

Operations Excellence

through an Australasian Organic Approach to

TPM & Lean

12 August 2014

Organisation Structure & Shift Rosters to support Operations Excellence

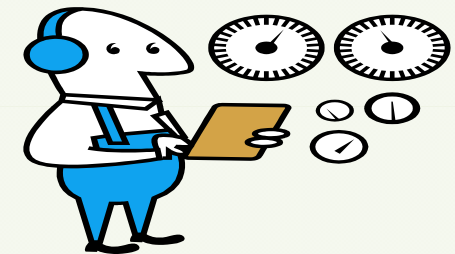


Presentation by:
Ross Kennedy
President CTPM

Outline of Presentation

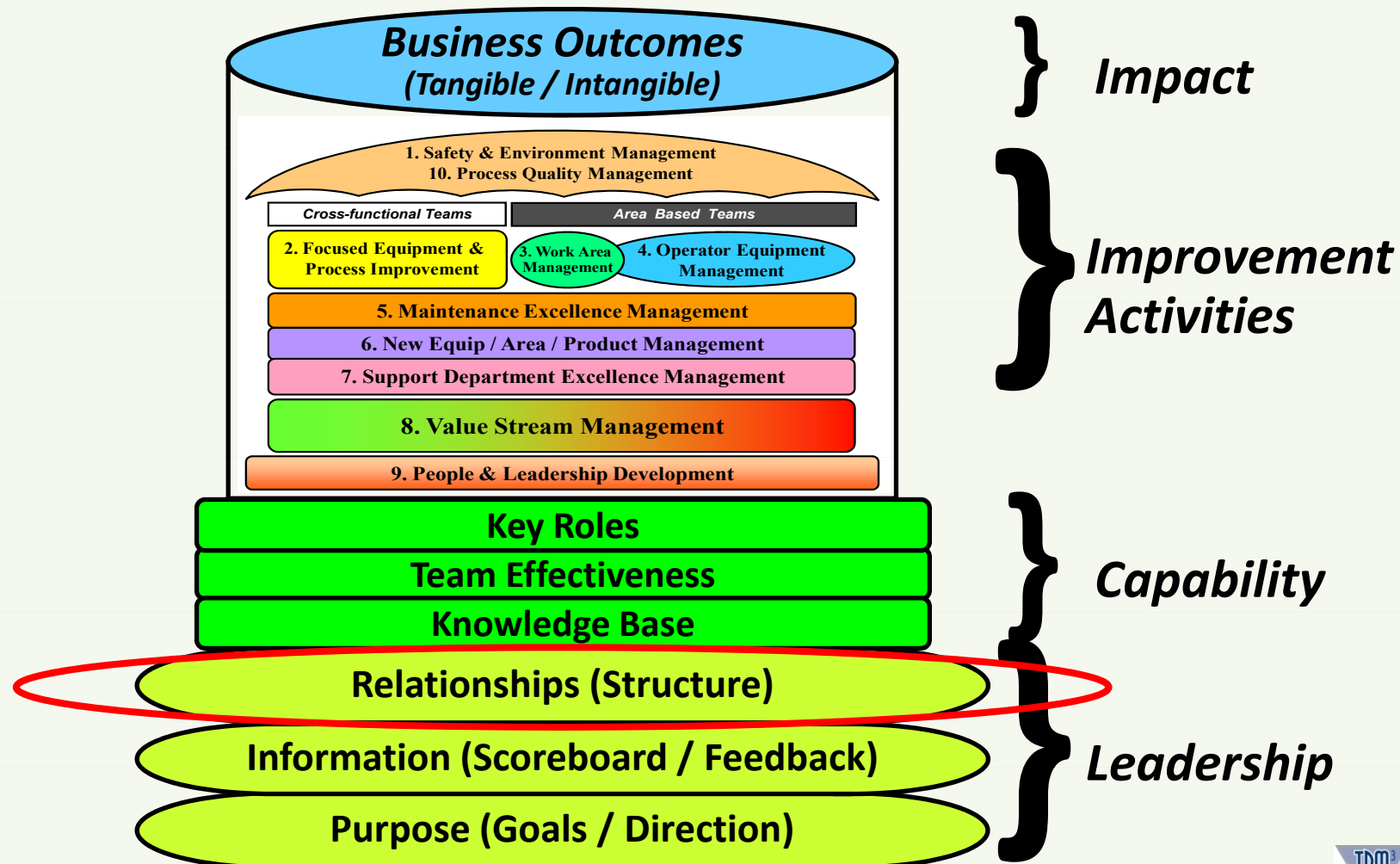
Organisation Structure & Shift Rosters to support Operations Excellence

1. The Importance of Structure
2. Getting the Structure Right
3. Importance of Rosters
4. Getting the Rosters Right
5. Key Production Roles
6. Summary



1. The Importance of Structure

5 Level Milestone TPM³ / CI Excellence Award to support the journey to Operations Excellence



1. The Importance of Structure

Operations Excellence or Continuous Improvement can be approached Organically (people development focused) or Mechanistically (CI Tools focused).

Our learning is that Mechanistic approaches do not sustain

To achieve Operations Excellence you need to develop all your people so they are capable and motivated to take responsibility for their:

- **inputs**
- **process**
- **outputs**

1. The Importance of Structure

‘it is the frontline that creates the bottom-line for a business’.

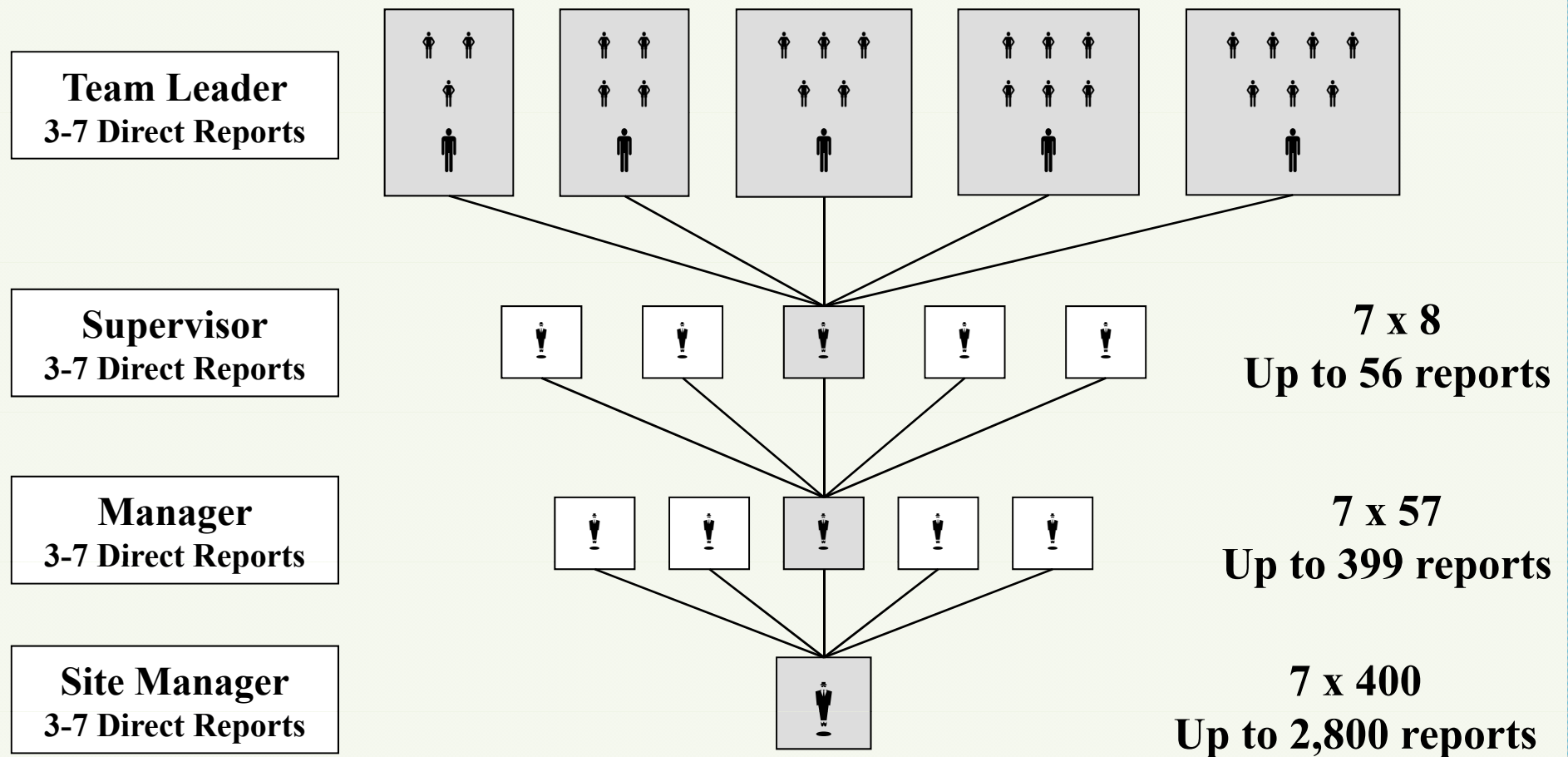
The Eighth Habit
Stephen Covey 2004,

The more you continue to develop your people to **Problem Solve**, create a **Visual Workplace** so as to be able to see problems at the earliest possible time, and apply **Prevention at Source** to stop problems from occurring, the quicker your organisation will be able to adapt and respond to an ever changing market, or be more **innovative** and become a market leader.

The Corporate Governance of CI
CTPM E-Tech Aug 2014

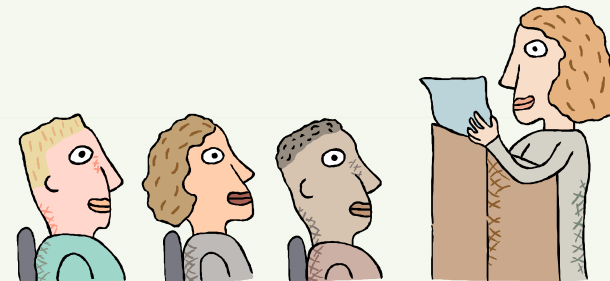
2. Getting the Structure Right

Creating the Structure to promote the development of your People





Ask the Audience



3. The Importance of Rosters

***Operators role is just to operate the plant
and***

Maintenance role is just to fix the plant

**Conduct maintenance weekly for 1-2 hours per shift to
allow Operators to conduct Clean for Inspections to
find equipment defects at the earliest possible time
and**

***Have the same maintenance people work with the
same crews each week to build relationships and
promote the sharing of learning***

3. The Importance of Rosters

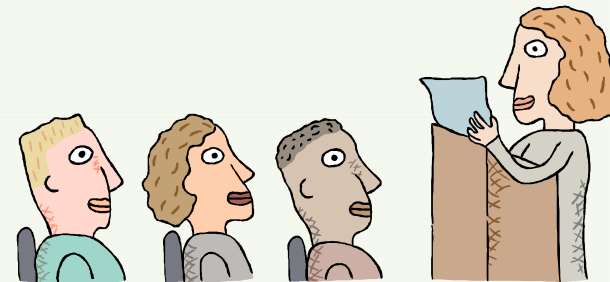
Customer & supplier connections (eg Maintenance, Quality and Mentoring Support) ***must be direct, and there must be an unambiguous yes-or-no way to send requests and receive responses ****

*Rule 2. Decoding the DNA of the Toyota Production System
Steven Spear and H. Kent Bowen
HARVARD BUSINESS REVIEW Sep-Oct 99

Production and Maintenance Rosters need to be aligned



Ask the Audience



4. Getting the Rosters Right

Some Rosters we have seen!

Production Crew (28 day roster x 8 hrs):

D, D, D, D, D, D, D, **R, R**, N, N, N, N, A, A, A, **R, R, R, R**, N, N, N, A, A, A, A, **R**
D, D, N, N, **R, R, R, R**, D, D, N, N, **R, R, R, R**, D, D, N, N, **R, R, R, R**, D, D, N, N

Production Supervisors (4 on 4 off x 12 hrs):

4. Getting the Rosters Right

What is the best roster system?

Day Shift Only

8 hour x 2 shifts fixed

8 hour x 2 shifts rotating (weekly)

8 hour x 3 shifts fixed

8 hour x 3 shifts rotating (weekly)

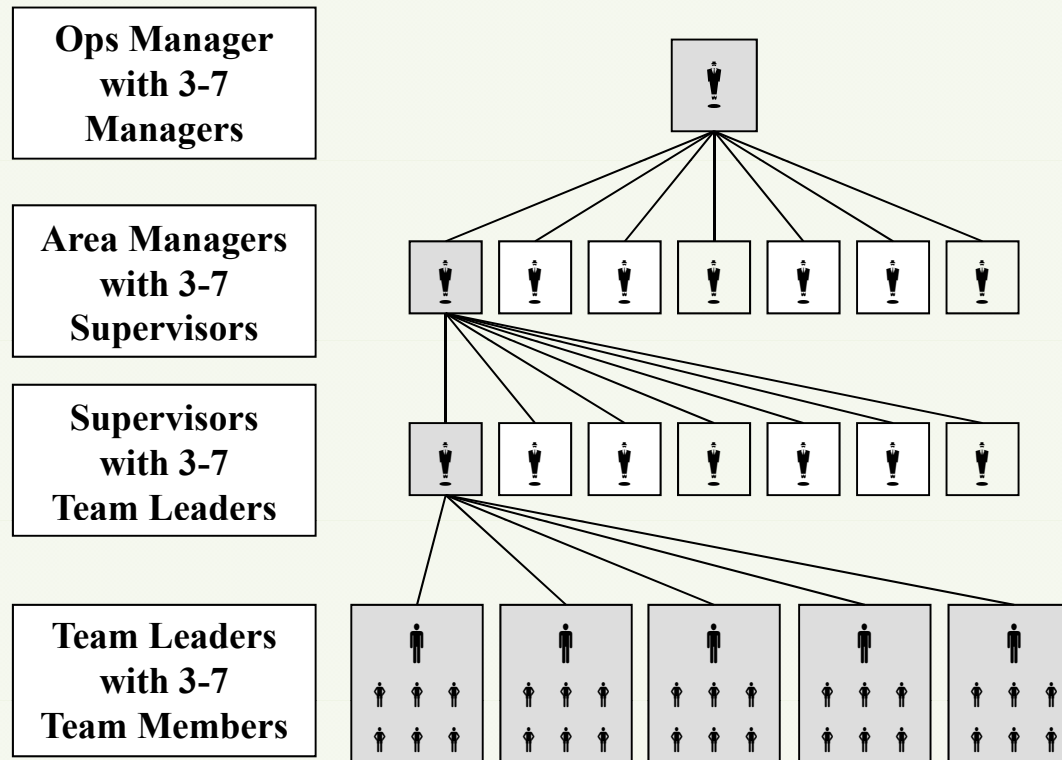
12 hours fixed

12 hours x 2D2N 4 off rotating

12 hours x complex roster system including long break every 8 weeks

Do you want your people to be involved in on-going improvement activities and develop their Problem Solving, Visual Workplace and Prevention at Source skills, or do you want them to come to work and do what they are told?

5. Key Production Roles



5. Key Production Roles

Team Member

- Perform required tasks to standard
- Support the achievement of the production plan in a safe, quality, cost effective and environmentally sound way
- Be an effective and contributing Team Member
- Be actively involved in scientific **Problem Solving** (identifying and solving problems using a scientific method such as Plan – Do – Check – Act rather than just working around problems)
- Be actively involved in creating a **Visual Workplace** so that problems can be identified at the earliest possible time
- Be actively involved in applying **Prevention at Source** so as to stop problems from occurring

5. Key Production Roles

Team Leader

- Ensure required tasks of the team are completed to standard
- Ensure the achievement of the production plan in a safe, quality, cost effective and environmentally sound way
- Train and support team members in Base Skills and Team Skills
- Teach the team members to be successful in scientific **Problem Solving** (identifying and solving problems using a scientific method such as Plan – Do – Check – Act rather than just working around problems)
- Teach the team members to be successful in creating a **Visual Workplace** so that problems can be identified at the earliest possible time
- Teach the team members to be successful in applying **Prevention at Source** so as to stop problems from occurring

5. Key Production Roles

Supervisor

- Provide frontline safety, human resource, engineering, maintenance and quality support
- Setting goals and allocate resources
- Teach and coach others to see problems, solve problems and build knowledge though ensuring clear expectations are established before initiating improvements
- Develop detailed knowledge of their equipment, machinery and process and teach it to others
- Create ample learning experiences by challenging standards to ensure work is being done without delay, without waste, and without strain of any kind
- Be integral to major improvements of the process, even introducing new products and processes

5. Key Production Roles

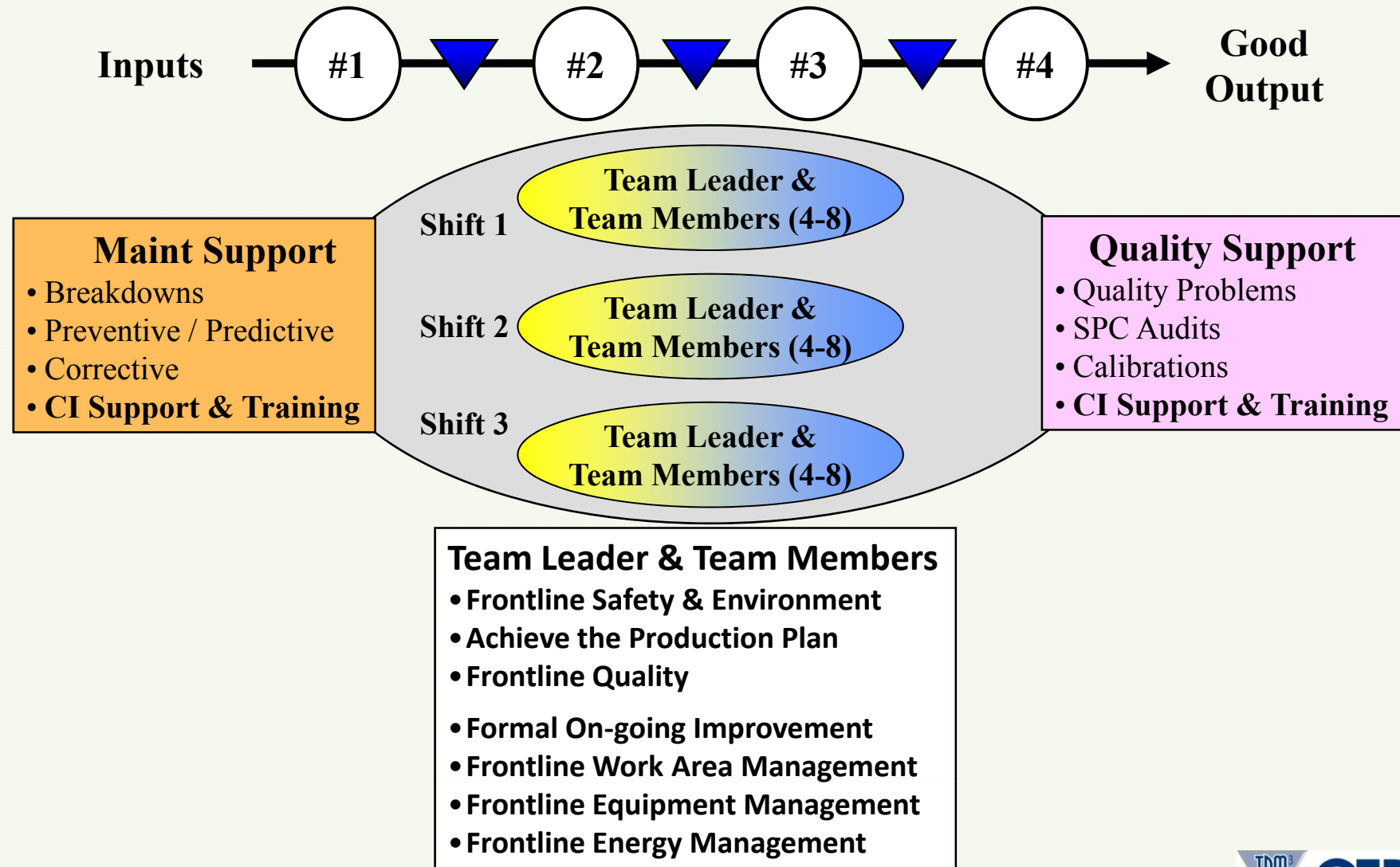
Attributes of a Team Leader / Supervisor / Manager

- A commitment to excellence;
- A willingness and desire to learn a new way of thinking;
- A willingness and desire to learn a new way of leading;
- See their role as one of developing their people and creating future leaders, in other words, a desire to be a good teacher and long term thinker;
- Recognise that Safety First is a given, and that perfect quality and customer satisfaction are the most important focus of the company after safety; and
- Understand and re-enforce that quality is never sacrificed for cost or expediency.

Do not select based on Charisma. It is the ability to repeatedly demonstrate their capability on the job – understanding of the work, understanding of lean thinking, good at getting to the root cause of problems

6. Summary

Production Area



How can we help?

www.ctpm.org.au

TPM & Lean Annual Forum 2014
Novotel Northbeach - Wollongong

Operations Excellence in Action

Engaging all your people in Continuous Improvement
2 DAYS ACTION PACKED ... Plus a Plant Tour

Wednesday 20 & Thursday 21 August - Leading Practitioners in Operations Excellence plus the Battle of the Improvement Teams

An opportunity to hear from, and network with Continuous Improvement practitioners from leading sites in Australia and New Zealand progressing their journey to Operations Excellence...

Also watch the Aussie Cup Team Competition finalist showcase their improvement activities. Demonstrating how both Cross-functional and Area Based Teams are the critical ingredient to any improvement journey



Friday 22 August - Half Day Plant Tour
Bluescope Steel Coated Products

Hear from and see their Operational Excellence improvement activities, complete with a networking lunch to end the half day experience.



Why you need to join us?

1. Recognised as the leading forum on Continuous Improvement in the Manufacturing Sector focused on speakers who work in and understand our Australasian workplace culture.
2. Provides Continuous Improvement Co-ordinators and Managers with the latest learning on how to get the most out of, and sustain the gains from improvement activities.
3. Hear and learn from 7 case studies, 5 improvement teams along with a unique plant tour experience.


Phone: +61 2 4226 6184
Website: www.ctpm.org.au






PLUS:





Specialising in Operations Excellence through TPM & Lean (TPM³)



May 2014

Organisation Structure & Shift Rosters for Operations Excellence – What have we learnt?

Executive Summary

Organisation structure and shift rosters are two areas that many companies struggle to get right in their quest to improve their business. Too often companies are locked into arrangements that significantly hinder their ability to engage all their people in on-going improvement activities resulting in a lack of sustainability of the improvements that are made.

Having a clear Operations Vision of what is required to achieve Operations Excellence is the obvious starting point, however many sites don't see or understand the importance of having the right organisation structure and shift rosters, let alone an Operations Vision, and then wonder why their improvement activities struggle to sustain.

Organisation Structure and Shift Rosters should be a key ingredient for any Operations Vision, recognising the vision may take several years to achieve.

This article aims to provide insights and direction regarding the two critical and interlinked areas of organisation structure and shift rosters. These insights have been gathered over many years of research and, when implemented, have allowed sites to rapidly improve their improvement journeys and hence performance.

Background

Niccolo Machiavelli (1469–1527), the founder of modern political science, in his book *The Prince* published some 5 years after his death in 1532, made the profound comment: *'Small problems are difficult to see but easy to fix, however, when you let these problems develop, they are easy to see but difficult to fix'*.

Steven Spears in his famous article (written with H. Kent Bowen) *Decoding the DNA of the Toyota Production System* published in the *Harvard Business Review* in Sept-Oct 1999 highlighted how Toyota had embraced this thinking when they created their Toyota Production System. In the article he identified 4 rules that underpin the success of the Toyota Production System which all focus on getting the problems identified at the earliest possible time and addressed by the people at the lowest level in the organisation as demonstrated in Rule 4: *'Any improvement must be made in accordance with the scientific method, under the guidance of a teacher, at the lowest possible level in the organisation'*.

This thinking was further expanded in Spears books *Chasing the Rabbit* and *High Velocity Edge* published in 2009 which emphasised and demonstrated through case studies from the most successful operations in the world from a range of industries, the critical importance of finding problems at the earliest possible time recognising that small problems may be difficult to find such as an incorrect label on a pallet of output, however they are much easier and cheaper to fix than big problems that are easy to see, such as a customer complaint when they receive the incorrectly labelled pallet.



Question Time



Presentation by:
Ross Kennedy
President CTPM

Email: ross.kennedy@ctpm.org.au

Phone: 02 4226 6184

Web: www.ctpm.org.au

1. The Importance of Structure & Rosters

Small problems are difficult to see but easy to fix, however, when you let these problems develop, they are easy to see but difficult to fix.

Niccolo Machiavelli (1469 – 1527)
The founder of modern political science

Any improvement must be made in accordance with the scientific method, under the guidance of a teacher, at the lowest possible level in the organisation

Decoding the DNA of the Toyota Production System
Steven Spear and H. Kent Bowen
HARVARD BUSINESS REVIEW Sep-Oct 99