

## Routine Stock Opname in Enhancing Service of Halodoc's Order and Increasing Transactions

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### ABSTRACT

In partnering with the e-commerce platform Halodoc, one of the challenges encountered is unfulfilled orders due to discrepancies between the system's stock and conventional stock. Therefore, the researcher aims to determine whether maintaining drug availability through routine stock opname in an online (e-commerce) setting can also enhance service quality. This study is quasi-experimental research conducted at Manut Farma Pharmacy from July to September 2023. The research involves daily routine stock opname of 312 registered drug items on the Halodoc application. These 312 drug items met the inclusion criteria, which were "Drugs included in the list of drugs available in the pharmacy and registered in the Halodoc program," and the exclusion criterion of "Physical stock of drugs having an expiration date of not less than 6 months." The research findings indicate that almost all incoming Halodoc orders can be served effectively (86%), which represents a significant increase of 19% (A sig. 0.003; p=0.05) compared to the previous three months (67%). The product is one of the key aspects of marketing, and by maintaining up-to-date stock conditions, it directly affects the fulfillment of incoming drug orders by enhancing the serving process. Routine stock opname can help improve the service of Halodoc orders, Although the number of incoming orders for Halodoc transactions is still relatively low, on the other hand, routine stock checks have also contributed to a 10% increase in conventional transactions.

### INTRODUCTION

Post the COVID-19 pandemic, there has been a significant shift in societal habits, leading to nearly a twofold increase in the e-commerce trend in Indonesia. According to BPS in 2021, the e-commerce business category was predominantly dominated by trading and repair businesses, accounting for 46.05% of the total registered e-commerce in Indonesia (2,361,423 businesses) (Teknologi Informasi, 2021). Several advantages associated with e-commerce sales include a new Revenue Stream that may be more promising, increased Market Exposure, reduced Operating Costs (especially in terms of employee and printing costs), Global Reach, and a decrease in pollution and contamination as there is no need for physical shopping. However, some drawbacks include valuable information theft,

service disruptions, unauthorized access to sources, heightened individualism, and disappointment in terms of expectations (Rerung, 2018).

Post-pandemic, several e-commerce companies in Indonesia have reported increased turnovers, notably in the pharmaceutical trading sector. Halodoc, for instance, has reported collaborating with over 4,000 pharmacy partners and other health services, boasting more than 20 million active users (Halodoc, 2023). For Halodoc application users, the multitude of payment methods, including banking and health insurance, has significantly simplified their experience. Presently, the available payment methods on the Halodoc application include Halodoc Balance, Credit/Debit Cards, GoPay, GoPay Later, Link Aja, Virtual Account, AstraPay,

and DANA (Halodoc, 2023). Regarding health insurance, Halodoc has collaborated with dozens of private insurance service providers in Indonesia.

Stock opname, a habitual practice in warehouses and storage facilities, involves conducting a physical examination of inventory items, known as stock opname, before inputting data into a computerized inventory system. According to Carolina *et al.*, Stock opname is one strategy to manage inventory, involving physically counting inventory stock and reconciling it with the recorded stock in the database Carolina *et al.* (2019). Inventory in a company is crucial as it serves as a link between various stages of production and the delivery of finished products to customers. According to Prayogi, the purpose of conducting stock opname is not only to ascertain the current level of inventory but also to understand a company's cash, assets, receivables, and liabilities (Prayogi, 2018).

In partnering with e-commerce platforms such as Halodoc, not all pharmacy businesses achieve desired turnovers. Some pharmacies rarely receive orders from the Halodoc platform. The reason for minimal incoming orders from this platform is transaction failures due to drug availability discrepancies not aligning with the Halodoc system's stock. This condition leads to order cancellations/transfers to other outlets. Repeated order cancellations can result in penalties, causing the pharmacy to be unable to receive orders within specific periods.

Manut Farma Pharmacy has been a partner of Halodoc since November 2020. Throughout this partnership, the pharmacy has faced several challenges related to fulfilling drug orders from Halodoc. Challenges include unfulfilled orders due to differences in stock and Halodoc's purchase prices that do not align with the drug's selling prices at the pharmacy. This issue has impacted the number of orders received from Halodoc. There was a decrease in orders in 2022, and in the first half of 2023, the pharmacy only received 16 orders, with only 5 being fulfilled, 6 unfulfilled, and 5 canceled. Based on research by Yani and Agus (2022) on product availability and purchase decisions, in conventional transactions, product availability significantly influences purchase decisions and holds a positive value (Yani and Agus, 2022). If conventional stock availability affects purchase decisions, here the researcher aims to determine whether online (e-commerce) drug availability can also increase the number of orders.

## METHODS

This research is a quasi-experimental study using the One-Group Pretest-Posttest Design (Sugiyono, 2019). The study aimed to improve the availability of Halodoc's drug stock by enhancing the routine stock opname on the Halodoc application. The intervention involved maintaining drug availability through stock opname updates. Stock opname was conducted daily, and immediate procurement was considered when the drug's inventory was low, allowing for multiple procurements within a month based on field conditions to ensure availability. The pre-data comprised the number of orders from the Halodoc application before the intervention, specifically in April, May, and June 2023. Meanwhile, the post-data represented the number of orders from the Halodoc application after the intervention for three months (July, August, September).

The researchers employed consecutive sampling, where all samples meeting the selection criteria were included in the study until the required sample size was achieved (Sugiyono, 2019). Consequently, the sample in this study consisted of all pharmacy drug items meeting the inclusion and exclusion criteria, which were then registered on the Halodoc application. The inclusion criteria were drugs listed as available in the pharmacy and registered in the Halodoc program, while the exclusion criteria were drugs with an expiration date of less than 6 months. The independent variable in this study was the frequency of Halodoc application stock opname per month, while the dependent variable was the numbers of medication orders from Halodoc that can be served per month.

The study was conducted from July 2023 to September 2023 at Manut Farma Pharmacy. The instrument used was a Microsoft Excel .csv template listing Halodoc drugs from the Halodoc application. Data analysis was performed descriptively and analytically. Descriptive data were organized and processed using MS Excel, while analytical analysis to determine significant differences used SPSS 23 (IBM Corp., Chicago, USA). Analytical testing began with a normality test using the Kolmogorov-Smirnov method to assess the data distribution. Data were considered normally distributed if the significance value (sig.) was greater than 0.05 ( $p > 0.05$ ). Utilizing the Wilcoxon test helped in establishing significant differences between pre-data and post-data. This test serves as an alternative to paired t-tests when the parametric assumptions are not met (Sugiyono, 2019). Data

were considered significantly different if the significance value (sig.) was less than 0.05 ( $p < 0.05$ ).

## RESULTS AND DISCUSSION

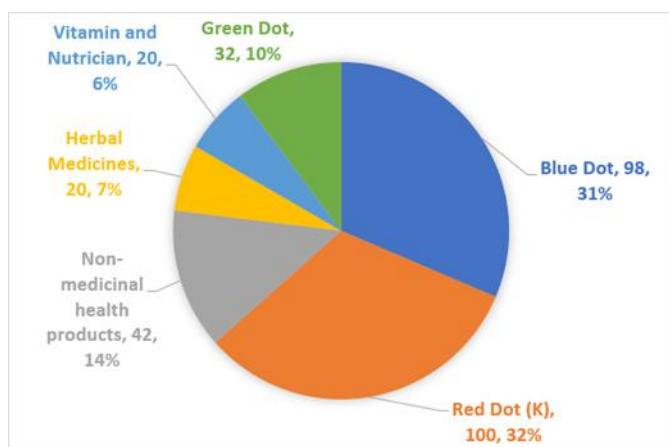
Prior to the intervention, the stock opname condition at Manut Farma Pharmacy, particularly for items registered on Halodoc, was conducted 2 to 5 times per week, focusing on drugs received post-procurement. This practice led to oversight of other drugs conventionally purchased by patients, causing discrepancies between the Halodoc database and the pharmacy's actual drug stock. During this intervention, stock opname specifically targeting Halodoc-listed items was performed daily after services. The stock opname involved aligning the quantity of drugs in the Halodoc database with the actual number of drug items in the pharmacy. In this study, Manut Farma Pharmacy registered a total of 312 drug items on the Halodoc application as follows: (Figure 1).

### Improvement in Halodoc Order Services

By performing routine daily stock opname, the pharmacy can promptly rectify

stock discrepancies within the Halodoc application. This stock improvement holds significant importance in Halodoc management, aiming to minimize lost revenue resulting from unfulfilled orders. Prior to the intervention, Manut Farma Pharmacy frequently rejected orders due to discrepancies between the system's stock and the actual pharmacy stock. Consequently, incoming orders from Halodoc steadily decreased, with no Halodoc orders received for an entire month. However, the intervention brought some improvements. Throughout the intervention and observation period, not only were Halodoc orders received, but they were also efficiently fulfilled. For a more comprehensive understanding, please refer to Table 1 below.

From the table, we can observe an increase in the number of orders served. The months of April, May, and June will be considered as pre-data, followed by July as post 1, August as post 2, and September as post 3. There were no Halodoc orders in June, hence the data are recorded as 0. In July, there were six incoming orders, of which four were successfully fulfilled,



**Figure 1.** Diagram of the Number of Medicines Registered in the Halodoc Application

**Table 1.** Halodoc orders entered into the Manut Farma Pharmacy

Month	Served	Rejected	Total Order	% Order Served
April	1	1	2	
Mei	1	0	1	67%
June	0	0	0	
July*	4	2	6	
Aug*	5	0	5	86%
Sept*	3	0	3	
Total Increase (pre-post)			467%	19%
* : post intervention (daily stock opname)				

one could not be processed, and another was canceled by the system. In August, there were five incoming orders, all of which were satisfactorily fulfilled. Similarly, in September, there were only three incoming orders, all of which were processed successfully. The calculation results showed that the average percentage of orders fulfilled before the regular stock opname increase was 67%. After the implementation of regular stock opname, the average percentage of orders fulfilled increased to 86%. From these data, there is an observed increase in serving percentage has increased from 67% to 86% (19%). Indirectly, in addition to the increase in serving percentage, the total number of Halodoc orders received by Manut Farma pharmacy also increased in July, August, and September, with a total order increase of 467% compared to the total orders in the previous three months.

With this approach, the medicine inventory is better managed as the regular practice of stock opname. Online medication orders placed through the Halodoc intermediary can always be satisfactorily filled by regularly performing stock opname. This result is consistent with Yani's claim that product availability has a major impact on consumers' decisions to buy (Andriani and Yuliastuti, 2022). Afifa and Agustin assert that customer satisfaction is positively and significantly impacted by service quality (Chabibah and Kusumayanti, 2021). As a result of the ordered pharmaceuticals being readily available and delivered to customers promptly, the growing habit of stock-opname has a significant impact on the incoming order service (Eskha, 2022; Mustika *et al.*, 2022; Putra and Suryanata, 2021; Nisza, 2020). This speaks to some users directly, and resolves a few user problems that Halodoc received, especially in relation to the availability of medications (Kushendriawan *et al.*, 2021). Halodoc's revenue can be maximized without

any revenue loss by using this strategy, particularly in August and September.

According to Kotler and Keller (2016), one of the most important basic parts of marketing is the product, as stated in the Theory of Marketing Mix. It is an essential component of the offering, without which there could be no exchange of goods or services (Darmawan and Grenier, 2021). In the marketing mix, a product is more than just a physical good or service; it also includes services or offerings (Thabit and Raewf, 2018). Frequent stock operations guarantee the inventory's current state, which enables each incoming order to be handled promptly and efficiently (Jeremi and Herwanto, 2021).

#### Statistical Analysis of Halodoc Order were Successfully served Quantity

To observe any significant differences resulting from the treatment given to the 312 drugs listed on the Halodoc application, a Wilcoxon test was conducted. The first step was a normality test using the Kolmogorov-Smirnov method. In this test, the total number of successfully serviced orders per item out of the total of 312 medicine items was analyzed, and the results obtained are presented in Table 2. Both Pre and Post data indicated non-normally distributed data, as indicated by the Sig. value of less than 0.05 (0.000).

The normality test of data is a crucial component in data processing and analysis. This test is utilized to determine whether the data follows a normal distribution, therefore guiding the type of analysis to be performed. The normality test results indicated a significance value of 0.00, signifying that the data are not normally distributed. Consequently, a significant difference test was conducted using the Wilcoxon method. According to Sugiyono, the Wilcoxon test serves as an alternative to paired t-tests when parametric assumptions are not met (Sugiyono, 2019).

**Table 2.** Analytical test with SPSS

Source		Result
Normality Test (Kolmogorov-Smirnov)	$\alpha = 95\%$	sig. pre (0.000) sig. post (0.000)
Negative Ranks		1
Positive Ranks		16
Ties		295
Significant difference test (Wilcoxon)	$\alpha = 95\%$	Asymp. Sig. (0.003)

**Tabel 3.** Point of Sale Conventional Transaction in Manut Farma Pharmacy

	Apr	May	Jun	Jul*	Aug*	Sep*
POS Transaction	2101	2386	2375	2603	2443	2501
Avr. Transaction	2287.34			2515.67		
% Increase				10%		

\* : Routine Stock Opname

Based on Table 2 of the Wilcoxon test, there are three parameters to be observed: negative outcome change, positive outcome change, and data similarity. In the comparison between pre and post data, the Negative Rank value shows 1, indicating a decrease in orders for one of the drug items. Conversely, the Positive Rank data indicates an increase in the number of orders for drug items during the intervention and observation process. Specifically, this study observed that sixteen drug items experienced an increase in order quantity. The ties in the table indicate the medication data that remained unchanged as they were not included in the incoming Halodoc orders to Manut Farma pharmacy during this period.

*P*-value for the significant difference test in Table 2 was obtained by comparing the average successfully fulfilled orders in April, May, June (Pre) with the average successfully fulfilled orders in July, August, September (Post). In this test, the Asymp. Sig. value obtained was 0.003 (Significantly Different).

Marketing is frequently thought of as the process of trying to get more orders. Improving the dimensions of the marketing mix is one of the tactics that can be used in marketing (Hamdan, 2021; Darmawan and Grenier, 2021; Sudirjo, 2023). The 4Ps are these parameters: Place, Price, Promotion, and Product. The perspective of Bisma and Pramudita, who assert that all e-marketing mix variables have a positive correlation and are necessary to increase overall online purchase interest (Bisma and Pramudita, 2019), supports this theory in terms of e-commerce practices (Pogorelova *et al.*, 2016). Pharmacy partners who work with Halodoc are only involved in providing drugs to Halodoc patients. As such, Halodoc sets its own prices for customers, runs promotions, and decides where patients can pick up their medications.

Based on the 4P approach, enhancing the product dimension appears to be the only practical way to increase competition amongst other Halodoc pharmacy partners. This could be the main cause of the relatively low number of

incoming orders even with a large rise in service quantity. It is impossible for pharmacy partners to compete on price, promotions, or pharmacy location. Additionally, as the e-product dimension has little effect on desire in making an online purchase, Bisma and Pramudita propose that it may not be as important (Bisma and Pramudita, 2019).

Improving the quality of service for Halodoc orders has been demonstrated to be possible with the regular practice of executing stock opname. Maintaining a regular inventory strategy guarantees medicine availability and steadily raises the possibility of obtaining fresh orders. On the other hand, better order services will shield pharmacies from fines for orders that are not filled or denied. Pharmacies can improve sales results, identify stock inconsistencies, and streamline operations by regularly carrying out stock operations (Andriani and Yuliastuti, 2022; Nur Farida, 2023; Polii *et al.*, 2021).

#### Increasing Number of Orders in Conventional Transactions

Stock opname activities are one of the strategies used to manage inventory, involving the physical counting of inventory stock adjusted with the recorded stock quantity in the database (Carolina *et al.*, 2019). In this study, the 312 routinely opnamed drug items are not solely sold on Halodoc but are also part of the pharmacy's conventional transaction product inventory.

The online stock opname has effectively maintained drug stock availability in the Halodoc e-commerce transactions. Simultaneously, indirectly, the routine stock opname also impacts conventional pharmacy transactions (POS). The influence on conventional transactions can be observed in Table 3.

During the implementation of routine stock opname, the number of transactions fulfilled conventionally at Manut Farma Pharmacy increased by 10%. Because the comparison was only 3 months pre vs 3 months post, no further statistical tests were carried out. Throughout the intervention period, the transaction count remained consistently higher each month. Even in August 2023, despite numerous national

holidays and festive occasions leading to pharmacy closures, the transaction count remained higher than the values from the three months preceding the intervention.

The consistent implementation of routine stock opname provided several direct benefits, such as:

1. Determining Medicine Availability: A pharmacy that maintains a regular stock order is able to guarantee that the right amount of medicines are available. This lowers the possibility of running out of stock, improves transaction volumes because products are consistently available, and enables the pharmacy to better satisfy patient and consumer expectations.
2. Preventing Losses: Moreover, the stock opname procedure aids in lowering the possibility of theft or loss. The pharmacy can immediately detect differences between inventory records and actual physical quantities by doing routine counts. By doing this, losses from missing medications are avoided, and transaction processes are made seamless.
3. Increasing Operational Efficiency: Consistent stock counts contribute to more effective inventory management. The pharmacy can more effectively plan its procurement when it has accurate knowledge of inventory levels. This saves the pharmacy money on storage fees, guarantees that there is enough stock on hand to manage growth in sales, and allows the pharmacy to have the correct products at the right time.
4. Improving Inventory Management Systems: Stock opname results can be used as a gauge to assess and improve inventory management systems. The pharmacist looks into significant differences between inventory records and physical counts. This could result in the discovery of problems with pharmaceutical service procedures for future changes, or it could lead to improvements in record-keeping systems.
5. Increasing Patient Confidence: Patient trust is increased by keeping an accurate and well-managed inventory. Customers are more likely to put their trust in a pharmacy that consistently has their products available and offers quality service. The benefits obtained are in line with research and other studies related to stock opname (Cahyani, 2015; Jeremi and Herwanto, 2021; Nur Farida, 2023; Eskha, 2022).

## CONCLUSIONS

The real increase in the frequency of stock opname becoming a daily routine within the Halodoc application ensures the availability of drug stocks, allowing almost all orders from the Halodoc application to be well-served. Although the number of orders in the Halodoc transactions is still relatively low, the increase in transactions can be felt in conventional transactions.

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