

## **ABSTRACT**

*The development of science and technology that has been developed at this time more rapidly, along with the increasing need for information itself. Where an agency company in the print media would require printing machine that has a good productivity with the aim to produce a daily newspaper with sufficient quantities in accordance with the needs of society, so that information more quickly and accurately.*

*By producing a newspaper every day along with the unstable economy and increasingly sharp competition in the industry, then the states are forced PT Harlan to further improve the smoothness, the effectiveness and efficiency of the printing. One of the things that support the smooth operation of the printing ie readiness of production machines in their duties. One way to measure the performance of machines in general that by using OEE and to minimize the possibility of losses to be borne by the company is to improve the Reliability, Availability and Maintainability (RAM) of the printing press itself. By using the data in the form of MTTF and MTTR of each subsystem of the printing press.*

*Based on calculations using the method of Overall Equipment Effectiveness, by performing calculations based on three main parameters, namely the value of the Availability of 75%, the value of the Performance of 97%, and the value of Quality by 98%, then the system has OEE values of 71.60% with a study for eight months or 5760 hour. Furthermore, the calculation method using the RAM Analysis modeling reliability block diagram, the system has a reliability score of 10.59% at 70 hours based on the analytical approach. Maintainability calculations using RAM Analysis using reliability block diagram modeling, it was found that the entire unit in the system has a chance to settle down a minimum of 12 hours to be able to function again with a probability of 100% to reach its original state. During eight months research, Inherent Availability of the system is 99.52% based on analytical approach and Operational Availability of the system is 73.91%.*

**Keywords: Reliability, Availability, Maintainability, KPI, RBD, OEE**