Abstract

Responsive Prioritisation for Equipment Breakdowns” an ANP Approach

In industry, a maintenance department is likely to face the problem of lacking clear, formal rules when trying to prioritise its response to broken down machines, specifically, when evaluating the relative criticality of breakdown incidents. The problem has been approached in many ways, most commonly through scoring techniques. In this paper, a newly developed Analytical Network Process (ANP) generic model is proposed to solve this problem and a case study is presented to facilitate its implementation in real life problems. In addition, the paper explores the difference between the Analytical Hierarchy Process (AHP) and the Analytical Network Process (ANP) and investigates in particular what can the ANP further offer, which is believed to have many advantages over regular scoring techniques. Key Words: industrial maintenance, responsive prioritization, ANP, scoring techniques.