ANALYSIS OF PRODUCTION QUANTITY BATIK DETERMINATION IN PT. BATIK DANAR HADI SURAKARTA

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ABSTRACT

This research aimed at obtaining appropriate Batik production quantity, thus optimal earnings can be reached. In this case, it is necessary for the company to make a planning before deciding policies concerning how much Batik that must be production in the coming period. Therefore issues that should be urgently found out is how much demand for Batik production in the future. In view of what mentioned above, it is necessary to conduct past-based sales forecasting first, as function restriction of their product demands.

Considering that data used in this research represent secondary data in the form of sale realization data of Batik clothing products at PT. Batik Danar Hadi since January until December 2000, than the applied forecasting is method of ARIMA Box-Jenkins. By way of such method from the four Batik sort have models of seasonal ARIMA, with the smallest AIC, BIC, SBC with each model: Written Batik tulis of ARIMA (100)(010)_{12}, Printing Batik with ARIMA (110)(011)_{12}, Cap Batik with ARIMA (100)(100)_{12}, combination Batik with ARIMA (001)(100)_{12}. In their forecasting values can be obtained as demand functions.

Whereas quantity determination analysis of production is: Firstly determining goal function by way of determining production costs of every Batik sort, sales price of every Batik sort, from this point margin contribution cost that later as goal function can be obtained. Determining function of restriction, in this case it is necessary to pay close attention to raw material restriction, supplementary material restriction, working capital limitation, machinery/equipment and demand restrictions. After goal function of and function restriction have been obtained, so the next step is determining quantity of Batik by means of programming linear method.