

## Maintenance – The meat in the Sandwich?

Does this seem familiar? It certainly did to a number of people who attended a CTPM Learning Group Meeting in Hobart on 22 June. Representatives from Norske Skog, National Foods, Incat, and Impact Fertilizers all participated in a presentation and discussion about this important topic at the Tasmanian Chamber of Commerce and Industry.



Businesses rely on effective and proactive maintenance departments to keep their assets performing well. When it comes to improvement and improvement initiatives though, maintenance often becomes the recipient of a whole lot of minor capital work for production based improvement or can spend a lot of time focussing on internal processes

such as RCM or improving scheduling. These are valuable activities but can be seen as unimportant to maintenance people on the shop floor, especially if they are used to fire fighting.

The group spent some time up front discussing the various improvement strategies that were being used at different companies. Some companies were progressing down a Lean journey, focusing on value stream mapping and reducing non value added time; others were looking at improving their lubrication processes; others were following a hybrid internal process. Each company was also at a different stage of development with some just establishing a PM process, whilst others had high machine availability and had time for considerable root cause analysis and prevention activity.

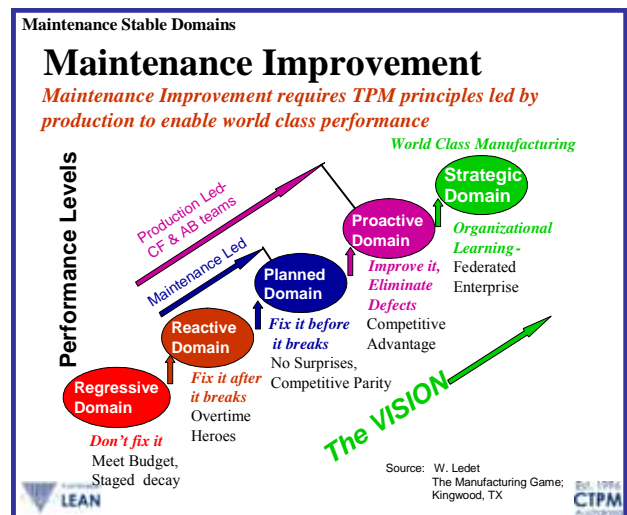


Figure 1

Figure 1 shows the various stable domains for maintenance improvement. Most of the participating companies identified themselves as being within or at least moving towards the “Planned” domain. KPIs such as PM completion and schedule compliance were helping them to measure their performance in this area.



A few companies identified that they were trying to move beyond the “Planned” domain into the “Proactive” domain. This involves a more intense focus on defect elimination and prevention. This has its basis in the concept of equipment TLC – ensuring that the plant was tight, lubricated, and clean. It also seeks to address the root cause of failure, as shown in Figure 2. To facilitate the movement into this domain, it is important that performance measures are reviewed. As “Maintenance Response Time” may become less of a measure when you move from the “Reactive” to the “Planned” domain, measures such as “defects identified and corrected” become more important in the “Proactive” domain.

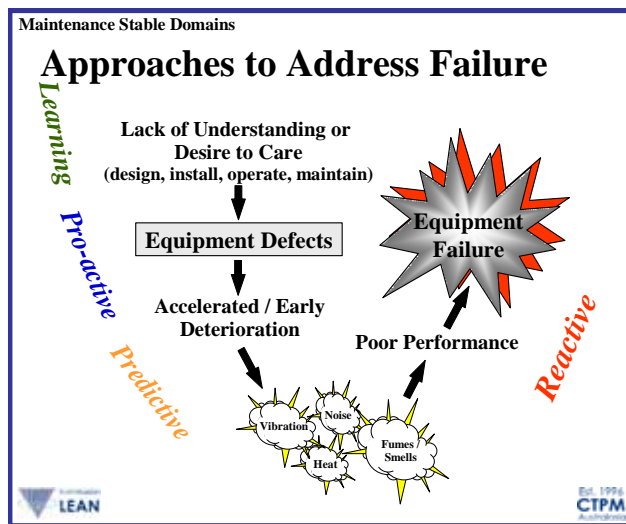


Figure 2

However as a maintenance led activity, defect identification and elimination can be difficult to do. This is because it relies upon frequent checking and genuine equipment care. This is really best done by the production department and production operators.

The move into the “Proactive” domain needs to be led by these people rather than the maintenance department (Figure 1).

This can leave the maintenance department in a bit of a quandary. What to do with these expert equipment technicians who now have fewer PMs to do? Within the TPM<sup>3</sup> – Australasian Lean methodology of Maintenance Excellence, these technicians now have an added role as machinery experts, aiding and assisting operators to truly understand their plant and equipment through Operator Equipment

Management (OEM). This goes beyond the standard trouble shooting guide to encompass deep understanding of how the equipment functions and what good performance really means. The result is expert operators focussed on equipment defect identification and prevention, and machine availability in excess of 90%.

Coupled with an initial focus on “time lost”, which helps to build credible improvement at the shop floor and free up time for further improvement activity, Maintenance Excellence provides a framework for real maintenance performance improvement. This helps to support the improvement activity of the entire business. Rather than being dictated to by production, or following an independent, isolated improvement path, TPM<sup>3</sup> and Maintenance Excellence is a proven methodology for enhancing the maintenance and production processes allowing organisations to jump straight to the “Proactive” domain (Figure 3).

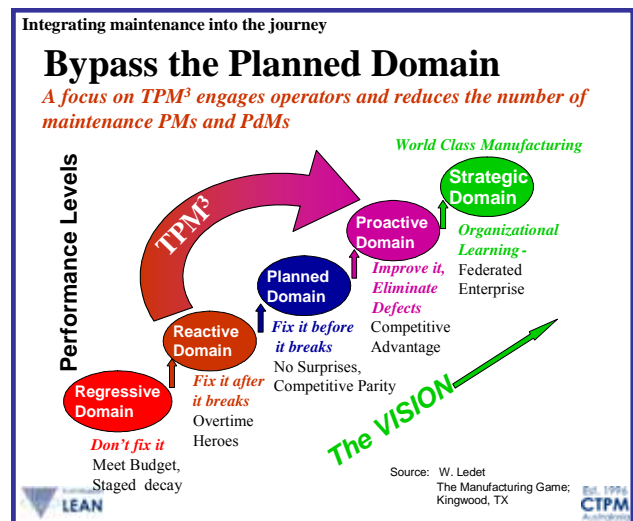


Figure 3

Further discussion and networking followed the presentation.

For further information about TPM<sup>3</sup> – Australasian Lean contact Tim O’Shea – TPM<sup>3</sup> Senior Navigator TAS, CTPM Australasia who is based in Elizabeth Town, Tasmania on 0428 525 349 or CTPM Australasia Head Office on (02) 4226 6184.