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HOW SITUATIONAL LEADERSHIP AND THE RIGHT MINDSET CAN ACCELERATE IMPROVEMENTS TO ASSET RELIABILITY
Mike Aroney

PROACTIVE MAINTENANCE EXECUTION DEMANDS ACTIVE SUPERVISION
Mike Asquini, PMP, CMRP, LSSBB, RMP
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SUPERVISION, MANAGEMENT AND LEADERSHIP
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FROM THE CHAIR

Dear members,

I’ve been thinking a lot about SMRP’s mission recently – to develop and promote excellence in maintenance, reliably and physical asset management. Solutions has been one of our tools to support this goal for many years. But like all good things, this too must come to an end. It’s with mixed emotions that I announce that the May/June edition is the final issue of Solutions.

Like many of you, I will be sad to see Solutions go, but I am excited about the new and exciting opportunities that lie ahead in place of the magazine. SMRP will continue to offer opportunities for member submissions, but these will now be shared through digital formats, such as the monthly member newsletter.

We’re in the midst of a year of change, due to the world-wide pandemic, but the Board of Directors and staff are continuing to evaluate SMRP membership to ensure we offer you maximum value. I am happy to say that this includes the 2020 Annual Conference.

We are in the process of planning an exciting program that will take place in Columbus, Ohio, from October 19-22. Don’t miss the chance to exchange ideas, learn from experts and to network as community of maintenance, reliability and physical asset management professionals! Keep in mind that your interactions might look a bit different this year, as we will be respecting all recommendations and mandates provided by government and health organizations. The Board will continue to monitor the situation and keep members informed of updates via email and social media.

As always, our goal is to continue to provide you with the best possible experience and the best return on your investment. SMRP has faced change during its many years as an organization; now is simply another time of adjustment for us. I look forward, though, to seeing how our member resources, events and entire industry benefit from the transformation ahead.

Gina Hutto-Kittle, CMRP
SMRP Chair
I have coached reliability improvement projects over the past twenty years for many diverse and reactive manufacturing organizations. What became obvious, early on, was that the way these projects are executed is critical to their success. This article presents two keys in this regard. The first key is the way the project is positioned, and the second key is the use of situational leadership along with the proper positioning of these improvement efforts as a business initiative with an asset maintenance and reliability component – this will accelerate implementation, utilization and benefit realization.

Proper Positioning

It is my experience that successful execution first depends on the way the organization’s leadership positions improving asset reliability. Most often, it is seen as a technical, “maintenance” project and delegated to the organization’s engineering or maintenance function when, in fact, only about 30% of the challenges at hand involve the technical solution.

The technical solutions in a reactive organization are almost always to close gaps or put in place foundational maintenance elements that enhance the organization’s ability to execute the work it currently has. The next steps are to get better at identifying more work sooner, to stop chasing failures and free time to begin loss-elimination activities. This typically involves asset reliability system (Figure 1) improvements, such as:

- Redefining and/or aligning organizational roles and responsibilities needed to drive effective maintenance and reliability practices
- Defining work execution processes from work identification to work close-out
- Improving outage management

How Situational Leadership and the Right Mindset Can Accelerate Improvements to Asset Reliability

Mike Aroney
Executive Consultant, Allied Reliability
- Establishing leading process metric dashboards
- Cleaning up the asset register to ensure the actual plant matches the virtual plant in the Computerized Maintenance Management System (CMMS)
- Conducting criticality analysis and Failure Mode and Effect Analysis (FMEA)
- Building Equipment Maintenance Plans (EMP)
- Realigning spare parts access based on criticality
- Using Root Cause Analysis (RCA) events to stabilize bad actors
- Optimizing Preventive Maintenance (PM) inspections
- Implementing Conditioned-based Maintenance (CBM) in accordance with the EMPs

Foundational element activities such as those listed take about two years to establish in the average reactive plant and represent about one-third of the constraints that need to be removed, relaxed, created and redefined to move the needles for reduced maintenance costs, improved asset availability and increased throughput. The level of effort to not only make these changes but also to be able to sustain them is much greater than what the engineering or maintenance functional owners are able to influence.

The organizational realignment and behavior-change challenges account for the remaining 70% of the lift. Consequently, an improvement of this magnitude requires an executive sponsor and executive steering team as well as a site sponsor, site leadership team and technical solution champions. As a rule of thumb, 40% of the organization’s current constraints affecting asset reliability are controllable at the site level, while the remaining 60% are controllable at the corporate level. It is for this reason that improving asset reliability from a systems perspective must be positioned as a business project and managed accordingly.

During this time, it is paramount that the organization’s corporate and site leadership teams are engaged to properly manage the organizational and behavior changes that account for the remaining two-thirds of the effort to improve the return on asset reliability. As mentioned earlier, the leadership teams should include:

- Executive sponsor – someone with positional authority who controls all resources needed to implement
- Executive steering team – corporate functional owners who set priorities, remove obstacles and commit resources at the corporate level
- Site sponsor – someone who controls all resources needed to implement at the site level
- Site leadership team – group who sets priorities, removes obstacles and commits resources at the site level
- Technical champions – those who advocate for the various work stream teams building the technical solutions
Once the organization’s leadership teams are established, a “cadence of accountability” is then created through frequent project status reports which include implementation risks that require leadership action to remove or mitigate. The cadence of accountability pulls the functional owners out of the whirlwind of day-to-day activities in their individual silos for which they are accountable and causes them to focus on aspects of the asset reliability improvement project that are within their circle of control.

Another critical aspect of successful execution requiring the attention of every member of the leadership team is engaging the workforce to rapidly implement and adopt the changes that will give them a competitive advantage. The use of situational leadership is a proven key methodology to this end.

**Situational Leadership**

First, what is situational leadership and, second, how can it help accelerate asset maintenance and reliability project implementations?

Situational leadership evolved during the 1970s from the work done by Paul Hersey and Ken Blanchard on “Management of Organizational Behavior” (Hersey 2012). Hersey and Blanchard defined leadership as an “influence process.” When you are a leader, you work with others to accomplish their goals and the goals of the organization. They defined leadership style as the pattern of behaviors used to influence others over time as perceived by them. Situational leadership rests on the following core values and beliefs:

- People can and want to develop
- Leadership is a partnership
- People value involvement and communication

The objectives of situational leadership are to:

- Be able to diagnose others’ development levels and choose the appropriate leadership style
- Know why there is no best leadership or coaching style
- Learn to use a common language for coaching and developing others
- Understand the negative impact of over-supervision and under-supervision on others’ performance and morale

There are three skills that a situational leader must develop.

1. Diagnosis: the willingness and ability to look at a situation and assess others’ development needs to decide which leadership style is most appropriate for the goal or task at hand
2. Flexibility: the ability to use a variety of leadership styles comfortably
3. Partnering for performance: reaching agreements with others about the leadership style appropriate for current needs

**Development Levels**

A situational leader’s diagnosis of development needs involves two components: the competence and commitment of the individual to accomplish the task at hand in a satisfactory manner. Competence and commitment can vary depending on the situation or task and will change over time or when the situation or task changes. Hersey and Blanchard identified four levels of development with associated behavioral characteristics and needs, as shown in Figure 2 and Table 1.

![FIGURE 2. FOUR DEVELOPMENT LEVELS](image)

The development levels of situational leadership indicated here always present during an asset reliability improvement project and closely approximate the Tuckman model of group/team dynamics: “Forming” (D1), “Storming” (D2), “Norming” (D3) and “Performing” (D4) (Tuckman 1965). These development levels can be mapped to a performance curve (Figure 3) depicting what is known as the “valley of despair.” The entire organization will experience these dynamics at varying times, including the leadership teams. An effective approach to facilitate through the dynamics is to provide a consultant coach for each of the project work streams and the leadership team.
<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Development Level 1 (D1)</strong></td>
<td>• Hopeful</td>
</tr>
<tr>
<td>indicates low competence and high commitment</td>
<td>• Inexperienced</td>
</tr>
<tr>
<td>• Curious</td>
<td>• New/Unskilled</td>
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<tr>
<td>• Optimistic</td>
<td>• Excited</td>
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<tr>
<td>• Excited</td>
<td>• Eager</td>
</tr>
<tr>
<td>• Enthusiastic</td>
<td>• Don't know what they don't know</td>
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<tr>
<td></td>
<td>• Acknowledgement of enthusiasm and transferable skills</td>
</tr>
<tr>
<td></td>
<td>• Clear goals and roles; priorities</td>
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<tr>
<td></td>
<td>• Action plans</td>
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<tr>
<td></td>
<td>• Information</td>
</tr>
<tr>
<td></td>
<td>• Boundaries and limits</td>
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<tr>
<td></td>
<td>• Step-by-step plan for learning</td>
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<td></td>
<td>• Direction about what and how</td>
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<td></td>
<td>• Frequent feedback on progress</td>
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<td></td>
<td>• Concrete examples</td>
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<tr>
<td><strong>Development Level 2 (D2)</strong></td>
<td>• Overwhelmed</td>
</tr>
<tr>
<td>indicates low to some competence and low commitment</td>
<td>• Confused</td>
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<tr>
<td></td>
<td>• Demotivated</td>
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<td></td>
<td>• Demoralized</td>
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<td></td>
<td>• Frustrated</td>
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<td></td>
<td>• Disillusioned</td>
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<td></td>
<td>• Discouraged</td>
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<td></td>
<td>• Still learning</td>
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<td></td>
<td>• Inconsistent performance</td>
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<td></td>
<td>• Flashes of competence</td>
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<td></td>
<td>• Involvement in clarifying goals and action plans</td>
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<td></td>
<td>• Perspective that progress is being made</td>
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<td></td>
<td>• Assurance that it is okay to make mistakes</td>
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<td></td>
<td>• Explanations of why</td>
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<td></td>
<td>• Opportunities to share concerns and be heard</td>
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<td></td>
<td>• Reassurance</td>
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<td></td>
<td>• Advice</td>
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<tr>
<td></td>
<td>• Coaching to build skills</td>
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<tr>
<td></td>
<td>• Help in analyzing successes and mistakes</td>
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<tr>
<td></td>
<td>• Praise for progress</td>
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<tr>
<td><strong>Development Level 3 (D3)</strong></td>
<td>• Mostly self-directed and productive</td>
</tr>
<tr>
<td>indicates moderate to high competence and variable commitment</td>
<td>• Capable</td>
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<tr>
<td></td>
<td>• Contributing</td>
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<tr>
<td></td>
<td>• Self-Critical</td>
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<td></td>
<td>• Cautious</td>
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<td></td>
<td>• Doubtful</td>
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<td></td>
<td>• Insecure</td>
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<td></td>
<td>• Tentative/Unsure/Hesitant</td>
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<td></td>
<td>• Bored/Apathetic</td>
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<td></td>
<td>• A sounding board to test ideas</td>
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<td></td>
<td>• Good questions to build self-reliant, problem-solving skills</td>
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<tr>
<td></td>
<td>• Praise for high levels of competence and performance</td>
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<td></td>
<td>• The opportunity to take the lead in goal setting and action planning</td>
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<tr>
<td></td>
<td>• Encouragement and support</td>
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<tr>
<td></td>
<td>• Help in removing obstacles to goal achievement</td>
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<td></td>
<td>• Help in looking at past successes and skills objectively to build confidence</td>
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<tr>
<td><strong>Development Level 4 (D4)</strong></td>
<td>• Justifiably confident</td>
</tr>
<tr>
<td>indicates high competence and high commitment</td>
<td>• Consistently competent</td>
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<td></td>
<td>• Inspired/inspires others</td>
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<td></td>
<td>• Expert</td>
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<tr>
<td></td>
<td>• Autonomous</td>
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<td></td>
<td>• Self-Assured</td>
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<td></td>
<td>• Accomplished</td>
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<td></td>
<td>• Self-Reliant/Self-Directed</td>
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<td></td>
<td>• May be asked to take on too much</td>
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<tr>
<td></td>
<td>• Trust</td>
</tr>
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<td></td>
<td>• Variety and challenge</td>
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<tr>
<td></td>
<td>• Autonomy</td>
</tr>
<tr>
<td></td>
<td>• Opportunities to teach and mentor others</td>
</tr>
<tr>
<td></td>
<td>• Acknowledgement</td>
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<tr>
<td></td>
<td>• Being valued for contributions</td>
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Leadership Styles

There are four leadership styles that coincide with the four development levels. Leadership styles are comprised of two types of behaviors:

- Directive behaviors – the degree to which a leader:
  - Sets goals and clarifies expectations
  - Tells and shows an individual what to do, when, and how to do it
  - Closely supervises, monitors and evaluates performance

- Supportive behaviors – the degree to which a leader:
  - Engages in two-way communication, listens and provides support and encouragement
  - Involves other people in decision-making
  - Encourages and facilitates self-reliant problem-solving

The four leadership styles combine the two behaviors in varying degrees (Figure 4):

- Leadership Style S1 – Directive:
  - Combines high directive with low supportive behavior
  - Used with D1 (low skill and high commitment)

- Leadership Style S2 – Coaching:
  - Combines high directive and high supportive behaviors
  - Used with D2 (low to moderate skill and low commitment)

- Leadership Style S3 – Supportive
  - Combines low directive and high supportive behavior
  - Used with D3 (moderate to high skill and variable commitment)

- Leadership Style S4 – Delegating:
  - Combines low directive and low supportive behavior
  - Used with D4 (high skill and high commitment)

When the asset improvement project begins, the project teams are essentially beginners or D1. If they had the knowledge, skill and experience to execute best practice reliability practices, no project to improve would be necessary. During this Forming phase, the consultant coaches use a Directive Leadership Style (S1), which is highly directive and low supportive. Remember, during this phase the D1's motivation is high, and he requires structure, clearly defined goals and roles, concrete examples, direction and feedback, and a plan for learning.

Note on the performance curve in Figure 3 that at D1 (low skill and high motivation) there is a bump in performance before the curve slopes down into the valley. This is due to the Hawthorne effect, whereby task accomplishment accelerates due to the attention and high visibility of the project at its start.

Project Phases and Leadership

It is during this D1 phase that the “parallel organization” leadership structure starts up and a cadence of accountability begins to beat. Project task loading is designed to grind through tasks in target process areas.

This phase usually lasts two to three months; however, reality often sets in a few months into the project. The project teams find they are being pulled in several directions by multiple competing priorities and the more foundational work they do, the more work they discover still needs to be done. They are beginning to understand the “why” and the “what,” but the “how” is still a mystery. At this phase, project team meeting attendance wanes, and a few soundbites might include, “How are we going to dig our way out of this hole” or “We have one guy swimming in every process swim-lane and he’s drowning in each one” or “We don’t have enough people.”

The Storming (D2) phase is where the organization begins to enter the valley of despair. Project task accomplishment slows, and the leadership team is highly engaged to spend much more time interfacing with the project teams, actively communicating with the workforce, listening to their frustrations, giving reassurance with explanations about why they’re being asked to do this, resetting and reinforcing priorities and removing obstacles.

The consulting coach guides the leadership team in the use of the S2 Coaching style of high direction and high support to help them meet the D2 needs (Table 1). It is important to celebrate successes, which at this point in the implementation is the
accomplishment of milestones on the project plan. Some quick wins may be realized as well and must be held up for recognition.

Engaging the leadership team in an S2 coaching, leadership style during the D2 phase of a reliability improvement project is paramount to facilitating the organization through the valley of despair and onto the performance curve’s upslope. On average, an engaged leadership team can take about two to three months to move the site through the valley of despair and into the Norming (D3) phase of the performance curve (Figure 3).

This Storming (D2) dynamic is the most critical period of any project and will present every time. This is where having a leadership team that is collectively focused on the implementation pays off. It underscores the importance of creating a leadership structure and a cadence for staying focused during the Norming (D1) phase of the project. This approach ensures a leadership team that is aligned to project-specific roles and responsibilities for who is kept updated on the status of both the technical and organizational changes. The leadership team is actively managed as part of the project plan’s tasks, which lessens the depth and shortens the cycle of the performance dip into the valley of despair.

Many implementations stall during this phase and never escape the valley of despair, failing to achieve the full functionality and benefits of a proactive asset maintenance and reliability program. The root cause for this shortcoming is most often traceable to how the asset reliability improvement initiative was positioned within the organization, as mentioned in the beginning of this article. If viewed as a maintenance project and delegated to the maintenance functional owners to implement, the likelihood of success drops dramatically.

Once on the upslope of the performance curve, the implementation enters the Norming (D3) phase and requires a Supporting (S3) leadership style. On an asset reliability improvement project, this translates into reassurance, recognition, and celebrating accomplishments that include reductions in maintenance costs and improving asset reliability, uptime, and throughput. The projects teams will be tentative about doing things differently and it is very important to implement a “caught you doing it the new way” audit process that is reinforced and recognized by the leadership team.

The Norming (3) phase usually lasts about three months. A common pitfall during this phase is “leadership team drift”. It is critical to maintain a cadence of accountability through this phase until the workstream teams are established in the Performing (D4) phase. That cadence of accountability will serve to avoid a backslide as the organization’s reinforcing and feedback loops from the process audits continue to build new organizational “muscle memory,” and allow time for the realignment of internal systems and constraints in a way that institutionalizes the new requirements and supporting behaviors resulting from the initiative. The rule of thumb is to make it difficult not to follow the new processes and standards in a way that is repeatable and sustainable.

When the site’s work stream teams enter the Performing (D4) phase, they are highly competent and committed to the solution they developed and implemented. They are seeing successes and benefits for both themselves and the organization, with the remaining challenge of scaling the solution to the entire site and other sites as well. At this point, the teams should be acknowledged for their contributions and used as internal consultants to meet their needs for additional challenge, trust and opportunities to teach and coach others. It is at this point that the consulting coach completes the knowledge transfer and closes out the project.

**Conclusion**

Successfully achieving the desired functionality laid out in the business case for change ensures that the full benefits resulting from improved maintenance and reliability practices are captured. The challenges of improving a reactive plant’s asset reliability posture involve implementing a technical solution and realigning organizational systems and constraints to effectively drive and sustain new behaviors. These two aspects of improving an organization’s asset reliability system represent about 30% and 70% of the project challenges, respectively.

The proper positioning of this type of improvement initiative as a business initiative with an asset maintenance and reliability component is critical to increasing the likelihood of success by engaging the right leadership levels and functions of an organization to collectively set priorities, commit resources and remove obstacles. Treating it as a technical solution and delegating responsibility to the maintenance or engineering functional owner decreases the likelihood of success because many of the constraints that must be changed to effectively manage all aspects of asset reliability are outside the control of these functional areas.

The use of situational leadership during the implementation of the technical solution aids the organization in facilitating the workforce quickly through the valley of despair by effectively managing the human dynamics of the Forming, Storming, Norming and Performing phases. Matching the appropriate leadership style of behaviors to the development levels of the workforce in each phase effectively accelerates the implementation by lessening the depth of the valley and shortening its cycle. A shorter implementation means faster realization of the benefits in terms of reduced maintenance costs, greater asset availability and improved throughput.

**Bibliography**


Proactive Maintenance Execution Demands Active Supervision

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Mark C. Munion, CMRP

Today, despite an integrated maintenance schedule, a team of maintenance technicians were delayed hours waiting on Operations to isolate equipment. Another team was informed that they would not be permitted to perform their scheduled work and simply loitered in the maintenance shop for the entire day. The third team was not able to complete their assigned work as scheduled because they could not locate the required parts. The fourth and final team, due to excessive planned man-hours, completed all assigned work prior to lunch and spent their afternoon lingering in the maintenance shop. Yet, throughout the shift, the maintenance supervisor was nowhere to be found.

Unfortunately, the above scenario is an all too frequent and common occurrence. Why did Operations fail to follow the agreed maintenance schedule? How could work have been scheduled without verifying the required parts were readily available? Rather than waiting in the maintenance shop, could alternate work have been clearly defined to maximize the technicians’ productivity? Most importantly, where was the maintenance supervisor throughout the day?

Plants have an extremely valuable yet very sparse resource: maintenance technicians. It’s important to treat them as such, and manage this resource directly. We must enable the technicians to perform their work efficiently with all barriers removed and utilize their time to the best of the organization’s ability.

Roles and Responsibilities of a Maintenance Front-Line Supervisor

The most challenging management role at a manufacturing or process plant is that of a front-line supervisor (FLS). The FLS is the liaison between the personnel who perform the hands-on
physical work in a process and those who manage performance, cost and other business-related goals. The FLS must balance having to provide supervision to those performing tasks that produce the product or service that generates revenue or customer satisfaction alongside the desire to meet the business results demanded by the stakeholders, which can often be shareholders. That is not an easy task.

The FLS wears many hats—teacher, policeman, preacher, coach, mentor, parent, etc. With today’s multi-generational workforce, the FLS must excel in interpersonal skills and be able to adapt and influence the variety of attitudes and values within their teams. The FLS needs to find an approach that each member of the team will respond to when they interact with them individually. However, when dealing with the entire group, the FLS must be fair but firm and treat each person with equal respect.

The Maintenance FLS’s primary role is to provide guidance to his or her direct reports about the maintenance tasks at hand and the job’s expectations. The FLS must provide clarity if there are any questions and then let his or her reports perform their assigned tasks. While the tasks are being performed, it is the responsibility of the Maintenance FLS to ensure that people are working safely with no environmental impact. He or she will also ensure roadblocks are identified and removed as they occur. Work will be monitored on an interval basis throughout the shift to ensure he or she is properly utilizing the correct labor inputs at the correct rates and meeting quality expectations.

In order to accomplish this primary function, the Maintenance FLS must be able to understand and translate the business objectives of who he or she reports to and convert those objectives into how he or she manages direct reports. The Maintenance FLS needs to be fully aware of local, state and federal employment guidelines and company policies, as well. These set the boundaries for how he or she interacts with direct reports.

Based on the responsibilities of leading his or her direct reports and answering to upper-middle management, the roles and responsibilities of a Maintenance FLS are some of the most difficult, demanding and challenging in any organization.

**Often Overlooked and Neglected**

Traditionally, the Maintenance FLS is promoted from functional roles where the focus is on a singular job. No longer an individual contributor responsible for his or her own performance, the newly minted Maintenance FLS must direct and manage the performance of others as well as his or her own. With this new role comes new challenges. How do you coach and lead your direct reports to improve safety, quality and efficiency? How do you navigate and resolve conflicts between your direct reports, contractors and other departments? How do you identify and solve problems on the fly?

For such a critical role, it might be surprising that the individual is promoted and simply “handed the keys” to the direct reports. Very few organizations invest in the training and professional development of their FLSs. An organization’s ability to achieve and sustain success is highly dependent upon the FLS’s responsibility and preparedness. This lack of leadership skills development may result in the FLS falling short in some of the most critical aspects of his or her job.

Not only is the Maintenance FLS not provided with the crucial leadership training, but he or she is often distracted by less useful activities such as administrative tasks and meetings. These activities prevent FLSs from spending more valuable and proactive time in the field engaging with their direct reports. Yet, the FLS will be chastised if he or she fails to complete the required documentation and/or attend a meeting. Unfortunately, this culture can unintentionally lead the Maintenance FLS to rationalize that he or she is not required to spend active time in the field, which often results in dire consequences.

This absence in the field results in a tide of events that causes the Maintenance FLS to be reactive, often with costly delays. Without the support and guidance of the Maintenance FLS in the field, the maintenance technicians are left on their own to deal with challenges. Without the required checks and balance, the idling increases and often leads to a lack of adherence and compliance with the scheduled maintenance work. In addition, this often leads to poor quality and/or inefficient work execution.

A recent client engagement study at a major petrochemical facility observed and obtained factual data in this very environment. Day-in-the-life (DILOs) or execution studies were conducted simultaneously with maintenance supervisor studies during the initial interaction in February 2018. The three Maintenance FLSs were found to have not spent one minute of their 10-hour shift in the field. As a result, the maintenance technicians’ time on tools for that week was 23%. Thus, during the 10-hour shift, the wrench time or time spent on tools was approximately 2 hours and 18 minutes. Yet, per Doc Palmer, the leading authority on maintenance work management, best practice is 55% or 5 hours and 30 minutes (Figure 1).

![FIGURE 1](image-url)
These Maintenance FLSs were once eager and enthusiastic. Unfortunately, with time, they had become complacent and started rationalizing their behavior of being less active in the field. When questioned, their responses included: “These are grown men; they don’t need me,” “They know my expectations,” “I don’t like bird-dogging them,” “They are the best all-around and I can vouch for each one of them,” “They know how to find me if they need me” and “They can call me on the radio at any time.”

Leadership development training and coaching was conducted individually with these three Maintenance FLSs over the course of several months. Efforts were made to help them balance their time in the field with their administrative tasks and meetings. Approximately 30% of their day was to be proactively spent in the field engaging and ensuring their direct reports were working safely, identifying and removing any barriers and verifying quality work was being performed. By the end of the engagement study in September 2018, the Maintenance FLSs had increased their presence in the field from 0% to approximately 18%. This resulted in a dramatic increase in wrench time from 23% to 54%, almost best practice. Imagine what the client could have achieved if the Maintenance FLSs increased their presence and engagement in the field to the best practice of 30% (Figure 1).

Manager’s Roles in Active Supervision

The maintenance manager and the rest of the leadership team are often oblivious to this lack of active supervision in the field. More and more responsibilities are ‘delegated’ to the Maintenance FLS, which usually entails more reports and meetings. Upper management frequently and consciously chooses for the reports to be the only vehicle of information exchange, instead of occasionally spending time in the field themselves. Unfortunately, these reports often do not reveal the true picture of what is occurring in the field, and management is presented with inaccurate and/or misleading data.

The Maintenance FLS has no incentive or motivation to increase his or her active supervision in the field if upper management fails to hold themselves and the FLS accountable for this critical action. Once we disengaged with the client and performed audits starting in November 2018, this became very obvious. We observed a return to less active supervision and a resulting decrease in wrench time (Figure 1). Upper management failed to sustain the momentum that had been created and the facility slowly returned to a more reactive culture.

A culture of active supervision must be embraced from the bottom to the top of an organization’s leadership structure. There is no substitute for direct feedback from maintenance technicians in the field to upper management. In the field is usually when upper management initially recognizes that their reports are not providing an accurate picture of the activities being performed. This usually leads to follow-up sessions with the Maintenance FLS in order to obtain a better understanding of what is and is not actually occurring. There is no better motivation for the Maintenance FLS than to hear that feedback directly from his or her manager.

Ownership and Accountability

The Maintenance FLS is under constant, tremendous pressure to create and maintain a safe working environment, increase efficiencies and improve results. In order to successfully perform in this crossfire of demands, he or she must exhibit a steadfast commitment on a daily basis. The Maintenance FLS is most effective when intrinsically motivated to do so; when they take ownership of not only his or her actions, but also the actions of the maintenance technicians working toward achieving specific organizational, departmental and individual performance objectives.

The Maintenance FLS must recognize that one of his or her most important tasks is to understand the barriers preventing his or her team from achieving success. Once again, this requires his or her presence in the field to identify these barriers. But this is not simply a data collecting exercise to report to management. As this data is continuously tracked, the Maintenance FLS needs to prioritize these barriers and then develop the appropriate corrective actions to eliminate or minimize their impact. The Maintenance FLS must own this imperative activity. Management should only be involved for complex barriers, which are outside the direct control of the Maintenance FLS.

One common complaint from a Maintenance FLS is that he or she had no involvement in the creation of his or her team. The Maintenance FLS must acknowledge and continuously diagnose the strengths and weaknesses of his or her team of direct reports. With upcoming retirements and high turnover rates, he or she must have a long-term vision about creating a team of highly trained and flexible maintenance technicians who can perform multiple maintenance tasks in a safe and highly effective manner. Any gaps must be identified and addressed in a timely manner to minimize training and/or performance flaws.

Sustainment of Active Supervision

Regardless of the changes in an organization’s strategic objectives in today’s competitive and complex business environment, active supervision has been and will continue to be the most effective and practical strategy for consistently achieving safety, quality and productivity targets. Active supervision is a key part of the continuous improvement cycle. Thus, active supervision behaviors cannot simply become a “flavor of the month” fad over time.

Once achieved, the sustainment of active supervisory behaviors is critical. One effective manner is to develop and implement a daily and efficient routine for the Maintenance FLS. Approximately 30% of the Maintenance FLS’s day should be proactive supervision. The remaining 70% of the day should...
include approximately 15% passive supervision, 20% coaching, 25% administrative time and 10% available time (Figure 2).

The maintenance manager and the rest of the senior leadership team can help drive and sustain this commitment from the Maintenance FLS by actively engaging and involving him or her in the strategic business priorities and overall vision of the organization. He or she needs a clear picture of the present and desired future state of the organization. By ascertaining these points and aligning his or her efforts, the senior leadership team can significantly increase buy-in and support by focusing attention on what the Maintenance FLS must do to support business objectives.

**Conclusion**

The primary objective of the maintenance function is to provide the maximum availability and efficiency of company assets throughout their expected life cycles at the lowest possible cost. In today’s highly complex and competitive environment, the importance of the Maintenance FLS’s impact on safety, environment, business performance and profitability has dramatically increased. An organization’s comprehensive strategy needs to elucidate how active supervision should contribute to the overall business objectives.

Members of upper management must recognize the difficulties associated with the FLS position and should strive to create an organizational environment in which Maintenance FLSs can perform their function most effectively. Not only do they need to conduct the proper leadership development training, but they also must set the example and proactively spend time in the field and expect the same from the Maintenance FLS. Most importantly, they must recognize organizational success is doomed without active supervision in the field.
Do we cripple our supervisors by imagining their roles to be leaders and managers and then sabotage them? Could it be that there are expectations placed on supervisors to fill the “leader” role in the absence of leadership and management from the company hierarchy? Let’s examine the roles and responsibilities for successful supervision, and if our companies sabotage success.

To have successful maintenance, you must have a realistic view of supervision. To have successful maintenance, you must give supervisors the tools, authority and support they need. To have successful maintenance, you must have respect for what the supervisor contributes.

In the maintenance field, the supervisor is the critical player running the team. At a basic level, the supervisor is accountable for the quality, safety, security and productivity of the maintenance effort. If you read articles about modern supervision, you will see quite a bit of discussion about the supervisor as a leader versus the supervisor as a manager. If you read between the lines, you understand that supervisors should be great leaders and efficient managers with a focus on getting the work done.

This expectation is nothing new. Supervisors often play multiple roles for the good of their companies.
Defining the roles

So are supervisors just supervisors, or are they also leaders and managers? What exactly do we hire supervisors to do? I think there is some confusion about what we expect from supervisors. Or, perhaps we are looking to these roles to make up for the lack of leadership and management at our companies. Before we can discuss this, let’s define the terms.

**Leader:** A leader is the person who leads or commands a group, organization, or country. A leader will provide a roadmap and set goals for the team to achieve and monitor to ensure those goals are met. According to online career development platform Mindtools.com, “Leadership is about mapping out where you need to go to ‘win’ as a team or an organization, and it is dynamic, exciting, and inspiring.”

**Manager:** A manager is responsible for controlling or administering all or part of a company or similar organization. Management organizes and facilitates business activities to achieve defined objectives.

Roles in the maintenance world

Much of our impression of leadership is from war movies and TV shows. We ask leadership to take the next mountain, the next bridge. In that kind of leadership, it is okay to sacrifice the leader and his or her “troops” to take that hill or bridge. That is an idealized version of leadership.

In maintenance, the “supervisor-leader” calls forth the best work from his or her team members. The leader is “there” for his or her people. The leader looks out for his or her people, tries to protect them from bad decisions of upper management, gets them training, provides recognition and takes the heat when there are mistakes. Leaders also protect the employees from their tendencies to take shortcuts, be unsafe or compromise environmental or health issues.

The company either supports or undermines the supervisor’s leadership by allocating adequate funds for training, tools, support systems and buying the right equipment in the first place.

In the same way, the idea of management comes from images of a relentless cost-cutter, efficiency expert or strictly a “numbers person.” The idealized manager has no time for soft skills, soft people or for anything that does not directly impact the value stream.

The supervisor-manager does not fit this stereotype. Good supervisor-managers start planning early to ensure, as best as possible, that the technicians have everything they need to do their jobs. The maintenance manager makes sure the other groups are ready so that the task can proceed smoothly. They chase after their team members to make sure that all work has work orders and that technicians record all hours, all parts and all other elements of the job.

The company will support or undermine the supervisor’s management by allocating adequate funds for maintenance management software, proper planning and scheduling. The company supports its management by insisting that all employees adhere to the schedule (including the issuance of permits and cleaning equipment before the work starts). The company agrees to the importance of the PM or predictive maintenance efforts and the adherence to that schedule, as well. The company also provides adequate support in the form of parts, adequately staffed warehousing, reliability, and maintenance engineering.

I visit organizations all the time that stand behind their supervisors as managers and promote the supervisor’s leadership.

Unfortunately, I also visit organizations that give lip service to leadership and proper management. That attitude costs them real money by increasing turnover, increasing mistakes, lowering morale and having leaders who do not lead, managers who do not manage and supervisors who do not supervise.
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