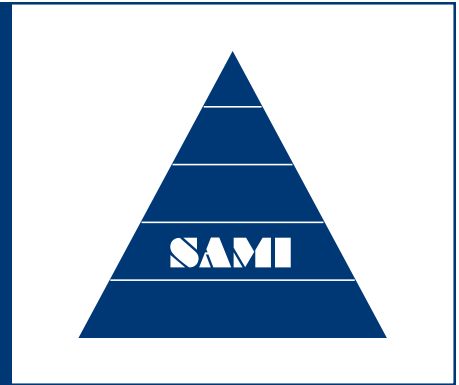


WE DELIVER CHANGE!

THE SAMI TIMES

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THE PRESIDENT'S CORNER



Often our clients wonder if our efforts are going to be effective and achieve the desired results. The reality is that SAMI methods work consistently. The variable is the quality of attention our clients place on the project. One such company devoting the management time and quality attention needed to assure our operational improvement

and maintenance improvement program worked is Shell.

The results thus far have been excellent! At Shell, direct costs are down by nearly 20 percent. Deferred production has been reduced from 11 percent to less than 6 percent (including planned outages). The business case identified \$250 million in benefits, and the results are exceeding this target!

We recently sat down with Shell executives familiar with the project.

SAMI: What is your opinion of the SAMI staff and their qualifications?

DWIGHT JOHNSTON: Not only do they have the subject matter expertise in improving maintenance operations in the organization, but they are all just good people.

JOHN LE BAS: I felt like we had very competent people who were able to assist us and help us shape a new future.

JON UNWIN: One of the things we see in the SAMI people is both content knowledge and skills with regard to asset management methodology, maintenance management and operational reliability, but also the way that they are able to work with the field operators, the equipment owners, the field supervisors and leaders across the locations and are able to understand and find some level to work with each individual to get the most out of them — very much a balance of content, skills and coaching skills.

SAMI: What is your opinion of SAMI's methods and business approach?

JOHNSTON: SAMI really brought in the whole maintenance improvement triangle, strategy and tactics, along with the expertise of how to not only design but effectively implement those for long-term sustainability in the organization.

UNWIN: SAMI has a solid methodology. Their asset management system or program clearly has been well

thought through and is very applicable to a range of business and industries.

The leadership obviously has a very clear vision that they display within the asset management system and the product. Working with a number of the SAMI leaders, it's clear that they have passion and commitment to the program and these processes.

SAMI: What long-term benefits / changes have become evident through your work with SAMI?

ERNST DEN HARTIGH: If I would compare this project with all similar projects we have done in this area, the main difference is that this one has proved to be sustainable.

We're in a three year journey, and typically previous efforts would ramp up to half a year and then would basically go back to zero because we did not manage to sustain it. In this case we've chosen for really a cultural change where we have the cultures integrated with the executors in the field and stay there until the thing is sustainable.

LE BAS: In the area of cost we've seen a clear cost reduction that is partially attributed to the work that was done here. Our safety performance is also at historic levels, so we are doing well from a HOC perspective, well from a cost perspective, a deferment perspective, and a production deferment perspective — all of which are directly contributed or the success is directly contributed to the project we have done with SAMI. UNWIN: Over the past few years we have seen significant improvement in our deferment, our platform uptimes, which obviously the total reliability program working with SAMI has been a major contributor towards.

SAMI: How has the work environment changed at your facility since your work with SAMI?

UNWIN: One of the things we achieved through phase one of the SAMI work was to have a one-process approach to all of our facilities. Now if you move from one location to another you'll see a huge correlation in consistency from each location that enables people to move from one location to another and not have to go through a new learning curve or learn a new way of doing things but to be able to build on what they already know.

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We are a consulting group for industrial organizations working to improve profitability, efficiency and equipment reliability. Our Mission is to improve our clients' production equipment health, by tapping the desire, creativity and dedication of all plant staff, and our vision is to be the firm consistently chosen by companies serious about making change; because our values of integrity, content knowledge, advanced practices and compassion for the workforce match the values of our clients.

THE SAMI ASSET HEALTHCARE TRIANGLE; STAGE 2:

PART 9 WE'RE NOT DONE JUST YET

BY DAVE ARMY, CMRP



When we last left off, our strategies had been prepared and we had developed the best laid plans. Are we done, no way! Proactive Maintenance is a never ending process of review and improvement. How can we be sure that our strategies will work? How do we get them implemented? What happens when they fail or produce less than desired. What happens when they work too well? All of these questions must be addressed if we are to be successful over time.

First and foremost, once you have decided on a new or revised strategy for a component it is essential that the new strategy find a home in your CMMS (Computerized Maintenance management System). While this caution may seem obvious, it always amazes me that strategies often lie on the shelves because no one has bothered to enter them into the system. Conversely, it also amazes me that often the revised strategies will go right on top of existing strategies, leaving two or three strategies to cover one task. I refer you to my previous article on PM Scrubbing (Summer 2005 SAMI Times).

Once the strategy has been entered into the CMMS, the next step is to align frequencies with the cycle schedule, as we discussed earlier. However, if a strategy involves a non-intrusive activity then you may want to slot it 7 weeks ahead of the execution week to take advantage of the walk-down process, assuming you have one.

all of the trouble to develop appropriate strategies if we can't measure either our success or lack thereof. So here are a couple of Stage 2 metrics to think about.

First you should look at the metrics on a system wide basis. This assumes that you've developed your strategies on a system approach. So some of the metrics you should already have at your disposal (from the analysis effort) should be availability and cost data. Using the baseline identified during analysis, you should then establish realistic goals for performance, once the strategies have been instituted. If you've centered upon CBM as a common strategy then you should start seeing results quickly.

The second tier of metrics centers on the integrity of the strategies themselves. Watch for schedule breakers (Emergency and Urgent work that interrupts schedule). Why? Because if you must respond to Emergency or Urgent work, that means a strategy has failed or that a dominant failure mode has been overlooked. Here's where the Reliability Engineer or his or her ilk gets involved in initiating the RCFA (Root Cause Failure Analysis). The outcome should be a revised strategy, new strategy of change to other inputs to Stage 2 i.e., craft skills, materials, operations, etc.

Lastly, you should watch what happens as a consequence of performing the strategies. If you notice little or no corrective activities resulting from a particular strategy then consider revising either the strategy itself or extending the frequency. Likewise, if you find that each time the strategy is executed, a corrective activity results, then again, consider revising the strategy or reduce the frequency.

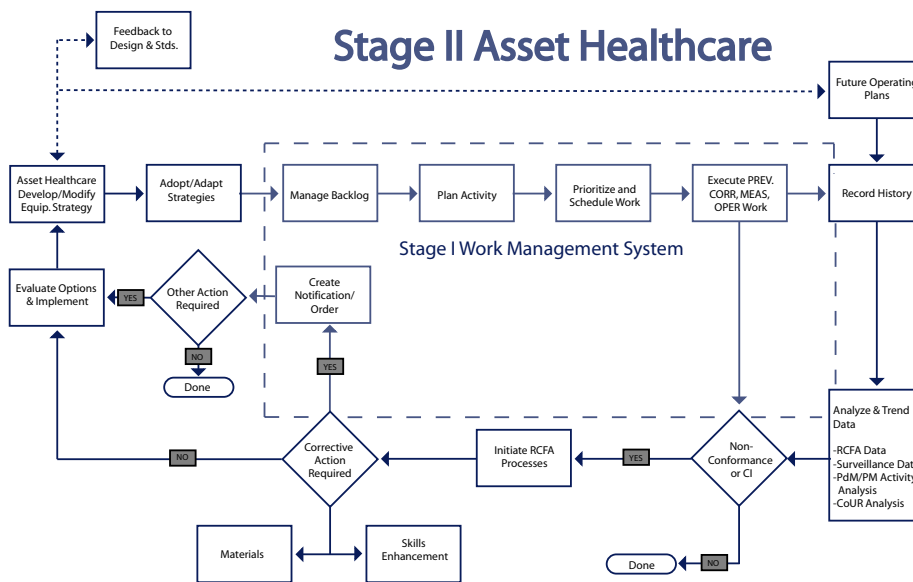
Remember, our goal is to get control of the equipment. Meet it on your terms. The look ahead scheduling process has given you plenty of opportunity to plan for the corrective actions resulting from executing your strategies. There is no need to feel rushed.

Finally, don't forget that Stage 2 is a never-ending process. Once you've reviewed a system, you're not through. Don't let your program languish. Be prepared to give it that attention that it needs and deserves.

As always, I'll be happy to share ideas and philosophy with you. And if you have any questions or comments, please feel free to e-mail me at darmy@samicorp.com.

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Stage II Asset Healthcare



So now we have the strategies identified (as best we know how) and entered into the database. Since you've got your Stage 1 act together, execute the strategies. But wait! Before you do that, there is one more thing. How will you know if you've been successful?

Remember, we started working on improving maintenance and reliability strategies for a reason, not just because it feels good. Therefore, we should have a performance baseline available. It doesn't make any sense to go through

INTERFACING OR INTEGRATION

A BRIEF SELF ASSESSMENT

BY RALPH HEDDING, PE, CMRP



Last week I was a guest speaker at a client's first Corporate Asset Management Conference. My discussion covered the practicalities of moving into an asset management initiative: what to expect, pitfalls, and success factors. During the question session following the presentation, a member of the audience asked why we do not recommend tackling both maintenance and production concurrently during a Stage 1 intervention. Simply put, we have found that getting the asset healthcare basic processes installed and sustained provides a highly stabilizing influence within the facility, which in turn allows for a production intervention to flourish. If indeed our intention is to ultimately provide for efficient and consistently repeatable low-cost performance, this is the shortest path to that end. Starting with production first will eventually force you to fix the core problems in maintenance to make progress in production. Trying to do both functions concurrently will have the production initiative waiting on progress in asset healthcare, so the most efficient utilization of resource application is to start in asset healthcare.

In rebuttal to my point, an engineering professor from a major university challenged this stating that asset management is about focusing on the assets and that our approach was still functionally based, not in the current "thinking" of new ways to attack the age-old problem. "Why not get the right people involved in the beginning and attack the issue at the asset?" he asked.

A very good point, why not? To do as he recommended would require a very integrated approach and an organization that is indeed integrated among all of the functional groups that would be required for the "attack". Maintenance, production, engineering, and operations planning would be the basic groups required in this endeavor. However, in our experience, the core processes in each of these groups are not that healthy. Using his approach, the individuals representing the basic groups could indeed investigate the problem(s), determine a course of correction, divide the responsibilities for action, then fall back upon their own groups' core processes to complete the actions. This then becomes the problem. For example, if the asset healthcare work management processes are not working well, if the planning, scheduling and execution of new work is cumbersome and the facility is in a reactive mode of operation, the new work proposed by the "attack group" will not be processed efficiently as emergency work would take priority. Without breaking out of the reactive cycle, few of the "fixes" to solve the problems which are causing the emergencies in the operation will be installed and the original time spent by the "attack

team" will be wasted and in the longer term frustrate further attempts at the problem solution. The basic processes in the functional areas must be robustly healthy to carry the solutions on to efficient installation and resolution of the original problem.

The professor's point was well taken, but the timing for the approach was in error. Our solution is to fix the basic processes in each functional area first through successive stages of intervention. No matter which of the SAMI Triangles are under consideration, we first fix the basic work management process in Stage 1. In this stage, however, we ensure that the interfaces to the other functional areas have been established properly. This is not integration as yet but rather properly developed and executed "touch points" between the functions where information and activities are exchanged efficiently. An example is the weekly scheduling meeting where production and maintenance jointly determine and commit to the final work schedule for the upcoming week.

On the production side, the initiative focuses on work management again; the disciplined execution of the production schedule, not on the schedule itself. We establish discipline to operating within the stated parameters and set points for the equipment to achieve reduced deviations from published standards. An interface to AHC Stage 1 is POEFM (preparation of equipment for maintenance) at the time agreed upon during the previous maintenance scheduling meeting. These examples do not represent an integrated operation, just properly executed interfaces; a fine but significant distinction.

We then enter Stage 2 to begin the optimization of the Stage 1; this is more like fine tuning the basic processes that have been embedded. In AHC we refine the proactive/preventive strategies for equipment care. In production we address the process set points to ensure that optimized equipment operations are achieved. We establish optimized production scheduling so that a highly repeatable and stable operation can be achieved, for example. Even through Stage 2, we continue to ensure that the interface points are operating properly.

Only after we have established the basic processes in Stage 1 and optimized in Stage 2 do we actively engage in integration activities. This is the thrust of Stage 3. It is at this point, when all of the basic processes have been established and optimized that we can begin to have the confidence that an "Asset Focused" approach to asset management can and will be sustainable and the facility can become an integrated entity.

Ralph Hedding is the Vice President of International Operations for SAMI. His expertise lies in performing client site assessments, preparing the client for the strategic plan, and the designing and implementation of maintenance and operations solutions. He is currently deeply vested in the South African Market.
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LE BAS: Since we started this work with SAMI a couple of years ago the way that people even think about work has changed, and it's changed for the better. A few years ago it was an easy excuse for people to believe that work couldn't be planned or that there would be enough things that would just happen and interrupt the plan, making no sense for them to even bother to put the plan together to start with; that's no longer the case. People expect that plan will be put together, they expect that plan will be followed, they know that it won't always work out, but people are holding each other accountable for following through on executing that plan.

SAMI: How has SAMI met your expectations? If not, what could have been done differently?

JOHNSTON: It's fair to say that SAMI exceeded my expectations.

LE BAS: SAMI met my expectations on this project, and they met it at each stage of the work, And had they not, frankly, we wouldn't have continued to work with the consultants like we did.

UNWIN: My expectations were met in establishing the consistency from asset to asset, having the processes embedded in the way we do work, and having the processes fit our business and fit for purpose.

SAMI: What is your overall opinion of SAMI?

DEN HARTIGH: If I had to start the journey all over again, I would again look at SAMI as a prime supplier for resources and help with strategic change.

JOHNSTON: I think SAMI has been very selective about the kind of people that work for them, and I would say on average, every person I've worked with at SAMI is pretty high caliber — very competent people.

I've gotten a bunch of phone calls about SAMI asking, "Would you use them again?" or "Would you recommend hiring them?" and my answer is always yes. I haven't seen a situation yet where I wouldn't recommend that SAMI couldn't come in and help with what their trying to do.

LE BAS: They met my expectations on this project with Shell, and in some ways exceeded those expectations, and frankly, I have high standards, and so to exceed my expectations says quite a bit. So, yes, I would hire SAMI again.

UNWIN: SAMI as an organization has a lot of strength. Clearly their leadership is solid and understands their objectives and what they are trying to achieve.

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