

# Operational Excellence

through CTPM's Australasian organic approach to

## TPM & Lean / CI

Webinar 32

22 September 2015

# Developing Leadership Thinking for TPM & Lean / CI



Presentation by:  
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*People before Tools*

**Webinar 32**

**22 September 2015**

## **Outline of Presentation**

### **Developing Leadership Thinking for TPM & Lean / CI**

1. Our Challenge for Leadership Thinking
2. Importance of Time Perspective
3. Thinking behind TPM & Lean / CI
4. Comparing Mass Production to Lean Production Leadership Thinking
5. Summary: Key Points on Leadership Thinking



# 1. Our Challenge for Leadership Thinking

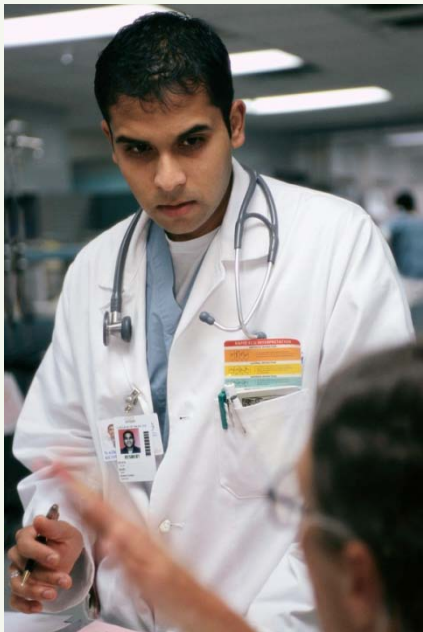
*Moving Leadership thinking at all levels from traditional  
Short Term, cost driven thinking to  
Long Term, total cost thinking  
has been one of the great challenges faced by many sites  
trying to implement and sustain their TPM & Lean / CI  
journey*



## 2. Importance of Time Perspective

*the most successful people, companies and countries  
have the longest time perspective*

Brian Tracy – The Physiology of Selling



## 2. Importance of Time Perspective

**Headings of the 14 Management Principles, which create the 'Toyota Way' in Jeffrey K Liker's book – The Toyota Way**

*Long Term Philosophy*

*The Right Process will produce the Right Results*

*Add Value to the Organisation by Developing your People and Partners*

*Continuously Solving Root Problems Drives Organisational Learning*

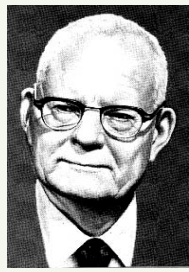
## 2. Importance of Time Perspective

**The 14 Management Principles, which create the ‘Toyota Way’:**

### *Long Term Philosophy*

Base your management decisions on a long-term philosophy, even at the expense of short-term financial goals



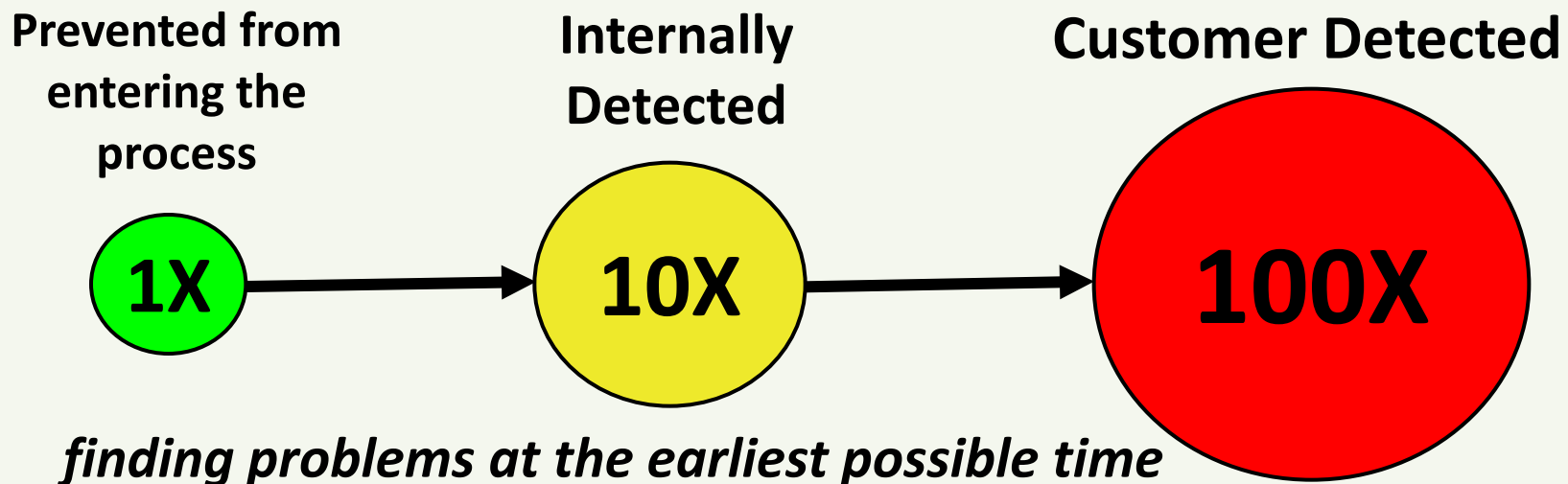


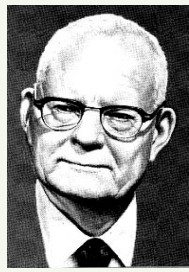
### 3. Thinking behind TPM & Lean / CI

#### Dr W Edwards Deming's 3 Key Points regarding Quality

1. Focus on the Process, not just the activity
2. Apply 'Prevention at Source' for the Process
3. Recognise the 'Tyranny of Time' when addressing problems

#### The cost of Product Defects when they are:





### 3. Thinking behind TPM & Lean / CI



## Prevention at Source for the Equipment

The cost of Equipment Defects when they are:

Prevented from  
entering the  
equipment

1X

Internally  
Detected  
through PM /  
PdM activities

20X

Ignored and cause  
Breakdowns

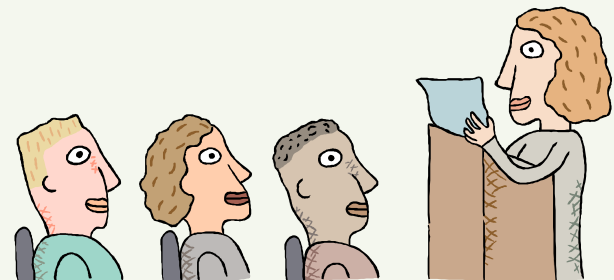
50X

*Hence need to prevent defects from entering our equipment as well as finding equipment defects at the earliest possible time*







# *Ask the Audience*



# 4. Comparing Mass Production to Lean Production Leadership Thinking

	2. Mass Production	3. Lean Production
<b>Timing</b>	Developed in 1913	Developed in 1970
<b>Location</b>	USA	Japan
<b>Who</b>	Ford	Toyota
		
<b>1. Focus</b>	Output Driven	Customer Driven
<b>2. Technology</b>	Inter-changeability of Parts	Process Control
<b>3. People</b>	Specialisation of Labour	Team Flexibility
<b>4. Cost Control</b>	Dept Budget Driven	Total Cost Driven
<b>5. Quality</b>	Control by End of Line Inspection <i>Don't Stop the Line</i>	Control by Process Responsibility <i>Stop the Line</i>
<b>6. Management</b>	Autocratic	Engagement
<b>7. Improvement</b>	Specialists	Everyone

## 1. Focus

# Output Driven Vs Customer Driven

$$\text{Customer Value} = \frac{\begin{array}{c} \uparrow \\ \text{Quality} \end{array} \times \begin{array}{c} \uparrow \\ \text{Service} \end{array}}{\begin{array}{c} \text{Total Cost} \\ \downarrow \end{array} \times \begin{array}{c} \text{Delivery Time} \\ \downarrow \end{array}}$$

**Quality** – not only the product but also the process

**Total Cost** – as opposed to price

**Service** – includes technical advice

**Delivery Time** – not just shortest, but most accurate and reliable

## 1. Focus

# Output Driven Vs Customer Driven

## Output Driven

Focus on Safety, Output and Cost

## Customer Driven

Ensure what they pass onto the next workstation / process is to the required quality standard.

*Q: How do you know you have produced quality output?*

## 1. Focus

# Output Driven Vs Customer Driven

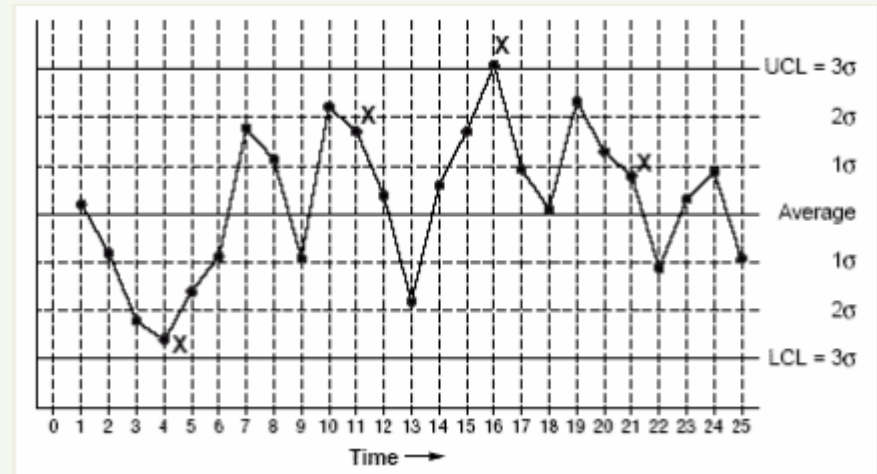
## Leadership Training at Toyota

*Recognise that Safety First is a given, and that perfect quality and customer satisfaction are the most important focus of the company after safety*

*Understand and re-enforce that quality is never sacrificed for cost or expediency.*

## 2. Technology

# Inter-changeability of Parts Vs Process Control



Control Chart with 'out-of-control' signals

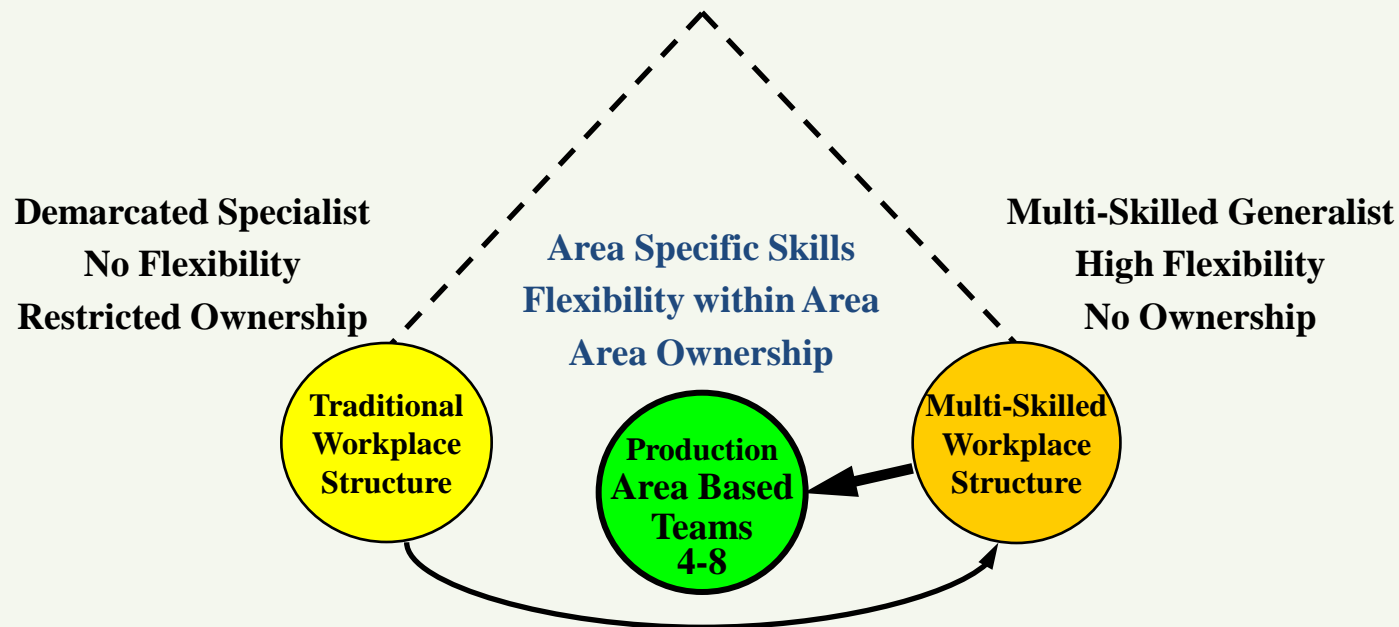
Focus on Numbers and Targets

Focus on Trends

### 3. People

## Specialisation of Labour Vs Team Flexibility

### The Pendulum of Change

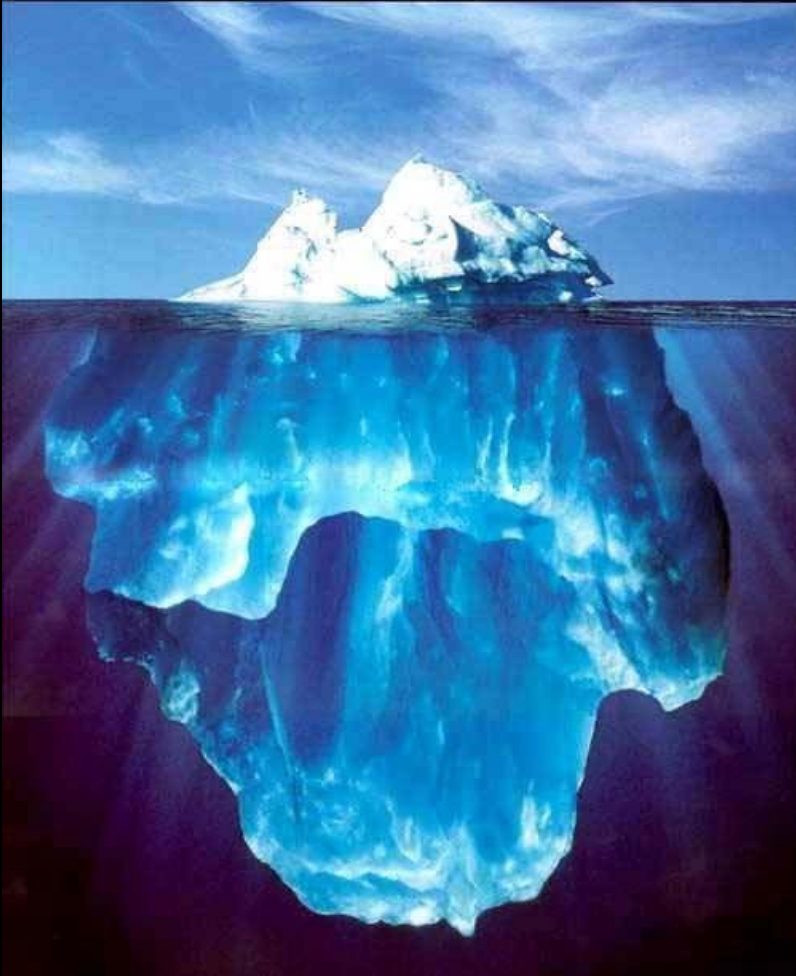


*Properly established Production Area Based Teams of 4-8 with dedicated Frontline Leader create an ownership environment that has flexibility though Base Skills across the team and allows the development of Mastery Skills and Team Skills*



## 4. Cost Control

### Dept Budget Driven Vs Total Cost Driven



Businesses are organic, there is no one measure that if focused on alone will generate desired results

For example:

Labour Efficiency may drop by say 5%, if you stop the equipment to do Clean for Inspection for 2 hours a week so you can find defects, and develop your frontline to find problems at the earliest possible time, however the benefits could generate 10 fold the bottom line benefit.

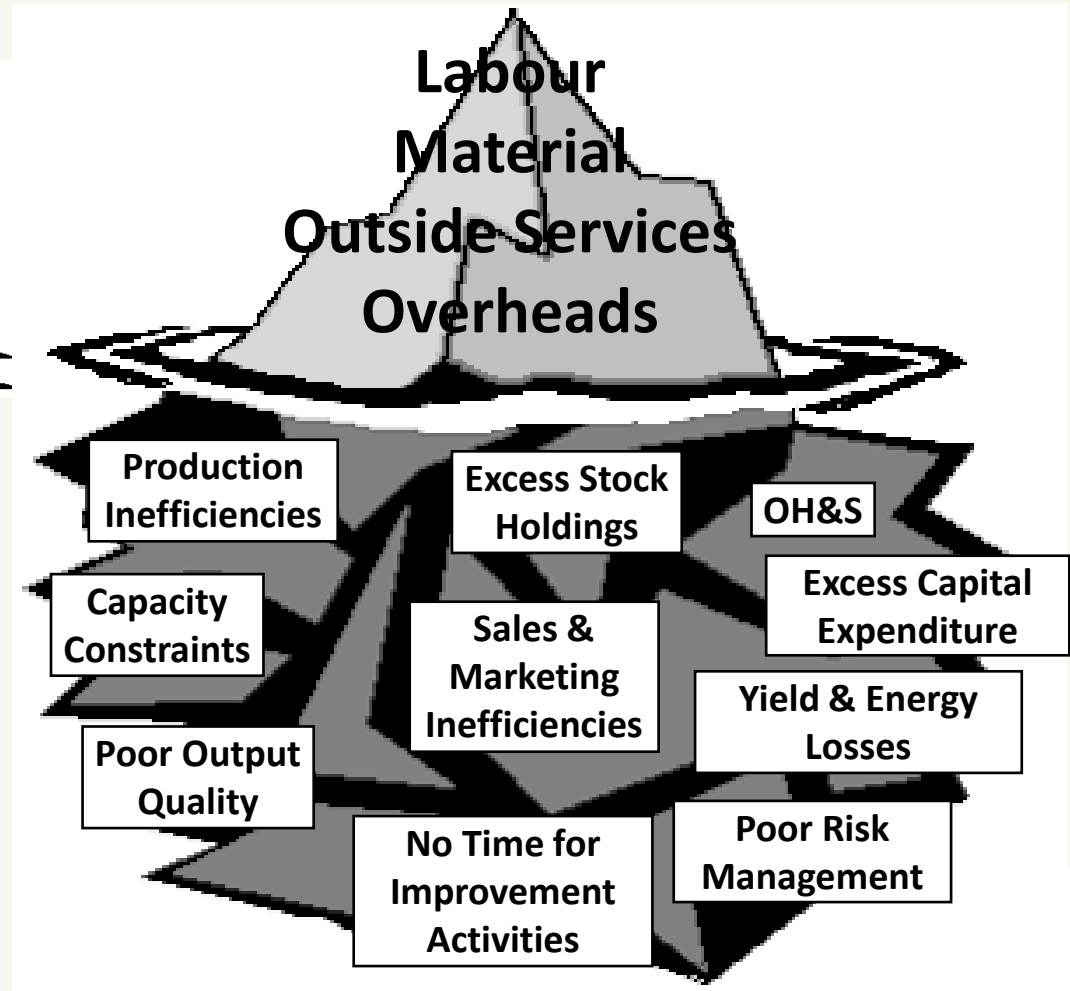


## 4. Cost Control

# Dept Budget Driven Vs Total Cost Driven



## The Hidden Cost of Poor Equipment Effectiveness



## 5. Quality

# Control by Inspection Vs Control by Responsibility

### Don't stop the Line

The more we make the lower the cost, and if the line is stopped the workers will slack off.

### Stop the Line

*I expect my workers to come to work and if necessary, 'pull the cord'*

## 5. Quality

# Control by Inspection Vs Control by Responsibility

## 3 Key Tasks

**In a quality focused organisation all personnel have 3 key tasks:**

1. Inspect their inputs to ensure they are to the required standard and if not correct, reject them (zero defects accepted or red bin quality concept).
2. Ensure their process is capable (Process Capability) and they follow Standard Operating Procedures and produce quality output.
3. Ensure what they pass onto the next workstation / process is to the required quality standard.

## 5. Quality

# Control by Inspection Vs Control by Responsibility

	Question	Evidence
Inputs	<i>Q: How do you know you are using quality input materials?</i>	Quality Standards for Inputs
Process	<i>Q: How do you know how to produce the output correctly?</i>	Standard Operating Procedures
Outputs	<i>Q: How do you know you have produced quality output?</i>	Quality Standards for Outputs

## 6. Management

# Autocratic Management Vs Engagement

Tell people what to do to ensure correct tasks are focused on.

However, people tend not to do anything until told to do so.

## Pull Culture Change

addressing the

*what's in it for me*

through

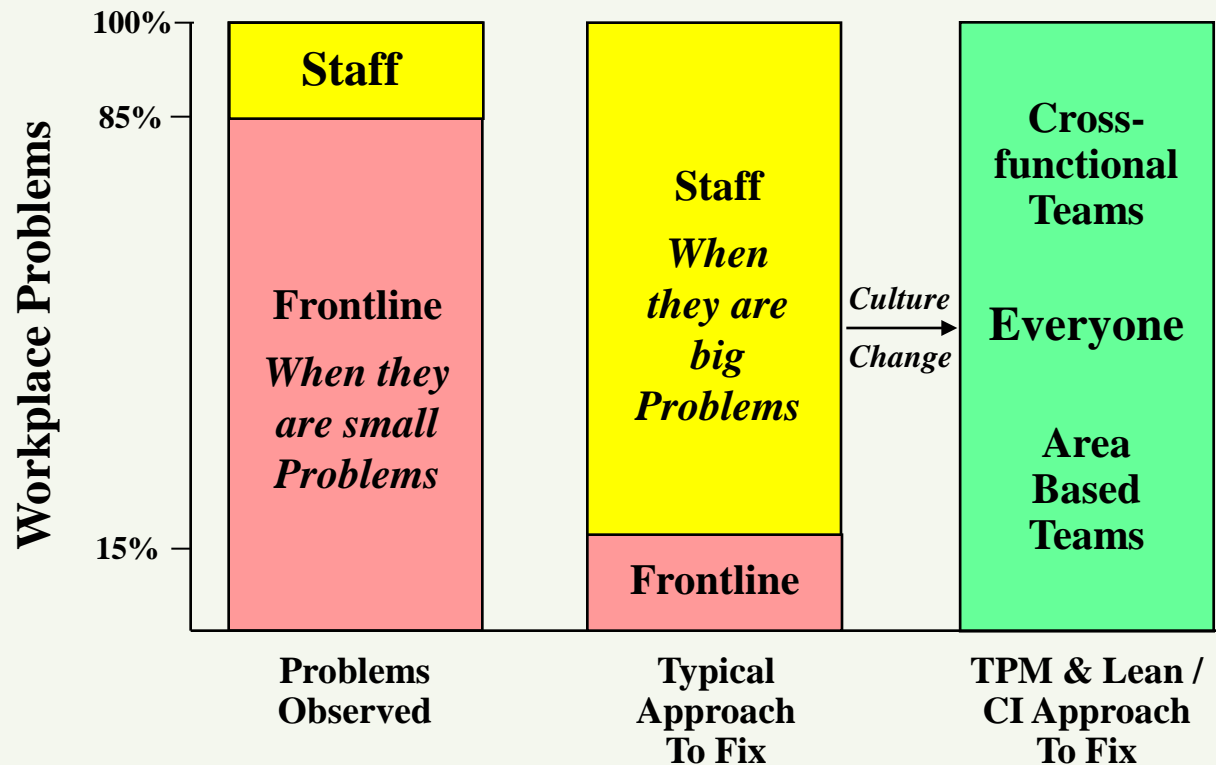
*emotive questions*

that promote and encourage everyone to be responsible (ownership) and accountable (agreed expectations) for workplace improvements.

## 7. Improvement

# Specialists Vs Everyone

## Identifying and Addressing Problems in the Workplace



## 5. Summary: Key Points on Leadership Thinking

1. Safety First is a given, however Quality before output and cost
2. Identify problems at the earliest possible time
3. Create a structure and rosters that support development of entire workforce
4. Total Cost rather than just the department budget impact
5. Control Quality through Responsibility rather than just inspection
6. Engage the workforce by asking questions
7. Get everyone involved in improvement rather than a select few



*Think Long Term*

# Final Word

## Education

alone is not enough, there needs to be a

*structured development plan*

to allow leadership at all levels to experience through  
**demonstration, doing and reflection** in their workplace,  
the benefits of the new thinking required to achieve  
Operational Excellence

This is best done through their on-going involvement in  
structured and disciplined, strategically driven Cross-  
functional and Area Based Improvement Teams as part  
of their normal weekly work



# How can we help you develop your in-house capability?



**Assisting you to develop your people  
through CI - People before Tools**

## Connecting the CI Community of Australasia through CTPM's new Company Membership Program

CTPM has been assisting Australian and New Zealand companies on their Continuous Improvement journeys for 20 years, over which time we have built up a significant knowledge base and network.

We believe it is now time to share with the broader CI Community of Australasia to ensure all companies are able to further develop their in-house CI capability.

Previously this knowledge base and network has been restricted to clients, now CTPM is opening access to this via an exciting new CTPM Company Membership Program.

The program is open to any site or department wishing to learn more about CI by sharing their learnings to the mutual benefit of Australasian Industry.

A key focus of our approach is to facilitate learning between sites or departments when it is convenient for all concerned, rather than be prescriptive with a set of pre-arranged events.

### NEW & FRESH APPROACH

- Flexible Networking and Learning**
- Keeping you up to date on latest Thinking & Events**
- Exclusive Access to 3 Key Enablers of Successful CI Capability**



### BENEFITS OF MEMBERSHIP

- Total flexibility to suit your specific needs
- Opportunity to develop relationships with other sites or departments facing similar challenges or who have overcome the challenges you face
- Access to the knowledge of our team of experienced CI Specialists who collectively have 135 years industry experience; 60 years consulting / facilitating / training experience and 50 years at CTPM
- Access to over 12 years of benchmarking data on Australasia industry with simple tools to assess how your site compares in relation to Quality, Delivery, People Engagement, Maintenance Effectiveness and Workplace Culture



**CTPM Company Membership has  
an annual fee of \$200 (Incl GST)  
per site or department**

**Special Offer: 50% Discount for the first year  
of Membership (available until 30 June 2015)**

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# *Question Time*



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