



**Smart Reporting Documentation: Optimized Reporting and
Workflow Management System With AI & GIS Integration**

**UNDERGRADUATE THESIS
Submitted as one of the requirements to obtain
Sarjana Komputer (S.Kom.)**

By:

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**FACULTY OF COMPUTER SCIENCE
INFORMATION SYSTEM STUDY PROGRAM
CIKARANG
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2025

SMART REPORTING DOCUMENTATION: OPTIMIZED REPORTING AND WORKFLOW MANAGEMENT SYSTEM WITH AI & GIS INTEGRATION

By

ABSTRACT

In today's digital era, technological transformation has become a necessity for government institutions to improve their performance effectiveness. One key institution adapting to this change is the Indonesian Democratic Party of Struggle (PDIP) faction in the House of Representatives (DPR RI). This digitalization effort was undertaken to support legislative, budgetary, and oversight functions in a more modern and efficient manner. However, this digitalization process still faces various operational challenges that impact the efficiency and quality of the faction's output.

The main problems encountered include manual management of meeting minutes, an undigitized attendance process, the lack of an integrated project monitoring system, and the difficulty for new staff adapting to the work environment. Daily meeting minutes are often not centrally stored, have inconsistent formats, and are difficult to track for approval. Furthermore, manual attendance with paper signatures hinders rapid and accurate data recapitulation. The absence of a project monitoring system leads to a lack of visibility into work progress and delays in decision-making. On the other hand, new staff face challenges in familiarizing themselves with the organizational structure, workspace, and assigned tasks, ultimately slowing the adaptation process.

This capstone project aims to deliver a digital solution that includes digitizing and centralizing meeting documentation, automating the attendance system, implementing an integrated project management system, and integrating artificial intelligence (AI)-based tools to accelerate the extraction of critical information from meeting documents. From a user perspective, several expert staff members expressed difficulties in managing documents, recording attendance, and understanding the progress of ongoing projects. Therefore, this solution is expected to improve work efficiency, data accuracy, and overall productivity within the PDIP faction of the Indonesian House of Representatives.

Keywords: digitalization, meeting documentation, attendance system, project management, RBAC.

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