DETERMINING THE CONTRIBUTION OF DEA EFFICIENCY USING SHAPLEY VALUE.

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Abstrack

Performance measurement is one of the ways to evaluate the success of an organization. Many organizations have designed their own measurement systems to reflect the needs of their current business. However, the organizations only consider the efficiency from a result regardless of the impact on that efficiency to the efficiency from other results. Knowing the contribution of particular efficiency to the entire process leads to the ease of managing activities. In this research, we combined two techniques: Data Envelopment Analysis (DEA) and Shapley Value. We use DEA to determine the efficiency of the activities and Shapley Value to determine how important that efficiency to entire process. This new method can be used to determine whether the efficiency of the process is balanced or not. Imbalance in efficiency will create some problems, for example imbalance of resources allocation.