

Facilities Management from A to Z



Based on The FM Lexicon by Martin Pickard
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Maintenance

The Facility Manager is charged with the care of an organisation's valuable assets. Maintenance activities should protect and enhance their value as well as ensuring that every asset is in proper working condition and continually performs at the desired level. Maintenance is a proactive function intended to avoid the reactive cycle of breakdown and repair.

The evolution of maintenance strategies has been in response to the changing needs of building occupiers. There are a variety of different maintenance regimes, the selection of the most appropriate methodology will depend on many factors to do with purpose, resources and timing. Designing the maintenance regime requires consideration of detailed operational features such as how to deal with spares, warranties, health and safety.

It is necessary to properly understand what condition is considered to be satisfactory and to identify the lowest acceptable performance level. If occasional complete failure is preferable to frequent downtime for engineering work the most appropriate maintenance strategy will be quite different to that required in an organisation with intense periods of high value activity where unforeseen breakdown would be very costly.

Identifying all assets and their importance to the organisation is fundamental. A useful asset register will be based on an asset hierarchy utilising standard equipment descriptions. This enables the proper recording of asset information including maintenance activities and assigned costs which means that a documented history for each piece of equipment can be established and used effectively.

Alternative maintenance regimes include:

- Reactive Maintenance – with repairs carried out as an immediate response to equipment failure
- Corrective Maintenance – where performance levels are monitored and targeted action takes place to restore assets to the desired level if deterioration occurs
- Planned Maintenance – with activities carried out to a pre-ordained programme whether they are required or not
- Preventative Maintenance – founded on a pre-set plan which anticipates standard failure patterns
- Predictive Maintenance – based on a constantly updated plan comparing the actual asset condition with standard failure patterns
- Condition Based Maintenance – where activities are carried out following inspection of the asset and comparison of its actual state with the desired condition
- Reliability Centered Maintenance – with activities carried out following inspection of the asset and comparison with the desired performance
- Business Critical Maintenance – with activities prioritized based on an analysis of the consequences of failure

Two excellent books on maintenance strategy are Guide M: Maintenance Engineering and Management published by CIBSE ISBN 9781903287934 and Lee's Building Maintenance Management by Paul Wordsworth ISBN Lee's Building Maintenance Management