ISSN 2087-3336 (Print) | 2721-4729 (Online)

TEKNOSAINS: Jurnal Sains, Teknologi dan Informatika

Vol. 1, No. 2, July 2024, page. 355-364

http://jurnal.sttmcileungsi.ac.id/index.php/tekno

DOI: 10.37373

Controlling merchandise inventory using the economic order quantity multi-item discount model method using Odoo software at UD. Ridho

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Submitted: 27/03/2024 Revised: 20/05/2024 Accepted: 29/05/2024

ABSTRACT

UD. Ridho is a business based in Jl. Sudirman Pekan Dolok Masihul, Dolok Masihul District, Serdang Bedagai Regency, North Sumatra, deals in the sale and purchase of goods. The business had an accumulation of surplus inventory, or overstock, which damaged the goods and kept them from going bad. resulting in total losses of Rp 154,104,00 from January 2023 to June 2023. Orders are placed by UD. Ridho for goods from five vendors. The EOQ Multi Item Model Discount Method is applied in this study using the Odoo software. The EOQ Multi-Item Discount Model is a technique for optimizing inventory costs by placing orders for commodities based on economic order amounts from many suppliers. Product categories offered by UD. Ridho Sugar, rice, wheat flour, instant noodles, soy sauce, detergent, salt, water, and edible oil are the ingredients of UD. Ridho. The discount model is applied to goods that receive a discount from the seller according to the quantity of goods bought. Instant noodles, rice, detergent, edible oil, and aqua are the products that are discounted. Applying the multi-item discount model approach with economic order quantity at UD. Ridho was able to save Rp 21,893,660, or 3.02% of the total amount. The Odoo software, which has three modules—inventory, purchasing, and sales orders—can be used with this paradigm to construct an inventory management application.

Keywords: Inventory control; merchandise; multi-item EOQ; EOQ discounts and ODOO

1. INTRODUCTION

Making sure that inventory is always available in the appropriate quantities when needed and used appropriately is one of the factors that inventory control must take into account. Production schedules are kept intact and excess capital in inventory is kept to a minimum using inventory control [1].

UD. Ridho is a company that deals with the purchase and sale of goods. This company is situated in the Serdang Bedagai Regency, North Sumatra, on Jalan Jendral Sudirman in Pekan Dolok Masihul, Dolok Masihul District. Products sold at UD. Ridho includes instant noodles, rice, sugar, wheat flour, edible oil, soy sauce, sauce, detergent, salt, and aqua. The company consistently faces surplus inventory in every goods category, including rice, sugar, wheat flour, edible oil, soy sauce, sauce, detergent, salt, milk, and instant noodles, every month. When excess inventory builds up, it surpasses safety stock. Only merchandise orders from the prior month's usage are visible. Because of the ongoing oversupply, the product will deteriorate and eventually expire.

The company experienced an overstock of 128 sacks of sugar, 229 sacks of rice, 76 sacks of wheat flour, 61 cartons of edible oil, 34 cartons of soy sauce, 75 cartons of sauce, 122 cartons of detergent, 60 packs of salt, and 60 packs of aqua glass from January to June 2023, according to data from UD. Ridho made this point. 132 containers, 9 milk cartons, and 102 instant noodle cartons. Between January and June of 2023, the total cost of UD. Ridho's overstock items will be IDR 154,104,000. UD. Ridho innovated by utilizing the Odoo application in the store to record and release items and reduce the likelihood of overstock. Odoo was particularly beneficial in the process of recording merchandise so that merchandise was entered at UD. OdOO is helping Ridho get better.

The UD. Ridho system is still operated manually. This leads to issues like the company's overstock, which has a significant impact on how commercial operations are conducted. This inventory must be kept to a minimum, but if it disappears entirely or is lowered, there will be a greater chance of an inventory deficit [2]. The Economic Order Quantity (EOQ) strategy has shown promise in improving goods inventory optimization and lowering overall inventory expenses. Businesses can control item inventory without interfering with operating procedures by strategically implementing the EOQ method [3]. Regarding inventory at UD, Ridho suppliers reduce inventory costs by offering discounts based on the quantity or price of things purchased. Keep in mind that the quantity and kind of items ordered from the same provider affect how much a product costs. Thus, the discount model and multi-item EOQ technique will be applied here.

The goal of using Odoo is to improve the accuracy of commodity data recording and facilitate business process execution for organizations. This will allow the process to operate with standardized technology and create a system that is anticipated to be user-friendly [4], [5]. Over the past six years, research has been conducted on inventory control utilizing the EOQ multi-item discount model [6]. The expenses are Rp. 303,733,977 in restaurants that employ the multi-item EOQ (Economic Order Quantity) approach to save money. With an inter-order time of 0.11 years, the difference in inventory costs is quite substantial. The business stands to save IDR 160,638,777, or 35% [7]. By using the EOQ approach internally, PT. Global Mulia Nusantara's research on raw material inventory control found a very significant difference in inventory expenses. Businesses can save money on the Rp 63,047,832.26 in raw ingredients needed to make coffee drinks in 2019. According to studies conducted on the Odoo system, PT. Otka Tekno Aditama has not implemented the Inventory module to its full potential to support business processes [8]. Updating the stock of arriving and exiting items is the process with the highest RPN value, according to the results of risk analysis with FMEA. The sales module can lessen issues and help streamline the work in the marketing department, particularly in the business processes of creating product and customer databases, quotations, sales orders, invoices, and delivery orders, according to research into the design of the Odoo ERP system [9]. Additionally, every data is automatically kept and integrated in all of these procedures [10]. It can be concluded that the use of Enterprise Resource Planning (ERP) for purchasing, inventory, and information systems sales of goods at Emi Wholesale and Retail Stores is based on research on the implementation and testing of applications starting from the problem identification stage, analysis of the business processes of the company, analysis of the choice of software used, as well as the implementation and testing process.

2. METHOD

Primary Data: Direct observations or observations were conducted at UD. Ridho, Pekan Dolok Masihul, Serdang Bedagai, North Sumatra, to get the relevant data. The purpose of this observation is to gather information about issues about excess merchandise inventory (overstock).

Secondary Data: The material gathered is accurate and covers all pertinent topics, as demonstrated by the following observations:

a. Goods demand data
b. Message cost data
c. Save cost data
d. Lead time data

Several analytical methods in this research are as follows:

Business TIC: Determine the total inventory costs from the business policy before determining the effectiveness of the multi-item EOQ discount model for total inventory costs [11]. Regarding figuring out the overall inventory expenses for the business. Use this formula to get the company's TIC:

$$TIC_i = (\overline{P} \times p_i) + A + D_i h_i \quad (1)$$

Economic Order Quantity (EOQ) Multi-Item Discount Model: Research indicates that the EOQ approach results in higher order costs and the largest holding cost savings when compared to the actual technique. The order quantity (Q), reorder level, and inventory reserves are the three main objectives of the EOQ model [12], [13]. By maximizing ordering and storage expenses, the multi-item EOQ approach lowers inventory expenditures. The following are the procedures involved in computing the multi-item model of Economic Order Quantity (EOQ) [14]:

a. Calculate how much inventory is short using the following equation:

$$N = S_L[f(z_\alpha) - z_\alpha \Psi(z_\alpha)] \quad (2)$$

b. Calculate the cost of shortage of merchandise using the following equation:

$$Ci = 30\% \text{ x } p_i \quad (3)$$

c. Calculate the holding costs per unit per year using the following equation:

$$h_i = p_i \times I \quad (4)$$

d. Calculate the order lot size for each order using the following equation:

$$Q = \sqrt{\frac{2D_i\,(A + C_i N_i)}{h_i}} \quad (5)$$

e. Safety stock
Additional supplies are provided to protect or guard against the possibility of a shortage of stock -out materials [15]. As for calculating safety stock, use the following equation:

$$SS = z_\alpha S\sqrt{L} \quad (6)$$

f. Reorder Points (ROP), which is the time when the company or production manager must place an order to purchase materials [16]. The reorder points calculations are used using the following equation:

$$ROP = D_i L + SS \quad (7)$$

g. To calculate total inventory costs using the results of the multi-item economic order quantity, the following formula can be used:

$$TIC = \sum_{i=1}^{n} D_i p_i + \sum_{i=1}^{n} \frac{AD_i}{q_I} + h_I\left(\frac{q_i}{2} + r_I - D_i L + SS\right) + \sum_{i=1}^{n} \frac{C_i D_i}{q_i} N_i \quad (8)$$

The notation information for the formulas is as follows:

D_i : Amount of raw material usage
p_i : Unit price of goods
q_i : Economical ordering lot sizes
A : Cost of one order
h_i : Storage costs per unit per month of raw materials
ROP : Reorder Points (ROP)
L : Lead Time (waiting time)
SS : Safety Stock
S : Usage standard deviation
C_i : Inventory shortage costs
N_i : Expect inventory shortages
$\overline{P}$: Average ending inventory
$f(z_\alpha)$: Ordinate
z_α : Normal standard deviation
$\Psi(z_\alpha)$: Partial expectations
O_b : Costs of purchasing raw materials

O_p : Costs for ordering raw materials
O_s : Cost of storing raw materials
O_k : Inventory shortage costs
TIC : Total cost of inventory
TIC_i : The company's total inventory cost

3. RESULTS AND DISCUSSION

Information about the stock of goods exchanged at UD. Sugar, rice, wheat flour, instant noodles, soy sauce, detergent, salt, aqua glass, and edible oil are the ingredients of ridho. The merchandise inventory is determined by UD's real conditions. You can view Ridho in Table 1. Table 1 shows that, for the first half of 2023, all items under observation have a sizable amount of final stock. Buying too many items or raw materials (beyond sales) might result in higher purchase prices and the need for storage or warehouse space. In addition, long-lasting items run the risk of becoming damaged and being rendered unsaleable, which raises the expense of production.

Table 1. Merchandise inventory data

No.	Name of goods	Initial Stock	Purchase	Sale	Last stock
1	Sugar	394 Sak	1830 Sak	1712 Sak	513 Sak
2	Rice	650 Cardboard	16.800 Cardboard	16.596 Cardboard	854 Cardboard
3	Flour	203 Sak	1570 Sak	1504 Sak	269 Sak
4	Edible oil	253 Cardboard	1230 Cardboard	1210 Cardboard	292 Cardboard
5	Soy sauce	138 Cardboard	255 Cardboard	229 Cardboard	164 Cardboard
6	Sauce	253 Cardboard	1335 Cardboard	1275 Cardboard	313 Cardboard
7	Detergent	580 Cardboard	3050 Cardboard	3018 Cardboard	662 Cardboard
8	Salt	403 Pak	2670 Pack	2660 Pack	413 Pack
9	Aqua Glass	490 Cardboard	11.400 Cardboard	11.321 Cardboard	569 Cardboard
10	Milk	44 Cardboard	62 Cardboard	57 Cardboard	49 Cardboard
11	Instant noodles	497 Cardboard	3580 Cardboard	3526 Cardboard	551 Cardboard

The costs of ordering items are broken down into two parts: the costs of correspondence and phone calls. Table 2 displays the data table on the costs associated with placing item orders.

Table 2. Data biaya pemesanan barang dagang

No	Cost component	Total Cost / Month (Rp)
1	Correspondence Fees	50.000
2	Telephone Costs	30.000
	Total	**80.000**

Table 2 illustrates the various expenditures associated with ordering at UD. Ridho, including Rp. 30,000 for telephone fees and Rp. 50,000 for correspondence derived from book and current account costs. Therefore, UD. Ridho pays IDR 80,000 in total messaging costs each time he submits an order.

Three factors are taken into account when calculating the costs associated with storing goods: the cost of the electricity used in the warehouse, the cost of warehouse staff (such as warehouse guards), and the cost of warehouse depreciation (such as warehouse maintenance costs). Table 3 displays the monthly cost of ordering products per unit.

Table 3. Merchandise storage costs

No	Cost component	Total Cost/Month (Rp)
1	Warehouse Personnel Costs	3.000.000
2	Electricity cost	500.000
3	Warehouse Depreciation Costs	500.000
	Total	**4.000.000**

Table 3 illustrates that storage expenses are made up of several cost elements, including UD's warehouse staff charges. With two employees, each earning Rp 1,500,000 a month, Ridho's total staff costs for the warehouse come to Rp 3,000,000. The cost of electricity is IDR 500,000 per month. The amount of Rp. 500,000 is obtained by dividing the warehouse depreciation expenses, which are derived from the warehouse investment costs, by the warehouse's useful life. The entire cost of goods storage comes to Rp 4,000,000**.**

Calculation of the Company's total inventory cost (TIC)

The company's TIC calculation on merchandise uses the equation (1)

$$TIC_{company} = D_i\, p_i + B_s + B_P$$

$$TIC_{company} = (305 \text{ x Rp. } 552.000) + \text{Rp.}80.000 + \text{Rp. } 3.303.720$$

$$= \text{Rp. } 171.743.720$$

The TIC calculation results for the company's actual conditions in the January-June 2023 period are in Table 4.

Table 4. Actual total inventory cost (TIC) of the company

No	Merchandise	Total Inventory Cost (TIC) Company (Rp)
1	Sugar	171.743.720
2	Rice	339.760.740
3	Flour	62.386.510
4	Edible oil	54.456.960
5	Soy sauce	2.774.800
6	Sauce	10.120.580
7	Detergent	24.422.710
8	Salt	9.117.529
9	Aqua Glass	26.812.577
10	Milk	3.398.500
11	Instant noodles	19.841.610
	Total	**724.836.236**

Table 4 shows that, form January to June 2023, the company's actual total inventory cost (TIC) is IDR 724,836,236. Of the 11 trading items, rice is the one that generates the highest inventory costs, amounting to Rp. 339,760,740, due to large purchases and high sales. Because purchases of soy sauce are made in smaller quantities than other purchases and because overall sales of soy sauce are made in smaller quantities than other purchases, soy sauce goods has the lowest costs, coming in at Rp. 2,774,800**.**

Calculation of total inventory cost (TIC) EOQ multi-item

The outcomes of applying the economic order quantity (EOQ) Multi Item Dikson Model approach to compute total inventory cost (TIC). Finding the expected amount of inventory shortage (N_i) first will yield the ordinate $f(z_\alpha) = 0.0540$ and partial expectation $\Psi(z_\alpha) = 0.0085$. The cost of shortage of merchandise (C_i) can then be calculated using equation (3), and the cost of holding per unit per year (hi) can be calculated using equation (4) before calculating (qi). Equation (5) is utilized in this safety stock computation to ascertain the potential for inventory shortfall "α" = 0.050, considering that equation (6) yields a standard normal deviation of zα = 1.6. Equation (8) is used in the Economic Order Quantity (EOQ) Multi Item Dikson Model approach to calculate Total Inventory Cost (TIC). as shown in Table 5.

$$TIC = \sum_{i=1}^{n} 286 \text{ x Rp. } 552.000 + \sum_{i=1}^{n} \frac{\text{Rp.}80.000\text{x } 286}{88} + \text{Rp. } 6.440$$

$$\left(\frac{88}{2} + 16 - (286 \text{ x } 0{,}18 + 7)\right) + \sum_{i=1}^{n} \frac{\text{Rp.}2.000 \text{ x } 286}{88} \text{ x } 4$$

TIC = Rp. 158.524.849

The results of calculating Total Inventory Cost (TIC) using the Economic Order Quantity (EOQ) Multi Item Dikson Model method are in Table 5.

Table 5. Total inventory cost (TIC) of proposed multi-item EOQ

No	Merchandise	Total Inventory Cost (TIC) Multi Item (Rp)
1	Sugar	158.524.849
2	Rice	339.558.290
3	Flour	59.689.462
4	Edible oil	53.251.896
5	Soy sauce	2.770.900
6	Sauce	14.217.770
7	Detergent	23.908.539
8	Salt	9.023.950
9	Aqua Glass	26.734.593
10	Milk	3.174.748
11	Instant noodles	19.510.644
	Total	**702.942.883**

Table 5 shows that due to significant purchases of rice and strong overall sales, the greatest Total Inventory Cost (TIC) EOQ Multi Item is in rice trade items, totaling Rp. 339,558,290. Because purchases of soy sauce are made in smaller quantities than other purchases and because overall sales of soy sauce are made in smaller quantities than other purchases, soy sauce goods have the lowest costs, coming in at Rp 2,770,900.

Economic Order Quantity (EOQ) Discount Model

The multi-item discount model calculation can be seen as follows using equation (5).

Untuk P_1 = Rp. 120.000 per unit is calculated as follows:

$$Q_i = \sqrt{\frac{2(2766)\ (\text{Rp. } 80.000 + \text{Rp. } 2.000 \text{ x } 34)}{600}}$$

Q_i = 35 Unit

It turns out that for Q_i = 35 units it corresponds to a price interval of Rp. 120,000, then Q_i = 35 units calculated using equation (8) as follows:

$$\text{TIC} = \sum_{i=1}^{n} 2766 \text{ x Rp. } 120.000 + \sum_{i=1}^{n} \frac{\text{Rp. } 80.000 \text{ x } 2766}{35} + \text{Rp. } 600 \left(\frac{35}{2} + 157 - (2766 \text{ x } 0{,}18 + 74)\right) + \sum_{i=1}^{n} \frac{\text{Rp.} 2.000 \text{ x } 2766}{35} \text{ x } 34$$

TIC = Rp. 338.504.545

Then we get the total price interval cost of Rp. 120,000 which is Rp. 338,504,545. The table of economic order sizes with merchandise discount factors can be seen in Table 6 below:

Table 6. Determination of prices with discount factors

Name products	Quantity	Price (Rp per unit)	Q count	Economical Order Size	Total Cost (Million/Rp)	Remarks
Rice	1-500	120000	42	42	339.914.931	
	501-1.000	115000	43	501	319.502.830	Optimal
Edible oil	1-500	264000	2	2	69.155.964	
	51-100	260000	2	51	53.079.821	Optimal
Detergent	1-150	47000	16	16	26.634.413	

Name products	Quantity	Price (Rp per unit)	Q count	Economical Order Size	Total Cost (Million/Rp)	Remarks
	151-200	45000	17	151	23.030.745	
	201-500	43000	18	201	21.959.978	Optimal
Aqua	1-600	14000	111	111	27.904.165	
	601-1.000	13000	117	601	24.898.572	Optimal
Instant noodles	1-200	33000	24	24	21.630.644	
	201-500	30000	26	201	17.966.503	Optimal

The best results were obtained for rice trading commodities with a total interval cost of Rp. 115,000 and a total cost of Rp. 319,502,830, when prices were determined using a discount factor based on Table 6. The best outcomes in edible oil trade items were achieved at a total interval cost of Rp. 260,000 and a total cost of Rp. 53,079,821. The best outcomes for detergent goods were achieved at a total interval cost of Rp 43,000, resulting in a total cost of Rp 21,959,978. The best outcomes for Aqua goods were achieved at a total interval cost of Rp 13,000, resulting in a total cost of Rp 24,898,572. The best outcomes for the instant noodle merchandise were achieved at a total interval cost of Rp 30,000, resulting in a total cost of Rp 17,966,503.

3.2 Discussion

Comparative analysis of total inventory costs

Comparative analysis of total inventory costs (TIC). A comparison of the overall expenses is shown in the image as Table 7 below, which is based on the costs associated with ordering, storing, shortages, and purchases for each item that was completed.

Table 7. Comparison of total inventory costs (TIC)

Inventory Policy	Item	Inventory Control Costs				Total Inventory Cost (TIC)
		Purchase Cost (Ob)	Order Cost (Op)	Holding Cost (Os)	Shortage Fee (OK)	
Company policy	Sugar	168.360.000	80.000	3.303.720	-	171.743.720
	Rice	336.000.000	80.000	3.680.740	-	339.760.740
	Flour	62.094.000	80.000	212.510	-	62.386.510
	Edible oil	54.120.000	80.000	256.960	-	54.456.960
	Soy sauce	2.580.000	80.000	114.800	-	2.774.800
	Sauce	9.834.000	80.000	206.580	-	10.120.580
	Detergent	23.876.000	80.000	466.710	-	24.422.710
	Salt	8.900.000	80.000	137.529	-	9.117.529
	Aqua Glass	26.600.000	80.000	132.577	-	26.812.577
	Milk	3.000.000	80.000	318.500	-	3.398.500
	Instant noodles	19.701.000	80.000	60.610	-	19.841.610
TOTAL						**724.836.236**
EOQ Policy	Sugar	157.872.000	260.000	386.342	6.500	158.524.849
	Rice	331.920.000	189.452	444.028	4.736	332.558.290
	Flour	59.487.000	85.812	114.485	2.145	59.689.462
	Edible oil	53.064.000	82.041	103.790	2.051	53.251.896
	Soy sauce	2.280.000	32.340	34.991	809	2.770.900
	Sauce	14.058.000	72.203	85.756	1.805	14.217.770
	Detergent	23.641.000	111.160	153.577	2.779	23.908.539
	Salt	8.860.000	72.474	89.652	1.812	9.023.950
	Aqua Glass	26.418.000	105.640	208.188	2.641	26.734.593
	Milk	3.000.000	50.000	123.487	1.250	3.174.748
	Instant noodles	19.404.000	46.946	58.510	1.174	19.510.644
TOTAL						**702.942.883**

The real EOQ for the company is IDR 724,836,236. A total of Rp. 702,942,883 is included in the EOQ multi-item discount model. The largest savings come from using the suggested strategy to cut purchasing expenditures by IDR 15,061,000 and holding costs by Rp 7,088,430, for a total of Rp 7,972,570. On the other side, with a total waste of Rp. 255,770, there is an increase in order costs and the possibility of shortfall expenses that did not previously occur. Nevertheless, the EOQ multi-item discount model approach is superior overall since it results in savings of IDR 21,893,660, or 3.02% of the total cost.

Inventory control analysis

Table 8 a comparison of the quantity ordered for safety stock (SS) and reorder points (ROP) products based on business policy and proposals.

Table 8. Comparison of reorder points (ROP) and Safety Stock (SS) merchandise orders

Merchandise	Actual Company policy			Proposed EOQ Multi Item Discount Model		
	Q	**ROP**	**SS**	**Q**	**ROP**	**SS**
Gula	286	-	-	88	16	7
Beras	2766	-	-	1168	157	74
Tepung Terigu	251	-	-	234	28	20
Minyak Makan	201	-	-	196	20	14
Kecap	38	-	-	94	3	2
Saos	213	-	-	236	12	6
Detergen	503	-	-	362	37	22
Garam	443	-	-	489	25	12
Aqua	1887	-	-	1.429	181	124
Susu	10	-	-	16	11	11
Mie Instan	588	-	-	1.002	32	14

Table 8 shows the variation in goods inventory between the multi-item discount model and corporate policy. For instance, according to business policy, the economic order amount for sugar merchandise is 286 sacks. In the meantime, 88 sacks is the affordable purchase quantity based on the EOQ multi-item discount model. While calculations from the EOQ multi-item discount model indicate that there are as many as seven sacks of safety inventory for sugar merchandise and a-reorder points of sixteen sacks, company policy states that there are no safety stocks and reorder points, stockouts, and excesses of merchandise are likely to occur every month. There were 1168 sacks of rice, 74 sacks of safety stock, and 157 sacks of reorder points. Bags of wheat flour total 234; safety stock is 20, and bags are the reorder points. There are 196 cartons of edible oil, 24 cartons of safety stock, and 20 cartons of reorder point

. There are 94 cartons of soy sauce, 2 cartons of safety stock, and 3 cartons of reorder points. There are 236 cartons for saus, 6 cartons for safety stock, and 12 cartons for reorder points. There are 362 boxes of detergent, 22 cartons of safety stock, and 37 cartons of reorder points. There are 489 packs of salt, 12 cartons of safety stock, and 25 cartons of reorder points. There are 1,429 cartons at Aqua, 124 cartons in safety stock, and 181 cartons at the reorder points. There are 16 cartons of milk, 11 cartons of safety stock, and 11 cartons of reorder points. There are 1,002 boxes of Instant Noodles, 32 cartons of safety stock, and 14 cartons of reorder points. The aforementioned analysis's findings demonstrate that a discount model exists for managing goods inventory to lower the likelihood of overstock, based on the multi-item EOQ model.

Implementing Odoo

The outcomes of utilizing Odoo display the name of the product, the selling price, the cost, the initial capital cost, the quantity on hand, the number of items in the warehouse, and the number of units of the message, which represents the number of units of goods. The cost of buying products rises when discounts are applied to increasing amounts of purchases. Since discounts have an impact on determining the economic order lot size, they must be factored into the total inventory costs.

4. CONCLUSION

Because it has been calculated analytically regarding inventory costs, safety stock (SS), and reorder points (ROP), the Economic Order Quantity (EOQ) multi-item discount model at UD.Ridho can reduce the occurrence of overstock and prevent out-of-stock. With the company's total actual TIC of Rp. 724,836,236 and the TIC Multi-Item Model Discount of Rp. 710,942,883, there is a cost difference of Rp. 21,893,660. 3.02% of the costs can be saved, according to the economic order quantity calculation approach. Odoo application at UD. Purchasing, which is used to purchase products from suppliers for resale to customers, sales orders, which are used to carry out transactions for receiving orders from customers and to record transactions for each order, and inventory are the three modules that make up Ridho. With the use of Odoo, you can enhance business processes that are more productive and efficient at Ud. Oh, Ridho.

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