APM Strategy

Decrease O&M Expenditures & Increase Profitability with a Comprehensive Asset Strategy solution
Addressing your modern business challenges

Asset intensive industrial businesses manage substantial operating and maintenance (O&M) budgets that represent a considerable portion of their fixed costs, which directly impact their profitability. A significant portion of this budget is spent maintaining and operating the assets used to produce their products. However, for many businesses their current asset management strategies are not under control, nor are they optimized and aligned to achieve the highest profitability at the lowest risk and cost. Many also lack the systems or processes in place to comply with ISO 55000 standards.

With respect to asset management strategies and practices, profitability is directly impacted due to

**Ineffective and inefficient equipment strategies:**
Optimize by determining the most effective types and frequencies of tasks to achieve business objectives for risk mitigation, cost containment and sustained reliability improvements.

**Lack of standardization and control:**
Implement best practice equipment maintenance, monitoring and inspection strategies across the enterprise.

**Lack of an integrated, holistic and evergreen approach:**
Establish dynamic equipment strategies that harmonize across functional areas to ensure a sustainable cycle of continuous improvement.

Operations & Maintenance Optimization

APM Strategy provides a common methodology to develop and manage asset strategies by using a risk-based approach to conduct analysis of individual assets, a group of assets, or an asset system. By balancing risk, production goals, and resource investment, APM Strategy allows asset-intensive organizations to focus costs on the most critical assets—reducing maintenance and inventory costs, increasing availability and reliability, and moving away from reactive maintenance practices to a proactive approach.

APM Strategy supports the following work processes:

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<th>Assess criticality of assets</th>
<th>Identify risks and mitigating actions</th>
<th>Optimize mitigation strategies for risk and cost</th>
<th>Manage and implement asset strategies</th>
<th>Drive corrective actions &amp; continuous Improvement</th>
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MODULES

ASSET CRITICALITY ANALYSIS (ACA)

Focus on Critical Assets
Enables users to define the criticality of assets based on the worst likely case consequence of failure of the asset to provide an overall criticality value. Using ACA, you can determine which of your systems, locations, and pieces of equipment have the highest risk based on your organization’s definitions.

RELIABILITY CENTERED MAINTENANCE (RCM)

Assess Systems Risk
By focusing on system functions, the RCM capability is designed to develop asset strategies that help reduce the effects of functional failures, which, for some systems, may have a more significant impact on production and costs than simple mechanical failures.

FAILURE MODES AND EFFECTS ANALYSIS (FMEA)

Assess Equipment Risk
In contrast to the Reliability Centered Maintenance analysis, which focuses on functional failures at the system level, the Failure Modes and Effects Analysis capability facilitates the identification and mitigation of critical failure modes defined at the equipment level.
**MODULES**

**ASSET STRATEGY MANAGEMENT (ASM)**

Qualitative Risk Analysis
Provides a common methodology to define risks and their mitigating actions for any asset, providing the ability to evaluate existing plans with basic qualitative risk analysis that is designed to be both straightforward and easy to use.

**ASSET STRATEGY OPTIMIZATION (ASO)**

Quantitative Strategy Modelling
Extends the qualitative risk/cost analytical capabilities of Asset Strategy Management through advanced, quantitative strategy modelling and Monte Carlo simulation for assets and systems resulting in optimized availability, reliability and cost while managing risk.

**ASSET STRATEGY IMPLEMENTATION (ASI)**

Implementation with SAP
Enables users to build implementation packages containing maintenance plans, maintenance items, task lists and operations to which strategy actions can be linked for the purposes of implementation in SAP.
MODULES

ACTION MANAGEMENT

Manage Corrective Actions
Enables users to manage recommended corrective actions generated from various sources across APM as well as implement planned actions that are defined with the Asset Strategy Management (ASM) application. It provides visibility and management of all actions and tasks for visibility within a single holistic view across the asset hierarchy.

LIFE CYCLE COST ANALYSIS (LCC)

Balance Costs & Plan Budgets
Asset lifecycle costs can be viewed from the perspective of the total cost of ownership of assets. By contributing to decisions regarding when to repair versus when to replace, asset strategies and equipment performance can be optimized over the long term, thereby helping to reduce costs for entire sites or fleets over defined accounting periods.

ASSET STRATEGY ACCELERATORS

A collection of predefined templates that contain the known failure modes and prescribed mitigating actions for specific asset or equipment types.
- Accelerate customer time to value
- Reduce plant personnel and resources required to perform strategy development
- Rapid deployment and standardization of best practices

LEARN MORE
GE Digital’s APM Suite

GE Digital APM increases asset reliability and availability while optimizing maintenance costs, mitigating operational risks, and reducing total cost of ownership (TCO). The software connects disparate data sources and uses advanced analytics to turn data into actionable insights while fostering collaboration and knowledge-management across the organization. Available on premises or in the cloud, APM works across all equipment, all OEMs, and all industries, across the plant, and across the fleet.

Industrial Data Diagnostics
Pinpoint opportunities to improve data quality and asset performance

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<th>Failure mode analysis</th>
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<td>Benchmark analytics</td>
<td>PM diagnostics</td>
<td>Improvement tracker</td>
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APM Health
Unified view of assets’ current state & health
- Rounds / Rounds Pro
- eLogs
- Health manager
- Calibration management

APM Reliability
Predicting equipment issues
- Reliability analytics
- Root cause analysis

Performance Intelligence
- Thermal Performance and Economic Advisory
  - SmartSignal
  - Predictive diagnostics
  - Digital twin blueprints

APM Strategy
Reduce risk & optimize life cycle cost
- RCM/FMEA
- Strategy management
- Strategy optimization
- Strategy implementation
- Lifecycle cost analysis

APM Integrity
Helping to keep facilities contained & compliant
- Compliance management
- Inspection management
- Thickness monitoring
- Risk based inspection

APM Safety
Reduce hazards risk within industrial processes
- Hazard analysis
- SIS management
- Management of change

APM Foundation / Essentials

IT/OT Connectivity & Integration
- EAM systems
- HMI/SCADA, Historian, MES systems
- Edge OT connectivity and analytics
- GIS systems

Data Management & Processing
Common asset model (or) hierarchy
- Analytics management and execution*
- Infrastructure Data Fabric*
  - Policy designer
  - End-to-end security

Monitoring, Analysis & Event Management
- Advanced Visualization*
- Dashboards, interactive data analysis
- Criticality, alerts, cases, recommendations
- HMI visualizations and alarms*

*Cloud only
Explore the benefits of APM

- Improves reliability, availability, and productivity
- Optimizes maintenance costs
- Mitigates risk
- Maintains technical expertise (industry and organizational knowledge)
- Delivers continuous improvement

Learn more about our complete APM offering

About GE

GE Digital, an integral part of GE Vernova’s portfolio of energy businesses, is a $1 billion software business putting data to work to accelerate a new era of energy. GE Digital has pioneered technologies like Industrial AI and Digital Twins to serve industries that matter for decarbonization like energy, manufacturing, aviation. Our software drives insights customers need to transform how they create, orchestrate, and consume energy. Over 20,000 customers world-wide use our software to fuel productivity and reliable operations while reducing costs and carbon for a more sustainable world. For more information, visit www.ge.com/digital. GE Vernova, a dynamic accelerator comprised of our Power, Renewable Energy, Digital and Energy Financial Services businesses, focused on supporting customers’ transformations during the global energy transition.

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Ready to leverage your asset data in ways that can increase productivity, mitigate risk, and optimize costs?

Schedule a call with GE Digital

BOOK A CALL

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