

ABSTRACT

The Shift to the Front (STTF) project is one of the projects undertaken by PT. XYZ whose construction is done by the vendor. However, when selecting PT. XYZ vendor in the vendor selection and evaluation system it is still done manually so that miscommunication often occurs in document tracking and project tracking as well as vendor selection and evaluation is done manually which considers several aspects, namely price, location, vendor work history, and vendor capabilities. To overcome the manual selection and evaluation of vendors, a website-based vendor selection and evaluation information system was designed in the form of a mock-up website that makes it easier for users at PT.XYZ. The method used for vendor selection and evaluation is based on predetermined criteria and sub-criteria using the Analytical Hierarchy Process (AHP) and Technique for Order Preference by Similarity to Ideal Solution (TOPSIS) methods. The results of the assessment of the importance of the criteria in the selection of vendors produce the following priority/weighting scales: priority I Documentation (0.2194), priority II Quality (0.1751), priority III Warranties (0.1717), and so on. From the results of the assessment of the level of alternative importance in the selection of vendors, the priority/weighting scales are as follows: priority I Vendor 24(0.6904), priority II Vendor 2 (0.6218), and priority III Vendor 19 (0.5907).

Keywords: Shift to the Front (STTF), AHP, TOPSIS, Decision Support System, Website Mockup