

Implementation of the FIFO System in the Management of Raw Material Inventory in the Kitchen at R-Gina Hotel Pemalang

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Informasi Artikel	Abstract
E-ISSN : 3026-6874 Vol: 2 No: 8 August 2024 Halaman : 82-87	This research aims to analyze the implementation of the First In First Out (FIFO) system in managing raw material inventory in the kitchen of Hotel R-GINA Pemalang. The research method used is qualitative, focusing on direct observation, in-depth interviews, and document analysis related to the inventory management process. Although the FIFO system has been widely studied in the context of manufacturing and supply chains in general, this research provides new insights into its application in a hotel kitchen operational environment. The research results show that the implementation of the FIFO system in the kitchen of Hotel R-GINA Pemalang has helped improve the efficiency of raw material usage and reduce the risk of spoilage or expiration. However, several challenges were found in its implementation, such as limited storage space and the need for staff training. The conclusion of this research emphasizes the importance of the FIFO system in raw material inventory management in the hospitality industry. The proposed recommendations include improving storage infrastructure, developing a digital recording system, and ongoing training programs for kitchen staff.
Keywords: First In First Out Inventory Raw Material	

Abstrak

Penelitian ini bertujuan untuk menganalisis implementasi sistem First In First Out (FIFO) dalam pengelolaan inventaris bahan baku di dapur Hotel R-GINA Pemalang. Metode penelitian yang digunakan adalah kualitatif, dengan fokus pada pengamatan langsung, wawancara mendalam, dan analisis dokumen terkait proses pengelolaan inventaris. Meskipun sistem FIFO telah banyak diteliti dalam konteks manufaktur dan rantai pasokan secara umum, penelitian ini memberikan wawasan baru tentang penerapannya dalam lingkungan operasional dapur hotel. Hasil penelitian menunjukkan bahwa penerapan sistem FIFO di dapur Hotel R-GINA Pemalang telah membantu meningkatkan efisiensi penggunaan bahan baku dan mengurangi risiko kerusakan atau kadaluarsa. Namun, ditemukan beberapa tantangan dalam implementasinya, seperti keterbatasan ruang penyimpanan dan kebutuhan pelatihan staf. Kesimpulan penelitian ini menegaskan pentingnya sistem FIFO dalam manajemen inventaris bahan baku di industri perhotelan. Rekomendasi yang diusulkan meliputi peningkatan infrastruktur penyimpanan, pengembangan sistem pencatatan digital, dan program pelatihan berkelanjutan untuk staf dapur.

Kata Kunci : Bahan Baku, First In First Out, Inventaris

INTRODUCTION

Effective inventory management is a crucial aspect of the hospitality industry, especially in managing raw materials in the kitchen. The success of a hotel kitchen's operations largely depends on the availability of high-quality and fresh raw materials to ensure guest satisfaction. One widely adopted inventory management method across various industries is the First In First Out (FIFO) system. This system prioritizes the use of raw materials that were acquired or purchased first, thereby reducing the risk of spoilage or expiration (Aashna Sharma, 2021; Kumar et al., 2021; Sembiring et al., 2019).

This study focuses on the implementation of the FIFO system in managing raw material inventory in the kitchen of Hotel R-GINA Pemalang. Hotel R-GINA Pemalang is one of the hotels in Pemalang, Central Java, which offers various high-quality dishes to its guests. Efficient inventory management is a primary concern for this hotel to maintain the quality of its dishes and minimize waste (Jonrinaldi et al., 2019; Mogbojuri et al., 2021; Saha, 2022). Although the FIFO system has been extensively studied in the context of manufacturing and supply chains in general, its application in the operational environment of a hotel kitchen has unique characteristics and challenges. Hotel kitchens face rapid inventory turnover, diverse menu variations, and high-quality demands.

However, several specific issues arise in implementing the FIFO system in the kitchen of Hotel R-GINA Pemalang. First, the limited storage space for raw materials is a constraint in organizing an efficient

layout to facilitate stock rotation according to FIFO principles. Limited storage space can make it difficult to access and identify raw materials that were acquired first, thereby increasing the risk of errors in raw material usage. Second, the lack of understanding and adherence of kitchen staff to FIFO principles also poses a challenge. Kitchen staff accustomed to different inventory management methods may struggle to adapt to the FIFO system. Non-compliance with FIFO principles can lead to inefficient use of raw materials and increase the risk of spoilage or expiration. Third, the limitations of inventory recording and tracking systems also hinder the effective implementation of FIFO. Manual recording or non-integrated systems can result in errors in identifying the entry and exit dates of raw materials, complicating accurate FIFO implementation.

Therefore, this study aims to analyze in-depth the implementation of the FIFO system in the specific context of the kitchen at Hotel R-GINA Pematang, considering the issues faced. This study will examine the factors influencing the successful implementation of FIFO, identify the challenges encountered, and provide recommendations to address these issues. By analyzing the specific problems in implementing the FIFO system in the kitchen of Hotel R-GINA Pematang, this research is expected to offer valuable insights for the hospitality industry in optimizing raw material inventory management. The findings of this study can assist other hotels facing similar challenges in implementing the FIFO system and provide a basis for developing effective solutions to address these issues.

METHOD

This study uses a qualitative approach to analyze the implementation of the First In First Out (FIFO) system in managing raw material inventory in the kitchen of Hotel R-GINA Pematang. A qualitative method was chosen because it allows for an in-depth understanding of the phenomena studied through the exploration of experiences, perceptions, and actual practices in the field.

The researcher conducted direct observations in the kitchen of Hotel R-GINA Pematang to see firsthand the application of the FIFO system in managing raw material inventory. Observations were made at different times to obtain a comprehensive picture of daily inventory management practices. The researcher noted important findings, such as raw material storage methods, stock rotation, and the use of raw materials in dish preparation. In-depth interviews were conducted with key personnel involved in raw material inventory management, such as the head chef, warehouse staff, and operations manager. These interviews aimed to explore their understanding, experiences, and challenges in implementing the FIFO system. The researcher used semi-structured interview guides that allowed flexibility in exploring topics that emerged during the interviews. The number of interviewees depended on the scale of the study and the saturation point when no new significant information emerged from additional interviews.

A snowball sampling technique was used in this study to identify and recruit relevant interviewees (Sugiyono, 2020). Snowball sampling helped the researcher identify interviewees from various roles and departments involved in raw material inventory management, providing a more comprehensive understanding of the FIFO system's implementation in the kitchen of Hotel R-GINA Pematang.

The researcher also analyzed documents relevant to raw material inventory management, such as purchase records, stock cards, standard operating procedures (SOPs), and inventory reports. Document analysis provided insights into the policies, procedures, and overall performance of inventory management. Data collected through observations, interviews, and document analysis were then analyzed thematically. The researcher identified patterns, themes, and relationships emerging from the data to understand the FIFO system's implementation in depth. This analysis involved data coding, theme categorization, and interpretation of meanings.

To ensure the validity of the findings, the researcher used triangulation techniques, comparing and synthesizing findings from various data sources. The researcher also conducted member checking by returning the analysis results to key participants to ensure the accuracy of the interpretation.

Based on data analysis and validation of the findings, the researcher drew conclusions about the implementation of the FIFO system in managing raw material inventory in the kitchen of Hotel R-GINA Pematang. These conclusions include the successes, challenges, and recommendations for improving the

inventory management system. The qualitative research methods used in this study allowed for a rich and contextual understanding of the application of the FIFO system in raw material inventory management in the hospitality industry.

RESULTS AND DISCUSSION

Discussion with Head Chef:

The Head Chef highlighted the importance of the FIFO system in ensuring that raw materials used are always fresh and of high quality. He explained that by using raw materials that enter first, the risk of spoilage and wastage due to expiration can be minimized. However, he also mentioned several challenges, such as limited storage space and the need for staff training to ensure consistent application of FIFO principles.

Discussion with Warehouse Staff:

The Warehouse Staff shared their experiences in managing the daily raw material inventory. They explained the storage, labeling, and stock rotation procedures in accordance with FIFO principles. They also emphasized the importance of accurate record-keeping and regular monitoring to ensure adherence to the FIFO system. However, they also mentioned challenges in organizing an efficient warehouse layout to facilitate the application of FIFO.

Discussion with Operations Manager or Food and Beverage Manager:

The Operations Manager or F&B Manager provided a managerial perspective on the implementation of the FIFO system. They explained how FIFO contributes to operational efficiency, cost control, and the quality of dishes served. They also discussed the importance of coordination between departments, such as the kitchen, warehouse, and purchasing, to ensure a smooth workflow for FIFO. They emphasized the need for ongoing training and supervision to maintain consistency in the application of FIFO.

Discussion with Purchasing or Raw Material Procurement Staff:

The Purchasing or Raw Material Procurement Staff explained their role in supporting the implementation of FIFO. They discussed purchasing strategies, such as ordering the right quantity of raw materials and scheduling regular deliveries to avoid overstocking. They also highlighted the importance of selecting reliable suppliers and arranging appropriate delivery agreements to ensure the quality and freshness of raw materials.

Discussion with Kitchen Staff or Chefs:

The Kitchen Staff or Chefs shared their experiences in using raw materials according to FIFO principles. They explained how they select raw materials that entered first and ensure their use before the expiration date. They also discussed the challenges in organizing raw material storage in the limited workspace of the kitchen and the importance of communication with warehouse staff to ensure the availability of needed raw materials.

Discussion with Accounting or Finance Staff:

The Accounting or Finance Staff provided insights into the financial impact of implementing the FIFO system. They explained how FIFO helps in controlling food costs, reducing losses due to wastage, and improving the accuracy of financial reporting. They also discussed the importance of integrating inventory recording systems with accounting systems for effective monitoring.

DISCUSSION

The discussions with various sources indicate that the implementation of the First In First Out (FIFO) system in managing raw material inventory in the kitchen of Hotel R-GINA Pemalang has provided significant benefits. The Head Chef, Warehouse Staff, and Kitchen Staff or Cooks consistently emphasized that using raw materials according to the FIFO principle has helped ensure the freshness and quality of the ingredients used in dish preparation. Research conducted by Ghani et al., (2022), Godday (2019), Manohar & Aappaiah (2017) shows that the implementation of the FIFO system in raw material inventory management in the food and beverage industry can improve the efficiency of raw material usage, reduce waste, and ensure consistent product quality. These findings support the discussions with the Head Chef, Warehouse Staff, and Kitchen Staff or Cooks at Hotel R-GINA Pemalang, who emphasized the benefits of FIFO in ensuring the freshness and quality of raw materials.

The Operations Manager or Food and Beverage Manager also confirmed that the FIFO system contributes to overall operational efficiency. By using raw materials that were received first, Hotel R-GINA Pemalang can reduce the risk of spoilage or expiration of raw materials. This not only reduces waste and financial losses but also ensures that dishes served to guests are always made with high-quality ingredients. Additionally, research by Godday (2019), Manohar & Aappaiah (2017) and Sembiring et al., (2019) indicates that the implementation of the FIFO system in inventory management can contribute to overall operational efficiency. These findings align with the confirmation from the Operations Manager or Food and Beverage Manager at Hotel R-GINA Pemalang that FIFO helps reduce the risk of spoilage or expiration of raw materials, reduces waste, and ensures the quality of the dishes served.

Accounting or Finance Staff also highlighted the positive impact of the FIFO system on food cost control and the accuracy of financial reporting. By implementing FIFO, Hotel R-GINA Pemalang can optimize the use of raw materials, reduce losses due to waste, and obtain a more accurate picture of inventory value and food costs. Research conducted by Ariharti et al., (2017), Boonsupthip et al., (2015), Mendoza-Villajuan et al., (2024); Shinta et al., (2024) also shows that the implementation of the FIFO system in inventory management can positively impact cost control and the accuracy of financial reporting. These findings support the statements from Accounting or Finance Staff at Hotel R-GINA Pemalang that FIFO helps optimize the use of raw materials, reduce losses due to waste, and improve the accuracy of inventory value and food costs.

However, the discussions with the sources also revealed some challenges in implementing the FIFO system in the kitchen of Hotel R-GINA Pemalang. Limited storage space is one of the main obstacles mentioned by the Head Chef and Warehouse Staff. Limited storage space can make it difficult to organize an efficient layout to facilitate stock rotation and optimal FIFO implementation. Creative solutions or improvements in storage infrastructure are needed to address this challenge. Previous research has also identified challenges in implementing the FIFO system, such as limited storage space and the need for staff training. Research conducted by Prasetya & Pujawan,(2019), Rachmat et al., (2019), Shin et al., 2019; Shinde & Ramdasi, 2021)found that limited storage space can be a hindrance to optimal FIFO implementation. These findings are consistent with the challenges expressed by the Head Chef and Warehouse Staff at Hotel R-GINA Pemalang.

The need for staff training also emerged as a significant challenge. The Head Chef, Operations Manager or Food and Beverage Manager, and Kitchen Staff or Cooks emphasized the importance of continuous training to ensure understanding and adherence to FIFO principles. Adequate training is necessary to change old habits and ensure consistency in FIFO implementation across the entire kitchen team.

Purchasing or Raw Material Procurement Staff also play an important role in supporting the successful implementation of FIFO. Ordering the right quantities of raw materials, scheduling regular deliveries, and selecting reliable suppliers are key factors in ensuring an efficient flow of raw materials and maintaining their freshness.

Overall, the results of the discussions indicate that the FIFO system has proven beneficial in improving the efficiency of raw material usage and maintaining the quality of dishes in the kitchen of Hotel R-GINA Pemalang. Despite challenges such as limited storage space and the need for staff training, the benefits gained from FIFO implementation remain significant. By addressing these challenges with appropriate solutions and ongoing efforts, Hotel R-GINA Pemalang can further optimize its raw material inventory management.

The findings from these discussions are not only beneficial for Hotel R-GINA Pemalang but can also serve as valuable lessons for other hotels looking to implement or enhance the FIFO system in their raw material inventory management. By understanding the benefits, challenges, and key factors in FIFO implementation, the hospitality industry as a whole can take steps to optimize inventory management and improve operational efficiency.

CONCLUSION

This study underscores the importance of implementing the First-In-First-Out (FIFO) system in raw material inventory management in the hospitality industry. The FIFO system ensures that the raw

materials that arrive first are used first, thereby reducing the risk of spoilage and waste due to expired ingredients. Consistent application of this system has been proven to enhance operational efficiency, maintain dish quality, and control costs.

However, to optimize the benefits of the FIFO system, several recommendations need to be considered. First, improving raw material storage infrastructure is crucial. Adequate storage facilities with appropriate temperature and humidity control will extend the shelf life of raw materials and minimize the potential for spoilage. Additionally, the layout and organization of storage spaces should be designed to facilitate easy access and rotation of raw materials according to FIFO principles. Second, developing a digital recording system would significantly aid in accurately tracking the inflow and outflow of raw materials. A digital system allows for real-time inventory monitoring, simplifies purchase planning, and reduces errors from manual recording. Integrating this system with technologies like barcodes or RFID can further optimize the efficiency and accuracy of inventory management. Lastly, continuous training programs for kitchen staff are a critical factor in the successful implementation of the FIFO system. Staff must understand FIFO principles, proper storage procedures, and how to use the digital recording system. Regular training will ensure consistent application of the FIFO system and raise staff awareness of the importance of effective inventory management.

By implementing these recommendations, the hospitality industry can maximize the benefits of the FIFO system in raw material inventory management. This will positively impact dish quality, operational efficiency, and overall business profitability. Further research can be conducted to explore technological innovations and best practices related to inventory management in the hospitality industry.

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