## **ABSTRACT**

PT Andalas Karya Mulia is a company engaged in heavy equipment rental and B3 waste transportation. PT Andalas Karya Mulia has several divisions in the company one of them is the equipment division that acts as a manager of equipment in the company. Since the establishment of the company until now the equipment division of PT Andalas Karya Mulia has 300 units of more heavy equipment and hundreds of spare parts stored in the warehouse. Due to the heavy equipment maintenance needs of the equipment division regularly then purchases spare parts to vendors who have cooperated with the company, where data collection and purchase of different equipment vendors are done with written documents, then appear problems with the process of storage and distribution of documents, which causes a lot of time. In addition, there is no data integration between each division related to the procurement of equipment resulting in late decision making in the business process activities of the company and the frequent differentiation of data purchases with demand data warehouse section resulting in miscalculation and hampering process.

Based on the problems contained in the company carried out the design of enterprise resource planning system using the software Odoo 9 purchase module with rapid application development method. At the design stage is done observation and system design based on existing business processes and business processes on odoo which then obtained the business proposal process. Furthermore, the installation, configuration, technical development and user manual preparation of the purchase module on odoo 9. Then do the test user acceptance test that aims to test the feasibility of the system according to company needs.

The result of this research is an ERP purchase system in Odoo 9 software which has been adjusted to the need of procurement equipment PT Andalas Karya Mulia and expected business process at company can run according to purchase module.

Keywords: EPR, Odoo, purchase and RAD method