

# **IMPLEMENTING THE SMART VILLAGE CONCEPT USING A LOCATION-BASED SERVICE APPLICATION**

***(Case Study: Somawangi Village, Banjarnegara Regency)***

CHYNTIA ELSA PRATIWI  
Informatics Study Program, Faculty of Science & Technology  
Yogyakarta University of Technology  
Jl. North Ringroad Jombor Sleman Yogyakarta  
E-mail: [chyntiaelsa780@gmail.com](mailto:chyntiaelsa780@gmail.com)

## **ABSTRACT**

*The Smart Village concept was developed to enhance the quality of public services, particularly through integrating technology into the complaint management system. In Somawangi Village, Banjarnegara Regency, complaint recording is still conducted manually, resulting in a processing time of over two weeks for reports. This situation hampers the village government's ability to address complaints effectively and restricts public access to monitor the status of their reports. This study aims to develop a mobile-based complaint application utilizing Location-Based Service (LBS) technology. The application is expected to facilitate the public in submitting complaints without needing to visit the village office, while also assisting the village government in managing and following up on reports more systematically. The system is designed using the Unified Modeling Language (UML) and developed with Java and PHP programming languages. The resulting application features an Android platform for the public to report issues with real-time location information and monitor the status of their complaints, as well as a web platform for the village government to manage these reports. The study's results demonstrated significant differences in the complaint system before and after the implementation of the application. The public can now submit online reports directly recorded by the village government for immediate processing, eliminating the need to come to the office.*

**Keywords:** *Android, Application, Location Based Service, Public Complaints, Smart Village*