

ABSTRACT

Small and Medium Industry (IKM) is a form of business activity that is not only limited to the business of buying and selling, but there are activities of production process, simple organizational management, and cooperation with other parties. IKM has limited in terms of cost and management of human resources in improving company performance. With the tight competition of the automotive *komponen* industry, there needs a strategy to manage SMEs effectively and efficiently. The IKM needs to manage data quickly and accurately, making the IKM requires information technology.

The solution raised in the issue of studying IKM automotive *komponens* by implementing *cloud*-based Enterprise Resource Planning (ERP) information technology. With a *cloud*-based ERP, IKM automotive *komponens* have a centralized system. To cut the cost of implementation, the recommended ERP software is open source. In this study, it aims to determine the ERP software in accordance with the needs of IKM automotive *komponens*.

In determining the priority of ERP-based software criteria using the Analytical Hierarchy Process method, the Supplier Evaluation (0.140) criterion is a top priority. The next priorities are Technical Criteria (0.110), Implementation Methodology (0.098), ERP Package Fitness With Organization (0.097), Market Positioning (0.093), Service & Support (0.086), System Reliability (0.083), Modularity Integration (0.079), Functionality (0.078), Compatibility (0.072), Cost & Budget (0.062). From Likert Scale, Odoo software has a value of 2.909, xTuple has a value of 2.545, and Idempiere has a value of 2.363. This makes Odoo a recommendation of cloud-based ERP software that has a value close to 3.00. This shows that Odoo meets the needs of IKM automotive components.

Keywords : SMEs, Automotive *Komponens*, ERP, *Cloud* , AHP