FORECASTING OF SALES ELECTRICITY IN PT. PLN (PERSERO) EAST JAVA DISTRIBUTION SURABAYA WEST SERVICE AREA

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Abstract

Electricity is the source of energy which distributed via cable and help humans meeting the need. In meeting the demand for electricity, PT. PLN (PERSERO) to sell electricity through two customer the prepaid and postpaid customer. Electricity consumption for prepaid and postpaid subscribe increasing from year to year so that necessary action can be controlled so that future electricity sales. The statistical method used for forecasting of sales electricity is ARIMA Box Jenkins and Double Exponential Smoothing. The data used in this study is the monthly electricity sales data from PT. PLN (PERSERO) East Java Distribution Surabaya West Service Area. Electricity sales data is divided into two customer that prepaid and postpaid customer. Characteristic of electricity sales data for prepaid customer tend to rise and the trend while characteristic of electricity sales data for postpaid customer tend to be fluctuating. Electricity sales forecasting model for the prepaid customer used double exponential smoothing while electricity sales forecasting model for the postpaid customer used ARIMA (2,1,0).

Keywords : Electricity, Prepaid, Postpaid, Double Exponential Smoothing, ARIMA Box Jenkins