554).

According to Assauri (2016:227) "raw material stocks are purchased in a state that has not been processed. These inventories are used separately from the production process generally the preferred approach is to eliminate differences from the supplier in quality, quantity, or delivery time, so that there is no need to separate them".

According to Jacobs and Chase (2016), inventory is a stock of goods and resources used in a company to carry out production and operational activities. Usually at a certain time inventory is the largest asset in the financial position statement which is difficult to cash out or disburse, therefore usually companies keep the inventory level low as much as possible.

According to Prathama Raharja (2015), demand is the desire of consumers to buy an item at various price levels over a certain period of time. In other words, new demand can occur when consumers have a need for the item and also have purchasing power to get the product.

Perfume that can be used as a characteristic of a person's scent is certainly an option for some people. The quality of the perfume is certainly one of the consumers' assessments of the decision to purchase the perfume. Not only quality, price can also influence consumer purchase decisions. Product quality and product price are considerations and benchmarks for consumer purchase decisions. Of the many types of perfumes that can be the choice of consumers, many perfume entrepreneurs have improved the quality of the scent in order to compete with other types of perfume products. Similar to Fadil perfume hammer perfume, they further improve the quality of products with their own distinctive aroma that is in demand by certain groups in order to compete with other

perfume products which of course also improve the quality of their respective products to excel in the market in today's era. Not only in terms of quality, of course the appropriate price is also a consideration for consumers in purchasing decisions. Most consumers consider that price can determine the quality of the product. However, it does not become a benchmark if the price is cheap and the quality is poor.

METHOD

The type of research used by researchers is quantitative. The quantitative research method is a research process that uses data in the form of numbers or statistics to answer research questions. This method focuses on making generalizations or general conclusions that are objective, measurable, and can be tested for truth using statistical analysis tools. Some of the steps in the quantitative research method include the selection of research topics, determination of the population and research samples, data collection, data processing, and data analysis. This method is commonly used in scientific research in various fields, such as sociology, psychology, economics, and education.

According to Azwar (2012: 6), the definition of the descriptive method is a method that analyzes only up to the level of description, namely analyzing and presenting facts systematically so that everything can always be easier to understand and conclude.

Quantitative research, according to Hermawan (2009: 19), is an objective approach, including data collection and quantitative data analysis and using statistical testing methods. Quantitative data according to Sudjana (2005: 4) is data in the form of numbers, the price of which is variable or *variable*.

RESULTS AND DISCUSSION

Based on the results of the research that has been carried out, it was found that the store does not use a special calculation method in ordering goods in order to meet consumer demand. Data in 2023 stores purchased 2,320 raw materials per order with a frequency of 8 orders

during one year of sales. *The safety stock* used by the store is 10% of the order amount or about 232 ml.

Meanwhile, according to *EOQ* calculations, it was found that the optimal purchase of raw materials was 3,210.3 ml with a frequency of 6 times for one year. *Seafety stock* obtained was 253.28. And knowing the lowest limit of raw material stock before returning to order is 407.72. This needs to be done so that the store does not run out of raw materials.

Based on the calculation results, *the EOQ method* has lower costs incurred than the pattern of providing raw materials carried out by stores because the purchase of raw materials is larger and the frequency of purchases is shorter so that the transportation costs or shipping costs incurred are lower. From the results of the application of *the EOQ* method used in this study, the store can determine the optimal supply of raw materials according to consumer needs. In addition, *the EOQ* method can overcome demand uncertainty with the availability of raw material security supplies and can also know when orders should be replaced.

Method Economic Order Quantity It is very useful to find out the optimal number of raw material orders, by knowing the optimal and more economical number of orders, it can also be known the order costs that should be incurred by the store. The total cost of material inventory carried out by the store turned out to show greater results when compared to the calculation method *Economic Order Quantity*. This shows that based on the formulation of the problem, the hypothesis of this study states that "it is suspected that the control of raw material supplies to meet the demand of consumers of refill perfume at Fadil Parfum Ogotua Village, Toli-toli Regency using the method *Economic Order Quantity*."

CONCLUSION

Based on the results of the analysis that has been carried out in this study, the conclusion found is that the *Economic Order Quantity* method provides results in controlling the inventory of refill perfume raw materials at the

Fadil Parfum store in Ogotua Village, North Dampal District, Tolitoli Regency is more optimal and economical compared to the supply pattern that has been carried out by the previous store, namely a larger amount of raw materials with a lower order frequency compared to the store policy pattern. So that it can minimize the costs needed to place an order.

SUGGESTION

In this study, one element is discussed in the provision of refill perfume raw materials, therefore there is a need for further discussion and research that includes more complex elements related to the supply of refill perfume raw materials so that the management of the implementation of the control of the inventory of raw materials as a whole can be carried out properly.

BIBLIOGRAPHY

- Citra, Trisna Wahyuni. *Analysis of Inventory Control with the Economic Order Quantity Method (EOQ) to Optimize the Inventory of Raw Materials for Mineral Water Packaging*. Journal of Professional Accounting Vol. 10 No. 2 of 2019. ISSN: 2338 6177.
- Cahyaning Raheni, Umar, Nasrullah Akkas, & Annas Hidayat Dj Sipanabi. (2024). The Influence of Product Quality, Payment Methods, and Timeliness of Delivery at Marketplace Shopee on Purchase Decisions (Survey on Students of Muhammadiyah Palu University). *Journal of Radial Management*, 11(1), 61-75.
- David Wijaya, et al. 2016. *Analysis of Fish Raw Material Inventory Control at PT*.
- David Wijaya, et al. *Analysis of Fish Raw Material Inventory Control at PT. Celebes Minapratama Bitung*. EMBA Journal Vol 4 No 2, June 2016.
- Handoko, T. Hans. 2012. *Personnel and Human Resource Management*. Yogyakarta. BPFE.
- Heizer, Jay and Barry Render. 2011. *Operations Management*. Edition 9 Book 1. Jakarta: Salemba Empat
- Heizer, Jay and Barry Render. 2014. *Operations Management*. Jakarta: Salemba Empat
- Heizer, Jay and Barry Render. 2014. *Operations Management*. Jakarta: Salemba Empat
- Herjanto, Eddy. 2014. *Operations Management*. ed: Revised. Jakarta: Gramedia.
- Herjanto, Eddy. 2016. *Operations Management*. ed: Revision. Jakarta: Gramedia.
- Hidayat, Rahmat, and Devrina Resticha. "Analysis of the influence of product variations and halal labeling on consumer satisfaction to increase repurchase interest in Wardah cosmetics." *Journal of Applied Business Administration* 3.1 (2019): 40-52.
- Inspired by Indochina. 2012. *Financial Management* Edition 4. Yogyakarta: BPFE
- Jayanti, Suci Etri, and Muhlizar Muhlizar. "The Influence of Lifestyle and Word Of Mouth (Wom) on N2N Refillable Perfume Purchase Decisions." *Journal of Muhammadiyah Business Management* 1.2 (2020): 103-108.
- Kusuma, Hendra. 2004. *Production Management*. Third edition. Yogyakarta: No. Machfoedz, Mahmud. 2006. *Entrepreneurship, Methods, Management and*.
- Kadafi, Muhammad Amin, and Ayu Delvina. "Analysis of raw material inventory control with optimal safety stock." *ECONOMIC FORUM: Journal of Economics, Management and Accounting*. Vol. 23. No. 3. 2021.
- Lestari, Sri, and Distian Dwi Nurdiansah. "Analysis of material needs planning in paper manufacturing companies using the material requirement planning (MRP) method." *Journal of Industrial Engineering INTECH, University of Serang Raya* 4.2 (2018): 59-64.
- Lutfiana, Lina. "Analysis of Inventory Management of Jazid Bastomi Batik

- MSMEs in Purworejo." Journal of Sharia Economics, Accounting, and Banking* 4.1 (2020): 55-66.
- Meswadi, & Usman. (2020). *J Parfum Business Management Information System. Software Journal*, 2(1),29-40. Faculty of Engineering and Computer Science, Indragiri Islamic University (UNISI)
- Miya Novita (2019). *Revealing the Success of the Marketing Strategy of the Refil Lancar Abadi Perfume Shop*. University of Semarang
- Noble. 2007. *Cost accounting, cost pricing and cost control* Edition 3. Yogyakarta: BPFE.
- Nofal Lazuardi, Ikbali. *ANALYSIS OF CONTROLLING THE INVENTORY OF MOTORCYCLE PARTS FOR COST OPTIMIZATION WITH THE EOQ METHOD (Study on PT. Citra Makmur Lestari Motorindo)*. Diss. Indonesian College of Economics (STEL) Jakarta, 2019.
- Nuriszal, Firman, and Moch Anshori. "Raw Material Inventory Planning for Instant Cement Products at PT. VWX." *JISO: Journal of Industrial and Systems Optimization* 2.1 (2019): 18-22.
- Rizaldi, Muhammad Indra. *Proposed Maintenance Task Maintenance for B-67 Engines with Realibility Centered Maintenance Method Approach at PT Bumimulia Indah Lestari Plant Gresik*. Diss. University of Muhammadiyah Gresik, 2018.
- Rifandy, M., & Marwan, M. (2021). CONTROL OF RAW MATERIAL INVENTORY TO IMPROVE THE COST EFFICIENCY OF WIRA BAG'S PRODUCTION SME INVENTORY USING THE ECONOMIC ORDER QUANTITY (EOQ) METHOD. *IESM Journal (Industrial Engineering System and Management Journal)*, 1(2), 165-173.
- Riyana, Okta Maya. *Analysis of Raw Material Inventory Using the Economic Order Quantitative (EOQ) Method on the Smooth Production of the Patchwork Making Industry According to an Islamic Economic Perspective (Study on Alfin Jaya Patchwork Fabric, Sukamulya Village, Banyumas District, Pringsewu Regency, Lampung Province)*. Diss. UIN Raden Intan Lampung, 2018.
- Riyanto, Bambang. 2001. *Fundamentals of Corporate Spending*. Yogyakarta: BPFE.
- Rajindra, Umar, & Julis Nurpadia. (2022). Planning Raw Material Needs to Improve Production Cost Efficiency in CV. Solo Indah Palu City. *Journal of Radial Management*, 9(2), 335-34
- Sofyan, Assauri 2008. *Production and Operations Management*. Institute of the Faculty of Economics UI. Jakarta.
- Sofyan, Diana Khairani. *Analysis of the Raw Material Inventory of Oil Palm Fruits at PT. Bahari Dwikencana Lestari. Industrial Engineering Journal* Vol 6 No 1 of 2017. ISSN 2302 934X.
- Subawa. 2015. *Analysis of Raw Material Inventory Control on Cost Efficiency. Journal of Office Administration* Vol. 3 No 2.
- Suryani, Suryani, and Dedi Can. "Inventory Control Analysis of Packaging Raw Material Inventory Management System." *Journal of Industrial Engineering INTECH, University of Serang Raya* 4.2 (2018): 65-70.
- Sesunan, K. M. H. (2022). Analysis of Funotrans Transportation Service Demand in Bandar Lampung City.
- Tritianti, D., Purnomo, H., & Kurniawan, R. (2021). Control of the supply of yarn raw materials in the ikat weaving business of aam putra kediri.
- Tanzeh, Ahmad. 2009. *Introduction to Research Methods*. Yogyakarta: Terrace. UI Educational Administration Lecturer Team . 2009. *Education Management*. Bandung. Winardi. 1993. *Fundamentals of Management*. This III. Bandung: Alumni.

- Umar & Rasmi Nur Anggraeni. (2023). The Role of BUMDES in Increasing Village Original Income and the Village Community Economy in Sigi Regency. *International Journal of Health, Economics, and Social Sciences (IJHESS)*, 5(3), 332-336.
- Waluyo, Princess Oktaviyani. *Analysis of Inventory Control of Raw Materials as Cost of Production and Its Effect on the Selling Price of Clothing Products at Cv Saputra Mandiri for the 2018-2020 Period*. Diss. Faculty of Economics and Business, University of Pakuan, 2022.
- Yanti, Novri, and Endang Sutrisna. "The Influence of Service Excellence and Price on Customer Loyalty at Azwa Perfume Pekanbaru." *Student Online Journal (JOM) in the Field of Social and Political Sciences* 5.2: 1-13.
- Zaki Baridwan. 2010. *Intermediate Accounting*. Seventh Edition. Yogyakarta: BPFE Gajah Mada University.