## Rancang Bangun Sistem Informasi Geografis untuk Memetakan Sebaran Penyakit Endemi di Kotamadya Semarang

Eko Handoyo, R Rizal Isnanto

Jurusan Teknik Elektro, Fakultas Teknik, Universitas Diponegoro Jl. Prof. Sudharto, SH Tembalang, Semarang, Indonesia 50275

## **Abstract**

Nowadays, many diseases have been discovered. So, the health problem is becoming to expand. These Diseases spreading becomes global threat, such as Severe Acute Respiratory Syndrome, HIV-AIDS, and Avian Influenza. While other common acute diseases such as Dengue Hemorrhagic Fever, Polio, Diarrhea, and infant's malnutrition still becomes thread. This incident happens because of many reasons, one of them is less responsiveness and low prevention from the health department. Therefore, excellent quality of health management is needed to decrease the endemic diseases.

This study focuses on managing the spreading of diseases in Semarang city by designing web based-Geographical Information System. The system that identifies the endemic and variant diseases will help the health department to react at the time endemic disease spreading extensively. On the other hand, it will recognize diseases spreading pattern in specific area. By viewing the location of the spreading, they can isolate the continuity of the endemic diseases. Therefore, the health department will have a quick reaction in order to prevent the diseases become widely. The manual method that has been used at this time is ineffective, comparing with the new online information system that will increase efficiency in reporting system. Finally, This Geographic Information System will increase the quality of healthcare management.

**Keywords:** healthcare management, Geographical Information System, web based reporting system, endemic diseases, health department.

