

How can maintenance software improve your bottom line?

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In general, for manufacturers, maintenance has three main areas that significantly impact an organization's profitability. The very first for most people is to increase production throughput. In maintenance terms, this would relate to improving equipment reliability and availability. The second is to manage risks. The risks could be legal, environmental, and financial. Maintenance department can be the pivot point in mitigating these risks to minimize economic impact. The third area, and the one that is the easiest to attack, is the continuous improvement of maintenance processes, procedures and practices.

Over the last decade, various studies have been conducted of maintenance departments to understand the impact of existing processes and practices on a company's financials. Highlights of these studies show that up to 77% of unexpected outages are self-induced by either the processes or practices within an organization. These same studies found that at least 40% of the operating expenses are on non-value-added activities. This waste came from all areas related to maintenance processes, such as MRO Inventory, PM programs, procurement, human resources and so on.

With the increasing complexity of the machinery and production processes, the traditional way of relying purely on experience to optimize maintenance for efficiency improvement is no longer valid, at least will not meet the ever-demanding requirements. Companies which started investing into computerized systems such as EAM, ERP and CMMS early on have accumulated significant amount of historical data which become gold mines for intelligent maintenance software systems to improve with measurable ROI in all aspect of the maintenance practice.

Artificial intelligence and machine learning software can cost-effectively contribute to all areas of maintenance improvement for profitability. When properly deployed and managed, they provide targeted knowledge, and action-based recommendations that are measurable, sustainable, and adaptable, driving continuous improvements in equipment reliability, financials, human resource efficiency, business process, inventory, procurement, and much more. The most important, however, is the introduction of a data-driven culture toward maintenance that will continue to improve and adapt by itself.