

7 Measures of Performance in Lean

What is it?

In the DTI publication - Quality Cost Delivery (QCD) seven measures are recommended:

- Not Right First Time (number of defects per million)
- Delivery Schedule Achievement
- People Productivity (units per operator hour)
- Stock Turns
- Overall Equipment Effectiveness (OEE)
- Value Added Per Person
- Floor Space Utilisation (turnover per floor area)

When to use it?

Measures should be used to understand the performance of a business or department.

This can be to benchmark against other operations for comparison.

The measures will also demonstrate improvements achieved through the application of Business Improvement Techniques. Measuring the initial condition of an area before making improvements is vital.

What does it achieve?

Demonstrates the improvement in performance achieved.

Key steps

Understand the companies existing measures.

Select appropriate measures for your project.

Check the sources of data for the measure.

Check the frequency of collection of data.

Plot the progress of your measure and display graphically as part of your Visual Management

Sources of Information

DTI web site

DEFINITIONS

1. Not Right First Time (NRFT)

= $\frac{\text{Quantity of defective units} \times 1000,000 \text{ (parts per million)}}{\text{Total qty of units supplied}}$

2. Delivery Schedule Achievement

= $\frac{\text{No. of planned deliveries} - [\text{No. not on time} + \text{No. of incorrect qty deliveries}]}{\text{No. of planned deliveries}} \times 100\%$

3. People Productivity

= $\frac{\text{Number of good units made}}{\text{No. of direct operator hours}}$

4. Stock Turns

= $\frac{\text{Sales turnover of product}}{\text{Value of raw material} + \text{WIP} + \text{finished goods}}$

5. Overall Equipment Effectiveness (OEE)

= Availability (%) x Performance (%) x Quality (%)

6. Value Added Per Person

= $\frac{\text{Output value} - \text{Input value}}{\text{Number of employees}}$

7. Floor Space Utilisation

= $\frac{\text{Sales turnover of model area}}{\text{Square metres of model area}}$