Digital Fleet Management for More Transparency into an Installed Base of Operating Assets and Educated Decisions

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Abstract

In today's world of industrial plants that are or will be operating a large fleet of assets and an aging workforce the challenges of making good and sometimes quick decisions affecting uptime and efficiency is vital to be on par with the competition. Information that will support the related decision process

The concept of digital fleet management will address these challenges by consolidating information derived from static and dynamic data from and for each asset in one platfrom. This is the only way to have all information consistently and readily available when you need it. Sophisticated algorithms may complement the effort to make use of a transparency newly gained that was not available before or was too strenuous to get hold of.

This will enables an insight into the assets' health and at the same time provide information related to the lifecycle of the asset:
Provision of information about the actual physical and software configuration of the asset at all times. Insight into the assets operational health as well as benchmarking across the fleet. Tracking preservation measures. Information on spare parts at all times. Information related to recommended or mandatory modifications and upgrades. Finally the 'digital twin' will pull in engineering data and allow for exploring information of equipment adjacent to the asset.

Whether greenfield or brownfield the concept of digital fleet management will allow deep and detailed insight into the aspects below for all or just the critical operating assets:

- Configuration management
- Operations performance management
- Preservation management
- Spare Parts Management
- Obsolescence Management
- Plant digital twin

This lecture describes in general, the challenges and constraints faced in today's lean operations and how digitalization can be a mean to address these. The benefit for the operator is an increase in operations efficiency and subsequent wise spending of OPEX based on insight into the installed base not possible or available before.