

FAQ

From AI Pilots to Enterprise Impact

How Food & Beverage Manufacturers Can Scale AI for Measurable Business Outcomes

Artificial intelligence (AI) is moving rapidly from experimentation to enterprise priority across the food and beverage (F&B) industry. Yet for many organizations, the challenge is no longer identifying AI use cases. It's creating the connected data, systems, and processes needed to turn promising pilots into measurable business outcomes at scale.

According to the 2026 State of Smart Manufacturing report from Rockwell Automation, the majority of F&B companies are using or planning to use AI within the next year, and nearly half have already invested in the technology.

However, F&B manufacturers report effectively using less than half of the data they collect, highlighting a critical gap between generating insights and putting them into action. While many recognize AI's potential to improve efficiency and operational performance, scaling those early successes across the enterprise remains a key hurdle. This FAQ explores how organizations can build the digital foundation needed to unlock greater value from AI and accelerate transformation.



WHAT PREVENTS ORGANIZATIONS FROM SUCCESSFULLY LAUNCHING AND SCALING AI PILOTS?

Food and beverage manufacturers have largely moved beyond the exploration phase of AI. Nearly 90% are already using AI and machine learning (ML) in their operations or plan to do so in the near term, demonstrating that the industry is no longer questioning whether AI has value. The greater challenge is translating that momentum into measurable business outcomes at scale.

For many organizations, the barriers are not the AI models themselves, but the underlying operational and organizational foundations required to support them. More than four in ten F&B leaders cite capturing, understanding, and effectively using data as a significant obstacle to growth, while others point to budget constraints, capital project execution challenges, competing priorities, and organizational change management.

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Many organizations can demonstrate success within individual use cases, but scaling those gains across facilities, functions, and business processes often proves more challenging. This is why leading manufacturers increasingly view AI as part of a broader transformation effort rather than a standalone technology initiative.



Organizations that scale AI more effectively often begin by strengthening the foundations beneath it, creating greater connectivity between operational and business systems, improving data quality and accessibility, and aligning AI initiatives to clear business objectives such as improving quality, reducing costs, increasing productivity, and minimizing risk. When AI is built on this type of connected digital foundation, it becomes easier to demonstrate value, secure stakeholder confidence, and scale successful use cases across the enterprise.

WHY IS IT/OT INTEGRATION ESSENTIAL FOR TURNING AI INSIGHTS INTO OUTCOMES?

To be effective, AI requires context, and integrating IT and OT data sources is one of the most powerful ways to provide that context. This is because integration of IT and OT provides the foundation for enterprise-wide visibility, which supports more cross-functional collaborative teams and eliminates silos of information. Once data is standardized, contextualized, and centralized in an IT/OT-integrated environment, AI can rapidly analyze it and uncover trends that can then be used to make informed adjustments.

This foundation is increasingly important as food and beverage manufacturers plan to expand AI use significantly in the

coming years. Industry respondents expect AI-supported manufacturing processes to grow from approximately 37% today to more than 60% by 2030, increasing the need for connected operational and business data.

For example, many F&B companies have already deployed vision systems to help improve quality inspection, reduce defects, and ensure consistency. However, most of these systems still operate as standalone solutions at individual production lines or facilities. By connecting vision data to cloud-based IT systems, manufacturers can centralize insights across sites, identify trends, replicate best practices, and begin to drive continuous improvements at scale.

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HOW CAN A CONNECTED DIGITAL FOUNDATION HELP ADDRESS MULTIPLE BUSINESS CHALLENGES SIMULTANEOUSLY?

F&B manufacturers are navigating a growing set of interconnected business priorities, including improving quality, managing costs, increasing productivity, strengthening supply chain resilience, and addressing workforce challenges. While these priorities are often addressed through individual initiatives, lasting impact can be difficult to achieve when systems, processes, and data remain disconnected.

A connected digital foundation helps bring operational and business data together, creating greater visibility across the enterprise and enabling decisions to be made with a more complete understanding of how actions in one area affect outcomes in another. When data is contextualized and accessible across functions, organizations are better positioned to identify inefficiencies, coordinate resources, and respond more effectively to changing business conditions.

This is particularly important as manufacturers face persistent pressures around data utilization, operational performance, and workforce availability. F&B leaders cite effectively using data, executing growth initiatives, and managing competing priorities among their most significant organizational

challenges. A connected approach helps address these issues by reducing information silos, improving collaboration, and providing a shared view of operations across the enterprise.

For example, if a retailer promotion or seasonal demand surge drives increased orders, data from the enterprise resource planning (ERP) system can seamlessly flow into a manufacturing execution system (MES) to automatically adjust production schedules, orchestrate autonomous mobile robots (AMRs) to stage raw materials at the line, and optimize line operations. By connecting systems and data across the value chain, F&B manufacturers can respond more quickly to changing demand, reduce manual coordination, and improve service levels by maintaining operational efficiency.

When AI is layered onto this type of environment, it can further enhance decision-making by uncovering patterns, identifying optimization opportunities, and helping teams anticipate and respond to operational challenges before they affect performance.

WHAT ARE THE EARLY INDICATORS OF AI SUCCESS?

Industry leaders increasingly view AI as a tool for driving measurable business outcomes rather than simply introducing

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new technology. According to the 2026 State of Smart Manufacturing Report, 48% of manufacturers identified AI and ML as the smart manufacturing capability delivering the greatest business impact among the technologies evaluated.

These outcomes align closely with manufacturers' broader transformation priorities. The report found that improving quality (46%), reducing cost (40%), and minimizing operational risk (36%) remain among the industry's top objectives. Organizations that connect AI initiatives to these business goals are often better positioned to demonstrate value, secure stakeholder support, and expand successful use cases across the enterprise.

HOW CAN F&B COMPANIES SUCCESSFULLY SCALE FROM PILOTS TO ENTERPRISE TRANSFORMATION?

Successful scaling begins long before a pilot is deployed. Organizations that achieve the greatest impact typically design pilots with both measurable business value and future scalability in mind, creating a clearer path from proof of concept to enterprise adoption. Rather than focusing solely on whether a pilot works, leading manufacturers evaluate whether it can be repeated consistently across facilities, functions, and use cases.

As AI investments continue to grow across the F&B industry, executives are increasingly focused on demonstrating business value and avoiding isolated deployments that create complexity without delivering long-term impact. Scaling successfully requires standardization, governance, and a clear connection between technology investments and business objectives. Organizations that establish common data models, repeatable processes, and integrated workflows are often better positioned to expand successful initiatives across the enterprise.

At the same time, enterprise transformation requires more than technology. It also depends on people, processes, and organizational readiness. F&B leaders increasingly recognize that workforce preparedness is critical to realizing value from digital transformation investments. The 2026 State of Smart Manufacturing report found that 93% of manufacturers expect smart manufacturing initiatives to reshape their workforce, while 40% reported reskilling employees in the past year. Organizations that pair technology modernization with workforce development are often better positioned to accelerate adoption and sustain results over time.

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Ultimately, organizations that scale most effectively view AI not as a collection of individual projects, but as part of a broader transformation strategy. By aligning technology, people, and processes around measurable business outcomes, manufacturers can create a repeatable framework for expanding successful pilots into enterprise-wide impact.

**For more information,
read the full 2026 State of
Smart Manufacturing Report**

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