

***DEVELOPMENT OF A SALES FORECASTING INFORMATION SYSTEM TO
DETERMINE THE AMOUNT OF MEDICINE STOCK USING THE TRIPLE
EXPONENTIAL SMOOTHING METHOD***

Dicky Kurnia Ramadhan

Study Program of Informatics Engineering

Majoring of Information Technology

ABSTRACT

Apotek Angrek has frequently faced challenges in inventory management of medicine stock. Processing and analyzing sales data is crucial to gain insights and information about the pharmaceutical needs provided by the pharmacy. To facilitate medicine stock provision, a forecast for upcoming periods will be conducted using previous sales data. Therefore, an application utilizing the Triple Exponential Smoothing method has been developed. Following the forecasting process, the prediction errors will be evaluated. To test the forecasting accuracy, Mean Squared Error (MSE) and Mean Absolute Percentage Error (MAPE) calculations will be used. The smallest MSE obtained is 2912.127763 and the smallest MAPE is 28.52597883%, using $\alpha = 0$, $\beta = 0.021271154$, and $\gamma = 0$.

Keywords: Inventory Management, Forecasting, Triple Exponential Smoothing