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ECONOMIC ORDER QUANTITY (EOQ) METHOD: ANALYSIS OF RAW MATERIAL INVENTORY CONTROL (XYZ HOTEL CASE STUDY)

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Abstract. The goal of the study is to compare the company's use of the EOQ (Economic Order Quantity) approach to that of Hotel XYZ in order to assess how well the latter maintains its raw material inventory. Both quantitative and qualitative research methodologies were employed in this study. Both quantitative and qualitative analysis methodologies were employed in this study. The first step in the data analysis is to compare how much raw material is purchased, how much it costs overall, and how much XYZ Hotel spends using the Economic Order Quantity (EOQ) approach. Based on the study's findings, it is known that employing the Economic Order Quantity (EOQ) approach, which considers safety stock and reorder point while requiring less frequent and larger raw material purchases than the XYZ Hotel, can be more efficient. By doing this, the production process is guaranteed not to be disrupted. Furthermore, there are lower costs associated with the procurement, ordering, and storage of raw materials. As a result, it can reduce the cost of raw material inventory. To be more effective in managing its raw material inventory, XYZ Hotel should employ the Economic Order Quantity (EOQ) technique and consider safety stock and reorder points. This will help to ensure that there is never an excess of raw material (raw material) inventory.
Keywords: Economic Order Quantity (EOQ), Inventory, Inventory control of raw materials, Accounting Procedures

Introduction

The goal of any commercially operated business is to maximize profit or benefit. Only by channeling and utilizing all potential or resources available to generate and expand the utility of goods and services would efforts in this direction be realized (Handoko, 2020). Making judgments on goal-achievement efforts is essential to organizing these activities and ensuring that the goods and services generated align with the strategy. Control is the process of ensuring that an organization achieves its objectives, and it must be made in order for the results to match what is anticipated or intended (Ritonga, 2020).

The planning function is intimately associated with this control. These two roles are complimentary because, according to (Mulyadi & Setiawan, 2018), excellent controlcan accomplish four control steps, but only if there is a plan in place. If control is carried out correctly, the plan will be implemented well. Establish performance metrics and procedures, assess performance, compare performance to benchmarks, and take remedial action.

The phrase "inventory," which refers to organizational resources held in reserve in anticipation of meeting demand, is the subject of control in this study (Wardhani & Suharto, 2024). Raw material inventory, work-in-process inventory, and finished goods inventory are the three categories of inventory. The inventory under investigation in this study is raw material inventory. The resources used to produce completed goods are

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known as raw materials. After undergoing the production process, these materials which are interrelated will become final commodities (Hidayat, Efendi, & Faridz, 2020).

Controlling raw material stockpiles (raw material) is essential to preventing waste in the company's raw material management process. A set of control policies known as "raw material inventory control" specify how much inventory should be kept on hand, when to place orders to raise inventory, and how big of an order should be held(Umami, Mu'tamar, & Rakhmawati, 2018). How much to order, when to reorder, and which raw materials to manage first are all issues that should be addressed by effective inventory control. The Economic Order Quantity (EOQ) Method is one way to manage raw material inventory with an economical level of raw material ordering.

Based on the level equation or equilibrium point of the inventory cost curve and order cost, the economic order quantity (EOQ) method minimizes total inventory costs (Inasari, Korawijayanti, & Farizi, 2023). The economic order quantity method formula is $EOQ = \frac{\sqrt{2}.R.S}{H}$, where R is the annual number of items consumed, S is the cost per order, and H is the annual inventory cost. The XYZ Hotel has not found success with this approach. As a business that engages in three-star hospitality on a daily basis, XYZ Hotel places a high premium on customer service and quality in order to keep the stars ithas already earned and grow them.

In addition to offering room service, this hotel also plans virtually weekly corporate meetings, seminars, company birthday celebrations, and weddings. The XYZ Hotel is dedicated to giving its customers excellent service as well as the best-tasting and most attractive food possible. In order to do this, it is necessary to have human resources with the necessary handling and processing abilities for these ingredients as well as high-quality food raw materials that are handled and processed properly. One such technique is inventory control and documentation utilizing the Economic Order Quantity (EOQ) approach (Mayasari, 2021).

There are times when an organization fails to implement the inventory recording method correctly for a variety of reasons. These include ignorance of the most recent inventory recording method, an inability to apply the proper method, or an opinion that the method previously used was sufficient (Munawaroh, Bahri, & Yatiningrum, 2023). Comparably, not all of XYZ Hotel's inventory recording techniques comply with the relevant clauses of the Indonesian financial accounting standards. Inventory-related topics, such as inventory recording techniques and inventory valuation techniques, are explained in Statement of Financial Accounting Standards (PSAK) No. 202.

The economic order quantity (EOQ) method of raw material control at XYZ Hotel has not gone well. This is evident from the fact that the inventory of food raw materials is determined solely by examining the raw material purchases and uses from the previous period, without considering the anticipated daily occupancy at that time. Asa result, there is frequently an excess of raw material inventory, which increases storage space needs and increases the risk of damage to food raw materials. Additionally, some of the raw materials are not used when they should be because of their relatively short shelf life. Consequently, raw materials deteriorate or even expire and become unusable.

If this keeps up, the business would lose working capital buying bulk amounts of food ingredients, then incurring fees for ordering and storing them.

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Table 1. Summary of food stocks, January to May 2024

Month	Inventory (IDR)	Consumption (IDR)	Remaining Ending Balance (IDR)	Percentage (%)
January	27.465.456	24.718.910	2.746.546	10
February	28.465.870	25.619.283	2.846.587	12
March	29.879.130	26.891.217	2.987.913	15
April	24.123.012	21.710.710	2.412.302	8
May	24.058.591	21.652.732	2.405.859	9

Source: XYZ Hotel, 2024

The inventory from January to May in 2024 for five months in satisfying the inventory demand can be seen in the above table, where there is always an ending balance of inventory. The purchase of food raw materials, which are arranged byquickly moving categories or popular food ingredient kinds, comes next in line with the remaining balance of this inventory:

Table 2. Food commodity stock purchases, January to May 2024

No.	Item Name	Unit	Quantity Purchased	Total Purchased (IDR)
1.	Rice	Kg	700	10.990.000
2.	Sugar	Kg	252	4.208.400
3.	Chicken Meat	Kg	692,9	23.489.310
4.	Eggs	Kg	329,1	8.852.790
5.	Cooking Oil	Ltr	241	4.964.600

Source: XYZ Hotel, 2024

The aforementioned table illustrates how the company's raw material inventory, which includes items like rice, sugar, chicken meat pieces, eggs, and cooking oil, is consistently overstocked in order to fulfill customer demand. The Economic Order Quantity (EOQ) technique, which emphasizes safety stock and the point at which the raw material inventory will be reordered, is an essential tool for managing the raw material inventory. The authors are interested in gathering research under the heading Analysis of Raw Material Inventory Control using the Economic Order Quantity (EOQ)Method at XYZ Hotel since they have seen the aforementioned phenomenon of having greater raw material inventory to meet demand and incurring ordering and storage costs.The issue formulation for this study is how to regulate raw material inventory at the XYZ Hotel using the EOQ (Economic Order Quantity) method, based on the background information provided above.

Literature Review

Inventory

When it comes to easing or expediting business operations, inventory plays a critical function for the organization. (Handoko, 2020) defines inventory as a broad termthat encompasses all organizational resources that are held in reserve in order to meet demand.

Errors in determining the size of the raw material stock are very influential for the company. If the company sets the inventory level too low, the production process will be hindered due to lack of stock and delays in meeting demand, or the company will not make a profit because it will lose the opportunity to sell its products. On the other hand, if the company sets the stock level too high, it will cause the company to incur excessive storage costs.

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Raw Materials

Raw materials are necessary for the production process in every business that produces a product. Afterwards, these raw materials are processed to create goods with a marketable worth. According to (Mulyadi & Setiawan, 2018), raw materials are substances that make up the entirety of a final product. The cost of acquiring raw materials includes not only the material's purchase price but also the cost of acquisition, storage, and other associated expenses.

Inventory Control Calculations

EOQ (*Economic Order Quantity*) Method

According to (Laoli, Zai, & Lase, 2022), EOQ, also known as the optimal number of purchases, is the amount of items that can be obtained at the lowest possible cost. The number of inventory orders that minimizes the direct cost of keeping inventory and the inverse cost of ordering goods is determined using this methodology (Ratningsih, 2021).

Safety Stock

Safety stock is the inventory that (Itsna R, Nirwana A, Widya P, & Bastomi, 2023) has set aside. The minimal quantity of material inventory that must be kept on hand to maintain the possibility of delays in the arrival of purchased materials is known as safety stock, according to (Sadriatwati, 2017). This prevents the company from experiencing a stock out or interruption of normal production activities because running out of materials usually results in a stock out cost element.

ROP (Reorder Point)

The stock level at which an order must be placed when stock reaches a specific level is known as the reorder point, according to (Mardiati & Saputra, 2023). A too low reorder point can cause the stock of goods or materials to run out before it can be replenished, which may cause production to halt or make it impossible to meet consumer demand. However, if the reorder point is set too high, there will be an abundance of goods in the warehouse when new supplies come, which can lead to unnecessary expenses and overspending.

Statement of Financial Accounting Standards No. 202 (PSAK No. 202) on Inventories

PSAK is a standard that must be followed in recording and reporting financial information in Indonesia. These PSAKs are rules that must be followed by accountants in order to make accounting reporting in Indonesia more effective. (Ikatan Akuntansi Indonesia, 2024)

1. Inventory

   The Indonesian Accounting Association has specialised its statement on inventories in PSAK No. 202. It consists of introductory, explanatory and disclosure sections on inventories of goods.

2. Introduction

   The introductory section of PSAK No. 202 contains the purpose of the statement, the scope of the statement and the definition of inventory.

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3. Purpose

   The purpose of this Statement is to specify the inventory accounting treatment. Determining the amount of cost recognized as an asset and continuing to accountfor that asset until the associated revenue is recognized are the two most important aspects of inventory accounting.

4. Scope of Application

   According to PSAK No. 202, this Statement applies to all inventories with the following exclusions:

   a. Work in progress under construction contracts, including directly related service contracts;
   b. Financial instruments; and
   c. Inventories held by producers of mining, livestock, and agricultural products,to the extent that such inventories are measured at net realisable value in linewith customary industry practice.

Research Methods

Research Design

This research design uses an action research design for planning (action research). Action research is a method used to design strategies using variable parameters involved in the design, and the results are material for making business plansand strategies in the areas of marketing, production or finance (Mardiati & Saputra, 2023).

Variables and Operational Definitio

Table 3. Variables and Operational Definitions

No.	Variable	Operational Definition	Indicator
1.	Inventory Controlof Raw Material	One of the closely related activities in a series of closely related activities throughout the complete production operation is inventory control, in accordance with preplanned procedures (Sulaiman & Nanda, 2018).	• Time • Amount • Quantity • Cost
2.	EOQ (Economic Order Quantity) Method	The ideal buy quantity is the number of orders that can minimize the overall cost of inventory. to determine the total amount of materials that must be bought for each purchase in order to satisfy demand over a given time frame (Pradana & Jakaria, 2020)	• Safety Stock • Reorder Point

Population and Sample

The study was carried out in a hotel on Jemursari Street in Surabaya, Indonesia. Being a three-star hotel in Surabaya City with a passable raw material inventory control system, this one was selected as the research site.

A population is a collection of facts that indicates a certain phenomenon (Aida, Kantun, & Tiara, 2023). The population under investigation in this study is the raw material inventory control that the business has been using since the XYZ Hotel opened in 2024. From January to May of 2024, the sample pertains to raw material inventory monitoring.

Data Collection Procedure

The data collecting took place across five months, from January to May 2024. This

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is done to identify trends and patterns in raw material inventory control in hotels using the Economic Order Quantity (EOQ) method throughout this time period. Three procedures are used to collect data, which include:

1. Survey
   Namely by conducting a direct review of the company that is the subject of research.
2. Observation
   Namely by making direct observations of the object of research.
3. Interview
   Namely through interviews with parties related to the research problems.

Technique of Analysis

Both quantitative and qualitative data analysis methods are used in this study. Where the research process, beginning with data collection and ending with recording, categorization, and description, may be explained using this technique. so that, with the help of preexisting ideas, it can determine how to solve the issue of managing the raw material inventory in the study object. This study employs a case study methodology. Both primary and secondary data were used. original information acquired The 25 workers at the XYZ Hotel made up the study's population. We'll gather secondary data from a range of literary sources.

Results and Discussion

The approach that determines the ideal level of food inventory is called the Economic Order Quantity (EOQ) method. With consideration for the amount of consumption from the previous year, the number of raw material purchases, and the frequency of purchases based on those made by XYZ Hotel, this EOQ technique seeks to predict the ideal order quantity of food ingredients based on the raw material inventory procurement planning:

Table 4. Frequency of food ingredients purchased, January to May 2024

Item Nama	Unit	Amount of Raw Material Purchased	Frequency of Raw Material Purchase
Rice	Kg	700	7
Sugar	Kg	252	30
Chicken Meat	Kg	692,9	73
Eggs	Kg	329,1	36
Cooking Oil	Ltr	241	17

Source: XYZ Hotel, 2024

The following information is required in order to determine the Economic Order Quantity (EOQ): the quantity of food raw materials consumed in a year, the cost of placing each order, and the cost of storage.

Table 5. Raw Material Consumption, Ordering Costs and Storage Costs, January to May 2024

Item Nama	Unit	Raw Material Usage	Ordering Cost	Storage Cost
Rice	Kg	625	8.000	2.355
Sugar	Kg	227	8.000	2.505
Chicken Meat	Kg	623,6	8.000	5.085
Eggs	Kg	296,2	8.000	4.035
Cooking Oil	Ltr	217	8.000	3.090

Source: XYZ Hotel, 2024

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From the above table, the optimum purchase quantity for each order can be calculated using the following formula $EOQ = \frac{\sqrt{2.R.S}}{\quad}$; the calculation results can be presented as follows:

Table 6. Purchase Quantity of Food Raw Materials, January to May 2024

Item Nama	Unit	EOQ	Purchase Frequency	Optimal Purchase Quantity
Rice	Kg	65	10	650
Sugar	Kg	38	6	228
Chicken Meat	Kg	44	14	616
Eggs	Kg	34	9	306
Cooking Oil	Ltr	34	6	204

Source: XYZ Hotel, 2024

To ensure that the overall quality of raw material purchases is 650 kg, the purchase of food raw materials with the type of rice food up to 65 kg at a purchase frequency of 10 times is calculated. When purchasing 38 kg of sugar food ingredients six times a year, the total amount of raw materials purchased comes to 228 kg. With a total buy volume of 616 kg, the 44 kilogram type of chicken meat food items are purchased 14 times. With a purchase frequency of nine times and a type of egg food of 34 kg, the total purchase amount is 306 kg. The ideal overall buy is 204 liters because cooking oil meal items amount to 34 liters when purchased six times. Comparing the amount of food raw materials that XYZ Hotel bought between January and May of 2024using the Economic Order Quantity Method

Table 7. Comparison of Purchase Quantity of Food Raw Materials using the Economic Order Quantity(EOQ) Method January to May 2024

Item Nama	Unit	Non EOQ		Metode EOQ		Difference			
		Qty	Freq	Qty	Freq	Qty	%	Freq	%
Rice	Kg	700	7	650	10	50	7	3	43
Sugar	Kg	252	30	228	6	24	10	24	80
Chicken Meat	Kg	692,9	73	616	14	76,9	12	59	81
Eggs	Kg	329,1	36	306	9	23,1	7	27	75
Cooking Oil	Ltr	241	17	204	6	37	15	11	65

Source: XYZ Hotel, 2024

It is evident from the above table that purchasing food raw materials using the Economic Order Quantity (EOQ) technique results in a lower total than purchasing food raw materials directly from the company. This is evident from the discrepancy in the rice food type that was purchased: using the EOQ approach, the purchase quantity was 650 kg with a purchase frequency of ten times, whereas the corporation purchased 700 kg with a purchase frequency of seven times. 50 kg, or 7%, less is the difference in quantity, and 3 times, or 43%, is the difference in frequency.

The corporation made 30 purchases of 252 kg of this particular variety of sugar food. In contrast, the buy quantity and frequency under the EOQ technique are 228 kg and 6 times, respectively. The quantity difference is 24 kg, or 10%, of the 24 times, or 80%, that the purchases are made. Using the EOQ approach, the purchase quantity was 616 kg

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with a purchase frequency of 14 times, however the corporation purchased 692.9kg with a purchase frequency of 73 times for the type of chicken meat food ingredients. The difference in frequency is 59 times, or 81%, while the difference in quantity is 76.9 kg, or 12%.

In the instance of egg feed, the business made 36 purchases totaling 329.1 kg. In contrast, the purchase quantity using the EOQ approach is 306 kg, with a 9-times purchase frequency. There is a 23.1 kg or 7% difference in amount, and a 27 times or 75% difference in purchasing frequency. Additionally, the corporation bought 241 liters of edible oil food ingredients with a buy frequency of 17 times, compared to 204 liters with a purchase frequency of 6 times using the EOQ approach. There is a 37-liter (15%) difference in quantity and an 11-times (65%) difference in frequency.

The expense of XYZ Hotel's use of the Economic Order Quantity (EOQ) method to purchase food raw materials from the company is then determined by comparing the quantity of raw materials purchased and the EOQ method. The followingtable displays the cost of buying raw materials:

Table 8. Comparison of Food Raw Material Purchasing Costs Using the EOQ (Economic OrderQuantity) Method January to May 2024

Item Nama	Unit	Non EOQ (IDR)	Metode EOQ (IDR)	Difference (IDR)	Percentage (%)
Rice	Kg	10.990.000	10.205.000	785.000	7,14
Sugar	Kg	4.208.400	3.807.600	400.800	9,52
Chicken Meat	Kg	23.489.310	20.882.400	2.606.910	11,1
Eggs	Kg	8.852.790	8.231.400	621.390	7,02
Cooking Oil	Ltr	4.964.600	4.202.400	762.200	15,35

Source: XYZ Hotel, 2024

The accompanying table illustrates how the cost of buying raw materials can be more effectively managed by employing the Economic Order Quantity (EOQ) method as opposed to what the XYZ Hotel performs. For rice as a food ingredient, the difference between the purchase price of raw materials (IDR 10,990,500) and the cost ofutilizing the EOQ technique (IDR 10,205,000) is IDR 785,000, or 7.14%. In the case of sugar food, the cost of purchasing raw materials is IDR 4,208,400, while using the EOQmethod it is IDR 3,807,600, so the difference can be calculated at IDR 400,800, or 9.52%.

In the case of sliced Chicken Meat food ingredients, the cost of purchasing raw materials is IDR 23,489,310, - while using the EOQ method is IDR 20,882,400, - so the difference can be calculated to be IDR 2,606,910, - or 11.1%. In the case of egg food ingredients, the cost of purchasing raw materials is IDR 8,852,790, - while using the EOQ method is IDR 8,231,400, - so the difference can be calculated as IDR 621,390, - or 7.02%. And in the case of edible oil, the cost of purchasing raw materials is IDR 4,964,400, - while using the EOQ method is IDR 4,202,400, - so the difference can be calculated as IDR 762,200, - or 15.35%.

Next, we'll go over how the corporation compares the overall cost of ordering food raw materials between the Economic Order Quantity (EOQ) method and what the XYZ Hotel does. The following is the price of ordering food raw materials:

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Table 9. Comparison of Total Cost of Ordering Food Raw Materials Using the EOQ (Economic OrderQuantity) Method January to May 2024

Item Nama	Unit	Non EOQ (IDR)	Metode EOQ (IDR)	Difference (IDR)	Percentage (%)
Rice	Kg	56.000	80.000	24.000	42,85
Sugar	Kg	240.000	48.000	192.000	80
Chicken Meat	Kg	584.000	112.000	472.000	80,82
Eggs	Kg	288.000	72.000	216.000	75
Cooking Oil	Ltr	136.000	48.000	88.000	64,7

Source: XYZ Hotel, 2024

As can be seen from the above table, there is a savings in the cost of ordering raw materials when food raw materials are ordered utilizing the Economic Order Quantity (EOQ) technique as opposed to when raw materials are ordered in accordance with The XYZ Hotel policy. According to The XYZ Hotel's policy, ordering rice would cost IDR 56,000 overall, but if the EOQ method is used, the cost would be IDR 80,000. Based on the data above, the difference between the two orders would be IDR 24,000, or 42.85%.

When it comes to sugar, the entire cost of the order placed by XYZ Hotel is IDR 240,000, but if the EOQ technique is used, the total cost is IDR 48,000. This means that the difference between the two amounts may be computed as IDR 192,000, or 80.00%. The entire order cost for the type of cut chicken meat meal items made by XYZ Hotel is IDR 584,000; however, if the EOQ technique is used, the cost is IDR 112,000. The difference may be estimated as IDR 472,000, or 80.82%.

The overall cost of the order placed by The XYZ Hotel for the particular sort of egg food items is IDR 288,000; however, if the EOQ technique is used, the total cost is IDR 72,000. As a result, the difference may be estimated as IDR 216,000, or 75%. Additionally, for the type of cooking oil food items, The XYZ Hotel's total order cost is IDR 136,000; however, if the EOQ technique is used, the total order cost is IDR 48,000. This means that the difference may be estimated as IDR 88,000, or 64.7%.

The effectiveness of the quantity and frequency of raw material purchases made using the Economic Order Quantity (EOQ) approach have an impact on the overall cost of ordering raw materials for food. The overall cost of ordering raw materials will be more economical when both the amount and frequency of purchases are more efficient. Furthermore, the following is explained when XYZ Hotel compares the overall cost of raw material storage experienced by the business with the Economic Order Quantity (EOQ) method:

Table 10. Comparison of total cost of stocking food ingredients using the EOQ (Economic OrderQuantity) method January to May 2024

Item Nama	Unit	Non EOQ (IDR)	Metode EOQ (IDR)	Difference (IDR)	Percentage (%)
Rice	Kg	137.375	127.562	9.813	7,14
Sugar	Kg	52.605	47.595	5.010	9,52
Chicken Meat	Kg	293.616	261.030	32.585	11.1
Eggs	Kg	110.660	102.892	7.768	7,1
Cooking Oil	Ltr	62.057	52.330	9.727	15.67

Source: XYZ Hotel, 2024

The table above illustrates how the Economic Order Quantity (EOQ) method's overall cost of storing food raw materials is less than The XYZ Hotel's; the difference is IDR 9,813, or 7.14%, depending on the type of food ingredient—rice. The difference for the type of food item sugar is IDR 5,010, or 9.52%. Additionally, there is an 11.1% variation in the type of food ingredient for Chicken Meat, worth IDR 32,585. There is a

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7.1% variation in the sort of food items used in eggs, or IDR 7,768,-. Additionally, there is a difference of IDR 9,727, or 15.67%, in the type of edible oil. This is affected by the Economic Order Quantity (EOQ) technique's purchasing quantity, which is less than The XYZ Hotel's policy, as well as a drop in ordering expenses following the application of the EOQ method. The XYZ Hotel's attained efficiency of raw material purchase expenses will be subpar if it sticks to its policy and doesn't modify the way it uses the EOQ method to regulate raw material inventories.

Discussion

When compared to what the XYZ Hotel performs, the quantity of food raw materials purchased can be more efficiently calculated using the Economic Order Quantity (EOQ) approach. Additionally, the overall cost of buying food raw materials may be less expensive when employing the Economic Order Quantity (EOQ) technique than when XYZ Hotel incurs the same total cost of acquiring raw materials. For example, the total cost of purchasing raw materials for rice is 7.14%, sugar is 9.52%, chicken meat is cut at 11.1%, eggs are 7.02%, and cooking oil is 15.35%. These percentages indicate the efficiency level of the raw material purchases. Because raw material orders are placed less frequently, the efficiency of the cost of purchasing raw materials has an impact on the overall buy efficiency of raw materials.

The cost of ordering food raw materials can be reduced by using the Economic Order Quantity (EOQ) approach, which is also more effective. For rice, it is 42.85%; forsugar, it is 80%; for chopped chicken meat, it is 80.82%; for eggs, it is 75%; and for edible oil, it is 64.7%. Because the corporation is buying fewer raw materials, the cost- effectiveness of those purchases has an impact on how efficiently this efficiency is achieved. Furthermore, the Economic Order Quantity (EOQ) approach can be used to reduce the expense of raw material storage. The food ingredients with the highest levels of efficiency that may be obtained include rice 7.14%, sugar 9.52%, chopped chicken meat 11.10%, eggs 7.10%, and edible oil 15.67%. The effectiveness of the company's overall raw material purchases has an impact on this efficiency's attainment.

The application conducted at XYZ Hotel, in comparison to the application using the Economic Order Quantity (EOQ) method, has a larger quantity of raw material inventory purchases, less efficient raw material purchasing costs, and greater total raw material ordering and storage costs. As a result, they do not comply with the inventory measurements listed in PSAK No. 202. These findings are based on the research results from the analysis of the raw material inventory control using the EOQ method.

Conclusion

Compared to what the XYZ Hotel performs, the Economic Order Quantity (EOQ) strategy may be more effective. To ensure that there are no interruptions to the production process, the safety stock and reorder point are still taken into consideration even when the quantity and frequency of raw material purchases are calculated less. Additionally, since purchasing, buying, and storing raw materials are less expensive, thecost of raw material inventory can be more efficiently managed. To be more efficient, XYZ Hotel should monitor its raw material inventory using the EOQ (Economic Order Quantity) approach. It should also consider safety stock and reorder point to ensure that there is never an excess of raw material (raw material) inventory. The inventory metrics specified in PSAK No. 202 are not met by the XYZ Hotel because their inventory buy quantity and raw material purchase cost are neither optimal or efficient.

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