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It's like building a house. Before you implement a world-class strategy, take a step back to ensure you can support it.

There's a story about how Vince Lombardi dealt with his team when they played poorly that has resonance for maintenance professionals everywhere. Rather than criticize his players, Lombardi would start by talking softly to them, saying, "This is a football …" and remind them of the need to return to basics. He knew how easily the fundamentals could be overlooked.

Despite today's strong interest in disciplines that represent paths toward world-class manufacturing status—*including TPM, TPR, RCM and others*—maintenance crews are not always ready to embark into these disciplines, because basic maintenance principles have not been covered or have been forgotten. In our profession, the basics are called "Best Maintenance Practices" (BMPs). These varied strategies are the right start for any activity that relates to the improvement of reliability, maintenance and productivity. When efforts in these areas don't result in complete satisfaction, a return to the basics may be in order.

Implement BMP and create a habit

The 5S philosophy—*Sort, Straighten, Sweep, Standardize and Sustain*—is the foundation for all Best Maintenance Practices. Poor 5S implementation undermines the strength of any such practices already implemented, and without a company-wide adoption of 5S, they cannot be

sustained. The demand in the 4th S—
to Standardize the workplace
—

is the key to BMP success. The 5S foundation also requires the following prerequisites:

1. Education…

Today's forward-looking companies recognize the value of education, whether undertaken in-house or in partnership with outside sources, such as local technical schools. In the latter case, some schools have established dedicated training areas on company grounds for current and new workers. With that kind of resource, it's important that personnel from all areas are able to take advantage of it. But even without such resources, a company's leaders should always assume the responsibility to train their people continuously, even if only for short periods of time.

2. Training…

This complement to education gives everyone the opportunity to show their ability to put into practice what they have learned. Cumulative skill-building eventually transitions into the empowerment that makes teams strong and effective. Daily training needs to be part of the activities of every workgroup. Leaders should spend at least 10 minutes per day exchanging ideas and updating team skills. This is a "customer service" that leaders must provide to their customers/teams. It also leads to reciprocal benefits, as better trained technicians will do better, more efficient work.

3. Management support…

Most frustrations suffered by enthusiasts of improvement come from the lack of hands-on support from top management. Leaders need to discover the power and effectiveness of rubbing shoulders with those who perform the jobs that keep the operation running. The learning experience will go both ways, and is one of the best investments a leader can make.

4. Culturization…

Culturization occurs when individuals in a group assimilate common concepts and principles. This motivates group members and encourages a cooperative attitude that strengthens group actions, creating a team in the process. The shared pride of positive results helps team members realize the personal benefits of their participation.

These four prerequisites are just part of a BMP foundation. The building blocks below must be incorporated to firmly establish a Best Maintenance Practice infrastructure.

Establish A Work Order System
It is crucial to establish a thorough Work Order System (WOS). The WOS existed before computers and helped maintainers measure effectiveness in several ways:

- Downtime (and the only way to measure it is with precision). Downtime reduction is the most important Key Performance Indicator for any maintenance team.
- Technician performance
- Parts consumption and inventory control
- Equipment behavior and trends

Carry Out Full CMMS Implementation & Training
The CMMS automates many tasks of maintenance control that were cumbersome in the past. But:

- Every maintenance-team member must be trained to make good use of the CMMS System..
- The CMMS should be linked to real-time labor utilization and parts inventory, and be used to generate procurement requests in a timely manner.
- The path to optimal CMMS performance requires the input of error-free information. Errors that do occur are mostly caused by poor training and/or communication.

Investigate & Identify Root Causes to Prevent Repeat Problems

Root Cause Analysis (RCA) is not always given the credit or importance it deserves. Consider:

- According to reliability expert Charles Latino, most of the maintenance effort mistakenly focuses on “fixing” repetitive or chronic problems.

- Latino also asserts that most of that cost could be avoided by implementing Root Cause Analysis.
- The value of RCA will be undermined if the steps needed to prevent a problem’s reoccurrence are not put in place.

Training, Cross-training, Professional Development & Autonomous Maintenance implementation Demand Skill-Improvement to Work

Most maintenance leaders do not use enough of their time to educate and train their crews. This happens because many leaders are not themselves trained on this critical task, and the vicious cycle spins again and again. Technician training must focus on three key responsibilities:

- *Technical issues (basic and advanced),* which include the correct application of methods and use of the right tools, instruments, systems, manuals and information.

- *Communication and customer service*, so technicians have a strong relationship with their customers.
- *The 5S concept*, so work is always performed in a professional manner. Leave the area and equipment clean and in “like new” or better shape.

Cross-training is undermined when trainees are taught by unqualified technicians. They inherit bad practices and habits, so the level of professionalism never improves.

Autonomous maintenance represents the core improvement of any advanced maintenance strategy, such as TPM or TPR. To work, maintenance technicians must develop a good training skill level so they can help operators understand their machines. As operators become more skilled and knowledgeable, their performance and that of their equipment will improve. They’ll also be more helpful at detecting and reporting abnormalities, which reduces the cost and time of repairs. Eventually, operators can be equipped to perform minor maintenance on their own.

Ensure a Thorough, Optimized Preventive Maintenance Process

With the above BMPs in place, maintenance technicians will have more time to perform Preventive Maintenance, which is too often neglected. PM needs to be done intelligently and with the advice and observation of the maintenance technicians and operators, where applicable. PM must be a live exchange of knowledge and execution to maintain the concept of continuous improvement.

Stay focused

With the flood of information on every subject these days, it can be easy to feel as though we need to go for the next new thing. This is human nature, especially when the latest new thing appears to be working for someone else. A simple rule, however, underlies the success of many such endeavors, particularly as they relate to maintenance goals: To succeed, do things right the first time and, if possible, do them better all the time. Don't simply do them better than you did before, do them better than anyone else. **MT**

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