

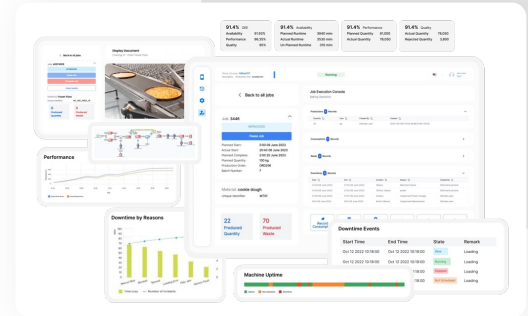


Manufacturing Workflow Intelligence™

Composable MES deployment and optimizations for actionable operational decisions in real time

Manufacturers are continuously expected to improve their manufacturing process to enhance efficiency, adaptability, and productivity. Manufacturing must combine advanced automation, cutting-edge technology, and data-driven insights to meet these expectations with fewer people, aging assets, and bottle-necked processes.

Manufacturing Workflow Intelligence is a next-gen manufacturing operations management solution driven by hybrid architecture, intelligent data, intuitive UX, and seamless composability and provide a comprehensive approach to overseeing all aspects of manufacturing operations.

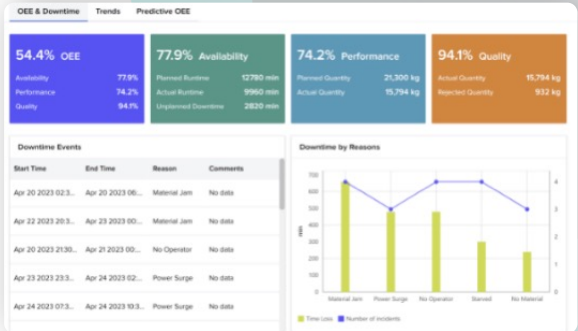


Challenges faced by manufacturers

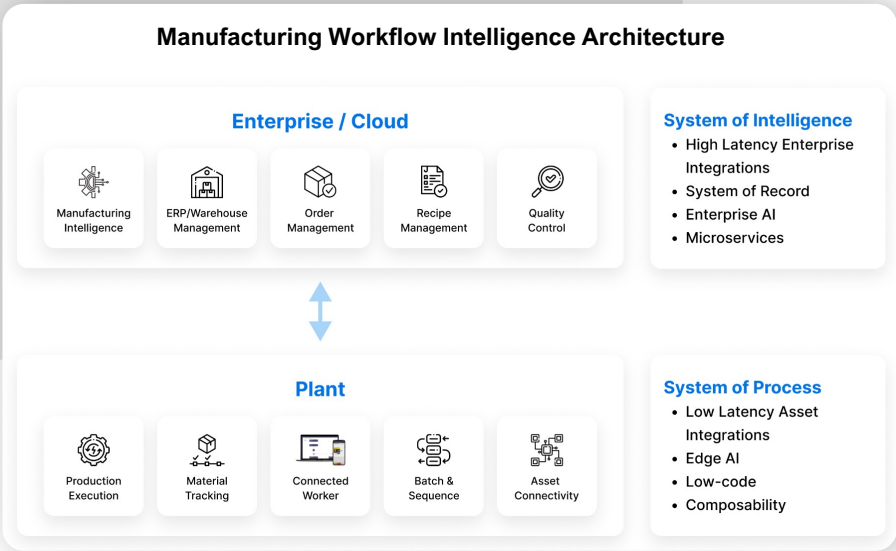
- **Inefficient production planning and scheduling:** Inadequate planning and scheduling of production can lead to bottlenecks, idle resources, or overworked machinery.
- **Siloed information for product tracking:** Tracking the journey of products or components through various stages of production is difficult, resulting in gaps in traceability and accountability.
- **Inefficient resource allocation:** Inefficient allocation of resources leads to underutilization and strain.
- **Manual data collection and reporting:** Relying on manual methods for data collection and reporting leads to inefficiencies, errors, and delays in decision-making.
- **Issues with scalability and flexibility:** The inability of systems to scale up or down in response to changing demands or business expansions limits adaptability.
- **Limited real-time visibility:** The lack of real-time visibility across manufacturing processes hinders proactive decision-making and agility.
- **Quality control and compliance issues:** Maintaining consistent quality standards while adhering to regulatory compliance becomes challenging without adequate operational processes.
- **MES implementation challenge:** Traditional MES systems often cause challenges, as deploying these complex, monolithic solutions frequently takes over six months. Despite significant investments and a lengthy time to value, the results are frequently disappointing. Furthermore, most traditional MES systems prioritize digitizing paper processes over developing true digital transformations based on data-driven continuous improvements and efficiencies.

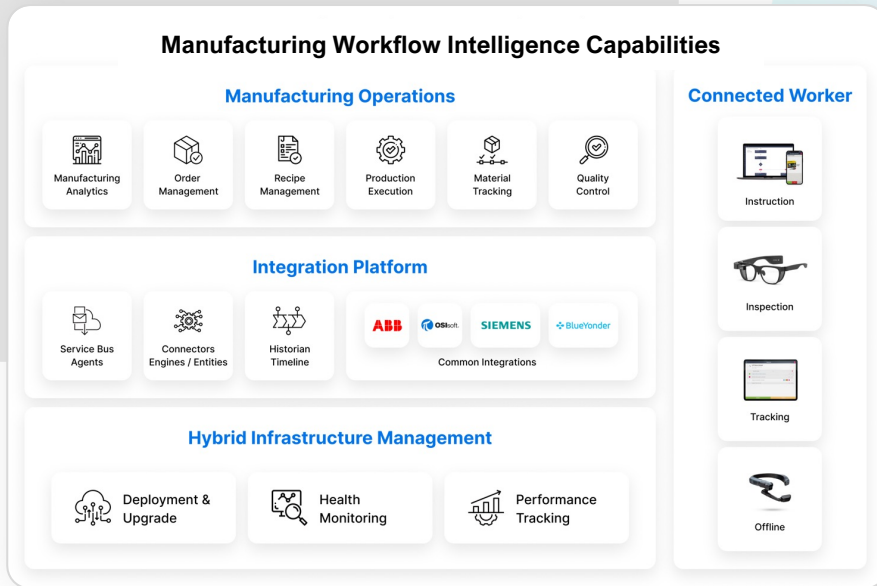
SymphonyAI's innovative approach— Manufacturing Workflow Intelligence

SymphonyAI's AI-embedded Manufacturing Workflow Intelligence is a composable, workflow-driven, next-generation Manufacturing Operations product that enables organizations to turn on and implement only the processes they need, thus reducing the time-to-value as compared to traditional MES solutions.



Manufacturing Workflow Intelligence offers modular products for order and job tracking along with OEE data collection and visualizations to measure productivity. Manufacturing Workflow Intelligence allows customers to control their process, quality, and material flows. The composable architecture allows starting small and building on its success instead of a complete system overhaul. The inherent integration capabilities in the product allow easy connectivity to assets and systems. The “in-process” data tracking offers real-time analytics and enables predictive “what-if” analysis.





The following elements form the core components of Manufacturing Workflow Intelligence:

- Manufacturing intelligence core:** A set of productized modules that perform core MES functions in accordance with the MESA model's eleven key capabilities. The composable nature of these modules, combined with the best-in-class multi-device user experience and seamless integration into AI applications, results in a next-generation MES system that includes a system of process (enabling an operation-centric approach), record, and intelligence.
- Integration layer:** An embedded, scalable, and robust integration layer (service bus) connector library that makes it easier to connect systems, equipment, sensors, and people.
- Digital manufacturing layer:** Allows for the creation and reuse of manufacturing functions, resulting in a shorter time to value and the spread of 'productized and certified' capabilities across multiple plants. In addition, the layer provides real-time tracking of every minute activity triggered by the solution in real (or near real) time.
- Manufacturing intelligence:** Embedding AI-driven intelligence into manufacturing operations to drive efficiencies - batch, flow, and discrete sequencing and execution optimization, quality tracking with computer vision inspection, and the ability to track Key Performance Indicators (KPIs) that drive person, process, and work-cell efficiencies.
- Proceedix® connected frontline worker:** A platform for connected workers to create and manage digital inspections, checklists, and guided instruction workflows delivered via tablets and glasses.

Why Manufacturing Workflow Intelligence

- 1. Enhanced productivity of end-users:** Automates workflows, provides user-friendly interfaces, and improves productivity by automating routine processes, providing guided workflows, and real-time access to relevant information for mission-critical tasks.
- 2. Paperless/Digitalized processes:** Transition to digital workflows allows you to create, share and manage digital documents, instructions, and reports from a single platform. This eliminates manual paperwork, reducing errors, improving efficiency and compliance with standards and regulations.
- 3. Analytics-driven manufacturing intelligence and execution:** Uses data analytics to provide actionable insights into manufacturing operations. These systems generate valuable insight by collecting, analyzing, and interpreting large quantities of data from various sources.
- 4. Reduced IT footprint in solution management:** Uses an integrated and centralized approach, eliminating the need for multiple systems and IT infrastructure.

Product capabilities

- 1. IRIS Copilot with inference and predictive engines:** Uses specialized large language models (LLMs) and generative AI to help factory operators, engineers, and managers automate tasks, improve efficiency, and prevent downtime.
- 2. Flexible deployment architecture:** The cloud-centric, hybrid architecture integrates both on-premises and cloud environments to attain unparalleled scalability, adaptability, and data accessibility.
- 3. Tailored user experience:** To maximize efficiency, Manufacturing Workflow Intelligence offers an exceptional user experience designed specifically for shop floor operators. Intuitive interfaces, real-time data access, and streamlined workflows enable operators to make informed decisions quickly.
- 4. Composable solutions:** Manufacturing agility can be achieved with customizable solutions that adapt to unique requirements and can be tailored when necessary.
- 5. Integrated artificial intelligence:** Manufacturing Workflow Intelligence embedded with AI capabilities improves decision-making accuracy, predicts issues, and streamlines operations for manufacturing excellence.
- 6. Order tracking and visibility:** Keep track of production orders and job progress across every division. Assign tasks to work centers based on their capabilities and immediate needs.
- 7. Material traceability:** With precise material tracking, ensure seamless traceability and optimize resource allocation from sourcing to assembly and packaging for maximum efficiency.
- 8. Real-time quality improvement:** Improve production process by monitoring quality in real-time. Identify issues quickly, minimize defects, and maintain the highest standards of excellence for each product.
- 9. Performance metrics and KPIs:** Stay ahead of the competition with real-time OEE (Overall Equipment Effectiveness) dashboards and instant machine status updates. Improve efficiency and productivity with actionable insights in production environments.

About SymphonyAI

SymphonyAI is building the leading enterprise AI SaaS company for digital transformation across the most critical and resilient growth verticals, including retail, consumer packaged goods, finance, manufacturing, media, and IT/enterprise service management. SymphonyAI verticals have many leading enterprises as clients. Since its founding in 2017, SymphonyAI has grown rapidly to 3,000 talented leaders, data scientists, and other professionals. SymphonyAI is a SAIGroup company, backed by a \$1 billion commitment from successful entrepreneur and philanthropist Dr. Romesh Wadhvani. Learn more at www.symphonyai.com.

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