## NUMBER OF PREDICTION SYSTEMS OF FABRICATION IRON PRODUCTION WITH TRIPLE EXPONENTIAL SMOOTHING (BROWN) METHOD

## By CHILMAN DZULFIKAR FAHMI 13 621 051

Asked to the Faculty of Engineering Informatics Study Program University of Muhammadiyah Gresik To Meet the Requirements to Acquire Bachelor degree S-1 Informatics Engineering Program

## **ABSTRACT**

CV. IndoJaya is a steel fabrication service in the fabrication area of PT Varia Usaha Gresik. Serving the sale of used fabric. CV. IndoJaya in the case of finished goods production in the following month did not know how many sales of finished goods would be needed. If there is a shortage of inventory sales will hamper the sales process from a predetermined schedule. CV. IndoJaya producing finished goods only estimates the amount of production without predicting demand for manufactured goods. Inventory, stock and production is one of the important factors in supporting operational sustainability, to find out the amount of production in the following month, this study uses the Triple Exponential Smoothing method (Brown). Tests carried out from January 2015 to December 2017 testing with 9 different alpha values, namely 0.1-0.9 with references 3, 6, and 12 months earlier. Prediction results will be used as a comparison value to determine the error value in predictions using MAD and MAPE. From the average prediction testing analysis, it produces the smallest MAPE value that is a 3-month reference with an alpha value of 0.2.

**Keywords:** Sales Prediction, Triple Exponential Smoothing (Brown), MAD,

MAPE.

Supervisor: Harunur Rosyid, ST., M.Kom