

# INVENTORY MANAGEMENT AND SERVICE DELIVERY AMONG SELECTED SOFT DRINK RETAILERS IN PANABO CITY

Romelyn Ajero<sup>1</sup>, Bernadette Joy M. Dema-ala<sup>1</sup>, Miabie D. Legarda<sup>1</sup>,  
& **Jomar Poblacion**<sup>2</sup>

<sup>1</sup> Department of Teacher Education, UM Panabo College, Panabo City,  
Philippines

<sup>2</sup>Program Head, Department of Business Administration EducationUM  
Panabo College, Panabo City

Email address: [jomar.poblacion@umindanao.edu.ph](mailto:jomar.poblacion@umindanao.edu.ph)

## ABSTRACT

This study aimed to determine the significant relationship between inventory management and service delivery among selected soft drink retailers. This study is based on an adapted and modified questionnaire. A random sampling approach was used to collect data from 35 staff and employees among selected soft drink retailers. Mean and Pearson-r were the statistical tools used. Quantitative non-experimental correlation research was used in this study. The study revealed that the level of inventory management was high and yielded an overall mean of 3.88, which means that it is often practiced in the business. While the level of the service delivery garnered a high result with overall mean of 4.15, which means that it is often practiced in the business. Furthermore, the study revealed that there is a significant relationship between inventory management and service delivery. The results showed a P-value of 0.000, which is less than the 0.05 level of significance, indicating that the null hypothesis ( $H_0$ ) is rejected.

**Keywords:** *Inventory management, service delivery, retailers, Philippines*

---

## INTRODUCTION

In countries throughout the world, service delivery has been affected by several factors in businesses. Service delivery may face several obstacles, such as difficulty accommodating last-minute service requests and a lack of inventory monitoring. The time required to overcome these obstacles could impede service delivery. On the other hand, if a company uses proper inventory management, it may be able to give its suppliers the correct orders and give them opportunities to improve production and deliver products on time. Improved service performance is the outcome of using the information to monitor the inventory (Danneels, 2021).

In a highly competitive market, service delivery is a requisite tool for small or large businesses today. This is the face of the business and customers' experience that will be determined by the service they receive. A company's ability to provide the goods and services that customers require in a manner that meets the customer's expectations is critical to its ability to improve customer satisfaction. It explained how planning and design on the inside would make service delivery more efficient. Developing a systematic component that not just guarantees a superior encounter for the client yet additionally empowers organizations to comprehend what is working for themselves and what is not regarding to service delivery (Mata, 2020).

Moreover, the inventory management methods influence service delivery because the outcome indicated that poor service quality results from poorly managed inventory management and that improved inventory management contributes to good results in service delivery. Unfortunate stock administration control will cause pointless misfortune that could also lead to several factors, such as company

stock outs, a lack of effective warehousing strategies, the delivery of inappropriate goods to customers, or a lack of official documentation for purchased goods. Thus, inventory management and service delivery have a strong connection (Ruth, 2021).

Furthermore, it was revealed that soft drink retailers had seen a lack of organization in their inventory management that may impact their service delivery. The lack of practices and poor service delivery might lead to missed sales and delays of orders, with these ineffective service deliveries causing immense trouble to the business as a whole. Thus, inventory management and service delivery work together to have an effective result for a firm (Aguilar, Golez & Macangga, 2020).

A theory expresses that stores in Nairobi need to keep up with their stocks at a level to fulfill their client needs while not requesting their resources in that frame of mind of unnecessary stock. As a result, they value knowing how the supermarket's implementation of inventory management affects service delivery. Additionally, it allows the supplier to fulfill orders in the appropriate quantities and increases product availability in supermarkets. Businesses will gain information that will help them make decisions in the future, and the service delivery level will be a useful tool for determining customer satisfaction. Thus, this anchored study concluded that inventory management and service delivery are strongly linked (Wanyonyi, 2017).

## **METHODS**

*Participants.* The study used a random sampling method to select the respondents. Thomas (2020) indicated that random sampling refers to randomly selecting respondents from a population, and every respondent has the same possibility of being chosen randomly in a population. The researchers selected 35 respondents from different soft

drink retailers in Panabo City. There are 19 soft drink retailers from the city's official list who are all licensed and have business permits. Among all the retailers, 15 businesses withdrew from answering the survey, and only four retailers of them agreed to participate in this study.

*Materials/Instrument.* The researchers used modified questionnaires as the research instrument to gather the data needed in this investigation. Sousa, Matson, and Lopez (2017) explained that researchers frequently change modified questionnaires to serve the study's objectives better and fit the purpose of the study. The modified questionnaire was used because it is an effective tool and suitable for collecting data from many respondents in less time. The experts validated the questionnaire to achieve the objectives of the study. The close ended questions were also used in this study to allow the respondents to answer a specific response from the options, which took less time indicated by Formplus (2022).

Moreover, to ensure the reliability of the modified questionnaire, the researchers conducted a pre-test in different location. Based on the result, it conveys that the Cronbach alpha of inventory management is 0.703, and the service delivery is 0.814. Cronbach alpha results should be at least 0.70 for an instrument to have a level of self-consistency that is acceptable (Taber, 2017).

A Likert Scale was used to determine the level of Inventory management and service delivery of the selected soft drink retailers in Panabo City; the following scales are used. 4.21 – 5.00 is considered very high, which means that inventory management and service delivery are always practiced. 3.41 – 4.2 is considered high, which means that inventory management and service delivery are often

practiced. 2.61 – 3.40 is considered moderate, which means that inventory management and service delivery are sometimes practiced. 1.81 – 2.60 is considered low, which means that inventory management and service delivery are seldom practiced. 1.0 – 1.80 is considered very low, which means that inventory management and service delivery are never practiced.

*Design and Procedure.* The study used a quantitative, non-experimental correlational design. Quantitative research is appropriate for this study since it is way more detailed on how inventory management has its connection to service delivery. Correlational research design observes the degree of two or more variables linked together. Under non-experimental method, it is used to determine the relationship between inventory management and service delivery, which is intended if there are significant structures between the two variables (Price, Jhangiani, & Chiang, 2013).

To collect the data, the researchers conducted an initial interview by asking for the names of the owners or retailers of the selected soft drink retailers to address the letter asking permission to conduct the study. The researchers asked for validation of the research instrument by using the modified questionnaire validated by the experts and the panel members so that the data would be as accurate as possible before using them. Upon approval, the researchers personally administered the questionnaires, and this study approach also asked for consent from the respondents to allow the researchers to conduct a survey while letting them know that their data would be highly confidential. The distribution of questionnaires to the respondents is done during free time. After the survey, researchers retrieved the data, tallied it, and subjected it to statistical interpretation.

The researchers used mean to determine the level of inventory management and to determine the level of service delivery of soft drink retailers in Panabo City. Pearson r was also used to determine the significant relationship between inventory management and service delivery among soft drink retailers in Panabo City.

## **RESULTS AND DISCUSSION**

### **Level of Inventory Management**

The overall result of independent variables, inventory management, shows a mean of 3.88, indicating high. It means that inventory management is often practiced in order to keep track of products for retailers. Ahmed (2023) supported that the efficient movement of goods and services enhances business operations through inventory management.

Moreover, lean inventory got the highest mean of 3.96 among the three indicators of inventory management. It is described as high, which means that lean inventory is often practiced in the business and retailers have a well-established lean inventory system in order to manage the number of products going in and out of the store to minimize the risk of losing sales due to insufficient inventory management. Soft drink retailers and employees identify ways to improve by practicing the principle calls for recording and analyzing of information or materials required to produce a particular product or service (Daniel, 2023).

In strategic supplier partnerships, the finding showed a mean of 3.82, which is described as high. It means that the soft drink retailers and employees often practice an excellent mutual agreement, such as a long-term contract, and have the same goal: to grow. Businesses that

have a good relationship with their suppliers enhance the customers' efficiency and service, as indicated by Page (2021).

In information technology, the finding showed that this got the lowest mean of 3.72, which is described as high. It means that most retailers and employees lack information technology which decreases the efficiency of their service. Some businesses lack in upgrading their technology due to the fact that the implementation cost can be substantially explained by Sharp (2021).

**Table 1. Level of Inventory Management**

<b>Indicators</b>	<b>SD</b>	<b>Mean</b>	<b>Descriptive Equivalent</b>
Lean Inventory	0.87	3.96	High
Strategic Supplier Partnerships	0.84	3.82	High
Information Technology	0.87	3.72	High
<b>Overall result</b>	<b>0.86</b>	<b>3.88</b>	<b>High</b>

### **Level of Service Delivery**

Presented in Table 2 were the results of the service delivery of soft drink retailers in Panabo City. The evaluation is based on 5-item questions, and the responses of respondents are analyzed and presented below. The overall result of the dependent variable shows a result of a mean 4.15, which is described as high. It means that service delivery is often practiced in the business. It is revealed that the service delivery's goal is to improve the value of a company's supply chain and the consistent delivery of that value. Thus, various soft drink retailers

ensure that their relationship with their customers is excellent to reduce problems in the service delivery sector, resulting in high business efficiency. (Jenkins, 2022).

Moreover, the table shows the soft drink retailer and employees' responses on the service delivery provided by the suppliers with five related questions. Among the five questions, it can be seen that the highest agreement response was obtained from item 3, the supplier delivers the orders on time, with a mean of 4.23, which is described as very high. It implies that almost all of the soft drink retailers and employees practiced a mutual agreement with their suppliers to minimize delays in time in their delivery service. It was revealed that producing goods in a ready state is one of the key factors so that a small amount of inventory can meet demand and delivery can occur immediately to ensure that customers receive exactly what they want when they want it mentioned by Perlmutter (2023).

On the other hand, in item 4, the supplier delivered the correct number of orders and obtained the lease agreement with a mean of 4.00, which is described as high. It means it lacks in keeping track of the number of orders during the delivery of products. Disruption in service delivery is inevitable due to human error, such as poor demand on forecasting (Linsley, 2019).

**Table 2: *Level of Service Delivery***

<b>Indicator</b>	<b>SD</b>	<b>Mean</b>	<b>Descriptive Equivalent</b>
Retailers Delivery	0.77	4.15	High
Overall Result	0.77	4.15	High



## Inventory Management and Service Delivery

It is presented in Table 3 shown that the independent variables are statistically significant in the dependent variables. The result of the P-value of the study is 0.000, which is less than 0.05. It simply means that the null hypothesis is rejected. Therefore, there is a significant relationship between inventory management and service delivery among selected soft drink retailers in Panabo City.

Kaile (2020) supported that there is a positive relationship between inventory management and service delivery since the efficiency of a business increases when efficient inventory management systems are implemented, and this has an effect on the level of performance in service delivery. Thus, inventory management and service delivery assist businesses in tracking all supplies and determining their actual prices. It also helps in managing sudden shifts in demand without compromising product quality or the customer experience.

**Table 3: Significant Relationship between Inventory Management and Service Delivery among Selected Soft Drink Retailers**

Indicator	SD	Mean	Descriptive Equivalent	P-value
Inventory management	0.86	3.88	High	0.000
Service delivery	0.77	4.15	High	

## CONCLUSION

Based on the results and findings of the data gathered, the researchers have concluded the following: (1) The level of inventory

management of soft drink retailers in Panabo City is high. Among the three indicators of inventory management, lean inventory got the highest score mean which is 3.96, and the information technology got a mean of 3.72 which is described as high. (2) The level of service delivery of soft drink retailers in Panabo City has an overall mean result of 4.15, which is described as high. (3) There is a significant relationship between inventory management and service delivery among selected soft drink retailers in Panabo City.

This study recommends using information technology tools such as Excel to monitor the inventory stock of soft drink products in retailers. This application tool is suitable in monitoring basic inventory for small businesses such as soft drink retailers and it is also less costly. Application increases productivity in tracking stock items and quantity to reorder for the company.

This study recommends using check and balances to minimize mistakes on ordering stocks and have correct numbers of items to be delivered. This procedure can help avoid overstocking and understocking in business because it might lead to expired products or lost in sales. Thus, it is essential to use this to help small businesses to control the correct number of stocks during delivery.

Furthermore, it also recommends to employees and soft drink retailers who want to know the basic knowledge on inventory management by being responsible on keeping track of supplies or products while minimizing cost of stocks to have better service delivery. In a nutshell, the researchers conducted this study to know the importance of inventory management and service delivery among selected soft drink retailers in Panabo City. After interpreting the results and discussions, it was discovered that the inventory management

significantly impacted service delivery. Further, the insight gathered is that no matter what size the business of a soft drink retailer, they continue to practice inventory management to improve their service delivery and quality to offer for their customers.

## REFERENCES

- Aguilar, M., Golez, C., & Macangga, P. (2020). Inventory Management and Financial Performance Among Selected Soft Drink Retailers.: (p.19) Call Number: PUT 658.7Ag91 2020 c-1*
- Ahmed, M. (2023). Importance of Inventory Management. Available at: <https://www.scmdojo.com/importance-of-inventory-management/>*
- Daniel, D. (2023). Lean Manufacturing. Available at: <https://www.techtarget.com/searcherp/definition/lean-production#:~:text=Some%20well%2Dknown%20companies%20that,using%20a%20lean%20production%20system>*
- Danneels, D. (2021). Service Delivery Challenges in Projects and Services Companies. Available at: <https://www.cegeka.com/en/be/solutions/dynamics365/insights/knowledge/main-service-delivery-challenges-in-projects-and-services-companies-and-how-to-face-them>*
- Formplus (2022). Close Ended Questions. Available at: <https://www.formpl.us/blog/close-ended-questions>*
- Jenkins, A. (2022). What is Supply Relationship Management (SMR)?. Available*

at:<https://www.netsuite.com/portal/resource/articles/erp/supplier-relationship-management-srm.shtml>

Kaile, C. (2020). *Effects of Inventory management practices and service delivery at Adult Hospital*. Available at: <http://155.0.3.194:8080/jspui/bitstream/123456789/497/1/CHOOLWE%20KAILE.pdf>

Linsley, R. (2019). *How to manage supplier performance*. Available at: <https://www.gatekeeperhq.com/blog/managing-poor-supplier-performance#:~:text=Supplier%2Dside%20causes%20of%20poor,Mistreatment%20of%20supply%20chain>

Mata, K. (2020). *Service Design and Delivery Process: 4 Success Factors*. Available at: [www.google.com/amp/s/hospitalityinsights.ehl.edu/servicedesign-and-delivery-process%3fhs\\_amp=true](http://www.google.com/amp/s/hospitalityinsights.ehl.edu/servicedesign-and-delivery-process%3fhs_amp=true)

Page, A. (2021). *Supplier relationship management: How to maintain good relationships with suppliers*. Available at: <https://www.myob.com/au/blog/6-ways-maintain-great-supplier-relationship#:~:text=Respect%20their%20way%20of%20doing,information%20and%20purchase%20order%20numbers>.

Perlmutter, D. (2023). *Just in Time Delivery: What is it, and How Does it Affect Supply Chain Management?* Available at: <https://www.bringg.com/blog/logistics/just-in-time-delivery#:~:text=Just%20in%20time%20delivery%20means,want%20precisely%20when%20they%20want>.

- Price, C., Jhangiani, R., & Chiang, I. (2013). *Research Method in Psychology*. Available at: <https://opentextbc.ca/researchmethods/chapter/correlational-research/>
- Ruth, N. (2021). *Inventory Management Techniques and Service Delivery In The Public Sector Entities in Uganda*. Available at: <http://dspace.unik.ac.ug:8080/jspui/bitstream/123456789/95/1/NALUBOWA%20RUTH.pdf>
- Sousa, V., Matson, J., & Lopez, K. (2017). *Questionnaire Adapting: Little Changes Mean a Lot*. Available at: <https://pubmed.ncbi.nlm.nih.gov/28322671/#:~:text=Questionnaire%20development%20involves%20rigorous%20testing,the%20Opurpose%20of%20their%20study>
- Taber, K. (2017). *The Use of Cronbach Alpha When Developing and Reporting Research Instruments in Science Education*. Available at: <https://link.springer.com/article/10.1007/s11165-016-9602-2>
- Wanyonyi, N. (2017). *Inventory Management Practices and Service Delivery of Major Supermarkets in Kenya*. Available at: [http://erepository.uonbi.ac.ke/bitstream/handle/11295/102768/Wanyonyi\\_Inventory%20Management%20Practices%20and%20Service%20Delivery%20of%20Major%20Supermarkets%20in%20Kenya.pdf?sequence=1&isAllowed=y](http://erepository.uonbi.ac.ke/bitstream/handle/11295/102768/Wanyonyi_Inventory%20Management%20Practices%20and%20Service%20Delivery%20of%20Major%20Supermarkets%20in%20Kenya.pdf?sequence=1&isAllowed=y)