

We Deliver Change!

# The SAMI Times

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## The President's Corner

### The Future of Asset Management, Part 1

This article explores a broader vision for asset management than has been previously articulated and brands this vision **Strategic Asset Management (SAM)**. Based on successful experience with our clients, **SAMI** is an integrated set of processes that systematically derive the highest value from plant assets, through a consistent philosophy, plans and objectives, and cooperative involvement by everyone in the plant. SAM represents a higher level of performance than is currently practiced or even recognized by the manufacturing community today.

Any useful model to guide action will have several characteristics:

- **Simplicity.** All of the greatest ideas are simple in concept. If not kept simple, they are not fully understood or remembered, and fail as guiding principles.
- **Intuitive.** Readers should be able to understand the underlying principles without guidance.
- **Utility.** The model should work consistently in application.
- **Completeness.** All necessary elements of success should be contained.

Our experience with the **Strategic Asset Management** model indicates these criteria are met. However, you as the reader will need to make your own judgments.

Our description of *Strategic Asset Management (SAM)* begins with the key elements of success, namely **Lead, Execute and Enable**.

**LEAD.** There are hundreds of books written about leadership, and each one has some valuable point to make. Frequently, though, the description is of individual leadership, and often charismatic leadership. Leadership in the plant setting, in our opinion, is creating consistency of purpose and action. Manufacturing is a large set of complex and interrelated systems of marketing, technology, finance, human resources, execution functions and equipment. Physical Asset Management then must take all of these into account.

Putting things as simply as we can into the SAM model, the LEAD element consists of the Managing System, Strategic Planning and Information Management.

**Managing System.** Disciplined, aligned action is the underpinning of any human endeavor. Examine any consistently great achievement and you will find alignment and discipline. That is the purpose of the managing system. Among the elements found here are:

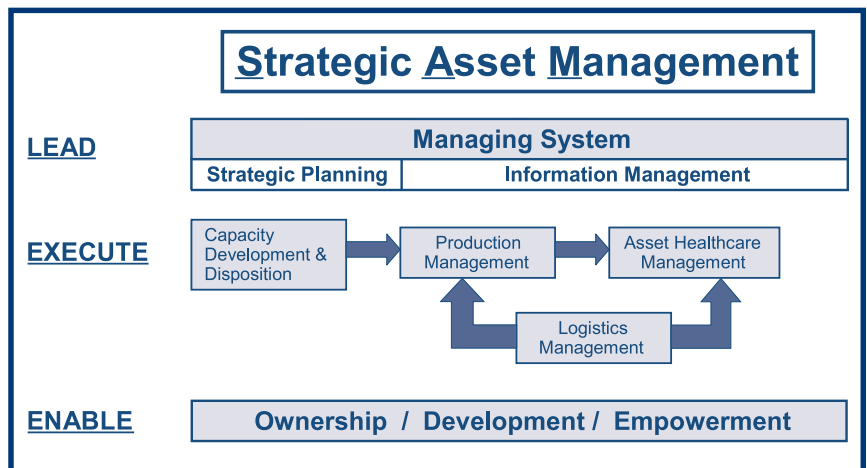
1. Top down and cascaded goals. Goals of profitability at the company level become volume and product mix goals for the plant. At the unit level these become volume goals, equating to equipment availability and product quality goals. For the operator these become daily production and equipment surveillance goals. For the craftsman they become equipment condition goals.

2. Plan-Do-Review. Everything we do is a process. Take emergency maintenance for instance. The process is: 1. get a request, 2. go do it, repeated all day long. Even a planned and scheduled job doesn't improve the system without a review process to examine the effectiveness of the plan, the execution of results, and a critical understanding of what is happening with the equipment.

3. Measurement systems. Assuring that in addition to outcome (lagging) indicators, each job in the plant has process (leading) indicators will enable each worker to make a more positive contribution.



**S. Bradley Peterson,**  
**CMRP**  
**SAMI President**



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We are a consulting group for industrial organizations working to gain leadership alignment for change, implement strategic asset management, develop advanced maintenance & production programs and create dramatic financial results. 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 1 Introduction

By Dave Army, CMRP



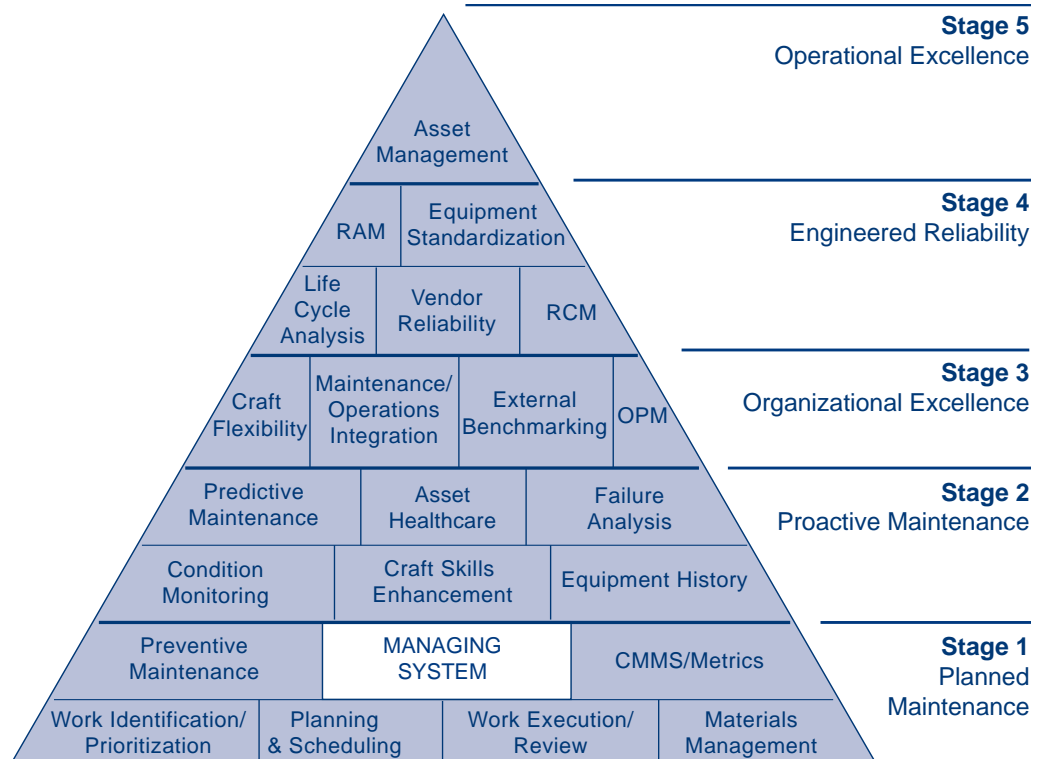
In previous articles, I have focused on Stage 1 Asset Healthcare activities. In Stage 1, as you may recall, the main objective was gaining *Control of the Work*. Getting good in Stage 1 results in better work efficiency and can ultimately lower resource (labor and materials) costs. It will also lead to increased work capacity within the organization, which in turn, will lead to the ability to perform additional tasks, such as preventive maintenance.

During Stage 1, we have assumed that a Preventive Maintenance (PM) program or a set of activities exist. As a part of Stage 1 implementation, a thorough scrubbing of the existing PM activities takes place. Enhanced Stage 1 Scheduling methodology sets forth that PM activities enjoy the highest priority of all backlogged activities available for scheduling. When it is decided that a PM will not be added to the schedule, then that PM is reviewed and either modified or deleted, based on input from the staff. At the end of a 13 week cycle, most of the existing PM will have received this cursory review. However, this is usually the limit to PM enhancements that take place during Stage 1. Remember, we are only gaining control of the work and providing a firm foundation for going forward.

In Stage 2 our objective is to *Gain Control of the Equipment*. Looking at the Triangle, you may quickly surmise that Stage 2 is all about PM. While it is true, as discussed above, that we will finely hone PM tasks, we will now address the ability to predict failure, learn from our experiences, match craft skill sets to new requirements and increase overall availability and reliability of key operating equipment. We call this proactive maintenance. While savings in Stage 1 are mainly limited to reductions in labor and materials costs, Stage 2 actually adds value to the bottom line. Small percentage changes in availability during a demand cycle will yield significantly to operating margins. This is where the real gains reside and this sole reason is why many companies plunge right into Stage 2 activities without realizing that the basics (Stage 1) need to be strengthened. How many of you have worked for companies that have Reliability Engineers or have implemented RCM (Reliability Centered Maintenance) initiatives while struggling with high levels of reactive work? In my experience, even though our plans were well conceived, seeing them come to life was a frustrating experience. The maintenance organization never had the time nor understanding to take on new tasks while struggling just to deal with today's crisis.

I do have some good news. If you've taken to heart all of the good advice provided to you in my Stage 1 Asset Healthcare series you will be ready to take on Stage 2. You now have control of the work and are now ready to maximize your gains. During the next several months I will describe the philosophy and methodology behind SAMI's approach to:

- Asset Healthcare Strategies
- Predictive Maintenance (PdM)
- Condition Monitoring
- Craft Skills Enhancement
- Failure Analysis
- Equipment History



If you have any questions or would care to comment please feel free to contact me.

**Dave Army, CMRP** 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.  
[darmy@samicorp.com](mailto:darmy@samicorp.com)

**Herb Lichtenberg** is a Project Manager for SAMI, currently overseeing our work with the Shell Exploration & Production Co. (SEPCo). His skills include maintenance & production improvement initiatives across various industries.  
[hlichtenberg@samicorp.com](mailto:hlichtenberg@samicorp.com)

# The SAMI Production Triangle; Stage 1:

## Part 1 ID Production Requirements

By Herb Lichtenberg



In the previous issue of The SAMI Times, Brad Peterson introduced the SAMI Production Triangle. Over the next few months I will discuss the basic elements of our model for Plant Operations Excellence.

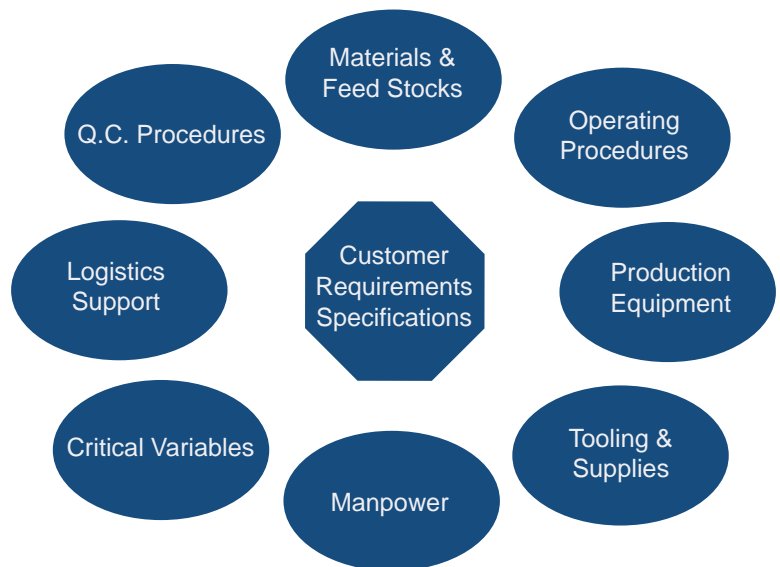
Stage One of the Production Triangle is Planned Operations. It is defined as the day-to-day basic operation of the facility. This means that:

- Customer / product requirements and specifications are clearly defined, understood and met;
- Production is planned and sequenced to meet customer needs and to maintain plant efficiency;
- Materials, equipment and manpower are available for production when scheduled;
- Critical operating and product variables are identified and controlled;
- Production / operating processes and procedures are standardized and followed;
- Production and operations data are used to manage the facility and the production plan;
- Production operations are stable and predictable – the facility is able to safely start-up, shutdown, and operate in accordance with the production plan.

The first step in this process is to identify everything we'll need to produce and deliver the product to meet the customer's requirements and to do it in a cost effective manner. Figure 1 above illustrates the elements needed for developing a production plan:

Before we do anything else, we must have a clear understanding of what the customer wants. This includes dimensional tolerances, chemical and physical properties, appearance specifications, packaging, volume and delivery requirements. Although it appears to be a very basic step, it is not uncommon that specifications reviews are minimized or skipped altogether. Quite often specifications need clarification. It's a mistake to quickly assume that we know what the customer means or wants and then apply our interpretation and standard products to the order. With global competition, customers are becoming more insistent about getting exactly what they need and want. More and more they want products that fit their unique requirements. They don't care about having their requirements neatly fit into the supplier's product line. Sometimes, a looser set of specifications will work just fine for a customer who is not willing to absorb the expense of holding to more rigid specifications. On the other hand, the reverse may be the case.

To facilitate better mutual understanding, a dialog with the customer is necessary. Failure to carefully review and understand the variations in a customer's specifications (product, packaging and delivery options)



can result in additional cost due to scrap, rework, production interruptions / delays and excess material inventories. It can also lead to strained customer relations resulting from product and service complaints.

Once we know what the customer wants and have the specifications clearly in mind, we are ready to determine the production parameters that are critical to the fulfillment of the customer's needs. These include the following:

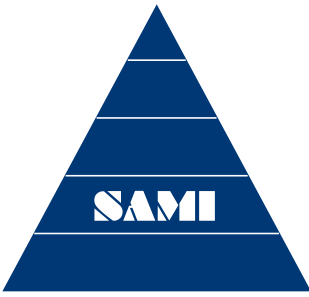
- Inspection / sampling criteria to assure quality and adherence to customer, industry and government standards;
- Critical production and process variables that need to be monitored and controlled;
- Applicable manufacturing / operating procedures.

Once the rules of production are established, we can identify the resources needed to fulfill the customer's order. These include:

- Specifications, volumes, availability and location for materials and feedstock;
- Supplies and tooling needed for production, packaging and shipping;
- The identification of specific production equipment and processes most capable of producing the desired products;
- Material handling support for movement of materials and product delivery;
- Manpower required to produce and deliver the customer's order.

We have now identified the elements needed to successfully satisfy the customer's order. In the next issue we'll discuss the process of planning and scheduling the production of that order.

*To obtain an image of the SAMI Production Triangle please go to [www.samicorp.com](http://www.samicorp.com)*



**Strategic Asset Management Inc.**  
**25 New Britain Avenue**  
**Unionville, CT 06085**

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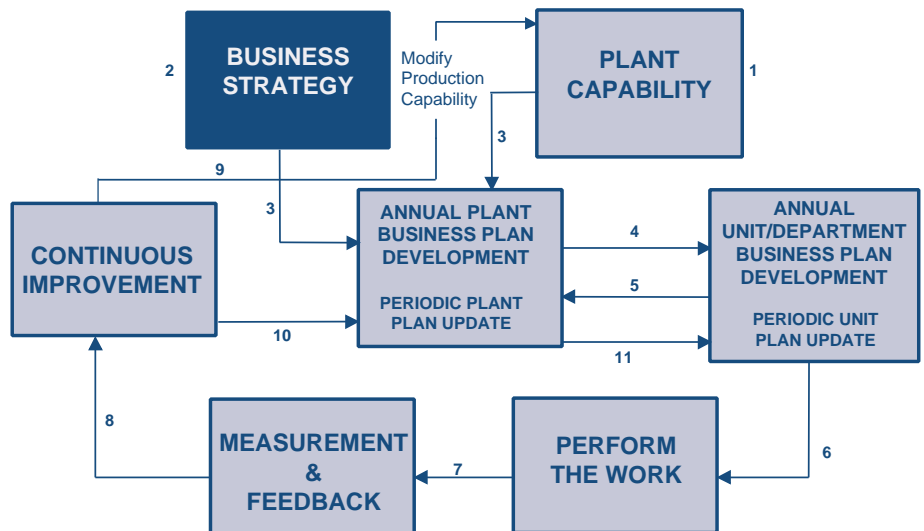
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4. Reward systems. Each plant rewards behavior in subtle ways. It may promote the overbearing craftsman to a supervisor position because “he gets people going”. We may reward equipment breakdown with money and admiration (overtime and “attaboys”). We may reward production achievement at any cost to people and asset condition. We reap what we sow, so we must be careful that our reward systems actually encourage proactive behavior. Proactive maintenance can’t happen in a reactive managing environment.

5. Roles, responsibilities and accountabilities are clear. If job expectations are not clear and results measurable, we have muddled accountability. Fingers point in all directions, and the blame game goes on all day. Being proactive in such a system takes more courage than most people will risk. Clarifying jobs and accountabilities is a leadership function.

6. Feedback. This is part of the Plan-Do-Review process, but gets special emphasis. We shape behavior by giving honest feedback without punishment. Under the right circumstances people *want to improve*. Leadership fails if it doesn’t capture that spirit.

### The Managing System



***This article will be continued over the next several issues. However, the full article is available at [www.samicorp.com](http://www.samicorp.com).***