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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:

Assess criticality of assets

Identify risks and mitigating actions

Optimize mitigation strategies for risk and cost Manage and implement asset strategies

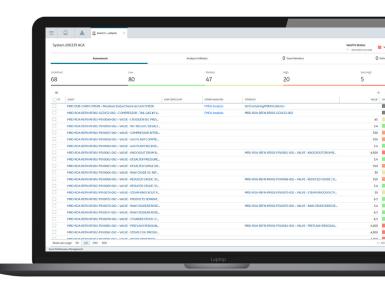
Drive corrective actions & continuous Improvement

MODULES

ASSET CRITICALITY ANALYSIS (ACA)

Focus on Critical Assets

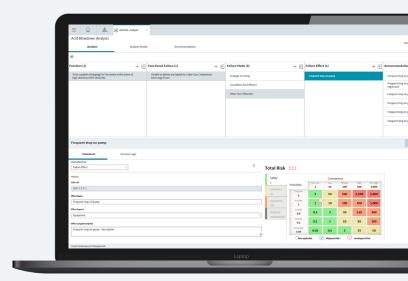
Enables users to define the criticality of assets based on the worst likely case consequence of failure of the asset to provide an overall criticality value. Using ACA, you can determine which of your systems, locations, and pieces of equipment have the highest risk based on your organization's definitions.



RELIABILITY CENTERED MAINTENANCE (RCM)

Assess Systems Risk

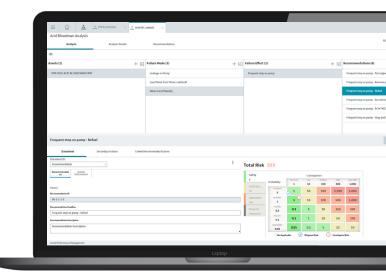
By focusing on system functions, the RCM capability is designed to develop asset strategies that help reduce the effects of functional failures, which, for some systems, may have a more significant impact on production and costs than simple mechanical failures.



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.

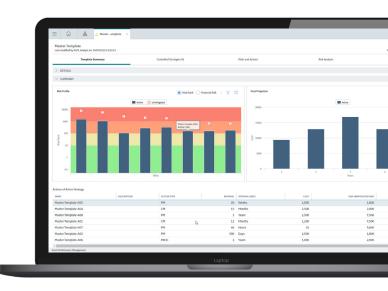


MODULES

ASSET STRATEGY MANAGEMENT (ASM)

Qualitative Risk Analysis

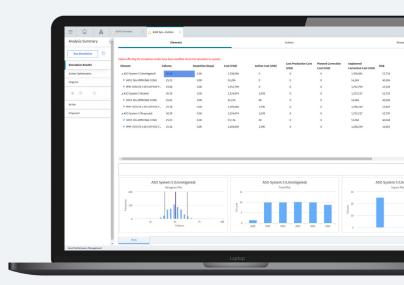
Provides a common methodology to define risks and their mitigating actions for any asset, providing the ability to evaluate existing plans with basic qualitative risk analysis that is designed to be both straightforward and easy to use.



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.

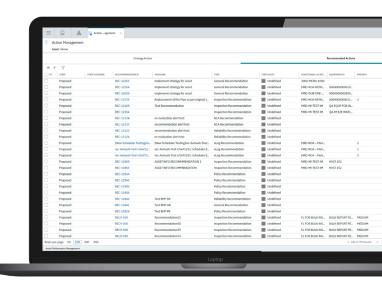


MODULES

ACTION MANAGEMENT

Manage Corrective Actions

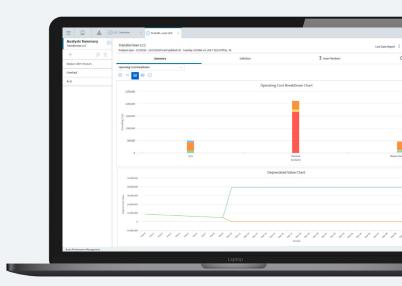
Enables users to manage recommended corrective actions generated from various sources across APM as well as implement planned actions that are defined with the Asset Strategy Management (ASM) application. It provides visibility and management of all actions and tasks for visibility within a single holistic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



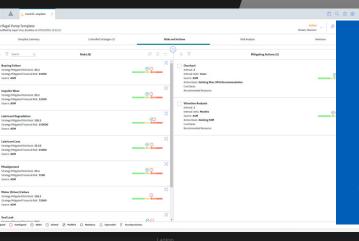
LIFE CYCLE COST ANALYSIS (LCC)

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

Data quality recommendations

Benchmark analytics

Failure mode analysis
PM diagnostics

Manufacturer comparisons
Improvement tracker



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

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*

IT/OT Connectivity & Integration

EAM systems
HMI/SCADA, Historian, MES systems
Edge OT connectivity and analytics
GIS systems

*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

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

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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