

# Supervisors As Leading Indicators of Safety Performance

By Dustin L. Hickey



**B**y understanding the crucial role of supervisors in building and maintaining a successful safety culture, one can see the potential benefits of motivating them to become more engaged. But how is this accomplished? It begins with measuring and tracking their level of involvement as a leading indicator of future safety performance.

## What Gets Measured Gets Improved

Versions of the phrase, *What gets measured gets improved*, are attributed to various people, from Lord Kelvin to W. Edwards Deming. Author and business consultant H. James Harrington describes it this way:

Measurement is the first step that leads to control and eventually to improvement. If you can't measure something, you can't understand it. If you can't understand it, you can't control it. If you can't control it, you can't improve it. (Cited in Kaydos, 1999, p. 3)

Most safety professionals understand the value of this concept (i.e., measure, control, improve) and already apply it to their safety programs. This improvement method can be accomplished by measuring and tracking trends in safety performance using key performance indicators (KPIs). KPIs generally fall into two categories: leading and lagging indicators.

Lagging indicators are considered reactive because they manifest after an incident. Examples of metrics in this category include injury statistics, number of environmental issues and number of

incidents resulting in property damage. Leading indicators are said to be proactive because they are observed before an incident occurs. These indicators include audit scores, hazard recognitions and near-hits reported. Lagging indicators show where performance has been, while leading indicators suggest where it is likely to go (Manuele, 2013).

The benefit of identifying leading indicators is that when performance is heading in the wrong direction, organizations can still intervene before an incident occurs. But even traditional leading indicators are symptoms that manifest as a result of employee actions and behaviors (excluding some unsafe conditions).

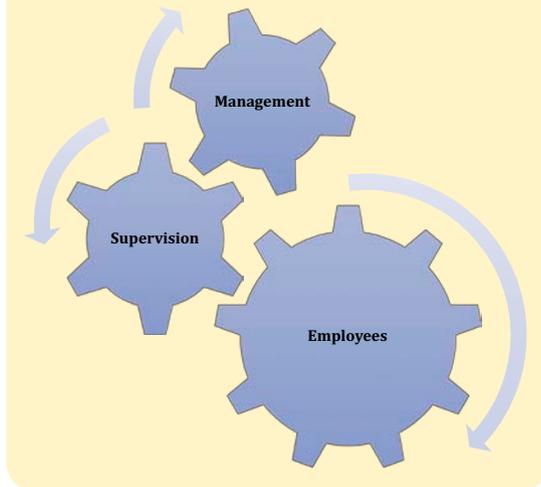
So, wouldn't it be great to measure what happens before those behaviors and symptoms occur? The good news is we can. To do this, companies must turn their focus to a different kind of leading indicator: the supervisor and his/her level of involvement in safety.

## IN BRIEF

- Participation from supervisors is a critical element of a successful safety culture.
- Supervisor involvement can be measured by defining specific actions to monitor.
- Awareness of being observed can motivate supervisors to become more active in safety.

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**FIGURE 1**  
**Supervisors Play a Crucial Role as Interface Between Management & Employees**



### ***The Impact of Supervisor Involvement***

As the interface between management and employees, supervisors are the key to achieving any business objective (Figure 1). Production, quality and safety performance are all tied directly to supervisors, their expectations, and the kind of actions and behaviors they allow. While upper management support is necessary, nothing is achieved without the frontline supervisor. This is due to the great influence over employees that supervisors possess. Krause (2008) calls this “leading from the middle.” He explains that supervisors affect safety performance and, as representatives of the company, have an obligation to help build the safety culture (Krause, 2008).

Safety culture can be described as the atmosphere within an organization that is built on shared beliefs, practices and attitudes that exist toward safety (OSHA, 2015). The culture then influences employee behavior and, ultimately, it dictates “the level of safety performance an organization can achieve” (Blair, 2013).

For a positive safety culture to exist, supervisors must be bought in, present and active in all aspects of safety. Their commitment and support for safety processes, programs and procedures must be visible to employees. When supervisors drive safety, employees’ safety behavior improves, adherence to safety rules increases, and incident reporting and investigations are conducted more thoroughly (“How to get line supervisors,” 2003). By understanding the impact of engaged supervisors and the benefit of measuring that which needs to be done or improved, one can see the potential benefits of measuring supervisors’ involvement as a leading indicator of safety performance.

### **How to Measure Involvement**

At first glance, involvement may seem to be intangible and, therefore, immeasurable. However,

involvement can be quantified by breaking it down into specific action items. The first step is to determine what actions should be measured. Then, monitor and record when a specific action occurs.

One example of a measurable action is the number of daily crew meetings (e.g., pretask, preshift, tailgate, toolbox safety meeting) attended by supervisors. Many supervisors spend mornings in the office doing paperwork, checking e-mails or attending other meetings (e.g., cost, schedule, production). Daily crew meetings are a crucial start of each shift and deserve supervisor attention. Depending on the type of work performed, these meetings may vary slightly, but the purpose remains the same: To discuss work steps, hazards involved with each step and protective measures to be taken. Supervisor participation in this process must be mandatory; management should make this expectation clear.

Other examples of areas of measurable participation include:

- Are supervisors vocal in weekly safety meetings with employees? As discussed, supervisors influence employee actions and behaviors. When supervisors speak up in safety meetings, employees listen.

- How many behavior-based safety (BBS) program observations are supervisors completing? BBS describes the process of observing employee behavior, identifying at-risk actions, then focusing efforts to modify the behavior to achieve safe behaviors (Aspen Publishers, 2010). By participating in the company’s BBS program and completing observations, supervisors are leading by example.

- Are supervisors contributing to the new-hire training and orientation process? This process is typically an employee’s first impression of a company and its values, goals and culture. This is the perfect time for supervisors to communicate safety expectations.

- Do supervisors help facilitate other periodic training sessions? By getting involved in training, supervisors demonstrate their support for safety. Doing so sends a message to employees that safety is important to supervisors. This in turn makes it important to the employee.

- Are supervisors active in safety audits and inspections? This is a great opportunity for supervisors and safety professionals to perform a joint walkthrough of work areas, identify potential hazards and communicate.

- Do supervisors participate in the company’s stretching program, if one exists? This is another example of supervisors setting an example by visibly engaging in safety activities. It shows employees that the rules apply to everyone and creates an opportunity for supervisors to interact with employees.

By defining these specific areas of involvement, management has also clearly defined what is expected from supervision. Instead of making a broad statement to “be involved” or “support safety,” management gives supervisors specific items to focus on and be involved in.

**Psychological Motivation: Making It Public**

Simply measuring something does not ensure that action will take place. The information must be shared with supervision and management. By doing so, something interesting happens: When supervisors see that their actions in a specific area are being observed by management, they tend to increase their performance in that area. This can be partly attributed to a phenomenon known in psychology as reactivity. Reactivity describes the effect that occurs when individuals alter their performance or behavior simply because they know their actions are being observed (Heppner, Wampold & Kivlighan, 2008).

**The Hawthorne Effect**

One famous example of reactivity at work is from the Hawthorne studies. In the 1920s, experimenters at Western Electric Co. conducted a series of productivity studies. One such study aimed to evaluate the effects of illumination on production. Initially, increasing light intensity appeared to increase production. However, when the lights were dimmed productivity still increased. Researchers were baffled and decided to interview the study participants. What they discovered, according to Porter (2012), was that when workers realized they were being watched it motivated them to become more productive. This is now known as the Hawthorne Effect. By understanding and applying this technique of psychological motivation, management can increase desired results in any area, including supervisor involvement (Porter, 2012).

**Putting It Into Practice**

There are many options to choose from when deciding how to distribute the information. Various scorecards and matrixes can be developed and shared electronically or printed, and distributed as necessary. However, an effective way to motivate supervisors is to publicly display the data. This can be achieved with an accountability board (Figure 2).

The concept of this tool is to have a central, public display of information designed to increase desired actions and behaviors. The board serves as a constant reminder and can motivate supervisors to improve. Instead of a physical board, companies may opt for an electronic KPI dashboard. Either way, making the information public can spur healthy competition among supervisors when they see each other participate in new-hire orientations, attend daily crew meetings, assist in training and join in safety audits.

When it comes to actions such as being vocal in weekly safety meetings, many supervisors may still be hesitant to join. Another way to utilize psychological motivation is to ask a willing

supervisor to present a brief safety topic for an upcoming meeting. This helps build momentum and encourages others who may be reluctant to speak up.

**Motivating Supervisors**

In addition to the benefits of measuring involvement and making the results public, safety professionals and upper management can do much more to encourage supervisors. They should consistently and frequently coach, mentor and train. Rewards and incentives can be tied to the program, with management support. Ultimately, some level of consequences should hold supervisors accountable when their participation does not meet expectations. While consequences are sometimes necessary, Nash (2004) points out that it is important that people understand why performance is being measured, rather than perceiving it as a punishment tool. When they understand the reasons behind measuring performance, they take ownership (Nash, 2004).

**Tracking Changes in Participation**

With action items established, measurements taken and supervisors encouraged, it is time to monitor changes and continue encouraging supervisors. Management should provide ongoing feedback and coaching based on changes in performance, positive or negative. Involvement data should be a regular topic in supervision meetings. Another great idea is to incorporate the action items into quarterly performance reviews. A typical performance review may include one line item for supervisor involvement that requires rating on a 10-point scale. However, such an evaluation is vague and subjective. Integrating specific, mea-

**FIGURE 2**  
**Accountability Board Example**





**As the interface between management and employees, supervisors are the key to achieving any business objective.**

sureable areas of involvement provides for a more effective, fair evaluation of supervisor involvement.

#### **Cost & Potential Return on Investment**

When implementing a program for measuring supervisor involvement, an employer would typically begin by tracking activities that should already be taking place. Thus, no new cost is associated with supervisors performing these activities. The only new cost is associated with data tracking.

For a small business operation, these duties likely can be absorbed by an existing manager or safety professional without incurring any new costs. For larger operations, employers may benefit from hiring a program administrator whose sole duty is to manage the KPI program. Wages for such a position would depend on industry, geographical location and experience level. For a cost savings, companies with internship programs could hire an OSH student.

Systems for tracking KPI scores can range from a simple electronic spreadsheet (e.g., Microsoft Excel) to specialized software systems designed specifically for this purpose. Specialized software is typically offered on a monthly, cost-per-user, subscription-based model. Monthly cost can range from \$50 to \$250 for smaller teams or organizations. Midsize companies with multiple branches, offices or divisions can expect to pay up to \$800 monthly. Large enterprises would negotiate a subscription price based on specific circumstances or may elect to purchase or develop a custom software program (ClearPoint Strategy, 2017).

When evaluating potential return on investment (ROI) for measuring supervisor involvement, consider the impact of improving supervisor participation on the different aspects of the company's safety management system. For example, when tracking supervisor involvement it may be discovered that on average, supervisors are only 60% compliant with safety expectations and requirements. With such a gap identified, the organization can take steps to correct the behavior and increase participation in the deficient areas.

Once compliance is raised to an acceptable level, the ROI realized depends on the effectiveness of the policies, programs, processes and

procedures. In other words, the system only ensures that specific objectives are met. The benefit or value realized varies depending on the effectiveness of that specific program or initiative. Due to the wide range of what employers may choose to measure and the varying effectiveness of these aspects, generalizing an expected ROI for this type of system is impossible. However, it is widely accepted that for every \$1 invested in safety, employers can expect a savings between \$3 and \$6 in return (Huang, Leamon, Courtney, et al., 2009).

#### **Conclusion**

Many organizations track a range of performance metrics. Knowing that supervisor participation is a key aspect of a successful safety culture, one can also see the potential benefits of measuring their involvement in safety programs, processes and procedures. By first defining which actions to measure, performing observations, then making the information public, supervisors are motivated to become more engaged in safety.

Encouragement, tracking changes in performance and providing ongoing feedback and support will continually increase supervisors' involvement. As involvement increases, the effects quickly translate into increased employee involvement. The result is ultimately a safer workplace, a stronger safety culture and cost savings for the employer. **PS**

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