

# Optimizing Maintenance Costs

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I was recently following a discussion on optimizing maintenance costs in an international corporation with multiple plants and divisions. I found it interesting the different approaches suggested to optimize maintenance costs. Most will add value within independent silos. However, no one mentioned that to maximize corporate maintenance costs; you need to determine what to improve that strategically will generate the best impact on corporate-wide profitability.

Over my 20 years of international experience in change management in the asset management and maintenance operations area, I have worked with corporations to eliminate waste to drive sustainable corporate profits. The number one challenge I have found for corporations with multiple plants and divisions is not determining what to holistically improve in order to maximize corporate-wide savings instead of focusing on interdependent silo improvements. A focus on interdependent silo improvements usually produces cost savings in one area. However, my experience has shown that these silo improvements rarely improve the bottom profit lines for these types of corporations. This is because siloed departments have different corporate goals and objectives. Let me explain through an example.

A plant maintenance manager is strongly encouraged to find financial savings in maintenance. This manager realizes some PM Jobs are not adding value.

*Tip: In a Preventative Maintenance program, statistically, up to 60% of the PM tasks add little to no value to the reliability of the equipment.*

A team comprised of tradespeople and reliability engineers is gathered to review the PM jobs and tasks. The group recommends improving the equipment reliability program, including adding additional spare parts to the MRO inventory and routes for new predictive maintenance technology. The team only focuses on their silo's maintenance financial budget improvements. They are not concerned about the spare parts inventory or human resource programs as these are different departments with their own cost-saving mandates.

The Maintenance Department optimizes the equipment reliability program to improve reliability and lower operating costs. The CMMS historical data shows that 44% of preventative maintenance jobs must be adjusted or removed to enhance reliability and, at the same time, lower operating costs. The Maintenance Department's adjustments to the PM jobs generate changes to

the MRO inventory program, which usually falls under the finance department. This may also lead to changes in local or global procurement vendor agreements. The adjustments may generate modifications to the Trades and Engineering Training program, the safety and environmental SOPs, and future hiring standards, all of which usually fall under the Human Resources Department.

What I've seen happen in these siloed cost improvement initiatives is that Maintenance Departments request additional spare parts be stored in the MRO inventory, increasing the holding costs of the spare parts inventory. Seldom do maintenance departments request adjustments to the MRO Inventory spare parts inventory levels on the spare parts linked to PM jobs that have been cancelled or modified due to improvements. Maintenance departments rarely ever consider these changes' impact on global procurement initiatives. Even more rarely, maintenance departments adjust higher ing and training upgrade standards to improve the quality of work concerns related to the maintenance changes. These missed cost-improvement steps diminish overall corporate savings. Approaching this same initiative from a holistic corporate perspective ensures all departments are engaged in true profitability at the corporate level maximizing sustainable profitability.

If you are focusing on corporate maintenance cost optimization, you need to determine what will generate the best impact on corporate-wide profitability. This means taking a holistic corporate approach to maintenance cost optimization. In the past, deciding what to improve to maximize corporate-wide savings took time and effort. Usually, it required hiring MRO-specific data analysts or consultants to analyze historical work orders, purchase orders, inventory usage, trade skills, etc., to understand the financial impact on corporations and determine what to focus on. Once you have chosen what you want to improve and understand the financial implications for the entire corporation, developing a holistic implementation approach is easier because you have the facts to get buy-in from the maintenance, operational and financial employees.

Advanced artificial intelligence and machine learning technologies are ideal for analyzing maintenance departments' corporate-wide impact on corporate profits. For the first time, quickly understand the impact maintenance operations have on the entire corporation and corporate profitability.

Let me know if you want additional information or have a question or comment on this topic; email me at [stan.shantz@perspectanalytics.com](mailto:stan.shantz@perspectanalytics.com).

## **About Perspect Analytics Inc.**

An advanced multi-language artificial intelligence and machine learning tool from Perspect Analytics Inc called intelligentMRO™ can drive significant savings in time and money. For the first time, quickly and easily, the impact on an entire corporation's maintenance operations has and its direct - positive or negative - on corporate profitability.

The intelligentMRO™ provides corporations with the information mentioned above in real-time, allowing you to easily combine various divisions or sister companies- even if they are using different CMMS/EAM/ERP systems - to see the extensive corporate-wide impact maintenance is having on the organization indicating what to work on to generate the financial impact you are trying to achieve corporately.