



What is Work Management

Overview

All companies who conduct routine activities and unexpected work tasks by default have a “Work Management Process”. However these processes have usually evolved over time and become site/plant common practice.

The following statement is a definition of Work Management.

“Work Management Process” is a deliberate process carried out to facilitate the Identification, Selection, Planning, Scheduling, Delivery and Review of Work”

The above statement seems straight forward enough, until you think closely about the cross section of departments and personnel required to work together to achieve such a goal. In order to have an effective process for maintaining safe and reliable plant operation, work must be planned, scheduled, co-ordinated, controlled and supported with resources for safe, timely and effective completion.

Work Management History

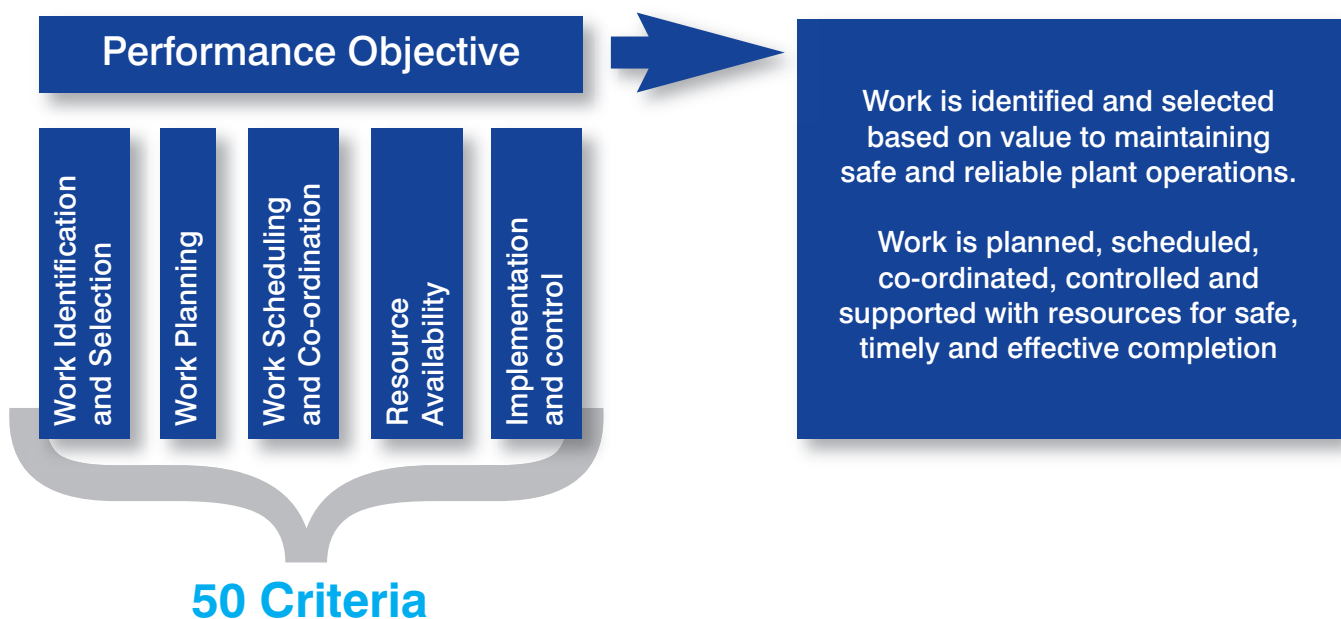
PCMS have developed a Work Management process based on the Institute of Nuclear power Operators (INPO AP-928) standard, adopted as the benchmark by the World Association for Nuclear Operations (WANO). In the highly regulated world of Nuclear Power generation and more latterly reprocessing and decommissioning it is paramount that all work activity can be demonstrated to the regulating bodies as having been conducted in a safe, controlled and measured manner:

This philosophy and practice is not only of value to the nuclear industry, the Work Management benefits are applicable and central to any progressive organisation who understand that the major losses and delays within their day to day operations will often be as a result of their staff struggling with inefficient and outdated process procedures.

Key Steps To Work Management

The following diagram illustrates the five key disciplines that are essential to a fully functional Work Management process. Each column needs to be equally strong and well supported during the development, implementation and embedding stages.

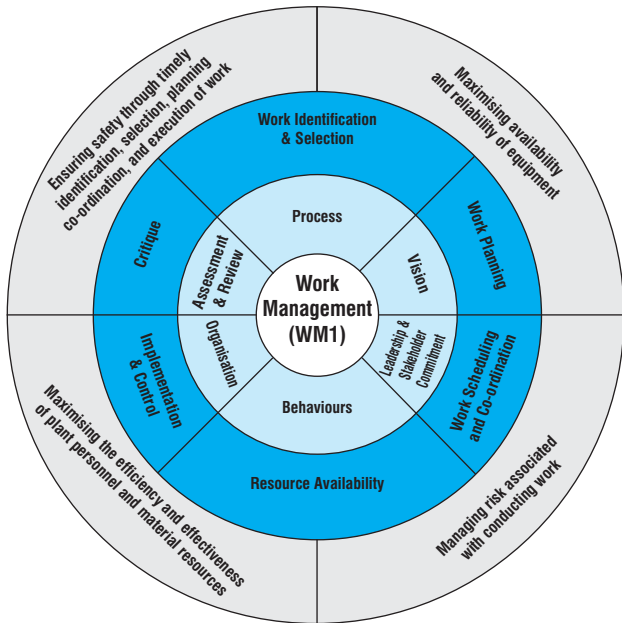
PCMS have worked with clients across many industry sectors to assess their various strengths and weaknesses within the five column criteria. This has led to the development of rapid action improvements initiatives via focused workshops and shop floor engagements.





Work Management Framework

The following diagram displays the main interrelationships between key components of a functional work management process:



The diagram to the left displays four rings, the significance of which are as follows:

The central circle recognises the Work Management process as the adopted methodology on a plant or site to identify, select, plan, schedule, deliver and critique work in a manner that ensures high levels of safe and reliable plant operation.

The inner ring designates the key elements essential to the successful implementation of a Work Management process. Each of these elements needs to be understood and developed as part of a balanced programme.

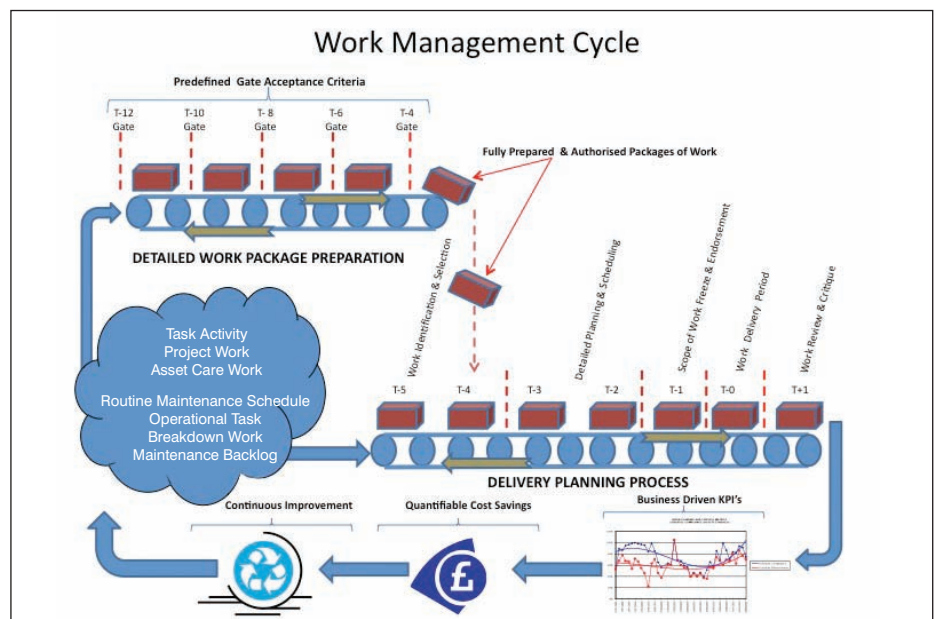
The middle ring designates the 'working mechanics' of the process. Each of these individual components needs to be embedded to produce an effective Work Management process.

The outer ring shows the main drivers and benefits that should be achieved through the implementation of a fully functional work management process.

Work Management Delivery Work Cycle

Overview of a T-12 Work Management Cycle

The diagram to the right shows a delivery cycle based on a 12 week time period. This cycle allows work packages to be fully defined, planned and scheduled. All work is made visible within the process and people organising the work are accountable for delivery based on a coordination and endorsement process communicated to all key stakeholders.

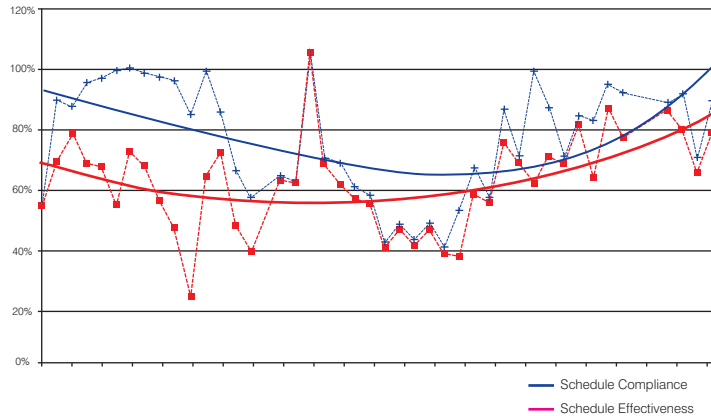




Work Management Benefits – Case History

The following data has been taken directly from a Work Management Improvement programme trend statistics during the initial implementation activity and the subsequent 'bedding in' period. This covers a 10 month implementation period.....

Figure 1 - Work Planning and Control Metrics Schedule Indicating Compliance and Effectiveness



BENEFIT 1:

Visible identification of Direct and Indirect work activity to management.

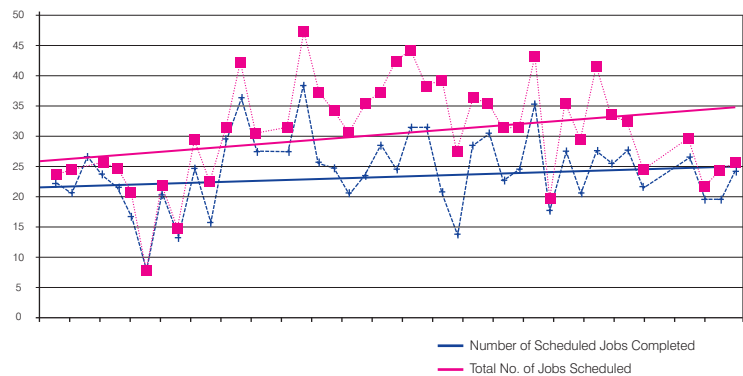
CHALLENGE:

To question the reasons for and clarify legitimate indirect activity.

RESULT:

Via critique at co-ordination meetings the additional accountability drives the convergence of Compliance and Effectiveness this means circa 35% direct utilisation is achieved.

Figure 2 - Job Profile



BENEFIT 2:

A visible account of work delivered against work scheduled, plus the highlighted peaks and troughs associated with scheduled work in the CMMS.

CHALLENGE:

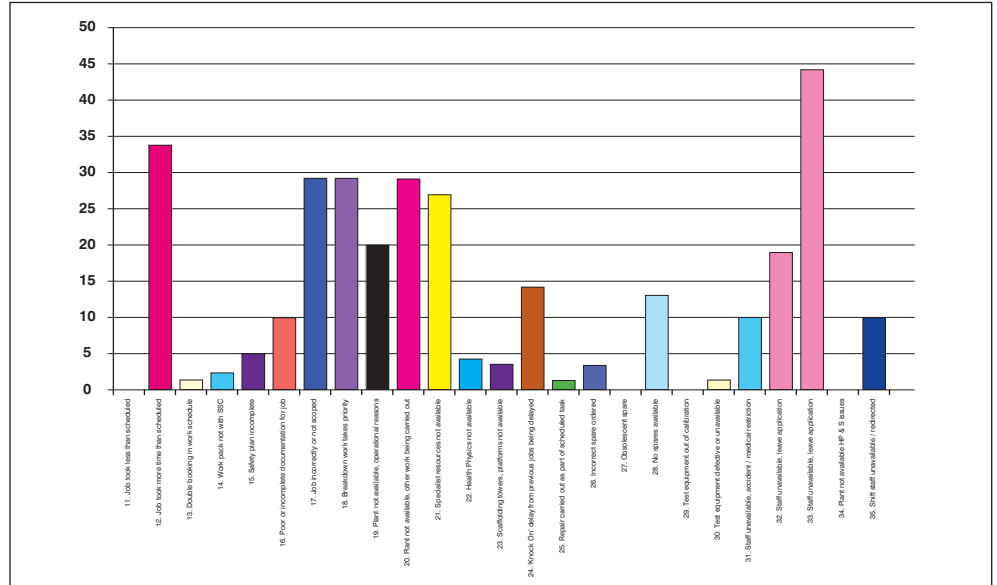
To match workload against capacity.

RESULT:

Circa 25% increased amount of jobs being scheduled and delivered as per schedule.



B33 - Work Planning & Control Project
- Reasons for Breaking Maintenance Schedule (Cumulative)



BENEFIT 3:

Database of factual information indicating area bottlenecks and reoccurring reasons for deviation. These maybe internal or external influences.

CHALLENGE:

To use this data to actually drive out root cause of deviations and apply corrective action.

RESULT:

The area has tackled the issue of poorly scoped jobs by introducing a defined scoping document for use by the first line Engineers/ Craftsmen.

Summary of Benefits Achieved in Area

- Via critique at co-ordination meetings the additional accountability drives the convergence of Compliance and Effectiveness, which means more direct utilisation can be achieved.
- Increased communication and common working practice. Circa 35% increase in staff utilisation with clear indication of proportional indirect/support activities.
- Circa 25% increased amount of jobs being scheduled and delivered as per schedule.
- Circa 20% rise in schedule adherence, thus demonstrating the increased effectiveness of pre-job scoping and delivery execution.
- The advanced look ahead gives engineers clear opportunity to put Project/Asset Care activity onto the plan.
- Additional visibility/control of staff utilisation gives the opportunity to redirect labour towards proactive engineering, helping plant reliability issues.