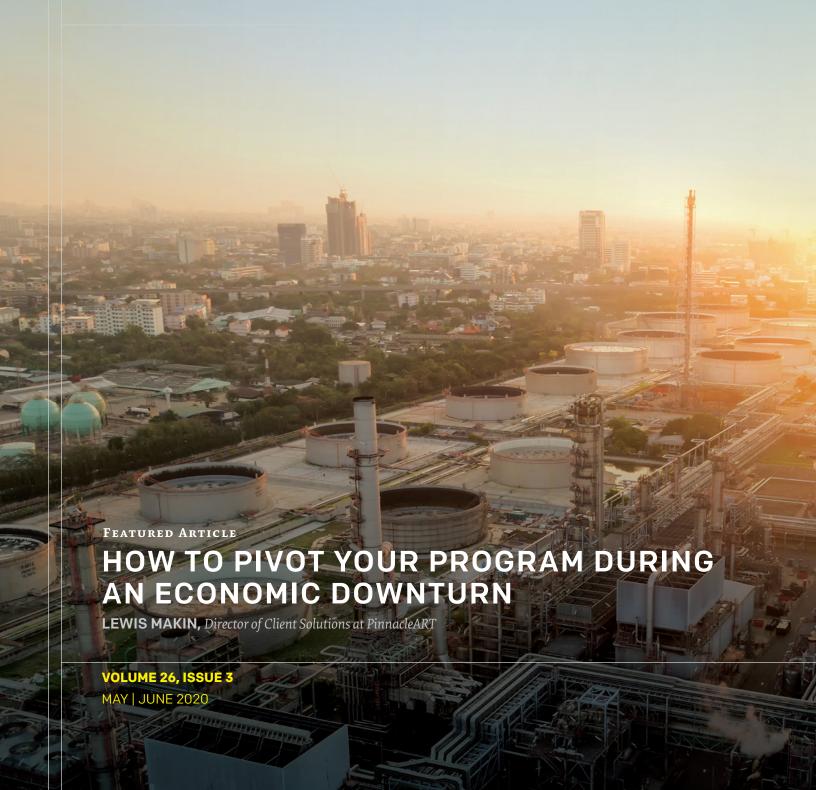


# Inspectioneering Journal

ASSET INTEGRITY INTELLIGENCE



### **HOW TO PIVOT YOUR PROGRAM DURING** AN ECONOMIC DOWNTURN

As the oil and gas industry slowly begins its long journey back to recovery, facilities are continuing to look for areas they can immediately reduce costs without negatively impacting their programs in the future. Additionally, decision makers are having to quickly decide where to invest the remainder of their severely diminished budgets and are having to make these decisions based on the data they have access to. Often, this data does not identify the areas of their program that have the greatest impact on their overall facility performance and can cause facilities to invest in activities that do not directly provide value to the facility.

Identifying initiatives that reduce short-term costs while having a positive, long-term impact on a program can be very challenging for plant management. However, despite the recent challenges that the oil and gas industry has faced over the past couple of months, facilities have the unique opportunity to assess, optimize, and improve their programs. This article will provide three areas plant management can focus on to pivot their program during an economic downturn:

- 1. Evaluate facility culture and embrace potential change
- 2. Build strong, data-driven processes to drive decision making
- 3. Pursue excellence and focus on measuring quantifiable value

#### **EVALUATE FACILITY CULTURE AND EMBRACE** POTENTIAL CHANGE

When evaluating which areas of a program to invest in during an economic downturn, facilities should first evaluate their culture and embrace any potential changes that may need to occur. Historically, many facilities have relied on tribal knowledge and the mindset of "that's the way we've always done things" to drive processes and decision making. Decision makers with this mindset can hinder the potential success of their program because they often do not see the need to make necessary changes to current processes, procedures, and tools. Often, plant managers develop this mindset because they do not know how certain changes will impact their program in the future. However, given the current environment of the oil and gas industry, now is the best time for facilities to implement changes.

To begin, facilities should evaluate their company vision and goals. A company vision serves as a guiding force for the overall organization. Facilities should be able to tie each and every goal to the overall company vision. Having a strong company vision that ties to facility goals will help plant managers measure the strength of their goals and will also coordinate their risks and opportunities across multiple teams.

Next, facilities should evaluate their culture. Does your facility have a results-driven or value-driven culture? While every facility has a set of results that it wants to achieve, achieving certain results is pointless unless they provide direct and measurable value. Shifting to a value-based culture and building goals based on that mindset will help facilities focus and achieve the results that directly impact their programs, customers, and community.

A value-based organization will prioritize investing in initiatives that are proven to add value to the organization regardless of how it may impact immediate results because they know it will benefit their program in the long run. For example, an organization may choose to cut reliability and maintenance spending by canceling high-cost initiatives planned in the near term. While these initiatives often bring immediate results, they can also put the facility's future performance at risk and can jeopardize the long-term financial return of the facility. Instead of focusing on the immediate result to reduce costs, a facility should view this as an opportunity to evaluate the return on value. In a down market, facilities should focus on initiatives that provide instant measurable value. While instant-value initiatives do not always provide the greatest return on investment, they provide facilities with the momentum and flexibility needed to change course quickly during a down market. Facilities need to capitalize on the unique, short-term opportunities that are not usually available when the market is doing well. As the market returns, facilities can then prioritize investing in larger initiatives with a greater, long-term return on value.

#### **BUILD STRONG, DATA-DRIVEN PROCESSES TO** DRIVE DECISION MAKING

The second initiative facilities should focus on when pivoting their programs during an economic downturn is evaluating and investing in the data foundation of their programs. Programs built on a strong data foundation equip facility leaders with the data they need to make smart, well-informed decisions about their programs. Additionally, as the market returns, plant managers will be better able to invest in initiatives proven to add longterm value to their programs.

To determine the strength of a program's data foundation, facilities need to determine if they use their data to support decision making by assessing the quality of their data:

- Does the collected data provide visibility into asset health and other critical program insights?
- Are plant managers able to use the data to easily determine the program areas that have the greatest impact on the facility's availability, safety, and cost?

• Are plant managers confident in making decisions based on their data?

While a massive overhaul of how facilities collect, organize, and analyze their data takes a significant amount of time and resources to complete, facilities should utilize the time during an economic downturn to re-evaluate their data collection and organization procedures. Three main areas facilities should focus on when evaluating their data foundation:

#### 1. Digitize current work processes

Digitizing current work processes will help facilities make quicker decisions based on accurate, up-to-date data. Whether facilities digitize all their processes or only digitize a specific area of their program, digitizing any element of their program will help facilities connect their teams, enabling quicker and more effective decision making.

Digitizing processes and documentation will help facilities quickly assess real-time data and will help internal teams understand what they need to accomplish, how they need to accomplish it, and the measurable impact of their efforts. While digitizing asset documentation such as Piping & Instrumentation Diagrams (P&IDs) and Process Flow Diagrams (PFDs) can be a time-consuming process, the combined short-term gains of quicker access to data and long-term benefits of having a robust document that can be evergreened make it a worthwhile initiative for facilities to invest in during an economic downturn.

#### 2. Structured data integrity

Facilities should have structured work processes as the foundation of their program. Well- defined work processes enable facilities to improve their performance in the short term and helps facilities build a successful program in the long term. First quartile (Q1) reliability and maintenance performers all have robust, structured work processes at the foundation of their programs. Additionally, Q1 performers focus on the end goal and outperform their competition in cost and availability while typically implementing fewer reliability initiatives. While there isn't a silver bullet or short-cut to strong reliability performance, it always starts with structured, quality data.

#### 3. Focus on data that will help facilities make immediate decisions

Given the current climate of the industry, facilities need to focus on investments that will help them make immediate decisions. Plant managers need to minimize investing in tools or systems that are primarily used to drive proactive activities and focus on predictive efforts that will enable them to make better, and potentially different, decisions today.

As mentioned above, facilities should focus their initiatives and investments on those that yield immediate value and push initiatives that drive a larger, but often longer return on value. Some examples of immediate-value initiatives (less than one-month return) are:

Asset Reliability Assessment targeted inspections

- Corrosion monitoring location optimization
- Spare parts optimization
- Criticality assessments

While all of the following initiatives can add value, their return on value is considerably longer than the initiatives mentioned above. In addition, without a strong foundational focus on data quality, many of the following initiatives fail to ever realize value due to poorly managed implementations:

- · Risk-based inspection programs
- Machine learning
- CMMS and IDMS integrations
- Integrity Operating Windows

The key takeaway here is that if you pursue any initiative, ensure that you trust the data that is driving the initiative. Ensure everyone understands the input variables that drive the results. If you don't, stop and reconsider your approach because your immediate return on value is going to be delayed, which can be the difference between surviving and flourishing during a down market.

#### PURSUE EXCELLENCE AND FOCUS ON MEASURING QUANTIFIABLE VALUE

The third area facilities need to focus on during an economic downturn is pursuing excellence and focusing on measuring quantifiable value from every action a facility makes. Measuring value is challenging. For many facilities, measured value could be tied to hitting specific production targets or returning a certain profit margin to shareholders. From a high level, the concept of measuring value is intuitive, but the real challenge occurs when facilities try cascading that value to every person and action taken at their facility.

The first step in pursuing excellence and measuring quantifiable value starts with the mindset of your leadership teams. During your weekly team meetings, ask: "Is everyone contributing and driving value in everything they do? Is everyone aware of the value that is gained by the tasks they accomplish? Are all of our tasks aligned and working together in synergy to drive our collective value mission?" If the answer to any of these questions is no, then your facility is not pursuing excellence.

The second and final step in pursuing excellence is persistence, specifically the persistence to never stop challenging measurable and quantifiable value in everything you do. Facilities that do these two steps well ultimately have a more positive work environment, drive better results, and achieve more with less.

In the current down market, the following list of initiatives have a defined quantifiable value proposition and help reduce costs today while also providing long-term benefits:

- Completing Asset Reliability Assessments
- Digitizing existing work processes
- Updating asset strategies real-time during turnarounds

- Implementing spare parts optimization
- Prioritizing corrosion under insulation (CUI) inspections
- Optimizing corrosion monitoring locations (CMLs)
- Designing for reliability in capital projects
- Incorporating rope access into inspection programs

Again, no single initiative is going to be a silver bullet, so facilities should tailor their specific set of initiatives to meet their unique value opportunity. For example, a facility that already has an organized digital documentation system may realize greater value and cost-savings from leveraging their digitized data to develop asset strategies real-time during a turnaround Similarly, a facility that has prioritized corrosion under insulation for piping circuits may realize greater value and cost-savings from incorporating rope access into their inspection program and completing both maintenance and inspection activities leveraging a single contractor. Regardless of the specific initiative and undertaking, plant managers should set a key focus to understand their facility's quantifiable value impact and to measure that impact across every action their facility takes.

Despite the challenges that the current market has caused, all facilities should continue to prioritize safety and reliability. By focusing on properly identifying the areas that provide direct value to their program, facilities will be better equipped to manage the cost constraints of the current market environment and steward strong, long-term performance as the market returns.

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Every Tuesday Morning | 9:30 AM CST

Reduce Cost by Digitizing Your Existing Processes

Reduce Cost by
Prioritizing Inspection and
Maintenance Activities

Reduce Cost by Developing Asset Strategies Real-Time During Turnarounds Reduce Cost with Spare Parts Optimizations

Reduce Cost by Prioritizing CUI Inspection

Reduce Cost by Optimizing CMLs

Reduce Cost by Designing for Reliability in Capital Projects

Reduce Cost with Rope Access

Reduce Cost with a Managed APM Program