

# THE RELIABILITY JOURNEY

MITIGATING ORGANIZATIONAL GAPS

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# THE RELIABILITY JOURNEY MITIGATING ORGANIZATIONAL GAPS

Regardless of the industry, the reliability journey starts with putting key fundamentals in place to build a strong core foundation. The ultimate goal of this journey is to deploy an effective reliability program within an existing organization. While there are many cases of successes and failures, understanding the elements that allow for a robust foundation is essential to mitigating organizational gaps that may impede progress. With the excitement of going down a new path, it is easy to lose sight of the importance of the organizational structure. This eBook addresses how to avoid such pitfalls.

#### **ORGANIZATIONAL STRUCTURE REVIEW**

It pays to take the time upfront for a complete review of the current organizational structure, with buy-in and backing from leadership to gain enterprise-wide alignment. When gaining alignment, it is extremely important to have the right personnel in the room; for example, key site management, site HR, and corporate representation. Findings from this review process may very well lead to additional headcount, resource reallocation, and reassessment of capabilities and skills. All of these changes must be made within the context of applicable regulatory guidelines.

## **ROLES, TASKS, AND RESPONSIBILITIES**

Key to foundational requirements is a clear understanding of each **role** within the organization, delivered in the form of a job description that lists: essential duties and responsibilities, required education/experience, and mandatory skills and abilities. Once the organization as a whole has established alignment on these foundational requirements and implemented the changes, the reliability process and programs can be developed.

When a organization does not set the tasks of reliability program implementation in the correct order with the correct priorities, significant gaps are exposed and creditability and buy-in can diminish rapidly. The organization could easily invest over a year working to deliver a highly effective standardized Work Execution Management (WEM) process that may fall flat. It can take significant time and valuable resources to re-gain alignment and re-focus the organization to continue to move forward.

#### **BEST PRACTICES**

It is recommended to establish manufacturing Best Practices from the beginning and stay compliant with necessary guidelines and laws of applicable industry regulatory agencies. While taking the time to do so may seem cumbersome, the benefits will be tenfold. The implementation and journey will be smoother. The results will present themselves through manufacturing Best Practice metrics, as well as help the entire organization through Best Practice sharing with other site counterparts when the opportunity is present.



"A ROBUST FOUNDATION IS ESSENTIAL TO MITIGATING ORGANIZATIONAL GAPS."

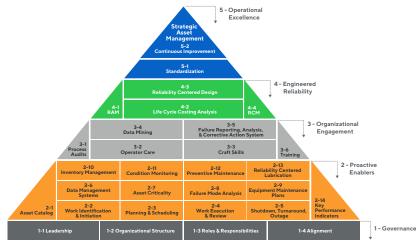


# SITE ASSESSMENT AND FEASIBILITY STUDY

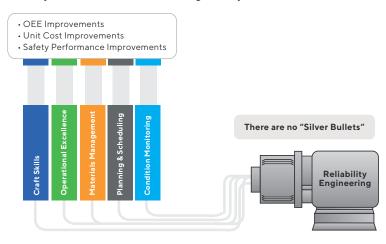
The first big undertaking for any organization starting their reliability journey is a thorough site assessment and feasibility study. This can be done via an external resource with the appropriate tools and expertise for conducting the evaluation in a professional, non-biased manner.

#### **Reliability Systems Model**

During this phase, there must be a clear **understanding** and alignment regarding the "future state." It is imperative to review the current practices, perform an in-depth gap analysis, and itemize a list of changes needed to achieve that future state. It is also important to review all aspects of reliability and organizational effectiveness, as outlined in the Reliability Systems Model (shown in the below pyramid-shaped diagram).



Organizations should compare the Best Practices in each category, within levels 1 through 5, to the actual execution and degree of integration. Remember, there is no silver bullet that is going to solve all the reliability issues at a manufacturing facility.





"THERE MUST BE A CLEAR UNDERSTANDING AND ALIGNMENT REGARDING THE FUTURE STATE."



# **Current Practices**

Current practices should be fully understood, documented, and include all facets from the leadership and organizational structure to the execution and closure of work. This is often an eye-opening experience, and if using an external resource, it is frequently tough to hear. It gives visibility to many of the systems and processes that are in place, as well as those that are hidden, not documented, or informal but part of the "current state." When the team has completed the documentation and discussion of the current state and review of the current practices for the site, as well as Best Practices, the future state development can begin.

# Gap Analysis

It goes without saying that most organizations in their current state do not pay much attention to the differences (gaps) within a given facility, as they are focused on the site's production. It is during standardization of Best Practices and the desire to improve asset and program reliability that these differences come to light.

A gap analysis helps resolve the differences/inconsistencies, as it encompasses maintenance management systems, site organizational structure, roles and responsibilities, etc. The organization should understand that skipping this step incurs significant risk and drawback. Therefore, it is important to have a cross-functional Reliability Team responsible for evaluating the gaps across the site, as well as a site champion to ensure follow through. The team should also note Best Practices at the site to be leveraged against the plan and vetted against future state, world-class Best Practices. The exercise will no doubt generate a significant amount of discussion and a long action item list. But it is well worth doing as a strategic building block for reliability program success.

## **Changes Needed (Future State)**

Every change management strategy, big or small, must begin with a clearly defined need for change. In most business applications, this is relative to financial performance in the form of revenue gain or cost reduction. The business case for change is, therefore, the financial risk to the organization if the improvement efforts are not adequately adopted by its employees. When communicating needed changes across the site to gain alignment of the core elements, leadership, organizational structure, roles and responsibilities, etc., push back is bound to happen.

It is the Reliability Team that must bring forward the best communicator and change agent with the message of where the organization is headed and what it takes to get there. Organizationally, the changes will be within documentation, reporting structure, duties, processes, and the most challenging, changing the culture. All actions the team identified (in the gap analysis) need to be implemented and adhered to, as they are the prerequisites for moving forward with the organization's reliability strategy.



"MOST ORGANIZATIONS IN THEIR CURRENT STATE DO NOT PAY MUCH ATTENTION TO THE DIFFERENCES (GAPS) WITHIN A GIVEN FACILITY, AS THEY ARE FOCUSED ON THE SITE'S PRODUCTION."

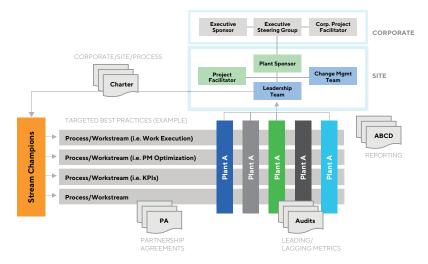


## **RELIABILITY PROGRAM PREREQUISITES**

The reliability journey and the associated programs are full of wants and needs; however, it is in delivering the "needs" on the core elements that the "wants" will fulfill themselves. For example, a common want is: "I want to control asset repairs using planned work." Well, in order to deliver the want, we would need to establish a good organizational structure, with a planning and scheduling work team, a robust kitting process, and so forth.

#### **Process Governance**

The sequencing of how the organization deploys its reliability program is critical with regards to process governance. Programs within the strategic reliability plan are often dependent on one another. Meaning, if not done in the correct order, the programs may be stopped from moving forward, or even lose momentum of credibility in a crucial time when buy-in at various level may be volatile. Therefore, after the site assessment and feasibility study are completed, it is important to clearly identify programs, develop a detailed deployment plan, and begin implementation of the foundation for success. To facilitate this process, a strong governance structure and support processes (illustrated in the below diagram) must be put in place to drive the organization toward established Best Practices in the reliability process workstream.



#### **Program Development**

A reliability program has various elements that allow for a robust program to get you to a reliable state; however, it does take time. Through the assessment and feasibility study, critical information was captured to identify maturity and Best Practices at the facility, as well as the lack of reliability processes; and target areas that need to be improved were also identified.

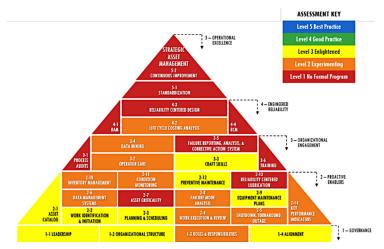
A visual layout of the site regarding its strengths and weaknesses will help with developing the program with a future state mindset. The idea is to achieve the same future state so that the overall

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"IT IS IMPORTANT TO CLEARLY IDENTIFY PROGRAMS, DEVELOP A DETAILED DEPLOYMENT PLAN, AND BEGIN IMPLEMENTATION OF THE FOUNDATION FOR SUCCESS."



program is standardized. This gives visibility to deployment sequencing, which will strengthen core fundamental principles and generate optimal prioritization of critical processes within the Reliability Systems Model. Below is an example of Reliability Systems Model of the current state.



#### **Deployment Roadmap**

The reliability journey becomes more evident with a fully integrated roadmap, or deployment strategy, with details that shows the sequencing and status for the entire site. This give the implementation team, from the corporate level to the site-level champion, all the information about what is being implemented, what is next, and how well the plan is moving forward. (See the below example of an Information Tracking Sheet.)

	PROGRESS					PROGRESS KEY
		SITE 1	SITE 2	SITE 3	SITE 4	None
LEADERSHIP	PRIORITY				-	Some
Leadership Governance	1	<ul> <li>Image: A start of the start of</li></ul>	<b>√</b>		<b>√</b>	Partial
Change Management	2	<ul> <li>Image: A start of the start of</li></ul>				Good
Reliability Indoctrination	3	<ul> <li>Image: A start of the start of</li></ul>				Complete
ORGANIZATION STRUCTURE						
Process Champion in Place	1	-			1	
Process Teams Established	2		-	-	1	

The corporate champion needs to be fully aware of what state the facility is at during the launch and be ready to administer support when needed. The site champion also needs to be aware of the current state and the sequence for deployment. Subject matter experts (SMEs) from other sites or external resources can be used, as well, to aid in the deployment of reliability processes. This helps to ensure the integrity of the program and those processes within company oversight. Full engagement is essential to delivering standardization and course correction, as required. Finally, routine workshops and assessments should be set to a frequency that ensures continued forward movement and prevents stagnation or going into retrograde mode.



"FULL ENGAGEMENT IS ESSENTIAL TO DELIVERING STANDARDIZATION AND COURSE CORRECTION, AS REQUIRED."



## **Foundations for Success**

Rolling out a reliability program and the proactive enablers seems relatively easy with respect to verbal acknowledgement and visibility of the plan. However, without specific proactive elements in place, the journey will stop as fast as it started. Refer to the Reliability Systems Model proactive enabler elements shown below.

	2-10 Inventory Management	2-11 Condition Monitoring	2-12 Preventive Maintenance	2-13 Reliability Centered Lubrication	
	2-6 Data Management Systems	2-7 Asset Criticality	2-8 Failure Mode Analysis	2-9 Equipment Maintenance Plans	2-14
2-1 Asset Catalog	2-2 Work Identification & Initiation	2-3 Planning & Scheduling	2-4 Work Execution & Review	2-5 Shutdown, Turnaround, Outage	Key Performance Indicators

It is of paramount importance to have leadership engagement, meaning the leaders are talking to the teams and keeping the vision of where the company wants to be in front of them at all times. Key stakeholders and champions responsible for site operations need to have full access to the content and drive to standardization, staying engaged with regular frequency in the governance. Knowledge of roles and responsibilities, i.e. who the person is who impacts specific processes, and how they will help the champion and core team achieve specific milestones, is also necessary.

Solid alignment at each level is critical, from the most senior leadership to the process and site champion. Each of these foundational proactive enablers should be talked about regularly and kept in front of all levels of the teams (both corporate oversight and facility), to avoid serious consequences that can make the journey more difficult and drawn out.

# **COMPANY ALIGNMENT**

A company needs to be fully engaged and ready to head down the path of implementing reliability improvements and embrace global manufacturing Best Practices to gain a more competitive edge. But one cannot assume this is actually happening, even with the foundation being laid. There must be genuine commitment, whether through project charters or program-acknowledged documentation of some sort. This includes commitment from senior leadership, team members, site leaders, and the site champion, at a minimum. Failure to gain such commitments can have a significant impact should you need support to break down gaps when trying to course correct. Lack of support can stop the improvement process in its tracks, creating a gap to making all the necessary changes and maintaining standardization. Setting strict guidelines for standardization, thorough vetting, and a formal review and approval process for changes or deviation from the standards are a must. It is good practice for any plan executed to have contingencies in place to be used if/when the need arises to keep the momentum going, without compromising the overall drive to a reliable state.



"SOLID ALIGNMENT AT EACH LEVEL IS CRITICAL, FROM THE MOST SENIOR LEADERSHIP TO THE PROCESS AND SITE CHAMPION."



# Commitments

Many think that reliability is easy, that it just entails keeping the equipment running. "How hard could it be?" you may ask. However, this is a misconception that will create a gaping hole in your journey to a reliable state. Reliability means having an asset function according to its intended purpose the same way, every time. While this is true at the ten-thousand-foot view, a Best Practice or "world class" definition is that plus all of the various processes and tools that allow every asset to have a fully-integrated asset lifecycle strategy, including coaching and mentoring, root cause analysis, predictive technology everything in between.

It is to this end that commitment is critical. We have all been told at some point, whether in our professional or personal lives, that we need to be either "all in" or "all out". Well, reliability works the same way. We need an all-in commitment from the leaders and the drivers to follow through on the path to reliability, no matter what it takes, because achieving a reliable state cannot be done with half the effort or partial processes. This commitment may require some educating of key stakeholders to help them fully understand the journey they are about to embark on and what it will take to get there. It is the site's cross-functional team that works with all leaders, including the site champion, to gain this commitment to the roadmap, the milestones, and the cost. They all need to move together towards organizational alignment and a future state that utilizes governance for continuous improvement and standardization.

## Success

The ultimate goal for the organization as a whole is to achieve the future state that was envisioned before the journey began. This is not an overnight success, but an accumulation of wins by meeting milestones and maturity levels that demonstrate progress. The quest towards a controlled reliable state needs to be communicated to all personnel. The core team will help expedite this by removing cut-throat competition across the site and communicating the unified front to achieve overall success. This establishes a gateway for sharing Best Practice and breaking down walls, as well as energizing the relationship building among counterparts.

No limit should be set on relationship building, as it needs to develop down to the shop floor. This can also be done by bringing teams together through workshops, milestone celebrations, or lunch and learns for discussion of Best Practices, coaching and mentoring, and process changes for improvement. It is our experience that using these different tools to drive the company to achieve overall success has helped organizations move down the reliability path quickly, with relatively small hiccups.

## Summits and Governance

Program governance is one of the biggest contributors to achieving overall success in eliminating and mitigating organizational gaps while on the reliability journey. Ongoing vigilance is necessary at many levels to ensure that standardization and action plans are implemented and fine-tuned, as needed, across the organization for continuous improvement.



"ONGOING VIGILANCE IS NECESSARY AT MANY LEVELS TO ENSURE THAT STANDARDIZATION AND ACTION PLANS ARE IMPLEMENTED AND FINE-TUNED."



Governance within the facility is often held at the department and leadership levels. The frequency is usually set by maturity and covers several topics in a short period to keep personnel informed and develop corrective actions for troubled areas.

- Department governance is held with key stakeholders and designated reliability champions for each area, with agenda-driven discussions and commitments to action plans to continue to improve reliability.
- Leadership governance is comprised of the key leadership in the facility to review the current status and administer action plans to break down gaps and hold accountability for deliverables. It should be a rolled-up reflection of the facility

The organization should see the importance of getting workstream owners or teams together for summits or off-sites to engage in person and work through constraints and changes that impact the overall program. This gives the opportunity for open communication and quality dialogue, to again maintain alignment through the organization as whole. These have helped time and time again within organizations to gain consensus around proposed program changes and processes that ultimately impact the way we conduct business within the reliability space. This type of collaboration is significant and allows changes to also be vetted, so as not to compromise regulatory agency requirements. If the organization wants the fastest way to get things accomplished while maintaining alignment, standardization, and commitment, all while building team relationships, this is the platform to do it.

#### **SUMMARY**

Deploying a robust strategic reliability program is no easy task, and not understanding how to overcome organizational gaps is a recipe for hardship and elevated risk of failure. While there is constant gap analysis along the way, it is imperative to take the time to assess, review, and mitigate the critical finds upfront – and it all starts with the core cross-functional team's assessment and feasibility study, and then making the required changes. We must know the site's maturity levels, develop the program, and gain the alignment needed for success.

Launching a reliability program in a facility may have its ups and downs; however, gaining alignment and establishing communication through summits and governance will, without question, move the program along, maintain continuity, and build a strong unified front. We have experienced what gaps within the organization can do, leading to a slow recovery, program stall, and painful buy-in rebuilding. No one can effectively build a roadmap for a journey without first knowing where you are and where you want to be. This includes identifying what obstacles you will encounter along the way, so your roadmap contains the instructions for how to navigate those obstacles when you encounter them.



"NO ONE CAN EFFECTIVELY BUILD A ROADMAP FOR A JOURNEY WITHOUT FIRST KNOWING WHERE YOU ARE AND WHERE YOU WANT TO BE."



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We have a proven asset management methodology to help you manage your assets across their entire lifecycle. The approach ensures that business strategy is connected to asset strategy, facilitates continuous improvement, and allows for entry into the process at any point, regardless of where you are on your reliability journey. We are the only provider with an end-to-end solution.

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