

## **ABSTRACT**

*Tuberculosis is an infectious disease of the respiratory tract caused by Mycobacterium tuberculosis. Tuberculosis cases in Banyuwangi Regency in 2017 was 2171, 2216 cases in 2018, 2635 cases in 2019, 2009 cases in 2020, and 1868 cases in 2021. There was a decrease in cases in 2020 and 2021 due to the Covid-19 pandemic, so the Health Office of Banyuwangi Regency program in screening case finding encountered problems. The existence of a webGIS based prediction system is expected to be able to provide predictive information and an overview of the spread of tuberculosis in Banyuwangi Regency, so that it can achieve the target of case finding. Predictions are made using Trend Analysis and Quantum GIS methods used in map making, and the method used in system development is Rapid Application Development (RAD). The result of this research is an information system that can display case predictions and a map of the distribution of tuberculosis case findings, besides that there is general information about tuberculosis. System testing with black box shows that the system has succeeded in displaying its functions.*

**Keywords:** *Prediction, Tuberculosis, Trend Analysis, RAD*