

Pinkan Jovanka. 2026. Analisis Manajemen Persediaan Greenfield Fresh Milk Sebagai Bahan Baku Minuman dengan Metode *Economic Order Quantity* (EOQ) pada Petik Merah *Café and Roastery* di Kabupaten Sleman. Di bawah arahan Dr. Wulandari Dwi Etika Rini, S.P., M.P

ABSTRAK

Pertumbuhan *industry food and baverage* menimbulkan tantangan bagi pelaku usaha dalam mempertahankan daya saing, khususnya dalam aspek manajemen operasional dan kepuasan pelanggan sehingga perlu manajemen persediaan yang efektif untuk mengurangi risiko kekurangan atau kelebihan stok, serta memastikan bahwa bahan baku selalu tersedia untuk mendukung kelancaran operasional dan kepuasan pelanggan. Penelitian ini bertujuan untuk: (1) mengetahui apakah persediaan Greenfield *fresh milk* sebagai bahan baku minuman di Petik Merah *Café and Roastery* sudah optimal; (2) menghitung jumlah pemesanan persediaan dan *reorder point* Greenfield *fresh milk* menggunakan metode EOQ; (3) menghitung besarnya *safety stock* Greenfield *fresh milk* yang harus dimiliki; serta (4) menghitung total biaya persediaan Greenfield *fresh milk* sebagai bahan baku pembuatan minuman. Penelitian ini menggunakan pendekatan kuantitatif dengan jenis penelitian deskriptif. Penentuan lokasi penelitian dilakukan secara *purposive*. Data yang digunakan berupa data primer dan data sekunder. Metode analisis yang digunakan meliputi analisis EOQ, *safety stock*, dan *reorder point*. Hasil penelitian menunjukkan bahwa persediaan Greenfield *fresh milk* di Petik Merah *Café and Roastery* belum optimal, ditunjukkan oleh perbedaan antara jumlah pemesanan optimal sebesar 59 pcs per pesanan dengan pemesanan aktual sebesar 34 pcs per pesanan, *safety stock* sebesar 16 pcs, serta titik pemesanan ulang sebesar 27 pcs.

Kata kunci: EOQ, Persediaan, *Reorder Point*, dan *Safety Stock*

Pinkan Jovanka. 2026. *Inventory Management Analysis of Greenfield Fresh Milk as a Beverage Raw Material Using the Economic Order Quantity (EOQ) Method at Petik Merah Café and Roastery in Sleman Regency. Under direction by Dr. Wulandari Dwi Etika Rini, S.P., M.P*

ABSTRACT

The growth of the food and beverage industry poses challenges for business actors in maintaining competitiveness, particularly in terms of operational management and customer satisfaction. Therefore, effective inventory management is required to reduce the risk of stock shortages or excess inventory and to ensure the continuous availability of raw materials to support smooth operations and customer satisfaction. This study aims to: (1) determine whether the inventory of Greenfield fresh milk as a beverage raw material at Petik Merah Café and Roastery is optimal; (2) calculate the optimal order quantity and reorder point of Greenfield fresh milk using the Economic Order Quantity (EOQ) method; (3) determine the required level of safety stock for Greenfield fresh milk; and (4) calculate the total inventory cost of Greenfield fresh milk as a raw material for beverage production. This research uses a quantitative approach with a descriptive research design. The research location was selected using a purposive method. The data used consist of primary and secondary data. The data analysis methods used is EOQ analysis, safety stock, and reorder point analysis. The results indicate that the inventory of Greenfield fresh milk at Petik Merah Café and Roastery has not been optimal, as shown by the difference between the optimal order quantity of 59 units/order and the actual order quantity of 34 units/order, with a safety stock of 16 units and a reorder point of 27 units.

Keywords: EOQ, Inventory, Reorder Point, and Safety Stock