

# **ASTER 90 POSYANDU VISITOR FORECASTING SYSTEM USING THE TRIPLE EXPONENTIAL SMOOTHING METHODE**

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## **ABSTRACT**

*The role of posyandu in society is very influential. The main aim of Posyandu is to prevent an increase in maternal and infant mortality during pregnancy, childbirth and postpartum through community empowerment. Posyandu Aster 90 has different data on pregnant women, babies and toddlers every year. Posyandu Aster 90 uses a manual method, namely by accumulating data on the number of babies and toddlers each year. This method is less effective. This research aims to build a forecasting system that can help make it easier to predict visitors at Posyandu Aster 90 so that it can help forecast or predict consumption needs and supporting equipment at Posyandu Aster 90. The Triple Exponential Smoothing method can predict the number of visits from babies and toddlers in the following months. the following month using time series data on visits from babies and toddlers in the previous year which has trends and seasonal data patterns. From this discussion, the aim of this forecasting system is designed to help Posyandu improve service quality and effectiveness both in terms of service and visitor forecasting from existing visitor data in accordance with expectations and system performance in accordance with the existing functional system. The system produces data-based forecasts with calculations using an alpha of 0.5 with the smallest MAD error value, namely 2.440. The accuracy of forecasting results for posyandu visitors by looking at the MSE (Mean Squared Error) value is 9.790, namely a smaller value indicates a lower squared error of. MAPE (Mean Absolute Percentage Error) 8.344 Shows the average percentage error.*

**Key words:** *Forecasting System, Exponential Smoothing, Triple Exponential Smoothing, Posyandu, Pengunjung.*