

COMPARATIVE ANALYSIS BETWEEN ANP AND ANP- DEMATEL FOR SIX SIGMA PROJECT SELECTION PROCESS IN A HEALTHCARE PROVIDER

ABSTRACT

This paper presents an ANP technique applied to identify and prioritize Six Sigma projects for healthcare providers whose results allow selecting the project that ensures the maximum financial benefits for the healthcare company. First, the Six Sigma evaluation model is determined, then the criteria weights are established by ANP (Analytic Network Process) and finally, results from ANP and ANP- DEMATEL (Decision Making Trial and Evaluation Laboratory) are compared. The results show a better decision making performance for ANP-DEMATEL. An empirical case from healthcare sector is presented, showing the effectiveness of the proposed technique.