

# Future Strategies for MRO Inventory Optimization

Procurement and Operations Leaders Reveal Insights into the Current State of MRO Strategy, Data Uniformity, and Collaboration



# Table of Contents

#### 02

Executive Summary

03

Key Insights

#### 05

Perspectives on MRO as a Strategic Initiative

#### 09

The State of MRO: Current Practices and Future Trends

#### 14

The Largest Gap Identified in MRO Organizations Today

## 16

Transforming MRO Procurement and Operations Strategies

**20** Conclusion: The MRO Practice in Five to Ten Years

**21** Key Suggestions for Strategic MRO Management

**22** About the Respondents

**23** About the Authors

# Executive Summary

Based on the survey results of 250 procurement and operations leaders, this report explores the current state and future evolution of MRO (maintenance, repair and operations) materials and parts management highlighting significant challenges and opportunities. The report identifies key barriers to effective MRO data management, such as outdated systems and a lag in Al adoption. It also underscores the importance of building stronger partnerships and adopting advanced technologies for improved end-to-end MRO inventory management and operational efficiency. Looking ahead, predictive maintenance, digital platforms, and enhanced collaboration between departments and suppliers are anticipated to transform MRO practices significantly. The respondents believe data-driven decision-making and upskilling the workforce will further enhance outcomes. Overall, the results of the study suggest that the alignment of MRO practices with broader business goals will drive strategic value through efficiency, innovation, compliance, and sustainability.





# Key Insights

## Among the respondents:

# **71**%

think MRO procurement/operations should be treated as a strategic initiative for continuous improvement and/or a potential source of innovation, rather than as a necessary project or cost.

# **42**%

say MRO procurement/operations is not treated as a strategic initiative in their organization.

# 33%

have decentralized MRO inventory teams across their organization.

## **44**%

don't use Predictive Maintenance Solutions, allowing for gut-based decisioning vs data driven decisioning.

# **46**%

currently don't have a process in place to define and regularly assess the criticality and stocking policies of its MRO materials.





Most organizations are using technologies that are not purpose built to manage their MRO practices:

- Enterprise resource management (ERM) software (80%)
- Supplier relationship management (SRM) tools (70%)
- Inventory optimization and management systems (66%)
- Predictive maintenance solutions (56%)



## Key Insights Continued

# **65**%

say they have a formal plan and process in place that ensures regular communication between procurement and operations, while 24% say the departments share joint ownership of outcomes, with overlapping KPIs and a deep mutual understanding.

## 39%

report full data uniformity across all MRO materials, with standardized specifications ensuring consistent data formatting and usage, while 57% have partial uniformity for just critical materials. Most of the respondents say their organizations have the following capabilities in their collaboration with their MRO suppliers:

- Data sharing (80%)
- Strategic sourcing agreements (63%)
- Vendor-managed inventory (60%)
- Routine delivery schedules (54%)

# **54**%

can completely track and understand the consumption and utilization of their MRO materials, including which assets utilize them, the timing of maintenance activities and schedules, and who performs maintenance; 41% can partially track and understand these factors.





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# Perspectives on MRO as a Strategic Initiative

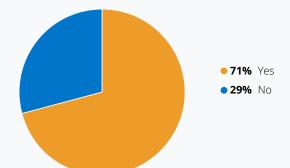
In recent years, the perception of MRO management has undergone significant change within industries. Once considered a mere operational necessity, many leaders now view MRO as a strategic initiative capable of driving innovation and efficiency, and competitive differentiation.

However, not every procurement and operations leader agrees with this assessment.

The study reveals that 71% of respondents believe that MRO procurement and operations should be viewed as strategic initiatives. This perspective focuses on continuous improvement and potential innovation rather than merely seeing the function as a necessary project or cost.

This result indicates a significant shift in the perception of MRO activities. By treating MRO as a strategic function, companies are likely to explore new technologies and methods to enhance the function and drive innovation.

This approach can lead to better resource management, cost savings, improved asset performance, and higher service levels. Do you think MRO procurement/operations should be treated as a strategic initiative for continuous improvement and/or potential source of innovation, rather than as a necessary project or cost?



The study reveals that 71% of respondents believe that MRO procurement and operations should be viewed as strategic initiatives.

## Perspectives on MRO as a Strategic Initiative

#### Reasons Respondents Think MRO Should be Treated as a Strategic Initiative

Researchers asked the respondents who said "Yes" to the previous question why they believe MRO procurement should be treated as a strategic initiative. The respondents provided several compelling reasons procurement and operations leaders should advocate for such an approach:

#### 1. Enhanced Operational Reliability and Availability:

Leaders emphasize that a strategic approach to MRO maximizes operational reliability by focusing procurement efforts on critical assets, which ensures high availability and minimizes unexpected downtimes.

#### 2. Proactive Risk Management:

By treating MRO procurement as a strategic priority, companies are better equipped to forecast and mitigate risks. Taking a riskbased strategic approach, allows companies to balance cost reduction with minimizing operational disruption and ensuring maximum uptime.

#### 3. Innovation and Continuous Improvement:

Strategic MRO initiatives foster a culture of continuous improvement by investing in the training and development of procurement and operations teams. Enhanced skillsets and capabilities drive efficiency gains and foster innovation, allowing companies to explore new technologies and strategies to improve performance.

#### 4. Employee Morale and Satisfaction:

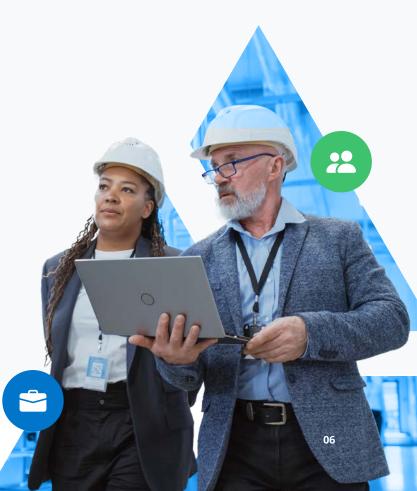
Leaders highlight that when MRO is treated strategically, it addresses employee concerns effectively and improves job satisfaction. Investing in workforce development, providing clear career paths, and recognition help boost morale and job dedication.

#### 5. Supply Chain Resilience:

Companies that excel in their MRO practice respond swiftly to market and production changes. This minimizes supply chain disruptions, improves reliability, and boosts customer satisfaction.

#### 6. Competitive Advantage:

Companies that excel in their MRO practice gain a competitive edge in their ability to provide Return on Capital Employed through optimized asset utilization/ lifespan, and cost savings from efficient maintenance and inventory management.







## Perspectives on MRO as a Strategic Initiative

## Reasons Respondents Think MRO Should Not be Treated as a Strategic Initiative

Nonetheless, some leaders disagree with this approach. After analyzing the various reasons provided, there are six key reasons why some leaders don't think MRO procurement should be treated as a strategic function:

#### 1. Misallocation of Resources:

Leaders express concern that allocating strategic resources to MRO could divert attention and investment from more critical business areas such as R&D, market expansion, and innovation. They believe that the opportunity cost of focusing on MRO is too high, potentially leading to inefficiencies and missed opportunities in growth sectors.

#### 2. Operational Focus Over Strategic Vision:

Many leaders view MRO as inherently operational rather than strategic. They argue that MRO's primary function is to ensure operational efficiency and continuity rather than driving competitive differentiation or innovation. The focus remains on maintaining the status quo rather than achieving transformative business goals.

#### 3. Limited Competitive Advantage:

There is a belief that MRO procurement does not offer a significant competitive advantage in their industry. Strategic initiatives are typically aimed at gaining a competitive edge, whereas MRO focuses more on efficiency, supply optimization, and cost savings.

#### 4. Cost-Benefit Perspective:

Leaders often view MRO as a necessary operational expense rather than a strategic investment. They argue that treating MRO as a strategic initiative would require significant costs without delivering corresponding strategic benefits. This perspective emphasizes the importance of directing funds towards initiatives with direct revenue implications.

#### 5. Lack of Transformative Potential:

Leaders argue that while MRO procurement is essential for daily operations, it lacks the transformative potential needed for strategic initiatives aimed at disrupting markets and creating new revenue streams. Incremental improvements in procurement processes are unlikely to offer substantial strategic advantages.

#### 6. Integration and Coordination Difficulties:

The complexity involved in integrating MRO into the broader strategic framework of the organization can be daunting. Leaders might be concerned about the challenges related to aligning MRO with other strategic initiatives, systems integration, and ensuring seamless coordination across departments.

Overall, the opposition centers around the belief that while MRO is essential for maintaining operational stability and compliance, it should not be elevated to a strategic initiative due to its limited potential for driving innovation, competitive advantage, and the risk of diverting resources from higher-impact areas.





## Perspectives on MRO as a Strategic Initiative

#### Barriers to Elevating MRO as a Strategic Initiative

Despite 71% of business leaders believing that MRO should be treated as a strategic initiative, only 58% report that it actually is within their organizations, highlighting a significant gap. Key barriers include siloed information and lack of data accessibility, which hinder comprehensive visibility and data-driven decision-making.

Competing operational priorities, such as production targets and cost management, often overshadow the long-term strategic benefits of effective MRO practices. Significant resistance to change within organizations, especially from personnel accustomed to traditional methods, makes implementing new strategies challenging. Additionally, the lack of expertise and insufficient investment in advanced technologies are critical barriers, as these resources are essential for modernizing MRO solutions.

Integrating MRO strategies with broader organizational goals is complex and requires careful coordination across departments. Furthermore, many leaders perceive a lack of immediate value add from strategic MRO, making it difficult to prioritize over other high-impact activities. Addressing these barriers is crucial for aligning organizational practices with the strategic potential of MRO, bridging the gap between belief and implementation.

Next, we'll explore what technologies procurement leaders are using to optimize their MRO procurement functions.

71% think MRO *should* be treated as strategic at their organizations but only 58% say MRO *is* treated as strategic at their organizations. ...

## MRO Technologies

In MRO procurement and operations, success is characterized by several key indicators, such as efficient cost management and risk reduction. It is critical that MRO leaders streamline their procurement operations, allocate resources effectively, and ensure the organization always has the materials it needs to maintain operations.

Often, this success depends on the function's underlying technology, as well as its ability to internally collaborate with other areas of the business and externally with suppliers.

Most organizations in the study prioritize enterprise resource management software, with 80% utilizing ERP modules for managing MRO practices. This high utilization rate underscores the importance of having a reliable system of record and integrating core business processes to improve efficiency.

Additionally, 70% of respondents use supplier relationship management tools, highlighting a significant emphasis on maintaining and optimizing vendor interactions.

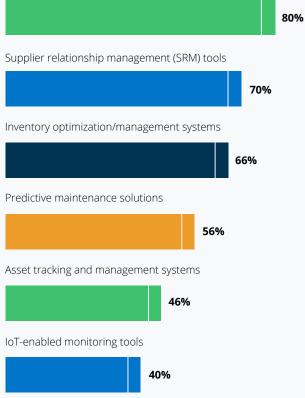
Inventory optimization and management systems are used by 66%, reflecting the critical need to track and control inventory levels effectively.

Finally, predictive maintenance solutions are employed by 56% of participants, signifying a growing trend toward anticipating equipment failures and minimizing downtime.

Still, only 46% use asset tracking and management systems, and only 40% use IoT-enabled monitoring tools. This suggests that there is still room for growth and improvement in utilizing technology for next-generation procurement practices, such as real-time monitoring of assets and automated inventory management.

# Which of the following technologies does your organization currently use to manage its MRO practices?

Enterprise resource planning (ERP) software







#### Creating Centralized Inventory Management Teams

Establishing a centralized inventory management team is often a crucial step toward optimizing MRO inventory and advancing organizational maturity in inventory practices. By centralizing inventory and procurement decisions under a dedicated central inventory management team, organizations can eliminate local optima decision-making, use coordination across their entire organization as leverage with their suppliers and significantly reduce waste.

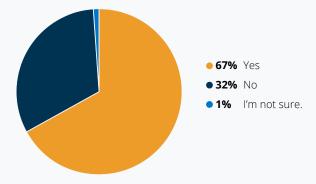
Most of the respondents (67%) say they have a centralized inventory management team at their organization that manages MRO inventory. However, almost one-third (32%) do not.

This type of team consolidates inventory policy decision-making and procurement activities, ensuring consistency and efficiency in purchasing decisions and processes. Centralizing these functions helps align inventory management with broader organizational goals, ensuring that inventory decisions support overall business strategy.

Additionally, by standardizing inventory and procurement procedures and utilizing advanced analytics, a centralized team can eliminate duplicate purchasing patterns, implement multiechelon inventory and part-sharing programs, and engage in obsolescent part resale initiatives. This approach not only optimizes inventory management but also maximizes cost savings and resource utilization.

Overall, this streamlined approach not only enhances operational efficiency but also contributes to significant cost savings and improved supplier relationships.





Researchers asked the respondents who don't currently have centralized teams to describe what barriers they face to implementing them. Some respondents noted a perception that existing teams possess specialized knowledge and expertise in their specific functions, which could be lost or diluted with centralization. However, this challenge can be mitigated by implementing systems that support a centralized team while facilitating collaboration with operators in the field, ensuring that specialized knowledge is still effectively utilized and shared.





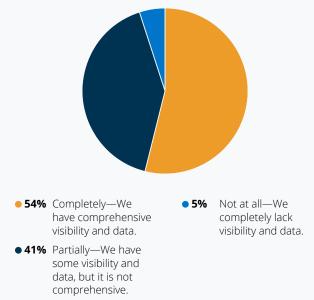
Another significant concern is the lack of universal recognition of the strategic value and return on investment of centralized inventory management. This lack of support from leadership and stakeholders stems from doubts about its strategic importance. However, this barrier can be addressed by demonstrating the longterm cost savings, improved efficiency, and enhanced supplier relationships that result from centralization, making a compelling case for its strategic value. Finally, many of the respondents who want to create a centralized team say they are challenged by complexities and cost concerns. They believe pursuing the initiative would be too costly, or they don't currently have the solutions in place to support such a team.

#### Tracking the Utilization of MRO Materials

There are potential challenges to understanding how MRO materials are being consumed and used. This has a significant impact on part-sharing programs and effectively assessing the criticality and stocking policies of certain materials. Organizations traditionally have implemented robust systems of inventory movement tracking to overcome these challenges effectively.

Most of the respondents (54%) say they can completely track and understand the consumption and utilization of their MRO materials, including which assets utilize them, the timing of maintenance activities and schedules, and who performs maintenance. Another 41% can partially track and understand consumption and utilization, while only 5% can't do so at all.

Researchers asked those respondents who can only partially track the consumption and utilization of their MRO materials, as well as those who can't track their materials at all, what is inhibiting them from achieving more comprehensive visibility. To what extent are you able to track and understand the consumption and utilization of your MRO materials, including which assets utilize them, the timing of maintenance activities and schedules, and who performs the maintenance?







According to these respondents, the absence of automated tracking systems and their reliance on manual processes significantly hampers accuracy. Traditional methods like paper-based records or spreadsheets are error-prone and time consuming, making real-time data capture and trend analysis difficult. Inconsistent data governance practices and the absence of clear data ownership guidelines lead to confusion over responsibilities and permissions, contributing to data duplication and inconsistency. Moreover, regulatory compliance requirements introduce additional complexity, diverting resources towards ensuring accurate reporting rather than improving data capture mechanisms.

The lack of a centralized platform for aggregating data from various MRO systems is a major impediment. Lack of interoperable systems and divergent processes across departments create information silos, making it challenging to achieve a unified view of MRO activities. This fragmentation is exacerbated by legacy systems and outdated software, which are often incompatible with newer tracking technologies, limiting the organization's adaptability and potential for improved visibility. However, emerging interoperable technologies that can stitch together previously difficult-tointegrate systems, combined with advanced capabilities to fill in data gaps, offer promising solutions to these challenges. By leveraging these technologies, organizations can achieve comprehensive visibility and accuracy in tracking MRO material consumption, leading to better criticality assessments, optimized stocking policies, and more effective partsharing programs.

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#### Using Artificial Intelligence in MRO

In addition to the technologies mentioned above, most MRO functions will at least be exploring how they can leverage AI to improve efficiency in the future. Others have already implemented AI functions.

Researchers asked the respondents to describe how they see AI playing or not playing a role in their MRO practices moving forward.

Among some of the respondents, AI algorithms will be implemented to predict maintenance needs, forecasting equipment failures, thereby reducing unplanned downtime. AI monitoring systems are anticipated to continuously track equipment health, allowing timely maintenance interventions to extend asset lifespan. They will even leverage AI for condition-based maintenance, moving away from traditional calendar-based approaches.

Respondents also aim to use Al for dynamic scheduling, optimizing technician assignments, and ensuring timely interventions, including by pre-ordering parts and tools for maintenance. Considerable opportunity has been identified in combining predictive maintenance, inventory optimization and dynamic scheduling tools powered by Al.

Finally, AI will streamline the procurement process by automatically generating purchase orders based on predicted demand and inventory levels. By integrating AI into supplier relationship management, leaders expect to foster sustainable supply chains through better contract term optimization and compliance. Despite the enthusiasm for AI technology, some leaders remain cautious about adopting AI in MRO procurement and operations. Concerns over data security and privacy are prevalent, as the implementation of AI requires the handling of vast amounts of sensitive data.

Furthermore, the initial investment and ongoing maintenance costs of AI systems pose financial challenges for some organizations. There's also skepticism regarding the reliability of AI algorithms, especially in accurately predicting rare or unprecedented equipment failures, which might undermine trust in these systems.

Technologies, including artificial intelligence, can collectively enhance the operational effectiveness of MRO practices. However, the use of technology alone is not enough to ensure success in managing MRO practices

Organizations must also prioritize continuous improvement and invest in training employees to effectively utilize these technologies. Additionally, communication and collaboration between departments are crucial for maximizing the benefits of these tools.

This is especially important when managing MRO inventory, as the function must supply materials to keep production operations running smoothly.





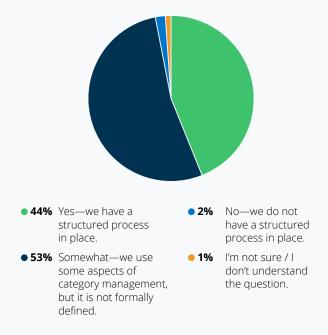
# The Largest Gap Identified in MRO Organizations Today

#### Regular Assessment of Criticality and Inventory Policies

Understanding and regularly assessing criticality and inventory policies is crucial for ensuring operational efficiency and minimizing risks within an organization. By continuously evaluating the importance of various materials and their impact on operations, businesses can prioritize resources, prevent costly downtimes, and maintain smooth production processes.

At 53%, a slight majority of the respondents say their procurement teams have a somewhat structured category management process for MRO. The remaining 44% say they have a completely structured process; these respondents use the strategic grouping and management of related products and services to drive results. Regular assessments also enable organizations to adapt to changing market conditions, optimize inventory levels, and enhance supplier relationships, ultimately leading to improved cost savings and strategic alignment.

The study results indicate that a majority of organizations (54%) have a structured approach to defining and regularly reassessing the criticality and stocking policies of MRO materials. However, a significant portion still lacks comprehensive implementation, often only assessing inventory policies without regular reassessments of material criticality. This gap could lead to inefficiencies and potential disruptions in maintenance and operations, as outdated assessments may cause overemphasis on certain materials, ultimately hindering optimal resource allocation and risk management. Does your procurement team have a structured category management process for MRO? This involves the strategic grouping and managing of related products or services (e.g., market analysis, sourcing strategy definition, spend analysis).





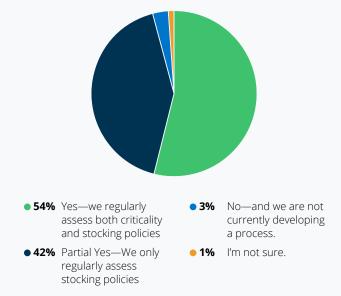


## The Largest Gap Identified in MRO Organizations Today

#### Advanced Technology Integration Can Address Challenges

Many companies fail to reassess criticality and service levels due to resource constraints, complexity of processes, and resistance to change, compounded by data management issues and lack of advanced tools. Additionally, insufficient leadership buy-in and a focus on immediate operational tasks over strategic evaluations contribute to this oversight.

These challenges can be effectively addressed by leveraging solutions that combine things like automation, business logic, and AI/ML techniques that fill in gaps in data. By integrating these advanced technologies, organizations can ensure accurate and timely reassessments of criticality, ultimately optimizing MRO inventory management and enhancing both operational stability and competitive advantage. Does your team currently have a process in place to define and regularly reassess the criticality and stocking policies of its MRO materials?



44% say they have a completely structured process; these respondents use the strategic grouping and management of related products and services to drive results.

Category management in procurement is crucial for achieving cost savings, strategic sourcing, and supplier collaboration, while also improving efficiency and risk management. It enables procurement to leverage market insights and drive value creation, aligning sourcing decisions with the organization's overall strategic goals.

Respondents were asked whether their procurement team has a structured category management process for MRO that involves the strategic grouping and managing of related products or services (e.g., market analysis, sourcing strategy definition, spend analysis.

At 44%, a minority say their procurement teams have a structured category management process in place. A remaining 53% had some aspects of category management, but no formally defined program defined.

This gap indicates significant opportunities for organizations to enhance their procurement effectiveness by implementing comprehensive category management practices. Without a structured approach, organizations may miss out on cost savings, improved supplier relationships, and better risk management.

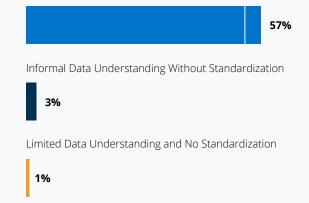
Investing in a formal category management process can lead to more strategic sourcing decisions, operational efficiencies, and ultimately, a stronger competitive position in the market.

#### Which of the following options best describes the state of your MRO material Data (including descriptions, manufacturer part numbers, spec sheets, and data uniformity)?

Full Data Uniformity Across All Materials



Partial Data Uniformity for Critical Materials







#### Building Strong Relationships Between Procurement and Operations

The relationship between procurement and operations is pivotal in ensuring the seamless functioning of MRO practices. Strong collaboration between these departments leads to optimized resource allocation, timely procurement of essential materials, and efficient maintenance operations. By fostering a synergistic relationship, organizations can align procurement strategies with operational needs, ensuring that the right materials are available when needed, thus minimizing downtime and operational disruptions.

Most of the respondents (65%) say they have a formal process in place that ensures regular coordination between the two departments. While only 24% say procurement and operations share joint ownership of outcomes, with overlapping KPIs and a deep mutual understanding. Nonetheless, 11% of the respondents say their organizations haven't reached these levels of coordination. Instead, the departments only share initiatives occasionally (9%) or they have a completely reactive relationship with no proactive integration (2%).

Researchers asked these respondents to describe what is preventing the relationships between MRO procurement and operations from being more cohesive.

The responses indicate that each team prioritizes its own tasks and goals, causing silos within the organization. The absence of shared goals and joint strategic planning prevents cohesive working relationships.

Additionally, inadequate training programs have resulted in skills gaps, further complicating crossfunctional collaboration between procurement and operations. The lack of a centralized system for information sharing leads to challenges, as varied technologies used by departments contribute to operational disconnects and delays.

#### How would you evaluate the relationship between procurement and operations in your organization?

The relationship between procurement and operations is reactive with no proactive integration.



There is occasional sharing of maintenance plans and initiatives between procurement and operations, but it is not systematic.



We have a formal plan and process in place that ensures regular coordination between the two departments.

	65%
Procurement and operations share joint ownership of outcomes, with overlapping KPIs and a deep mutual understanding.	
24%	

To resolve these challenges, procurement and operations leaders must recognize the importance of collaboration and establish a shared vision and goals for their teams. They should also implement joint strategic planning processes to align priorities and timelines, as well as provide adequate training opportunities to bridge skills gaps and promote cross-functional understanding.





Promoting transparency in processes and involving employees in procurement decisions can also improve communication and prevent conflicts between teams. Establishing clear escalation protocols can also help address issues that may arise between MRO procurement and operations.

MRO procurement teams often face challenges with product data due to inconsistencies and inaccuracies across different systems and sources, making it difficult to maintain a single source of truth. Additionally, the lack of standardized data formats and incomplete information hampers efficient decision-making and inventory management. These issues are further compounded by the complexity of integrating legacy systems with modern data management solutions, leading to fragmented and siloed data.

Without standardized product data, it can be especially challenging to centralize inventory management and optimize procurement. Currently, only 39% of the respondents say they have full data uniformity across all their materials. The specifications for all their materials are standardized, ensuring consistency in how data is formatted, collected, and used.

Most of the respondents (57%) say they only have partial data uniformity across their critical materials. They have standardized specifications for a select group of their most important materials, but they have not standardized others. However, given the fact that a large portion of respondents are not regularly reviewing criticality poses a problem. Achieving data uniformity requires collaboration between different departments and business units. It will also require implementing a standardized data management system that can be used by all departments impacted in MRO procurement.

Specialized product data solutions leveraging Al can enrich product data, identify potential duplicates, and suggest product criticality. These solutions can help automate the crucial updating of product data to ensure accuracy and relevance, including verifying material specifications with suppliers and making necessary changes as new products are introduced or old ones become obsolete.

According to some respondents, a lack of standardized data governance practices and the absence of clear data ownership guidelines lead to confusion over responsibilities and permissions, contributing to data duplication and inconsistency. Moreover, regulatory compliance requirements introduce additional complexity, diverting resources towards ensuring accurate reporting rather than improving data capture mechanisms.

Finally, resistance to digital transformation within the organization and insufficient data security measures pose additional challenges. The reluctance to adapt to new technologies impedes the adoption of advanced data tracking tools, while inadequate security protocols risk the integrity and confidentiality of MRO tracking data, limiting its usability for comprehensive analysis.





#### Enhancing Collaboration with MRO Suppliers

Many procurement organizations that fail to collaborate with their MRO suppliers face higher costs, supply chain disruptions, inefficiencies, limited innovation, reduced supplier performance, weaker relationships, and missed strategic sourcing opportunities.

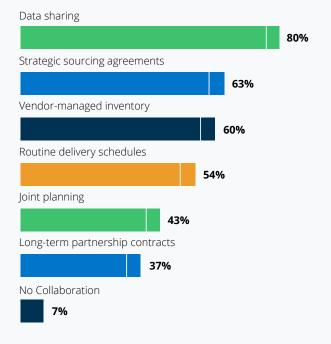
Respondents were surveyed to determine the extent of their collaboration with MRO suppliers. While 80% of the respondents have implemented data sharing with their MRO suppliers, only 43% engage in joint planning to ensure the long-term security of their MRO material supply.

Most of the respondents also use strategic sourcing agreements (63%), vendor-managed inventories (60%), and routine delivery schedules (54%) as part of their collaborations with suppliers.

Moving forward, organizations must focus on building stronger partnerships and increasing collaboration with their MRO suppliers to improve the accuracy and efficiency of tracking material consumption and maintaining appropriate stock levels. This may involve investing in technology that enables real-time data sharing, sharing of long-term demand plans, establishing clearer communication channels, and outlining mutual goals and expectations for improved supply chain management.

Organizations must also address internal challenges that hinder effective data tracking, such as outdated systems, inadequate resources, and resistance to digital transformation.

#### Which of the following accurately describes your organization's level of collaboration with its MRO suppliers?



Through these approaches, MRO procurement leaders can achieve greater visibility into their operations, leading to improved inventory management, reduced downtime, and increased cost savings.





# Conclusion: The MRO Practice in Five to Ten Years

The data revealed throughout the research indicates the following for the evolution of MRO management in the next five to ten years:

Procurement and operations leaders envision a significant transformation in their company's MRO practices, driven by advancements in technology and an evolving regulatory landscape. The most prominent expectation is the shift towards predictive maintenance.

Leveraging technologies such as IoT sensors, machine learning, and predictive analytics, companies aim to anticipate equipment failures and perform maintenance proactively. This approach will reduce downtime, optimize asset performance, and enhance overall operational efficiency.

Another common theme is the increasing incorporation of digital AI technologies into MRO practices. Digital platforms for inventory management, asset tracking, and maintenance scheduling will streamline processes and improve decision-making. Additionally, tools such as augmented reality and remote monitoring will be employed for troubleshooting and training, further enhancing operational efficiency.

Data will play an essential role, providing insights into asset performance and maintenance trends, and allowing for data-driven optimization of maintenance schedules and decision-making.

Sustainability also emerged as a critical focus. MRO practices will integrate initiatives aimed at optimizing energy consumption during equipment operation, promoting eco-friendly disposal practices, and exploring renewable energy solutions. Collaboration will be crucial in the evolving landscape. MRO procurement functions will foster strategic agreements with suppliers, service providers, and industry peers, sharing best practices and accessing specialized expertise to drive innovation and improve outcomes. Additionally, there will be an emphasis on upskilling the workforce, particularly in digital literacy and data analytics, to empower employees to effectively leverage emerging technologies and extract actionable insights.

Finally, the regulatory landscape will require vigilant compliance management. The implementation of proactive systems for compliance monitoring and real-time regulatory intelligence will ensure adherence to evolving standards, mitigating risks and safeguarding reputation. Leaders also foresee the alignment of MRO practices with broader business goals, emphasizing value creation, cost optimization, and operational excellence through strategic MRO management.

In summary, the next decade will see MRO practices becoming more predictive, digital, sustainable, collaborative, and compliant, aligning closely with broader business strategies to drive efficiency and innovation.





# Key Suggestions for Strategic MRO Management

## **1** Adopt AI Platforms for Inventory Management

Utilizing AI platforms for inventory optimization, material criticality assessment, asset tracking, maintenance scheduling, and spend optimization will streamline processes and improve decision-making, leading to increased efficiency and reduced costs.

## **2** Enhance Internal and External Collaboration

Building stronger collaboration internally between procurement and operations as well as externally with MRO suppliers through joint planning and data sharing will lead to more accurate tracking of material consumption and better stock management.

# Invest in Predictive Maintenance Technologies

Leveraging IoT sensors, machine learning, and predictive analytics can help anticipate equipment failures, reduce downtime, and improve the management of Assets and MRO inventory.

## **4** Upskill the Workforce in Digital Literacy and Data Analytics

Providing comprehensive training for employees in new digital tools and data analytics will empower them to leverage emerging technologies effectively, leading to better decision-making and increased innovation in MRO procurement practices.

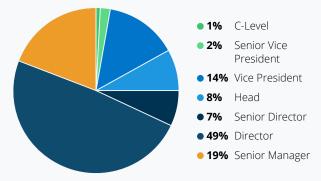




# About the Respondents

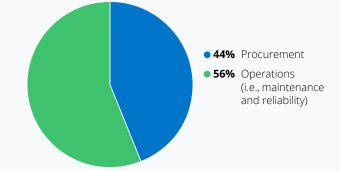
The WBR Insights research team spoke with 250 procurement and operations leaders to generate the results featured in this report. All the respondents are at least partially responsible for indirect, spare parts, or MRO (maintenance, repair and operations) at their organizations. All the respondents represent organizations that manufacture their own products without outsourcing.

#### What is your seniority?



Almost half of the respondents (49%) are directors. The remaining respondents are senior managers (19%), vice presidents (14%) department heads (8%), senior directors (7%), senior vice presidents (2%), and C-level executives (1%).

#### What best describes your role?

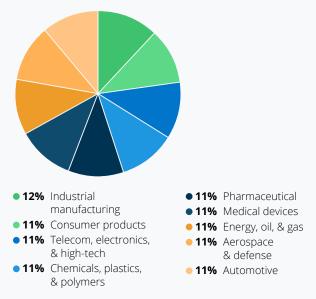


A slight majority of the respondents (56%) occupy roles in operations, while 44% occupy roles in procurement.

#### What industry does your company represent?



More than one-third of the respondents (37%) represent companies that make more than \$10 billion in annual revenue.



The companies represented in the report occupy a variety of industries, including industrial manufacturing (12%), consumer products (11%), and telecom, electronics, and high-tech (11%), among others.





# About the Authors



Verusen is a leading Al-powered MRO inventory optimization & collaboration SaaS provider focused on helping global, asset-intensive manufacturers streamline their supply and materials management strategy. Verusen uses advanced data science and artificial intelligence capabilities to harmonize disparate MRO data across multiple enterprise systems to provide complex supply chains with true visibility for supply and inventory planning and procurement intelligence.

This helps organizations reduce risk, optimize working capital, and ensure production uptime to meet customer needs. The result is a foundation organizations can trust to fuel digital transformation and support supply chain maturity initiatives.

Headquartered in Atlanta, Verusen has been named one of Georgia's Top 10 Innovative Technology Companies. Visit **verusen.com** for more information, or follow us on X/Twitter at **@Verusen\_AI** and **LinkedIn**.



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