



ASSET AND MAINTENANCE INFORMATION SYSTEM AT
PT. OMRON

UNDERGRADUATE THESIS
Submitted as one of the requirements to obtain
Sarjana Komputer

By:
ANYA TALITHA FEBYANTI
012202205010

FACULTY OF COMPUTING
INFORMATION SYSTEM STUDY PROGRAM
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1.1 Problem Identification

1.1.1 Background of the Issue

In the current era of digitalization, efficient and structured data management is one of the keys to the company's operational success. PT Omron as one of the companies engaged in manufacturing faces challenges in asset management and Maintenance Record (MR). Data management that is still done manually using paper documents is not only time consuming but also increases the risk of data loss or damage.

Currently, asset-related information only focuses on asset value, such as price or depreciation, without paying attention to maintenance history that can affect asset performance and service life. On the other hand, maintenance records that are separate from asset data make it difficult to conduct a thorough analysis, so companies cannot maximize the potential of their assets.

Manual processes are also a major challenge in managing Maintenance Records. Data is often difficult to find when needed, problem descriptions are only recorded in text without visual support, and tracking of approval status and maintenance progress is not transparent. This results in inefficiency and slows down problem solving which affects the company's productivity. Therefore, it is necessary to develop a web-based information system that can integrate asset management and Maintenance Record in an efficient, secure, and structured manner.

1.1.2 Problem Statement

At PT Omron, the asset management and maintenance record (MR) process is still done manually. Because of this, the data is not integrated, difficult to access when needed, and at risk of being lost.

For now at PT Omron has not used a system for managing its assets. A web-based information system will be able to overcome existing problems and the system must be able to integrate asset management and MR to improve efficiency, data security, and transparency of operational processes.

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ABSTRACT

The development of a web-based asset management information system is essential to streamline inventory tracking and asset management processes within institutions. Organizations typically manage various inventory items, including machines, laptops, and computers, which are vital for daily operations. However, many institutions still rely on manual data processing using Microsoft Excel without a centralized database, leading to inefficiencies, errors, and limited scalability. This study aims to address these issues by developing a web-based system using the CodeIgniter framework for application development and MySQL as the database, managed through PhpMyAdmin. The development process follows a structured approach consisting of system analysis, data collection, system design, application development, testing, and implementation. The result is a functional and efficient web-based application designed to improve asset and inventory record management. The system is expected to enhance data accuracy, accessibility, and overall operational efficiency within the institution.

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