

Process Management Maturity: A Model for Its Analysis in the Maintenance Function

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Abstract:

The excellence in maintenance is closely linked to an organization's ability to ensure the safety, performance, adequate costs, and reliability of its assets. Achieving maintenance excellence requires the adoption of effective management practices that elevate the maturity level of processes. This study explores a model for evaluating maintenance management maturity, focusing on Hydro Mineração Paragominas, a bauxite mining company. Information collection allowed for an analysis of current practices compared to 367 requirements outlined in maintenance checklists (roadmaps) for mobile equipment in mining and industrial maintenance, identifying gaps to achieve maintenance excellence. It was necessary to implement a model to assess the maturity level of maintenance management in the organization, aiming to promote continuous improvement among all involved in maintenance activities. The maintenance excellence evaluation model served as a tool to measure the maturity level of maintenance management at Hydro Paragominas, showing an improvement of 9.3 percentage points between 2022 and 2024, corresponding to the first and second diagnostic cycles, respectively.

Keywords:

asset management, maintenance, maturity, reliability, diagnosis.