Maintenance Objective-Based Asset Maintenance Maturity Model

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Abstract : The fast-changing business and operational environment are forcing organizations to adopt asset performance management strategies, not only to reduce costs but also maintain operational and production policies while addressing demand. To attain optimal asset performance management, a framework that ensures a continuous and systematic approach to analyzing an organization's current maturity level and expected improvement regarding asset maintenance processes, strategies, technologies, capabilities, and systems is essential. Moreover, this framework while addressing maintenance-intensive organizations should consider the diverse business, operational and technical context (often dynamic) an organization is in and realistically prescribe or relate to the appropriate tools and systems the organization can potentially employ in the respective level, to improve and attain their maturity goals. This paper proposes an asset maintenance maturity model to assess the current capabilities, strength and weaknesses of maintenance processes an organization is using and analyze gaps for improvement via structuring set levels of achievement. At the epicentre of the proposed framework is the utilization of maintenance objective selected by an organization for various maintenance optimization programs. The framework adapts the Capability Maturity Model of assessing the maintenance process maturity levels in the organization.

Keywords : asset maintenance, maturity models, maintenance objectives, optimization

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