

# The Extent of Implementation, Challenges of Inventory System, and Organizational Effectiveness of the Provincial Government Office of Occidental Mindoro

Karine May C. Palomino\*

*General Services Office, Local Government Unit, Calintaan, Occidental Mindoro, Philippines*

**Abstract:** The objective of this study is to evaluate the extent of implementation and challenges of inventory system and the organizational effectiveness of PGO in Occidental Mindoro. The study employed the descriptive-correlational design to determine the relationship of the extent of inventory system implementation and challenges encountered to the organizational effectiveness of the PGO in Occidental Mindoro. A total of 85% of the total number of employees were randomly selected to participate in the study. The findings indicate that inventory system's implementation's effectively supports PGO operations by streamlining processes, aiding core functions, and performing tasks efficiently, the system reliably reduces errors, generates accurate information, and supports decision-making—the highest-rated aspect is its ability to minimize recording and processing errors. Data can be easily shared across departments, workflows are improved, and inter-agency coordination is supported. On the other hand, there is a high extent of organizational challenges, especially in coordination, policy implementation, and support for system improvements. The Provincial Government Office of Occidental Mindoro demonstrates strong service delivery in quality, accessibility, responsiveness, and timeliness. While system functionality contributes meaningfully to service delivery, transparency, and organizational effectiveness, addressing organizational issues can meaningfully improve performance and transparency. System-related factors are key determinants of overall organizational performance, and when various challenges exist, technical issues have the strongest influence on overall performance.

**Keywords:** Inventory System Implementation, Inventory Management Challenges, Organizational Effectiveness, Provincial Government Office.

## 1. Introduction

The core of successful governance must be defined by how it pilots its constituents to a progressive tomorrow, sustaining its needs, executing public desired outcomes, and fortifying its resources for the best interest of the public. There is no uniform way to operate for all government offices, but common principles are surely parallel with one vision of ensuring the well-being of residents (Ferarez, 2024). In the context of provincial governance, Republic Act No. 7160, also known as

the Local Government Code of 1991, decentralizes governance in the Philippines by granting local government units. The Office of the Provincial Governor is responsible for implementing policies and overseeing the provincial administration (Atienza & Go, 2023). The state gave Provincial Government Offices (PGO) local autonomy, authority, function, and responsibility and it works with the national government to meet and serve the needs of each community (Senate of the Philippines, 2017).

In May 2024, the Philippines ranked 67th out of 100 countries in the Chandler Good Government Index (CGGI), an institution that utilizes an annual index built by government practitioners worldwide. This has been determined through a set of 35 indicators meticulously crafted by global experts to measure the performance and effectiveness of participating countries, which has been so far the worst placement of the Philippines in 4 years since the launch of CGGI.

The CGGI assesses across six major pillars: leadership and foresight, robust laws and policies, strong institutions, financial stewardship, attractive marketplace, and global influence and reputation (Lagura, 2025).

The Research gap addressed in this study is that, although PGO plays a critical role in delivering essential public services and managing resources efficiently, constituents are still experiencing a low quality of service compared to what is expected of a government. Many PGOs continue to rely on outdated or manual inventory systems, which can lead to challenges in tracking assets, procurement inefficiencies, and resource mismanagement. The implementation of a modern inventory system is expected to streamline operations, enhance accountability, and improve overall organizational effectiveness (Lodge et al., 2015). This study is conceptualized to analyze the present inventory system of PGO in Occidental Mindoro and determine whether it has a direct impact on the unit's organizational effectiveness.

The purpose of this study is to evaluate the extent of implementation and challenges of inventory system and the organizational effectiveness of PGO in Occidental Mindoro.

\*Corresponding author: karinemay38@gmail.com

There is limited empirical data on the challenges, effectiveness, and outcomes of inventory system implementation specific to Occidental Mindoro making it unclear how these systems influence service delivery, resource allocation, and administrative performance in this unique local context.

## 2. Methodology

### A. Study Design

This study employed the descriptive-correlational design to determine the relationship of the extent of inventory system implementation and challenges encountered to the organizational effectiveness of the PGO in Occidental Mindoro.

### B. Study Setting

The study was conducted from August to September 2025 in the province of Occidental Mindoro. The study intends to explore avenues in improving the present inventory system of the area while evaluating its relation on organizational effectiveness. This research aimed to provide insights into how digital inventory systems can transform administrative practices in provincial government office, contributing to more effective service delivery and resource management.

### C. Unit of Analysis and Sampling

Selected employees of the General Services Office of the Provincial Government of Occidental Mindoro were the respondents as they are the only LGU office in the province that currently implements an inventory system. A total of 85% of the total number of employees were randomly selected to participate in the study. They were currently employed in key departments involved in inventory operations, including the General Services Office directly utilizing or managing the inventory system, participants have direct experience using, managing, or supervising the inventory system (e.g., encoding inventory data, approving requests, monitoring stocks, or system oversight) and participants must have held their current role for at least six months to ensure they have sufficient familiarity with inventory processes and system implementation.

### D. Research Instrument

The primary data gathering instrument was a survey questionnaire developed to gather quantitative data on the extent of inventory system implementation, challenges encountered, and organizational effectiveness of the Provincial Government Office in Occidental Mindoro. The instrument consists of structured items using a Likert scale to measure respondents' perceptions on system functionality, data accuracy, system integration, service delivery, resource management, transparency, and operational efficiency.

The main instrument is the respondents' questionnaire which is divided into four parts: Part 1 Respondents' profile, Part 2 Inventory system implementation which includes the following: system functionality, data accuracy and system integration in Occidental Mindoro, and Part 3 Organizational effectiveness which consist of the following: service delivery, resource management, transparency, and operational efficiency

in Occidental Mindoro, and Part 4 Challenges encountered during the implementation of the inventory system which includes technical challenges, organizational challenges, and human resource challenges.

### E. Data Collection Procedure

For the quantitative data aspect of the study, the researcher utilized a survey instrument. The question aims to explore whether inventory is conducted within the participants' respective office. If so, the follow up inquiry seeks to identify the challenges they have encountered in the implementation of their inventory management systems. This approach is intended to capture insights into the practical experiences and difficulties faced by office personnel in managing inventory processes. Moreover, in the quantitative gathering of data, the researcher asked permission from the Governor's office for the conduct of the study. The data gathering for this study was conducted on September 2025.

### F. Ethical Consideration

The researcher asked permission from the provincial government office particularly from the Governor's office to gather the data. Trust in the respondents will be given considering their full understanding of the objectives and the research process. The research instrument was properly explained in order to gather accurate and valid results. The survey questionnaire was given and served personally at a specified time. The confidentiality of the respondents' data was ensured throughout the collection, analysis, and reporting of the findings. It was guaranteed that all the data and results gathered was exclusively used for the purpose of the study.

The content of this study is an original paper and is not copied from any existing study. The researcher used the American Psychological Association (APA) style to give credit to the other research studies used as references. Previous studies and resources used as bases of this study was properly cited and acknowledged. This study only intends to contribute to the advancement of education and does not cause any harm to anyone involved during the conduct of the study.

### G. Data Processing and Analysis

The respondents' profile was described using the frequency and percent distribution. Weighted means and ranking were computed to describe the inventory system implementation and organizational effectiveness in PGO.

To measure the extent of inventory system implementation in the PGO of Occidental Mindoro in terms of system functionality, data accuracy, and system integration, weighted mean and standard deviation was used. Likewise, to measure the extent of how the inventory system affects the effectiveness of the PGO in Occidental Mindoro in terms of service delivery, resource management, transparency, and operational efficiency, weighted mean and standard deviation was used.

Moreover, to determine the challenges and limitations encountered during the implementation of the inventory system, weighted mean and standard deviation was used. To test the relationship between inventory system implementation and organizational effectiveness of PGO in Occidental

Mindoro, Kendall’s tau-b correlation was used. Likewise, to test the relationship between the challenges and limitations encountered during the implementation of the inventory system and organizational effectiveness, Kendall’s tau-b correlation was used.

### 3. Results

#### A. The Extent of Inventory System Implementation

The extent of inventory system implementation in terms of system functionality is high with mean of  $4.47 \pm .46$ . System Functionality is highest in the system performs tasks efficiently without frequent errors with mean of  $4.72 \pm .45$ , followed by, the system is easy to use and navigate with mean of  $4.65 \pm .57$ , next by the system helps streamline LGU services and processes with mean of  $4.40 \pm .59$ , and last by the system is available and accessible when needed with mean of  $4.32 \pm .72$ . The overall standard deviation of 0.46 indicates similarity of ratings by the respondents. The results show that the extent of inventory system implementation in terms of System Functionality is high, as reflected in the overall mean of 4.47. This indicates that respondents generally perceive the system as effective in meeting the functional requirements of the LGU.

#### B. Data Accuracy

The extent of inventory system implementation in terms of data accuracy is high with mean of  $4.21 \pm .57$ . Data Accuracy is highest in the I trust the data produced by the system for decision-making with mean of  $4.40 \pm .63$ , followed by the system helps reduce errors in recording or processing information with mean of  $4.37 \pm .62$ , next by I rarely encounter incorrect or inconsistent data in the system with mean of  $4.27 \pm$

.47, then by There are proper validation measures to ensure data accuracy with mean of  $4.17 \pm .67$ , and last by The data generated by the system is accurate and reliable with mean of  $3.85 \pm .86$ . The overall standard deviation of 0.57 indicates homogeneity of ratings by the respondents.

#### C. System Integration

The extent of inventory system implementation in terms of system integration is high with mean of  $4.27 \pm .58$ . System Integration is highest in the system supports inter-agency coordination and collaboration with a mean of  $4.37 \pm .58$ . Followed by, system integration has improved our workflow and efficiency with a mean of  $4.37 \pm .54$ . Then by, the system works well with other platforms or systems used in our LGU with a mean of  $4.32 \pm .72$ . Next by, data can be shared easily between departments through the system with a mean of  $4.25 \pm .63$ . Lastly, I experience fewer delays because the systems are integrated properly with a mean of  $4.05 \pm .78$ . The overall standard deviation of 0.54 indicates ratings are clustered around the mean.

#### D. System Implementation

The descriptive analysis in Table 5 reveals that the extent of inventory system implementation of the PGO of Occidental Mindoro is high mean of  $4.32 \pm .48$ , the flow of goods, materials, and equipment in the office is highly regulated. The implementation of inventory system is highest in terms of system functionality with a mean of  $4.47 \pm .46$  followed by system integration with a mean of  $4.21 \pm .57$  and data accuracy with a mean of  $4.27 \pm .54$ . The overall standard deviation of 0.48 reveals that ratings are clustered around the mean and most ratings are similar.

Table 1  
The extent of inventory system implementation in terms of system functionality

Indicators	Mean	SD	Description
The system helps streamline LGU services and processes.	4.40	.49	High
The system supports the core functions of our LGU office.	4.27	.64	High
The system is easy to use and navigate.	4.65	.57	Very High
The system is available and accessible when needed.	4.32	.72	High
The system performs tasks efficiently without frequent errors.	4.72	.45	Very High
<b>System Functionality</b>	<b>4.47</b>	<b>.46</b>	<b>High</b>

Scale: 1.00-1.50 Very Low; 1.51-2.50 Low; 2.51-3.50 Moderate; 3.51-4.50 High; 4.51-5.00 Very High

Table 2  
The extent of inventory system implementation in terms of data accuracy

Indicators	Mean	SD	Description
The system helps reduce errors in recording or processing information.	4.37	.62	High
The data generated by the system is accurate and reliable.	3.85	.86	High
I trust the data produced by the system for decision-making.	4.40	.63	High
There are proper validation measures to ensure data accuracy.	4.17	.67	High
I rarely encounter incorrect or inconsistent data in the system.	4.27	.47	High
<b>Data Accuracy</b>	<b>4.21</b>	<b>.57</b>	<b>High</b>

Scale: 1.00-1.50 Very Low; 1.51-2.50 Low; 2.51-3.50 Moderate; 3.51-4.50 High; 4.51-5.00 Very High

Table 3  
The extent of inventory system implementation in terms of system integration

Indicators	Mean	SD	Description
Data can be shared easily between departments through the system.	4.25	.63	High
System integration has improved our workflow and efficiency.	4.37	.54	High
The system supports inter-agency coordination and collaboration.	4.37	.58	High
The system works well with other platforms or systems used in our LGU.	4.32	.72	High
I experience fewer delays because the systems are integrated properly.	4.05	.78	High
<b>System Integration</b>	<b>4.27</b>	<b>.54</b>	<b>High</b>

Scale: 1.00-1.50 Very Low; 1.51-2.50 Low; 2.51-3.50 Moderate; 3.51-4.50 High; 4.51-5.00 Very High

Table 4  
The extent of inventory system implementation

Indicators	Mean	SD	Description
System Functionality	4.47	.46	High
System Integration	4.21	.57	High
Data Accuracy	4.27	.54	High
<b>Inventory System Implementation</b>	<b>4.32</b>	<b>.48</b>	<b>High</b>

Scale: 1.00-1.50 Very Low; 1.51-2.50 Low; 2.51-3.50 Moderate; 3.51-4.50 High; 4.51-5.00 Very High

E. The Extent of Challenges Encountered in the Implementation of Inventory Systems

The descriptive analysis in Table 5 reveals that the extent of challenges encountered in the implementation of inventory systems of the PGO of Occidental Mindoro is high with a mean of 1.73±.38. The challenges encountered is highest in terms of Organizational Challenges with mean of 1.55±.39 followed by Human Resource Challenges with mean of 1.75±.43, and Technical Challenges with mean of 1.87±.46. The overall standard deviation of 0.43 reveals that ratings are clustered around the mean and most ratings are similar.

Table 5  
The extent of challenges encountered in the implementation of inventory systems

Indicators	Mean	SD	Description
Organizational Challenges	1.55	.39	Low
Human Resource Challenges	1.75	.43	Low
Technical Challenges	1.87	.46	Low
<b>Challenges</b>	<b>1.73</b>	<b>.38</b>	<b>Low</b>

Scale: 1.00-1.50 Very Low; 1.51-2.50 Low; 2.51-3.50 Moderate; 3.51-4.50 High; 4.51-5.00 Very High

F. Technical Challenges

The extent of challenges encountered in the implementation of inventory systems in terms of Technical Challenges is high with mean of 1.87±.46. Technical Challenges is highest in the system frequently experiences downtime, leading to inaccuracies in inventory data followed by software and hardware updates are often unavailable, affecting the efficiency of the system. with mean of 1.92±.65, next by unstable or unreliable internet connectivity hinders the effective functioning of the inventory system with mean of 1.87±.56, and software and hardware updates are often unavailable affecting the efficiency of the systems with mean of 1.87±.60 Followed

Table 6  
The extent of challenges encountered in the implementation of inventory systems in terms of technical challenges

Indicators	Mean	SD	Description
The inventory system frequently experiences technical errors or system glitches during operation.	1.87	.46	Low
Software and hardware updates are often unavailable, affecting the efficiency of the system.	1.87	.60	Low
The system frequently experiences downtime, leading to inaccuracies in inventory data.	1.92	.65	Low
Unstable or unreliable internet connectivity hinders the effective functioning of the inventory system.	1.87	.56	Low
The inventory system is not well integrated with other departments, resulting in duplication of work.	1.87	.46	Low
<b>Technical Challenges</b>	<b>1.87</b>	<b>.46</b>	<b>Low</b>

Scale: 1.00-1.50 Very Low; 1.51-2.50 Low; 2.51-3.50 Moderate; 3.51-4.50 High; 4.51-5.00 Very High

Table 7  
The extent of challenges encountered in the implementation of inventory systems in terms of organizational challenges

Indicators	Mean	SD	Description
Poor communication and coordination among departments result in inconsistent inventory records.	1.50	.50	Very Low
Clear policies and guidelines for the proper use of the inventory system are lacking or poorly implemented.	1.62	.55	Low
Monitoring and evaluation processes are weak or ineffective in enhancing system performance.	1.60	.49	Low
The organization shows limited support for innovation and is resistant to changes related to the inventory system.	1.45	.50	Very Low
Insufficient budget is allocated for the improvement and maintenance of the inventory system.	1.60	.54	Low
<b>Organizational Challenges</b>	<b>1.55</b>	<b>.39</b>	<b>Low</b>

Scale: 1.00-1.50 Very Low; 1.51-2.50 Low; 2.51-3.50 Moderate; 3.51-4.50 High; 4.51-5.00 Very High

by, the inventory system is not well integrated with other departments, resulting in duplication of work with mean of 1.87±.46. Lastly, the inventory system frequently experiences technical errors or system glitches during operation with mean of 1.87±.46. The overall standard deviation of 0.46 indicates ratings are homogenous among the respondents.

G. Organizational Challenges

The extent of challenges encountered in the implementation of inventory systems in terms of Organizational Challenges is high with mean of 1.55±.39. The organization shows limited support for innovation and is resistant to changes related to the inventory system with mean of 1.62±.49, followed by poor communication and coordination among departments result in inconsistent inventory with mean of 1.60±.54, next by monitoring and evaluation processes are weak or ineffective in enhancing system performance with mean of 1.60±.49, then by insufficient budget is allocated for the improvement and maintenance of the inventory system, with a mean of 1.50±.50 and last by clear policies and guidelines for the proper use of the inventory system are lacking or poorly implemented with a mean of 1.45±.50. The overall standard deviation of 0.39 indicates ratings are similar among the respondents.

H. Human Resource Challenges

The extent of challenges encountered in the implementation of inventory systems in terms of Human Resource Challenges is high with mean of 1.75±.43. Human Resource Challenges is highest in users have limited knowledge and confidence in operating the inventory system accurately with a mean of 1.82±.50. Followed by there is an insufficient number of technical support staff to address system concerns promptly with a mean of 1.77±.53, and employees lack adequate training to operate the inventory system effectively with a mean of 1.77±.53. Next by, staff show low motivation and poor compliance with established procedures in using the inventory system with a mean of 1.72±.45. lastly, high employee turnover disrupts consistency in the operation and management of the inventory system with a mean of 1.67±.47. The overall standard deviation of 0.43 indicates ratings are close and clustered to the mean.

I. Level of Organizational Effectiveness

The descriptive analysis in Table 9 reveals that the level of Organizational Effectiveness of the PGO of Occidental Mindoro is high with mean of 3.04±.17 Organizational Effectiveness is highest in terms of Service Delivery with mean of 4.49±.52, followed by, Resource Management with mean of 4.28±.45. Next is, Operational Effectiveness with mean of 1.79±.50. Lastly, Transparency with mean of 1.59±.44The overall standard deviation of 0.17 reveals that ratings are clustered around the mean and most ratings are almost the same.

Table 9  
The level of organizational effectiveness

Indicators	Mean	SD	Description
Service Delivery	4.49	.52	High
Transparency	1.59	.44	Low
Resource Management	4.28	.45	High
Operational Effectiveness	1.79	.50	Low
<b>Organizational Effectiveness</b>	<b>3.04</b>	<b>.17</b>	<b>Moderate</b>

Scale: 1.00-1.50 Very Low; 1.51-2.50 Low; 2.51-3.50 Moderate; 3.51-4.50 High; 4.51-5.00 Very High

J. Service Delivery

The level of organizational effectiveness in terms of Service Delivery is high with mean of mean 4.49±.52. Service Delivery is highest in the LGU delivers public services in a timely manner with a mean 4.52±.66. Followed by, feedback from citizens is considered in improving service delivery with a mean 4.52±.59, and Citizens' needs and concerns are addressed effectively by our office with mean =4.52± .55. Then, the LGU provides equal and fair access to services for all community members with mean=4.50±.55. Lastly, services provided by the LGU meet quality standards with mean= 4.40±.63. The overall standard deviation of 0.52 indicates ratings are clustered to the

Table 8  
The extent of challenges encountered in the implementation of inventory systems in terms of human resource challenges

Indicators	Mean	SD	Description
Employees lack adequate training to operate the inventory system effectively.	1.67	.47	Low
Staff show low motivation and poor compliance with established procedures in using the inventory system.	1.77	.53	Low
There is an insufficient number of technical support staff to address system concerns promptly.	1.82	.50	Low
Users have limited knowledge and confidence in operating the inventory system accurately.	1.72	.45	Low
High employee turnover disrupts consistency in the operation and management of the inventory system.	1.77	.53	Low
<b>Human Resource Challenges</b>	<b>1.75</b>	<b>.43</b>	<b>Low</b>

Scale: 1.00-1.50 Very Low; 1.51-2.50 Low; 2.51-3.50 Moderate; 3.51-4.50 High; 4.51-5.00 Very High

Table 10  
The level of organizational effectiveness in terms of service delivery

Indicators	Mean	SD	Description
Services provided by the LGU meet quality standards.	4.40	.63	High
The LGU provides equal and fair access to services for all community members.	4.50	.55	High
Feedback from citizens is considered in improving service delivery.	4.52	.59	Very High
Citizens' needs and concerns are addressed effectively by our office.	4.52	.55	Very High
The LGU delivers public services in a timely manner.	4.52	.66	Very High
<b>Service Delivery</b>	<b>4.49</b>	<b>.52</b>	<b>High</b>

Scale: 1.00-1.50 Very Low; 1.51-2.50 Low; 2.51-3.50 Moderate; 3.51-4.50 High; 4.51-5.00 Very High

Table 11  
The level of organizational effectiveness in terms of resource management

Indicators	Mean	SD	Description
The LGU uses financial resources effectively and responsibly.	4.50	.55	High
Physical resources (e.g., equipment, facilities) are well-maintained and utilized efficiently.	4.27	.64	High
There is proper planning and budgeting for resource use in the LGU.	4.12	.56	High
Resource shortages rarely affect service delivery in the LGU.	4.27	.55	High
Human resources are allocated according to operational needs.	4.25	.66	High
<b>Resource Management</b>	<b>4.28</b>	<b>.45</b>	<b>High</b>

Scale: 1.00-1.50 Very Low; 1.51-2.50 Low; 2.51-3.50 Moderate; 3.51-4.50 High; 4.51-5.00 Very High

mean.

K. Resource Management

The level of organizational effectiveness in terms of Resource Management is high with mean of 4.49±.52. Resource Management is highest in the LGU uses financial resources effectively and responsibly with mean 4.50±.55. Followed by, Physical resources (e.g., equipment, facilities) are well-maintained and utilized efficiently with mean 4.27±.64. Next by, Resource shortages rarely affect service delivery in the LGU with mean 4.27±.55. Then, Human resources are allocated according to operational needs with mean 4.25±.66. Lastly, there is proper planning and budgeting for resource use in the LGU with mean 4.12±.56.

L. Transparency

The level of organizational effectiveness in terms of Transparency is high with mean of 1.59±.44. Transparency is highest in financial reports and decisions are accessible to stakeholders with mean 1.85±.57. Followed by, the LGU promotes accountability in all departments with mean 1.75±.43. Next is, I believe the LGU operates with honesty and integrity with mean 1.50± .55. Then, the LGU provides clear and accurate information about its programs and services mean 1.47±.59. Lastly, there are open channels for reporting concerns or irregularities with mean 1.37±.58. The overall standard deviation of 0.44 indicates ratings are homogenous among the respondents.

M. Operational Effectiveness

The level of organizational effectiveness in terms of Operational Effectiveness is high with mean of 1.79±.50.

Operational Effectiveness is highest in the workflows are clearly defined and help employees perform tasks effectively with mean 1.95±.63. Followed by, delays in operations are minimal with mean 1.82±.59. Next is, technology is used effectively to enhance daily operations with mean 1.80±.56. Lastly, LGU processes are streamlined and avoid unnecessary steps with mean 1.67±.65. The overall standard deviation of 0.50 indicates ratings are similar among the respondents.

*N. The Relationship between the Extent of Implementation of Inventory System and Organizational Effectiveness*

The correlation analysis in Table 14 presents that the implementation of inventory system is moderately related with organizational effectiveness with coefficient of .465 with p-value less than .05. This means that the increase in the implementation of inventory system relate to increase in organizational effectiveness. The correlation analysis indicates that the implementation of the inventory system is moderately associated with organizational effectiveness (r = 0.465, p < 0.05), suggesting that improvements in system implementation may enhance overall organizational performance. Specifically, System Functionality is moderately correlated to Service Delivery with coefficient of .533, weakly correlated to Resource Management with coefficient of .341, moderately correlated to Transparency with coefficient of .535, and moderately correlated to Organizational Effectiveness with coefficient of .410. All supported by the p-values less than .05.

Data Accuracy is weakly correlated to Service Delivery with coefficient of .295, weakly correlated to Resource Management with coefficient of .254, weakly correlated to Transparency with coefficient of .361, and weakly correlated to Organizational Effectiveness with coefficient of .283. All supported by the p-value less than .05. System Integration is weakly correlated to Service Delivery with coefficient of .299, weakly correlated to Resource Management with coefficient of .339, moderately correlated to Transparency with coefficient of .457, and moderately correlated to Organizational Effectiveness with coefficient of .516. All supported by the p-value less than .05.

*O. The Relationship between the Extent of Challenges in the Implementation of Inventory System and the Organizational Effectiveness*

The correlation analysis in Table 15 presents that the challenges in the implementation of inventory system is weakly related with organizational effectiveness with coefficient of .324 with p-value less than .05. This means that the increase in the challenges in the implementation of inventory system relate to the increase in organizational effectiveness.

Technological Challenges is weakly correlated to Service Delivery with coefficient of .196, weakly correlated to Resource Management with coefficient of .381, moderately correlated to Transparency with coefficient of .476, and moderately correlated to Organizational Effectiveness with

Table 12  
The level of organizational effectiveness in terms of transparency

Indicators	Mean	SD	Description
I believe the LGU operates with honesty and integrity.	1.50	.55	Very Low
The LGU promotes accountability in all departments.	1.75	.43	Low
The LGU provides clear and accurate information about its programs and services.	1.47	.59	Very Low
Financial reports and decisions are accessible to stakeholders.	1.85	.57	Low
There are open channels for reporting concerns or irregularities.	1.37	.58	Very Low
<b>Transparency</b>	<b>1.59</b>	<b>.44</b>	<b>Low</b>

Scale: 1.00-1.50 Very Low; 1.51-2.50 Low; 2.51-3.50 Moderate; 3.51-4.50 High; 4.51-5.00 Very High

Table 13  
The level of organizational effectiveness in terms of operational effectiveness

Indicators	Mean	SD	Description
LGU processes are streamlined and avoid unnecessary steps.	1.67	.65	Low
Technology is used effectively to enhance daily operations.	1.80	.56	Low
Workflows are clearly defined and help employees perform tasks effectively.	1.95	.63	Low
The LGU adapts quickly to changes or challenges in its operations.	1.72	.50	Low
Delays in operations are minimal.	1.82	.59	Low
<b>Operational Effectiveness</b>	<b>1.79</b>	<b>.50</b>	<b>Low</b>

Scale: 1.00-1.50 Very Low; 1.51-2.50 Low; 2.51-3.50 Moderate; 3.51-4.50 High; 4.51-5.00 Very High

Table 14  
The relationship between the extent of implementation of inventory system and organizational effectiveness

Implementation	Operational Effectiveness	Correlational Coefficient	p-value	Description
System Functionality	Service Delivery	.533	.000	Moderate
	Resource Management	.341	.006	Weak
	Transparency	.535	.000	Moderate
	Organizational Effectiveness	.410	.001	Moderate
Data Accuracy	Service Delivery	.295	.020	Weak
	Resource Management	.254	.037	Weak
	Transparency	.361	.003	Weak
	Organizational Effectiveness	.283	.021	Weak
System Integration	Service Delivery	.299	.020	Weak
	Resource Management	.339	.006	Weak
	Transparency	.457	.000	Moderate
	Organizational Effectiveness	.516	.000	Moderate
<b>Overall</b>	<b>Overall</b>	<b>.465</b>	<b>.000</b>	<b>Moderate</b>

Scale: 1.00-1.50 Very Low; 1.51-2.50 Low; 2.51-3.50 Moderate; 3.51-4.50 High; 4.51-5.00 Very High

Table 15

The relationship between the extent of challenges in the implementation of inventory system and the organizational effectiveness

Challenges	Operational Effectiveness	Correlational Coefficient	p-value	Description
Technological Challenges	Service Delivery	.196	.134	Weak
	Resource Management	.381	.002	Weak
	Transparency	.476	.000	Moderate
	Organizational Effectiveness	.517	.000	Moderate
Organizational Challenges	Service Delivery	.091	.482	Negligible
	Resource Management	.248	.045	Weak
	Transparency	.381	.002	Weak
	Organizational Effectiveness	.492	.000	Moderate
Human Resource Challenges	Service Delivery	.141	.291	Negligible
	Resource Management	.201	.117	Weak
	Transparency	.330	.011	Weak
	Organizational Effectiveness	.376	.004	Weak
<b>Overall</b>	<b>Overall</b>	<b>.324</b>	<b>.005</b>	<b>Weak</b>

Scale: .000-.150 Negligible; .151-.400 Weak; .401-.650 Moderate; .651-.900 Strong; .901-1.000 Perfect

Table 16

The factors of implementation of inventory system significantly predicting organizational effectiveness

Domains	Beta Coefficient	Significance	Description
System Functionality	.122	.000	Significant
Data Accuracy	-.004	.245	Not Significant
System Integration	-.178	.078	Not Significant

R2 = .524; F = 13.196; Sig. = .000

Table 17

The dimensions of challenges predicting organizational effectiveness

Domains	Beta Coefficient	Significance	Description
Technical Challenges	-.056	.518	Not Significant
Organizational Challenges	.222	.025	Significant
HR Challenges	.023	.799	Not Significant

R2 = .345; F = 6.382; Sig. = .001

coefficient of .517. This indicates that resolving technical issues may directly influence accountability and overall efficiency.

Organizational Challenges is negligibly correlated to Service Delivery with coefficient of .091, weakly correlated to Resource Management with coefficient of .248, weakly correlated to Transparency with coefficient of .381, and moderately correlated to Organizational Effectiveness with coefficient of .492.

Human Resource Challenges is negligibly correlated to Service Delivery with coefficient of .291, weakly correlated to Resource Management with coefficient of .201, weakly correlated to Transparency with coefficient of .330, and weakly correlated to Organizational Effectiveness with coefficient of .376. This suggests that while staffing and training issues exist, their influence is less pronounced.

*P. The Factors of Implementation of Inventory System Significantly Predicting Organizational Effectiveness*

The regression analysis in Table 16 shows that among the factors of implementation of inventory system, System Functionality significantly predict Organizational Effectiveness as indicated by the p-value less than .05. A large portion of Organizational Effectiveness approximately equal to 52.4% is explained of by the presented domains of implementation of inventory, indicating that over half of organizational performance can be attributed to system-related factors.

*Q. The Dimensions of Challenges Predicting Organizational Effectiveness*

The regression analysis in Table 17 shows that among the dimensions of challenges, only Organizational Challenges significantly predicts Organizational Effectiveness as indicated

by the p-value less than .05. A considerable portion of Organizational Effectiveness approximately equal to 34.5% is explained of by the presented domains of challenges in implementation of inventory system, demonstrating that while other challenges exist, technical factors have the strongest impact. The F-value indicates that the dimensions of challenges in implementation significantly predict organizational effectiveness.

**4. Discussion**

The extent of inventory system implementation in terms of system functionality indicates that respondents generally perceive the system as effective in meeting the functional requirements of the LGU. This supports the study of Ugbebor et al., (2024) who consistently notes that high system functionality is a key indicator of a well-implemented inventory system, as functional systems enhance performance, reduce manual workload, and support daily operations more efficiently

While in data accuracy, it corroborates the study of Hamdat et al., (2024) that it is widely recognized as a critical component of effective inventory management systems because accurate information ensures operational efficiency, reliable reporting, and informed decision-making. Likewise, Mokogwu et al., (2024) concluded that, computerized information systems significantly improve data accuracy by automating data entry and processing, which minimizes human errors commonly associated with manual handling of inventory records.

The result clearly supports the idea of Ameh et al., (2024) that system integration strengthens workflow efficiency. They highlight that when systems communicate with one another, processes become more streamlined, and delays caused by

fragmented platforms are significantly reduced. Moreover, integrated systems eliminate the need for repetitive data entry and manual reconciliation of records, leading to faster task completion and smoother workflow transitions between units (Eze *et al.*, 2024).

Results on technical challenges suggests that respondents generally perceive the system as unstable and unfunctional, experiencing interruptions during use. This finding aligns with Gumilao (2024), who emphasize that modern inventory systems are increasingly designed with improved reliability and error-reduction mechanisms, allowing users to perform tasks efficiently without frequent system breakdowns. This is supported by Gupta (2025), who note that system integration remains one of the most common technical difficulties in public sector information systems due to varying platforms, legacy systems, and inconsistent data structures between departments. These integration gaps often lead to duplicated tasks, slower processing, and coordination challenges across units.

The findings under organizational challenges supported by Musheke and Phiri, (2021) who argues that effective communication across organizational units strengthens information flow and minimizes discrepancies in shared data systems. Similarly, Zorlu and Korkmaz, (2021) emphasize that coordination among departments reduces record inconsistencies and supports more synchronized operational processes within information systems. These studies highlight that communication is a foundational organizational factor that significantly enhances the successful implementation of inventory systems.

Human resource challenges, emphasize that adequate training enhances user competency, reduces errors, and improves system utilization. Mohd *et al.*, (2018) highlight that training increases perceived ease of use, leading to better user adoption. While, turnover disrupts institutional memory and reduces continuity in system operations. Shenoy, (2016) also emphasize that stable staffing improves long-term system performance because experienced employees retain critical knowledge needed for consistent inventory processes.

The level of organizational effectiveness under service delivery state that high-quality public service delivery is achieved when organizations consistently meet standards, ensure fairness, and incorporate stakeholder feedback into improvement processes. Aligns with Cruz (2024), who emphasize that responsive government institutions build public trust by prioritizing community concerns and adapting services to meet emerging needs.

The highest-rated indicator under Resource Management is the PGO using financial resources effectively and responsibly. This suggests that respondents perceive financial management as a strong point in the organization. This is supported by Yasin and Mokhtar (2022), who emphasize that prudent and accountable use of financial resources enhances transparency, supports operational goals, and ensures that funds are allocated efficiently to meet organizational objectives.

PGO operates with honesty and integrity, suggesting that respondents strongly perceive ethical conduct within the organization. This aligns with Karsono (2023), who emphasizes

that organizational transparency is closely linked to integrity, as honest practices build public trust and enhance accountability in governance.

Technology is used effectively to enhance daily operations, that respondents perceive technology as a key enabler of efficient workflows. This is supported by Kawiana (2023), who argue that effective use of information and communication technologies streamlines processes, reduces manual errors, and improves overall organizational performance. Jerab and Mabrouk, (2023) highlight that operational bottleneck can persist even in well-structured organizations, often due to process complexity, resource constraints, or transitional challenges in adapting systems.

The increase in the implementation of inventory system relate to increase in organizational effectiveness, improvements in system implementation may enhance overall organizational performance. This finding is consistent with Nisrina *et al.*, (2024), who emphasize that well-implemented information systems improve efficiency, coordination, and decision-making, which in turn strengthen organizational effectiveness.

System Functionality is moderately correlated to service delivery, results align with Sang (2025), who note that systems with robust functionality directly support service quality, accountability, and operational efficiency, although their impact on resource management may be less pronounced.

Data Accuracy is weakly correlated to service delivery, this reflects Hamdat *et al.*, 2024, who observed that while accurate data is essential for informed decision-making, its effect alone may not strongly drive broader organizational outcomes without complementary system features.

System integration is weakly correlated to service delivery. According to Ikwuanusi *et al.*, (2024), integrated systems enhance interdepartmental coordination and accountability, thereby boosting transparency and overall effectiveness, whereas their direct influence on operational outputs like service delivery may be more limited.

Challenges in the implementation of inventory system is weakly related with organizational effectiveness, this means that the increase in the challenges in the implementation of inventory system relate to the increase in organizational effectiveness. This aligns with Tusriyanto *et al.*, (2023), who notes that implementation challenges, such as technical or human resource issues, may slow processes but can also drive organizations to adapt and improve systems, slightly enhancing performance.

Technological challenges are weakly correlated to service delivery, this indicates that resolving technical issues may directly influence accountability and overall efficiency. This is supported by Renaldo *et al.*, (2022), who argue that addressing technical difficulties improves system reliability and strengthens organizational outcomes.

Organizational challenges are correlated to service delivery, reflecting Gutterman (2023), who highlight those strong internal policies and coordination can buffer the negative impact of organizational constraints on overall performance.

Human resource challenges are negligibly correlated to service delivery, this suggests that while staffing and training

issues exist, their influence is less pronounced. Mizrak and Caylan, (2023) emphasize that effective training and support can mitigate human resource constraints, limiting their effect on organizational effectiveness.

Factors of implementation of inventory system, system functionality significantly predict organizational effectiveness. This finding is consistent with Hamdat *et al.* (2024), who highlight those well-functioning systems enable efficient workflows, informed decision-making, and higher service quality. Likewise, Seun *et al.*, (2023) emphasizes that accurate data is crucial for effective management and strategic planning, as it ensures reliability in reporting and reduces errors. A large portion of organizational effectiveness indicating that over half of organizational performance can be attributed to system-related factors, supporting the notion that technology adoption and proper system design are key drivers of public sector efficiency (Rekunenko *et al.*, 2025).

Organizational challenges significantly predict organizational effectiveness. This finding aligns with Nisrina *et al.*, (2024), who highlight that resolving organizational difficulties enhances system reliability, workflow efficiency, and decision-making capabilities.

A considerable portion of organizational effectiveness explained by the presented domains of challenges in implementation of inventory system, demonstrating that while other challenges exist, technical factors have the strongest impact. This confirms that challenges in implementation collectively affect organizational performance, reinforcing the importance of technical support, system stability, and infrastructure in ensuring effective PGO operations (Syarifuddin and Ajmal, 2024).

## 5. Conclusions

### A. Conclusion

The inventory system effectively supports PGO operations by streamlining processes, aiding core functions, and enhancing task efficiency. The system reliably reduces errors and generates accurate information, strengthening informed decision-making. Seamless data sharing across departments improves workflows and inter-agency coordination. Coordination, policy enforcement, and support gaps remain significant barriers. System performance, updates, and connectivity issues consistently affect PGO operations. Training, motivation, and technical support needs are prevalent but manageable. High-quality, responsive, and timely services reflect strong operational performance. Efficient use of finances and physical resources demonstrates effective stewardship. Accountability and information access are well-established, fostering trust. Processes, technology use, and adaptability are consistently robust. Significantly enhances service delivery and transparency, though its effect on resource management is limited. Contributes positively but moderately to overall organizational performance. Strengthens transparency and organizational performance more than service delivery or resource management. Greatest influence on transparency and overall effectiveness; resolving them improves accountability

and efficiency. Addressing coordination and policy issues can meaningfully boost performance. Staffing and training concerns exist but have minimal impact on overall outcomes. System functionality is the key determinant, explaining over 52% of variations in organizational effectiveness. Organizational Challenges are the most influential among challenges, accounting for 34.5% of variations in organizational performance.

### B. Recommendation

After the study was completed, it was recommended that the Provincial Government of Occidental Mindoro may maintain and upgrade the inventory system, provide continuous staff training, monitor performance regularly and ensure full integration across department to optimize operational efficiency, improve inter-departmental workflows and enhance coordination across offices. Second, they may address organizational challenges, minimize technical challenges and address human resource challenges to enhance system use and performance. In addition to this, the Provincial Government may sustain strong service delivery, maintain effective resource management, strengthen its high level of transparency, reinforce accountability measure and ensure continued integrity in all operations to adopt quickly to operational demands. Furthermore, the Provincial Government Office of Occidental Mindoro may maximize system functionality, strengthen data accuracy and enhance system integration to strengthen transparency and overall organizational performance. They may also focus on enhancing system functionality to improve organizational effectiveness and overall performance. Lastly, the Provincial Government Office may prioritize addressing technical challenges as resolving these issues will have the greatest impact on enhancing overall organizational effectiveness.

## References

- [1] B. Ameh, O. Arowosegbe, O. Agbelusi, J. Adeosun, M. Chukwunweike, and S. Adeyemi, "Bridging the gap: Innovations in supply chain technology through ERP integration and intelligent automation," *International Journal of Computer Applications Technology and Research*, vol. 13, pp. 1–15, 2024.
- [2] K. Anwar and N. Abdullah, "The impact of human resource management practice on organizational performance," *International Journal of Engineering, Business and Management*, vol. 5, pp. 35–47, 2021.
- [3] M. Atienza and J. Go, "Assessing local governance and autonomy in the Philippines: Three decades of the 1991 Local Government Code," 2023. [Online]. Available: [https://www.researchgate.net/publication/383983842\\_Assessing\\_Local\\_Governance\\_and\\_Autonomy\\_in\\_the\\_Philippines\\_Three\\_Decades\\_of\\_the\\_1991\\_Local\\_Government\\_Code](https://www.researchgate.net/publication/383983842_Assessing_Local_Governance_and_Autonomy_in_the_Philippines_Three_Decades_of_the_1991_Local_Government_Code)
- [4] G. B. Lagura, "Towards digital governance divide index development: Evaluating city government websites in the Philippines," *Journal of Community Development Research (Humanities and Social Sciences)*, vol. 18, no. 1, pp. 1–17, 2025, doi: 10.69650/jcdrhs.2025.717.
- [5] J. Cruz, "Assessing the effectiveness of local government decentralization in enhancing public service delivery in the Philippines," *Mahogany Journal De Social*, vol. 1, pp. 214–223, 2024.
- [6] C. Eze, O. Alao, O. Dudu, and E. Alonge, "Automation in financial reporting: A conceptual framework for efficiency and accuracy in U.S. corporations," *Global Journal of Advanced Research and Reviews*, vol. 2, 2024.
- [7] C. Ferarez, "Good governance: Key to achieving sustainable development," *The Manila Times*, 2024. [Online]. Available:

- <https://www.grantthornton.com.ph/insights/articles-and-updates/1/from-where-we-sit/good-governance-key-to-achieving-sustainable-development/>
- [8] J. Gumilao, "Automated inventory management system for Department of Education Regional Office IX," 2024.
- [9] A. Gupta, "Bridging legacy systems and digital platforms: A comprehensive investigation of application and infrastructure modernization challenges in core banking systems," *International Journal of Environmental Sciences*, pp. 3475–3487, 2025.
- [10] A. Gutterman, "Organizational performance and effectiveness," 2023. [Online]. Available: [https://www.researchgate.net/publication/372935897\\_Organizational\\_Performance\\_and\\_Effectiveness](https://www.researchgate.net/publication/372935897_Organizational_Performance_and_Effectiveness)
- [11] A. Hamdat, B. Ceskakusumadewi, A. Samalam, M. Rizal, and I. Lawalata, "The impact of management information systems on decision-making efficiency," *Vifada Management and Digital Business*, vol. 1, pp. 56–74, 2024.
- [12] U. Ikwanusi, O. Onunka, S. Owoade, and A. Uzoka, "Digital transformation in public sector services: Enhancing productivity and accountability through scalable software solutions," *International Journal of Applied Research in Social Sciences*, vol. 6, pp. 2744–2774, 2024.
- [13] D. Jerab and T. Mabrouk, "The evolving landscape of organizational structures: A contemporary analysis," *SSRN Electronic Journal*, 2023.
- [14] B. Karsono, "Good corporate governance: Transparency, accountability, responsibility, independency and fairness (literature review)," *Dinasti International Journal of Management Science*, vol. 4, pp. 811–821, 2023.
- [15] I. Kawiana, "Utilization of information and communication technology in performance management for a better organization," *Neo Journal of Economy and Social Humanities*, vol. 2, pp. 186–193, 2023.
- [16] M. Lodge, E. C. Page, and S. J. Balla, eds., *The Oxford Handbook of Classics in Public Policy and Administration*. Oxford, U.K.: Oxford Univ. Press, 2015.
- [17] F. Mizrak and S. Caylan, "Human resource training and its effect on the integration and success of organizational change," 2023.
- [18] S. H. Mohd, A. Izharuddin, I. Idris, and H. Othman, "Examining the relationships between perceived usefulness, perceived ease of use, enjoyment and self-efficacy on employees' behavioral intention toward adopting online technology applications at the workplace," *American Journal of Social Sciences and Humanities*, vol. 3, pp. 29–39, 2018.
- [19] C. Mokogwu, G. Achumie, A. Adeleke, I. Okeke, C. Paul, and M. Ewim, "A data-driven operations management model: Implementing MIS for strategic decision making in tech businesses," *International Journal of Frontline Research and Reviews*, vol. 3, pp. 1–19, 2024.
- [20] M. Musheke and J. Phiri, "The effects of effective communication on organizational performance based on the systems theory," *Open Journal of Business and Management*, vol. 9, pp. 659–671, 2021.
- [21] S. Nisrina, R. Masviansyah, A. Adiwana, I. Kusumasari, and R. Hidayat, "The role of information systems in improving the efficiency of business decision making," *Jurnal Bisnis dan Komunikasi Digital*, vol. 2, 2024.
- [22] I. Rekunenko, A. Koldovskyi, V. Hordiienko, O. Yurynets, B. A. Khalaf, and M. Ktit, "Technology adoption in government management: Public sector transformation analysis," *Journal of Governance and Regulation*, vol. 14, pp. 150–160, 2025.
- [23] N. Renaldo, S. Suhardjo, and C. Suyono, "Benefits and challenges of technology and information systems on performance," *Journal of Applied Business and Technology*, vol. 3, pp. 302–305, 2022.
- [24] T. M. Sang, "Impact of operational performance and service quality experience on customer satisfaction and loyalty," *European Journal of Interdisciplinary Studies*, 2025.
- [25] Senate of the Philippines, "Senate initiates long-overdue review of Local Government Code to further strengthen LGUs – Angara," 2017. [Online]. Available: [https://web.senate.gov.ph/press\\_release/2017/0226\\_angara1.asp](https://web.senate.gov.ph/press_release/2017/0226_angara1.asp)
- [26] E. Seun, B. Gegeleso, T. Falana, A. Aderonke, and B. Olabode, "Impact of information systems on operational efficiency: A comprehensive analysis," *Indian Journal of Computer Science and Engineering*, vol. 14, pp. 661–673, 2023.
- [27] N. Shenoy, "Employee turnover – Impact on organizations and reasons," *International Journal of Advanced Research in Management*, vol. 7, pp. 96–104, 2016.
- [28] S. Syarifuddin and A. Ajmal, "The role of technology and infrastructure in improving operational efficiency," *Bata Ilyas Educational Management Review*, vol. 4, pp. 14–29, 2024.
- [29] S. Tusriyanto, M. Sulaeman, and L. Nurcholidah, "Optimising organisational performance through human resource management strategy and technology integration to enhance innovation," *Technology and Society Perspectives*, vol. 1, 2023.
- [30] F. Ugbebor, D. Adeteye, and J. Ugbebor, "Predictive analytics models for SMEs to forecast market trends, customer behavior, and potential business risks," *Journal of Knowledge Learning and Science Technology*, vol. 3, pp. 355–381, 2024.
- [31] H. Yasin and M. Mokhtar, "Accountability and transparency in financial management among secondary school principals," *International Journal of Academic Research in Business and Social Sciences*, vol. 12, 2022.
- [32] K. Zorlu and F. Korkmaz, "Organizational communication as an effective communication strategy in organizations and the role of the leader," 2021.