

ABSTRACT

Decision makers always take decision even every second of their life. When they make decision, there is a process in the human brain that affects the quality of decisions made, if the decision to be taken is complex with large risks such as policy formulation, decision makers often need a scientific, logical and structured tools to help them in making decision. During the past quarter of a century, there has been an increasing awareness of the vital role played by purchasing in enabling a company to be competitive. One of the most important aspects of purchasing is supplier selection. Supplier selection is one of the most important decision making problems, since selecting the right suppliers significantly reduces the purchasing cost and improves corporate competitiveness. PT. Madubaru is one of the company that engaged in agro industry field located in special region of Yogyakarta which are producing sugar (PG. Madukismo) and also spirits (PS. Madukismo). There are several supplier who work with PG. Madukismo especially for the pump supplier, but the problem emerges when no a fixed supplier in PG. Madukismo sometimes made the supplier not reliable enough to supply material that the company need and also there is still no method or tools used by PG. Madukismo to determine their supplier. There are 3 suppliers to be analyzed in determining the supplier rank. AHP method is used for determining the consistency of the experts and Fuzzy AHP method is used in determining the best supplier for the company. Result shows, for the supplier selection based on price criteria PT.X is the most suitable supplier followed by PT.Y and PT.Z.

Keywords: Supplier selection, Supplier rank, AHP, Fuzzy AHP