ABSTRACT

Since 1998, STT Telkom held two ways of students' admission, which are Written Exam and STT Telkom Admission Screening Invitation (USMS). In USMS, prospect students screened by their achievement during High School through report score, extra curricular activities, and their High School Score which is based on High School's alumni population academic achievement in STT Telkom. The problem in deciding the acceptance of prospect students through USMS is a multi criteria problem where exists a set of alternatives (prospect students) and a set of criteria (report score, High School origin, extra curricular activities score, High School score, students quota, etc.).

In this Final Project, a web based STT Telkom Admission Screening Invitation Decision Support System using multi criteria decision method which is TOPSIS (Technique for Order Preference by Similarity to Ideal Solution) using Entropy weighting method had been developed. The system output is suggested screened participants per study program and reports that consist of useful information for supporting final decision making.

TOPSIS method is well implemented by the system (applicable) to process ranking in this case while entropy weighting method is kind of inappropriate to use because of its undetermined result for decision maker. Thus, manual weighting would be a better weighting option rather than entropy in this case. By using USMS DSS hopefully could assist decision maker for making better decision.

Keyword: DSS, Admission Screening, Multi Criteria, TOPSIS, Entropy