NUMBER OF PREDICTION SYSTEMS OF FABRICATION IRON PRODUCTION WITH SINGLE MOVING AVERAGE METHOD

By **ACHMAD RIFKI RUSADY**

13 622 084

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 Single Moving Average method. testing based on 3x3 order (the previous 3 months) produces MAD = 55,407 and MAPE = 13%, the second test with 4x4 order (6 months before) produces MAD = 44,907 and MAPE = 11,9%, third test with order 6x6 (12 the previous month) produced MAD = 35.75 and MAPE 12%.

Keywords: Single Moving Average, MAD, MAPE.

Supervisor: Harunur Rosyid, ST., M.Kom