ABSTRACT

Small and Medium Industry (SMI) automotive component is a stand-alone productive economic enterprise undertaken by an individual or business entity that is neither a subsidiary nor a branch of a company owned.

IKM automotive component sector increasingly get resistance from imported products to enter the sole agent brand holder (SBHA). In addition, SMIs have limited financial and human resources making it difficult to meet the demands of the Single Brand Holder Agent (SBHA). The absence of the use of information technology is one of the causes of this because the use of technology is a factor that determines the success of SMI.

The solution offered is that SMI requires a *cloud*-based open source ERP sistem. Recommendation of *cloud*-based open source ERP sistem so as not to burden the SMI to buy *software* license and buy infrastructure. Therefore, the selection of *cloud*-based open source ERP *software* for *software* that will be selected according to the needs of SMI.

This research uses two approaches likert scale and game theory. Likert scale is used to assess *software* comparison against SMI needs, and game theory is used to prove the likert scale assessment. Likert scale results showed that Odoo had the greatest score of 33, and the result using game theory method showed that Odoo won the game against xTuple and Idempere with the optimum cost strategy with a value of 40. This shows that Odoo is a *cloud*-based ERP *software* that meets the needs SMI automotive components.

Keywords: SMIs, Automotive Components, ERP, Cloud, Game Theory