



Handling of the Preparation of Wicker Raw Materials with ABC Analysis Approach

Nuri Kartini

Universitas Muhammadiyah Cirebon, Jawa Barat, Indonesia

Abstract. In connection with the importance of ABC method analysis in company management, this can be applied to rattan companies that aim to classify or group raw material inventories and find out the raw material items often used in each production. From the results of this study, it can be concluded that the ABC analysis approach to controlling rattan raw material inventory can be classified as follows: Class A classification is classified as raw materials that require strict control, consisting of Mandola Polished AB rattan raw materials, CL rattan Lasio Mandola Polished BC rattan. Class B classification is classified as requiring moderate control, consisting of 8 items of rattan raw materials, namely Tohiti rattan, which has a percentage of total cost, Subaliyu rattan, Semambo rattan, Pietrit rattan, Mandola Semi Polished AB rattan, Mandola Semi Polished CD rattan, Core rattan, Manau rattan. Class C classification includes loose control, consisting of 4 rattan raw materials items: Mandola Semi Polished BC rattan, Jawit rattan, Mandola Semi Polished CD rattan, and Sanjat rattan.

Keywords: Controlling, Rattan, ABC Analysis, Production, Raw Material

INTRODUCTION

ABC classification, often referred to as ABC analysis, is a classification of a group of materials in descending order based on the cost of use per period (price per unit multiplied by the volume of use of that material over a certain period). A commonly used time is one year. ABC analysis can also be determined using other criteria rather than solely based on cost criteria depending on what essential factors determine the material. The ABC classification is commonly used in inventory control (Rosnani Ginting, 2007).

In each period, rattan raw materials have excessive inventory caused by improper ordering because they still use estimates without theoretical calculations to place orders, which results in cost overruns or waste. There will be a risk of storage damage to raw materials, and the quality of raw materials decreases, so special handling is needed in inventory control. In essence, inventory will

remain to anticipate unexpected fluctuations in demand, but efforts are made to minimize the amount of inventory.

There is no grouping of rattan raw materials based on the level of need, which causes all types of rattan raw materials to be stocked in large quantities and the determination of the optimal quantity that must be stocked. For this reason, controlling several kinds of raw materials requires grouping raw materials based on priority, so there must be special handling in inventory control. In connection with the importance of ABC method analysis in company management, this can be applied to rattan companies that aim to classify or group raw material inventories and find out the raw material items often used in each production

METHOD

The research method used is a quantitative research method that aims to determine the grouping and problems of raw material inventory so that there are no vacancies or buildups and reduce the occurrence of raw material defects and optimal raw material inventory. The data used are:

- a) Primary Data: Observations and interviews
- b) Secondary Data: general company data, raw material inventory data, raw material price data

Data processing using the ABC method. ABC analysis divides inventory into three classes based on inventory's value (volume). The criteria of each class in the ABC analysis are as follows:

1. Class A Inventory with a high annual volume value of rupiah. Inventory belonging to this class requires excellent attention in procurement because it impacts high costs and intensive inspections.
2. Class B Inventory with a medium annual rupiah value. In this class, moderate control techniques are required.
3. Class C Inventory, whose annual volume is low, is only about 10% of the total inventory value. In this class, knowing what important factors determine the material is necessary. The ABC classification is commonly used in inventory control.

DISCUSSION

From the data processing process, results are obtained as shown in the following table:

Table of ABC analysis calculation results

Jenis Barang	Persediaan Bahan Baku (unit)	Harga Satuan Rp.	Total Biaya (Rp. 000)	(%)	% Kumulatif	Kelas
Rotan Mandola Polos AB	4850	21500	104275	19.60%	19.60%	A
Rotan CL	3850	27000	103950	19.54%	39.14%	A
Rotan Lasio	2520	41000	103320	19.42%	58.56%	A
Rotan Mandola Polos BC	4380	20500	89790	16.88%	75.44%	A
Rotan Tahiti	1045	18500	19332,5	3.63%	79.07%	B
Rotan Subaliyu	1250	14500	18125	3.41%	82.48%	B
Rotan Semambo	780	17500	13650	2.57%	85.04%	B
Rotan Pietrit	900	12000	10800	2.03%	87.07%	B
Rotan Mandola Semi Polos AB	612	16500	10098	1.90%	88.97%	B
Rotan Mandola Polos CD	574	16500	9471	1.78%	90.75%	B
Rotan Core	1095	8500	9307,5	1.75%	92.50%	B
Rotan Manau	905	9500	8597,5	1.62%	94.12%	B
Rotan Mandola Semi Polos BC	580	14500	8410	1.58%	95.70%	C
Rotan Jawit	725	11500	8337,5	1.57%	97.26%	C
Rotan Mandola Semi Polos CD	636	12000	7632	1.43%	98.70%	C
Rotan Sanjat	660	10500	6930	1.30%	100.00%	
TOTAL			532026			

Based on the calculations in the table above, 16 items of rattan raw materials can be classified into three classes, namely:

1. Class A classification with a total cost of Rp. 89,790,000 for one year from June 2019 to May 2020, with a total class A cost of Rp. 401,335,000 or 75.44% of the total cost, so class A raw materials must be appropriately stored by reporting the receipt and use of goods based on the needs calculation, regular checking, and continuous monitoring. Inventory control classified as class A is classified as raw materials that require strict control. Class A classification consists of raw materials: (a) Mandola Polished AB rattan, (b) CL rattan, (c) Lasio rattan, (d) Mandola Polished BC 2 rattan.
2. Class B classification with a total cost of Rp 99,381,500 or equal to 18.69% of the total cost, so class B raw materials require good storage, namely the use of goods based on past usage calculations or demand lists, checking changes in needs, and monitoring for possible inventory shortages. Inventory control classified as class B is classified as requiring moderate control. Class B classification consists of 8 items of rattan raw materials, namely: (a) Tahiti rattan has a percentage of total cost, (b) Subaliyu rattan, (c) Semambo rattan, (d) Pietrite rattan, (e) Mandola Semi Polished AB rattan, (f) Mandola Semi Polished CD rattan, (g) Core rattan, (h) Manau rattan.
3. Class C classification with a total class C cost of Rp 31,309,500, or equal to 5.88% of the total total cost. This class C raw material, when it reaches the point of reordering, the

reorder is carried out, checking is done by comparing to needs, and monitoring is unnecessary or little done. Control of the inventory of class C raw materials includes loose control. Consists of 4 items of rattan raw materials, namely: (a) Mandola Semi Polished BC rattan, (b) Jawit rattan, (c) Mandola Semi Polished CD rattan, (d) Sanjat rattan

CONCLUSION

From the results of this study, it can be concluded that with the ABC analysis approach, rattan raw material inventory control can be classified as follows:

1. Class A classification is classified as raw materials that require strict control, consisting of raw materials: (a) Mandola Polished AB rattan, (b) CL rattan, (c) Lasio rattan, and (d) Mandola Polished BC rattan.
2. Class B classification is classified as requiring moderate control, consisting of 8 items of rattan raw materials, namely: (a) Tohiti rattan has a percentage of the total cost of (b) Subaliyu rattan, (c) Semambo rattan, (d) Pietrit rattan, (e) Mandola Semi Polished AB rattan, (f) Mandola Semi Polished CD rattan, (g) Core rattan, (h) Manau rattan.
3. This Class C classification includes loose control, consisting of 4 items of rattan raw materials, namely: (a) Mandola Semi Polished BC rattan, (b) Jawit rattan, (c) Mandola Semi Polished CD rattan, (d) Sanjat rattan

BIBLIOGRAPHY

Agustina Eunike, Nasir Widha Setyanto, Rahmi Yuniarti, Ihwan Hamdala, Rio Prasetyo Lukodono, Angga Akbar Fanani. (2018). Perencanaan Produksi dan Pengendalian Persediaan. Malang: Ub Press

Dian F. Hidayat, Ossa Sutaarga, Akhmad Fakhrurozi. (2019). Analisa Pengendalian Persediaan Gudang Barang Jadi dengan Analisa ABC pada Perusahaan Cat PT. Pr P-Issn: 2502-4582, E-Issn: 2580-3794. Journal Industrial Manufacturing, 63- 66, Vol 4, No.1

Fikram, M. N. (2019). Optimasi Persediaan Bahan Baku dengan Analisis ABC dan Periodic Review Pt Xyz P-Issn 2656-3789 E-Issn 2657-0181. Jurnal Optimasi Teknik Industri, 21-25, Vol. 1 No.2

Happy Fauzi Afianti, Hery Hamdi Azwir. (2017). Pengendalian Persediaan dan Penjadwalan Pasokan Bahan Baku Impor dengan Metode ABC Analysis Issn: 1411-7010 E-Issn: 2477-507x. Jurnal Iptek, 77-90, Vol.21 No.2

Hudori, M. (2017). Penentuan Kelompok Persediaan Sparepart Mesin pada Industri Baja dengan Menggunakan Analisis Klasifikasi Abc Issn. 2086-0412. Jurnal Citra Widya Edukasi, 153-162, Vol Ix, No 2

Junaidi. (2019). Penerapan Metode ABC terhadap Pengendalian P-Issn: 2598-9022/ E-Issn: 2598-9618. Jurnal Ekonomi dan Manajemen, 159-174, Vol 2, No 2

Olga Aditya Putra dan Indro Prakoso. (2020). Penerapan Metode Klasifikasi ABC dan 5s pada Gudang Tools PT. Mesin Isuzu Indonesia Issn (Print) 2477- 2089 (Online) 2621-1262. Jurnal Rekayasa Sistem Industri, 90-96, Vol 5, No. 2

Ricky Effendi, Johan Oscar Ong, Arief Samuel Gunawan. (2016). Penerapan Sistem Klasifikasi ABC dan Kombinasi Forecasting sebagai Pendukung Keputusan di Dalam Sistem Informasi Pengadaan Barang

Roni, S. (2016). Pengendalian Persediaan Bahan Bakudengan Menggunakan Activity Based Costing (ABC). Jom Fekon, 14-27, Vol.3 No.1

Sayuti, M. (2018). Analisis Pengelompokan Persediaan Jenis Bahan Baku Rotan dengan Menggunakan Metode ABC. 207-216