

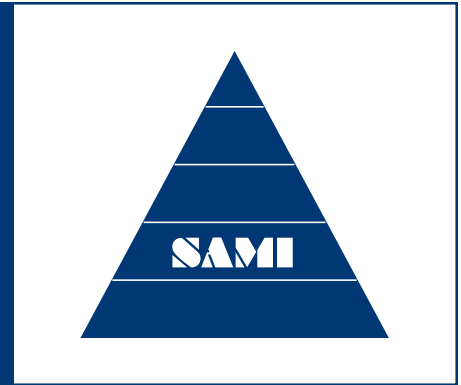
WE DELIVER CHANGE!

# THE SAMI TIMES

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## THE PRESIDENT'S CORNER



### Secrets of Sustaining Change in Manufacturing, Part 1

by S. Bradley Peterson, CMRP  
SAMI President

Insanity: doing the same thing over and over again and expecting different results. —Albert Einstein

#### What is Change?

This may seem to be a silly question. Most of us would answer “improved results”. We would agree, of course. But that’s only part of the answer.

A production manager once lamented to me that his previous plant manager had decided “to harvest the reliability of the plant”, by cutting back on routine and outage expenditures, he dramatically lowered plant operating costs. Based on his excellent work, he was promoted to a senior corporate position. Company leadership was further convinced of this man’s excellence when the next plant leadership team couldn’t keep the plant operating, in spite of increased spending. My friend the production manager had no hope of being considered a success in any reasonable timeframe.

#### Plant Culture

Culture is perhaps best described as the predominant way of reacting to events, and is based on attitude, conditioning, and expectations. How is culture sustained?

Most of us are taught our jobs, not by the *outcomes* we are to produce, but by the *activities* our on-the-job teachers demonstrate. “When this event happens, this is what you do.” The new employee has learned that respected and authoritative people act in a certain way. The *sum of these behaviors* is what we call the culture.

People have been trained to respond in a certain way, a way they have been told is correct and right. When someone not close to them (from corporate, or a new plant leader) tells them they *will* work differently, they filter this through what they have been taught, and they know it’s wrong. No one knew the job as well as the person who taught them. How could someone from the outside possibly know better? Dedicated plant employees will see their job as *preventing outside stupidity* from diluting the core job they know and understand: produce product for sale.

We are fortunate that they do so. If the plant responded immediately to every initiative that came their way, and took all the time requested of them, their time and attention to production would diminish, and so would the amount of quality product produced. When we see “Change” from their point of view, it often threatens their very livelihood.

#### Activities that Deliver Change

It is not enough to do your best; you must know **WHAT** to do, and **THEN** do your best. —W. Edwards Deming

Deming would always ask his clients “By what method?” they would intend to accomplish a goal. It’s surprising how often in business an idea becomes a goal without a resourced plan. “Just get it done!” is the exhortation by leadership. In fact, everywhere we go we find our prospects discussing how they would love to engage with us, but they have “initiative overload”. Unless this overload situation is resolved, there will be no progress!

Over many years of reviewing consulting successes and failures we have been sharpening a model that is nearly always successful. We call it the *SAMI closed-loop improvement process*.

**Assess and Plan.** Getting people engaged for change is the first step, and we do this through the Assess and Plan step in the Closed-Loop Process. Among the outcomes of the steps:

- Creates a strong emotional gap
- Engages operating management to plan the future
- Develops a functional operating vision of the future
- Creates a forum for agreement
- Creates a multiple year road map
- Identifies expected value of change
- Develops a detailed plan of delivery
- Develops detailed goals by business unit
- Aligns leadership!

*continued on page 2*

### Secrets of Sustaining Change in Manufacturing .... 1

### Secrets of Sustaining Change (cont.) ..... 2

### SAMI Asset Healthcare: A Clients Perspective ..... 3

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.

# SECRETS OF SUSTAINING CHANGE IN MANUFACTURING

## PART 1

BY S. BRADLEY PETERSON, CMRP

continued from page 1



First we must understand something that is a bit of a mystery for most: change doesn't happen because of understanding or knowledge. Change happens because of PASSION!

The human is likened to an automobile. We steer with our minds, but the drive train is our emotions. If we want change, we must *feel strongly* about it. And what feelings might these be? Love, anger, greed, pride, fear...any of these will do. Love is the most effective, because it builds lasting change. Fear of losing one's job may enable us to change our behavior patterns—but as soon as that fear is relieved, we will tend to go back to the original state. Greed for profits is another motivation...but tends to temporarily change only outcomes and not the fundamentals. Pride in what we do, and looking for praise is a positive way to approach things, and can lead to success. Loving our co-workers, wanting the team to perform at a peak capability, loving the business we are in and wanting to perpetuate all the good that is inherent in it—these are excellent motivators for change.

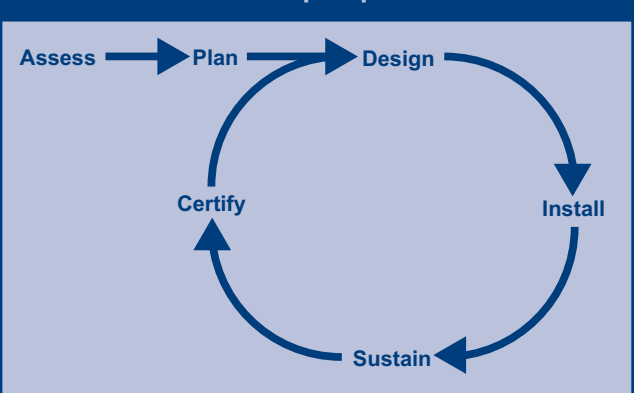
But simply *knowing* we have a gap doesn't get us over the hurdle of changing our behaviors. In the assessment, we interview the wage staff. Universally, many are critical of the leadership, and for valid reasons. They see waste everyday in the system. They see risks to health and the environment. They know the system of work should be improved. When the manager hears these things he has a choice: accept them and work to improve, or reject them and go on a hunt for the offending worker.

In the Operational Strategic Planning phase, we create a forum for middle managers to review their common progress and gaps, and to decide collectively whether they will address the gaps. This is much more positive than a top-down directive. They develop an emotional bond to "go and get this fixed once and for all".



This emotional commitment only matters if we have a detailed plan for implementation. The detail is at the same level as for a shutdown or turnaround. A high level assignment of accountability doesn't begin to be a basis for agreement, and this is what we often see in place of a detailed plan.

### The SAMI Closed-Loop Improvement Process



When we have a plan, we see what other initiatives are working in the same area. For example, we are working with a global business that has had separate initiatives to implement SAP and improve production and safety. Each has had its own business case, separate resources, separate steering committees, separate resources, all competing for the attention of the first line staff, who know they cannot absorb so much time away from their primary jobs. What we did was to combine all of these efforts into a single implementation plan, with a single team integrating them into the new behaviors of the workplace. Suddenly what was overwhelming becomes simple and desirable.

For those initiatives that are not resourced (we call them "I hope" initiatives), we ask to have them eliminated from the list. There is no progress possible without resources, so why continue to pretend they will be done. This takes a strong leadership team to admit nothing is happening, but much better to give them an early and painless death, than to continue to attend meetings, etc.

Finally, we need to have a compelling business case. There are literally hundreds of things we might fix in a plant. But we're here to conduct business and to make profits. We can get excited about doing the right things AND getting great results. Our leadership will agree to supporting initiatives with a very strong business case, where there is individual accountability to achieve the case, and agree that it is practical.

to be continued in the SAMI Times Spring 2005 issue

# THE SAMI ASSET HEALTHCARE TRIANGLE; STAGE 2:

## A CLIENT'S PERSPECTIVE

BY DAVE ARMY, CMRP



How many of you have been asked to write a paper, presentation or article and lived with dread as the deadline approaches? Well, if you have, then let me join you. To me, writing has always seemed a chore, but for once, a client has come to the rescue. SAMI is now working on a Stage II engagement in Secunda, South Africa. Our client is Sasol Synfuels. We have been engaged in Stage I activities for more than a year and due to initial success have moved into the Stage II portion of the engagement. As with all of our initiatives, we have first commissioned a client Design and Validation Team to incorporate existing processes and map out future processes that will enable Stage II.

One of the deliverables for the SAMI Team is to develop a group of process owners (the Design and Validation Team) who will be the leaders in the Installation and Sustain phases. One of the Design Team members is Mr. Hein Botes. Hein is an Area Leader in the Utilities Department for Synfuels, which put him pretty high in the pecking order. Hein has become a believer in the process and the potential benefits of installing a fully integrated Stage II process. So much so, that he has written an article for his department newsletter. After reviewing the article, I felt that Hein has put into words, from the client perspective, those things that I have been sharing with you over the past couple of years.

Now I will share his advice with you. A couple of things to note; first, the engagement at Sasol is called SAMI and stands for Sasol Asset Management Initiative. Secondly, Hein uses some South African terms that I cannot begin to explain, but I am sure that you will get the intended meaning.

### **SAMI Stage 2: Milking the cow or caring for it?**

I must actually start off this article like Braam Whittaker: I greet you in the name of SAMI! Yes, this thing called SAMI has certainly impacted dramatically on our lives and has become a whole new way of life for all people in the Maintenance, Planning and Production environment. I am proud to say that Utilities is doing excellently regarding the indicators we measure, as well as the business case that was put on the table – you can all be very proud of yourselves! Many people and even Departmental Managers (the old MET's) have asked me (half unbelievably) how we manage to do so well regarding SAMI Stage 1. My opinion is that it is because we have amazing people in Utilities – people that can accept a challenge and “make problems go away” (the right people on the bus!?).

It is in exactly this spirit of continuous improvement, excellence in all we do and winning with people that Sasol Secunda has decided to embark on the next phase, namely SAMI Stage 2. I have been volunteered by you-know-who to be on the design team for Stage 2, starting end of October 2004 and

ending somewhere in February 2005. Whoa, what a challenge we have with this one! We are currently busy figuring out what tools we have in Sasol and why we still battle to get control of our equipment – yes, this is exactly the purpose of Stage 2 (remember, Stage 1 was to get control of our work, namely correct ID of work, planning, scheduling and executing). Refer to the SAMI triangle below.

In Stage 2 we attempt to be more proactive regarding the maintenance we do. This means we try and prevent failures from happening in the first place, instead of “fighting the fires” after a breakdown. The way this is supposed to be done is through a very good analysis of what failures one can expect from a piece of equipment, developing maintenance strategies to prevent these failures, conducting effective root cause analyses (RCA's) when a failure does occur and then again updating the strategy (if required).

So why do we “battle” with this daily and do we have our “evergreen” problems/equipment that seem to have a life and a will of their own? The answer lies in seeing the big picture and asking ourselves: “*why are we doing this maintenance again?*” or: “*what is the best, sustainable output of this piece of equipment?*” In an attempt to answer this question and put things into perspective, we have started talking about a cow!

Let us consider a dairy farmer with a herd of cows. Why does he have the cows? Well, he would like to milk the living daylight out of them to get the most milk to sell on the market, right? Wrong! What he wants to do is to make sure that he makes the most profit out of his cows over their total productive life. This means thinking about how long to milk them, how much milk per day and at what quality. To do this he must realise the capacity of his cows and try and milk them within these “parameters”. Sounds familiar? This is exactly what the guys in Production are doing/needs to do and we call this Asset exploitation or utilisation. In the cow example we will have the dairy personnel doing this.

However, there is also another side: The cows need shelter, food, water, medical care etc. for them to be able to survive and keep on supplying the milk. This is the Asset healthcare side of the coin and what the guys in Maintenance are doing/supposed to do. The herdsman/men will be the guys doing this for the cows.

Now, can you see that neither the dairy personnel or herdsmen can work in isolation? The herdsmen will need to know what to feed the cow for maximum output and how to treat her so that she is healthy most of the time and able to produce milk. The dairy guys again will need to know and be sensitive to the impact that their actions have on the health of the cow – in the short –and long term. However, ultimately the farmer needs to determine how much milk is required from the market and if his total input costs are too high to make a living. He is thus the Asset Manager.

Okay, Hein, what are you blabbering about! The point is that we all need to think like farmers (Asset managers) and

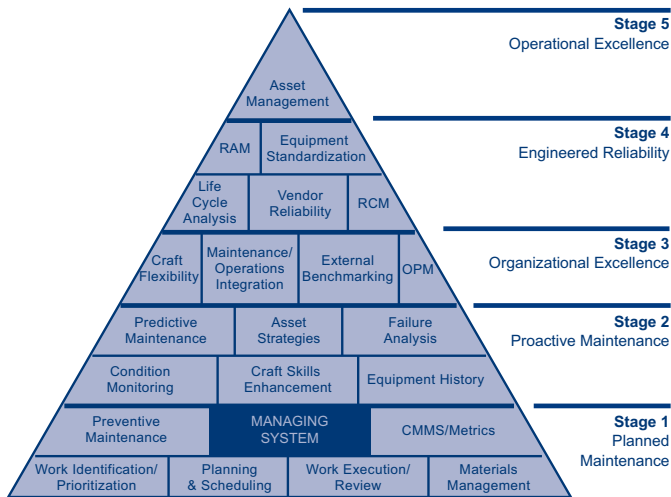
**Dave Army** is the Vice President of Results Delivery for SAMI. His expertise includes analysis, design and implementation of maintenance and operations solutions for numerous industries. He currently oversees all SAMI implementation activities.  
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continued from page 3



A final very important point: the Engineering leg of the business will hold the key to the success of SAMI Stage 2. This “intelligence” portion of our business will have to help and focus on those areas that give us problems and then make sure that the loop is closed to ensure optimum reliability and availability of our processes. Back to our cows: you (Engineers) need to act as the veterinarian or dietician that have the skills so that we can do the best for our “cows”. You must also help us make sure we do not milk any bulls...!

In conclusion: May you all have a MOOOvie nice holiday and come back safely!

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In the next article we will further explore the details of establishing a proactive maintenance culture within your organization. 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](mailto:darmy@samicorp.com).