COMPUTATION MODEL FOR EVALUATION OF E LEARNING READINESS USING MCDM METHOD

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ABSTRACT

The use of e-learning is a demand in schools in the current digital era. The successful implementation of e-learning is influenced by many factors, including the provision of technological infrastructure, HR training, organizational culture and leadership factors. For this reason, an evaluation of the school's readiness in implementing e-learning is carried out, which is known as e-learning readiness (ELR). Evaluation of school ELR was conducted to analyze the strengths, weaknesses and dominant factors in implementing elearning in schools, so that it can be a reference in policy making by related parties.

This study aims to develop computational models to evaluate elearning readiness using the MCDM method (Promethee and TOPSIS). The research steps include 3 stages, namely preparation, implementation and the final stage. The data used is elearning readiness data from several high schools on the specified criteria.

ELR evaluation is carried out using the Promethee method and TOPSIS which are based on weighting Simple Additive Weighting (SAW) and Analytical Hierarchy Process (AHP). There are eight criteria for measuring school e-learning readiness (ELR), namely Psychological readiness, Sociological readiness, Environmental readiness, Human resource readiness, Financial readiness, Technological skill readiness, Equipment readiness, Content readiness.

The results of the study were computational evaluation models with Promethee and TOPSIS, which gave the results of the e-learning readiness rating of a school, by analyzing the results based on variations in the weight of the criteria determined using SAW and AHP. In addition, the results of the study also reveal what factors are still weak and need improvement, and factors that are considered strong in supporting the implementation of e-learning.

Kata Kunci: *MCDM, Promethee, TOPSIS, e-learning readiness (ELR)*