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Successful organizations have learned that they have to do more than deal with just the technical barriers.

Many sites struggle with poorly performing personnel and physical assets. Operators not running and maintaining the assets properly, or maintenance personnel not performing adequate maintenance can lock operations into a frustrating, reactive environment. This type of environment perpetuates performance problems that lead to higher operating costs as well. Organizations in this mode are looking for answers, but not always in the right places. Many desire to achieve Reliability Excellence but underestimate or take the wrong approach to achieve that goal.

The term "Reliability Excellence" typically sparks thoughts of new equipment or new technical, tactical ways to fix problems. Although the equipment or technical elements are sometimes part of the solution, they are only a small part of the picture. Reliability Excellence is a holistic, systems approach focused on eliminating waste and losses through business process re-engineering, culture change and technology related to the reliability and performance of assets. The most critical success factor is culture change.

To evolve from a reactive environment to a proactive one, an organization must change its culture. Working with others on their journey from reactive to proactive over the years, our organization has observed that up to 70% of management's attention needs to be focused on culture change, with only 30% focused on applying tactical or technical solutions.

The groups that were successful in their journeys shared a common focus: Culture change was at the core of their thinking and subsequent actions. Having actively involved leadership and a focus on Reliability Excellence proved to be the cure for their reactive and costly environments.

Let's call these successful organizations "survivors," since their journey to excellence has equipped them to weather financial storms.

In pursuing Reliability Excellence, the survivors have followed a proven methodology. Despite the many technical aspects within this methodology, ultimately it was the attention to change management that determined success. Key elements in achieving Reliability Excellence include:

- Leading with education
- Assessing the current condition
- Closing the gaps
- Communication, risk plans and education
- Operations-owned reliability
- Complete employee engagement

Leading with education

Leading with education was always an important first step in the survivors' successful journeys. This created the awareness and desire for change. Plant leaders attended multi-day training sessions that covered not only Best Practices, but more importantly, taught them the significance of their role in the culture change—*and how their actions or inaction coud spell either success or failure.* They learned about specific techniques and tools that they could use to achieve the needed change in behaviors. The understanding and application of situational leadership would become an important tool for properly addressing the emotional ups and downs that are typical with change initiatives. This education was coupled with individual coaching at all levels throughout the organizations.

Assessing the current condition

In order to chart the proper path for change, survivors assessed their current practices, and compared what they were doing against Best Practice. Often without realizing it, this also was an educational event for their organizations. Many participants had been unaware that better practices existed outside their respective worlds. Learning that they did helped them better understand the need for change—*as well as the significant challenge and opportunity in front of them*. In all cases, the "pull" for change within their organizations increased by the end of the assessment.

The gaps found were then translated into a master plan of actions to close the gaps in each area. This concrete, sequential part of the project was well understood by everyone involved. It

was, however, harder to understand the gaps associated with culture change. When the survivors clearly saw that the organizational culture elements needed improvement and focused appropriately, they found the key to their success.

Closing the gaps

The next step was to select cross-functional team members that would focus on closing the gaps that existed in their current practices. Cultures are changed from within, and selecting the right people to be on the teams was crucial. This was the beginning of the relationships and partnerships that would be needed during implementation and sustainment. The time spent upfront in selecting the appropriate team members added another success component to their path.

Substantial analysis and design went in to closing each gap—*simply "checking the box" was not an option.* Survivors learned that there was no such thing as passive culture change. They quickly discovered that achieving excellence would entail much more time and effort, including actively addressing the people-side of these gap closures and ensuring active sponsorship by leadership. When re-engineering their current business processes, they learned that change makes people uncomfortable and that direct communication, training and support would be needed to move the organization from their current comfort zone to the identified, and often scary, "Best-Practice target condition."

Communication, risk plans and education

Successful transformations included active communication and risk plans that were carried out to the floor by plant leadership. This visible leadership component helped change fear to trust—*and led to the belief that things would be different, but better.*
Survivor companies employed situational leadership methodologies to manage the varying emotions demonstrated during their transformations.

Planner/schedulers, reliability engineers, material managers, supervisors and trades people were trained in Best Practices and culture change relating to their roles. All employees attended Reliability Excellence awareness sessions. This education continued to create the needed "pull" for change.

Operations-owned reliability

Another important aspect of achieving Reliability Excellence was transferring the ownership of

reliability to the asset owners. Key managers were coached on the specific actions that they would need to take to accomplish this culture change. At its core, this shift required managers to start asking different questions of different people within their organizations—*a major paradigm change.*

Typically, plant leaders were holding the operations groups accountable for key performance indicators (KPIs) like tons produced, quality and safety, among others. The maintenance groups were responsible for KPIs like maintenance costs, PM compliance, schedule compliance, safety and overall reliability of the equipment.

The plant leaders changed this paradigm dramatically. Operations managers were now to report a different set of metrics at weekly staff meetings. They were expected to create partnership agreements with maintenance and other key parts of the organization—*so that success or failure would be shared.*
The maintenance organization became a supporting group to the operations groups, with shared goals, instead of being seen as a service organization. This was another key step in their change process.

A very simple analogy in the form of a question was the basis for this change of ownership:

"Who owns the reliability of your car? The owner, or the mechanic that services it?"

The answer was obvious: The asset owner. This new way of thinking now required that specific actions be taken. Operational groups began measuring overall equipment effectiveness (OEE) and collecting data that pinpointed their bad-actor assets. This, in turn, created a pull by operators to get assistance from reliability engineers in solving their reliability issues. These issues typically included not only equipment concerns, but also operating deficiencies in how the equipment was operated, started up and shut down.

Maintenance and operations began working together to plan and schedule proper maintenance and reliability activities. That's because it was now important to the asset owner that the equipment be operated and cared for properly. Standardized work became the norm for both operators and trades people. The organization was—*at last*—paying attention to leading indicators, not lagging ones.

Complete employee engagement

For survivor organizations, another key part of the culture change was the involvement and engagement of all the employees. People not directly involved with the teams were also trained on their role in this new way of thinking and acting. This was followed by one-on-one coaching across all levels of the organization. Specific questions were routinely asked of these individuals as well in order to affect their behaviors. The goal of such efforts was to transfer knowledge and ownership of the change to every part of the organization, thereby institutionalizing the desired practices and behaviors. Regular audits were performed and subsequent action plans were created to close any remaining gaps. This led to long-term sustainability of the improvements.

Conclusion

Organizations successfully traveling the road to Reliability Excellence considered its implementation to be more than just a technical project. Arriving at their desired destination required active participation and communication from leadership, education to build buy-in from across the organization, asking the right questions and taking the appropriate actions to build accountability and sustainability. Survivor organizations that have followed this path have successfully transformed their cultures from reactive to proactive, and in achieving Reliability Excellence have also dramatically improved their bottom-line business performance. **MT**

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