

ABSTRACT

PT GPTP, which has been operating in the construction industry since August 22, 2017, faces various complex challenges in inventory material management, particularly in telecommunication projects carried out in collaboration with Telkom Akses. One of the main issues faced by the company is its inability to consistently meet the Service Level Agreement (SLA) agreed upon with its partners, leading to a decline in operational performance and customer satisfaction. Moreover, the lack of standardization in inventory material management processes further exacerbates the situation, causing inconsistencies in stock management.

To address these issues, this study utilizes the waterfall system development method, chosen for its ability to provide a structured and organized framework in software development. This method includes a series of stages, such as system requirements analysis, system information architecture design, program code implementation, system quality testing, installation, and ongoing maintenance.

The result of this research is an inventory information system specifically designed to meet the needs of PT GPTP. This information system is equipped with various features aimed at improving efficiency in material management, including real-time stock tracking capabilities, more organized stock management, and standardization of inventory material processes.

The benefits of this research are to improve the management of material warehousing processes and enhance the efficiency and accuracy of data distribution. Ultimately, this will minimize issues related to service level agreements and standardize inventory management practices.

Keywords: Inventory, SLA, Website, Waterfall.