An Approach to Manage and Evaluate Asset Performance

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Abstract : Modern engineering assets are complex and very high in value. They are expected to function for years to come, with ability to handle the change in technology and ageing modification. The aging of an engineering asset and continues increase of vendors and contractors numbers forces the asset operation management (or Owner) to design an asset system which can capture these changes. Furthermore, an accurate performance measurement and risk evaluation processes are highly needed. Therefore, this paper explores the nature of the asset management system performance evaluation for an engineering asset based on the System Support Engineering (SSE) principles. The research work explores the asset support system from a range of perspectives, interviewing managers from across a refinery organisation. The factors contributing to complexity of an asset management system are described in context which clusters them into several key areas. It is proposed that SSE framework may then be used as a tool for analysis and management of asset. The paper will conclude with discussion of potential application of the framework and opportunities for future research.

Keywords : asset management, performance, evaluation, modern engineering, System Support Engineering (SSE)

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