

**KNOWLEDGE, EFFICIENCY AND EFFECTIVENESS OF THE INVENTORY  
MANAGEMENT SYSTEM OF THE PROPERTY AND CENTRAL SUPPLY  
DEPARTMENT OF UNIVERSITY OF PERPETUAL HELP SYSTEM LAGUNA**

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**ABSTRACT**

Effective inventory management plays a vital role in helping universities maximize resources, streamline operations, and control costs. Wang et al. (2021) emphasize that it ensures timely procurement and minimizes waste, while Huang and Lee (2022) point out how advanced tracking technologies help maintain compliance and prevent overstocking. Azmi et al. (2023) stress the value of automation and real-time monitoring in enhancing decision-making and reducing errors. Roe (2023) highlights the importance of keeping systems updated and providing continuous staff training. This study explored the knowledge, efficiency, and effectiveness of the inventory management system at the Property and Central Supply Department of the University of Perpetual Help System Laguna. Through a descriptive-correlational approach, data from 122 respondents revealed a very high level of knowledge (mean = 3.59), efficiency (mean = 3.60), and effectiveness (mean = 3.61) in system use. A significant correlation was identified between inventory accuracy/compliance and efficiency ( $r = 0.268$ ,  $p = 0.003$ ), indicating that improved accuracy contributes to better efficiency. Although familiarity with system features showed a negligible relationship with effectiveness ( $r = 0.096$ ,  $p = 0.292$ ), usage/application had no significant link ( $r = 0.032$ ,  $p = 0.730$ ). However, knowledge strongly correlated with system effectiveness—particularly in familiarity ( $r = 0.238$ ,  $p = 0.008$ ) and usage ( $r = 0.353$ ,  $p = 0.000$ ). These results highlight the need for continuous improvement. While users show strong understanding and proficiency in using the system, areas such as inventory report analysis and communication with procurement require attention. Additionally, opportunities exist to improve cost savings, stock turnover, and security. Ultimately, the study concludes that enhancing knowledge and accuracy leads to better efficiency and effectiveness, calling for a well-structured action plan to strengthen the university's inventory management system.

**Keywords:** Inventory, management system, property, central, supply

**INTRODUCTION**

Inventory management plays a pivotal role in enhancing operational efficiency within universities, where effective allocation and distribution of resources are crucial for both academic and administrative functions. As highlighted by Wang et al. (2021), efficient inventory management not only streamlines resource availability but also contributes significantly to cost reduction. In their study, they emphasize the importance of robust systems that support timely procurement and mitigate waste, directly benefiting teaching and research activities. Furthermore, Huang & Lee (2022) underscores the essential role of the Property and Central Supply Department in inventory control. They advocate for advanced technologies and methodologies that enhance resource tracking, which in turn ensures compliance with

procurement regulations while minimizing shortages or overstocking. Additionally, a study by Roberts et al. (2023) analyzes recent trends in inventory management practices, suggesting that innovative technologies such as artificial intelligence and blockchain are revolutionizing traditional frameworks. Their findings reveal that successful implementation of these tools results in more transparent and responsive supply chain practices. Effective inventory management is increasingly recognized as a cornerstone of operational efficiency in universities,

Chen et al. (2020) emphasize that a well-structured inventory system not only facilitates resource allocation but also enhances the institution's ability to respond to unexpected demands, thereby avoiding disruptions to academic schedules. Their research illustrates case studies where universities improved their responsiveness through streamlined inventory processes. Building on this, Smith & Johnson (2021) explores the intersection of technology and inventory management. They argue that the adoption of data analytics and cloud-based solutions has revolutionized inventory management practices, enabling institutions to achieve real-time visibility over their resources. Their findings show that universities leveraging these technologies experienced a 30% reduction in excess inventory, allowing for better allocation of funds towards educational initiatives.

In a more recent study, Martinez et al. (2022) discuss the importance of integrating sustainability into inventory management strategies. They argue that by adopting green procurement practices and waste reduction policies, universities can not only enhance their operational efficiency but also fulfill their commitments to environmental stewardship. Their work shows examples of institutions that have successfully implemented sustainable inventory practices, resulting in significant cost savings and reduced environmental impacts.

According to Zhang & Li (2020), adopting lean management techniques significantly reduce waste and leads to more efficient use of resources. Their research details how universities that implemented lean methodologies witnessed up to a 25% improvement in inventory turnover rates, allowing for increased responsiveness to academic and administrative demands. Complementing this, Kim & Nguyen (2021) emphasize the role of Internet of Things (IoT) devices in modernizing inventory control systems. They suggest that IoT technology offers real-time tracking and monitoring of supplies, which not only reduces the risk of stockouts but also minimizes the time spent on manual inventory counts. Their findings reveal that institutions employing IoT solutions reported a 40% decrease in inventory reconciliation time, thus streamlining procurement processes.

Further supporting the case for efficiency, the work of Turner & Scott (2022) highlighted how automated inventory management systems can transform university operations. Through the implementation of automated replenishment strategies, universities can achieve significant reductions in labor costs while ensuring that inventory levels are maintained at optimal thresholds. Their study found that institutions that embraced automation experienced an average increase of 20% in operational efficiency, allowing staff to focus on more strategic tasks. Additionally, Jones et al. (2023) discuss how analytics can greatly improve inventory management efficiency. They argue that using predictive analytics can help universities anticipate needs based on historical usage patterns, thereby optimizing stock levels and reducing carrying costs. Their analysis suggests that data-driven institutions achieved a 15% reduction in

surplus inventory, significantly freeing up budget resources for other critical functions. Moreover, Patel & Roberts (2023) advocates for cross-departmental collaboration in inventory management processes. They found that enhancing communication between academic departments and supply chains led to a more coordinated approach to resource allocation, which improved overall efficiency and responsiveness to institutional needs. Their approach underscores the importance of collaborative frameworks in addressing the complexities of university inventory systems. For these reasons, the researcher took interest in this study to evaluate the level of knowledge, level of efficiency and effectiveness of the Inventory management system of the Property and Central Supply Department. The respondents of this study were HR and non-teaching staff of the University of Perpetual Help System Laguna. Lastly, by the time this study had concluded, the researcher formulated several recommendations with the hope that they would serve as a guide for should implement capacity-building initiatives to further enhance employees' competencies in inventory management. These recommendations aim to enhance an action plan to strengthen knowledge, level of efficiency and effectiveness of the Inventory management system.

### **Objective of the Study**

The overall objective of this study was to examine the knowledge, efficiency, and effectiveness of the inventory management system of the Property and Central Supply Department of the University of Perpetual Help System Laguna. Specifically, this study had the following aims (1) investigate the respondents level of knowledge on the inventory management system (2) examine the respondents' level of efficiency in inventory management system (3) assess the effectiveness of the inventory management system (4) determine the significant relationship between the respondents' level of knowledge on the inventory management system, the respondents' level of efficiency in inventory management and the effectiveness of the inventory management system (5) propose an action plan based on the findings of the study to enhance the respondents' knowledge, efficiency, and effectiveness of the inventory management system of the Property and Central Supply Department of the University of Perpetual Help System Laguna.

### **METHODS**

To obtain the necessary data needed for the study, quantitative research was utilized. Vaidya (2020) [15] defined it as a method of research that relies on measuring variables using a numerical system, analyzing these measurements using any of a variety of statistical models, and reporting relationships and associations among the studied variables.

Likewise, descriptive- correlational research design was employed by the researcher, as it is the most effective research model for this study. Copeland (2022) (16) stated that the aim of descriptive research was to describe a phenomenon and its characteristics. This type of research was more concerned with what rather than how or why something happened. Correlational research referred to a non-experimental research method that studied the relationship between two variables through statistical analysis. Correlational research did not examine the effects of extraneous variables on the variables under study. Specifically, this study described the respondents' knowledge, efficiency, and effectiveness of the inventory management system of the Property and Central Supply Department. Additionally, it investigated the significance of

relationships, through correlation, between and among the respondents' knowledge, efficiency, and effectiveness of the inventory management system of the Property and Central Supply Department. For the sampling technique, stratified random sampling technique was used in this study. As explained by Lemm (2020) [17], it is a type of probability sampling that allows researchers to improve precision (reduce error) relative to simple random sampling (SRS). The population is divided into non-overlapping groups, or strata, along a relevant dimension then collects a random sample of population members from within each stratum. Using the Slovin's Formula calculator with 95% confidence level and 5% margin of error, the researcher obtained a sample size of 177 HR and non-teaching staff of the University of Perpetual Help System Laguna. The actual sample of 122 was calculated using the Raosoft Calculator and selected through the random sampling method (Rahi, 2020) (18), with a 95% confidence level and a 5% margin of error. A stratified sampling technique was also used in the study. The selected respondents were regarded as the best representatives from the total population because they had adequate knowledge of the research topic, which warranted their selection as respondents of the study.

The respondents of the study were the HR and non-teaching staff of the University of Perpetual Help System Laguna, Standardized survey questionnaires were personally and virtually (through Google Forms) administered to the selected respondents to better explain the nature of the study and their participation in the investigation and discuss with them the instructions to follow for an easier and more convenient ways of answering the survey forms. Because the researcher utilized a self-made questionnaire, it was subjected to validation through presentation to a panel of experts in research, language teaching, and statistics. Their comments and suggestions were essential for ensuring its validity. After modifications, it was reviewed by the adviser for final approval. The accomplished questionnaires were collected right after they were answered by the respondents and the gathered data were tallied, tabulated, analyzed, and interpreted.

Statistical tools such as weighted mean and ranking, Pearson r, were used for the analysis of data and interpretation of results.

## RESULTS AND DISCUSSIONS

### I. Level of Knowledge on the Inventory Management System

**Table 1 The Respondents' Level of Knowledge on the Inventory Management System: Familiarity with System Features and Functions**

| Indicator   | Weighted Mean | Verbal Interpretation | Rank |
|---|---------------|-----------------------|------|
| 1. I can track inventory levels, monitor stock movement, and update records in real time to prevent shortages or overstocking.  | 3.63          | Very High             | 3    |
| 2. I understand how to record stock entries, withdrawals, and adjustments to maintain accurate and up-to-date inventory records | 3.72          | Very High             | 1    |

|  |             |                  |     |
|--|-------------|------------------|-----|
| 3. I am aware of how the system aligns with the university's procurement procedures, including purchase requisitions, approvals, and supplier management | 3.48        | Very High        | 6.5 |
| 4. I am familiar with automated restocking processes, order placements, and tracking supply requests to ensure timely availability of resources          | 3.48        | Very High        | 6.5 |
| 5. I know how to label, categorize, and store materials, equipment, and supplies based on university requirements  | 3.71        | Very High        | 2   |
| 6. I can use system tools to conduct inventory audits, track discrepancies, and ensure adherence to institutional procurement policies.                  | 3.52        | Very High        | 5   |
| 7. I am able to generate reports, to analyze stock trends, and use data-driven insights for informed decision-making in resource allocation.             | 3.56        | Very High        | 4   |
| <b>Average</b>   | <b>3.59</b> | <b>Very High</b> |     |

Table 1 presents the respondents' level of knowledge on the Inventory Management System, specifically their familiarity with its features and functions.

As shown in the table, indicator 2, “I understand how to record stock entries, withdrawals, and adjustments to maintain accurate and up-to-date inventory records,” ranked first with a weighted mean of 3.72, verbally interpreted as “Very High.” This was followed by indicator 5, “I know how to label, categorize, and store materials, equipment, and supplies based on university requirements,” which ranked second with a weighted mean of 3.71, also interpreted as “Very High.” Indicator 1, “I can track inventory levels, monitor stock movement, and update records in real-time to prevent shortages or overstocking,” ranked third with a weighted mean of 3.63.

Meanwhile, indicator 7, “I am able to generate reports, analyze stock trends, and use data-driven insights for informed decision-making in resource allocation,” ranked fourth with a weighted mean of 3.56. Indicator 6, “I can use system tools to conduct inventory audits, track discrepancies, and ensure adherence to institutional procurement policies,” ranked fifth with a weighted mean of 3.52. Indicators 3 and 4, which pertain to understanding how the system aligns with procurement procedures and familiarity with automated restocking processes, were tied at rank six with a weighted mean of 3.48.

Overall, the average weighted mean of 3.59 indicates that respondents have a “Very High” level of knowledge regarding the Inventory Management System. These findings suggest that employees are well-versed in the system's features and functions, particularly in stock recording, categorization, and real-time tracking, which are essential for efficient inventory management.

**Table 2 The Respondents' Level of Knowledge on the Inventory Management System:  
Level of Usage and Practical Application**

| Indicator   | Weighted Mean | Verbal Interpretation | Rank |
|---|---------------|-----------------------|------|
| 1. I regularly track inventory levels, update stock records, and ensure that supplies are available when needed                                       | 3.65          | Very High             | 2    |
| 2. I consistently document stock entries, withdrawals, and adjustments to maintain accurate inventory records and prevent discrepancies.              | 3.63          | Very High             | 3    |
| 3. I actively participate in the procurement process, using the system to request, approve, and track supply orders for efficient resource allocation | 3.67          | Very High             | 1    |
| 4. I apply the system to monitor stock levels and initiate restocking requests to prevent shortages and disruptions in university operations.         | 3.51          | Very High             | 7    |
| 5. I use the system to classify and label materials, ensuring proper storage and easy retrieval of resources.   | 3.60          | Very High             | 5    |
| 6. I conduct inventory audits and verify stock accuracy to ensure compliance with university policies and procurement guidelines.                     | 3.52          | Very High             | 6    |
| 7. I follow security protocols, ensuring that only authorized personnel have access to modify or update inventory records.                            | 3.61          | Very High             | 4    |
| <b>Average</b>  | <b>3.60</b>   | <b>Very High</b>      |      |

Table 2 presents the respondents' level of knowledge on the Inventory Management System in terms of usage and practical application.

As shown in the table, Indicator 3, "I actively participate in the procurement process, using the system to request, approve, and track supply orders for efficient resource allocation," ranked first with a weighted mean of 3.67, verbally interpreted as "Very High." Indicator 1, "I regularly track inventory levels, update stock records, and ensure that supplies are available when needed," ranked second with a weighted mean of 3.65, indicating strong adherence to inventory monitoring. Indicator 2, "I consistently document stock entries, withdrawals, and adjustments to maintain accurate inventory records and prevent discrepancies," followed closely in third place with a weighted mean of 3.63.

Meanwhile, Indicator 7, "I follow system security protocols, ensuring that only authorized personnel have access to modify or update inventory records," ranked fourth with a weighted mean of 3.61, reflecting a high level of awareness of security measures. Indicator 5, "I use the system to classify and label materials, ensuring proper storage and easy retrieval of resources," ranked fifth with a weighted mean of 3.60. Indicator 6, "I conduct inventory audits and verify stock accuracy to ensure compliance with university policies and procurement guidelines,"



ranked sixth with a weighted mean of 3.52. Lastly, Indicator 4, “I apply the system to monitor stock levels and initiate restocking requests to prevent shortages and disruptions in university operations,” ranked seventh with a weighted mean of 3.51. Overall, the average weighted mean of 3.60 suggests that respondents exhibit a very high level of knowledge and practical application of the Inventory Management System. This indicates that they are well-versed in inventory tracking, procurement processes, system security, and compliance with institutional guidelines

**Table 3 The Respondents’ Level of Knowledge on the Inventory Management System: Accuracy and Compliance in Inventory Management**

| Indicator  | Weighted Mean | Verbal Interpretation | Rank |
|--|---------------|-----------------------|------|
| 1. I accurately record stock levels, receipts, and disbursements to prevent errors and inconsistencies.                | 3.60          | Very High             | 3    |
| 2. I participate in scheduled inventory audits to verify stock accuracy and identify any discrepancies.                | 3.54          | Very High             | 7    |
| 3. I follow institutional guidelines and procurement policies to align inventory management with regulatory standards. | 3.66          | Very High             | 1.5  |
| 4. I update inventory records in real time to ensure that stock levels reflect actual usage and availability.          | 3.66          | Very High             | 1.5  |
| 5. I track inventory transfers, deliveries, and withdrawals to prevent misplacement or unauthorized use.               | 3.57          | Very High             | 4.5  |
| 6. I ensure that inventory processes comply with financial controls, budget allocations, and procurement protocols.    | 3.57          | Very High             | 4.5  |
| 7. I investigate and correct inconsistencies between recorded and actual stock levels to maintain data integrity.      | 3.56          | Very High             | 6    |
| <b>Average</b>   | <b>3.59</b>   | <b>Very High</b>      |      |

Table 3 presents the respondents’ level of knowledge regarding accuracy and compliance in inventory management. As seen in the table, indicator 3, “I follow institutional guidelines and procurement policies to align inventory management with regulatory standards,” and indicator 4, “I update inventory records in real time to ensure that stock levels reflect actual usage and availability,” were ranked 1.5 with a weighted mean of 3.66, verbally interpreted as “Very High.” Following closely, indicator 1, “I accurately record stock levels, receipts, and disbursements to prevent errors and inconsistencies,” was ranked 3 with a weighted mean of 3.60, also interpreted as “Very High.” Indicator 5, “I track inventory transfers, deliveries, and withdrawals to prevent misplacement or unauthorized use,” and indicator 6, “I ensure that inventory processes comply with financial controls, budget allocations, and procurement protocols,” both ranked 4.5 with a weighted mean of 3.57.

Meanwhile, indicator 7, “I investigate and correct inconsistencies between recorded and actual stock levels to maintain data integrity,” was ranked 6 with a weighted mean of 3.56, followed by indicator 2, “I participate in scheduled inventory audits to verify stock accuracy and identify any discrepancies,” which was ranked 7 with a weighted mean of 3.54.

The overall weighted mean of 3.59, verbally interpreted as “Very High,” indicates that respondents demonstrate a strong level of knowledge regarding accuracy and compliance in inventory management. These findings suggest that respondents are well-versed in institutional procurement policies, real-time stock updates, and adherence to financial controls, which are essential for maintaining the integrity and efficiency of inventory management systems.

**Table 4 Table of the Respondents’ Level of Knowledge on the Inventory Management System**

| Indicator  | Weighted Mean | Verbal Interpretation | Rank |
|--|---------------|-----------------------|------|
| 1. Familiarity with system features and Functions  | 3.59          | Very High             | 2.5  |
| 2. Level of usage and practical application        | 3.60          | Very High             | 1    |
| 3. Accuracy and compliance in inventory Management | 3.59          | Very High             | 2.5  |
| <b>Overall Weighted Mean</b>                       | <b>3.59</b>   | <b>Very High</b>      |      |

As shown in Table 4, the respondents' overall level of knowledge of the Inventory Management System was rated as Very High, with an overall weighted mean of 3.59. Among the three indicators, Level of Usage and Practical Application ranked highest with a weighted mean of 3.60, indicating that respondents actively engage with the system in their daily operations.

Meanwhile, Familiarity with System Features and Functions and Accuracy and Compliance in Inventory Management both obtained a weighted mean of 3.59, showing that respondents are well-versed in the system's functionalities and adhere to institutional guidelines for inventory management. These results suggest that respondents possess a strong understanding of the system, ensuring efficient inventory control, accurate record-keeping, and adherence to procurement policies.

**Table 5 The Respondents’ Level of Efficiency in Inventory Management System**

| Indicator  | Weighted Mean | Verbal Interpretation | Rank |
|--|---------------|-----------------------|------|
| 1. I effectively communicate with procurement officers, department heads, and suppliers to maintain a seamless inventory flow. | 3.53          | Very High             | 9    |
| 2. I ensure proper stock organization, categorization, and movement for efficient warehouse operations.                        | 3.70          | Very High             | 1    |



|   |             |                  |    |
|---|-------------|------------------|----|
| 3. I efficiently compile and analyze inventory reports to support decision-making and resource planning.                    | 3.48        | Very High        | 10 |
| 4. I promptly detect and correct inventory mismatches, ensuring data integrity and Accountability                           | 3.55        | Very High        | 8  |
| 5. I strictly adhere to procurement and inventory management guidelines to ensure regulatory compliance.                    | 3.62        | Very High        | 4  |
| 6. I efficiently input stock records, transactions, and updates with minimal errors, ensuring real-time inventory accuracy. | 3.57        | Very High        | 7  |
| 7. I regularly track inventory levels and respond promptly to supply needs, preventing shortages and overstocking.          | 3.60        | Very High        | 6  |
| 8. I efficiently handle purchase requisitions, approvals, and supplier coordination to streamline inventory replenishment.  | 3.61        | Very High        | 5  |
| 9. I anticipate inventory demands and initiate restocking procedures to avoid supply disruptions.                           | 3.63        | Very High        | 3  |
| 10. I am adept at using the inventory management software's features, including tracking, reporting, and audit tools.       | 3.68        | Very High        | 2  |
| <b>Average</b>  | <b>3.60</b> | <b>Very High</b> |    |

Table 5 presents the respondents' level of efficiency in using the Inventory Management System. As shown in the table, indicator 2, "I ensure proper stock organization, categorization, and movement for efficient warehouse operations," ranked 1 with a weighted mean of 3.70, verbally interpreted as "Very High." Indicator 10, "I am adept at using the inventory management software's features, including tracking, reporting, and audit tools," ranked 2 with a weighted mean of 3.68, while indicator 9, "I anticipate inventory demands and initiate restocking procedures to avoid supply disruptions," ranked 3 with a weighted mean of 3.63.

On the other hand, indicator 3, "I efficiently compile and analyze inventory reports to support decision-making and resource planning," was ranked the lowest at 10 with a weighted mean of 3.48, verbally interpreted as "Very High." Indicator 1, "I effectively communicate with procurement officers, department heads, and suppliers to maintain a seamless inventory flow," ranked 9 with a weighted mean of 3.53, while indicator 4, "I promptly detect and correct inventory mismatches, ensuring data integrity and accountability," ranked 8 with a weighted mean of 3.55. Overall, the respondents' efficiency in inventory management was rated "Very High" with an average weighted mean of 3.60. This suggests that respondents are highly proficient in maintaining stock organization, utilizing inventory management software, and anticipating supply needs. However, while all indicators were rated "Very High," the lower ranking of inventory report analysis and communication with procurement officers suggests areas for further enhancement to optimize overall efficiency.

**Table 6 The Effectiveness of Inventory Management System**

| Indicator   | Weighted Mean | Verbal Interpretation | Rank |
|---|---------------|-----------------------|------|
| 1. The system enables instant tracking of inventory levels, preventing shortages and overstocking.  | 3.66          | Strongly Agree        | 2    |
| 2. The system ensures precise documentation of stock movements, purchases, and usage, minimizing discrepancies.                               | 3.66          | Strongly Agree        | 2    |
| 3. Inventory requests, approvals, and supplier coordination are streamlined for timely replenishment.   | 3.66          | Strongly Agree        | 2    |
| 4. The system contributes to cost savings and operational efficiency  | 3.48          | Strongly Agree        | 10   |
| 5. The system aligns with procurement policies, ensuring transparency and regulatory adherence.   | 3.64          | Strongly Agree        | 4    |
| 6. The system quickly identifies and corrects discrepancies, maintaining data integrity.  | 3.61          | Strongly Agree        | 7    |
| 7. The system reduces waste, improves stock turnover, and minimizes holding costs, contributing to financial savings.                         | 3.60          | Strongly Agree        | 8    |
| 8. The system strengthens inventory security – Access controls prevent unauthorized modifications and protect inventory from losses or theft. | 3.57          | Strongly Agree        | 9    |
| 9. The system automates reporting and data analysis – It generates detailed inventory reports, supporting data-driven decision-making.        | 3.62          | Strongly Agree        | 6    |
| 10. The system optimizes resource allocation – Supplies are distributed based on actual needs, minimizing waste and improving utilization.    | 3.63          | Strongly Agree        | 5    |
| <b>Average</b>  | <b>3.61</b>   | <b>Strongly Agree</b> |      |

Table 6 presents the respondents' perceptions of the effectiveness of the Inventory Management System. As shown in the table, indicators 1, 2, and 3 "The system enables instant tracking of inventory levels, preventing shortages and overstocking," "The system ensures precise documentation of stock movements, purchases, and usage, minimizing discrepancies," and "Inventory requests, approvals, and supplier coordination are streamlined for timely replenishment" all ranked 1st with a weighted mean of 3.66, verbally interpreted as "Strongly Agree." This suggests that the system is highly effective in maintaining inventory accuracy and ensuring smooth procurement processes. On the other hand, indicator 4, "The system contributes to cost savings and operational efficiency," ranked the lowest at 10 with a weighted mean of 3.48, though still verbally interpreted as "Strongly Agree." Similar, indicator 8, "The system strengthens inventory security access controls prevent unauthorized modifications and protect inventory from losses or theft," ranked 9 with a weighted mean of 3.57, while indicator 7, "The

system reduces waste, improves stock turnover, and minimizes holding costs, contributing to financial savings,” ranked 8 with a weighted mean of 3.60. Overall, the respondents strongly agreed on the effectiveness of the inventory management system, as reflected by the average weighted mean of 3.61. The results highlight that the system effectively prevents inventory shortages, ensures accurate documentation, and streamlines procurement processes. However, the slightly lower ratings for cost savings, stock turnover, and security controls suggest areas for potential improvement to further enhance overall operational efficiency.

**Table 7 Relationship between the Respondents’ Level of Knowledge and Level of Efficiency in Inventory Management System**

| Knowledge in Inventory Management System        | Pearson r value                 | p-value | Interpretation  |
|---|---------------------------------|---------|-----------------|
| Familiarity with system features and functions  | 0.096<br>Negligible correlation | 0.292   | Not Significant |
| Level of usage and practical application        | 0.032<br>Negligible correlation | 0.730   | Not Significant |
| Accuracy and compliance in inventory management | 0.268**<br>Low correlation      | 0.003   | Significant     |
| **Significant @ 0.01                            |                                 |         |                 |

As shown in Table 7, there was a significant relationship between the respondents’ accuracy and compliance in inventory management and their level of efficiency in using the Inventory Management System. The Pearson r value of 0.268 (low correlation) with a probability value of 0.003 was less than the 0.01 significance level. This implies that the higher the respondents’ accuracy and compliance in inventory management, the higher their efficiency in utilizing the system.

On the other hand, familiarity with system features and functions had a Pearson r value of 0.096 with a p-value of 0.292, indicating a negligible correlation and no statistical significance. Likewise, the level of usage and practical application showed a Pearson r value of 0.032 with a p-value of 0.730, also indicating a negligible correlation and no significant relationship. These findings suggest that while familiarity and usage alone do not significantly impact efficiency, accuracy and adherence to compliance standards play a crucial role in Agree.” Similarly, indicator 8, “improving overall effectiveness.

**Table 8 Relationship between the Respondents’ Level of Knowledge and Effectiveness of Inventory Management System**

| Knowledge of Inventory Management System       | Pearson r value            | p-value | Interpretation |
|--|----------------------------|---------|----------------|
| Familiarity with system features and functions | 0.238**<br>Low correlation | 0.008   | Significant    |
| Level of usage and                             | 0.353**                    | 0.000   | Significant    |

|   |                            |       |             |
|---|----------------------------|-------|-------------|
| practical application                           | Low correlation            |       |             |
| Accuracy and compliance in inventory management | 0.311**<br>Low correlation | 0.000 | Significant |
| **Significant @ 0.01                            |                            |       |             |

As shown in Table 8, there was a significant relationship between the respondents' level of knowledge and the effectiveness of the Inventory Management System. The Pearson r value of 0.238 (low correlation) with a probability value of 0.008 for familiarity with system features and functions was less than the 0.01 significance level, indicating that greater familiarity with the system contributes to its effectiveness.

Additionally, the level of usage and practical application had a Pearson r value of 0.353 (low correlation) with a p-value of 0.000, showing a stronger but still low correlation with system effectiveness. This suggests that as respondents actively use and apply the system in their inventory processes, the system's effectiveness improves. Similarly, accuracy and compliance in inventory management exhibited a Pearson value of 0.311 (low correlation) with a p-value of 0.000, confirming a statistically significant relationship. This implies that adherence to accuracy and compliance standards enhances the overall effectiveness of the Inventory Management System. Overall, the findings suggest that while the correlations are low, all three dimensions of knowledge—familiarity, practical application, and accuracy and compliance—contribute significantly to the system's effectiveness.

**Table 9 Relationship between the Respondents' Level of Efficiency and Effectiveness of Inventory Management System**

|   | Pearson r value            | p-value | Interpretation |
|---|----------------------------|---------|----------------|
| The Respondents' Level of Efficiency and Effectiveness of Inventory Management System | 0.268**<br>Low correlation | 0.003   | Significant    |
| **Significant @ 0.01  |                            |         |                |

As shown in Table 9, there was a significant relationship between the respondents' level of efficiency and the effectiveness of the Inventory Management System. The Pearson r value of 0.268 (low correlation) with a probability value of 0.003 was less than the 0.01 significance level, indicating a statistically significant relationship between efficiency and system effectiveness. This suggests that as respondents demonstrate higher efficiency in managing inventory—such as organizing stock, tracking inventory levels, and ensuring compliance with procurement policies, the overall effectiveness of the system improves. While the correlation is low, the findings imply that enhancing efficiency in inventory-related tasks can positively impact the system's ability to prevent shortages, streamline operations, and support decision-making.

## CONCLUSION AND RECOMMENDATION

The respondents possess a very high level of knowledge of the Inventory Management System. Their strong familiarity with system features and functions frequent usage and practical application, and adherence to accuracy and compliance standards indicate a well-developed understanding of inventory management processes. This high level of knowledge suggests that the respondents are well equipped to effectively utilize the system for efficient inventory tracking, organization, and decision-making.

The respondents' efficiency in inventory management was rated "Very High". This suggests that respondents are highly proficient in maintaining stock organization, utilizing inventory management software, and anticipating supply needs. However, while all indicators were rated "Very High," the lower ranking of inventory report analysis and communication with procurement officers suggests areas for further enhancement to optimize overall efficiency.

The respondents strongly agreed on the effectiveness of the inventory management system results highlight that the system effectively prevents inventory shortages, ensures accurate documentation, and streamlines procurement processes. However, the slightly lower ratings for cost savings, stock turnover, and security controls suggest areas for potential improvement to further enhance overall operational efficiency.

The higher the respondents' accuracy and compliance in inventory management, the higher their efficiency in utilizing the system

The higher the respondents' level of knowledge and efficiency in using the Inventory Management System, the more effective the system becomes.

The higher the respondents' level of efficiency in inventory management, the more effective the Inventory Management System becomes.

There is a need to comprehensively implement the action plan made to enhance the respondents' knowledge, efficiency and effectiveness of the inventory management system of the property and central supply department of University of Perpetual Help System, Laguna.

## RECOMMENDATIONS

The university administrator should provide continuous training and workshops to further enhance the respondents' knowledge and skills in using the Inventory Management System. Implementing advanced training programs, system updates, and refresher courses will help ensure that staff remain proficient and adaptable to new inventory management trends. The university management should continuously support the enhancement of the respondents' knowledge and skills in using the Inventory Management System by providing regular training, system updates, and technical assistance. Implementing workshops, refresher courses, and hands-on training will help staff maximize the system's efficiency in inventory tracking, organization, and decision-making. Additionally, allocating resources for system improvements and ensuring adherence to inventory policies will further enhance its effectiveness. The university management should allocate resources for system improvements and ensure that inventory

policies and procedures are consistently followed. Regular assessments and audits should also be conducted to maintain accuracy, compliance, and overall effectiveness in inventory management. The Human Resources Department should implement capacity-building initiatives to further enhance employees' competencies in inventory management. Providing targeted training programs on cost optimization, stock turnover management, and security protocols will help address the identified areas for improvement. Additionally, HR should collaborate with the university management to establish incentive programs that recognize employees' efficiency in inventory processes, motivating them to uphold best practices in procurement and documentation.

Non-teaching staff should actively participate in training sessions and workshops on inventory management to enhance their skills in stock monitoring and documentation, and compliance with procurement policies. Regular engagement with system updates and adherence to best practices will further improve efficiency in handling inventory processes. Additionally, fostering a culture of accountability and teamwork in inventory-related tasks will help streamline operations, minimize errors, and ensure the effective utilization of the Inventory Management System.

The researcher should explore further studies on inventory management practices to identify additional factors that influence system efficiency and effectiveness.

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