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IN BRIEF

- This literature review sought to identify themes present in a decade of safety leadership publications, then correlated those themes with information in mainstream leadership models.
- Five themes are common in leadership articles authored by members of the SH&E community: employee involvement, accountability, developing a safety culture, professional safety responsibility and management engagement.
- Safety professionals can use the leadership dialogue within the safety community to identify common ground with an organization's leadership model so that safety can become an integral part of that model.

■or a safety manage-■ ment system to be effective, it must be partnered with an effective leadership technique. This article seeks to establish a model for safety leadership that has been created in light of leadership discussion within the safety community and mainstream thought on organizational leadership.

The Safety Literature

The author explored select literature on safety leadership to determine common ground and benchmark that information against mainstream leadership literature in order to establish a model for organizational safety

leadership. This information was helpful in understanding the degree to which the status quo is being supported or whether innovative aspects of leader-

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ship are needed to incorporate organizational managers in workplace safety leadership.

Articles published in *Professional Safety* from 2000 to 2009 were reviewed to identify common themes related to principles of workplace safety leadership. Doing so informs an understanding of what the safety profession has considered as important when addressing workplace safety leadership. These articles were selected because they present a perspective of what the professional safety community deems as imperative in leading workplace safety.

Articles were limited to those appearing in PS due to the journal's status as the primary peer-reviewed journal within the safety profession. It was essential to limit the research to peer-reviewed articles in order to present perspectives that have been reviewed by those in the safety community rather than simply thoughts and opinions that might appear in non-peer-reviewed publications.

This information was then benchmarked against mainstream leadership literature to determine a model that can be used to effectively engage organizational managers who may already exerganizational managers wno may aneauy excresse leadership skills based on these mainstream models. A sample of mainstream leadership literature was purposefully selected (Creswell, 2007) to deeply explore how themes in safety literature can be integrated into components of these mainstream models stream models.

Although the mainstream models are presented as examples within the scope of this review and general findings are limited to these models, the



general principle of being able to apply themes of safety leadership to mainstream leadership models is the major finding of this research and gives SH&E professionals direction in being able to establish common ground with organizational leaders.

Literature Findings & Analysis

The process of identifying common themes of information in the PS journal articles was utilized to identify core leadership issues. The five themes identified were:

- 1) employee involvement;
- 2) accountability;
- 3) development of a safety culture;
- 4) safety professional responsibility;
- 5) management engagement.

Employee Involvement

Petersen and Dotson (2007) identified employee commitment as essential to the success of a workplace safety management system. Employees are engaged in the daily work being performed, so they have the most invested in their personal safety and know what needs to be done to perform a job safely. Engaging employees and gaining their commitment can increase the quality of workplace safety efforts. Employees have a role in problem solving through the process of identifying hazards in the workplace and determining solutions (Petersen, 2004).

Relationship building between management and employees was identified as an issue of concern by Cooper (2001). Rather than employee involvement being a scripted activity, management and employees should have a healthy relationship that allows for the flow of communication in all directions within an organization. The ability for such communication to occur is contingent on an authentic relationship between employees and management.

Efforts to involve employees in workplace safety can become misguided and establish an incorrect role for managers (Krause & Weekley, 2005). Employees must be involved in workplace safety processes, but management should not abdicate its responsibility for reducing injuries. The relationship must be balanced so that employees can effectively engage in safety while management provides the appropriate amount of leadership.

Geller (2000) approaches employee involvement from a behavioral perspective by communicating the need to give workers control over their environment. By giving employees control over certain things that affect their work, their behavior will change to accommodate the freedom provided. Rather than employees reporting to work and having each aspect of their work planned for them, employees should be given choices and control in matters of workplace safety. This will result in true engagement instead of automated responses to the environment.

Accountability

Managers within an organization must take responsibility for safety (Simon & Frazee, 2005). They must be accountable for safety to ensure that injury reduction efforts are successful. This involves the establishment of consequences for poor safety performance. Simon and Frazee present General Motors (GM) as an example of a radical change in workplace safety. Safety had never been discussed at the upper management level within the corporation until a new director asked about the safety report at the close of a board meeting.

The request was the catalyst for change that caused upper managers to become accountable for safety performance within the scope of their positions. Divisional leaders took it upon themselves to learn about developing a safety culture and safety management system. The result was significant improvement in workplace safety performance.

Organizational leaders must hold others accountable for safety as well (Geller, 2000). They must take the initiative to place safety-related performance expectations on other managers and employees. When safety performance expectations are not met, leaders must hold managers and employees accountable. This process will instill a sense of urgency in relation to workplace safety initiatives and achieving applicable goals.

Geller (2008) expanded his focus on behavioral aspects of safety among employees to include self-accountability among employees. In such an environment, employees engage in safety because of the control they have over the environment. This control then evolves into self-accountability. Employees take ongoing responsibility for their actions without the need for management to hold them accountable.

Development of a Safety Culture

Safety is identified as needing to have a cultural component. For this concept to have meaning, organizations must practically define what is meant when they refer to their safety culture (Blair, 2003). Defining an organization's safety culture can provide freedom in that a single business need not be constrained by a universal notion or definition of a safety culture. One example of this can be found in the area of risk. An organization that operates with high risk levels may have different safety cultural attributes than an organization which operates with low risk levels. This concept provides a great deal of flexibility for organizations to practically define their safety culture.

Once a safety culture is defined, it must be understood by those within an organization (Krause, 2004). Words used to define a safety culture must be understood by everyone so that management and employees can communicate clearly about what the safety culture means and what activities may take place to initiate or grow that culture.

A strong safety culture correlates to general success in business (Krause & Weekley, 2005). When a company develops a strong safety culture, the results are positive effects on business. Many employees and managers may feel a paradox exists between efforts in safety and production (Carillo, 2005).

This is manifested in behaviors that support production activities over a concern for workplace safety. The organizational culture is described as supporting productivity at the expense of employee safety. However, efforts in safety and productivity are not mutually exclusive. Development of a safety culture through an emphasis on protecting employees has positive consequences on business growth.

Developing a safety culture should not be confused with simply allocating financial resources to workplace safety efforts. Simon and Frazee (2005) found that GM had been significantly funding workplace safety efforts and initiatives, yet the organization's safety culture was poor. Financial resources dedicated to workplace safety must be coupled with demonstrable support by organizational leadership. Actions must accompany dollars spent and upper management rhetoric. A safety culture cannot be purchased.

When examining a safety culture, safety should be viewed as a value rather than a priority (Cooper, 2001). A common phrase in industry is *safety first*, which refers to safety being the top priority in every action taken. The inherent challenge with a safety-first philosophy is that safety is being identified as a priority. Priorities change, so the potential exists for situations in which safety is no longer at the top. When safety is identified as a value, it is placed at the core level of being nonnegotiable. Regardless of the environment or level of activity, safety will always be a component of how work is performed.

Creating an environment in which safety efforts are encouraged and rewarded can have a positive effect on developing a safety culture (Hansen, 2000). Encouraging and rewarding safe work behavior and efforts toward reducing injuries have a behavioral impact on a safety culture. When management and employees perceive that their efforts in safety are encouraged and rewarded, they are more likely to engage in such behavior.

An organization's safety culture can be measured (Blair, 2003). Safety climate surveys allow employees to respond to a broad range of questions regarding safety efforts within an organization. Questions may examine the degree of management support and role modeling, employee training, safety activities and the ability for employees to engage in safety processes. Results can help an organization understand the status of its safety culture and what actions can be taken to enhance it.

Safety Professional Responsibility

SH&E professionals have dedicated responsibility for leading injury reduction efforts. Through a safety management system, they can communicate to management what must be done to reduce injuries (Petersen & Dotson, 2007). Safety professionals can provide guidance on regulatory compliance issues as well as safety culture development.

Safety managers often have the attention and support of upper management, but the organization ultimately determines a safety manager's power (Petersen, 2004). An organization may recognize safety as being important and vest the SH&E manager with authority to implement injury reduction measures and hold individuals accountable for assigned responsibilities. In organizations

where this does not occur, SH&E professionals must learn to influence without authority by using effective communication skills.

The safety manager needs to develop an injury reduction approach that engages the philosophy of meeting both his/her objectives and management's operational goals. There is no single best way to accomplish this task (Hansen, 2000). Safety managers must exhibit flexibility in the process of reducing injuries through focusing on what they know needs to be accomplished while considering management's needs.

SH&E professionals must measure organizational safety performance as well. A traditional measurement reflects the number of injuries an organization has experienced over time. However, a low number or lack of injuries does not mean that safety is being managed well (Krause, 2004).

Audits are tools safety managers can use to quantify behavior and conditions that may lead to an injury. The safety manager can observe the physical work environment to quantify the number of unsafe conditions that could result in an injury. Employee behavior can be observed to quantify the number of at-risk behaviors as well.

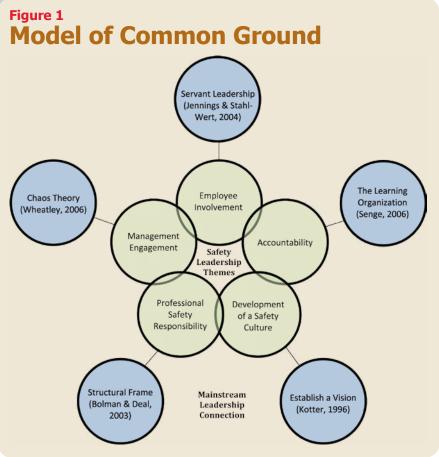
Employee and management performance measurements also can be implemented to gauge the performance of the safety management system (Cooper, 2001). For example, operation managers can be assigned to deliver daily preshift safety reviews. This activity is measured by documenting each event and interviewing employees to determine the effectiveness of the communication.

Management Engagement

Senior managers must focus on multiple areas of a given business. This may result in management focusing on core business issues that directly affect organizational growth (Petersen & Dotson, 2007). Safety management must rise to being a core issue that leadership sees as an important area for which they are directly responsible. Their engagement is critical to the success of injury reduction efforts.

Often, managers tend to engage in safety only when responding to an incident (Carillo, 2005). This process is reactionary and may result in improper decisions being made by management. Rather than becoming involved only when an incident occurs, ongoing engagement in the safety program allows managers to understand an incident within the context of the comprehensive safety management system.

Managers must take responsibility for failure (Geller, 2008). Although a safety manager may be directly responsible for workplace safety management, only senior management can ensure that



safety is instilled as a value within the organiza- The five themes tional culture (Petersen & Dotson, 2007). If an identified were employee is injured due to a fall that resulted from employee involveinadequate fall protection, the senior manager may ment; accountability; be directly responsible because s/he did not budget development of a funds to purchase fall protection harnesses or work safety culture; safety platform railing.

Leaders' behavior and their commitment to sibility; and managecertain aspects of business are predictors of success in those areas to which leadership is dedicated (Krause & Weekley, 2005). Senior managers greatly influence organizational behavior simply by demonstrating support for various initiatives. Other managers and employees will begin to see as important what leaders see as important. This will result in leaders' behavior being transferred to others throughout the organization.

Benchmarking conducted by GM revealed that upper management was actively involved in safety in other organizations (Simon & Frazee, 2005). The process of comparing a poorly performing organization in the area of safety to an organization that has a high-performing safety management system can illuminate opportunities for improvement. GM realized that one area in which it was lacking was direct engagement of upper management in workplace safety activities.

Leadership is critical to workplace safety success in that leaders' words must be supported by their actions. Credibility is at risk if no correlation exists

professional responment engagement.



Common ground can be achieved by integrating safety **leadership** in organizational leadership in a way that fosters the achievement of financial goals.

between words and action (Petersen, 2004). Leaders may say that safety is an organizational value, but they will not be perceived as credible if these words are not supported by allocating money for safety supplies and initiatives, discussing safety performance in organizational meetings and behaving safely in an operational environment.

Culture within an organization is created to a great extent by those in top leadership roles (Blair, 2003). Organizational leaders hold a great deal of responsibility in how they influence organizational culture. They can directly influence the development of a safety culture through their behavior and commitment to safety as an important element of organizational performance.

Senior management should establish the vision for excellence in safety (Cooper, 2001). Regardless of the presence of dedicated safety management staff, senior management holds the power on setting an organization's direction. When senior management establishes the vision, employees and management will perceive safety as being incorporated as a standard component of operational performance. Rather than seeing safety as an independent discipline governed by the safety manager, it will be seen as a way of doing business.

In summary, the themes of employee involvement, accountability, development of a safety culture, safety professional responsibility and organizational leader responsibility found in safety leadership articles published in *PS* between 2000 and 2009 indicate what the safety profession views as critical in developing an effective safety management system. It is now important to benchmark this information against mainstream leadership literature that can influence general leadership techniques employed by organizational leaders.

Finding Common Ground

The trends identified in the *PS* articles are consistent with current mainstream philosophies of leadership. One concept presented is that leaders must be accountable and take responsibility for failure in workplace safety (Geller, 2008). This concept is relative to the learning organization (Senge, 2006).

When the organizational leader takes responsibility for a failure in the safety management system, learning can occur and be applied to the organization to prevent the incident from recurring. An absence of responsibility could prove to hinder this learning and change process. The learning organi-

zation confronts failure as a learning opportunity to improve work processes.

Responsibility plays an important role in the process. When leaders accept responsibility as is done in the learning organization, change can occur that can reduce workplace injuries. An SH&E professional who works in an organization that directly or indirectly bases its leadership style on Senge's (2006) learning organization can enter the dialogue by helping leaders see the connection between lessons learned from an incident and improved organizational performance.

Although leaders may easily understand the direct costs associated with an incident, an SH&E professional can gather and present data on the much larger indirect costs that can have a negative effect on organizational performance, such as loss of production quality due to a nonexperienced employee performing work normally handled by an experienced employee who has been injured and is away from work. These opportunities can serve to communicate information in a way that organizational leaders are accustomed to perceiving and learning from incidents that affect performance.

As noted, the organization determines a safety manager's power (Petersen, 2004). Organizational leaders can establish the safety function as one which has power. Bolman and Deal (2003) refer to this as a structural frame of leading organizations. The leader must structure an organization so that it achieves maximum efficiency. A safety management system is one tool a leader can use to maximize organizational efficiency because it helps prevent losses from injuries and incidents that damage property.

Time lost in production results in dollars lost to the organization. Suppose an employee operating a forklift loses control and strikes a machine. Because of the incident, the facility cannot continue production; dollars are lost through nonproductive employees being paid until the machine is repaired; and sales are lost due to missing deadlines. Leaders can use the structural frame as a way to incorporate safety into the way the organization is structured operationally.

A safety professional may find himself/herself in a position vested with power. In these cases, common ground already exists in that the SH&E professional has power and can function productively within an organization's structural frame.

However, others may be in a position where they must influence without authority. In such situations, safety professionals can open the dialogue with leaders to discuss the value of vesting the safety function with authority that is equivalent to others at similar levels within the organization. The SH&E professional can use the structural frame to speak in terms common to leaders in order to transition the safety position to one that can be maximized to help organizational leaders achieve the highest possible degree of operational performance.

Although uniform regulations govern workplace safety, there is no single best way to accomplish this task (Hansen, 2000). Each organization has

unique attributes that are exemplified through apparent chaotic activity (Wheatley, 2006). In the midst of this chaotic activity is a form of equilibrium. The seeming chaos and actual equilibrium are unique to each organization due to the specific variables and diversity present among its people, within the business's daily functioning, and type of product or service provided.

For injury reduction efforts to be effective, safety management must be adapted to the unique chaos that occurs within an organization. One model of safety management will not work in every organization due to the diversity of how organizations function. Safety professionals can use chaos theory to approach the workplace from a completely open point of view. Rather than having a preconceived notion of what safety solutions are needed, safety professionals can first observe the organization to determine its unique equilibrium, then determine what techniques will work successfully.

For example, a hierarchical organization may benefit from one approach that might be counterproductive for an organization that utilizes bottom-up problem-solving techniques. Different methods work for different organizations and it is this chaos that challenges the safety professional to determine the variables at work and design an effective strategy to address workplace safety.

Compassion for others may be one avenue for leaders to understand their safety responsibility (Krause, 2004). Some leaders may respond on an emotional level to an incident or lead workplace safety due to an emotional connection with employees and managers. Bolman and Deal (2001) refer to this as leading with soul in that "the human heart is more than a pump" (p. 25). Leaders may have a heartfelt connection with those in their charge and this connection can be utilized to accomplish injury reduction.

Employee injuries result in significant trauma to the individual, coworkers, supervisors and their families. Leaders who lead with soul can identify compassion as an area to focus attention with the result of not only saving money through loss prevention, but also in providing employees with a greater quality of life.

Safety professionals can be sensitive to leaders who execute their responsibilities with a great deal of compassion for those in the workplace. Rather than attempting to reach these leaders by charting statistics, such as graphs of injury rate reduction and departmental performance, the SH&E professional can make an emotional appeal by telling the story of incidents and their effect on employees who were involved. The safety professional can maintain objectivity in managing a situation while communicating on an emotional level with leaders.

Credibility is at risk when words and action are not connected (Petersen, 2004). Leaders must live the words they speak and create an environment that allows others to be successful. Servant leadership is a leadership philosophy that seeks to demonstrate authentic leadership by giving a voice to all employees (Jennings & Stahl-Wert, 2004). First,

leaders must "upend the pyramid" (p. 43) by placing themselves at the bottom and instilling power and a voice to those who perform work on the plant floor.

Later in the process, the leader is to "blaze the trail" (p. 46) to performance excellence by placing action to words. Employees performing work may be best equipped to determine hazards that exist and ways to mitigate them. The servant leader creates an environment where employees can openly voice concerns and recommendations that can result in positive change to the way work is performed.

This management philosophy is the epitome of implementing opportunities for employee involvement. An SH&E professional in an organization that uses servant leadership can engage employees by seeking their input about how to make the workplace safer. Servant leadership attempts to vest employees with power by upending the pyramid and acknowledging that they know the most about what is needed to make work effective.

This is a shared concept in safety in that employees are viewed as those who are best positioned to identify risks associated with work as well as how to make the workplace safe. Safety professionals can use this leadership style to enable employees to make substantive contributions to risk reduction.

Senior management should establish the vision for excellence in safety (Cooper, 2000). This issue coincides with the need Kotter (1996) presents for leaders to establish an organization's vision. Rather than being authoritarian or micromanaging employees, the leader can establish and communicate a clear vision of where the organization needs to go. Then, employees and managers can rally around the vision and contribute to its attainment through a culture that facilitates open communication and engagement.

Workplace safety management is enhanced when it is part of the organizational leader's vision. Employees and managers will perceive workplace safety as one of the organization's critical components and will be influenced to engage in injury reduction efforts. Safety professionals may be exposed to leaders who integrate safety into their vision. This environment sets the stage for safety professionals to maintain open communication that properly informs leaders regarding safety so that it may be integrated in the organization's vision.

Where safety is not part of a leader's vision, the safety professional must productively open communication with leaders and explain how safety can be used as a component to facilitate the leaders' current vision. This partnership may make leaders aware of safety as an additional resource to facilitate excellence in organizational performance.

This information illustrates how themes identified within the safety community as being important when leading safety have connections to leadership philosophies espoused in mainstream literature. SH&E professionals can identify a management philosophy that exists within their organizations and determine where common ground exists between the components of that philosophy and the themes of safety leadership identified in this review.

SH&E professionals have an opportunity to integrate safety into managerial and leadership dialogue where common ground exists.

Although select mainstream leadership texts have been presented, the concept of identifying common ground can transcend this limited comparison to evaluating numerous mainstream leadership models. For example, Lencioni (2002) addresses the leadership failure of avoiding accountability as an issue when developing teams and evaluating team performance. This issue can be connected to the safety theme of accountability where leaders must accept accountability for safety within the scope of their responsibility.

Covey (1989) identifies the ability to synergize as one of the seven habits of highly effective people. This habit relates to the safety leadership theme of employee involvement in that rather than leaders dictating what activities must occur, synergy can occur among individuals at all levels to identify the most productive avenue to develop safety strategies. Rich opportunities exist to connect the themes of safety leadership with existing mainstream leadership. Doing so can help SH&E professionals establish common ground in communicating with organizational leaders.

Leadership & Safety Management Systems

The importance of organizational leadership engagement in effecting strong safety performance is prevalent in safety texts (Geller, 1996; Petersen, 2001; Manuele, 2003; Krause, 2005; Schneid, 2008). Leadership also has been addressed through guidance provided in organized safety management system documents published by ANSI (2005) and OSHA. Both ANSI and OSHA identify leadership as a core component of effective safety management.

Specific connections exist between the themes identified in this study and the management system information published by OSHA and ANSI. The research behind both of these standards indicates the degree to which good leadership leads to good safety performance as is indicated by the content of the systems.

For example, OSHA includes four of the five safety leadership themes found in this study as components of a safety management system:

- 1) Employee involvement: reasons workers must be involved and avenues through which to do so.
- 2) Accountability: establishing performance standards, providing resources, designing a measurement system, applying consequences and implementing these at all levels in the organization in a system for accountability.
- 3) Development of a safety culture: elements of a safety culture.
- 4) Management engagement: reasons leaders need to become engaged in safety and avenues through which this can be accomplished.

Rather than safety leadership being relegated solely to safety professionals, safety management system standards indicate the degree to which safety leadership must be shared throughout the organization. Avenues can be identified through which organizational leaders become engaged and demonstrate leadership that results in improved safety performance.

The Business of Safety

The themes of safety leadership highlight the need to understand an organization's business component. The safety leadership themes present a key list of success factors that safety professionals can use to find common ground within an organization's primary leadership philosophy. The financial aspect of organizational performance presents another opportunity for SH&E professionals to achieve common ground by clearly articulating the value of safety in achieving financial goals.

The business case for safety can be made by equating the investment of financial resources in safety to its effect on the organization's profitability. Manuele (2011) addresses the need to adequately reflect the cost of incidents. Direct costs of injuries can easily be captured by quantifying such things as medical expenses, disability payments, attorney fees and property damage repair costs.

Indirect cost is much more difficult to determine. Indirect costs, such as lost sales, increased operational cost and loss of quality, require a great deal of work and an appropriate methodology to identify and calculate accurately. Due to the large spectrum of industries, indirect costs will vary greatly among organizations.

However, once these data are accurately identified, a business case can be generated for implementing safety within an organization through the use of statistical tools that can be used to correlate dollars spent in safety with projected cost savings related to reducing the number and severity of incidents. The information provided will communicate a specific return on investment for money allocated to safety.

Although safety is an ethical issue in that corporate responsibility dictates the need to protect all employees, it is also a financial issue from both cost and benefit perspectives. Lack of safety can result in direct and indirect costs when incidents occur. Proactive safety also generates cost to an organization through areas such as salaries paid for safety professionals, employee training and purchase of equipment needed to protect employees.

However, the safety profession can add value financially through money saved in lowering incident frequency and severity, and influencing operations through increased quality of production by maintaining a functional work environment with highly skilled personnel in place.

Common ground can be achieved by integrating safety leadership in organizational leadership in a way that fosters the achievement of financial goals. Finding this common ground can position safety as a value-added component integrated into organizational leadership.

Conclusion

If the learning adults wish to learn in a social environment in which their intellectual alertness will count for something (will get itself realized, i.e., in power, creative expression, freedom, etc.) they will be as eager to

improve their collective enterprises, their groups, as they are to improve themselves. (Lindeman, 1961, p. 104)

This statement sets the stage for safety professionals to "improve their collective enterprise" by further exploring the factors that influence the leadership of workplace safety within organizations. This article has provided a brief glimpse into the connection between what the safety community has deemed as important in workplace safety leadership and corresponding mainstream thought on leadership. SH&E professionals have an opportunity to integrate safety into managerial and leadership dialogue where common ground exists.

The safety literature indicates the need for management to be engaged in workplace safety (Blair, 2003; Carillo, 2005; Cooper, 2001; Geller, 2000, 2008; Krause, 2004; Krause & Weekley, 2005; Petersen, 2004; Petersen & Dotson, 2007; Simon & Frazee, 2005). Managers must articulate support for workplace safety and follow such words with actual engagement in workplace safety activity. Safety professionals can facilitate the integration of safety leadership principles into an organization's leadership philosophy by understanding the points at which these principles intersect.

Although workplace safety management has progressed, it is far from reaching the complete positive effect that it can have on industry and the economy. The significant losses experienced each year from work-related incidents present a clear need to integrate workplace safety into organizational leadership. This can result in more productive relationships between safety managers and organizational leaders. The greatest effect will be on saving and enhancing employees' quality of life.

At numerous points, the principles of safety leadership correspond to mainstream models of organizational leadership. Recognizing this common ground can help SH&E professionals set the stage for constructive dialogue on the integration of safety as a core component of organizational leadership. **PS**

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