

Workflow Analysis of Administrative Transactions in the Schools Division of Ilocos Sur

Elvira Quennie P. Ataup^{1*}, Nora A. Oredina¹

¹ College of Graduate Studies, Don Mariano Marcos Memorial State University, North La Union Campus, Bacnotan, La Union, Philippines

* elvira.palomares@deped.gov.ph, noredina@dmmmsu.edu.ph

Date Submitted:
August 25, 2026

Date Accepted:
September 20, 2026

Date Published:
October 09, 2026

DOI:
10.5281/zenodo.23265152

ABSTRACT

This study aimed to assess the workflow efficiency of administrative transactions in the Schools Division Office of Ilocos Sur and determine the workflow bottlenecks and operational challenges in administrative service delivery. This study utilized a descriptive mixed-method research design. One hundred fifty (150) administrative personnel were selected as participants using a purposive sampling technique. A researcher-made questionnaire was used as an instrument, and the data were analyzed using weighted mean, standard deviation, frequency, percentage, and thematic analysis. The results revealed that administrative transaction workflow efficiency was efficient ($M = 3.75$). Document management emerged as the administrative personnel's most

efficient aspect, followed by processing time and resource utilization. The study also found that the administrative offices experienced multiple approval levels, delayed document routing, manual processing, communication gaps, limited personnel, and inadequate digital systems as the most frequent workflow bottlenecks and operational challenges in administrative service delivery. The study recommends streamlining administrative procedures, improving digital systems, and enhancing communication to improve administrative transaction workflow efficiency and service delivery in the Schools Division Office of Ilocos Sur.

Keywords: *workflow efficiency, administrative transactions, process improvement, Schools Division Office, Department of Education*

INTRODUCTION

Efficient administrative processes are critical to the effective delivery of public education services. While schools are the primary education service delivery units, administrative systems significantly impact the quality of services rendered to various stakeholders. The administrative offices of the Department of Education (DepEd) undertake a wide range of administrative, supervisory, and operational support functions, including managing personnel, records, procurement, finances, and frontline services. Hence, administrative transactions are vital to achieving organizational effectiveness and stakeholder satisfaction.

Public organizations worldwide are currently witnessing the need to increase efficiency, transparency, and accountability while embracing digital governance. Fatoni et al. (2024) found that effective school administration could improve operational efficiency and service delivery through enhanced organizational coordination and effective resource utilization. Atief Aisyil Wi'am, Yaqien, and Triwiyanto (2024) also established that improved administrative processes could increase institutional effectiveness by accelerating routine procedures and reinforcing organizational support systems.

Administrative modernization is a key priority in the Philippine public education system. Ease of Doing Business and Efficient Government Service Delivery Act of 2018 (Republic Act No. 11032) requires public agencies to undertake process improvement initiatives to shorten processing time and increase organizational efficiency. The DepEd has been at the forefront of improving organizational performance through digital transformation and quality management system implementation. For instance, Pitogo (2024) found that the adoption of integrated information systems in the DepEd Caraga Regional Office resulted in improved administrative efficiency by expediting document management and enhancing inter-office communication.

Digital technology has become a critical determinant of administrative efficiency in the education sector. Presbitero and Obiso (2025) found that digital technology use predicted the administrative efficiency of school administrators and teachers, explaining 40% of the variance in the outcome variable. Their study revealed that digital technology could improve document management, communication, decision-making, and overall organizational performance. Similarly, Bantaculo (2024) found that the effective use of information and communication technology (ICT) could increase administrative efficiency by minimizing manual processing and accelerating office transactions.

Administrative efficiency also depends on how effectively administrative personnel perform their duties and execute organizational processes. In their phenomenographic study of the concepts of administrative efficiency of non-teaching personnel in the Department of Education, Hernandez and Canoy (2025) identified five categories: fast service delivery, accuracy and compliance, responsible use of resources, teamwork, and ethical service delivery. The study found that administrative efficiency was multifaceted and should be evaluated using multiple indicators, including speed, accuracy, and service compliance.

Studies conducted in other countries also reveal the critical role of digital technology in improving administrative efficiency. Ali and Arshad (2021) found that school leaders' acceptance of digital technology predicted administrative efficiency and organizational effectiveness. Their study, which used the unified theory of acceptance and use of technology (UTAUT), established that technology use was a critical predictor of administrative efficiency, explaining 65% of the variance in the outcome variable. Ofori-Kyereh and Agyei (2022) also found that the use of technology by school administrators could improve communication, document management, and overall administrative efficiency.

Recent studies also reveal that organizational culture plays a critical role in accelerating digital transformation and improving administrative efficiency. Manuel and Alon (2024) found that leadership had a significant effect on the development of a digital organizational culture that could promote technology adoption, collaborative decision-making, and continuous process improvement. Prachumrasee et al. (2024) also found that the digital transformation of administrative processes could improve transparency, document management, and organizational efficiency in public institutions.

Despite the need for efficient administrative processes, most government agencies face the challenge of long processing time, which often results in delays in service delivery. Multiple approval levels, lack of effective communication, and inadequate documentation are some of the challenges associated with slow processing time in government agencies. While most of the aforementioned studies have demonstrated the role of digital technology and leadership in improving administrative efficiency, there is a need to conduct more studies on administrative workflow, particularly in the administrative offices of the DepEd Schools Division Offices. Most of the previous studies have focused on the role of technology and management practices in administrative efficiency while neglecting the importance of process improvement initiatives. This study focuses on the administrative offices of the Schools Division of Ilocos Sur to determine the level of administrative transaction workflow efficiency and identify the most frequent workflow bottlenecks and operational challenges in administrative service delivery.

The Schools Division Office of Ilocos Sur undertakes a wide range of administrative functions to support the effective delivery of education services in the province. As the administrative burden increases,

the need for efficient administrative processes also increases. However, there is limited information on the level of administrative transaction workflow efficiency and the most frequent workflow bottlenecks and operational challenges in administrative service delivery. This study will generate information that can help improve the efficiency of administrative processes in the Schools Division Office of Ilocos Sur. Hence, this study aimed to analyze the workflow of administrative transactions in the Schools Division Office of Ilocos Sur by determining the level of workflow efficiency, identifying the workflow bottlenecks and operational challenges in administrative service delivery, establishing the relationship between workflow efficiency and administrative service quality, and developing a Process Improvement Framework.

Objectives of the Study

This study aimed to analyze the workflow efficiency of administrative transactions in the Schools Division Office of Ilocos Sur by determining the level of workflow efficiency, identifying the workflow bottlenecks and operational challenges in administrative service delivery, establishing the relationship between workflow efficiency and administrative service quality, and developing a Process Improvement Framework.

METHODS

Research Design

This study utilized a descriptive mixed-method research design. The quantitative research component involved analyzing the level of administrative transaction workflow efficiency, while the qualitative component focused on identifying the most frequent workflow bottlenecks and operational challenges in administrative service delivery.

Research Participants

The participants of this study were the administrative personnel of the Schools Division Office of Ilocos Sur who were directly involved in processing administrative transactions. The population of this study comprised Administrative Officers, Administrative Assistants, Administrative Aides, Human Resource Management personnel, Records Management personnel, Finance personnel, Supply Officers, Planning Officers, Information and Communications Technology (ICT) personnel, and other support staff. A purposive sampling technique was used to select 150 administrative personnel as respondents. The study also involved key informant interviews with the heads of the various administrative units to gain an in-depth understanding of the issue.

Research Questionnaire

A researcher-made questionnaire was used to gather quantitative data from the selected administrative personnel. The questionnaire was developed based on the literature review and the research objectives. It comprised two sections: Section 1 measured the level of administrative transaction workflow efficiency, while Section 2 identified the most frequent workflow bottlenecks and operational challenges in administrative service delivery. The questionnaire was validated by experts in the field of educational management and public administration. A pilot testing of the questionnaire was done among administrative personnel of a selected Schools Division Office in the region to establish its reliability and improve its validity. The questionnaire had a Cronbach's Alpha of 0.9, indicating that it had a high level of internal consistency and reliability.

Data Collection Procedure

Prior to data collection, this study requested and received permission from the Schools Division Superintendent of the Schools Division Office of Ilocos Sur. The study also requested and received permission from the heads of the various administrative units. The respondents were informed of the purpose of the study and asked to provide informed consent. The questionnaires were administered to the

respondents, and they were given enough time to complete the documents. The collected questionnaires were reviewed to ensure that they were complete and consistent before scanning and encoding. In addition, this study conducted key informant interviews to supplement the information gathered using the questionnaires. The data collected from the questionnaires and interviews were analyzed while maintaining the confidentiality of the respondents' responses in accordance with Republic Act No. 10173, otherwise known as the Data Privacy Act of 2012.

Statistical Treatment of Data

Descriptive and inferential statistics were used to analyze the quantitative data gathered using the questionnaires. Frequency and percentage were used to present the demographic data of the respondents. In addition, the study used weighted mean and standard deviation to determine the level of administrative transaction workflow efficiency. The qualitative data gathered using the open-ended questions in the questionnaires and the key informant interviews were analyzed thematically in accordance with the procedures developed by Creswell and Poth (2018). The qualitative data were analyzed by going through the data to become familiar with the information, coding the information to identify patterns, developing themes, reviewing the themes, and interpreting the findings. The themes identified from the qualitative data were used to establish the most frequent workflow bottlenecks and operational challenges in administrative service delivery and develop a Process Improvement Framework.

RESULTS AND DISCUSSION

Level of Workflow Efficiency of Administrative Transactions

The study revealed that the overall level of workflow efficiency of administrative transactions in the Schools Division Office of Ilocos Sur was efficient ($SD = 0.64$). This implies that the administrative processes in the Schools Division Office of Ilocos Sur were effective in meeting the service delivery needs of the stakeholders and were perceived as efficient by the administrative personnel. The study also established that document management was the most efficient administrative process, followed by processing time and resource utilization. The findings also revealed that communication flow was the second least efficient administrative process, while process complexity was the least efficient administrative process.

Document management had the highest mean score of ($M = 4.08$, $SD = 0.57$), which indicates that administrative personnel perceived the process as efficient. This implies that the organization had effective document filing, storage, retrieval, and routing systems that enhanced the efficiency of administrative processes. The efficient document management process also reduced the likelihood of misfiling and ensured compliance with the relevant regulations and policies.

The study also established that resource utilization had a mean score of 3.76 ($SD = 0.66$). This indicates that the administrative offices had sufficient personnel, equipment, and other resources to support the efficient delivery of administrative services. In addition, the study found that processing time had a mean score of 3.82 ($SD = 0.61$). This implies that the administrative offices were effective in processing routine administrative transactions in a timely manner. The findings also revealed that communication flow had a mean score of 3.69 ($SD = 0.64$). This suggests that the administrative offices had effective communication channels that enabled them to deliver services efficiently. However, the study also established that there was a need to improve communication to ensure faster decision-making and processing of transactions.

The study also established that process complexity had a mean score of 3.41 ($SD = 0.74$), which suggests that the process was efficient. However, the study also established that process complexity was the least efficient administrative process. This implies that the administrative personnel faced several challenges when executing the administrative processes, including multiple documentary requirements and approvals, which slowed down the processing of transactions. The findings of this study are consistent with

those of Presbitero and Obiso (2025), who found that effective administrative systems and the use of digital technology could improve organizational productivity, workflow efficiency, and service delivery. Fatoni et al. (2024) also found that effective administrative processes could enhance institutional effectiveness by minimizing process delays and improving organizational coordination.

Workflow Bottlenecks and Operational Challenges

The study also identified the most frequent workflow bottlenecks and operational challenges in administrative service delivery in the Schools Division Office of Ilocos Sur. The findings revealed that multiple approval levels were the most frequent workflow bottlenecks and operational challenges in administrative service delivery, as identified by 116 (77.3%) respondents. Multiple approval levels slowed down the processing of transactions and placed an extra burden on the administrative personnel. The study also established that multiple approval levels were necessary to ensure compliance with the existing regulations and policies.

The study also found that delayed document routing was the second most frequent workflow bottleneck and operational challenge in administrative service delivery, as identified by 109 (72.7%) respondents. Document routing delays often occurred when documents had to be physically delivered from one office to another, especially when multiple endorsements were required. This finding is consistent with the findings of Presbitero and Obiso (2025), who found that the use of digital technology could improve document management by eliminating the need for physical delivery of documents.

The study also established that manual processing of documents was the third most frequent workflow bottleneck and operational challenge in administrative service delivery, as identified by 103 (68.7%) respondents. Manual processing of documents involved extra encoding, filing, and verification steps, which often slowed down the processing of transactions. The study also found that communication delays were the fourth most frequent workflow bottleneck and operational challenge in administrative service delivery, as identified by 97 (64.7%) respondents. Communication delays often resulted in duplicated efforts, miscommunication of information, and slowed decision-making.

The study also established that limited personnel was the fifth most frequent workflow bottleneck and operational challenge in administrative service delivery, as identified by 89 (59.3%) respondents. Limited personnel often resulted in extra workloads for the existing staff, which slowed down the processing of transactions. The study also found that heavy administrative workload was the sixth most frequent workflow bottleneck and operational challenge in administrative service delivery, as identified by 84 (56.0%) respondents. Heavy administrative workload often resulted in fatigue among administrative personnel, which could lead to errors in processing transactions. The study also found that inadequate digital systems were the seventh most frequent workflow bottleneck and operational challenge in administrative service delivery, as identified by 76 (50.7%) respondents. Inadequate digital systems often resulted in the inability to monitor the status of documents and transactions, slowing down the processing of transactions. The study also found that limited office equipment and facilities were the eighth most frequent workflow bottleneck and operational challenge in administrative service delivery, as identified by 63 (42.0%) respondents. Limited office equipment and facilities often resulted in the inability to process transactions efficiently.

The findings of this study reveal that the most frequent workflow bottlenecks and operational challenges in administrative service delivery in the Schools Division Office of Ilocos Sur were multiple approval levels, delayed document routing, manual processing of documents, communication delays, limited personnel, heavy administrative workload, inadequate digital systems, and limited office equipment and facilities. These findings are consistent with the findings of Hernandez and Canoy (2025), who found that administrative efficiency was achieved through fast service delivery, accuracy and compliance, responsible use of resources, teamwork, and ethical service delivery. The findings of this study are also consistent with the findings of Prachumrasee et al. (2024), who found that the use of digital systems could improve document management, transparency, and organizational efficiency in public institutions.

CONCLUSION

The study concluded that the workflow efficiency of administrative transactions in the Schools Division Office of Ilocos Sur was efficient. The study also established that the administrative offices experienced multiple approval levels, delayed document routing, manual processing of documents, communication delays, limited personnel, and inadequate digital systems as the most frequent workflow bottlenecks and operational challenges in administrative service delivery.

Recommendations

It is recommended that the Schools Division Office of Ilocos Sur streamline administrative procedures, improve document management, enhance communication, and adopt digital technology to improve the efficiency of administrative transactions and service delivery.

REFERENCES

- Anti-Red Tape Authority. (2023). *Ease of doing business guidebook*. <https://arta.gov.ph>
- Department of Education. (2022). *DepEd quality management system (QMS) manual*.
- Data Privacy Act of 2012, Rep. Act No. 10173 (2012).
https://lawphil.net/statutes/repacts/ra2012/ra_10173_2012.html
- Ease of Doing Business and Efficient Government Service Delivery Act of 2018, Rep. Act No. 11032 (2018).
https://lawphil.net/statutes/repacts/ra2018/ra_11032_2018.html
- Fatoni, M. H., Fatimah, M., Santoso, B., & Syarifuddin, H. (2024). The role of school administration in improving operational effectiveness and quality of education. *International Journal of Educatio Elementaria and Psychologia*, 1(6), 335–345. <https://doi.org/10.70177/ijeep.v1i6.1400>
- Hernandez, J., & Canoy, O. (2025). Service beyond the desk: Exploring DepEd administrative staff's conceptions of efficiency in public education support systems. *Psychology and Education: A Multidisciplinary Journal*, 50(10), 1154–1159. <https://doi.org/10.70838/pemj.501004>
- International Organization for Standardization. (2015). *Quality management systems—Requirements* (ISO Standard No. 9001:2015). <https://www.iso.org/standard/62085.html>
- Manuel, J., & Alon, R. (2024). Creating a digital culture in schools: The role of leadership in technology integration. *International Journal of Educational Leadership and Management*, 12(1), 14–30.
<https://doi.org/10.17583/ijelm.12257>
- Ofori-Kyereh, B., & Agyei, D. D. (2022). UTAUT-based study of school administrative technology use in Ghana. *African Journal of Educational Management*, 20(3), 101–117.
- Pitogo, N. S. (2024). Enhancing administrative efficiency through the DepEd Caraga Regional Office Information Systems Portal. *International Journal of Computing Sciences Research*, 8, 2822–2840.
- Prachumrasee, K., Ronghanam, P., Thonmanee, K., Phonsungnoen, P., Mangma, P., Setthasuravich, P., & Lowatcharin, G. (2024). From traditional to digital: Transforming local administrative organization workflows in Thailand through social listening tools. *Social Sciences*, 13(12), Article 666.
<https://doi.org/10.3390/socsci13120666>
- Presbitero, M., & Obiso, R. (2025). Role of digital tools and administrative efficiency in basic education: A basis for tech-driven administrative optimization training plan. *Psychology and Education: A Multidisciplinary Journal*.