

Asset Management Maturity Model Definitions

Business Value

Grow over Time

Level 0 – “Survival”

- Reactive maintenance
- Equipment run until failure (RTF)
- Repairs done as problems occur

Level 1 – Calendar Based Maintenance

- Time/interval-based Preventive Maintenance
- Vendor developed Job Plans
- Parts inventory overstocked (“Just in Case”)

Level 2 – Usage Based Maintenance

- Equipment meters, run hours, and mileage help differentiate desirable timing for planned maintenance
- Vendor recommended run times
- Leaders sequence PMs
- Parts inventory monitored and categorized

Leader Planning

Level 3 – Condition Based Maintenance

- Maintenance team monitors machine/asset conditions from many sensors and compares to “acceptable” benchmarks to identify problem conditions)
- Maintenance team analyzes results to prompt actions
- Established warning and alarm levels
- Parts Inventory is tightly optimized

Skilled Techs, Planners and Sensors

Level 4 - Predictive Maintenance

- Machine learning analyzes event correlations to identify equipment degradation and predict timing of future issues
- Artificial Intelligence tools schedule maintenance
- More data = improved modeling
- Asset risk and equipment performance based
- Alerting based on defined thresholds, performance/exception rates
- “Just in Time” maintenance

AI Tools

Maintenance time/effort and planning complexity

Maintenance is an Expense

Maintenance is an Investment