## ABSTRACT

Indosari is a shop which sell kinds of chemical for foods and housekeeping industry. Till now, the shop is doing the purchasing for its supply just based by owner's intuition, so that it often causes the hoarding of several items. Moreover, it also often causes the emptiness of several items, so that the shop would not be able to comply the customers demand. This case is not efficient, because the customer's satisfaction will determine the selling rate at that shop.

For that reason, a system developed to support the decisions making (Decision Support System) which process the selling data and uses the decomposition method. This method identify three particularly based components. They are trend, cycle, and seasonal factor.

This system is able to produce the prediction of next demand quantity, so that it can be anticipated for the supply. According to the selling data from January 2000 until July 2005, we get the average error for all items is 0.9461. This shows us a quite good result, because the formula used on this method is :

 $error = \frac{X(t)}{X'(t)}$  where X(t) is for original data, and X'(t) is for forecasting

result. Therefore, the value of error which more close by to the value of one is being a better result.

Key word : Decision Support System, goods supply, Decomposition