Jurnal Pengabdian Masyarakat: Bisnis dan Iptek
Vol. 3 No. 1, May 2026, 78-85
ISSN Online: 3064-0415, https://doi.org/10.56447/jpmbistek
Published by LPMM, STMIK Mardira Indonesia, Bandung.

Inventory Management: Optimizing Inventory in The Shoe Business at Sneakers One, Bandung

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Abstract

This community service activity aims to enhance inventory management at the shoe business Sneakers One in Bandung. The main issue faced is the complexity of inventory management, which arises from variations in sizes, models, and rapid changes in trends. Through qualitative methods and field research involving lecturers and students, we provide recommendations to utilize sales data and appropriate inventory management methods.The results indicate that the implemented inventory system is quite effective, prioritizing fast-moving products and ordering new items in small quantities. Although the company has adopted a simple Economic Order Quantity (EOQ) concept, it has yet to implement a formal calculation system. We recommend conducting a more in-depth inventory management analysis, focusing on demand-based stock management, inventory efficiency, and risk reduction.

Keyword: *Inventory, Risk, Economic Order Quantity, Stock*

Introduction

Inventory management is a crucial aspect of retail operations, including shoe businesses. Sneakers One, as one of the shoe retailers in Bandung, faces challenges in maintaining adequate inventory levels. The variation in sizes, models, and rapidly changing trends makes inventory management more complex. (Heizer & Render, 2017; Gupta & Singh, 2019) Therefore, it is essential for the company to implement effective methods in inventory management to avoid overstocking or stock shortages. (Nahmias, 2020; Kachru & Sharma, 2021; Manik et al., 2023; Foster & Sidharta, 2019) In examining the implementation of this research, a noticeable gap exists in the comprehensive application of structured inventory management systems, particularly in aligning with contemporary practices highlighted in various studies. For instance, Tatikonda and Montoya-Weiss (2022) emphasize the critical role of supply chain management in achieving operational excellence, suggesting that a more integrated approach could enhance Sneakers One's performance.

Research by Maulana et al., (2024) shows that by applying the EOQ method and improving inventory monitoring, companies can ensure efficient stock management, reduce operational costs, and avoid supply disruptions. Sneakers One could benefit from a similar implementation to refine its processes. Fathurrohman & Nugraha (2025) findings indicate that an appropriate Reorder Point can save purchasing costs by allowing for bulk orders that qualify for discounts. This is crucial for Sneakers One, as their current strategy lacks the precision that could optimize ordering processes and minimize associated costs. Samsudin & Martanto (2024) emphasizes the importance of data categorization for optimizing stock planning to match actual demand, which helps prevent shortages or excess inventory. This aligns with the need for Sneakers One to adopt more data-driven practices. Nugroho et al., (2022) explain that digital inventory systems enhance data accuracy and expedite decision-making processes. Transitioning to a digital system could significantly improve Sneakers One's inventory management

practices, while Hejlova et al., (2025) points out that overstock in industries like fashion and sneakers can lead to losses due to rapid product trend changes, highlighting the urgency for Sneakers One to improve its inventory control methods.

This research illustrates that while Sneakers One demonstrates some effective practices, there are substantial opportunities for advancing its inventory management to achieve operational excellence, avoid potential pitfalls, and align better with established theories and practices in the field.

Based on the analysis of the research object, its operational practices still face several risks that can affect business performance. One major risk is potential stock-outs of high-demand products. This happens because the current ordering system relies on demand observations rather than precise calculations. Additionally, the business faces the risk of overstocking new products that turn out to be unpopular in the market. Slow-moving items and defective goods also pose a risk, as they reduce inventory value. If the store holds too much old stock, it will incur higher storage costs and potential losses from discounting prices. Finally, relying on manual sales forecasts can lead to errors in inventory purchasing decisions.

Based on this background, the research questions for this community service activity are: What is the current state of inventory management at Sneakers One? What challenges does the company face in managing inventory? And which methods are suitable for improving inventory management efficiency at Sneakers One? The objectives of this community service activity are to analyze the current condition of inventory management at Sneakers One, provide recommendations to enhance inventory management efficiency, and educate business operators about the importance of data analysis in inventory management.

Method

This activity employs a qualitative approach through field research. A team of lecturers and students conducts direct observations and interviews with business operators at Sneakers One. The population for this study consists of

all business operators at Sneakers One. The research sample is drawn from the owners and employees directly involved in inventory management..

The instruments used in this research include structured interviews with business operators, direct observations of inventory management in the store, and document analysis of sales data and product information. The obtained data are analyzed descriptively by identifying patterns and issues that arise from the interviews and observations. Recommendations are formulated based on this analysis.

Results and Discussion

The operational system at Sneakers One implements an inventory management approach based on consumer demand levels. Products with high demand are reordered in larger quantities to ensure stock availability and prevent sales disruptions. For new products, Sneakers One typically places an initial small order to gauge market response and consumer interest. If sales show an increase and demand is positively assessed, the store will reorder in larger volumes. This strategy helps reduce the risk of accumulating unwanted items. Slow-moving products or those with slight defects are usually sold at discounted prices. This discount strategy aims to minimize the buildup of old stock while maintaining storage efficiency. By effectively managing inventory this way, Sneakers One can better align its offerings with market needs and optimize its operations.

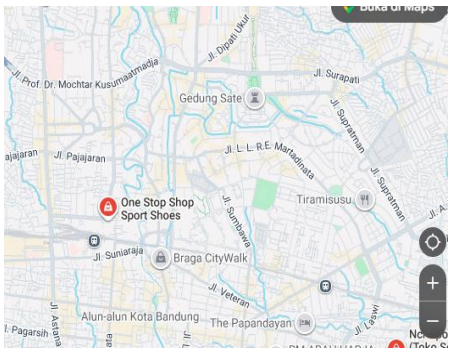

Figure 1. Location of the Object

Analysis of Theory and Practice Suitability

In EOQ theory, companies strive to determine the optimal order quantity to minimize both storage and ordering costs. The practices employed by Sneakers One, such as reordering during high demand and initially ordering new products in small quantities, demonstrate efforts to manage inventory efficiently and reduce the risk of overstocking.

The strategy of placing small initial orders for new products aligns with demand forecasting concepts. The store seeks to observe consumer responses before committing to larger purchases. This approach indicates that inventory decisions are not solely based on estimates but also take into account sales data and customer interest.

The practice of selling slow-moving and defective items at discounted prices aligns with inventory management theory. According to stock management principles, items with slow turnover should be reduced promptly to avoid increasing storage costs and to free up space for more in-demand products. By offering discounts, the store can accelerate inventory turnover while also minimizing potential losses.

However, the application of these theories at Sneakers One remains simplistic. The company does not yet fully utilize formal EOQ calculations, such as detailed assessments of storage costs, ordering costs, or reorder points. Decision-making is still largely based on sales experience and direct observations of consumer demand.

Evaluation of Operational Performance

This evaluation aims to identify how well Sneakers One manages its inventory and responds to market conditions. By analyzing both theoretical frameworks and practical applications, we can better understand the effectiveness of their current strategies and highlight areas for improvement. Overall, Sneakers One's operational performance is quite good as it successfully adjusts inventory to match market demand. The strategy of ordering small quantities for new products demonstrates a risk management approach to prevent unsold items. Additionally, the policy of offering

discounts on slow-moving and defective products helps accelerate inventory turnover, ensuring that the storage space does not become overly congested.

Figure 2. Implementation of Activities

From an efficiency standpoint, the store's operational system is quite flexible, as ordering decisions can adapt to market conditions and consumer trends. However, inventory management still does not utilize a structured or data-driven system comprehensively. As a result, stock control is not optimal, leading to potential shortages or excess inventory.

The accuracy of inventory records often relies on periodic systems, which involve tracking inventory at set intervals, such as weekly or monthly. The perpetual system updates stock data in real time with every incoming or outgoing transaction. Cycle counting is another method that checks

inventory by counting a portion of items regularly without needing to count the entire stock at once. These methods can enhance inventory accuracy and management efficiency when properly implemented.

Conclusion

The inventory system is quite effective, prioritizing fast-moving products. The company orders new products in small quantities and sells slow-moving items at a discount. It has also implemented a simple Economic Order Quantity (EOQ) concept, using market demand analysis, but has yet to adopt a formal calculation system. It is recommended that the company conduct an Inventory Management Analysis, managing stock based on market demand while focusing on inventory efficiency and risk reduction.

The company can apply the Economic Order Quantity (EOQ) calculation in a more structured manner. The EOQ method helps determine the optimal order quantity, making storage and ordering costs more efficient. Additionally, the store can implement the Reorder Point (ROP) concept to identify the right time for reorder. By establishing a reorder point, the risk of running out of stock for high-demand products can be reduced. When dealing with slow-moving items, the store can use ABC analysis to categorize products based on their sales levels. High-selling products can be prioritized in inventory, while low-selling items can have their order quantities limited. The store is also advised to utilize digital stock recording, ensuring that sales and inventory data are more accurate. With such a system in place, decision-making can rely on actual sales data, leading to more effective and efficient operations.

References

Fathurrohman, L. R., & Nugraha, A. A. (2025). Penerapan Pengendalian Persediaan Menggunakan Metode Safety Stock dan Reorder Point untuk Meningkatkan Efisiensi Biaya Persediaan Barang Jadi:(Studi Kasus pada PT. Medal Queenindo). *Indonesian Accounting Literacy Journal*, *5*(2), 210-227.

Foster, B., & Sidharta, I. (2019). *Dasar-Dasar Manajemen*. Yogyakarta, Diandra Kreatif.

Gupta, A., & Singh, A. (2019). *Inventory Management: Principles, Concepts and Techniques*. Springer.

Hejlova, D., Ariestya, A., Koudelkova, P., & Schneiderova, S. (2025). Strategic silence in corporate communication concerning deadstock and overstock in the fashion industry. *Corporate Communications: An International Journal*, *30*(2), 294-312.

Heizer, J., & Render, B. (2017). *Operations Management (11th ed.)*. Pearson.

Kachru, R., & Sharma, S. (2021). *Inventory Management: Strategies and Best Practices*. Routledge.

Manik, E., Sidharta, I., Coenraad, D. P., Komara, A. T., Satria, R. O., & Riadi, F. (2023). Assessing total quality management and its impact on product quality: A cross-sectional study on textile industries in Bandung, Indonesia. *International Journal of Applied Economics, Finance and Accounting*, *15*(2), 71-79.

Maulana, A. T., Shaliha, K. Z., Siahaan, M. J. A., Wilatikta, J. W., & Lestari, M. A. (2024). Analisis penerapan economic order quantity (EOQ) untuk efisiensi pengelolaam bahan baku. *Jurnal Ekobistek*, *13*(4), 167-172.

Nahmias, S. (2020). *Production and Operations Analysis (7th ed.)*. Waveland Press.

Nugroho, B. S., Lestari, D., Rahayu, E. P., Pertiwi, F. A. D., Izzatin, N., & Suryani, N. S. (2023). Penerapan Sistem Manufacturing, Inventory, dan Purchasing Berbasis Enterprise Resource Planning (ERP) Odoo. *Solusi*, *21*(2), 117-129.

Samsudin, R. R., & Martanto, M. (2024). Optimalisasi Stok Barang Melalui Algoritma K-Means Clustering Analisis Untuk Manajemen Persediaan Dalam Konteks Bisnis Modern. *JATI (Jurnal Mahasiswa Teknik Informatika)*, *8*(3), 3572-3580.

Tatikonda, M. & Montoya-Weiss, M. (2022). The Role of Supply Chain Management in Achieving Operational Excellence. *Journal of Operations Management, 68*(4), 563-579.