"Survey Says"

What Other Executives in the Chemical Industry Are Doing

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Chemical manufacturers supply more than 100,000 different chemical compounds essential to keeping the economy going, according to the World Economic Forum. The caustic nature of many of the compounds can destroy valuable assets quickly, making it essential that those assets be maintained and inspected on a regular basis.

The challenge is a difficult one, which is why asset integrity management (AIM) market leader Metegrity initiated a roundtable many years ago to guide the development of its software. The roundtable featured 30 experts from multiple industries, including chemical, to leverage the best practices for all.

In the same spirit of reaching out to industry leaders to ensure that its products and services are the best possible ones available, and meet the needs of demanding chemical manufacturing plants, Metegrity commissioned a survey to find out what chemical plant engineers, managers, and executives have to say about asset integrity management.

"Chemical manufacturers supply more than 100,000 different chemical compounds essential to keeping the economy going..."

Survey Says: What Your Peers Say About Asset Integrity Management

The survey was sent out to hundreds of leaders in the chemical manufacturing community, and resulted in responses from just like you:

Companies: Integrated chemical plants, plastics plants, petroleum chemical plants, agriculture chemical plants, and specialty chemical plants.

Roles: Maintenance Management, HSE, Plant Management, Engineering Management, Asset Management, Operations Engineering, and other Regulatory and Inspection roles.

Company Sizes: Respondents came from every size of company, from under $10 million specialty chemical companies to larger $10 billion integrated chemical companies.

Survey Says: Top 10 Findings

1. Manual vs. Automated Systems

About 60% of respondents reported that they used manual processes, such as manually checking paper records to check on the status of important assets. In addition to the time spent on maintaining records, companies using manual systems found it difficult to use more sophisticated methods, such as risk-based inspection. Instead, it is often deemed necessary to rely on simpler methods, such as time-based inspection, despite the advantages that risk-based inspection provides.

With Visions Enterprise, you get the latest in asset integrity management, aided with the benefits of automation, integration and digitalization. For example, Visions addresses the growing industry-wide concern regarding management of system failures and associated legal consequences, which are now getting personal for plant managers, not to mention reducing data entry and human error.

2. Time-Based vs. Risk-Based Inspection Scheduling

About 60% of respondents reported that they used time-based methods to schedule inspections. With time-based methods, you run the risk of either wasting money (due to over inspection) or a regulation violation (due to asset failure and loss of containment).

Metegrity offers an accurate system to schedule inspections based on the risk characteristics of the asset. In the past, you might have been able to justify a time-based inspection scheduling routine. An example of this is a two year recurring equipment certification. Even if companies restrict their time-based inspection routines to relatively simple inspections or on low-risk equipment, they still risk wasting the time of senior staff, who would be better utilized in inspecting more complex equipment.

3. Risk-Based Inspection

About 40% of respondents reported that they are failing to use risk-based inspection (RBI). RBI represents a significant advance in asset integrity management and is highly touted as the best method available.

Metegrity gives you the power of RBI. We work with you to build an initial RBI model and perform assessments on your assets in our highly integrated and comprehensive Visions Enterprise program.

"About 60% of respondents reported that they used time-based methods to schedule inspections."

Visions Enterprise provides an assessment of all damage mechanisms and new scheduling information reflecting inspection that is based on risk, not time. With Visions Enterprise, studies have shown that 20% of most companies' equipment account for 80% of the risk. With this insight, staff can now concentrate their efforts on the most critical equipment, which can reduce risk and save labor.

4. Reporting for Hazard Reviews

Almost 50% of respondents rely on Microsoft Excel to provide damage mechanism information during hazard reviews. This can cause outdated and inaccurate records.

Metegrity provides industry-leading Integrity Reports to support your operations and maximize the functionality and benefits of your productive assets. Visions Enterprise reports on results on circuit and status of inspections based on API 510, API 570, and API 653 regulations, all of which can be stored in the fixed equipment integrity report. Additional forms can be produced to acknowledge the unique attributes of rotating equipment and pressure safety valves (PSVs).

5. Data Sources

More than 50% of respondents admitted to using non-integrated data sources for records management, such as paper and Excel for history, data documentation, and design data. Not only does this methodology result in challenges for reporting in hazard reviews, it also consumes a significant amount of valuable time.

"Metegrity provides industry-leading Integrity Reports to support your operations…"

Auditors are now demanding more detailed records to include:

- Technical approach used for analysis data

- Procedures used

- Technical models used

- Pressure test data

- Details of all measurement tools

- Results of finite element analysis

- Fatigue analysis

- Sign-off records by officials

- And many other details

As a result, records and data management can now take significantly longer than maintenance and repair activities. As skilled labor can be difficult to acquire and retain, saving time is a value add most companies can benefit from in all areas.

With Visions Enterprise, you can keep all records in a logically organized way, so that you have everything you need at your fingertips.

6. Mobile

The survey also found that the lack of a mobile graphical interface is a pain point when it comes to work performed in the field. The lack of a mobile interface limits field personnel to only having access to enter inspection data while in the office.

Metegrity offers VISIONSGO, the first of its kind mobile solution for asset inspections.

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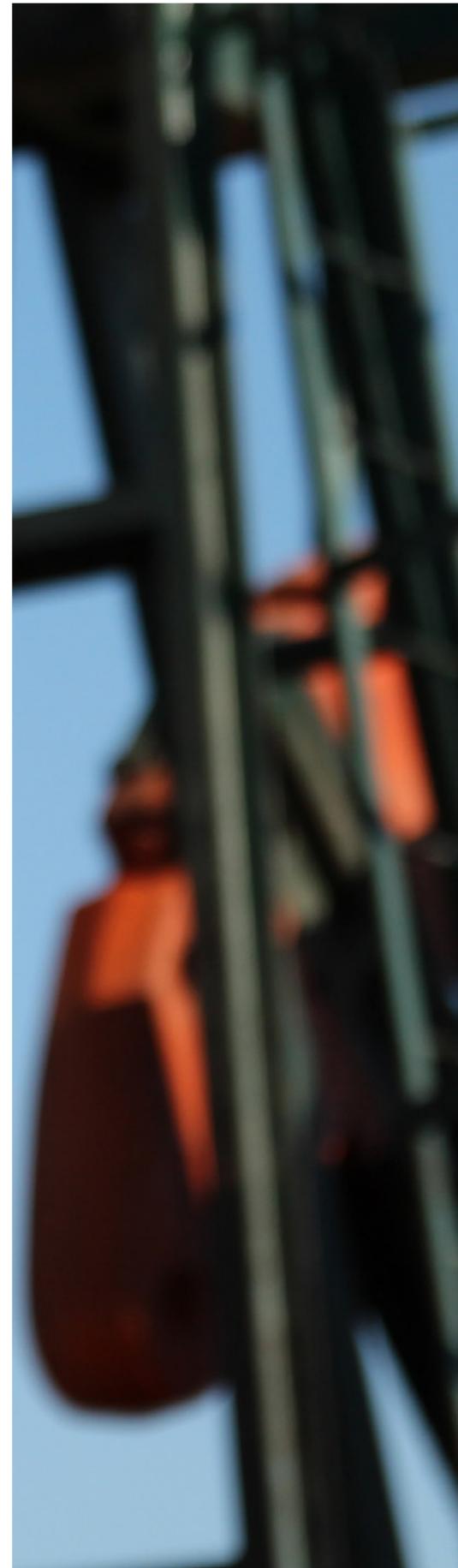
With VISIONSGO, you now have the ability to collect and analyze all asset inspection data directly from the field via mobile tablet. This prevents you from spending excessive amounts of time manually collecting data through paper records and waiting for the results to be reported. The result? Faster access to data accelerates decision-making, improved productivity, and more time saved.

7. Environment, Health, and Safety (EHS)

Survey results showed that respondents felt significant pain because of the limited capabilities of their EHS platform. Some EHS platforms simply cannot produce reports or send notifications and alerts with process safety metrics and KPIs. This can present major problems when problems arise.

Metegrity understands the importance of EHS more than ever before. Regulators are cracking down on environmental problems as well as health and safety issues.

With Visions Enterprise designed around global regulatory standards, your audit compliance process is easily streamlined to ensure you meet regulations and are aligned with best practices.

"Metegrity understands the importance of EHS more than ever before."

8. No Link to ERP

The respondents of the survey reported that they feel significant pain levels due to the lack of connection between their asset integrity and process safety performance and their ERP systems. Without the linkage, companies lack the important information that asset integrity management systems can provide to ERP systems.
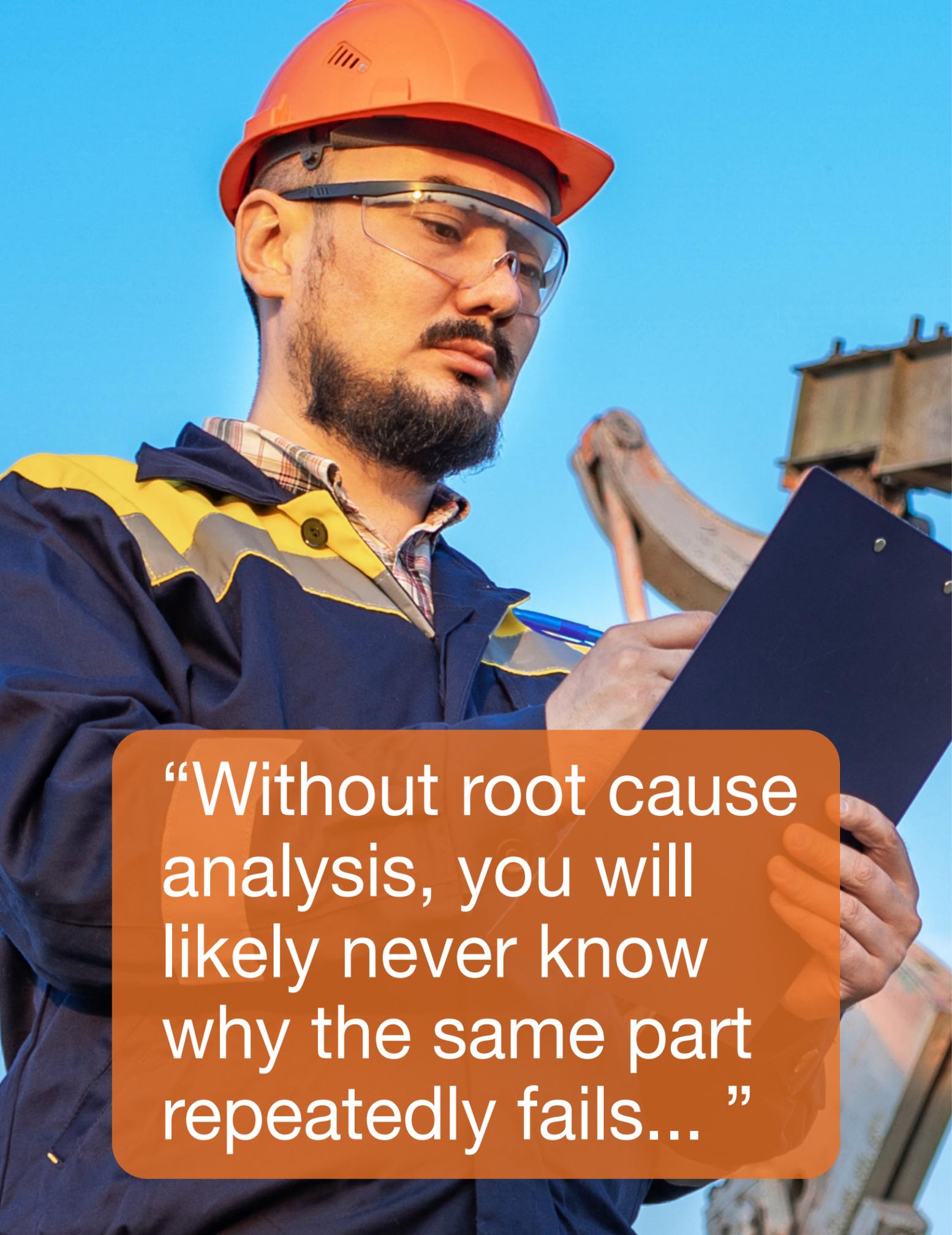
Metegrity's integration with ERP systems allows for Visions Enterprise to be the driver for scheduling work memos based on either risk or condition, rather than time-based. The integration "pushes" work to the ERP to initiate a work order. Metegrity connects with virtually every computerized maintenance management system (CMMS), such as EAM, SAP, Maximo, InforEAM, as well as AutoCAD, data logger instruments, data historians, and others.

9. Inspection, Testing, and Preventive Maintenance (ITPM)

Respondents expressed a major concern with regards to managing a risk-based program to identify the correct ITPM routines. Many of these companies are doing reactive maintenance, that is, responding as incidents occur. Prescriptive inspection is growing in popularity for a reason. Why risk downtime, additional costs, and health and safety issues when you can conduct prescriptive inspection based on risk assessments instead? This is the value that companies are seeking.

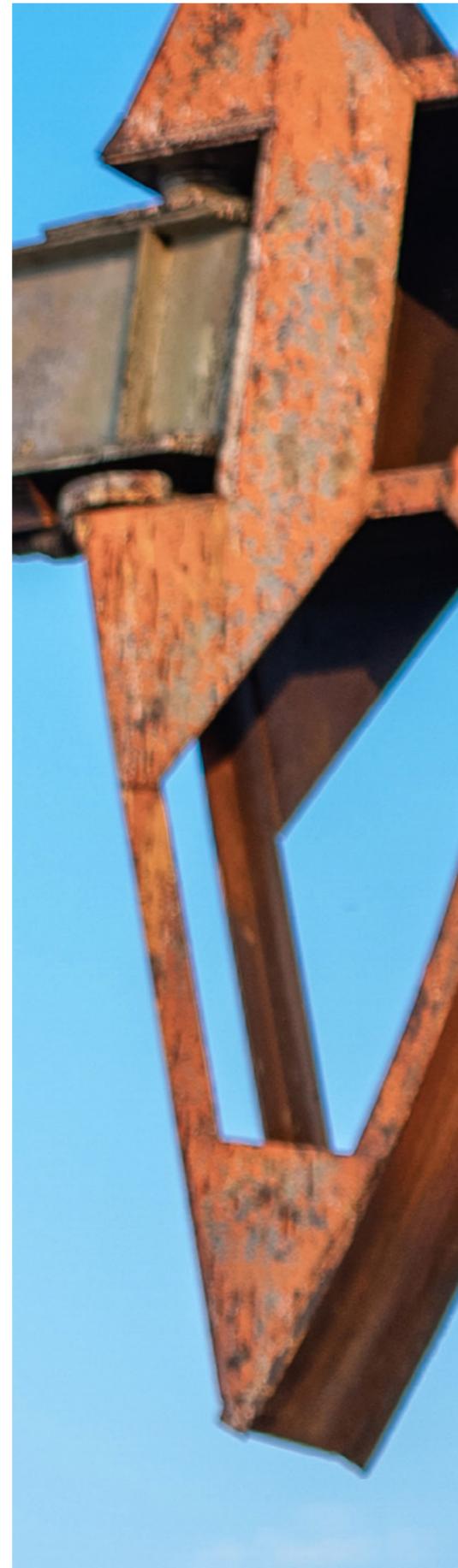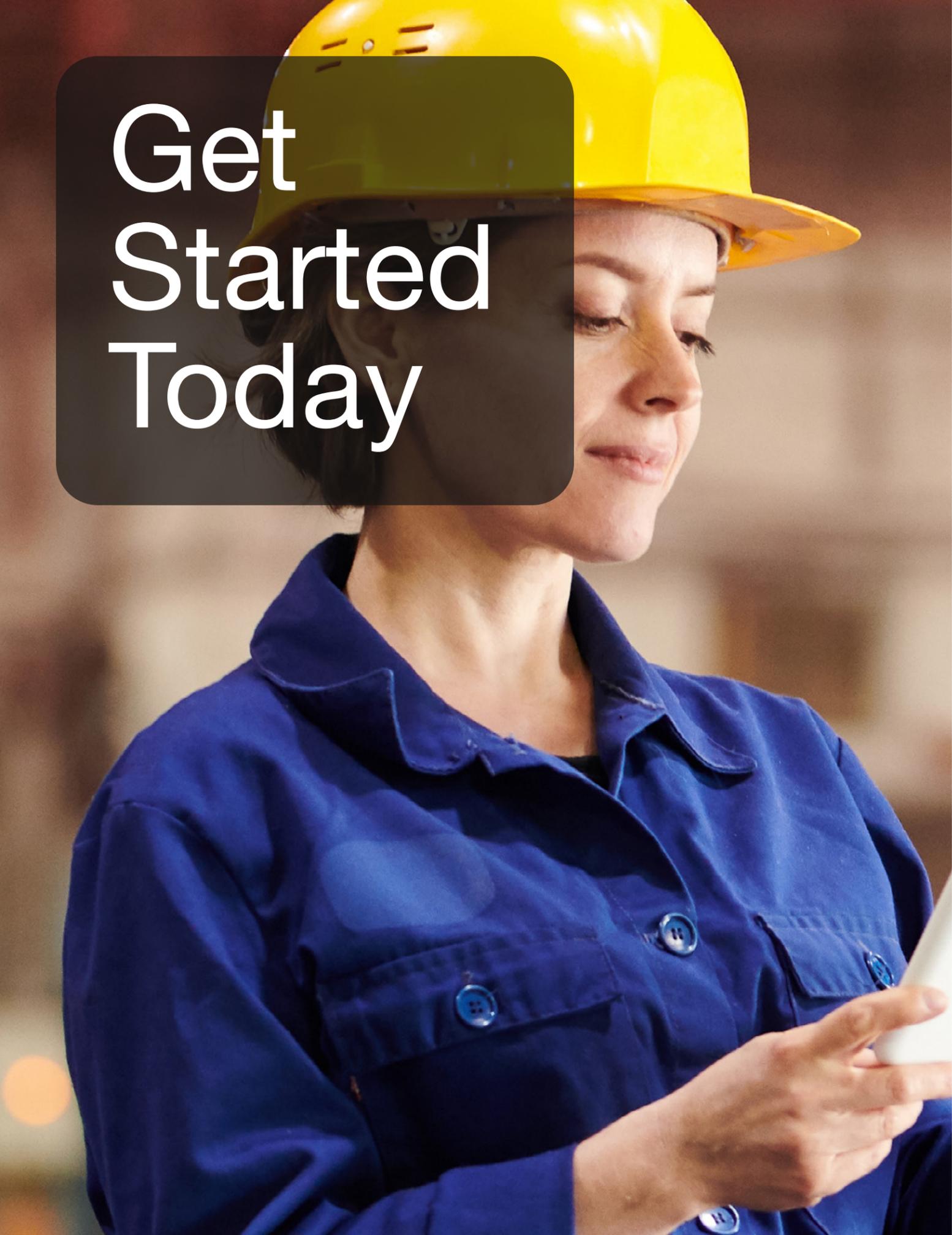"Metegrity connects with virtually every computerized maintenance management system (CMMS)..."

With Visions Enterprise, you can complete your integrity plan (ITPM planning and scheduling) for your most critical equipment and also define the acceptance criteria. This solution puts you at the forefront for moving your company from reactive maintenance to prescriptive inspection.

10. Root Cause Analysis

Survey results indicated that respondents are concerned about being unable to conduct root cause analysis for failures with their current system. Without root cause analysis, you will likely never know why the same part repeatedly fails, which could be a costly unknown to allow.

Visions Enterprise provides an accurate data history that is vetted for an asset. This information is invaluable during a root cause analysis.

> "Without root cause analysis, you will likely never know why the same part repeatedly fails… "

Get Started Today

Contact Metegrity to find how Visions Enterprise can transform the asset integrity management in your chemical plant.

Toll-free: 866.485.8500

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Learn more at Metegrity.com

metegrity

Manage asset health using our asset integrity management software for single to multi-site plants and facilities.

Visions Enterprise is a comprehensive, risk-based asset integrity software solution that supports all equipment types in a single platform. The solution is configurable, with seamless integration to CMMS systems, such as EAM, SAP, Maximo, InforEAM, J.D. Edwards, as well as AutoCAD, data logger instruments, data historians, and others.

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