

Analysis of ABC Method, EOQ Method and Safety Stock as Determinants of Inventory Control Optimization of Tobacco Products Sumber Jaya at Jamsbacco Store

Eliza Febi Kharina*

University of Nusantara PGRI Kediri, Jl. KH. Ahmad Dahlan No.76, Mojoroto, Kota Kediri, East Java, 64112, Indonesia

elizafebikharina99@gmail.com*

*corresponding author

Article Information

Submission date	01/01/2025
Revised date	07/01/2025
Accepted date	10/03/2025

Abstract

Research aim : This research focuses on product grouping using the ABC method, analyzing and evaluating product inventory control using the Economic Order Quantity (EOQ) and Safety Stock methods, in order to improve the efficiency and effectiveness of managing product inventory at Jamsbacco stores.

Design/Method/Approach : This research is a quantitative method research with case study techniques. This research focuses on an in-depth analysis of a unique or specific case, with the aim of understanding in detail the phenomenon, process, or behavior in a particular context, especially in the business field. The subject of this research is the Jamsbacco Tobacco Shop which is located at Tunggul Wulung Street, Karangrejo Village, Ngasem District, Kediri Regency. The object of this research is the inventory of trade goods in the form of TIS Tobacco brand Sumber Jaya.

Research Finding : There are not many studies that discuss inventory control in tobacco retail stores

Theoretical contribution/Originality : Could be useful for tobacco product control

Practitioner/Policy implication : The limitations of this research focus on specific products in inventory control optimization analysis so that it often causes strategic limitations.

Research limitation : The limitations of this research focus on specific products in the analysis of inventory control optimization so that it often causes strategic limitations.

Keywords : Inventory Control, ABC Method, EOQ, Safety Stock

1. Introduction

In this era of globalization, the times are hypercompetitive. Competition that occurs is not just an ordinary "match", but has reached the provision of added value to products and services [1]. Including in the rapidly growing business world, competition is no longer a new thing, with competitiveness between competitors that is increasingly becoming a challenge for every business actor, especially in the retail sector. The retail business plays an important role in meeting consumer needs for accessibility and convenience, especially in the modern era. In

addition, the retail business has an important role in the modern economy, namely being a direct link between producers and consumers as the spearhead of distribution of goods or services. In this fast-paced era, the retail sector continues to develop and innovate to meet consumers' increasingly high expectations for convenience, product choice and responsive service. One of the retail sectors is retail stores which have a big role in providing various community needs ranging from basic needs to specialty goods. One segment that shows significant potential is the tobacco retail business, which is growing rapidly in Indonesia, including one of them in the Kediri area.

Retail stores have become a fundamental part of the daily life of modern society especially in this fast-paced digital era, the need for accessibility and convenience in shopping is increasingly urgent [2]. Retail stores emerge as a solution by providing a variety of products ranging from daily necessities to specialty items such as tobacco products. In the context of the local economy, the existence of tobacco shops not only fulfills consumer needs, but also contributes significantly to local revenue. However, to survive and compete in an increasingly competitive market, store managers must be able to manage existing resources effectively and efficiently. Tobacco retailing has diverse objectives, which not only focus on the profit aspect, but also on meeting consumer needs and fulfilling social responsibility. By offering different types of products, such as cigarettes, cigars, and other tobacco products, tobacco retailers aim to fulfill different consumer preferences and needs. In the retail business, especially tobacco shops, inventory management is one of the key elements that must be considered. To maintaining sufficient product availability and in accordance with market demand is an important step to increase competitiveness and maintain customer satisfaction so that optimal inventory management does not cause various problems, such as shortages or excess stock, which can result in losses in terms of operational costs and customer satisfaction [3].

Ineffective inventory control can also cause problems in selling goods. For example, when there is a stock-out or shortage of product inventory, so that customer orders cannot be fulfilled by the company. Inventory control has various methods that aim to optimize the amount of stock, reduce storage costs, and ensure the availability of goods in accordance with demand. According to Sartono (2014), there are several methods that can be used to control the inventory of trade goods, among others such as: Economic Order Quantity (EOQ) known as the economic order quantity method. A method that calculates the optimal order quantity to minimize inventory costs, such as ordering costs and storage costs, Material Requirement Planning (MRP) is a method used primarily in manufacturing companies to determine raw material requirements based on production plans, Just In Time (JIT) a method that aims to minimize inventory by only ordering or producing goods when needed [4]. This method reduces storage costs and the risk of overstock, but requires strong coordination with suppliers so that goods can arrive on time, ABC analysis is a method that classifies goods based on their importance. Category A includes items with high value but small quantities, category B is items with medium value and quantity, and category C is items with low value but large quantities. With this analysis, companies can focus on more intensive inventory management for category A items. Meanwhile, Safety Stock is a reserve inventory that is kept in anticipation of

unexpected demand or delays in delivery. Safety stock ensures that the company remains in stock despite supply chain disruptions or demand fluctuations

There are several considerations in trying to procure the right inventory item, the right time, and the right quantity. Ensure that the item or type of material is relevant to order. The ABC method divides inventory by value and priority into three categories: categories A, B, and C. The types of inventory items classified according to the pareto principle consist of: (1) Category A (80-20) Namely the category of goods that absorb funds (capital) as much as 80% of the total capital available for inventory, and the number of goods in inventory is in the range of 20% of the total type of goods being managed / owned. (2) Category B (15- 30) Namely the category of goods that absorb funds / capital as much as 15% of the overall capital available for inventory, and the number of goods that become inventory is in the range of 30% of the overall type of goods being managed (owned). (3) Category C (5-50) Namely the category of goods that absorb funds (capital) as much as 5% of the overall capital available for inventory, and the number of goods that become inventory is in the range of 50% of the overall type of goods being managed / owned [5].

After knowing the priority of trade goods inventory in retail, the EOQ method is needed to determine the economic order quantity. Economic Order Quantity (EOQ) is a method that helps determine the optimal order quantity so that the total inventory cost can be minimized. EOQ calculates the optimal point between storage costs and ordering costs, so that companies can determine when and how many items need to be ordered without having to keep excess stock or place orders too often. With EOQ, companies can maintain stock availability to meet demand, while avoiding the risk of stock-outs that can lead to lost sales opportunities. EOQ also provides guidance in determining the reorder point, so that management can make more accurate decisions regarding the procurement of goods. According to the opinion in research, this method is used to determine the most optimal number of orders for goods each time an order is [6].

Rolling tobacco is a promising business because it is a commodity that continues to be in demand by the public, especially consumers who have a special preference for a more personalized way of smoking. Along with the development of trends and lifestyles, rolling tobacco processing has evolved to allow for a variety of tobacco products with more diverse qualities and characteristics [7]. To meet consumer demand, rolling tobacco is produced in a variety of variants according to preferences, purchasing power, and target market segments. Rolled tobacco has a more distinctive appeal compared to conventional cigarettes in the market. In terms of quality, rolled tobacco often has fresher cut leaves, natural colors, and a more intense tobacco aroma. In addition, the packaging of rolling tobacco is also made more attractive and practical, making it easier for consumers to choose and store products. This makes rolling tobacco a more personalized choice for fans of rolling cigarettes or "tingwe" (linting dewe), who want to enjoy natural tobacco flavor without the chemical additives commonly found in manufactured cigarettes.

In Kediri, there is a shop that focuses on selling rolling tobacco products located on Jalan Tunggul Wulung, Karangrejo Village, Ngasem District, Kediri Regency. This shop is

known as "Toko Jamsbacco" and offers various types of tobacco ranging from original tobacco, aromatic tobacco, and factory flavored tobacco. Not only that, this shop also provides rolling tools, cigarettes, cigars, and various other cigarette accessories. Like any other company, Toko Jamsbacco has a primary goal to survive and thrive in a competitive market. To achieve this goal, the store is committed to managing its resources well, including the inventory control of tobacco products

According to the opinion of Martono (2018), effective inventory management is very important to ensure product availability in accordance with consumer demand [8]. By improving inventory control, Toko Jamsbacco can not only maintain smooth sales operations, but also potentially increase profits and meet the growing needs of consumers. Toko Jamsbacco as a retail store that focuses on selling rolling tobacco products and other accessories often faces a number of challenges in controlling its product inventory. The main challenge faced by this store is the instability of inventory which often cannot keep up with fluctuations in market demand. When demand increases, the store often experiences shortages of stock on popular category products, while on the other hand some other products are overstocked or piled up due to lack of demand [9]. This leads to increased storage costs and reduces the store's operational efficiency. In addition, without a structured inventory management system. Jamsbacco stores have difficulty in monitoring and predicting optimal inventory levels. Inaccuracies in inventory data often hinder decision-making in terms of product reordering. As a result, stores often experience problems in meeting consumer needs, so that this can reduce customer satisfaction and interfere with potential profits to the store. In research, safety stock is a safety stock that aims to minimize stockouts and reduce additional storage costs and total stockout costs and storage costs [10]. Therefore, it is necessary to calculate safety stock, so that stores can maintain a high level of service and reduce the risk of stockouts, thereby increasing customer satisfaction [11]. Currently, the inventory control or control carried out by the Jamsbacco Store is still quite weak. This is because the Jamsbacco Store only provides inventory based on goods that have been sold out. Jamsbacco stores do not provide safety stock or safety stock for popular items that are in demand by consumers. This can cause several problems such as inventory shortages or idle funds due to the abundance of inventory on items that have slower demand than other items. To solve this problem, the Jamsbacco Store must start controlling its inventory.

In previous research that has been done with the title "Application of ABC Analysis and EOQ Method as a Formula Milk Inventory Controller at Maya Prambon Store". The results of this study indicate that the calculation of formula milk inventory control at Toko Maya Prambon using the EOQ method is more efficient as evidenced by the savings in the total cost of inventory, which was originally Rp. 2,820,376 to Rp. 257,570. So that in the total inventory cost (TC) there is a savings of Rp. 2,562,806. In this case, savings are made through reducing ordering and storage costs so as to reduce inventory costs. The phenomenon that occurs is that it is often found that trade goods are too much inventory but not in all products and trade goods that run out of stock but not in all products. So that it requires the implementation of optimal inventory control of trade goods. Based on the phenomena that occur and the results of previous

research, researchers want to apply inventory management with ABC analysis and the Economic Order Quantity (EOQ) method to control the inventory of tobacco products with the title "Analysis of the ABC Method, EOQ Method and Safety Stock as Determinants of Optimization of Inventory Control of Sumber Jaya Tobacco Products at Jamsbacco Stores".

1.1. Statement of Problem

Jamsbacco stores are currently facing challenges in inventory management that are not optimal because there is no structured application of methods, trade goods that have the largest contribution to revenue do not get adequate priority. So this creates gaps in resource allocation, both in terms of storage space and managerial attention. The problems that are formulated: (1) How is inventory control based on ABC method? (2) How is the inventory analysis of Jamsbacco Stores using the EOQ method? (3) How is the Safety Stock inventory analysis at Jamsbacco Stores?

1.2. Research Objectives

The objectives of this study are: (1) To analyze the inventory control of Sumber Jaya tobacco products based on the ABC method for category A goods (2) To analyze the inventory of Sumber Jaya tobacco products at Jamsbacco Stores using the Economic Order Quantity (EOQ) method (3) To analyze Safety Stock inventory to support inventory control at Jamsbacco Stores. Jamsbacco stores are currently facing challenges in inventory management that are not optimal because there is no structured application of methods, trade goods that have the largest contribution to revenue do not get adequate priority. So this creates gaps in resource allocation, both in terms of storage space and managerial attention. The problems that are formulated: (1) How is inventory control based on ABC method grouping for category A goods? (2) How is the inventory analysis of Jamsbacco Stores using the EOQ method? (3) How is the Safety Stock inventory analysis at Jamsbacco Stores?

2. Method

The object of this research was conducted at the Jamsbacco Store located on Jln. Tunggal Wulung Karangrejo Ngasem Kediri. The object observed in this study is the sales volume and demand for Sumber Jaya brand tobacco products to determine which products have the greatest contribution to revenue. The data used in this study are data on purchases of Sumber Jaya products and sales of Sumber Jaya products in 2023. Furthermore, the data collection stage in this study is to collect data by conducting observations and interviews with the owner of Toko Jamsbacco. There are several stages in conducting this research, namely conducting preliminary studies, collecting data, processing data, analyzing the results of data processing, and providing conclusions and suggestions.

In this study, the authors used quantitative methods. Quantitative methods are also called traditional methods which can be interpreted as research methods based on the philosophy of positivism, used to study certain populations or samples, and use research tools to collect data, which aim to test quantitative / statistical hypotheses that have been implemented or applied. The analysis method used in this research is to use ABC analysis, and use the Economic Order Quantity (EOQ) method and Safety Stock combination. ABC classification is the classification

of a group of materials in descending order based on the cost of material use per period of time (price per unit of material multiplied by the volume of use of that material during a certain period). ABC analysis can also be applied using other criteria than cost criteria, depending on what important factors determine the material, in the ABC classification commonly used in inventory control. Safety stock is required to overcome demand mismatches due to longer lead times in tobacco products. However, the existence of safety stock can lead to inefficiencies, so the amount should be reduced to a minimum.

The author uses case study research techniques that focus on in-depth analysis of one or more unique or specific cases, with the aim of understanding in detail phenomena, processes, or behaviors in a particular context, especially in the business field. This research was conducted for 3 months, starting from October to December 2024. In this study, the POM-QM software is also used as a material for processing data where the software is useful for simplifying the calculation process so that optimal results are obtained.

This study uses 2 types of data, namely primary data in the form of observation and interview results and secondary data obtained by researchers indirectly from the object, but through other sources, both oral and written in the form of information related to the volume of ordering goods according to Arikunto (2013).

In collecting data, there are several techniques that are carried out, namely:

- a. Interview with the person in charge of the shop owner. Interviews are a data collection technique carried out to obtain data about Sumber Jaya tobacco trade products.
- b. Observation of data collection directly at the research location by taking notes or taking pictures needed in the research.
- c. The method of collecting data from literature and books related to the problems discussed, also to support solving existing problems by reading or studying books as a theoretical basis or other reference materials that support research objectives in problem solving.
- d. Data collection documentation by requesting copies of data, photos or company documents. The data referred to in this study is the sales volume or order volume of goods.
- e. Literature study, literature study is to study references regarding ABC classification and EOQ method which will become a strong theoretical basis as the basis for the problem to be studied.

The data analysis technique used in ABC analysis is using calculations processed using the POM Windows program. The data processing method uses the EOQ method. EOQ calculations are processed using the POM Windows program. EOQ formula for optimizing safety stock in inventory control:

According to Heizer & Render (2015), that in EOQ analysis is one of the inventory control methods that is often used to order a number of items with the aim of minimizing the inventory of goods in the company.

EOQ

$$EOQ = \sqrt{\frac{2.D.S}{H}}$$

Description:

EOQ : purchase quantity

D : Total demand for a period

S : Ordering cost for each order

H : Storage cost per unit

In research, states that the calculation of safety stock is as follows:

$$SD = \sqrt{\frac{\sum (x - \bar{x})^2}{n}} \quad SS = SD \times Z$$

Description:

SD = Standard Deviation

\bar{x} = Average

\bar{x} = actual sales data

n = Number of data

Z = standard deviation table value for 5% deviation = 1,65

3. Results and Discussion

ABC System

The analysis method in this study uses ABC analysis, whose calculations are carried out with the help of POM QM for Windows Version 5.2 software. At Jamsbacco Kediri store tobacco products jaya source has 28 different types of products. The calculation of the ABC System analysis method is the determination of tobacco product groups based on the number of requests and sales that use the most storage and that generate the most costs. Tobacco products are included in category A with a cumulative presentation of 49.12 - 75.22% while in category B classification with a cumulative 78.73 - 90.61% and in classification C with a cumulative 91.72 - 100%. In order to get more attention in inventory control in Jamsbacco Kediri Store. The following are the results of the ABC System analysis.

Table 1. ABC Analysis Calculation Results

No.	Product Name	Cummulative Percentage	Class
1	SJ SURYA SUPREME	49,12	A
2	SJ SAMSU	57,95	A
3	SJ KRETEK KUNING SUPREME	62,89	A
4	SJ JUARA MELATI	67,19	A
5	SJ S.MILD	71,27	A
6	SJ SURYA PRO	75,22	A
7	SJ JUARA ICE	78,73	B
8	SJ AMERICAN BLEND	82,15	B
9	SJ KRETEK MERAH SUPREME	85,16	B

No.	Product Name	Cummulative Percentage	Class
10	SJ SURYA EKSKLUSIF	88,07	B
11	SJ POP BERRY	89,35	B
12	SJ GGF INTERNASIONAL	90,61	B
13	SJ APEL	91,72	C
14	SJ APEL ICE	92,8	C
15	SJ DUNHIL	93,71	C
16	SJ DJARUM SUPER	94,52	C
17	SJ ICE BLAST SUPREME	95,33	C
18	SJ BLACK CAPUCCINO	96,08	C
19	SJ JAMBU ICE	96,77	C
20	SJ LA	97,38	C
21	SJ MANGGA ICE	97,93	C
22	SJ MILD MENTOL	98,48	C
23	SJ MALBORO	98,95	C
24	SJ CAPPUCINO	99,4	C
25	SJ ORANGE ICE	99,81	C
26	SJ COCOPANDAN	99,91	C
27	SJ HERBAL SUPREME	100	C
28	SJ BLACK MENTOL	100	C

Source: POM QM output results

Based on the results of table 1. It can be seen that there are 6 types of tobacco products included in the class A category, 6 types of tobacco products included in the class B category, and 16 types of tobacco products included in the class C category.

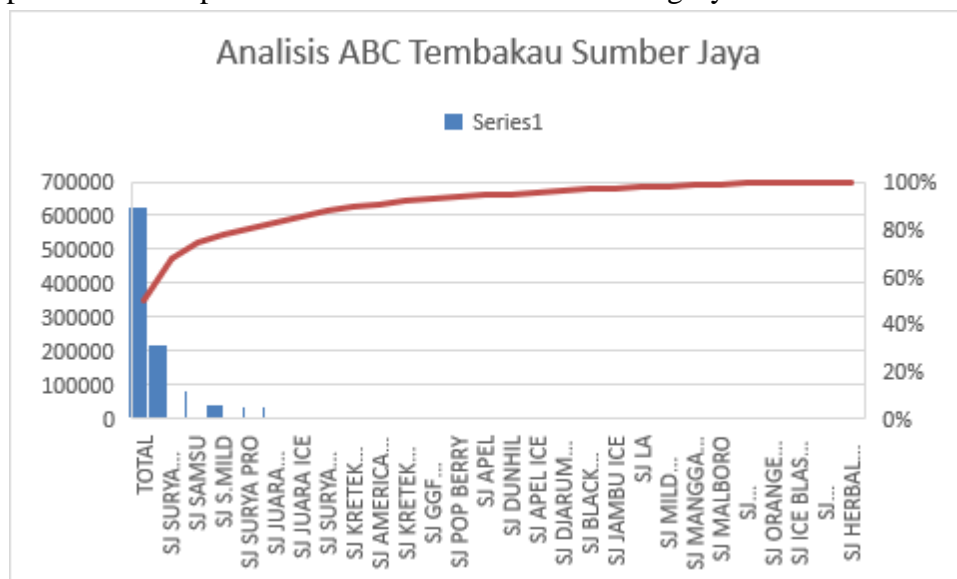


Figure 1. Pareto Diagram of ABC System Analysis

Source: Pareto Diagram

Based on table 1 above and the analysis of the pareto diagram of tobacco products, the source of wealth that will be carried out will be the calculation of inventory control using the EOQ method, namely tobacco products that are included in category A with a high sales frequency and have a major influence on company costs are SJ Surya Supreme, SJ Samsu, SJ Kretek Kuning Supreme, SJ Juara Melati, SJ S.Mild, and SJ Surya Pro.

Economic Order Quantity (EOQ)

Table 2. Calculation Results with Formula

No	Nama Produk	Ordering Cost	Ordering Cost Order	Storage Cost	Storage Cost Unit
1	SJ SURYA SUPREME	Rp. 473.600,00	Rp. 64.069,57	Rp. 2.947.200	Rp .4.823,57
2	SJ SAMSU	Rp. 264.900,00	Rp . 18.921,43	Rp. 529.800	Rp. 5.697
	SJ KRETEK KUNING				
3	SUPREME	Rp . 148.200,00	Rp. 37.050,00	Rp. 296.400	Rp. 65,00
4	SJ JUARA MELATI	Rp. 129.000,00	Rp. 18.428,57	Rp. 258.000	Rp. 6.000,00
5	SJ S.MILD	Rp 122.400,00	Rp. 13.600,00	Rp. 244.800	Rp. 4.618,87
6	SJ SURYA PRO	Rp . 118.500,00	Rp . 23.700,00	Rp . 237.000	Rp . 5.925,00

Source: Company secondary data, processed, 2024

Table 3. EOQ analysis of SJ Surya Supreme

Description	Needs
Goods Requirement (D)	611
Cost per Order (S)	Rp 64.069,57
Storage Cost Per Unit (H)	Rp 4.823,57
EOQ	127

Source: Company secondary data, processed, 2024

From the table above, it is known the optimal amount of inventory for each order per year is 127 kg for SJ Surya Supreme tobacco products.

Table 4. EOQ analysis of SJ Samsu

Description	Needs
Goods Requirement (D)	93
Cost per Order (S)	Rp 18.921,43
Storage Cost Per Unit (H)	Rp 5.697
EOQ	25

Source: Company secondary data, processed, 2024

From the table above, it is known the optimal amount of inventory for each order per year is 25 kg for SJ Samsu tobacco products.

Table 5. Analisis EOQ SJ Kretek Kuning

Description	Needs	
Goods Requirement (D)		65
Cost per Order (S)	Rp	37.050,00
Storage Cost Per Unit (H)	Rp	65,00
EOQ		272

Source: Company secondary data, processed, 2024

From the table above, it is known the optimal amount of inventory for each order per year is 272 kg for SJ Kretek Kuning tobacco products.

Table 6. Analisis EOQ SJ Juara Melati

Description	Needs	
Goods Requirement (D)		43
Cost per Order (S)	Rp	18.428,57
Storage Cost Per Unit (H)	Rp	6.000,00
EOQ		16

Source: Company secondary data, processed, 2024

From the table above, it is known the optimal amount of inventory for each order per year is 16 kg for SJ Juara Melati tobacco products.

Tabel 7. Analisis EOQ SJ S.Mild

Description	Needs	
Goods Requirement (D)		53
Cost per Order (S)	Rp	13.600,00
Storage Cost Per Unit (H)	Rp	4.618,87
EOQ		18

Source: Company secondary data, processed, 2024

From the table above, it is known the optimal amount of inventory for each order per year is 18 kg for SJ S.Mild tobacco products.

Table 8. Analisis EOQ SJ Surya Pro

Description	Needs	
Goods Requirement (D)		40
Cost per Order (S)	Rp	23.700,00

Description	Needs	
Storage Cost Per Unit (H)	Rp	5.925,00
EOQ		18

Source: Company secondary data, processed, 2024

From the table above, it is known the optimal amount of inventory for each order per year is 18 kg for SJ Surya Pro tobacco products.

Safety Stock Calculation

1. Calculating the standard deviation of Sumber Jaya product inventory data Category

Table 9. Calculation of Standard Deviation

Product Name	Nov-23	Des-23	Jan-24	Feb-24	Mar-24	Apr-24	Mei-24	Jun-24	Jul-24	Ag-s-24	Sep-24	Okt-24	Ave rage/ Mo nth	Standard Deviation
SJ SURYA SUPREME	21,9	22,1	19,7	12,4	26,9	13,0	18,2	13,3	16,5	15,3	34,6	3,5	18	7,90
SJ SAMSU	8,5	8,4	9,6	10,4	4,1	9,1	5,6	8,5	7,2	2,2	9,8	1,0	7	3,11
SJ KRETEK KUNING														
SJ JUARA SUPREME	0,4	0,9	1,3	1,7	1,6	1,1	1,7	4,5	4,2	0,4	3,9	0,4	2	1,50
SJ MELATI	5,7	3,6	2,5	2,0	2,2	0,6	3,8	2,9	4,9	1,0	5,9	0,6	3	1,87
SJ S.MILD	4,6	4,0	1,8	1,0	5,3	1,3	5,1	0,5	2,8	1,2	11,9	1,2	3	3,19
SJ SURYA PRO	5,5	3,7	2,8	4,6	2,6	1,7	1,8	3,1	4,1	2,9	4,7	0,5	3	1,44

Source: Company secondary data, processed, 2024

Standard deviation in this case is a standard deviation number based on monthly demand data, while the largest deviation is produced by SJ Surya Supreme products, while the smallest deviation is shown by SJ Surya Pro products. The results of this standard deviation calculation are used to determine the safety stock level.

2. Calculating Safety Stock

Table 10. Determination of the Amount of Safety Stock

No	Product Name	Standard Deviation	Z	Safety Stock	Rounding (Kg)
1	SJ SURYA SUPREME	7,90	1,65	13,03	13
2	SJ SAMSU	3,11	1,65	5,13	5
3	SJ KRETEK KUNING SUPREME	1,50	1,65	2,47	2

No	Product Name	Standard Deviation	Z	Safety Stock	Rounding (Kg)
4	SJ JUARA MELATI	1,87	1,65	3,08	3
5	SJ S.MILD	3,19	1,65	5,27	5
6	SJ SURYA PRO	1,44	1,65	2,37	2

Source: Company secondary data, processed, 2024

The inventory that must be available in the warehouse as a safety stock is the most of the SJ Surya Suprem product, which is 13kg. While the least safety stock on SJ Kretek Kuning is 2kg.

4. Conclusion

The conclusions of this study are 1). The application of the ABC method in determining the inventory class shows that there are 6 products in category A, total of 6 products fall into category B, while the remaining 14 products fall into category C; 2), Based on the calculation of inventory control of tobacco resources at Jamsbacco Kediri Store using the EOQ method, the number of economic orders of tobacco resources that are prioritized are SJ Surya Supreme 127 kg per order with a frequency of orders 23 times, SJ Samsu 25 kg per order with a frequency of orders 14 times, SJ Kretek Kuning 272 kg per order with a frequency of orders 4 times, SJ Juara Melati 16 kg per order with a frequency of orders 7 times, SJ S.Mild 18 kg per order with order frequency 9 times, SJ Surya Pro 18 kg per order with order frequency 5 times 3) Determination of safety stock to prevent out of stock, as well as too much inventory (over stock) considering that a large amount of investment must be allocated to the type of tobacco products included in class A. The amount of safety stock for Sumber Jaya's prioritized tobacco products that fall into category A is SJ Surya Supreme of 13 kg, SJ Samsu of 5kg, SJ Kretek Kuning of 2 kg, SJ Juara Melati 3kg, SJ S.Mild 5kg, SJ Surya Pro 2kg.

Understanding the class, can find out the type of inventory that must receive intensive managerial focus on class A, so it is necessary to control the inventory of these products using the EOQ method in order to minimize the cost of storing tobacco resources and over stock, because the inventory included in the class A category has a greater number of requests when compared to products included in the class B and C categories. The determination of safety stock is designed so that the store can still meet customer demand without having to bear excessive costs due to inefficient storage. This management strategy shows that a structured approach can optimize resources, improve operational efficiency, and minimize risks in inventory management.

References

- [1] Djiko R. Persaingan Usaha Kios Tradisional Dengan Toko Modern Di Kecamatan Tobelo Tengah Kabupaten Halmahera Utara. J Ekon Sos Hum 2021;03:18–22.
- [2] Firayanti Y, Wulansari F. Analisis Strategi Pemasaran Toko Kelontong dalam Menghadapi Perkembangan Perusahaan Ritel di Kabupaten Kubu Raya 2024:825–39.

-
- [3] Dimas Rasdiyatno R, Iqbal M, Hasibuan A, Kunci : K, Persediaan M, Pelanggan L, et al. Manajemen Persediaan Yang Efektif Untuk Mengoptimalkan Operasi Perusahaan Industri. *Neraca Manajemen, Ekon* 2024;6.
 - [4] Rambitan BF, Sumarauw JSB, Jan AH. Analisis Penerapan Manajemen Persediaan Pada CV Indospice Manado. *J EMBA* 2018;6:1448–57.
 - [5] Guslan D, Saputra I. Analisis Pengendalian Inventori Dengan Klasifikasi ABC dan EOQ Pada PT Nissan Motor Distributor Indonesia 2020;10:73–7.
 - [6] Sanrio febry lopenzo, Jesen, Rivara syara nasution. Analisis Perbandingan Metode EOQ, POQ, Dalam Perencanaan Pengendalian Retail Toko A. *J Green Eng Sustain* 2024;2:78–90.
 - [7] Humaidi. Ekonomi Tradisional dan Perubahan Sosial. *JIESP J Islam Econ Stud Pract* 2024;3:110–23. <https://doi.org/10.54180/jiesp.2024.3.1.110-123>.
 - [8] Manajemen SN, Akuntansi E, Beras P, Di P, Shandy UD, Nganjuk P, et al. Analisis Kombinasi Metode ABC dan Safety Stock Pada Pengendalian Persediaan Seminar Nasional Manajemen , Ekonomi dan Akuntansi 2023:1–11.
 - [9] A ES, Darno D, Wiraswati MO, Ningrum DA. Analisa Pengendalian Persediaan Suku Cadang Pada PT. XYZ Dengan Metode Analisis ABC. *Abiwara J Vokasi Adm Bisnis* 2020;2:5–13. <https://doi.org/10.31334/abiwara.v2i1.1050>.
 - [10] Alfiansyah A, Hasin A. Integrasi ABC System dan EOQ Dalam Pengendalian Persediaan Bahan Baku (Studi Kasus pada Perusahaan Tisu di Yogyakarta). *J Soc Sci Res* 2023;3:10202–13.
 - [11] Farid M, Cahya M, Ariyadi Q, Khumaira SZ, Reynaldo AB, Junayat S. *Jurnal Ekobistek* 2024;13:173–8. <https://doi.org/10.35134/ekobistek.v13i4.859>.
 - [12] Purnomo H, Riani LP. Implementasi Kombinasi Analisis ABC, Dan Safety Stock Sebagai Penentu Optimasi Pengendalian Persediaan Minyak Goreng. *J Bisnis Dan Manaj* 2019;13:10–8.
 - [13] Kafidzin R, Septianawati G, Utomo N. Analisis Pengendalian Persediaan Produk Dengan Menggunakan Metode Abc. *Juremi J Ris Ekon* 2023;3:141–6. <https://doi.org/10.36418/syntax-literate.v7i10.12847>.