

Planning to fix: improving maintenance efficiency

Maintenance, a key function to smooth operations, too often falls victim to firefighting instead of careful planning and management, which can significantly reduce costs

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In most industries, the cost of maintenance is between 10 and 25 percent of total operating costs. Maintenance efficiency is an important factor in this as typically more than half the cost is labor. Furthermore, improving maintenance efficiency has a positive impact on reliability—so companies can cut costs without risking performance.

Sadly, efficient maintenance is not the norm. We frequently see waste and inefficiencies in maintenance tasks: two people working when one is required; or time spent finding parts or technicians waiting for machines to become available. This doesn't change whether you outsource maintenance or do it in-house; you pay for this inefficiency in either case.

Most agree that planning and scheduling maintenance reduces these wastes and improves efficiency. So why isn't this always in place? Here are three common reasons:

1. Maintenance is too reactive. This is often seen in companies with a "Production is King" mentality. Here, maintenance is seen as a service provider to production, and there is not enough time to plan and schedule properly.

Changing a reactive culture is a significant challenge. For example, employees may not be comfortable delaying maintenance for fear of risking further failures, especially when the problem could be fixed immediately. It may also be easier for them to focus on the possible consequences of an action rather than thoughtfully assess other probabilities. Finally, some will find the instant reward of being an excellent fire fighter compelling.

2. Too many resources are on the shift team. Shift teams reduce the impact of breakdowns, but are more expensive and harder to manage.

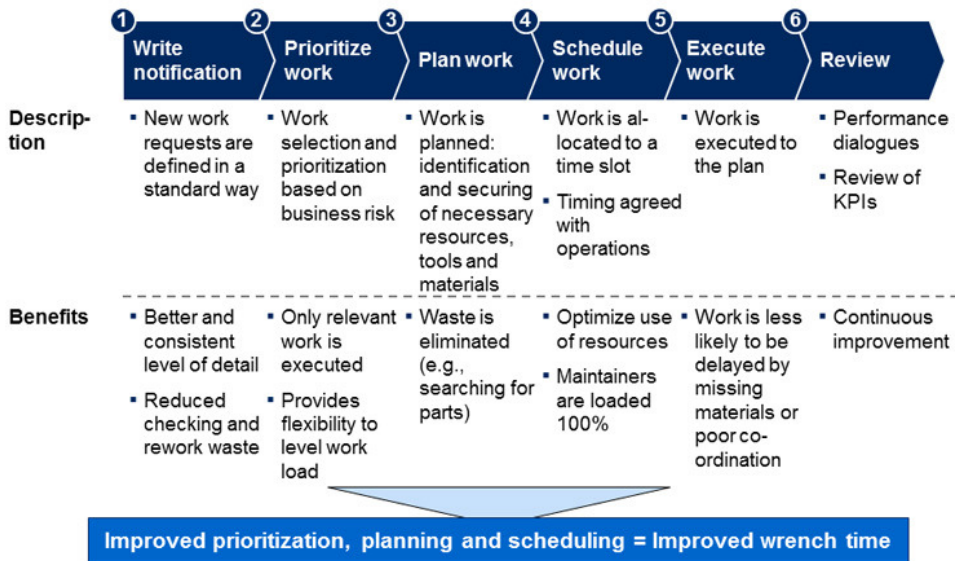
When we analyze the work completed by shift teams, we frequently find more than 75 percent of that work could have been done by a day team. Moreover, this level of support discourages the involvement of production teams in breakdowns.

3. Poor quality planning or scheduling. Accurate task plans and schedules define the standard that is expected of maintenance and are required to drive improvement. Although an incomplete schedule can be appropriate in some circumstances, it can also hide waste.

The best companies achieve high maintenance efficiency by having a systematic work order process as shown in Exhibit 1.

Exhibit 1: A standard maintenance planning and scheduling process is required to improve wrench time

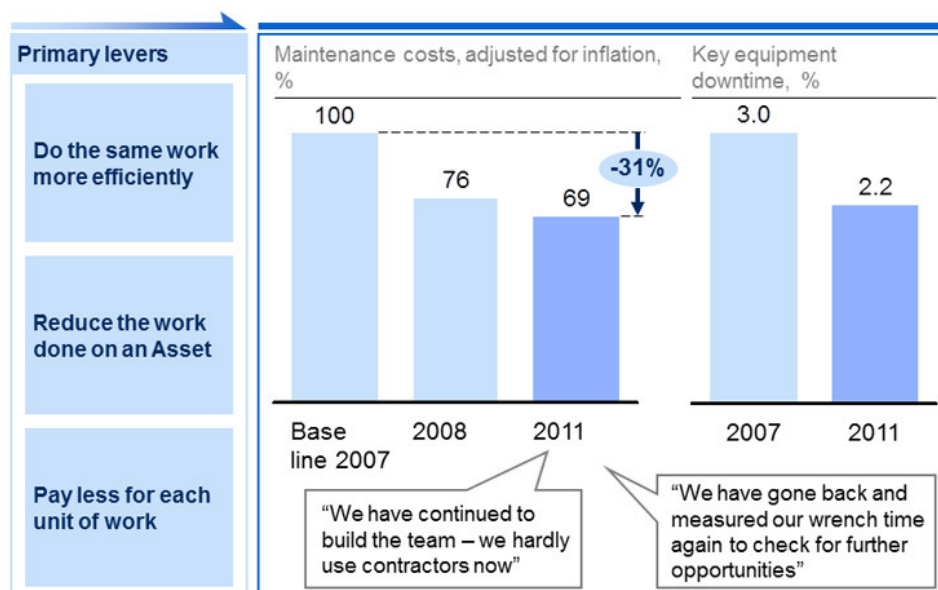
Corrective maintenance prioritization, planning and scheduling process



A process alone is not enough, however. It needs support from good management practices, including the right organization and performance management in addition to people with the right capabilities and mindsets.

An aluminum rolling mill reduced its total maintenance costs by more than 30 percent by implementing such a process. Its results (Exhibit 2) also demonstrate continuous improvement and a positive impact on machine reliability.

Exhibit 2: A major downstream metals facility reduced site maintenance costs without any impact on reliability



Wonder how your own organization fares in its maintenance capabilities? We encourage you to take this [survey](#) to understand more about best practices that drive maintenance costs and how your company compares against them ■

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