

Manufacturing Maintenance Management Scenarios



Without CMMS	Horizontal ERP Software	Dedicated CMMS (Vortex)
Maintenance tracked manually or via Excel sheets	ERP modules used for basic maintenance tracking	Purpose-built CMMS for complete maintenance lifecycle
Unplanned downtime and reactive maintenance	Limited preventive maintenance capabilities	Automated preventive and predictive maintenance scheduling
No visibility of spare parts or stock	Stock data exists but not linked to work orders	Integrated spare parts and inventory management
Technicians rely on paper-based work orders	ERP not suitable for daily technician workflows	Mobile app for real-time work order updates and photos
Difficult to track maintenance costs per machine	Generic cost tracking	Full cost breakdown per site, asset, work order and maintenance type
Machine history scattered or missing	History stored but not easily accessible	Complete digital history per machine and component
KPIs like MTTR, MTBF not tracked	KPIs need manual calculation	Automatic tracking of MTTR, MTBF, and OEE metrics
Low production efficiency due to frequent stops	Downtime data not shared with production	Integrated with production data for efficiency insights
No Integration with Automation systems (IoT, PLC's, SCADA, BMS)	Limited Integration with Automation systems (IoT, PLC's, SCADA, BMS) possible only for a few data and hard to implement	Full Integration with Automation systems (IoT, PLC's, SCADA, BMS) providing real time data, condition based maintenance.
TCO (Total Cost of Ownership) Low initial cost, but high hidden costs from inefficiency, downtime, and manual work	TCO (Total Cost of Ownership) High initial, on going and customization costs, requiring many internal resources from both business and IT for implementation.	TCO (Total Cost of Ownership) Moderate initial cost, low ongoing costs due to automation and high adoption
ROI (Return on Investment) Very low – mostly negative ROI due to lost productivity and downtime	ROI (Return on Investment) Moderate ROI, often delayed due to complexity and poor fit	ROI (Return on Investment) High ROI within 6–12 months from reduced downtime, better resource utilization, and data-driven decisions