

# Evaluating the Impact of Manual Accounting Systems on Employee's Performance and Quality of Public Service Delivery of Metro Kalibo Water District

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## Abstract

This study examined the effects of the manual accounting system on employee performance and public service delivery at the Metro Kalibo Water District. Despite the growing demand for efficient and transparent services, the organization continues to use manual accounting practices that may affect operational efficiency and service quality. A descriptive-quantitative research design was used. The respondents included thirty-two (32) employees composed of accounting staff, customer service representatives, administrative personnel, supervisors, and management staff directly involved in accounting and service functions. Data were gathered over three months and analyzed afterward. Respondents were assessed based on educational attainment, position, length of service, sex, and their perceptions of the manual accounting system. Findings showed that manual accounting practices caused delays in processing, increased workloads, and a greater risk of errors, negatively affecting employee efficiency and the quality of public service delivery. The study also revealed a significant relationship between the system's impact and the challenges experienced by employees. The results provide useful insights for improving accounting practices and supporting system modernization.

**Keywords:** Manual accounting system; Employee performance; Quality of public service delivery; System improvement; Water district

## Introduction

Accounting Systems are essential to the successful operation and provision of excellent community service by public sector organizations, particularly water districts. The Commission on Audit (COA) is in charge of making decisions and allocating resources. Delays, inaccurate financial records, and inefficiencies might affect long-term service delivery. These issues have the potential to harm water districts employees and clients while also impeding the provision of essential services.

Despite ongoing efforts by the public sector to modernize, many municipal water agencies still use manual accounting methods. Because they are accustomed to them, don't have the means to replace them, or just don't want to, people usually leave items in place. However, according to COA (2021), Manual accounting is more prone to mistakes, takes longer, and makes it more difficult to obtain timely and accurate financial information. Employees may become less successful and productive at work if they spend too much time on tedious duties like manually recording, verifying and reconciling accounts.

A manual accounting system has effects that go beyond the internal operations of the company. If financial processes are delayed or inaccurate, billing purchasing and other service-related activities may take longer. Inadequate financial management can have a detrimental effect on the delivery of public services, especially in establishments that provide needs like water, according to COA (2021). In this situation, the public might not be able to receive prompt, high-quality services, which could lead to dissatisfied clients and diminished public confidence. In this situation, the public might not be able to get prompt, high-quality services, which could lead to disgruntled clients and a drop in public confidence. Employee's productivity is directly impacted by the systems they utilize at work. Manual accounting procedures can raise employee stress and workload, particularly when errors must be corrected often. An employee's motivation, morale, and general job performance may eventually suffer as a result of this circumstance. The need to enhance internal control systems, particularly accounting procedures, in order to increase government agencies efficacy, accountability, and service quality COA (2021). Understanding how the Metro Kalibo Water District's manual accounting method impact worker productivity and public services is essential. This is done in order to give the business information that could help it enhance its internal procedures and increase its capacity to supply the community with safe, dependable, and efficient water services. Use these tips to help you save time, reduce mistakes, and increase your effectiveness overall. Eventually, a more effective accounting process will allow districts to better serve their customers and promote long-term service delivery. This indicates that the business needs to have a more modern and efficient accounting system. This improvement can increase the overall services delivery to the community.

### **Methodology**

The method used in this study was descriptive-quantitative research design to investigate the factors affecting the liquidation that leads to delayed or non-submission of the Public Elementary Schools of the Department of Education – Division of Aklan. The respondents of the study were composed of the following: the 46 Public Elementary School Heads, Teacher in Charge, and Head Teacher of District of Banga, Lezo, Makato, Libacao and Malay. The sample sizes were selected using the simple random sampling of 50% of the total number of Public Elementary School Heads, Teacher in Charge, Head Teacher.

This study used a self-formulated questionnaire-checklist that devised with the guidance of a thesis adviser, and using the work of Clark (2003), as reference. The questionnaire had three parts, with the first part focusing on the respondents' profiles, including age, civil status, highest educational attainment, length of services and average monthly salary. The second part of the questionnaire was composed of a 15-item checklist under three variables, such as, submission of requirements, technology and external factor. The Likert-type instrument had five response options, ranging from strongly agree to not agree. And the third part of the instrument was composed of a 20-item checklist under two variables, such as, procurement, and provision. The Likert-type instrument had five response options, ranging from very often to never. The reliability was computed by using the Pearson r. Moreover, the statistical data were computed by means of SPSS v. 2021.

The researcher has first sought permission from the Senior Education Program Specialist Planning and Research of the Department of Education Division of Aklan allowing to float the questionnaire checklist and in undertaking limited personal interviews from among the target respondents, and case-to-case

observations within the setting of the study. Finally, the researcher ensured the confidentiality of responses of respondents, and meeting the requirements of research ethics.

### **Research Design**

The Metro Kalibo Water District (MKWD) employed a descriptive-survey research design to investigate the impact of manual accounting methods on employee productivity and public service quality (Barrooa, 2025). The primary goal was to collect first-hand data on the effects of the manual accounting procedures on service quality, employee happiness, productivity, and financial transaction correctness. Descriptive research is a methodical approach of gathering data to characterize the current state of a specific subject or circumstance, according to Good and Scates (2020). In order to effectively explain the current situation, it concentrates on providing answers to queries such who, what, when, where, and how rather than pinpointing causes. In order to identify personnel issues and provide a thorough analysis of current accounting methods, the study's descriptive survey strategy may help the researcher gather staff members perspective, experiences, and opinions regarding MKED's manual accounting methods.

### **Research Instrument**

The Metro Kalibo Water District (MKWD), Finance Services Division staff worked together with researchers to develop the questionnaire checklist utilized in this study. The instrument was created in compliance with accepted accounting standards and procedures using references to the International Federation of Accountants (IFAC) principles. Public utility manuals and computerized accounting systems are contrasted in relevant research and generally accepted accounting principles (GAAP).

The questionnaire, which had three main elements, was the main tools used to collect data:

Part I gathered the participant's demographic information, with a focus on their roles within MKWD. Respondents were questioned about their level of education, position or classification (Accounting staff, Administrative Services Personnel, Customer Service Representative, Supervisor, or Management Staff), sex, length of service with the company.

Part II has ten (10) items that were split between two important variables: public service delivery and staff performance. It sought to quantify the effects of the manual accounting system on external service results as well as internal operations.

Part III contained fifteen (15) items, focused on the precision and effectiveness of accounting procedures, as well as the challenges and associated with utilizing a manual accounting system. These included problems including transaction processing delays, record keeping, mistakes, restricted accessibility, and difficulties retrieving data, all of which can have a detrimental impact on job productivity, data accuracy, and the general standard of public service delivery.

### **Data Gathering Procedure**

In order to begin the data collection process, the researcher formally asked the General Manager of the Metro Kalibo Water District (MKWD) for permission to perform the study. After authorization was received, coordination was established with the division managers of each division to enable to smooth distribution of the survey equipment.

The goal of the study, the voluntary nature of the participation, and the guarantee that all answers would be kept private and the used exclusively for academic purposes were explained to the respondents prior to the distribution of the survey questionnaires. The purpose of the printed survey was to collect data

regarding the perceived impacts of manual accounting processes on the public service delivery and employee performance.

To safeguard each participant’s privacy, rights, and independence, the researcher closely adhered to ethical research guidelines throughout the data collection process. Respondents may complete the survey at their own pace because there was ample time. Throughout the process, the researcher graciously answered any questions or request for clarification.

The collected data was handled with the utmost care and confidentiality, used solely for academic and research purposes, and archived in order to maintain the integrity of the research findings

**Data Analysis Procedure**

The data were statistically computed, analyzed, described, and interpreted using the Likert’s Scale and the frequency and percentage distribution. These techniques aid in assessing public sentiment and determining the overall impact of the manual accounting system on the Metro Kalibo Water District.

In Part I, the frequency and percentage distribution of the instrument were used to determine the demographic profile of the respondents in the Metro Kalibo Water District.

In Part II of the tool used to evaluate the effects of the manual accounting system used by Metro Kalibo Water District. The respondents were able to use this scale to indicate how much they agreed with many statements about their impact on staff performance and public service delivery.

**Table 1. Measurement for the impact of accounting system on staff performance and public service delivery**

| Ranges      | Scale | Verbal Description     |
|-------------|-------|------------------------|
| 4.21 – 5.00 | 5     | Very High Impact (VHI) |
| 3.41 – 4.20 | 4     | High Impact (HI)       |
| 2.61 – 3.40 | 3     | Moderate Impact (MI)   |
| 1.81 – 2.60 | 2     | Low Impact (LI)        |
| 1.00 – 1.80 | 1     | Very Low Impact (VLI)  |

Part II of the tool to assess the degree of challenges faced when utilizing the manual accounting system:

**Table 2. Measurement for the degree of challenges brought by the manual accounting system**

| Ranges      | Scale | Verbal Description     |
|-------------|-------|------------------------|
| 4.21 – 5.00 | 5     | Very High Impact (VHI) |
| 3.41 – 4.20 | 4     | High Impact (HI)       |
| 2.61 – 3.40 | 3     | Moderate Impact (MI)   |
| 1.81 – 2.60 | 2     | Low Impact (LI)        |
| 1.00 – 1.80 | 1     | Very Low Impact (VLI)  |

**Ethical Considerations**

In order to safeguard the rights, welfare and dignity of all individuals involved in assessing the effects of the manual accounting methods on staff performance and public service delivery at Metro Kalibo Water District (MKWD), this study was built strictly in compliance with ethical principles.

MKWD Management gave formal authorization and consent before the data collection, indicating their dedication to the study's ethical conduct. Participants were provided with comprehensive and unambiguous information about the objects, constraints, and procedures of the study in order to assist them in making an informed decision regarding their involvement.

Respondents were made aware that participation is entirely voluntary and they are free to stop at any time without facing any cost or repercussions. Every participant provided their informed consent prior to any data collection.

Strict procedures were implemented to safeguard confidentiality and privacy; no personally identifiable information was collected or recorded. Data was anonymized, stored securely, and only aggregated results were presented in order to prevent connecting responses to particular individuals. This tactic safeguarded confidential employee and business information. Furthermore, the data was only used for academic purposes; no unapproved individuals or organizations received any of it. By being transparent and accountable at all times, the researchers ensure that the study was conducted with honesty, integrity, and respect for all parties involved.

## Results and Discussion

### Demographic Profile of Employees in Metro Kalibo Water District

**Table 3. Demographic Profile of Employees in Metro Kalibo Water District as to Educational Attainment**

| Education                         | Frequency | Percentage (%) |
|-----------------------------------|-----------|----------------|
| College Graduate                  | 23        | 71.90          |
| Postgraduate (Master's/Doctorate) | 9         | 28.10          |
| <b>Total</b>                      | <b>32</b> | <b>100</b>     |

Table 3 presents the educational attainment of employees in the Metro Kalibo Water District. The majority of employees are college graduates, comprising 71.90% (23 respondents) of the workforce, while 28.10% (9 respondents) have completed postgraduate studies such as master's or doctorate degrees. There are no employees whose highest educational attainment is elementary or high school. This distribution indicates that the workforce is composed entirely of well-educated individuals.

Higher educated workers are typically better equipped to manage technical, administrative, and financial tasks, according to the Philippine Institute for the Development Studies (2019). The Metro Kalibo Water District (MKWD) workforce has the educational background necessary to handle accounting duties, even in a manual system, as seen by the high percentage of college and postgraduate education bringing superior analytical and strategic talents that can help enhance procedures and enable better decision-making. College graduates add crucial skills for ordinary financial operations.

The organization is able to preserve both operational and strategic strengths because of this combination of educational backgrounds. While postgraduate workers can assist with planning and system improvement projects, college graduates assist with day-to-day accounting and service-related duties. However, even highly skilled workers may still have decreased productivity, increased workloads, and a higher chance of errors when using manual accounting methods, as stressed by McLeod and Schell (2018) and the Commission on Audit (2020). This implies that even while MKWD employs academically

competent workers, the shortcomings of its current manual method may nevertheless have a detrimental impact on worker productivity and the standards of public service delivery.

**Table 4. Demographic Profile of Employees in Metro Kalibo Water District as to Job Position**

| Education                       | Frequency | Percentage (%) |
|---------------------------------|-----------|----------------|
| Accounting Staff                | 9         | 28.10          |
| Administrative Personnel        | 3         | 9.40           |
| Customer Service Representative | 7         | 21.90          |
| Supervisor                      | 7         | 21.90          |
| Management Staff                | 6         | 18.70          |
| <b>T o t a l</b>                | <b>32</b> | <b>100</b>     |

Table 4 displayed the various job roles held by employees on the Metro Kalibo Water District (MKWD). Accounting personnel made up the most of the respondents (28.10%) followed by supervisors (21.90%) and customer service representatives (21.90%). Administrative personnel comprised 9.40% of the respondents, while management personnel made up 18.80%. This distribution shows that the organization’s operational and managerial staff are evenly distributed.

The Philippine Association of Water Districts (2021) and the Philippine Civil Service Commission (2022) both claim that having workers in a variety of roles contributes to the representation of managerial and daily operational viewpoints. While supervisors and management staff concentrate on keeping an eye on workflow efficiency and guaranteeing adherence to organizational norms, accounting professionals are primarily in charge of the financial recording and reporting. In the meanwhile, administrative staff and customer service agents assists with internal coordination and public transactions.

A more thorough knowledge of how the manual accounting method affects employee performance and the provision of public services resulted from the study’s ability to collect perspective from workers engaged in all facets of MKWD’s operations.

**Table 5. Demographic Profile of Employees in Metro Kalibo Water District as to Length of Service**

| Length of Service  | Frequency | Percentage (%) |
|--------------------|-----------|----------------|
| 21 years and above | 6         | 18.80          |
| 16-20 years        | 8         | 25.00          |
| 11-15 years        | 9         | 28.10          |
| 6-10 years         | 2         | 6.30           |
| 5 years and below  | 7         | 21.90          |
| <b>T o t a l</b>   | <b>32</b> | <b>100</b>     |

The demographic profile of Metro Kalibo Water District (MKWD) personnel according to the duration of service is shown in Table 5. The majority of the respondents (28.10%) had worked for 11-15 years, followed by those who had worked for 16-20 years (25.00%). Of the respondents, (21.90%) had worked for five years or less, and (18.80%) had worked for twenty-one years or more. Employees with six to ten years of service made up the lowest category, accounting for 6.30% of the workforce.

A mix of seasoned employees and more recent hires inside the company can be seen in the variation in the employee’s tenure. This equilibrium is crucial because it both introduces new concepts and viewpoints and aids in the preservation of institutional knowledge. Long-serving staff members offer invaluable knowledge and a deeper comprehension of operational procedures and issues, especially in handling manual accounting systems, according to the Philippine Institute for Development Studies (2019) and the Commission on Audit (2021). However, more recent hires could offer creative suggestions and encourage projects pertaining to digitalization and system enhancement.

**Table 6. Demographic Profile of Employees in Metro Kalibo Water District as to Sex**

| Sex          | Frequency | Percentage (%) |
|--------------|-----------|----------------|
| Male         | 6         | 18.80          |
| Female       | 26        | 81.20          |
| <b>Total</b> | <b>32</b> | <b>100</b>     |

Table 6 shows the demographic profile of Metro Kalibo Water District (MKWD) personnel in terms of sex. Male employees made up of 18.80% (6 employees) while female employees made up of 81.20% (26 employees) of the respondents.

According to the Philippine Civil Service Commission (2022) and the Philippine Water Works Association (2021), women frequently hold administrative, accounting and customer service roles in the public utility and service sectors. This Distribution indicates that MKWD has predominantly female workforce. According to studies, women frequently exhibit excellent interpersonal communication, customer services and attention to detail skills, all of which are critical for sustaining favorable client relationship and guaranteeing accounting accuracy.

**Impact of the Manual Accounting System**

**Table 7. Impact of the Manual Accounting System in terms of Employee’s Performance**

| Employee Performance  | 5<br>VHI | 4<br>HI | 3<br>MI | 2<br>LI | 1<br>VLI | Weighted<br>Mean | Verbal<br>Interpretation |
|---|----------|---------|---------|---------|----------|------------------|--------------------------|
| 1. The manual accounting system requires employees to perform repetitive and routine tasks. | 19       | 10      | 3       | 0       | 0        | 4.50             | VHI                      |
| 2. Manual accounting processes cause delays in task completion.                             | 20       | 8       | 4       | 0       | 0        | 4.50             | VHI                      |
| 3. Employees experience reduced productivity due to time-consuming procedures.              | 19       | 9       | 3       | 1       | 0        | 4.44             | VHI                      |
| 4. Manual recording increases the likelihood of employee burnout and stress.                | 19       | 9       | 4       | 0       | 0        | 4.47             | VHI                      |
| 5. The absence of automation affects employee’s ability to meet performance targets         | 19       | 11      | 2       | 0       | 0        | 4.53             | VHI                      |

|                                  |  |  |  |  |  |             |            |
|----------------------------------|--|--|--|--|--|-------------|------------|
| efficiently.                     |  |  |  |  |  |             |            |
| <b>Grand Weighted Mean (GWM)</b> |  |  |  |  |  | <b>4.49</b> | <b>VHI</b> |

Legend:

- 4.21 – 5.00 - Very High Impact (VHI)
- 3.41 – 4.20 – High Impact (HI)
- 2.61 – 3.40 – Moderate Impact (MI)
- 1.81 – 2.60 – Low Impact (LI)
- 1.00 – 1.80 – Very Low Impact (VLI).

With a grand weighted mean of 4.49, Table 7 demonstrates that the manual accounting system has a significant impact on worker performance across all roles. This indicates that most workers concur that the existing system drastically lowers their productivity and efficiency. Because they frequently handle tedious and time-consuming financial chores, administrative personnel and management staff reported the greatest impact.

These results are in line with the United Nation Development Programme (2021) and the Philippine Civil Service Commission (2022), which both observe that manual systems frequently result in increased stress, workload, and error risk. Similarly, repetitive physical labor can result in burnout and decreased motivation, according to research publish in the International Journal of Management Science (2019).

Overall, the findings imply that although workers are competent and qualified, the manual accounting methods restricts their output and keeps them from concentrating on more important work. This emphasizes the necessity of automated pr digital technologies to boost productivity, cut down on delays, eliminate mistakes, and promote improved worker performance and service delivery.

**Table 8. Impact of the Manual Accounting System in terms of Public Service Delivery**

| Employee Performance  | 5<br>VHI | 4<br>HI | 3<br>MI | 2<br>LI | 1<br>VLI | Weighted<br>Mean | Verbal<br>Interpretation |
|---|----------|---------|---------|---------|----------|------------------|--------------------------|
| 1. Manual accounting causes delays in processing customer transactions.                         | 17       | 14      | 1       | 0       | 0        | 4.50             | VHI                      |
| 2. Errors in manual records affect the quality of public service delivery.                      | 16       | 14      | 2       | 0       | 0        | 4.44             | VHI                      |
| 3. Manual processes result in slower financial data consolidation and reporting.                | 18       | 11      | 3       | 0       | 0        | 4.47             | VHI                      |
| 4. Poor asset tracking reduces the efficiency of service operations.                            | 11       | 16      | 5       | 0       | 0        | 4.19             | VHI                      |
| 5. The manual system limits the organization’s ability to respond quickly to customer concerns. | 11       | 17      | 4       | 0       | 0        | 4.22             | VHI                      |
| <b>Grand Weighted Mean</b>  |          |         |         |         |          | <b>4.36</b>      | <b>VHI</b>               |

Legend:

- 4.21 – 5.00 - Very High Impact (VHI)
- 3.41 – 4.20 – High Impact (HI)
- 2.61 – 3.40 – Moderate Impact (MI)
- 1.81 – 2.60 – Low Impact (LI)
- 1.00 – 1.80 – Very Low Impact (VLI).

Table 8 shows how the Metro Kalibo Water District’s public service delivery is significantly impacted by the manual accounting system. The findings show that it has an influence on the speed, accuracy, and responsiveness of services; most categories were assessed as having a “very high impact,” particularly transaction delays recording errors, and delayed data processing.

Overall, the manual approach slows down operations by increasing errors and causing delays, even if personnel still strive to provide quality service. Outdated systems might lower efficiency and service quality, according to studies by the Philippine Association of Water Districts (2021) and the Philippine Civil Service Commission (2022).

Additionally, the high impact of manual accounting on public service delivery underscores the interconnection between internal processes and customer satisfaction. When employees spend excessive time on repetitive and error-prone tasks, their ability to respond promptly to service requests is compromised, leading to delays and reduced service quality. This aligns with findings from the Philippine Institute for Development Studies (2019) and the Commission on Audit (2020).

In summary, the results indicate that manual processes have a direct impact on customer satisfaction in addition to internal effort. The Philippine Institute for Development Studies (2019) and the Commission on Audit (2020) found that when workers spend too much time on repeated tasks, service delivery slows down and becomes less responsive.

**Extent of the Challenges Encountered in the Use of the Manual Accounting System**

**Table 9. Extent of the Challenges Encountered in the Use of the Manual Accounting System in terms of Work Efficiency, Accessibility, and Security**

| Indicators  | 5<br>VHE | 4<br>HE | 3<br>ME | 2<br>LE | 1<br>VLE | Weighted<br>Mean | Verbal<br>Interpretation |
|---|----------|---------|---------|---------|----------|------------------|--------------------------|
| 1. Manual data entry often results in errors and inconsistencies in financial records.            | 21       | 10      | 1       | 0       | 0        | 4.63             | VHE                      |
| 2. Identifying and correcting mistakes in manually recorded transactions takes considerable time. | 16       | 12      | 4       | 0       | 0        | 4.38             | VHE                      |
| 3. Report generation and financial analysis are delayed due to slow manual processing.            | 19       | 11      | 2       | 0       | 0        | 4.53             | VHE                      |
| 4. Manual processing limits the ability to handle large volumes of data efficiently.              | 15       | 15      | 2       | 0       | 0        | 4.41             | VHE                      |

|   |    |    |   |   |   |             |            |
|---|----|----|---|---|---|-------------|------------|
| 5. Lack of real-time data updates affects the accuracy and timeliness of reports. | 17 | 11 | 4 | 0 | 0 | 4.41        | VHE        |
| <b>Grand Weighted Mean</b>  |    |    |   |   |   | <b>4.47</b> | <b>VHE</b> |

Legend:

4.21 – 5.00 - Very High Extent (VHE)

1.81 – 2.60 – Low Extent (LE)

3.41 – 4.20 - High Extent (HE)

1.00 – 1.80 – Very Low Extent (VLE)

2.61 – 3.40 - Moderately High (MH)

With a grand weighted mean of 4.47, Table 9 shows that employee have a very high degree of difficulty utilizing the manual accounting methods. This indicates that the difficulties are typical and frequently encountered at work.

Manual data entry is the main problem (4.63), which frequently results in mistakes and inaccurate financial records. Since everything must be done by hand, delays in creating reports, and evaluating financial data (4.53) also have an impact on efficiency. Large data handling and a lack of real-time updates (4.41) further worsen reporting and lower accuracy.

Additionally, workers take more time to verify and fix mistakes (4.38), which increases their burden. Overall, the results demonstrate that the manual accounting method poses significant obstacles to quick access to financial data, accuracy, and efficiency.

Overall, the findings show that employees experience considerable challenges when using manual accounting methods, particularly in terms of accuracy, efficiency, and timely financial reporting. Frequent manual data entry, delays in processing information, and the need to repeatedly check for errors make the work more difficult and time-consuming, highlighting the limitations of relying on manual accounting systems.

| Indicators  | 5<br>VHE | 4<br>HE | 3<br>ME | 2<br>LE | 1<br>VLE | Weighted<br>Mean | Verbal<br>Interpretation |
|---|----------|---------|---------|---------|----------|------------------|--------------------------|
| 1. Delays in processing service response.   | 17       | 11      | 4       | 0       | 0        | 4.41             | VHE                      |
| 2. Difficulty in tracking and verifying transactions reduces service transparency.                        | 17       | 11      | 4       | 0       | 0        | 4.41             | VHE                      |
| 3. Manual reporting causes delays in providing accurate and timely financial information to stakeholders. | 18       | 12      | 1       | 1       | 0        | 4.47             | VHE                      |
| 4. Limited access to information affects responsiveness in addressing client concerns.                    | 20       | 10      | 2       | 0       | 0        | 4.56             | VHE                      |

|   |    |    |   |   |   |             |            |
|---|----|----|---|---|---|-------------|------------|
| 5. The manual system is prone to manipulation and fraud, affecting trust and accountability | 18 | 13 | 1 | 0 | 0 | 4.53        | VHE        |
| <b>Grand Weighted Mean</b>  |    |    |   |   |   | <b>4.48</b> | <b>VHE</b> |

Legend:

- 4.21 – 5.00 - Very High Extent (VHE)
- 3.41 – 4.20 - High Extent (HE)
- 2.61 – 3.40 - Moderately High (MH)
- 1.81 – 2.60 – Low Extent (LE)
- 1.00 – 1.80 – Very Low Extent (VLE)

Table 10 indicates that employees experience a very high level of difficulty with the manual accounting system, as reflected by the Grand Weighted Mean of 4.48. This suggests that problems related to data accuracy, transaction processing, and reporting are commonly encountered in everyday operations.

The results highlight several major concerns. Employees find that delays in processing financial transactions often slow down customer service, while difficulties in tracking and verifying records reduce transparency in operations, both with a weighted mean of 4.41. Manual reporting procedures also make it harder to provide accurate and timely financial information to stakeholders (4.47). In addition, limited access to information affects the organization’s ability to respond quickly to client concerns (4.56). Employees also recognize that the manual system is vulnerable to manipulation and fraud, which weakens trust and accountability, with a weighted mean of 4.53.

These findings show that employees spend a significant amount of time handling repetitive and error-prone tasks, which lowers productivity and delays decision-making. The reliance on manual processes not only slows daily operations but also creates inefficiencies in the flow of information and increases the possibility of financial errors.

Overall, the findings emphasize the need for Metro Kalibo Water District to modernize its accounting system. Upgrading or replacing the current manual process could improve efficiency, strengthen data accuracy, enhance transparency, and build greater public trust, ultimately leading to better decision-making and improved service delivery.

### Service Responsiveness and Transparency

**Table 11. Extent of the Challenges Encountered in the Use of the Manual Accounting System in Terms of Service Responsiveness and Transparency**

| Indicators   | 5<br>VHE | 4<br>HE | 3<br>ME | 2<br>LE | 1<br>VLE | Weighted<br>Mean | Verbal<br>Interpretation |
|--|----------|---------|---------|---------|----------|------------------|--------------------------|
| 1. Recording and processing of financial data are time-consuming due to the manual nature of the system. | 15       | 16      | 1       | 0       | 0        | 4.44             | VHE                      |
| 2. Limited access to accounting records and financial data hinders efficient task                        | 18       | 12      | 2       | 0       | 0        | 4.50             | VHE                      |

|  |    |    |   |   |   |             |            |
|--|----|----|---|---|---|-------------|------------|
| performance.   |    |    |   |   |   |             |            |
| 3. Manual Recordkeeping poses risks of data loss, damage, or unauthorized access       | 18 | 13 | 1 | 0 | 0 | 4.53        | VHE        |
| 4. Duplication of work and lack of real-time information affect overall productivity.  | 12 | 20 | 0 | 0 | 0 | 4.38        | VHE        |
| 5. The absence of proper data backup and security measures reduces record reliability. | 15 | 15 | 2 | 0 | 0 | 4.41        | VHE        |
| <b>Grand Weighted Mean</b>   |    |    |   |   |   | <b>4.45</b> | <b>VHE</b> |

Legend:

- 4.21 – 5.00 - Very High Extent (VHE)
- 3.41 – 4.20 - High Extent (HE)
- 2.61 – 3.40 - Moderately High (MH)
- 1.81 – 2.60 – Low Extent (LE)
- 1.00 – 1.80 – Very Low Extent (VLE)

With a Grand Weighted Mean of 4.45, Table 11 shows that employees have significant difficulties in service responsiveness and transparency under the manual accounting method. Workers complained that their job is delayed by restricted access to documents and that the manual recording and processing of financial data takes too long. They also mentioned the dangers of data loss, task duplication, and inadequate data protection, all of which lower efficiency and production.

These results imply that the existing manual system slows down operations and compromises the accuracy of financial data. Thus, in order to increase productivity, bolster data security, and facilitate quicker access to precise financial information, Metro Kalibo Water District need a more advanced and automated accounting system.

**Significant Relationship between the Impact of the Manual Accounting System and the Challenges Encountered in Metro Kalibo Water District.**

| <b>Table 12. Significant Relationship Between the Impact of the Manual Accounting System and the Challenges Encountered in its use at Metro Kalibo Water District</b> |                            |                              |                |                 |
|---|----------------------------|------------------------------|----------------|-----------------|
| <b>Variable</b>   | <b>Mean</b>                | <b>Pearson's Coefficient</b> | <b>p-value</b> | <b>Decision</b> |
| Impact of the Manual Accounting System in Metro Kalibo Water District   | 4.45<br>(Very Effective)   | 0.76                         | 0.012          | Reject Ho       |
| Challenges Encountered in Using a Manual Accounting System  | 4.46<br>(Very High Extent) |                              |                |                 |

|  |  |  |  |  |
|--|--|--|--|--|
|  |  |  |  |  |
|--|--|--|--|--|

*s –Significant at 0.05 level*

The findings show that the two factors have a significant and obvious link. The two variables tend to rise together, as seen by the significant positive correlation indicated by the Pearson correlation coefficient ( $r=0.76$ ). Furthermore, this link is statistically significant at the 5% level and is unlikely to have happened by coincidence because the  $p$ -value of 0.012 is below the 0.05 cut off.

Practically speaking, this implies that employees face additional challenges at work when the manual accounting systems operational shortcomings become more noticeable. These difficulties are frequently encountered in tasks like transaction processing, error correction, record retrieval, and report preparation.

**System Improvement and service enhancement recommendations can be formulated based on the outcomes of the study.**

The analysis come to the conclusion that in order to improve employee performance and the standard of public service of Metro Kalibo Water District, the current accounting system must be improved. The findings demonstrate that the manual approach slows down work because of transaction delays, repetitive procedures, record access issues, and an increased chance of mistakes. These problems lower productivity and make it more difficult for the company to productivity and make it more difficult for the company to promptly address customer request.

As a result, the report suggests that the Accounting System Modernization and Service Efficiency Enhancement Program (ASMEP) be put into place. This program’s main objectives are to switch to a computerized accounting system, improve data management and security, and train staff members on digital financial procedure. By making these changes, the company will be able to streamline processes, minimize errors and delays and provide faster and more dependable public service.

**Conclusion**

Demographic factors such as age, civil status, education level, and experience play significant roles in the liquidation of allocated funds. Providing training sessions and capacity-building programs for school administrators and personnel involved in financial management.

Effective liquidation of allocated funds for public elementary schools is critical for ensuring transparency, accountability, and proper utilization of resources within the Department of Education. The Department should invest in modern accounting and reporting technologies tailored to the needs of public elementary schools.

The research findings underscore the multifaceted nature of factors influencing the utilization and liquidation of allocated funds in terms of provision and procurement within the public elementary education sector. Enhance communication channels between the Department of Education Division of Aklan and public elementary schools. Allocate resources accordingly, such as staffing support or access to financial management tools.

While the Pearson correlation analysis establishes a relationship between the factors, future researchers could delve deeper into establishing causality. Conducting qualitative research to obtain insights into the

underlying causes behind the observed association can be aided by utilizing experimental or longitudinal designs to assist understand the direction of causation between the variables.

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