



Winning the Race with the MES/MOM Solution

Advantage

Why Businesses Can't Afford to Wait





Manufacturers today are navigating various operational challenges, including accelerating digital transformation, workforce shortages, and fluctuating global markets. Alongside these hurdles, they face mounting pressures to enhance productivity, manage complex supply chains, and meet stringent regulatory requirements while staying competitive. These demands underscore the urgent need for solutions that empower the enterprise to perform in the face of anything.

Manufacturing Execution System/Manufacturing Operations Management (MES/MOM) solutions have emerged as a strategic investment for businesses looking to modernize and stay agile in this quickly-evolving landscape. By providing a foundation for smarter manufacturing, these technologies drive productivity, reduce downtime, and ensure data integrity across the organization.

Explore this infographic to understand why MES/MOM solutions are crucial for businesses to win the race to the 'finish line' of digital transformation.

Today's Top Manufacturing Pressures

Manufacturers are facing significant personnel and process-related challenges as they navigate rapid technological advancements, workforce shifts, and global disruptions. Aberdeen Research surveyed leading manufacturers to surface their most pressing concerns with regard to their teams and processes. Following are the top challenges:*



47%

Supply chain disruptions



15%

Market perception of organization/competitors



35%

Maintaining security and stability of data



11%

Demand volatility



31%

Availability of skilled resources



11%

Inability to collaborate with the extended enterprise (suppliers, resellers, customers, regulators)



27%

Increased volume and complexity of data

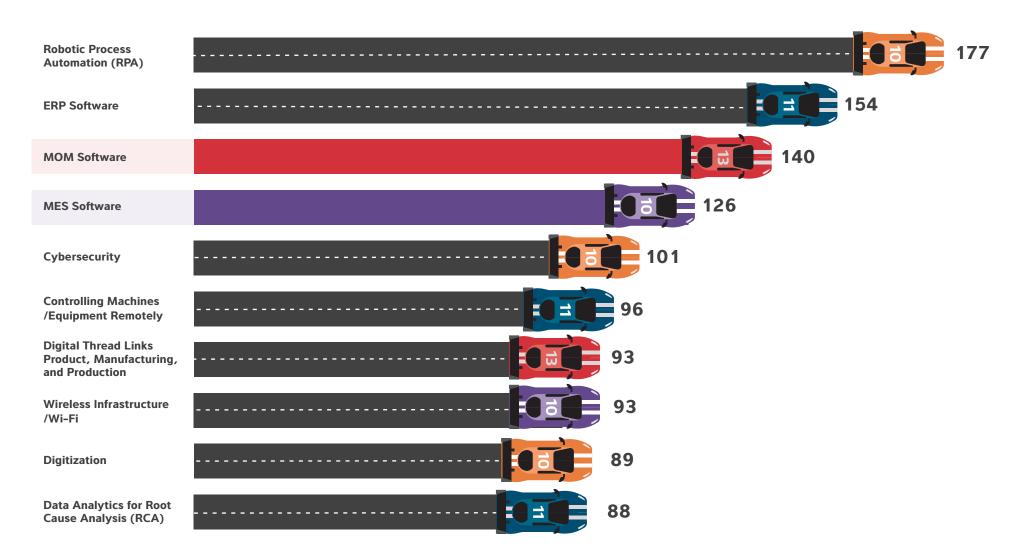


11%

Diminished productivity

MES/MOM vs. Other Technologies

MES/MOM solutions help manufacturers tackle today's top challenges. By integrating data across the organization, optimizing workflows, and automating processes, MES/MOM solutions enhance productivity and ensure stability in a rapidly changing environment. ABI Research asked leading manufacturers where MES/MOM solutions sit in priority against other solution options.² They are nearly the top priority, only surpassed by robotic process automation and ERP software.*



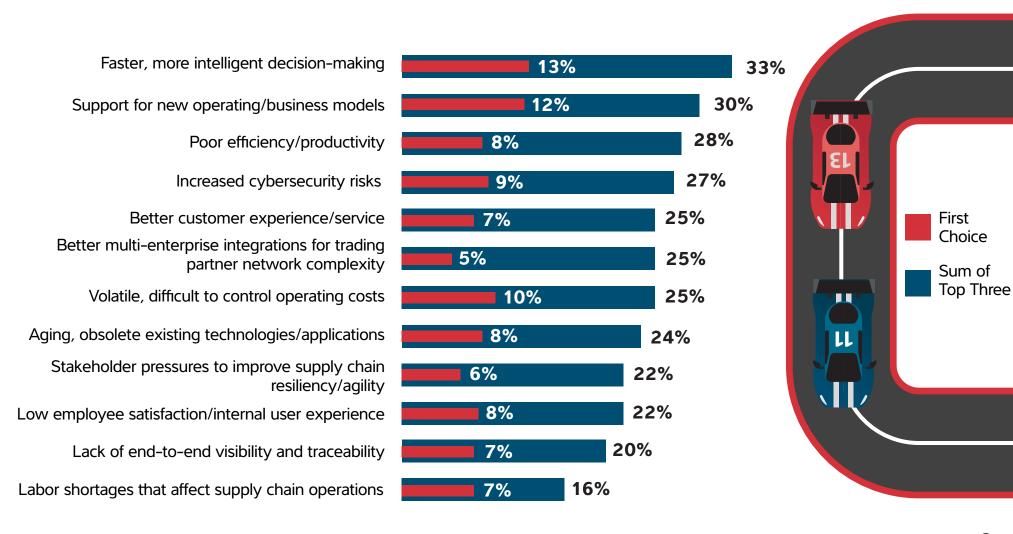
Investment Priorities for Manufacturers of All Sizes

Smaller manufacturers are putting greater priority on MES/MOM solutions because these systems help them efficiently streamline operations. By adopting MES/MOM solutions, they can stay competitive with larger manufacturers, manage complexity, and better respond to market demands. ABI Research revealed that for companies with less than 5,000 employees, many respondents ranked MES/MOM solutions as one of their top investment priorities.^{3*}



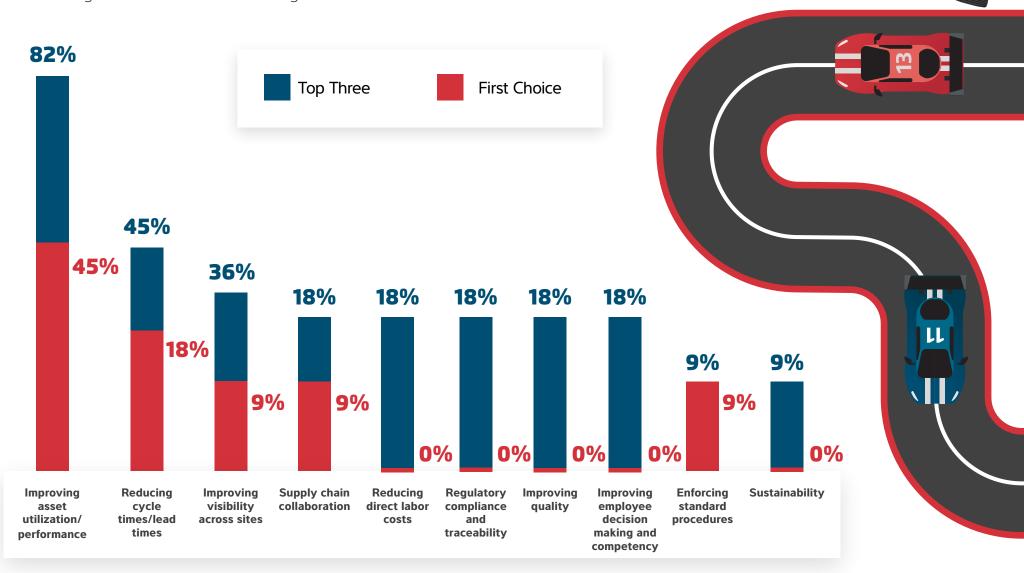
Motivating Factors for Manufacturers to Invest in **Supply Chain Technology**

Manufacturers are motivated to invest in supply chain technology to increase efficiency, reduce costs, ensure better inventory management, improve collaboration, and maintain a competitive edge in a rapidly evolving market. Gartner asked manufacturers about the top 3 most important factors motivating their organization to invest in supply chain technology.⁴ Following are the top responses:*



The Most Prominent Business Drivers for MES/MOM Implementations

Manufacturers are embracing MES/MOM solutions as the key driver of operational and financial success in manufacturing. Implementing MES/MOM solutions leads the way to improved production efficiency, more real-time visibility, enhanced quality control, and lower operational costs. When asked by Gartner, manufacturers reported the following business drivers for their organization:5*



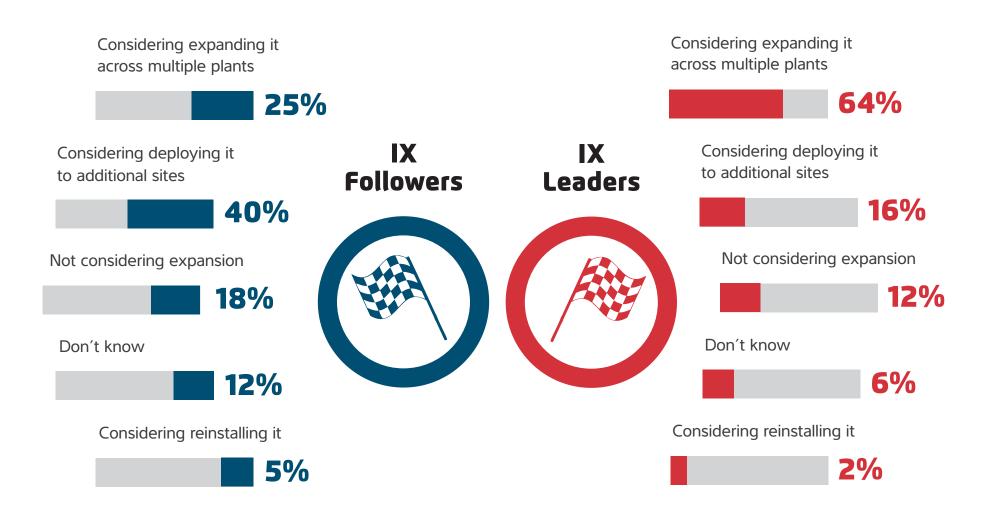
How the MES/MOM Maps to Operational & Business Challenges

It's no secret that MES/MOM solutions help solve key business challenges that are affecting today's manufacturers. From improving quality to avoiding downtime, MES/MOM solutions offer various capabilities that improve outcomes across the entire enterprise. ABI Research asked manufacturers about the top challenges MES helps solve. Following are the areas where they cited measurable improvements:6*



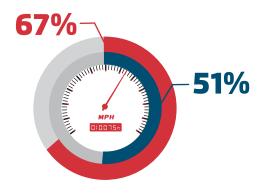
Businesses' Expansion Plans for MES/MOM Solutions

But once MES/MOM solutions are in place, what's next? Manufacturers who are focused on industrial transformation (IX) have developed ambitious plans for these transformational tools. Those who lead in IX are more aggressive about plans for not only its deployment, but its expansion across multiple locations. LNS Research revealed the following differences between IX leaders and followers with regard to MES expansion:⁷

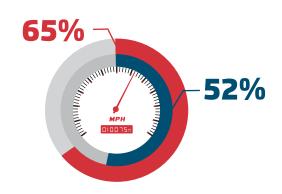


Best-in-Class Resilient Manufacturing Capabilities

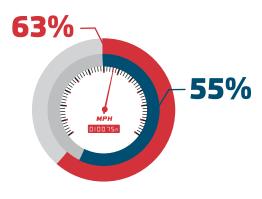
Best-in-class manufacturers recognize the transformational capabilities next-gen technologies bring to the enterprise. With the right technology, leading manufacturers will continue to dominate as lagging organizations remain behind. Aberdeen Research surveyed both best-in-class and other manufacturers on the capabilities of their factories.⁸ It is no surprise that a much higher percentage of best-in-class manufacturers have resilient capabilities that include the following:*



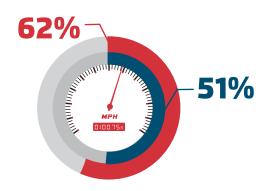
Automated equipment alerts that notify maintenance, breakdowns, and delivery schedules



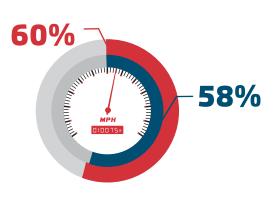
Internal resources to manage change, reconfiguration, and customization of business solutions



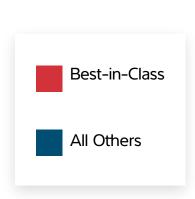
Traceability of components and items throughout purchasing, manufacturing, and sales processes



Ability to quickly adapt to react to business changes



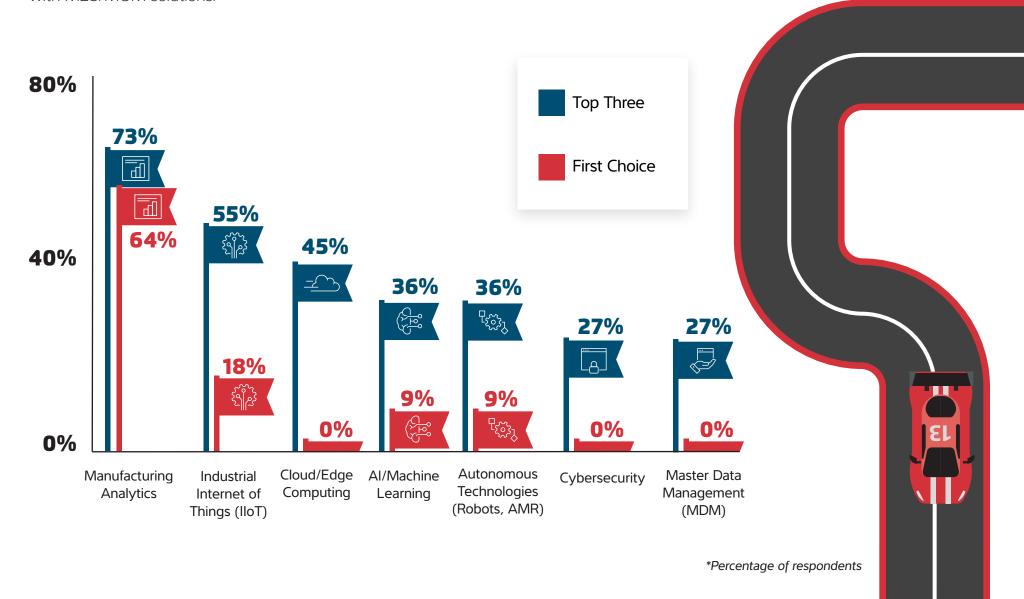
Operations that are integrated with customer service, logistics, and delivery organization





Top Technologies Implemented with MES/MOM Solutions

MES/MOM solutions empower technologies that drive manufacturing to new heights. These technologies are on the leading edge and enable manufacturers to uncover efficiencies and capitalize on innovation. So, what technologies are valued the most? In a survey by Gartner, nearly two-thirds of organizations rank manufacturing analytics as one of their top three technologies—and more than half rank it as their first choice. Let's review the top technologies implemented with MES/MOM solutions:*



Stop Waiting and Start Winning with Innovative, Future-Ready MES/MOM Solutions

As the manufacturing landscape becomes increasingly complex and competitive, staying agile, efficient, and data-driven is no longer a luxury—it's a necessity.

MES/MOM solutions empower manufacturers with the tools they need to supercharge productivity, streamline operations, and thrive in today's fast-paced, ever-evolving landscape. By integrating these technologies, businesses gain real-time visibility across their operations, allowing them to make more informed decisions, improve quality control, and reduce costs. The result is a more resilient and competitive organization that can respond quickly to market fluctuations and disruptions.

The time to invest in MES/MOM solutions is now. Companies that hesitate risk falling behind, while those who take advantage of these systems will be better positioned to thrive in the face of new challenges and opportunities. With MES/MOM solutions, manufacturers can unlock operational excellence, driving long-term growth in an industry that demands constant innovation and agility.



Watch the Webinar





Survey, 2021

8. Aberdeen Research, July 2023 2. 3. 6. ABI Research, 2024 4. Gartner, Supply Chain Technology User Wants and Needs Survey, 2023 5. Gartner, Market Guide for MES/MOM 6. Implementation Providers Survey, 2021 7. LNS Research, Industrial Strategy Drives MES Market Change in Discrete and Batch Industries, February 2024 9. Gartner, Market Guide for MES/MOM Implementation Providers