Demand Forecasting for Batik Product of Community Enterprise in Songkhla province, Thailand.

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Abstract

The current economic for growing and technological development include the customer requirements are changing rapidly as the resulting problems are complex. In terms of production to keep up with the demands of markets and customers. Therefore, the prediction will happen in the future based on historical data analysis. The current data and experience to make the business of forecasting results used to understand the changing trends of the business environment will impact to business process in the future. The objectives of study are to applying the demand forecast technique for batik products by simple moving average, weighted moving average and exponential smoothing. The methods in this study used the daily sales data for the batik products mentioned were collected for the period starting Jan 2015 and ending Dec 2015. The data were obtained by contacting the selected retail outlet manager. Their user friendly database allows us to view daily sales of individual batik products such as number of units sold and product code for this study. The result was found that simple exponential smoothing, when \( \alpha = 0.5 \), the MAD was 34.47, the moving average forecasting method weighted to the MSE minimum of 1551.21 and forecasting with simple exponential smoothing when \( \alpha = 0.5 \) to the MAPE was 21.07%. The results shown that the exponential smoothing technique was the best method in this study.

Keywords: Forecasting, Production, Batik products