EXECUTIVESafety Responsibility

By Theodore J. Schorn

TOP MANAGEMENT SUPPORT is the most commonly cited factor in the success of safety programs in the literature of the safety professional. The lack of such support is also cited as a frequent reason for poor safety performance in manufacturing plants. Unfortunately, in many cases, the specific expectations of management and the definition of the needed support are seldom defined. Just what is it that executive managers need to do to foster excellent safety performance? This article provides a review of the executive's role, responsibility and potential contribution to plant safety performance. Specific actions are identified and linked to the needed values within top management to provide practical advice.

Introduction

Safety performance improvement is an acknowledged goal within the foundry industry and statistical measures, provided by the Bureau of Labor Statistics and others, support this priority (Schorn, 2020). In calling for improvement, this author and others have called for greater top management involvement (Marsh et al., 1998; Schorn, 2010; Smith, 2017). Indeed, it can readily be admitted that one of the factors most often noted in describing the success of improvement projects of any kind is top management support. Unfortunately, the phrase "top management support" is often ill-defined in one or more aspects and thus this agreed upon ingredient for success in improve-

ment cannot be effectively added.

KEY TAKEAWAYS

•Lack of management support is often a reason for poor safety performance.
•Precisely what executive managers need to do to foster excellent safety performance is seldom outlined.

outlined.
The executive's role, responsibility and contribution to plant safety performance are reviewed, and actions are identified and linked to the needed values within top management.

Two aspects of top management support need enhanced clarity before making headway toward defining what such support might require. First, exactly who is intended in the phrase, "top management"? Second, in order to ensure that a uniform measure of success in improvement is available, the definition of safety performance must be provided.

Who Is an Executive?

Typically, in the experience of the author, "top management" most often refers to that very small group of individuals in the company that might self-identify as executives. Peter Drucker, the well-respected and often quoted guru on management, agrees with the majority opinion that executive contribution is critical to the success of any enterprise and certainly its improvement. In his book, *The Effective Executive*, Drucker (2002) defines an executive as "Every

knowledge worker in a modern organization is an 'executive' if, by virtue of his position or knowledge, he is responsible for a contribution that materially affects the capacity of the organization to perform and to obtain results." A few pages later, Drucker clarifies that "actions and decisions" are the things that create the contribution of an executive. The substance of an executive's contribution is defined, again in the same text, as "direct results; building of values and their reaffirmation; and building and developing people for tomorrow. . . . All three . . . have to be built into the contribution of every executive."

In this article, executives are addressed as those whose authority permits them freedom to direct resources and make final decisions on organizational direction and whose role holds them accountable for the ultimate results of the organization, their maintenance of the organization's values and their people development within the organization.

What Defines Safety Performance?

There are at least two broad schools of thought regarding how safety performance ought to be measured. There is perhaps no perfect approach; each perspective has some merits.

One view is to measure safety performance as the level of conformity to defined safe practices. This view is often taken by those proponents of a behavior-based safety approach as they see conforming behaviors as the primary determiner in the reduction of the rates of occupational injuries. They also see, with good reason, that this metric is a leading indicator of injury rates—a process metric rather than a results metric.

An alternative view is to measure safety performance as the rate of occupational injury itself. While acknowledged as a lagging indicator, this view holds that this metric correlates best with the actual harm (both tangible and intangible) suffered by the organization when safety performance is poor. It is also noted that many engineering and design controls, as well as some administrative controls, are not contingent on human behavior and contributory to the results. These technical controls (and the effort put into them) are not measured by behavior-based analyses of conformity, though they do contribute to the achieved level of injury occurrence.

While this question may appear to be only of theoretical interest, research into safety performance requires an output measurement to quantify the value and impact of various input parameters of interest. Research into safety performance has largely used the more objective and more easily obtainable injury rate as its success indicator. Petersen (2005b) explored the potential of weighting injury rates with severity ranking—which appears to retain objectivity and a sense of fairness. This approach has not been utilized by others, likely because of the random nature of severity in its linkage to a present hazard. For example,

the difference between a laceration that requires only first aid and that which becomes a recordable injury might be a trivial millimeter or two in the placement of the arm or hand. The evidence for a hazard is present regardless of the severity of the injury.

In this article, the example set by the majority of researchers to measure safety performance by injury rate—is followed. The rate will be normalized by use of the standard total case incident rate OSHA calculation metric.

The Goal of This Article

This article sets out to understand the research into those factors that influence injury rates and the contribution executive management can and should make to foster excellent safety performance.

It can be observed that executive actions and decisions seldom directly impact safety performance as a result of the organizational distance between those that are injured, their circumstances and the executive. Indeed, research describing executive influence on safety performance places several intermediate factors between the executive and the injury. A few examples can be found in Figures 1, 2 and 3.

The complexity of these relationships (slightly simplified in each case by the author for clarity) may be part of the reason that specific prescriptions for executives in regard to safety

FIGURE 1 CLARKE: RELATIONSHIP OF MANAGEMENT LEADERSHIP TO INJURY RATES

Sharon Clarke (2013) proposed the relationship of management leadership to injury occurrence rates as shown in this diagram after a metaanalytic review of leadership and its relationship to safety. Management leadership Supervisory leadership Safety climate Safety Safety participation compliance **Injuries**

performance improvement are hard to come by. Reading papers like these also confirms the existence of a degree of ambiguity in the definition of management; this is especially true where survey data is utilized.

The complexity of the linkage between executive behavior and safety performance can mask the need for executives to be actively involved at all. This would be a serious misreading of the research. Each of the figures presented begin with "management" at the highest level, cascading activity and attitude through the organization to produce tangible structures and results. The question is, what specific behaviors and actions drive that energy most efficiently and effectively into excellent safety performance?

Unfortunately, many safety experts are vague in their descriptions of the desired executive behavior beyond "commitment" or "support" (Rodgers et al., 1993; Sulzer-Azaroff & Austin, 2000). It is the task of this article to consider the role of executives and the means at their disposal to communicate energy and life into people and structures that are part of the causal chain leading to the reduced occurrence of injuries. It is the perspective of this article that executive actions and decisions can and often do have a highly significant and even decisive influence on safety performance through the working of intermediary people, structures and culture.

The Executive's Responsibility

An executive's responsibility is inextricably linked to the individual's role in the organization. As was observed in Drucker's definition, the responsibility is what determines the title. This is worth unpacking further, with specific reference to the responsibility of the executive for safety performance.

An executive's responsibility can be described in relationship to that which is entrusted to the executive for the purpose of operating the business for profit (or in the rare case of a manufacturing nonprofit, the achievement of the vision and purpose of the organization). This might be referred to as the positive argument for executive ownership of safety.

The negative argument for safety might briefly examine who else could or should be responsible for safety. In ruling out these other contenders as inadequate or inappropriate, one is left with the executive as responsible.

Executive Stewardship

Executives are entrusted with three resources within the organization to accomplish the direct results spoken of by Drucker.

The people in the organization are entrusted to the executive to direct, to harness the energy and ideas, and to set them in relationship with one another so that things happen to drive results. This trust extends to not merely preserving this resource but to prospering it for the continuing growth of the company.

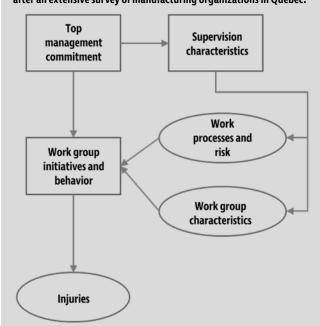
The reputation of the company, both inside and outside the organization is entrusted to the executive. This is a resource that could easily be squandered or stained by poor decisions but when prospered can lead to new business opportunity, greater success in attracting talent and improved negotiating with important outsiders from customers to financial institutions.

The goods of the company, its tangible and intangible assets, are entrusted to the executive. Equipment, facilities, technology and intellectual property are available to be harnessed or wasted.

It seems clear that the executive's first responsibility is the stewardship of the human resources entrusted to this role.

FIGURE 2 SIMARD & MARCHAND: RELATIONSHIP OF MANAGEMENT COMMITMENT TO INJURY RATES

Simard and Marchand (1995) proposed the relationship of top management commitment to injury occurrence rates as shown in this diagram after an extensive survey of manufacturing organizations in Quebec.



These impact all the other resources, enabling them to be directed for good and for the release of creativity, innovation and passion. Max DePree (1989) wrote, "The art of leadership requires us to think about the leader-as-steward in terms of relationships." These human relationships are the conduit through which executives put into action their ideas and make things happen.

Safety as defined minimally as the occurrence rate of injury is a direct threat to the primary resource the executive is accountable to protect and the executive's best means of generating the direct results that are so easily measured.

Beyond the immediate harm to the individual injured, injury rates affect a series of factors as follows (Behm, 2009; Weakliem & Frenkel, 2006):

- •morale and motivation,
- •impaired focus on business priorities toward human security and loss,
 - •mistrust in management capability or planning,
- •mistrust in the company benevolence or good will in its motivation,
- •a lack of confidence in proceeding with plans and standard procedures, and
 - •erosion in the validity of company value statements.

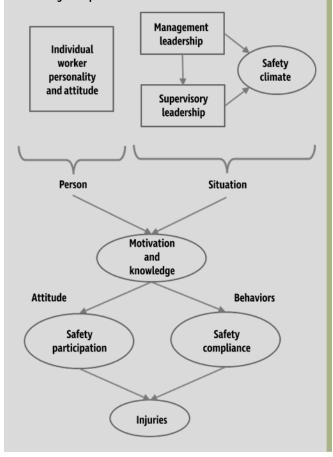
Poor safety performance not only threatens the people resource entrusted to the executive, but the other trusts as well (Bunn et al., 2001; Handley, 2021; Veltri et al., 2007):

•diminished external reputation, which can create a drag on customer relations, community relations and recruiting talent,

•harm to property or equipment,

FIGURE 3 CHRISTIAN ET AL.: RELATIONSHIP OF MANAGEMENT LEADERSHIP TO INJURY RATES

Michael Christian and colleagues (2009) proposed the relationship of management leadership to injury occurrence rates as shown in this diagram after a meta-analytic study of roughly 100 research papers evaluating these parameters in the USA.



- •downtime associated with the injury and its investigation, analysis and correction,
- •losses in productivity and payment of wages for those on restriction or off work,
 - •higher rates of workers' compensation premiums,
 - potential fines and audits, and
 - •potential litigation costs.

In summary, the company executives bear the responsibility for safe operating performance as a direct consequence of their accountability for that which has been entrusted to them: people, reputation and assets. Poor safety performance is a significant threat to each of these trusts. This line of argument is applicable regardless of the sense of morality one might associate with preventing harm to the workforce. In the perspective of the author, executives have a moral imperative to protect human life as supremely valuable and irreplaceable.

The morality perspective is sometimes deflected by those that understand the executive responsibility for safety as misplaced or so far removed from the C-suite that culpability resides elsewhere.

Executive Surrogates

A number of others have been offered as alternative responsible parties for poor safety performance. It should be noted that a responsible party is designated as primarily responsible, not that no one else had any contributing culpability.

The Worker

While on the surface it might appear to be uncaring to blame the victim in an industrial injury, many investigations of safety incidents end by describing the source of the injury as the workers themselves. Indeed, the U.S. Bureau of Labor Statistics (U.S. BLS, 2018), in its Table R3 identifying the source of losttime injury for the year 2018, reported that about 16% of the reported cases in manufacturing were attributed to the worker.

The argument is made that since the worker failed to follow instructions provided to them, the injury is a direct result of their behavior and not a failure of supervision or management at whatever level. This apparent strong causal connection assumes that there were no other causes to the event other than the worker's poor choice (which itself is assumed to be a character defect such as inattentiveness, haste or sloth). This is poor root-cause analysis and a misjudgment of worker behavior (Schorn, 2017).

It has also been argued that human error exists and cannot be attributed to anyone but the worker. Since human error is universally present and a characteristic of all workers (and not a moral failing but simply a consequence of humanness) some responsibility for worker injury must fall on the worker for their own error.

The point that human error is so widely recognized provides the basis for the rebuttal to this perspective. The larger part of the field of quality assurance is based on the need for management to acknowledge the omnipresence of human error and therefore to design strategies for minimizing their impact since they are known to occur (Rodriguez-Perez, 2018). No customer accepts the excuse for nonconforming product that "to err is human." The quality assurance discipline recognizes the need for error-proofing strategies and various approaches to reduce the harm created by human error. This thinking has been applied to the field of safety extensively (Dekker, 2014; Reason, 1990).

Importantly, the field of safety management has long recognized management's responsibility for worker behavior—and behavior-based safety programs are the result of that awareness (Geller, 2001; Hermann, 2010).

It is clear that workers' inappropriate actions can lead to injury; these actions are motivated by a host of influences, some intrinsic to the organization (referred to as the safety culture or climate in safety research). These are the responsibility of the organization to address if it desires to achieve excellent safety performance. These worker actions can also be influenced by extrinsic factors, reasonably not under the direct control of the organization. These might fall under the category of human error or attributed to family, health or social pressures experienced by the worker. Regardless, since this is a known risk to manufacturing and management has chosen to utilize humans to perform the task (as opposed to some form of automation), they have responsibility to design protective and preventive measures to minimize the risk to workers. A failure to manage known risks in the process through planning is a management issue.

The Safety Manager

According to the ISO 45001 standard, the safety manager or safety officer in a facility has the responsibility to establish, implement and maintain a safety management system



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(Darabont et al., 2017). This responsibility, if carried out incompetently, can lead to poor safety performance and a general disregard for safe work practices and noncompliance to safety regulations. One could infer that if safety performance is less than desired, the safety management system is not properly functioning, and this is a safety manager responsibility.

In fairness, establishing an effective safety management system is an important part of achieving excellent safety results and an essential element of effective safety management (Robson et al., 2007). Yet it must be understood that the essential element of all management systems is a core plan-docheck-act (PDCA) methodology that is turned by executive management activities such as delegating authority, designing organizational communication, roles and responsibilities, providing the needed resources, establishing safety policy, and reviewing and taking action on the safety system metrics. In short, the best safety manager will be stymied in their attempts to perform their duties if executive management is not actively involved and committed to the functioning of the safety management system. There is no substitute for the authority, policy direction and resource provision of executive management. Safety management systems do not grow up from the grassroots efforts of workers or even supervision; they are established on the priority and values of the executive in charge.

Management/Supervision

There is overwhelming evidence that the direct supervisor or manager has a substantive influence on both attitude and behavior of workers (Bullemer & Laberge, 2011; Cohen, 1977; enavior of workers (Bullemer & Laberge, 2011; Cohen, 1977; arker et al., 2001; Zohar & Luria, 2003). This is based on data om perception surveys and careful analytical work evaluating he relationship between supervisory practice and both the beserved level of safety practice conformity and the injury rate. here is an immediacy of connection, and communication in the supervisory relationship that is only rivaled by the peer roup connection. Supervisory actions found most decisive in estering excellent safety results include:

•providing enabling support and training,
•holding a consistent priority of safe practice over all other things, Parker et al., 2001; Zohar & Luria, 2003). This is based on data from perception surveys and careful analytical work evaluating the relationship between supervisory practice and both the observed level of safety practice conformity and the injury rate. There is an immediacy of connection, and communication in the supervisory relationship that is only rivaled by the peer group connection. Supervisory actions found most decisive in fostering excellent safety results include:

- •monitoring people in both attitude and action,
- personally modeling proper practice,
- providing context for decisions and policy, and
- •taking prompt action on worker concerns and nonconformity.

Supervisory staff are supported and given goals and priorities by middle management. Middle management in turn is supported and directed by executive management. The ability of supervision to consistently take appropriate steps to support safety goals is derived from the priorities, objectives and resources received from the upper levels of management. Where inadequate priority is given by management for training or appropriate corrective action for safety concerns, supervision can do little to soften the effect. Indeed, the good supervisor must translate management decision-making into effective and motivating direction for the workers. This task is made difficult or impossible by management with an inconsistent view of the priority of safety, or where management has not valued the establishment of an effective and fully functioning safety management system. Supervision is left to explain, to make do and protect the worker to the extent permitted.

The chain of management decisions begins at the top: that which is truly important will work its way through the organization, much as a team takes its ethos from the coach. Excellent supervision is a critical building block to safe work; management at every level must see the importance of supervision and do everything they can to make that job as easy as possible.

Random Chance

There are some, no doubt, who subscribe to a philosophy that might be summarized by "bad things happen so just do the best you can." They espouse banners encouraging people to be careful, watch out for hazards and not take unnecessary chances. They refer to safety incidents as "accidents" since they crop up at irregular intervals, despite people being careful, and appear not to evidence any particular pattern. People are just unlucky to have been the victim of an accident.

The described approach is a (usually) unintentional effort to diminish management responsibility for controlling what happens within the shop. Controlling the factors of influence driving safety performance is hard work and requires a significant investment in competent people, systems and money. Yet the apparent randomness of injury occurrence can be observed to be the action of probability on knowable and almost always preventable risks. Not clearing sidewalks of ice during

FIGURE 4 MAIN ELEMENTS OF CULTURE THAT INFLUENCE SAFE WORK



the winter around the entry or exit points and parking lots of the facility will not guarantee a slip and fall injury; superior vigilance on the part of employees and visitors may restrain the hazard for a time. When an injury will occur under these circumstances is impossible to predict; but that it will happen at some point can be a virtual certainty.

Planning for facility and process safety includes surveying safety risk with a view to mitigate the likelihood of occurrence and reduce the severity of such an event were it to occur. Failure to direct resources to perform this assessment of risk and take appropriate action is to play a losing game of chance. In such gambles, the "house" always wins. This failure is a direct denial of the stewardship responsibility the executive has over people, the company reputation and its assets.

Customers will not accept nonconforming product; there is therefore pressure on management to control the actions of people and processes such that the output is uniformly conforming. Random chance occurrences that would threaten the conformity of product is either prevented by product or process design (error proofing) or detected by some appraisal mechanism prior to further processing. The mean-spirited random chance world of bad things happening is taken into account during quality planning and largely taken out of play. Somehow, the same strategy is not always applied to the goal of safe operation and conformity to safe work procedures. Can it be that in such a case executive management has prioritized making customers happy over keeping workers safe?

Safety Performance Factors

What drives safe work performance? It is clear from the research described in Figures 1, 2 and 3 (pp. 22-23) that a complex set of interrelationships exists to influence safe work and in particular the decisions made by workers to perform work safely or not.

At the level of the worker, two factors, themselves aggregates of specific actions and attitudes, distinguish themselves in all research on safety performance: the environment in which the person works relative to safety, called safety culture or safety climate, and the quality of the individual's direct supervisor.

Safety Culture

Organizational culture has been succinctly described as "the way we do things around here" (Martin, 2006). The culture of an organization is that which is picked up by the new employee in their first few weeks or months on the job; how to get along, how to get things done, what is expected, what makes management happy and so on. The challenge to research in safety performance is that this culture, even while easily felt and experienced, is difficult to precisely identify and categorize for measurement and analysis. This may partially explain the various directions researchers have taken to the challenge.

In an effort to harmonize the various research directions, a cause-effect diagram is created (Figure 4) to capture the main elements of culture that influence safe work on the shop floor.

The influences in Figure 4 are described as follows.

Example

The word "example" refers to the learning that takes place as the worker observes others performing tasks, getting things done, dressing for work, how they use PPE and so on. This directly relates to the phrase "how we do things around here," and this model is vastly more influential than formal instruction or written procedures. Tips, tricks, work-arounds and other practical advice are picked up from watching what others do. These examples inform the worker about what they should do when faced with a situation or task.

Convenience

The word "convenience" is intended to describe the work procedure or method and its relative difficulty to perform according to "the book." Is the right thing to do the easiest and most natural thing to do? Or has the procedure been designed so that it is difficult, complex, unnatural and harder to perform than the wrong or unsafe way? The complexity of instructions (to read, understand and follow) is a part of the culture; who creates these documents? Is the shop floor involved, or are they produced by an engineer disconnected from the work involved?

Options

When faced with a difficulty, what viable options does the worker have? Can they opt out if they feel unsafe or unsure about how to proceed? Can they ask a question or make a suggestion for improvement? Can they wait until they are better equipped mentally or physically to perform the task? Can they get help? Options disappear when the peer group will mock the employee who is scared or who requires time to figure things out before proceeding. Options disappear when production pressure means workers must keep going even if they are severely fatigued or not sure they are doing it the right way. Options are available when open and supportive relationships enable communication without fear.

Enablement

How is the individual equipped or enabled to perform the task or make the decision in the situation? This will depend on mental equipment such as training and available, understandable instructions, as well as physically equipping the individual to perform with the proper PPE, tools, gages or other materials to be safe and successful. Is the culture set up so that people learn to swim by being thrown into the deep end, to figure it out on their own? Or does it add responsibility and risk incrementally as people demonstrate their capability and competence?

Accountability

The word "accountability" is intended to describe the feeling, whether expressed in tangible forms or not, that the worker will let someone down if the task is not completed correctly or if something goes wrong that they could have prevented. This includes a sense of ownership for the work and a responsibility to perform well. Accountability is on a spectrum: There is a healthy amount of ownership along the center of that spectrum; too little and workers do not care about what they do, knowing perhaps that others don't care either. On the opposite end there is a severity of accountability, strict oversight and little trust in the worker.

Rewards

Decision-making is a mostly unconscious process of weighing pros and cons, especially when individuals are faced with situations for which no clear easy and obvious option applies. Rewards, whether positive or negative, are part of the calculus of decision-making, including those decisions impacting safety. These rewards might be characterized by questions such as, what will make my supervisor happy? What will others think? Will they affirm me in my decision, or will they criticize or penalize me for it? What is valued in the culture? What is rewarded? Within the sphere of safety, are workers rewarded for taking risks if it will get the job done faster? Are they applauded for their creativity if they choose to ignore safety rules but have a positive outcome in productivity? Company values are interpreted by workers not simply by the crude reward of money or in-kind benefits but what is praised, what is talked about first and what generates the most enthusiasm.

The executive who understands these factors and deliberately takes steps to promote a culture aligned with their values can greatly impact the day-to-day work and move it toward higher safety performance levels.

Direct Supervision

In determining what drives safety performance, safety culture is the environment in which decisions are made but the face of the safety culture and the enabler of success is the direct supervisor.

The direct supervisor has three roles within the organization: steward, coach and cheerleader (Figure 5).

Steward

A steward is an individual charged with the responsibility of ensuring the prosperity of the assets of another. Supervisors have a delegated responsibility from middle and upper management to care for and ensure the prosperity of the resources they have been entrusted with so that the work can be completed and goals met. A good steward is faithful in their care of the owner's assets.

Supervisors must therefore first understand the mission of management and operate consistently within the value framework of the ownership. They must represent management; indeed, they are management to the shop floor associate. It is the supervisor's job to communicate company policy and practice, and to do so faithfully and with adequate context so that every individual hears the message and has a grasp of the "why."

Stewards protect and ensures the prosperity of the owner's assets. The most valuable asset is the people. This protection involves not merely keeping people out of harm's way but seeing to their growth, their development as a productive and contributing member of the team. This means they see to the worker's job assignment, their competence and their regular assessment so that growth can occur.

FIGURE 5 **DIRECT SUPERVISOR'S ROLES IN AN ORGANIZATION**

The complementary roles of a direct line supervisor in an organization are shown. These summarize and synthesize research related to best management practice, not specifically safety performance. Steward Supervisor roles Coach Cheerleader

Stewards ensure that equipment is cared for and is in good operating condition, both to protect workers and to protect productivity. Looking after housekeeping, orderliness and organization on the shop floor is important as it supports the goals of safety and productivity.

In caring for people and looking after equipment and products, stewards assist in supporting the company reputation. Workers who are well cared for and supported as respected and contributing members of a team voice their satisfaction in the community. Those who are abused, overworked, put in high-risk situations and treated as machines also voice their level of satisfaction to the community.

In short, the supervisor as steward is the effective emissary and representative of executive management, carrying out the will of the company and getting the job done through the workers on the floor. They serve as intermediary and put arms and legs to the plans of management in their role as steward.

Coach

Few, if any, shop floor associates can perform their jobs safely and successfully immediately upon hire. They must be brought to a level of competence in their tasks and given background knowledge to make effective decisions in their work. This is not merely an educational process because developing competence is not simply information transfer. It is a change process; workers must learn to do things differently and follow standard work, the specific way that has been designed for a task to be completed that will be most efficient and safe. Change is difficult and, for adults, there is a considerable desire to do things in a way "that make sense to me." Operators sometimes say, "Here, let me try that." Adults bring their own background, experiences, habits and knowledge to the job. While this can be a potential source of innovation later, at the point of initial training it can get in the way. The supervisor seen as a teacher or educator can and will struggle.

The goal for a supervisor is to be seen as a coach, following the sports model. Coaches are distinguished from teachers in that the athlete knows that the coach is on the side of the team and every player. They know the coach wants to win and will sacrifice and work hard to help the team win. When the coach makes the team practice and critiques technique or effort, everyone understands this is because the coach understands what it will take to win. Coaches are successful when they develop credibility through trust. Coaches certainly must also demonstrate their own competence at the game, but their individual interactions with the players are supportive, directive and intended to bring out the best in that player for the good of the team.

The analogy holds true for the supervisor on the shop floor. They need the associates to work together, to be willing to contribute in the various positions of the process as directed. The supervisor overcomes the obstacles to change by demonstrating respect for the individual and building trust by showing genuine care, all the while interested in winning, accomplishing the work goals safely and successfully.

Just as athletes need to see the game plan and have some appreciation for the strategy that will be used during the game to win, supervisors are better coaches when they help the workers understand the bigger picture of what is happening in the company and how what they are doing will help them all win.

Every coach in the world of athletics is focused on preparation for success through practice. This preparation includes deliberate attention to injury prevention. Coaches understand how harmful it is to the individual and to the team to lose a player to injury. Risk is reduced by wearing protective equipment, by prohibiting certain behaviors and by developing habits of technique. Supervisors have the same responsibility and the same emphases.

Coaches are not buddies; a certain distance between players and coaches is observed. This is a recognition of the different roles and a reflection of respect for the coach's authority. The coach decides who will make the team and who will play the game.

Good coaches accept blame for a team loss; they heap praise on the team and attribute a win to the team's effort. Coaches understand their role and responsibility to make the team the best they can be. This engenders the respect, trust and credibility necessary for the coach to succeed.

Cheerleader

It is absurd to think of the coach on the sidelines with pompoms leading a cheer. However, if the image is shifted slightly to that of a parent cheering for their child who has just (barely) mastered the art of riding a bike, then it becomes understandable.

The trust relationship necessary for supervisory success is enhanced by encouragement and recognition of jobs properly done. This is certainly positive reinforcement, a known methodology for behavioral modification. But it is far more than that when done authentically and with the appropriate feeling: it is communicating that the supervisor is on the worker's side, that they care for them.

The continuous improvement principle of PDCA is sometimes falsely viewed as only a corrective action sequence. The check phase is viewed as an audit or other verification that inevitably discovers something not conforming. Thus, the act phase is only viewed as corrective action to address the shortfall. Within supervision, it is much more common and necessary to discover that people are doing what they ought to do and doing it well. What then? Is the supervisor to simply nod and move on, looking in other locations for violators? No. Praise and encouragement should be the response to a check phase that shows all is well. This contact with the supervisor develops a pathway to communication that is nonthreatening. If supervisors only speak to associates to correct or instruct, it is difficult for a worker to approach the supervisor with a problem, a mistake or a fear. Cheerleading does not have to be overly effusive to be effective; but when it is effective, an openness in communication is present that can lead to positive safety messages and better confidence on the part of associates to do the right thing.

Supervisors become stewards, coaches and cheerleaders within the context of how they themselves are managed and appraised. Middle management and ultimately executive management send approval or disapproval signals to such behaviors and supervisors learn, just as do shop floor workers, just "how we do things around here."

Executive Behaviors

Having emphasized the responsibility of the executive for safety performance and observed the factors of influence in safety performance, what can executives do to make use of these factors and support low injury rates and a high degree of safety conformity?

Executive action can be divided into two broad categories: those actions that drive the process (which in turn creates the conditions of safe work) and those actions that communicate organizational values that form the rationale behind both the process and individual decision-making at every level.

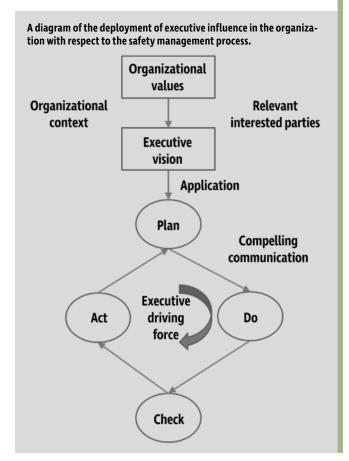
Process-Driving Behaviors

Executive action necessary to energize and maintain a safety management system can be described in reference to Figure 6. This set of relationships derive from formal research, most notably Simard and Marchand (1995), and the management principles found in ISO 9000:2015. The result of the PDCA feedback loop in Figure 6 is a reduction in risk due to safety hazards, an increase in conformity to procedures and expected behaviors and a reduction in the rate of occupational injuries.

Figure 6 begins with the organizational values that have been adopted by the company and affirmed by the executive responsible for the firm. These values should align with a basic safety message consistent with the overwhelming priority of human life. Other values can be subservient to this core value but could include the basic seven messages described by this author in other work (Schorn, 2019).

Often the organization was founded on the values of the founder at the center; the executive then is often called to bring the company back to its roots. Whatever the scenario, the executive brings their own set of value propositions that they hold to be true and to which they (consciously or not) will return. Over time, groups tend to mirror their leader and value what they value. A thoughtful executive will take time

FIGURE 6 **EXECUTIVE ACTION NEEDED** TO ENERGIZE & MAINTAIN A SAFETY MANAGEMENT SYSTEM



reflecting on their values to confirm they are worthy and so that they might more deliberately inculcate them in others. This is the first of five leadership practices espoused by Kouzes and Posner (2002) in their understanding of transformational leadership.

Values clarification leads to a desire to improve the situation around the executive. Gaps appear between the way things are and the way they could be if the values grasped by the executive were commonplace and lived. Opportunity is identified, and an image of a new reality begins to emerge. This image becomes settled in the mind of the executive and a clarified vision of a new reality related to the organization emerges.

This new vision is influenced by the existing constraints, strengths, weaknesses, opportunities and threats inherent in the organization's context. The executive must begin where they are, regardless of how different the new reality they are striving to reach might be.

This new vision is also tempered by the influence of those relevant interested parties who have the right or authority to speak into the organization or to direct its activity in some way. These parties might include customers, key suppliers, corporate overseers or others.

As the vision is strengthened by exposure to these influences, it is communicated to the next layer of management who share in the implementation of the vision. This is accomplished through planning.

Planning

Executives lead planning sessions that will set the course for the implementation of the vision. It is abdicating responsibility and showing inadequate commitment to talk about what is needed but let others "work out the details." The safety officer and key management staff must be involved by executive presence, authorization and guidance. The next layer of management needs to understand, as personally and passionately as possible, just what this vision will look like when it is fleshed out in tangible changes in organization, structure, processes and responsibilities. Communication is central to the success of this endeavor and the executive's "stamp" needs to be on it and in it for success.

The goal of planning together is to establish the apparatus for the feedback loop that encompasses the PDCA cycle. This will be created (or reinforced) through a specific time line of changes, including the needed training and rollout of new organizational and other documented changes. In the crucible of forming this initial plan, a more concrete understanding of the vision in its details will take place and buy-in will be enhanced since they helped create the system.

Unfortunately, many safety managers develop a system on their own, with a sign-off of the package at the end. This likely inadequately engages executive management, builds little ownership and little understanding of what the system requires and what it intends to accomplish. Consequently, when such systems fail, it is the system or the paperwork that are blamed for poor results, not the lack of investment in the planning from executive management.

Turning the Wheel

Having invested in the establishment of a company safety management structure and processes, it becomes the executive's responsibility to continue to put energy into the "wheel" so that the PDCA loop rotates and learning, improvement and risk reduction take place. What does this suggest executive's do to energize the system?

First, as noted in Figure 6, compelling communication needs to reach every associate in the business. The vision needs to be cast and the executive must be observed to personally be throwing their weight of authority and conviction behind the safety initiative. Past performance, obstacles and other realities must be acknowledged, but the emphasis must be on the new day and the new place that the effort will take the group.

This cannot be seen as simply a new program or a project. The culture of the company must change and that needs to be communicated, along with the admission by the executive that things have not been what they should be. A good coach accepts the responsibility for the loss and is committed to prepare the team for what is next.

It is in communication such as this that authenticity, borne from the strength of conviction in the value of human life and its primacy over every other business goal, is felt and the hearers are alerted to something noteworthy and hopeful. If authenticity is not felt, if this is just public relations with the workers or a cameo in the safety manager's presentation, the results will be poor.

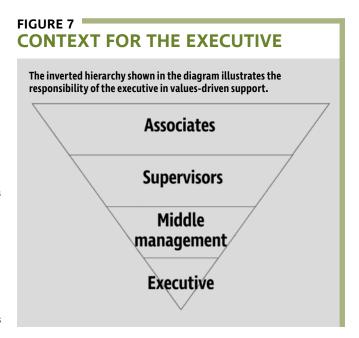
Second, continuing interest and genuine concern for progress at every level of the program must be in evidence. This can be accomplished through deliberate and random intersection with the program activities and people. Showing up at meetings (unannounced), talking to associates on the floor about how things are going, and interacting with audits and plant walk-arounds.

There are good and bad ways to do this. The executive does not take over the activity; they observe politely and reserve critique for a private discussion. The executive is not present to micromanage, but to authorize and underscore the work the team is doing to promote safety. The executive is present to understand the issues firsthand, to express appreciation and to offer resources where they might be needed to support the work.

Executives can support by asking the right questions that demonstrate a priority on the workforce. In a review of an injury for the purpose of root-cause analysis, if the only question the executive asks is "How much is this going to cost?" the executive should stay in their office. But if the executive asks about the injured person and how their family is doing, or asks "What can I do to help?" then they have strengthened the value of safety and encouraged and energized the work.

Third, executives must preside over formal, periodic reviews of the progress of the safety system and its results. Results metrics should be a combination of leading and lagging indicators (Manuele, 2009; Sheehan et al., 2016). The outcome from such meetings is not simply to "rubber stamp" results but to determine whether the plan is on target and either celebrate the results or identify actions to be taken to address shortfalls. Action items that arise from such meetings should be addressed first thing the following meeting. Requiring presenters to personally deliver (and explain) results should provide a measure of accountability and ownership. The executive questions asked in this review meeting are also indicative of their interest and commitment to the process. The opening and final words of such a meeting should be the executive's: a platform to put their interpretation on the work, on the effort as a whole and the company values this work is intended to build.

Fourth, executives need to be vigilant and aware of rebellion and naysayers. There may be those within the company,



whether in middle management or supervision, who truly do not share the vision and values of the leader. This makes such people not merely ineffective at moving the effort forward; it poisons the work and calls into question whether the executive is truly committed to the vision or only committed as needed to not "rock the boat." Executives cannot abide by those who are not aligned with the vision and values of the company. These are core beliefs, and that insubordination will not be tolerated.

Yet there are those in the organization who may be committed to the vision and adhere to the values but disagree with methods or procedures or some other aspect of the planning and implementation of the work. Provided these individuals express loyal opposition and speak in the right forum and with a degree of respect, it is important to have and listen to these contrarians. The team cannot make the best plans without hearing alternatives. Conflict is important to get out in the open and understanding multiple perspectives allows an approach that respects the risks and downsides. Interpersonally, disagreements should be aired early and often, so that people feel heard and do not store up bitterness. Good executives might recruit contrarians to sit in on planning meetings for just these purposes if they don't already have a few.

This vigilance is carried out most effectively by the executive often asking, "How are we doing?" and listening to the answers. This should be done in a setting where the person asked has the freedom to say, "I think we're making a mistake about . . ." or perhaps, "I think you are wrong about. . . ." The courage of a subordinate to tell the executive they are wrong should be reason enough to respect the perspective and thank the person for bringing it up. Where the executive can keep from being defensive and actually hear what the person is trying to say, learning can take place.

Finally, in all that the executive does, they must express positive feedback and appreciation for those doing the work, but especially to the direct subordinates who carry the burden of translating the executive's expectations into reality. The support given to direct reports can then be shared with others down the line.

Value Communicating Behaviors

While many of the executive practices described in the preceding section are intended to communicate and deepen values understanding and commitment, there are a few additional points to be made.

The context for the executive: the person's role in the organization should be expressed as in Figure 7 (p. 29). In an organization that is committed to the primacy of human life, the executive becomes the servant since their relationship to the human life around him/her is to nurture and protect it, even as the workers head out to accomplish their production duties.

Figure 7 (p. 29) shows the executive as supporting the entire organization. Executives understand the feeling of the weight of the company on their shoulders. The executive is equipped by virtue of their position to have the resources, freedom of action and authority to provide support and direction to the whole.

It is important to observe in Figure 7 (p. 29) that the executive provides this support through those middle managers who report to the executive. The executive must support these direct reports so that they are enabled, equipped and empowered to support the next layer.

In such an organization, everyone serves a support role for the frontline associates, the people at the top of the organization. This inversion from the typical way a pyramidal hierarchy is displayed reflects an important recognition: the only ones in the company making anything that can be sold are the associates on the shop floor. Their needs are paramount to the organization, and protecting their safety and security is informed self-interest if nothing else.

If one takes Figure 7 (p. 29) as a more accurate, or at least more insightful way to look at the organization, this suggests some strategies for executives to drive their values into the organization top-up, as it were.

The primary focus of the executive, then, is the reproduction of themselves in the lives of their direct reports, the next chain of command. This will require significant investment of time to encourage, correct, direct and monitor their performance and especially decision-making. This must be done while keeping a largely hands-off approach, as the intent is to see what these subordinates do on their own: how they really think, not on how well they can copy the boss or follow explicit instructions from above.

The performance appraisal of subordinates, especially those who report directly to the top executive, ought to be based on their adoption of company values in relation to their subordinates. How are their employees being developed, cared for and helped to internalize the company vision and values in their work? Often, the clear message from the chief executive gets lost in the handoff through the layers of the company; each manager needs to pass on the safety message from the heart and align with the executive in charge. If people care is truly the most important thing, the nature of support from executives to middle managers and up to hourly associates on the floor is changed to support, encouragement and direction with a value-centered framework.

An important values communicating behavior is perhaps the hardest to maintain: the executive must model their values, they must "walk the talk." This means consistently following the rules established for everyone else (there is no executive privilege when it comes to safe work practices). Since generally executives do not spend large amounts of time with the shop floor workers, every moment counts and every impression counts. Word gets around if the executive got caught wearing

dress shoes on the floor (probably no steel toe cover on those shoes). Word gets around if the executive checked on the family of someone who just had a baby or whose grandmother passed away. While on the shop floor, the executive is responsible to live up to the ideals of stewardship, coaching and cheerleading. The leader of the supervisors should know how to supervise, and it should show.

Hypocrisy in any leader erodes trust, restrains communication and greatly limits the leader's effectiveness. Trust is the key parameter of executive effectiveness in leading change initiatives and certainly of promoting organizational change to drive safety performance (Barling et al., 2002; Michael et al., 2005; Zacharatos et al., 2005).

Properly constructed perception surveys can be a useful tool in assessing how well the vision and values are getting to the shop floor and how well they are being practiced in the view of employees (Petersen, 2005a). Questions related to management, including executives, can be answered. It is an important discipline to look squarely in an unbiased mirror and deal with reality rather than limit your exposure to those who agree or who are inclined to have a favorable impression of your performance. Surveys should only be utilized in an environment where there is an executive willing to respond to the survey and be open about the results, at least in summary form. Completing surveys in a workplace raises expectations that something will be done about concerns raised, and curiosity is piqued to find out what others thought about the issues raised. Asking opinions and allowing the survey results go dormant will be a strong detraction to building trust and interpreted as hypocrisy: "You really didn't want to know my opinion if you aren't going to do anything about it or even respond."

Conclusion

Executives have the ultimate responsibility for the safety and security of the workforce they employ. Indeed, just as the captain of a ship is responsible for the crew, even to be the last person off the boat, so too the senior executive has the responsibility for all that occurs in the plant. Blaming others only points to an executive weakness in managing and developing subordinates.

Executives have responsibility for the establishment of a working system to identify and reduce safety risk within the organization. This safety management system may take various forms, from formal third-party certification to ISO 45001 to behavior-based or people-based safety systems and many other variants. Successful systems use closed-loop communication systems based on the PDCA model, allowing for continual improvement and adaptation to changing conditions and circumstances.

Executives' actions and decisions are immensely influential and can, with time and consistent effort, dramatically improve safety performance. These actions will be predicated on the primacy of the value of human life and the servant posture to serve the people of the organization for their benefit and the company's benefit.

The meaning of "top management support" has been fleshed out in this work, with energy and values-centered direction being chief components. Energy is needed to drive the PDCA process of safety improvement. Direction is provided by the personal and genuine interaction with the people consistent with the inestimable value placed on human life.

In the recognition that executives can have a decisive influence on the organization for good, and that concrete actions can be taken to drive safety improvement, there is hope and a

road to follow. May all of the executives who read this choose to make a difference in company performance and to contribute to society through the service of others. **PSJ**

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