# PROCESS MANAGEMENT AND IMPROVEMENT
## YOUR HANDBOOK

## AIMS

This handbook explains what process management and improvement means and how it can help you to improve organisational performance.

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## Where to start:

Organisations that choose to embark on the "process journey" have two possible startpoints; process management or process improvement.

Those who know that they need to re-align themselves to meet the needs of customers better, or to gain more confidence and control in the way they operate, are likely to choose Process Management as their startpoint.

Other organisations may only wish to improve the performance of one or more specific processes. To achieve this, they focus on process by process improvement.

Process Management will inevitably lead to some improvement activity and those processes that have been improved will ultimately need to be managed on a day-to-day basis in order to maintain their performance.

| Process Management Startpoint | Process Improvement Startpoint |
|---|---|
| • Need a strategic understanding of how the organisation achieves its mission | • Need to sort out under-performance in specific processes |
| • Need to meet the requirements of ISO 9001:2000 | • Need to achieve new levels of performance in specific processes |
| • Need to get many processes "under control" or operating predictably | • Need to design a process, to meet new or changing customer requirements |
| • Need to reduce "silo thinking" across the organisation | • Need to deliver some quick wins and performance benefits |

# A PROCESS FOR PROCESS MANAGEMENT

There are four main elements in the successful implementation of process management:

| Organising for Process Management | Process - by - Process Improvement | Day - to - day Process Management |
|---|---|---|

Develop Process Management Capability & Support

## 1. Organising for Process Management involves four activities…

1.1   Clarifying the purpose, strategy and goals of the organisation so you can be clear about what process management is expected to deliver

1.2   Agreeing the best process strategy and approach

1.3   Developing a high-level process model and appointing owners to key processes

1.4   Capturing processes and sub-processes at lower levels of detail within the overall model

## 2. Process By Process Improvement is where process improvement projects are carried out and also has four activities…

2.1   Process selection, identifying the priority processes where improvement teams should be set up

2.2   Preparation for improvement, where you establish specific improvement targets, set up teams and plan each improvement project

2.3   Process Analysis and Re-design, where teams map, measure, analyse, re-design and test processes to achieve the targets set in step 2.2

2.4   Implementation of improvements, where change plans are developed and new process designs are implemented and handed over to the Process Owner
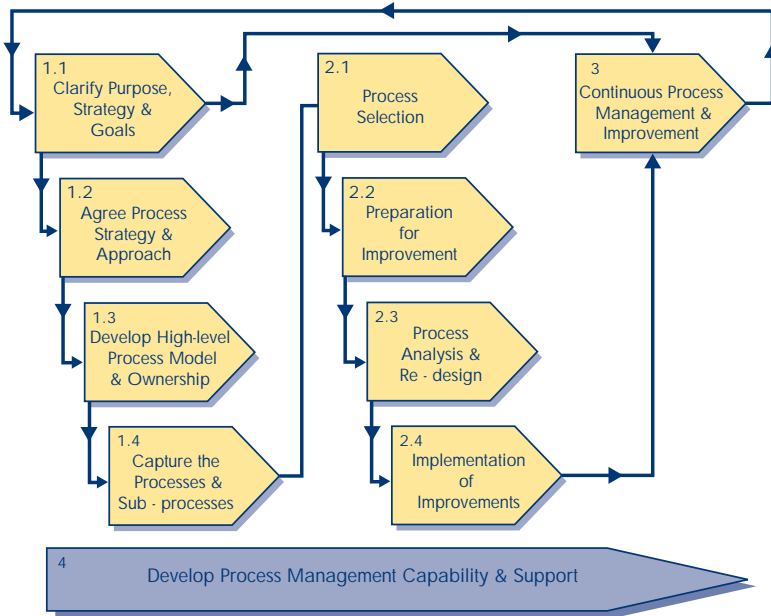
**3. Day to day Process Management** is the element where management and continuous improvement of a process is carried out as a routine, and important, part of normal operations.

Once a process has been improved by a project team, its performance needs to be monitored continuously and corrective actions may need to be taken to keep things on track.

## 4. Develop Process Management Capability and Support

In order for an organisation to be successful in the overall process management approach it will need to develop Process Management Capability and Support. This part of the implementation model ensures process management is not just a one-off activity, but can be sustained over time and continue to deliver benefits.

The full implementation model is:



| 1.1 Clarify Purpose, Strategy & Goals | 2.1 Process Selection | 3 Continuous Process Management & Improvement |
| 1.2 Agree Process Strategy & Approach | 2.2 Preparation for Improvement | |
| 1.3 Develop High-level Process Model & Ownership | 2.3 Process Analysis & Re - design | |
| 1.4 Capture the Processes & Sub - processes | 2.4 Implementation of Improvements | |

4 Develop Process Management Capability & Support

In the following pages we will look at each of these steps in more detail.

# 1. Organising for Process Management



**1.3**
**Develop High-level**
**Process Model**
**& Ownership**
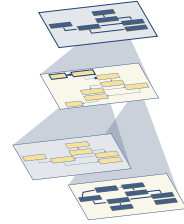
In this step, you are now ready to begin developing a high-level view of the organisation as a series of processes, using the agreed approach from step 1.2.

Key activities are…

1. Capture the high-level processes – this should include all the linkages and main inputs and outputs at the process interfaces
2. Validate the high-level process model to ensure it is a recognisable representation of the organisation
3. Agree Process Owners for each of the processes on the high-level model
4. Carry out a high-level diagnostic study – this may include customer satisfaction, cost distribution, effectiveness of measures, "brainstorm" of issues, "support" vs. "control" and cultural aspects

*Effective Process Models:*

- Are more than simply lists of processes

- Are more than pictorial representations, often based on a value chain, but ignoring the interfaces and interactions between processes

- Represent real processes, highlight the dependencies and make it easy to identify customers and key performance indicators

Development of the high-level process model should ideally be done by the senior management team, to ensure ownership.

# Key features of effective Process Models:

- Process Names are Verb + Noun (e.g. Develop Strategy)
- Define Inputs and Outputs
- Define interactions between customer-facing processes initially
- Separate out support and enabling processes - they link to everything!
- Ensure the top-level processes are necessary and sufficient to deliver the organisation's Mission and desired outcomes
- Aim for no more than 10 -12 processes at the top level
- Every process should have a single named individual identified as Process Owner

## An example High-level Process Model:

### Core Business Processes
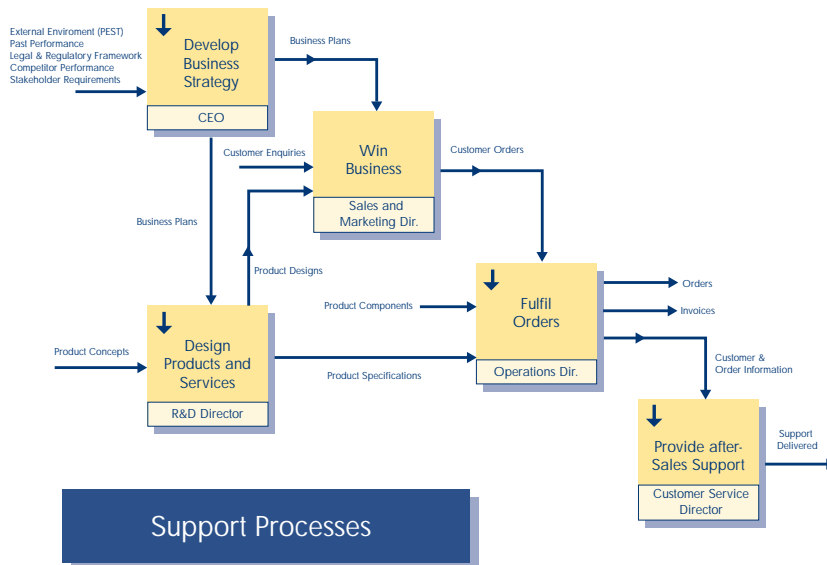


## Output:

The output of this step should be an agreed, defined high-level process model, with linkages and issues arising, and improvement priorities if appropriate.

## Process Measurement:

At the core of process management and improvement is the actual and required performance of the process.

Measurement is simply the way in which the *performance* of the process is expressed in *quantified* terms.  Measurement is the only way to tell if process performance is, or is not, improving.

The three broad areas in which process performance can be measured and some examples of each type are:

| Internal Measures | Output Measures | Satisfaction Measures |
|---|---|---|
| Cycle Time | Output Volume/Value | Perceived value for money |
| Processing Time | Accuracy/Error Rates | Emotional reaction to the product/service |
| Volume Throughput | Conformance to Spec. | Experience of using the product/service |
| Operating Cost/Efficiency | Completeness | Perceived ease of obtaining the product/service |

When carrying out an improvement project, significant data collection and analysis are likely to be required.  This "diagnostic" measurement enables the root causes of process performance problems to be identified.  However, in the day-to-day management of a process it may only be necessary to have a small number of key performance measures.

Your Project Proposal should guide your choice of diagnostic data collection and analysis:

- What are the project's targets?
- What measurement data already exists?
- What problems are there that need to be quantified?
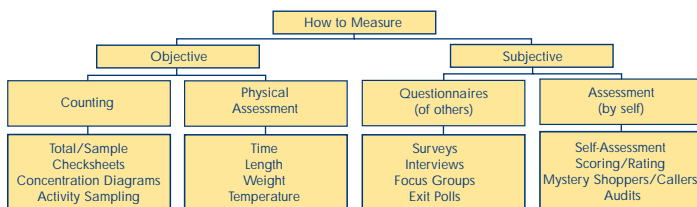
## Analysis of Process Performance:

Having gathered relevant data, an analysis of current process performance is possible, taking account of both objective and subjective data. Tools and techniques which can help include:

| Cost/Cycle-time Analysis | Value-Added Analysis |
|---|---|
| Pareto Analysis | Line Graphs (Run Charts) |
| Histograms | Scatter Diagrams |
| Bar Charts | Pie Charts |

*The use of Six Sigma principles and tools can be invaluable to gain further insight into the performance of a process.*
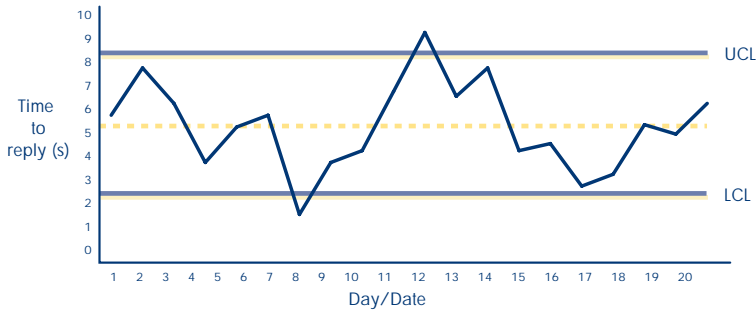


A Line Graph (above) is a useful way of showing process performance trends over time. Application of Statistical Process Control (SPC) techniques may also help identify common and special causes of process variation.

A Pareto Diagram (right) can be useful in identifying and quantifying the most important causes of a problem.
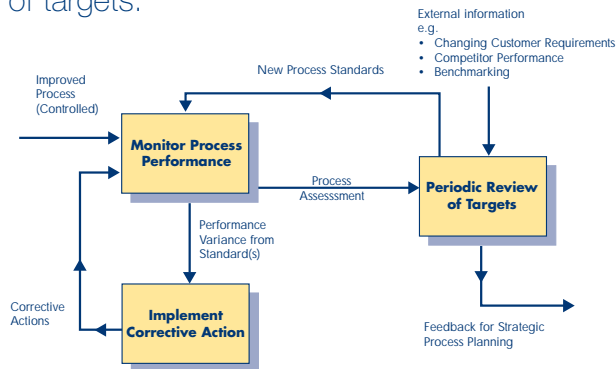
# 3. Day-to-day Process Management



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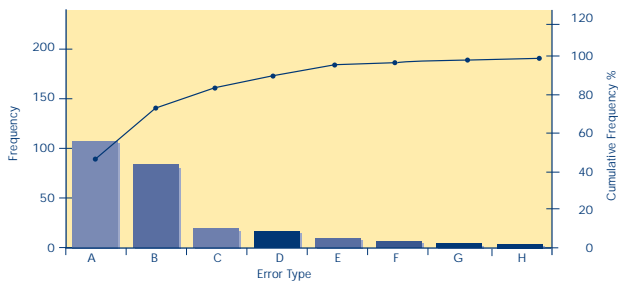
Continuous
Process
Management &
Improvement

The final element of the process management implementation model is the day-to-day management of processes. Organisations that are adopting a process focus across all their processes will ultimately apply this step to every process. Those that are doing specific process improvements may choose to apply this only to those newly improved processes.

Day-to-day process management involves monitoring process performance, implementation of corrective actions and periodic reviews of targets.



External information
e.g.
• Changing Customer Requirements
• Competitor Performance
• Benchmarking

New Process Standards

Improved
Process
(Controlled)

Monitor Process
Performance

Process
Assesssment

Periodic Review
of Targets

Performance
Variance from
Standard(s)

Corrective
Actions

Implement
Corrective Action

Feedback for Strategic
Process Planning

## Monitor Process Performance:

The current performance of a process and its capability ("health") can both be monitored, assessed and improved. In addition, targets for performance or capability will need to be reviewed and possibly set at a higher level.

Each process should have a systematic set of measurements (Key Performance Indicators) against which its performance is tracked, communicated and improved.

## Process Assessment:

A number of leading edge organisations are using Process Capability and Maturity Models (CMMs) to help assess their processes. Since the early 1990s, CMMs have been developed for a range of applications including systems and software engineering, workforce management and development, and product development and process development. The Process Qualification table (below) shows how this assessment method can be applied.

| Maturity Level | Performance Level | Process Characteristics |
|---|---|---|
| Optimising | "World Class" | Process equals or exceeds the best external comparison and continues to improve. |
| Quantitatively Managed | "Competitive" | Process equals or exceeds the performance of competitors and continues to improve. |
| Managed | "Achieving" | Process consistently achieves the targeted level of performance and is managed proactively. |
| Defined | "Known, but not achieving" | Process is defined, mapped and understood. It is stable enough to operate, but cannot be guaranteed to achieve the required level of performance. |
| Initial | "Unknown and unpredictable" | Process is chaotic, or ad hoc. It depends on "heroics" to make it work. Past successes are not repeatable. |

Every process will exist at one of the five maturity levels and the organisation and Process Owners can decide how far up the maturity model each process needs to be, depending on organisational priorities and strategies.

For example, an organisation that needs to excel in product or service development may need to have that process at the Optimising (World Class) level. If it was currently at only "Defined", there would be a significant gap to be addressed as a matter of priority. Conversely, a process such as "Pay Suppliers" may be performing quite acceptably at the "Managed" level and therefore not a priority for urgent improvement.

# The Process Managed Environment:

Ultimately, a process managed organisation will have created an environment where:

- All processes are identified, mapped and held electronically
- Resources have been agreed for each process step - who does what across the organisation
- All supporting procedures, guidelines, checklists are attached to relevant process steps
- All maps are available to all 'knowledge workers' via terminals
- All key users have the ability to input ideas electronically to suggest process changes and collaborate in terms of process improvement
- Relevant KPIs are captured and displayed via the process maps with traffic lights
- All process owners have full control over their maps
- Process (and attachment) changes are under change control, authorised and kept up to date in 'real time'
- All process owners can dynamically and rapidly evaluate 'what if' scenarios
- All process owners are able to cost processes based on Activity Based Costing (ABC) principles
- Process owners are able to complete Full Time Equivalent (FTE) analysis at touch of a button
- All employees are empowered to release their potential
- Best practices are shared via the Process Management System - capturing the 'best way'
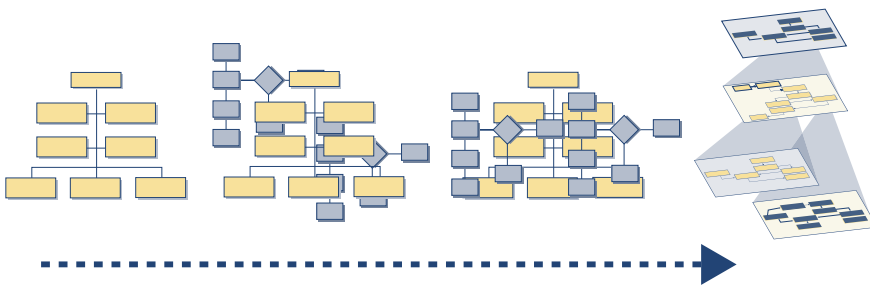


The transition from traditional, line management driven, to a process-focussed organisation.

TQMI is a leading European, specialist management consultancy, who help organisations to manage improvement and the processes that support it.

TQMI has worked with continuous improvement concepts and tools for many years and provides strategic and technical consultancy advice, training, media and publications. For further information on our services please visit our web site **www.tqmi.co.uk**

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Customer Service Excellence
Implementing A Continuous Improvement Process
Managing In A Quality Way
Managing Successful Improvement Projects
Problem Solving
Process Improvement

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