

4 reasons why you need to draw a new roadmap to improved reliability



Reliability Success: All in the Details

Want common-sense solutions to reliability issues? Give everyone a seat at the table



■ Marie Getsug is a senior consultant for maintenance and

reliability services with Commissioning Agents Inc. As a technical and discipline lead with CAI, she works to promote maintenance and reliability professionals and OEMs as stakeholders in front-end planning (FEP) for capital projects and demonstrate how the foundational principles of ISO 55000 asset management standards – leadership, value, alignment, and assurance – make asset management everyone’s responsibility.

PS: You have 25 years of experience in the maintenance and reliability field. You organized and chaired the SMRP Pharma and Biotech shared interest group four years ago. You’ve developed training courses on reliability concepts. What have you learned about what it takes to be a leader in the reliability field?

MG: Defining and being guided by the purpose, goal, mission and vision shared by the entire leadership team absolutely needs to become priority over what you are doing with your own discipline and the team you represent. I’ve been a maintenance and reliability manager for decades, and when I first served on a senior leadership team, I sat on it with the mindset that I’m going to protect my team and their interests related to maintenance and reliability. I was very protective of my team, as I think a lot of people are. You have this natural tendency to protect your team, but at the same time by doing that you could be sacrificing the potential good of everyone. It becomes clear that if you’re going to be a really strong leader and pull the whole company or firm together that you have to represent the leadership team in a way that is even more strongly represented than what you would do for your own team. So you cannot in any way, shape, or form diminish the decisions that are being made at the senior leadership level.

PS: Could you give a quick definition of what design for reliability means to you?

MG: Design for reliability is really about looking at a project from an entire lifecycle approach. There are

three aspects to DfR: designing out failure modes; ensuring the design is maintainable, reliable, cleanable, operable, etc.; and leveraging current M&R specifications and standards, unless a new technology can demonstrate value from straying from them.

I think a lot of times especially young folks get out and they look for the most amazing technological solution to a problem. Their efforts become very focused on the asset or the technical solutions that might be available. What design for reliability does is it adds a couple of elements. One is, what does the project team need to do to design this project to fulfill the project’s objective and make it user-friendly?

I’ve seen where you can’t literally open a door because it’s right slammed up against a wall or you can’t move a gear box because it interferes with the ceiling. So it’s about maintainability, reliability, accessibility, cleanability, operability and just having those factors consciously included in the concept, initiate, and design phases.

DfR also involves designing out failure modes – especially those on like pieces of equipment so as to learn from previous experience. In addition to these, it includes honoring what is already estab-

lished in that particular plant. So if a maintenance and reliability team has standardized (use of a particular line of products) and they have all of the training and all of the spare parts and everything set up in the plant to support those specific items, then if you're not mindful of that and you go in and put in something completely outside of the standards of what that team is used to, then it presents a whole lot of additional challenges for training, for stocking spare parts, and for having to relearn the system.

Gaining and documenting those maintenance and reliability specifications and standards helps to make sure each project, when it is handed over to the maintenance team to take care of it for the rest of its life, that it's built and designed around what they already know unless there's truly some major benefit to putting in something new.

PS: To get this done, M&R really has to have a seat at the table during planning and design of these projects.

MG: Absolutely. Everyone's interests at the table are valid. And if you understand the interests behind each individual, then being able to leverage every single one of those interests becomes a whole different approach to problem-solving. □

4 reasons why you need to draw a new roadmap to improved reliability

If you are having trouble reaching your reliability destination, maybe there is a problem with your map.

□ The journey to world-class reliability is far from straightforward. The road is filled with detours, U-turns, and even stop signs that can derail your efforts entirely. Maybe the problem is not with your people or your processes; maybe you just need a new, better roadmap.

In a recent Plant Services webinar, Jason Tranter, CEO and founder of Mobius Institute, explored why so many reliability programs fail and presented a unique roadmap for success. Whether you are still in the plotting stages of your reliability journey or have launched a well-intentioned program only to run into speed bumps, this might be the year to rewrite your roadmap and get your program back on track.

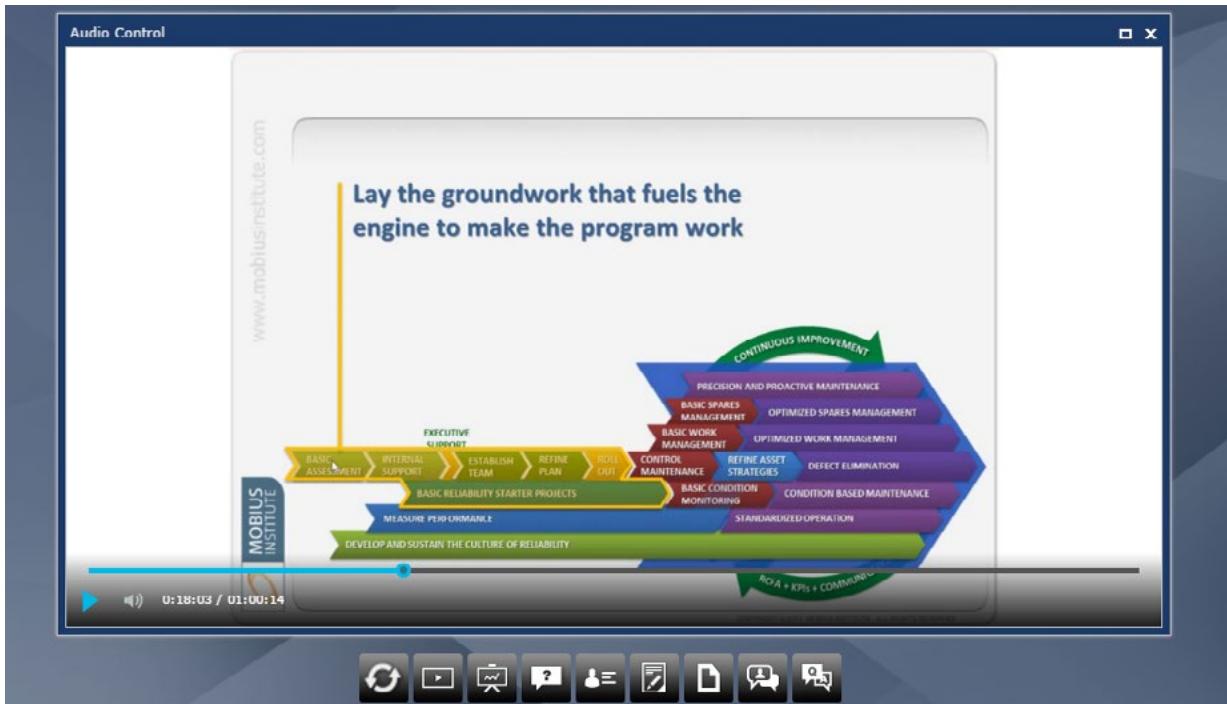
Here are four reasons why you need to chart a new map if you want to achieve long-term reliability success.

DOING THE RIGHT THINGS AT THE RIGHT TIME

Many elements make up a successful reliability program, including reliability-centered maintenance, failure mode analysis, condition-based maintenance, preventive maintenance optimization, and much more. These various components all need to be executed, but what is the best order of implementation to ensure overall reliability success? If you don't do them in the right order and, more importantly, if you haven't laid the proper groundwork, then you won't enjoy the achievement that you were anticipating. Programs without the proper foundation often experience success for a little while before fizzling out.

TAKING ACTION BEFORE DRAFTING A PLAN

It's tempting to reach for low-hanging fruit and try implementing small reliability initiatives without having an official plan in



place. We're all guilty of listening to webinars, visiting conferences, and reading books that motivate us to implement the great ideas that we have seen and heard without considering how they will affect overall plant reliability. Any reliability improvements you make will be beneficial, but, without a plan, your initiatives can lose traction and not go anywhere.

THE RIGHT MAP FOR THE RIGHT PLANT

It's illogical to think that there is only one right reliability path for all plants. We all come from different industries, work with different people, and deal with different management styles, and these difference can't be ignored. When it comes to planning your reliability strategy, don't be afraid to customize the plan to fit your particular requirements. Start with a roadmap that has a proven track record in your indus-

try, taking advice from your peers that have experience reliability success and failure, while still keeping your specific needs in mind.

DON'T OVERANALYZE

When implementing a reliability roadmap, many businesses fall into the trap of spending too much time and too many resources over analyzing data. They focus on the technical solutions, throwing money and manpower at analyzing endless data to the nth degree without producing actionable results. This will not make your reliability program a success. □

To learn more about each of the four points listed above, watch the on-demand webinar.

http://info.plantservices.com/mobius_april_2017_pd_mnt

Additional Resources

FIVE ESSENTIAL ELEMENTS OF A RELIABILITY INITIATIVE

Building a reliability improvement initiative is not rocket science, but there are five key elements that are required to ensure the program will achieve the greatest benefit and be sustainable. Can you just focus on maintenance? No. Can you pass the buck to consultants? We don't think so. In this Webinar, we will reveal the five elements, justify why they are so important, and explain why (in our experience) the best programs are driven from within.



CLICK HERE >> <http://bit.ly/2rW7neo>

CONTAMINATION CONTROL: THE KEY TO GEARBOX RELIABILITY

If you are not controlling contamination of your lubricants, then you cannot achieve the maximum service life of your rotating machinery or your lubricants. Using lots of 3D animations and animated illustrations, this presentation will focus on gearbox lubrication, explaining why contamination reduces the life of the gears and bearings (and the oil itself), how much the service life is reduced, how to reduce contamination, and how to remove unavoidable (and avoidable) contaminants.



CLICK HERE >> <http://bit.ly/2qNGSKI>

BEARING FAILURE, DETECTION AND PREVENTION

In this webinar, we discuss the most common reasons why rolling element bearings fail, including lubrication problems, lubricant contamination, excessive loading, and installation and handling. Next, the webinar summarizes how a variety of condition monitoring technologies can be utilized to determine the condition of rolling element bearings, including basic and advanced vibration analysis, oil analysis, wear particle analysis, and thermography. And finally, and most importantly, we discuss how to make changes in order to extend the life of rolling element bearings through precision maintenance techniques.



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E-LEARNING: ILEARNRELIABILITY [ENTERPRISE]

iLearnReliability [Enterprise] provides reliability improvement training for reliability professionals, an entire industrial facility or your whole enterprise. iLearnReliability is unrestricted, online training that provides strategic guidance, plant-wide buy-in, and skills development. iLearnReliability™ includes awareness training for plant management, reliability program manager and technical skills training, and toolbox talks to build support and buy-in from the plant floor. Now you can now make “Reliability a Reality”.



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