



Value Chain Competitiveness
Improvement
Framework

Maturity Guide



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Version: 2



Module: **Leading Improvements**

To ensure that we behave and lead in the right way to empower and engage people to focus on the continuous improvement of processes, products and services to the customer.

Theme:
Goal Deployment

- Give a **common direction** and drive responsibilities
- System to enable **coaching** of principles, processes and tools
- **Leadership actions** enabling a continuous improve culture

'Capable, Engaged People'



Theme:
Performance Management

- **Connect** business and local goals
- **Visually manage** performance
- **Measures that engage** and drive improvement thinking and problem solving

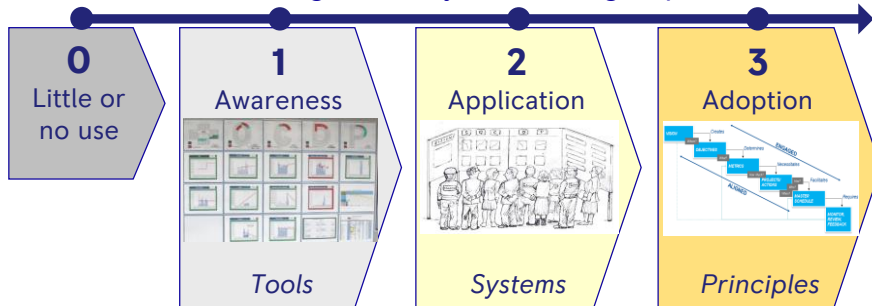
Theme:
Continuous Improvement

- What is **value-added** and waste?
- See and eliminate **waste**
- How to **continuously improve**
- **Supportive leadership** approach necessary to help teams

Theme:
Financial Awareness

- Basic understanding of traditional **accounting** statements
- How **Business Improvement** activities affect financial results and **impact** traditional accounting

Goal: Increasing Maturity in Leading Improvements



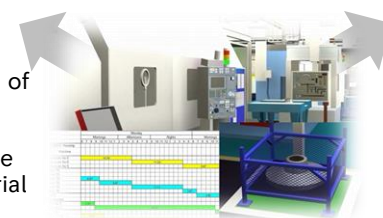
Module: **Planning**

Production Planning and Control delivers the desired level of customer service whilst optimising manufacturing, stock holding and system administration costs.

Theme:
Planning and Control

- Taking the **customer demand** into a system of work through **production planning**
- Techniques to improve and **control** the material flow around the production facility
- Visualise, organise and track **inventory movement** through to delivery

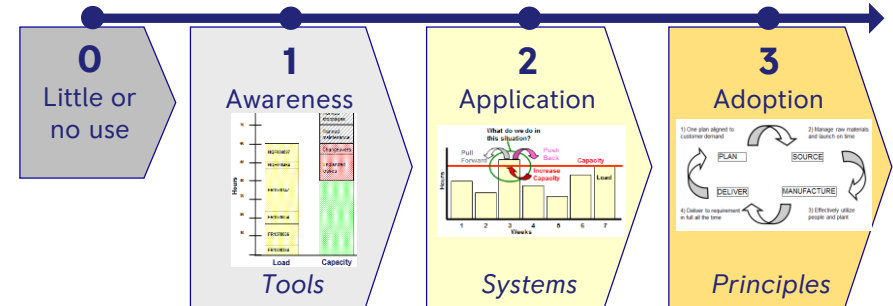
'Deliver Commitments'



Theme:
Load and Capacity

- Understand the load & capacity **process**
- Determine **capacity constraints** considering equipment and labour resources
- **Manage** and deal with load vs capacity imbalances

Goal: Increasing Maturity in Planning



Module: Quality 'Built-in'

Ensuring robust process design, risk analysis and mitigation, and error prevention vs. defect detection as a goal.

Theme: Design

- **Design for Assembly** - to reduce the number of parts, easing handling and assembly operations
- **Design for Manufacturing** - to select the most cost effective material and process to ease manufacturing
- Apply Design for Manufacture and Assembly knowledge and experiences for idea generation and action implementation

'Right First Time'



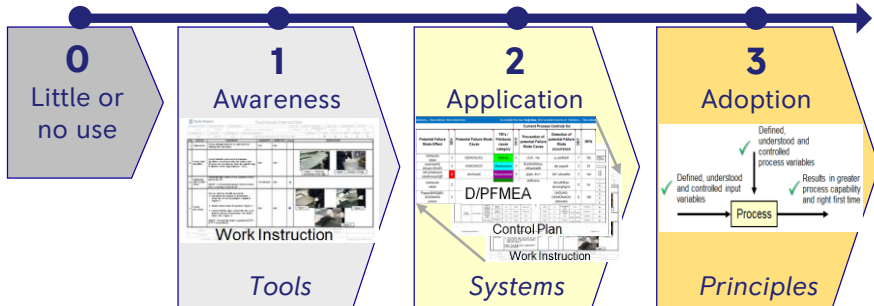
Theme: Problem Solving

- A problem is a **deviation from standard** or ideal situation
- Techniques for **practical problem solving** and approach for applying it
- Apply a **structured problem solving** technique used to analyse and fix more in-depth issues

Theme: Build-in Quality

- To ensure that **process outputs** meet or exceed **customer requirements** 'Right-First-Time'
- Focus on **error prevention**
- Design, implement and continuously improve the 'Built-In' Quality Assurance System

Goal: Increasing Maturity in Quality 'Built-in'



Module: Facility Design

Ensure that facilities are designed to align product and material flow, people and support infrastructure to customer and business needs.

Theme: Value Streams

- Define all of the **value stream steps** required to transform a product or service
- Use **Value State Mapping** to visually identify opportunities to improve and plan actions to achieve a future condition

'Flow and Flexibility'



Theme: Flow & Layout

- Arrangement of people, equipment, material and methods to create products in order of process in a **continuous flow**
- Focus on short lead times, low inventory and **flexibility to respond to changes** in mix and volume minimises the total cost of product

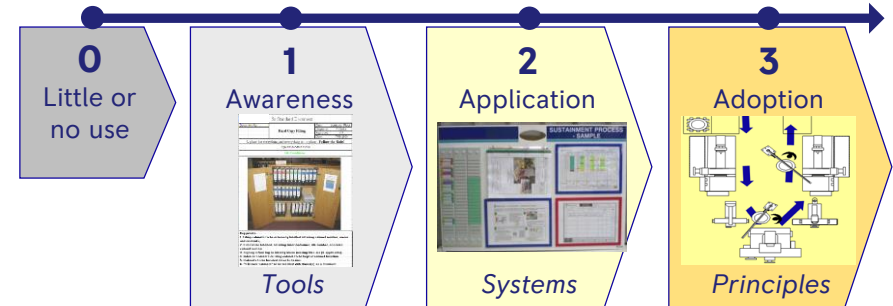
Theme: Visual Workplace

- A visual workplace environment is safe & welcoming and where **standards** are easily recognisable,
- Techniques for establishing a **visual workplace**

Theme: Sustainment

- Sustainment system giving "status at a glance" view of **compliance** to standards and **abnormality management**
- Define and operate a process **confirmation system** suitable to the process and environment

Goal: Increasing Maturity in Facility Design



Module: Industrial Engineering

To minimise variability and waste within the workplace in order to improve safety, quality and productivity.

Theme: Standard Work

- Visual standards to minimise variability & continuously improve
- Working processes that reflect the **safest, easiest and most productive method**
- Ensure **adherence** to current standards



Theme: Workstation Design

- Design an **optimal workplace** that is safe and comfortable
- Minimise waste of effort and movement for **repeatable, high quality, productive operations**
- Use appropriate analysis tools to identify and **remove waste**

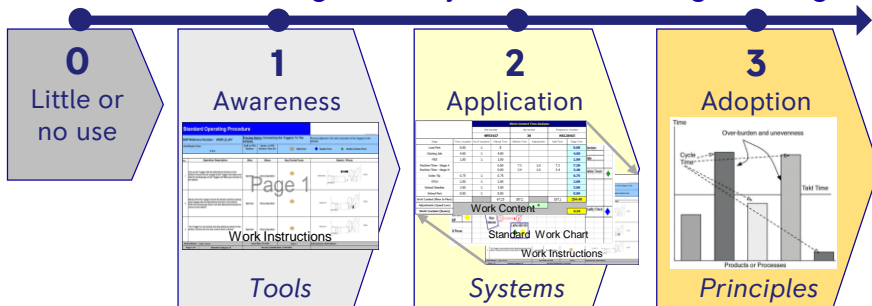
Theme: Work Content

- **Define work content** to enable accurate planning, monitoring and control of capacity and costs
- Use the appropriate work **measurement techniques** to capture accurate work content

Theme: Manning

- **Optimise manpower** utilisation and productivity levels
- Allocating work tasks to the correct number of people consistent with **demand and productivity targets**

Goal: Increasing Maturity in Industrial Engineering



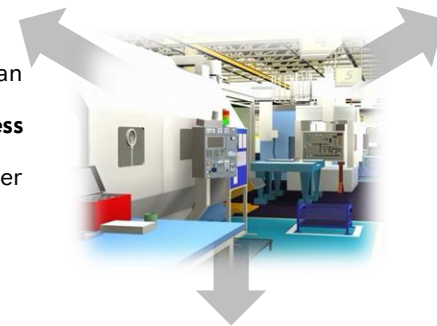
Module: Total Productive Maintenance

To reduce and eliminate equipment related productivity issues – both to maximise return on investment of assets, and deliver value to customers.

Theme: Equipment Effectiveness

- Ensure equipment can operate at the **required effectiveness** to reduce operating costs, satisfy customer requirements and maximise return on capital
- Implement Overall Equipment Effectiveness to manage **improvements against losses**

Theme: 'Reliable, Effective Assets'



Theme: Asset Care

- Implement asset care to keep equipment safe and reliable, gain **autonomous care** of equipment and **minimise losses & waste**
- To identify the appropriate strategies & **actions to improve plant performance**

Theme: Set-up Reduction

- **Reduce lost time** associated with setting up a machine or process
- Enable **smaller batches** / production runs of product, reducing stock levels and lead-time
- Increase **manufacturing responsiveness** and improve customer service

Goal: Increasing Maturity in Total Productive Maintenance

