

# Operational Excellence

through CTPM's Australasian organic approach to

## TPM & Lean / CI

Webinar 34

3 December 2015

# Improving Line Performance through Skills Development



Presentation by:  
**Ross Kennedy**  
President CTPM





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**President CTPM**



*People before Tools*

**Webinar 34**

**3 December 2015**

## **Outline of Presentation**

### **Improving Line Performance through Skills Development**

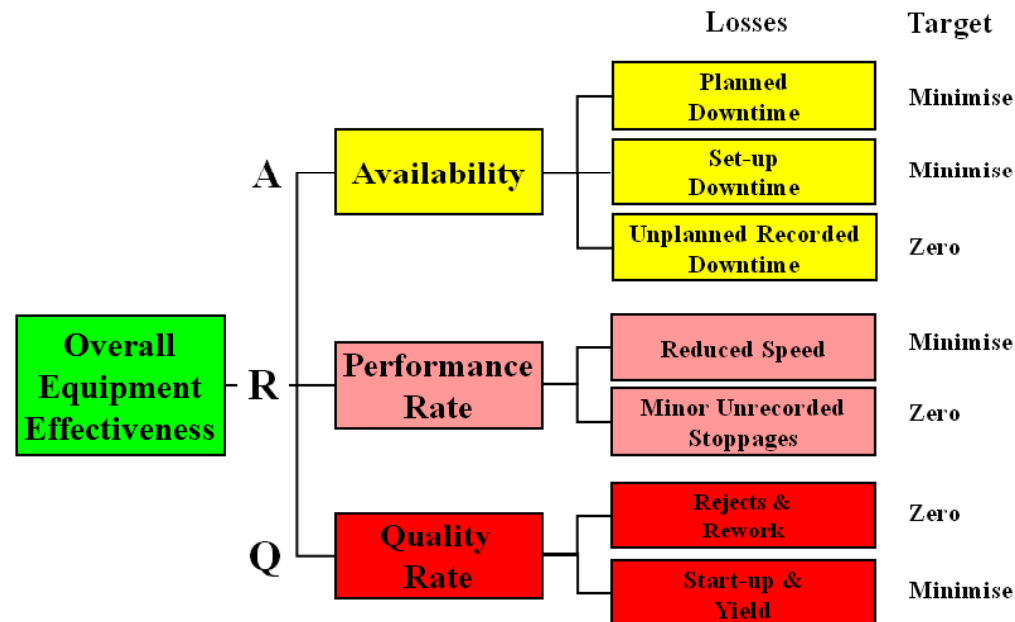
1. Understanding the impact Operator skills have on line performance
2. The learning from ***Training Within Industry***
3. The need for a structured Cross-functional Team approach
4. How do we get started?

# 1. Understanding the impact Operator skills have on line performance

## 3 Types of OEE Losses:

- Management related Losses
- Technical related Losses
- People Development related Losses

## Overall Equipment Effectiveness Model



# CTPM's TPM & Lean Annual Forum 2013: Wollongong NSW

## 18-20 September 2013

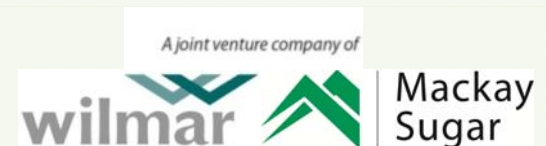
### Developing Shopfloor Skills while Standardising Work Practices

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Helping Operators to deal  
with their Equipment and  
Systems



**Aaron Jacobs**  
CI Co-ordinator  
NZ Sugar



# 1. Understanding the impact Operator skills have on line performance

## Questions?

Show of hands

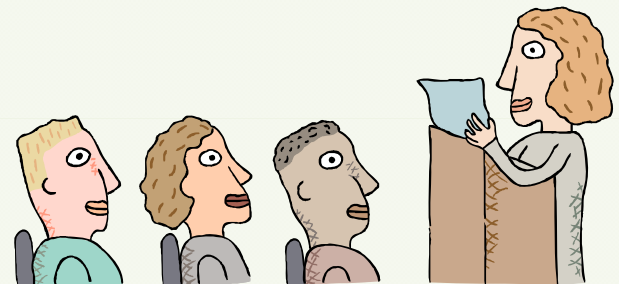


Who believes some of their Operators:

don't fully understand their equipment  
are not trained well enough  
are not smart enough



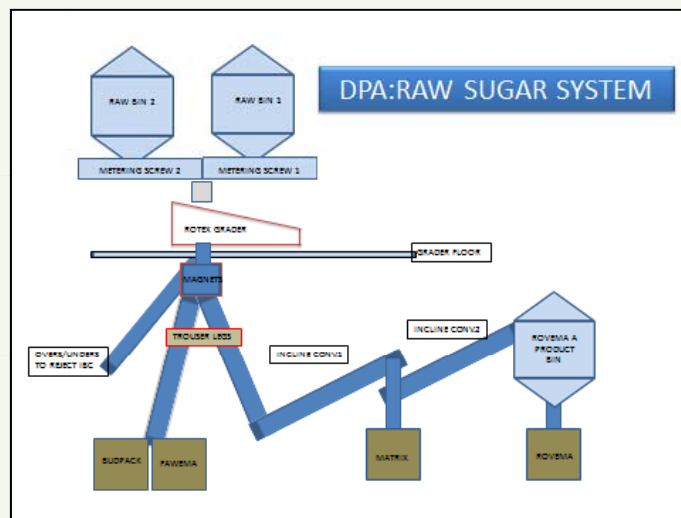
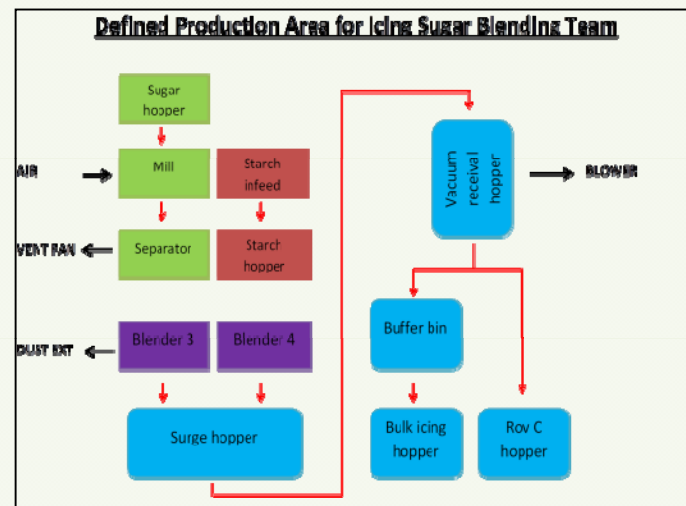
# *Ask the Audience*





# 3 Teams over 3 cycles with 3 different issues

1. Matrix Packing Machine (First Rate)
2. Icing Sugar System (The Maximisers)
3. Raw Sugar Delivery System (Raw my Boat)





## 2. The learning from *Training Within Industry*

*During the second world war, the concept of Training Within Industry (TWI) was developed in the USA to accelerate the training of new or unskilled personnel in factories who replaced those who joined the military and went off to war.*

The training process involved:

Breaking down the job into its ***Major Steps***;

Identifying the ***Key Points***; and

Teaching using the ***Four Step Method***.

Every job task consist of a series of activities that are completed in a specific order and way. The activities are referred to as the **Major Steps**.

The **Key Points** are the most important aspect of the training process. They cover:

***Safety***

***Quality***

***Special Technique***

***Productivity Rate***

***Control of Cost***

## 2. The learning from *Training Within Industry*

The Key Points must have a valid and **important reason**, if not they **are not** Key Points.

The Major Steps define ***what*** is being done while the Key Points describe ***how*** to perform the Major Step

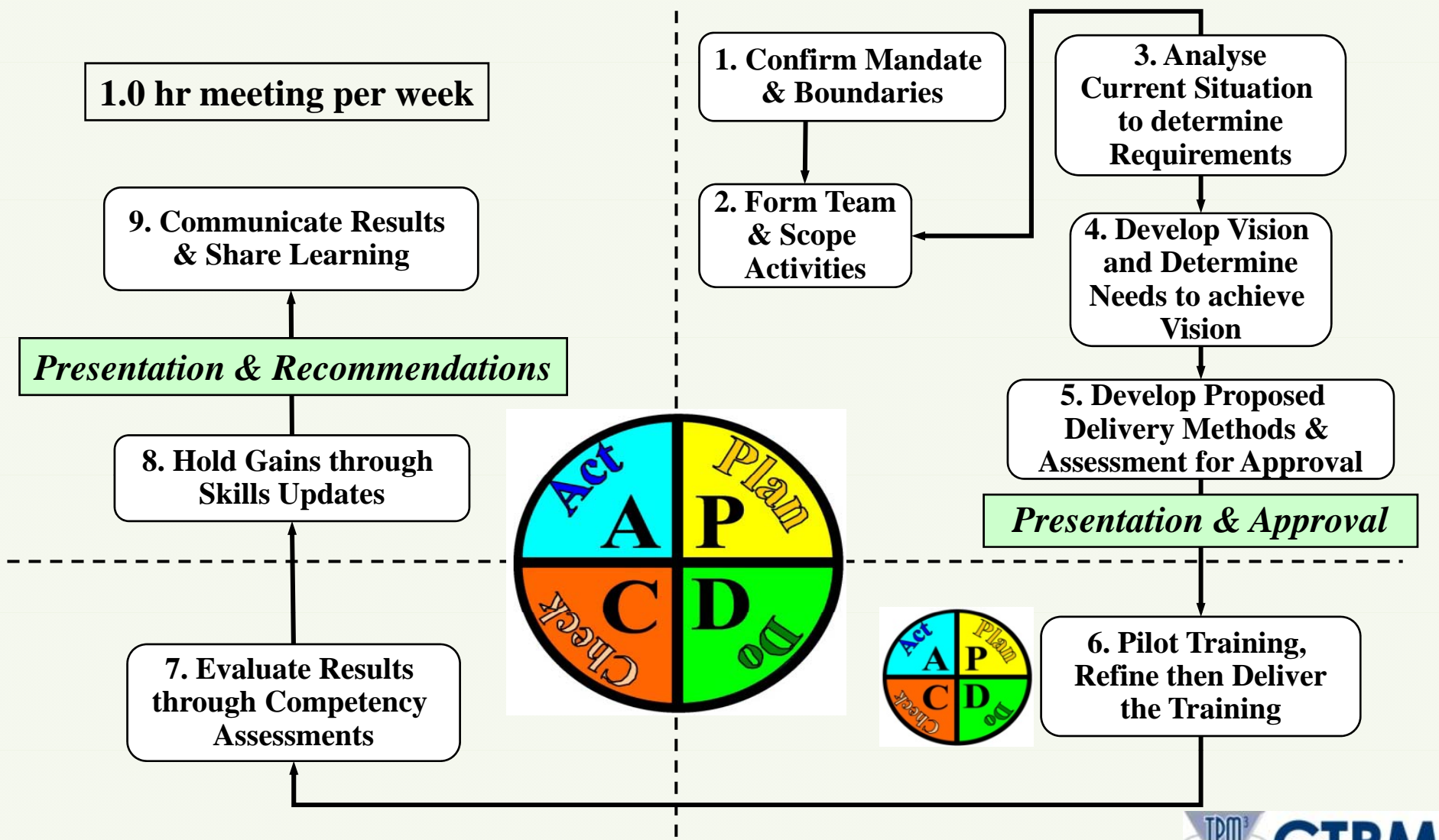
The **Four Step Method** of Teaching:

Steps	TWI Language	Relationship to P-D-C-A Cycle	CTPM Adult Learning Language
Step 1	<b>Prepare</b> the Student	Plan	Education
Step 2	<b>Present</b> the Operation	Do	Demonstration
Step 3	<b>Try-out</b> Performance	Check	Practice
Step 4	<b>Follow-up</b>	Act / Adjust	Reflection

# 3. The need for a structured Cross-functional Team approach

## Micro Education & Training Skills Improvement

typically within a 12 week cycle based on the P-D-C-A wheel



### **3. The need for a structured Cross-functional Team approach**

#### **Selecting the right team members: What skills do we need?**

##### **What do we Train**

- Centre Lining Settings
- Standard Operating Procedures
- Quality Standards
- Changeover Routines

##### **How do we Train**

- Training by dedicated trainers
- Training by Frontline Leader
- On-the-job Learning
- Buddy Training

##### **How do we Assess**

- Competency Assessment
- Objective Outcomes

##### **How do we Monitor**

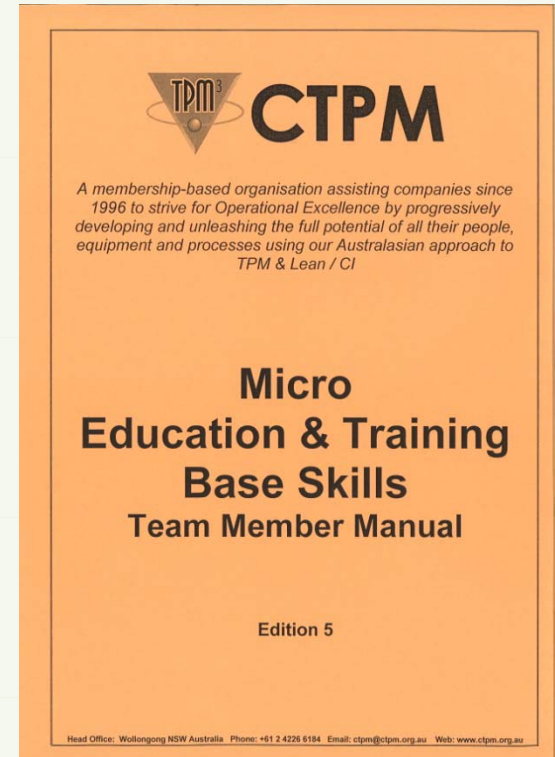
- Training Records
- Skills Matrixes

## 4. How do we get started?

# Micro Education & Training Base Skills Team

## The Process

1. Focus on Developing the Frontline Leader
2. Focus on Self Learning
3. Ensure Competency of Required Skill
4. Focus on Practical Training
5. Use a Systematic Approach
6. Promote Team Discussion & Reflection
7. Use Real Examples
8. Focus on Standardising the Work
9. Use Training Within Industry (TWI) Methods
10. Use the Toyota Training Model for Delivery





# Learning from NZ Sugar



## The Process

Each case was unique but we ended up following the same process:

- Identify Settings (includes fixing things not working properly)
- Standardise the settings (determine what the correct settings should be)
- Train the operators (ensure they understand the why)

## The System

- In many cases we don't fully understand the equipment
- Too quick to blame operators and training
- Need to go back to the fundamentals, Why and How?
- Operators aren't stupid they just often have to put up with stupid systems

# How can we help ?

**CTPM**  
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)**

**www.ctpm.org.au**

## Membership Benefits include:

- Receiving a copy of Aaron's presentation
- Receiving a copy of this presentation
- Plus a lot more





TREASURY WINE ESTATES



Norske Skog

goodman fielder  
our homegrown food company



Humes

AstraZeneca



Dominion Salt



Doors & Openers

THERE'S SO MUCH MORE BEHIND A B&O DOOR

SKRETTING  
a Nutreco company





# *Question Time*



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