



SYNERGISTIC

Manufacturing Systems Pty Ltd

Introduction

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Introduction

Synergistic Manufacturing Systems Pty Ltd [Synergistic] is a specialist change management company that has a 'hands on' approach to addressing issues in manufacturing companies. The main focus for SYNERGISTIC is in companies that have problems resulting in poor plant reliability.

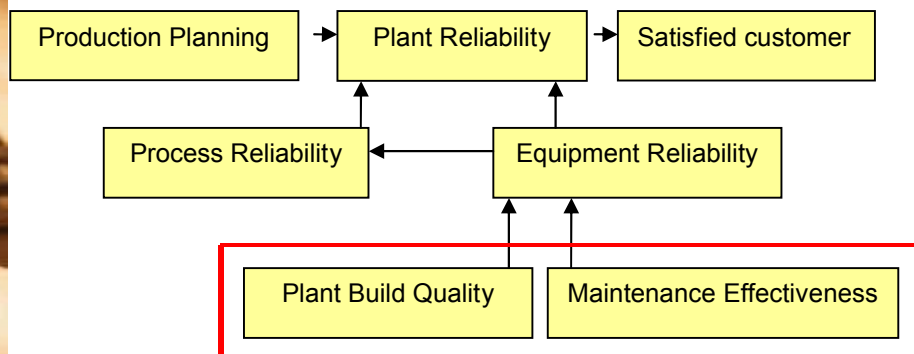
Many of the companies we have been involved in suffer reliability issues due to rapid growth, ineffective staff, or the effects of staff militancy. There are many other reasons why your plant may not be performing well but the structured and controlled approach to change quickly brings results in these companies.

Most change management companies will promise reliability gains, however few will guarantee the results. Using a proven change process that can be customised to suit your company, the SYNERGISTIC systems have demonstrated significant improvements from the roll out of its programs with results clearly evident after the first twelve months.

Plant reliability starts with Maintenance

If you have a primary or secondary processing facility and your maintenance department seems to be holding your production back then the change program 'The Evolution of Maintenance™' is the first step to reliability. Why?

1. To get plant reliability you must have process reliability.
2. To get process reliability you must have equipment reliability.
3. To get equipment reliability you must first address 'Plant Build Quality' and 'Maintenance Effectiveness'.





Plant Build Quality

It is very important to first look at the process that you have and ask the following questions;

1. Was the process built to do what it is currently required to do?
2. Is the process reliable and capable for every product and specification required of it?

What I am asking is “what are the ‘improvements’ required to get the plant to run reliably”? It is important that a complete list is compiled to ensure that all improvement options can be considered against the benefits of return from undergoing the process. (Note that in most countries the tax rules would allow these jobs to be capitalised).



Maintenance effectiveness

It is a given that the company is spending money on maintenance. The question is, “is ‘maintenance’ being done?” That is, ‘*work undertaken that sustains or improves reliability in your plant*’. Most companies I visit fill their maintenance day predominately with breakdowns. There are often a small number of improvement jobs to be done, and on occasion there may also be some preventative work carried out. However in many cases preventative work is set up to make the life of the maintenance people easier and not necessarily targeted at reliability.



The reason for rapid change

The processes and procedures implemented by SYNERGISTIC throughout the change process are designed to achieve change at a very fast rate. By suffering the pain of quick change in the early part of the change management process the financial gains for the company are realised years earlier. Depending on the size of your plant the gains will be relative to the economy of scale of the organisation. My experience has shown that the gains are often solely profit as in most cases the productivity gains are supplemented by a reduction in energy and operating costs.



The consequence of fast change from a financial perspective is the requirement to recover plant condition in the first year, but only from this recovery can we see the increased plant gains that will lead to dramatic financial improvements in plant output.



For the maintenance manager stuck in a breakdown mindset the only foreseeable way out is to employ more maintenance personnel to fix the breakdowns faster, thus increasing the cost of maintenance.

For senior management it is often easier to slash the maintenance budget and tell the maintenance manager to just make do with the money he has. Now maintenance costs come down but down time goes up. Even worse, the maintenance around the site is often deferred in favour of reacting to breakdowns. The deferred maintenance includes building painting, plant room maintenance and maintenance in areas that are often unseen.



This type of cost reduction often attracts recognition for managers but the cost reduction from deferring maintenance can only last a maximum of three years. The lack of necessary maintenance in the unseen areas of the plant will eventually have a profound effect on plant reliability. From here on the maintenance cost will increase in order to reduce the plant downtime. The Site Manager will be praised for reducing the downtime while a Maintenance Manager will be vilified for overspending his budget and so the cycle repeats.



Understanding Maintenance Chaos Fatigue

Let face it, controlled maintenance functions such as maintenance checks, routine activities and documentation are not as much fun as the alternatives of modifying machines, installing machines, attending breakdowns or the fitting and adjustment of change parts. These activities are clearly more exciting and rewarding for your maintenance people. The most exciting activity of all is responding to breakdowns. I believe this is the biggest maintenance problem because it becomes addictive for your maintenance people.



Here is why I believe this is the case. Everyone wants to feel important and there is no one more important in the world to a production manager than a maintenance person when their production line is broken down.





When the line is fixed the maintenance person is often congratulated for the great work they have done in fixing the breakdown quickly.

It is not unusual to hear a General Manager single out an individual for praise because they fixed a break down that could have caused major problems with plant output. This moment of praise feels good and feeds the need for more breakdown success.

With more breakdowns comes less reliability combined with a reluctance to do preventive work which would reduce the level of breakdown and consequently of satisfaction and recognition. In fact there is often no reward for good maintenance except an easier life at work.



It is normal to go to a plant and see every maintenance person just responding to breakdowns. There are three problems with this:

1. The cost of fixing the plant.
2. The cost of the plant downtime.
3. Turnover of staff due to 'chaos fatigue'.



Continued and increasing breakdowns, as is common in the breakdown maintenance mode, will inevitably burn out your maintenance staff. This burn out is due to ongoing and repeated breakdown dramas that were fun at first but quickly become fatiguing.

In addition, there is the pressure from management on the maintenance staff to fix the plant faster because the downtime becomes more visible and unavoidable. The resulting 'blame game' quickly leads to a breakdown in relationship between maintenance, production and management. This inevitably leads to a combative, bitter, defensive and unproductive maintenance team.



It is not long after this that your maintenance people start to leave and you end up in recruitment and burn out cycle because the root cause is not addressed.



So what is step one?

Many Maintenance Managers go to maintenance forums and listen to the maintenance evangelists. They return feeling energised and motivated only to find themselves sitting behind their desks thinking “well that was great but what do I do now?”

Although it is not essential an audit is very desirable in order to establish where you are in comparison with where you need to be. This will allow you to track and report your progress both to the team and to the programme sponsor. An audit is undertaken by Synergistic Manufacturing Systems before we start any change processes. This audit is specific to this change process and is designed to encourage progress evenly in all the critical areas as well as having three levels of accreditation as progress is made.

Roles and responsibilities

The first step is to build the foundation of your maintenance team. This means you must start by agreeing on a maintenance structure. This is just a case of deciding where you want to be when the change process is complete and building a structure that fits the vision. Include writing position descriptions for all the roles and setting KPI's for those roles.

This programme comes with HR documents covering interview guides to complete position descriptions ready to be customised to suit your business.

The next step covers processes and procedures. SYNERGISTIC has template procedures to support the introduction of clearly defined processes to bring order to your maintenance department and allow them to work professionally with the other teams within your organisation.

The Evolution of Maintenance™ is a structured approach to stepping your maintenance team quickly to world class practices

The human side of the change process

Templates exist for the quick implementation of position descriptions, KPI's, interview guides and training plans.

There are also clear strategies dealing with staff retention and succession planning which provides focused training.





Training and development

SYNERGISTIC Has a number of training packages especially developed to meet the needs of manufacturing professionals. These packages include:

- SYNERGISTIC Managing Humans
- SYNERGISTIC Personal Systems Manager
- SYNERGISTIC What is Maintenance?
- SYNERGISTIC Project Manager
- SYNERGISTIC Operator Ownership



The outcomes

At the end of the implementation process, when it is agreed the objectives have been met, the SYNERGISTIC team quietly exit the business and hand over to the trained and capable succession team to form and strong and professional maintenance department.

Sean Stayner



Managing Director
Synergistic Manufacturing Systems Pty Ltd





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Personal Systems Manager

Imagine it is your first day in a management role, you sit behind your desk and look at your new computer, empty filing cabinet and the phone rings, it is someone you have never met wanting to address three or four important issues with you. How did you cope?

This program was developed to assist managers with systems that allow them to manager information and to manage their time effectively.

In this training the important these important areas are covered:-

- Operating MS Outlook® effectively
- Capturing and completing tasks given to you
- Effectively communicating issues to other people
- Organising your time more effectively
- Managing a filing cabinet so that everything is easily recovered.

By having everyone trained in these processes information is sorted, communicated and recovered effortlessly, secondly when a successor steps into a new role they can take over the filing systems of their predecessor and continue to function as if it were their own.

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Permit to work

Permit to work comes about initially through the requirements of AS/NZS 4801:2001. This is the Australian standards for Occupational health and safety management systems. These standards define in 4.4.6 *Hazards identification/risk assessment and control of hazards/risks*, how workplace risks must be managed.

Section 4.4.6.1 General

The organization shall establish, implement and maintain documented procedures to ensure that the following are conducted: -

- a) *Hazard identification*
- b) *Hazard/risk assessment*
- c) *Control of hazards/risk; and then*
- d) *Evaluation of step (a) to (c)*

The SYNERGISTIC Permit to Work process complies with the training requirements of this section of the standards by completing training for everyone involved with the permit to work process, ensuring they complete a PTW form as a part of the training and complete the multi choice questionnaire to assess their competence.

Further assessment of the effectiveness of the people performing the permit to work process is undertaken by management audit of the process operating to ensure that the process is being carried out in accordance with the procedures.

We believe this to be the simplest process to, firstly make people safe, comply with AS/NZS 4801:2001 the standards for safety systems management and comply with Australian state or New Zealand legislation.



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What is Maintenance?

I believe that the first step to fixing your maintenance is to understand what the core business of maintenance is, or should be. I believe it is this simple I would also say that maintenance is 'work undertaken that sustains or improves reliability in your plant'.

A simple test is to review all the work undertaken in your plant and see what percentage of the work fits this definition. In many cases the percentage of real maintenance work is very low and in some cases non-existent.

So maintenance is about sustaining reliability in a machine and ultimately all the machines in the process. I would then say that it is the job of maintenance to ensure 'equipment reliability'

So then what is not truly maintenance?

- Improving the operation of a machine
- Fitting and adjustment of change parts.
- The installation of new equipment.
- Responding to breakdowns.

You are probably asking yourself why it is so important to understand the difference.

This training covers the basics of maintenance, understanding their reason for existing and clarifies the important role that maintenance plays in plant reliability. The intended outcome of this training is to ensure that the focus of your maintenance staff is on tasks that add to the reliability of your plant.





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Managing Humans

You will often hear the term “people are our most valuable asset” and this can be true, however here are two problems with this. Firstly they need to be the right people in the right roles and they need to be effectively developed to ensure that they are adding value to the business.

If people are our most valuable asset then developing the people who lead them is paramount to their success.

In this training the following areas are covered:

- You will learn how to step humans effectively through change
- Learn how to develop humans to become self managing
- Learn how to identify the solutions with problem humans
- Learn how to effectively discipline humans at the right time for the right reasons
- Look at the fundamental human management philosophies

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Project Manager

Professional Projects Every Time

SYNERGISTIC Project manager is an easy to follow six step project management process that has been developed specifically for manufacturing.

The intended outcome of this training is to allow a simple planning process that will avoid scope creep on projects, ensure that the details of the planning process are not missed and more importantly that everything is budgeted for in the project

For the capital approval process an insight is given into the requirements of tax law. The company's capital request process is presented in the training, giving the trainees a clear understanding of the correct approval routes and the reasons why they need to be followed.

Time line reporting and project close out are the final steps of this process. These ensure that the project stake holders are informed of the progress. Before close out of the project input is sought to ensure that expectation of the project stakeholders are met.

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