ABSTRACT

Maintenance is an important activity undertaken to maintain or improve the function of equipment in order to work optimally. One of the factors that support the maintenance activities is machine reliability. Higher machine reliability reduces process costs. Conversely, engine failure due to interference reduces production output which can reduce business benefits for the community. In business terms, the problem of controlling the cost of unreliability (COUR) of equipment and process failure is just a waste of money. Unreliable index costs are simple and practical reliability tools for converting failure data into costs. The manual calculation process for COUR and RAM analysis has a very long stage, so it will take a long time if the equipment under study is large. Maintenance analysts need to use more than one existing application as work tools. Therefore, designed a web-based application with more complete features that can be used to analyze COUR and RAM. This application will simplify the process of calculation, analysis, and results management, so it will helps maintenance analysts in doing their work. This application can determine the maintenance policy, predict the performance of a machine's reliability, availability and maintenance capabilities. As well as calculating costs from reliability issues.

Keywords: Web-based application, Maintenance, COUR, RAM, Unreliable Index Costs.