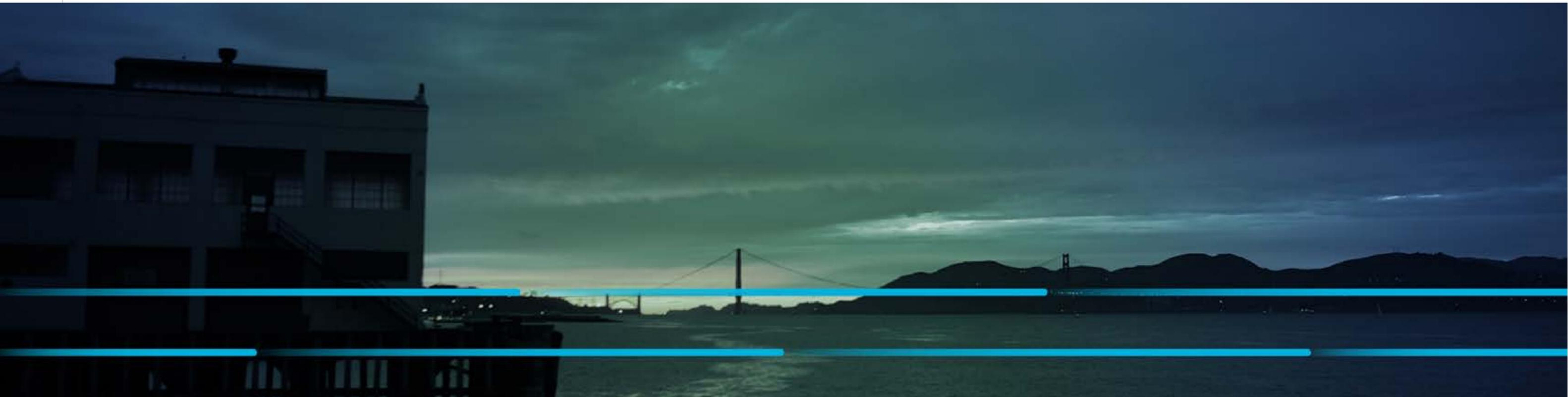




Compliance & Integrity Management from GE Digital

Part of our Asset Performance Management suite



Business Challenges

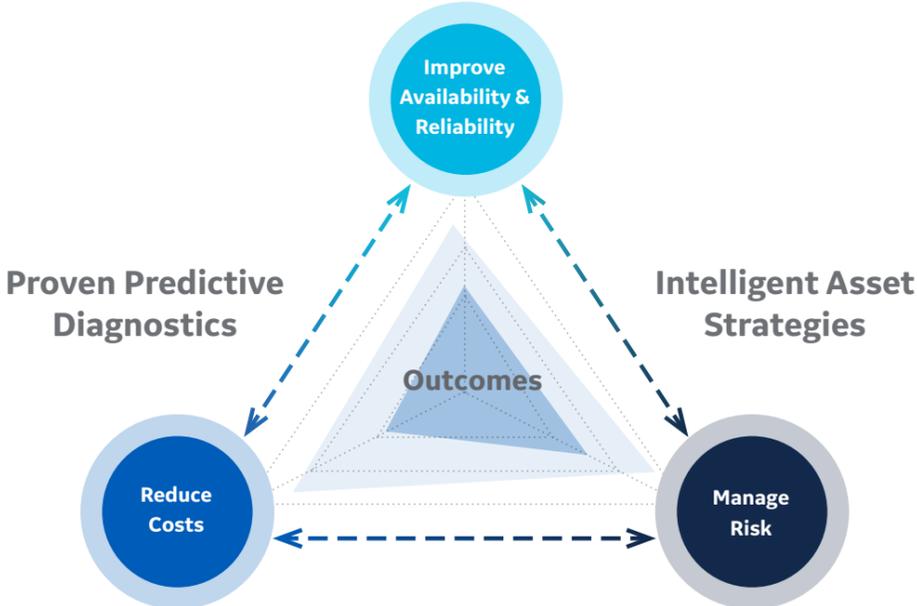
To implement and maintain a cost-effective regulatory compliance strategy, it is critical that inspection, safety, and maintenance capabilities are streamlined to deliver the utmost efficiency and actionable insights for asset-centric industrial organizations. With the application of risk-based principles, owner operators can define

effective strategies for maintaining operational goals within maintenance budget constraints. And through automation of a lifecycle approach, the effectiveness of this strategy can be used to modify the strategy itself.

Intelligent Asset Strategies

Asset Performance Management (APM) from GE Digital is an integrated suite of four software and service offerings powered by Predix, the operating system for the Industrial Internet. APM enables [intelligent asset strategies](#) to collect and manage all of your data and information to make the best decisions to help maximize overall asset and operational performance and to continuously improve and learn, automatically.

APM helps asset-centric organizations drive safer and more reliable operations while ensuring optimal production at a lower sustainable cost by balancing cost, availability and reliability, and risk.



So how can your organization enable intelligent asset strategies and address these key business challenges head on?



Compliance & Integrity Management

Part of our APM suite, GE Digital's Compliance & Integrity Management (C&IM) provides organizations with best-practice, foundational safety and environmental work processes, allowing users to calculate risk and the remaining useful life of assets. C&IM also ensures that inspection and compliance strategies are evaluated as equipment conditions change.

C&IM allows you to focus more on preventative maintenance and developing intelligent actions to fully comply with regulatory measures.

C&IM can help you:

- > **Develop and enhance** inspection strategies that support risk-based inspection methodologies such as API 580, 581
- > **Enable compliance** with OSHA 1910.119 process safety management requirements and ISA/IEC safety standards
- > **Fully integrate compliance and integrity** initiatives across your enterprise to maximize asset availability and lower the likelihood of catastrophic incidents

LEARN MORE

Real customer results:

\$325K

Saved annually by improving mechanical integrity in turnarounds

[Learn More](#)

14%

Reduction in corrective maintenance

[Learn More](#)

25%

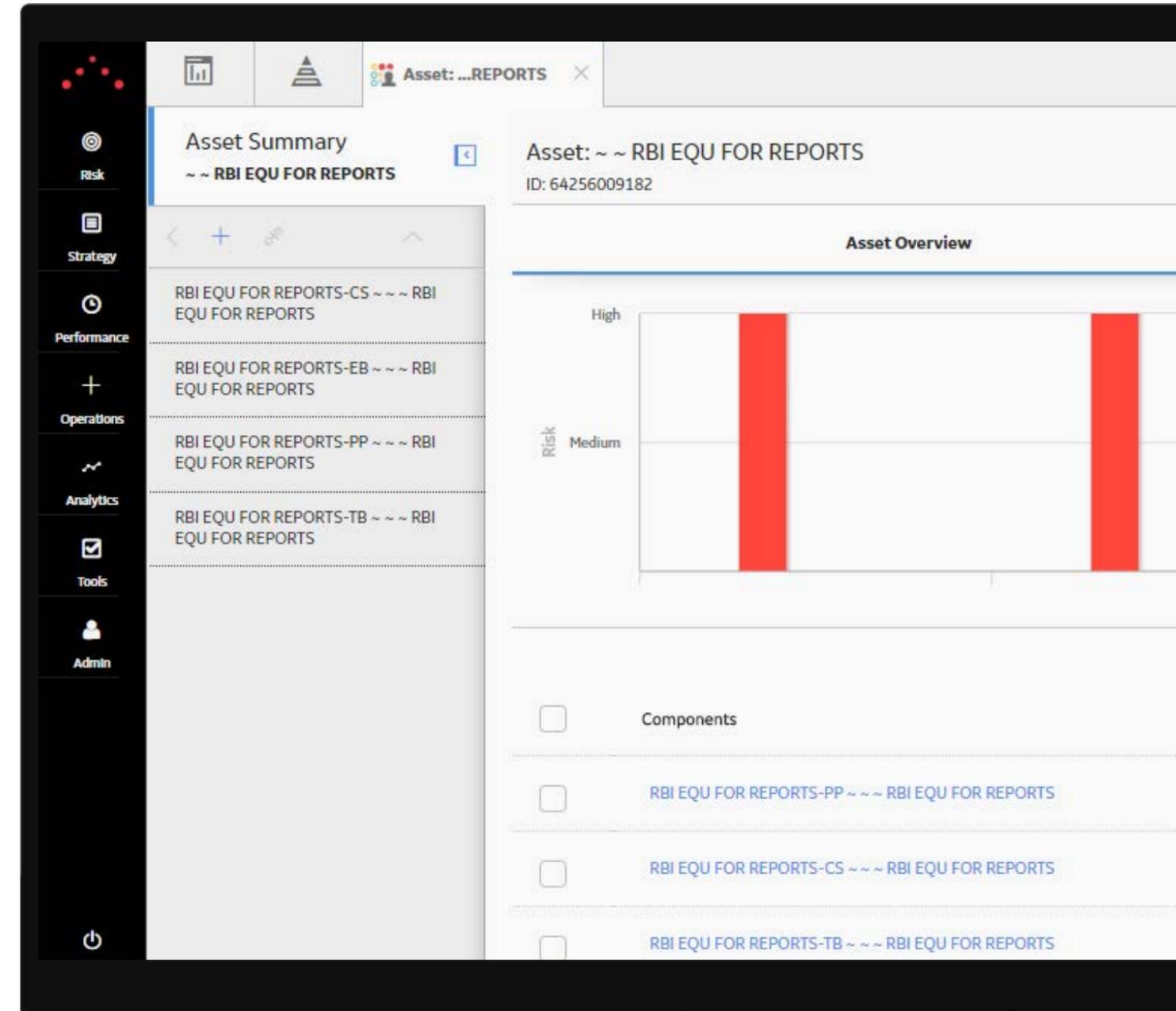
Increase in preventative maintenance by improving mechanical availability

[Learn More](#)

£2.12

Saved annually by using risk based inspection capability

[Learn More](#)



Features of Compliance & Integrity Management

> Hazard analysis

Based on international standards, such as the IEC 61882 Hazard and Operability Studies (HAZOP Studies) - Application Guide, the hazard analysis capability is both a regulatory requirement and an integral part of an overall risk-management process--focused on identifying and assessing risks and managing the reduction of those risks. Hazard analysis is fully integrated with capabilities in our [Asset Strategy Optimization](#) solution.

> Safety lifecycle management

Safety lifecycle management addresses the need to maintain and manage the reliability and performance of critical process instrumentation and safety instrumented systems, as well as compliance requirements. Based on international industry standards such as ISA 84/IEC 61511 and IEC 61508, this capability helps enable the management of all phases of the safety lifecycle, from design through operation and maintenance to eventual decommissioning.

> Risk based inspection

Most inspection programs are mandated by regulatory agencies with the power to apply significant penalties for non-compliance. To improve cost-effectiveness, many organizations are turning to risk based inspection (RBI) as a preferred methodology. This RBI methodology is based on and has been certified as complying with American Petroleum Institute (API) 580 and 581. This capability provides the ability to assess the likelihood and consequences of failure to optimize inspection rigor based

on overall risk. The visual surveillance and inspection of both fixed and linear assets is a critical element in assessing the current condition of the asset and avoiding equipment failures. RBI can be integrated seamlessly into inspection-management and maintenance programs.

Our APM solution is the only solution that provides a methodology agnostic RBI capability, and it was the first software solution certified to the 3rd edition of API-RP 581 by Trinity Bridge Digital.

> Inspection management

Inspection management provides the ability to drive large-scale inspection programs and ensure compliance with federal, state, and local requirements—including API standards. This capability allows asset owners and operators to manage inspection plans on a variety of asset classes, document the condition of each asset, and track inspection recommendations to closure.

> Thickness monitoring

Effective thickness monitoring activities are an essential component of an APM program, helping to eliminate equipment failures. This capability provides the ability to calculate remaining useful life and inspection priority based on corrosion rates or thickness measurements. Thickness monitoring can be integrated with a variety of data loggers, thereby streamlining the collection of thickness data. Tasks associated with thickness monitoring also can be integrated into EAM/CMMS systems and our other APM solutions.

> Management of change

This capability provides a systematic approach to managing changes to equipment, materials, operating conditions, procedures, and personnel, taking into consideration all aspects of operations which will or could be impacted because of a change. The management of change (MOC) capability provides a flexible solution for creating and managing change projects, communicating changes to team members, and enforcing an approval system to provide accountability for the change. With MOC, users are able to comply with change-management requirements by relating records from other APM entities to ensure that all impacted areas of the organization are recorded as changed elements in the change project. This, in turn, provides your organization with a greater degree of auditability, which is essential in industries that require management of change as a regulatory compliance requirement.

GE Digital's Asset Performance Management

Compliance & Integrity Management is one of four APM solutions:



Reliability Management

Achieve less unplanned downtime by predicting equipment issues before they occur.

- Predictive diagnostics
- Case and collaboration management
- Root cause analysis
- Reliability analysis



Compliance & Integrity Management

Ensure asset integrity and compliance by monitoring changing risk conditions.

- Hazard analysis
- Safety lifecycle management
- Risk based inspection
- Inspection management
- Thickness monitoring
- Management of change



Asset Strategy Optimization

Optimize across availability, reliability, risk, and costs through intelligent asset strategies.

- Reliability centered maintenance
- Failure mode and effects analysis
- Strategy management
- Strategy library
- Lifecycle cost analysis
- Financial and risk simulation



Machine & Equipment Health

Anytime, anywhere, unified view of your assets' current state and health.

- Connectivity
- Data management
- EAM integration
- Condition monitoring
- Data analysis and visualization
- Criticality analysis
- Event management
- Recommendation management
- Reliability benchmarking

APM offers multiple benefits, including:

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

[Learn more about our complete APM offering](#)

Want to learn how to implement and maintain a cost-effective regulatory compliance strategy? Visit our website to learn more about Compliance & Integrity Management.

VISIT OUR WEBSITE





About GE

GE (NYSE: GE) is the world's Digital Industrial Company, transforming industry with software-defined machines and solutions that are connected, responsive and predictive. GE is organized around a global exchange of knowledge, the "GE Store," through which each business shares and accesses the same technology, markets, structure and intellect. Each invention further fuels innovation and application across our industrial sectors. With people, services, technology and scale, GE delivers better outcomes for customers by speaking the language of industry.

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