



**DOCUMENT TRACKING SYSTEM (DOTS) FOR CIVIL WORKS:
IMPLEMENTATION AND OUTCOMES**

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ABSTRACT

This study evaluated the Document Tracking System (DoTS) at the DPWH Iloilo City District Engineering Office using a descriptive qualitative design. Using in-depth interviews, the study gathered data from four liaison officers and three internal employees. Findings showed that while the system modernizes document handling by replacing "cumbersome" physical storage with "actionable insights," its success depends on human intervention and infrastructure stability. The DoTS improves volume management and aligns with RA No. 11032 to "expedite government transaction processes," but efficiency is often compromised by "power and internet outages." The research concludes that the office has achieved "mediated transparency" rather than "open transparency," as stakeholders still rely on staff intermediaries for status updates. Policy recommendations include establishing a dedicated stakeholder portal, investing in redundant power and network infrastructure, and enforcing a "real-time update" protocol to ensure the system remains a reliable driver of accountability.

Keywords: *Document Tracking System, Operational Efficiency, Digital Governance, DPWH Iloilo City*

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INTRODUCTION

Development tracking systems have improved the efficiency of the government transactions by setting up timelines for prompt approval of document transactions. These systems, as recent developments on technologies, help meet the demands for transparency in public service. Thus, this study focuses on how these tools manage information efficiently and effectively in a government setting.

In 2007, the Philippine Congress passed Republic Act 9485, formally titled "An Act to Improve Efficiency in the Delivery of Government Service to the Public by Reducing Bureaucratic Red Tape, Preventing Graft and Corruption, and Providing Penalties Therefore." Frequently referred to as the "Anti-Red Tape Act of 2007," this legislation was designed to foster a culture of integrity, accountability, and the responsible oversight of public resources and administration. Additionally, the law seeks to streamline administrative workflows and implement robust measures intended to deter graft and corruption within the government sector.

In accordance with this mandate, the Department of Public Works and Highways (DPWH) implemented a streamlined system designed to accelerate project completion and the processing of related documentation while enhancing the transparency of its organizational operations. (DPWH, 2021). This system of tracking is called the Document Tracking System (DoTS).

DoTS functions as an electronic dynamic routing slip that tracks down and monitors the status of slow-moving documents. It points out those who are responsible for the delays

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of processing and indicates a target date for document release. This system prescribes a timeline for the reviewing and approving offices. To date, the DoTS system has been in implementation within the DPWH for five years.

Reflecting on the positionality of the researcher as an employee of the DPWH Iloilo City District Engineering Office for the last ten years, there is a recognized need to assess the implementation and outcomes of the DoTS system. This study sought to provide empirical data that would help the DPWH management ascertain the current status of the program and maximize its goals and objectives.

MATERIALS AND METHODS

Research Methodology

This research employed a descriptive qualitative design to carry out the investigation. This design fits the study because it allows for an in-depth exploration of the current state of the Document Tracking System (DoTS). The evaluation focused on describing the implementation experiences and outcomes through the perspectives of the participants.

A researcher-developed interview guide serves as the primary tool for data collection. This qualitative approach facilitates the gathering of detailed narratives to address the specific objectives of the research.

Participants of the Study

The research design originally proposed a sample of six respondents, consisting of three external liaison officers and three internal DPWH staff members. However, the study

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expanded to seven respondents to ensure data saturation and a more comprehensive representation of the user base. The final group included four liaison officers from private contractors and three DPWH personnel directly responsible for document tracking.

This selection followed the criteria for purposive sampling. Participants were chosen based on their specific roles and expertise relative to the research objectives. By including both system administrators and external stakeholders, the study captured a dual perspective on the implementation and effectiveness of the DoTS. This adjustment ensured that the findings reach the necessary depth to address the Statement of the Problem.

Sampling Design and Technique

The study employed a convenience sampling technique. According to David (2022), convenience or accidental sampling is a non-probability sampling method where the investigator selects sample units based on their availability and willingness to participate in the study. This approach allowed the researcher to gather data efficiently from liaison officers and DPWH staff who were present and accessible during the data collection period.

The researcher selected four liaison officers and three internal staff members as the primary respondents. This technique is practical for qualitative research where the focus is on gathering specific implementation experiences rather than achieving statistical representativeness. By utilizing participants who engage with the Document Tracking System daily, the study ensured that the gathered insights remained relevant to the actual operational environment of the office.

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Research Instrument

The researcher applied qualitative data collection techniques to gather relevant information for the research objectives. The research primarily used a semi-structured interview guide to gather data. This tool facilitated a directed yet adaptable conversation, enabling the researcher to record comprehensive insights into the execution and results of the Document Tracking System (DoTS).

Data gathering involved conducting one-on-one interviews with clients from various licensed contractors and DPWH staff involved in project implementation. The use of a semi-structured format ensured that while specific topics like quantity, quality, and timeliness were addressed, participants could also share unique experiences and challenges.

The researcher employed convenience sampling to access respondents at the DPWH Iloilo City District Engineering Office during business hours. This approach minimizes disruption to civil works operations while ensuring a practical data collection process. Residence in Iloilo and employment at the DPWH office facilitate direct, face-to-face access to participants, which is essential for building rapport and obtaining high-quality qualitative data.

Validity of the Research Instrument

The proposed interview guide for this study underwent a rigorous validation process. To validate the instrument, a draft was submitted to the research adviser and a panel of subject-matter experts. These evaluators examined the items to ensure the instrument provides an

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adequate and appropriate measure of the research variables. The researcher utilized the observations and suggestions from the experts to subsequently refine the interview guide.

Data Analyses

The researcher employed thematic analysis to examine the qualitative data gathered from one-on-one interviews. This systematic approach involves identifying, analyzing, and reporting recurring patterns or themes within the feedback provided by liaison officers and DPWH staff.

The analysis followed a structured process of data familiarization, initial coding, and theme development. This method allowed the researcher to categorize responses into specific themes related to implementation experiences, system outcomes, and implementation challenges. By focusing on these qualitative narratives, the study uncovered the underlying factors affecting the Document Tracking System (DoTS) in terms of quantity, quality, and timeliness.

RESULTS AND DISCUSSIONS

The study examined the implementation and outcomes of the Document Tracking System (DoTS) at the DPWH Iloilo City District Engineering Office. The research utilized data from four external liaison officers and three internal DPWH staff members to evaluate implementation experiences, work effectiveness, and client satisfaction.

Regarding implementation experiences, the results showed that the DoTS improved document management by replacing manual logbooks with digital tracking. Both groups

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agreed that the system handles large quantities of documents and increases the speed of movement. However, the data reveals that system accuracy is not autonomous. While liaison officers rely on the data as a "source of truth," internal staff reported that tracking information is only reliable when they provide consistent and immediate manual updates. Infrastructure issues, such as internet outages, remain a primary barrier to maintaining this accuracy.

In terms of work effectiveness, the system acted as a time management tool for the internal staff. It provides visibility into deadlines and encourages personnel to finish tasks on schedule. Liaison officers experienced the results of this effectiveness through more predictable and organized document processing. The findings showed that effectiveness is highest when the digital record matches the physical location of the document. When updates lag, both groups experience a breakdown in the process flow.

Client satisfaction was high among the liaison officers because they receive faster and more definitive answers regarding their documents. A significant finding was that these external liaison officers did not have direct access to the DoTS portal, which requires internal staff to act as intermediaries for all status inquiries. The data indicated that while the system improved the service provided to clients, it maintained a clerical burden on the staff because stakeholders outside the office could not track documents independently.

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Conclusion

The transition from manual logbooks to the Document Tracking System has successfully modernized the document handling process at the district engineering office. This shift has established an organized and professional environment where document movements are traceable. The system provides a necessary framework for accountability that previous manual methods lacked.

The reliability of the system, however, remains dependent on human compliance. Tracking data loses its value when staff members fail to perform real-time updates. Regardless of the software's capabilities, the system is a reflection of staff discipline rather than an autonomous digital solution. Accuracy is directly tied to the consistency of manual data entry by personnel.

Technical and infrastructure limitations obstruct the full potential of the digital mandate. Internet instability and power outages force a temporary return to manual methods, which creates data gaps. Furthermore, these infrastructure failures prevent the system from being a perfect record of office activity and hinder the goal of seamless document tracking.

The current implementation provides a limited form of transparency. While the liaison officers benefit from the data, they remain excluded from direct access to the portal. This exclusion maintains a clerical burden on the DPWH staff, who must act as intermediaries for all inquiries. The lack of a stakeholder-accessible portal prevents independent tracking and maximum efficiency.

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