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## Lean Philosophy towards the Enhancement of Maintenance Programs Efficiency with Particular Attention to Libyan Oil and Gas Scenario

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**Abstract :** The ongoing hindrance for Libyan oil and gas companies is the persistent challenge of eradicating maintenance program failures that result in exorbitant costs and production setbacks. Accordingly, this research is prompted to introduce the concept of lean philosophy in maintenance, which aims to eliminate waste and enhance productivity in maintenance procedures through the identification and differentiation of value-adding (VA) and non-value-adding (NVA) activities. The purpose of this paper was to explore and describe the benefits that can be gained by adopting the Lean philosophy towards the enhancement of maintenance programs' efficiency from theoretical perspectives. The oil industry maintenance community in Libya now has an introduced tool by which they can effectively evaluate their maintenance program functionality and reduce the areas of non-value added activities within maintenance, thereby enhancing the availability of the equipment and the capacity of the oil and gas facilities.

**Keywords:** efficiency, lean philosophy, Libyan oil and gas scenario, maintenance programs **Conference Title:** ICORES 2024: International Conference on Oil Reserves and Energy Systems

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