

ABSTRAK

ANALISIS PENGENDALIAN PERSEDIAAN BAHAN BAKU MELTE VANANA DENGAN MENGGUNAKAN METODE ECONOMIC ORDER QUANTITY (EOQ) PADA CV VANANA JAYA SINERGI

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Penelitian ini bertujuan untuk mengetahui metode peramalan, kuantitas dan frekuensi pembelian bahan baku yang optimal, mengetahui *reorder point*, *safety stock* dan *total inventory cost* bahan baku keripik pisang dan coklat *compound* dengan menggunakan metode *Economic Order Quantity* (EOQ). Penelitian ini digunakan untuk mengkaji penerapan metode *Economic Order Quantity* (EOQ) dalam pengendalian persediaan bahan baku di CV Vanana Jaya Sinergi. Penerapan metode EOQ pada tahun 2019 menghasilkan kuantitas pembelian optimal keripik pisang 487,96 Kg, frekuensi 15, *safety stock* 314,40 Kg, *reorder point* 388,997 Kg dan Total Biaya Persediaan Rp219.169,16, sedangkan pada tahun 2020 kuantitas pembelian optimal keripik pisang 300,67 Kg, frekuensi 19, *safety stock* 184,22 Kg, *reorder point* 242,212 Kg dan Total Biaya Persediaan Rp248.805,92. Kuantitas pembelian optimal coklat *compound* pada tahun 2019 adalah 204,33 Kg, frekuensi 11, *safety stock* 73,34 Kg, *reorder point* 87,552 Kg dan Total Biaya Persediaan Rp152.672,22, sedangkan pada tahun 2020 kuantitas pembelian optimal coklat *compound* 124,02 Kg, frekuensi 13, *safety stock* 42,98 Kg, *reorder point* 87,552 Kg dan Total Biaya Persediaan Rp177.249,16. Peramalan permintaan bahan baku keripik pisang dan coklat *compound* pada tahun 2021 yaitu sebesar 3350,844 Kg dan 957,385 Kg. Kuantitas pembelian optimal keripik pisang tahun 2021 adalah 230,22 Kg, frekuensi 15, dan Total Biaya Persediaan Rp 196.038,86. Kuantitas pembelian optimal coklat *compound* tahun 2021 adalah 87,54 Kg, frekuensi 12, dan Total Biaya Persediaan Rp 159.861,84. Perhitungan persediaan keripik pisang dan coklat *compound* lebih optimal menggunakan metode *Economic Order Quantity*, dibanding dengan menggunakan metode konvensional. CV Vanana Jaya Sinergi dianjurkan menggunakan metode *Economic Order Quantity*.

Kata kunci : CV Vanana Jaya Sinergi, *Single Exponential Smoothing*, *Economic Order Quantity*, *Reorder Point*, *Safety Stock*, *Total Inventory Cost*.

ABSTRACT

INVENTORY CONTROL ANALYSIS OF MELTE VANANA RAW MATERIAL USING ECONOMIC ORDER QUANTITY (EOQ) IN CV VANANA JAYA SINERGI

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The purpose of this research was to determine forecasting method, the optimal purchase quantity and purchase frequency of raw materials, reorder point, safety stock and total inventory cost of raw material banana chips and chocolate compounds using Economic Order Quantity (EOQ) in CV. Vanana Jaya Sinergi. This research used to study the application of Economic Order Quantity (EOQ) of raw materials in inventory control. The application of the EOQ method in 2019 resulted in the optimal purchase quantity of banana chips was 487.96 Kg, frequency was 15, safety stock 314.40 Kg, reorder point was 388.997 Kg and Total Inventory Cost was Rp219.169.16, while in 2020 the optimal purchase quantity of banana chips was 300.67 Kg, frequency was 19, safety stock was 184.22 Kg, reorder point was 242.212 Kg and Total Inventory Cost was Rp. 248,805.92. The optimal purchase quantity for compound chocolate in 2019 was 204.33 Kg, frequency was 11, safety stock was 73.34 Kg, reorder point was 87.552 Kg and Total Inventory Cost Rp. 152.672.22, while in 2020 the optimal purchase quantity for compound chocolate was 124.02 Kg, frequency was 13, safety stock was 42.98 Kg, reorder point was 87.552 Kg and Total Inventory Cost was Rp. 177,249.16. Demand forecast of banana chips and compound chocolate in 2021 were 3350,844 Kg and 957,385 Kg respectively. The optimal purchase quantity of banana chips in 2021 was 230,22 Kg, the frequency was 15, and the Total Inventory Cost was Rp. 196.038,86. The optimal purchase quantity for compound chocolate in 2021 was 87,54 Kg, frequency was 12, and Total Inventory Cost was Rp 159.861,84. The inventory of banana chips and chocolate compounds is more optimal using Economic Order Quantity than using conventional methods. CV Vanana Jaya Sinergi was recommended using Economic Order Quantity.

Keyword : CV Vanana Jaya Sinergi, *Single Exponential Smoothing, Economic Order Quantity, Reorder Point, Safety Stock, Total Inventory Cost*