

CHAPTER I

INTRODUCTION

1.1. Background

Advances in technology, particularly in the field of information technology, have played a significant role in various aspects of life [1]. One of the functions of information technology can be used in modernizing administrative systems, and law enforcement. The National Police of the Republic of Indonesia (Polri) is one of the government agencies involved in law enforcement related to handling traffic violations through the implementation of the ticketing system. In the ticketing process, the National Police needs an efficient system to record, store, and manage traffic violation data so that law enforcement can run faster, more efficiently, and more accurately. A ticket is a fine imposed by the police on road users who commit traffic violations.

However, in its implementation, the Tandes Police Unit of the Surabaya Police as one of the Police agencies at the sub-district level operating in the West Surabaya area, is currently still facing several obstacles related to the management of ticket data recapitulation which is still manual. This manual system has a fundamental weakness, namely being vulnerable to the risk of data loss due to archive corruption, data redundancy, and significant time efficiency during the process of retrieving historical data [2]. In addition, the use of register books as the main medium in ticket recording also requires large storage space and is prone to damage. These problems will hinder the process of law enforcement and community services that should be carried out more efficiently.

With the development of web-based technology, these problems can be overcome through the digitization of web-based systems. This system is designed to be a solution at the Tandes Police Station to overcome problems in managing traffic violation data more effectively. This system is expected to provide features that make it easier for administrative affairs officers (urmin) to record, manage data, and enable more precise decision-making based on more accurate data.

In addition, this system will also be equipped with data filtering functions and automatic report creation that can make it easier for the Head of the Traffic Unit (Kanit Lantas) of the Tandes Police to monitor the number of violations, ticket status, and officer performance in the field. In the long term, this system is expected to be able to increase the credibility of the Tandes Police in providing community services and encourage increased traffic discipline in their area. Thus, this system will play an important role in improving the performance and professionalism of the National Police, especially in the jurisdiction of the Tandes Police in the management of ticket recapitulation. In contrast to previous research, the majority focused on the analysis of ETL macro policies or the digital fine payment system. This research offers novelty by focusing specifically on the digitization of internal recapitulation administration at the Police level to bridge the gap between manual enforcement in the field and digital databases [3] [4].

To ensure that the system built runs stably and in accordance with the needs of users at the Tandes Police Station, structured software development is needed. With a structured approach, the development process can be more directed and produce a better system. Through this research, a web-based ticket recap application will be developed that can help the Tandes Police in managing ticket data better, because every incoming data can be immediately recapped and stored systematically in a centralized database. The implementation of this application is expected to contribute to changes/improvements to the existing manual system, thereby supporting the optimization of more effective and efficient community services.

Based on this background, this research was conducted to design a Web-Based Ticket Recap System at the Tandes Police Station. It is hoped that this system can be an effective solution to overcome various problems faced in the management of ticket recapitulation and make a real contribution in supporting the duties of the National Police in law enforcement.

1.2. Problem Formulation

Based on the above background, the formulation of the problem in this study is:

1. How can the web-based ticket recap system speed up the process of recording, storing, and reporting ticket data accurately and efficiently at the Tandes Police Station?
2. How can the web-based ticket recap system automatically generate recapitulation reports in PDF format to facilitate the documentation and reporting process at the Tandes Police Station?

1.3. Problem Limitations

1. This application is strictly intended for urmin (administrative affairs) officers of the Tandes Police who are authorized to record, manage, and recapitulate ticket data. The general public cannot access this system.
2. The application focuses solely on the recapitulation of ticket data, including the recording of blank ticket books/letters, violator information, trial dates, violation types, and ticket settlement statuses. It does not include features for processing online fine payments.
3. The application is designed exclusively to support the management of ticket data within the jurisdiction of the Tandes Police. Tickets issued outside this area will not be recorded; instead, the ticket will be returned to the violator, and the urmin officer will direct them to the appropriate police station.

4. The system only records traffic violations that are subject to ticketing under applicable laws and regulations. Non-traffic violations are not accommodated..
5. This application operates as a standalone local system for the Tandes Police Station and is not integrated with other existing police systems (such as the Digital Korlantas Polri or Samsat Digital Nasional applications).
6. Internal access is restricted to police officers and managed via role-based access rights. Only authorized administrative affairs officers (urmin) have the permission to add, modify, or delete ticket data.

These restrictions are intended to maintain the focus of application development and to meet the needs of the Tandes Police, so that the system can run effectively according to its role and function.

1.4. Research Objectives

Based on the formulation of the problem that has been explained, the objectives of this study are as follows.

1. Produce a system that is able to speed up and simplify the process of recording, storing, and reporting ticket data in an integrated and computerized manner.
2. Implementing the automatic report generator feature in PDF format so that the documentation process of traffic violations at the Tandes Police Station becomes faster.

These goals are expected to realize an application that not only helps manage ticket data effectively at the Tandes Police Station, but can also speed up

the provision of information related to tickets, as well as improve the quality of community services in the field of traffic law enforcement.

1.5. Research Benefits

The results of this study are expected to provide benefits including:

1. For the author
 - a. Apply the theory of web programming, databases, and systems analysis that has been studied.
2. For Companies
 - a. Improving the work efficiency of unit urmin officers in managing ticket data and can speed up the reporting process periodically.
 - b. Minimizing the risk of human error in recording and calculating the recapitulation of daily, weekly, monthly and yearly violator data.
3. For the University
 - 1) It is a reference for future researchers who want to develop a similar system.