

ABSTRACT

Decision Support System For Spare Part Stock Provision Using Analytical Hierarchy Process at Garansindo Inter Global is a decision support system that provides parts recommendation to be purchased by looking at the point of view of the importance level criteria of the spare parts. The system is built using data from the previous end project, and has the same functionality as the existing system but uses a different method of Analytical Hierarchy Process (AHP). This system builds on existing business processes, and does not change the business process. The system is built using Unified Modeling Language (UML), yEd Graph Editor, and ERDPlus tools to design the application and this system using PHP programming language and MySQL database. Testing strategy for this application using black box testing that aims to ensure that the application has been in accordance with the design analysis. Black box testing is a testing strategy that pay attention to the results of the application display without looking at the source code. Thus, the system is able to provide recommendations in the form of spare parts rankings to be selected for ordering process based on the level of importance of spare parts criteria at Garansindo Inter Global. This application is expected to overcome the problem of delay in the provision of spare parts stock that can inhibit the service process of the vehicle, so that any requirement of spare parts needed for vehicle service process then the stock of spare parts will always be available and ready for use.

Keywords: Decision Support System, Spare Part, Analytical Hierarchy Process, Garansindo Inter Global, PHP