

Modernizing F&B Operations in Saudi Arabia

A Practical Guide for Plant
& Operations Leaders



Saudi Arabia's food and beverage (F&B) manufacturing sector is undergoing rapid change. Driven by Vision 2030's food security agenda, rising consumer demand, and evolving Saudi Food and Drug Authority (SFDA) compliance requirements — strengthened by new SFDA legislation enacted in 2025 — plant and operations leaders face growing pressure to do more with less: faster, more reliably, and with full traceability.

This guide is designed for the people responsible for making this change happen: operations directors, plant managers, and engineering leads who need a clear-eyed view of where their facilities stand today and a realistic path forward.



\$47.9B

Projected F&B market size by 2030 [1]

85.7%

Of F&B trade dependent on imports (2022) [2]

\$70B

Projected sector investment by 2030 [3]

Sources

[1] Mordor Intelligence, 'Saudi Arabia Food and Beverages Market Size & Share Analysis — Growth Trends and Forecast (2025–2030)', January 2026. mordorintelligence.com. Market size and CAGR (5.67%) are Mordor Intelligence estimates.

[2] Statista, 'Saudi Arabia: food and beverage import dependency 2022', 2024. statista.com

[3] USDA Foreign Agricultural Service (FAS), GAIN Report SA2023-0003, 'Saudi Arabia: Food Processing Ingredients', 2023. fas.usda.gov. Total sector investment projected to reach USD 70 billion by 2030, up from USD 44 billion in 2016.

1. The Efficiency Gap Challenge in F&B Manufacturing



Food and beverage manufacturers operating in Saudi Arabia face one of the region's most demanding environments. Energy costs are rising. Skilled labor is harder to retain under Saudization mandates. And regulators are raising the bar on traceability and product safety through an SFDA framework that was significantly strengthened by new legislation in 2025.



Yet many facilities are still running legacy systems — siloed SCADA installations, manual production reporting, and paper-based quality records — that were never designed to meet this level of demand.



The result is a persistent efficiency gap. Industry research consistently shows that food and beverage manufacturers typically operate with Overall Equipment Effectiveness (OEE) scores of **55–65%**^[4] — well below the world-class benchmark of **85%+**. The gap represents real recoverable capacity: a packaging line running at 60% OEE that improves to 75% adds the equivalent of 15% more production output without any capital investment in new assets.

What this means for your operations

- Every percentage point of OEE improvement translates directly to usable production capacity — without capital investment in new assets.
- In a rapidly growing market where Vision 2030 is actively driving new local supply contracts and investment, closing the efficiency gap is not just an operational priority — it is a competitive one.

Sources

[4] oxmaint.com, 'OEE Optimization for Food Production Lines: A Practical Guide', March 2026; iFactoryApp, 'OEE Improvement Strategies for Food and Beverage Production Lines', April 2026; Packserve, 'OEE in Beverage Manufacturing', March 2026 (citing Evocon World Class OEE Report and LLumin F&B OEE Overview, 2024–2025).



2. The Vision 2030 Pressure on F&B Manufacturers

Vision 2030 is reshaping the operating environment for food and beverage manufacturers in Saudi Arabia in three significant ways.

1 Food Security & Local Production

Saudi Arabia's food and beverage trade is **85.7% dependent on imports**[2], with the Kingdom spending an estimated SAR 100–120 billion annually on food imports. Vision 2030 has elevated food security to a strategic national priority. Total investment in the food manufacturing and processing sector is projected to reach **USD 70 billion by 2030**, up from USD 44 billion in 2016,[3] with the government mobilizing direct subsidies, concessionary financing through the Saudi Industrial Development Fund, and duty-free access to raw materials for local producers. Food and beverage manufacturers that can demonstrate operational reliability and output consistency are best positioned to benefit from this investment environment.

2 Evolving SFDA Compliance Requirements

The Saudi Food and Drug Authority's regulatory framework was significantly strengthened in 2025 through new legislation that formally granted the SFDA legal independence and expanded enforcement powers — including the authority to impose penalties on non-compliant food manufacturers and mandate compliance with Good Manufacturing Practices (GMP) across all food facilities.[5] Manual compliance processes are no longer adequate at scale. Manufacturers need integrated systems that can produce audit-ready records automatically and flag deviations in real time.

3 Energy & Sustainability Targets

Energy typically accounts for **approximately 15%** of operating costs in food and beverage manufacturing[6] — one of the largest controllable cost lines in any plant. Yet the food manufacturing sector achieved only a **6% reduction in energy intensity between 2000 and 2020**[7] — far behind industries like textiles and transport equipment, which achieved 47% reductions over the same period. Under Saudi Arabia's National Renewable Energy Program and the Saudi Green Initiative, industrial energy consumption is under increasing scrutiny. Manufacturers need real-time visibility into energy usage and the ability to act on it, not just report it retrospectively.



Sources

- [5] Hammad & Al-Mehdar Law Firm, 'The New SFDA Law: A Transformational Regulatory Framework for Food, Drug, and Health Oversight in Saudi Arabia', July 2025. hmco.com.sa
- [6] Centrica Business Solutions, 'Energy accounts for 15% of food and drink manufacturers' costs', citing Energy Advantage Research (survey of 1,000+ energy decision-makers across 6 countries). centricabusinesssolutions.com
- [7] PwC, 'Unlocking the energy-demand opportunity in food and beverage', September 2024, citing IEA data. pwc.com

3. Where Does Your Facility Stand? The SIRI Maturity Framework

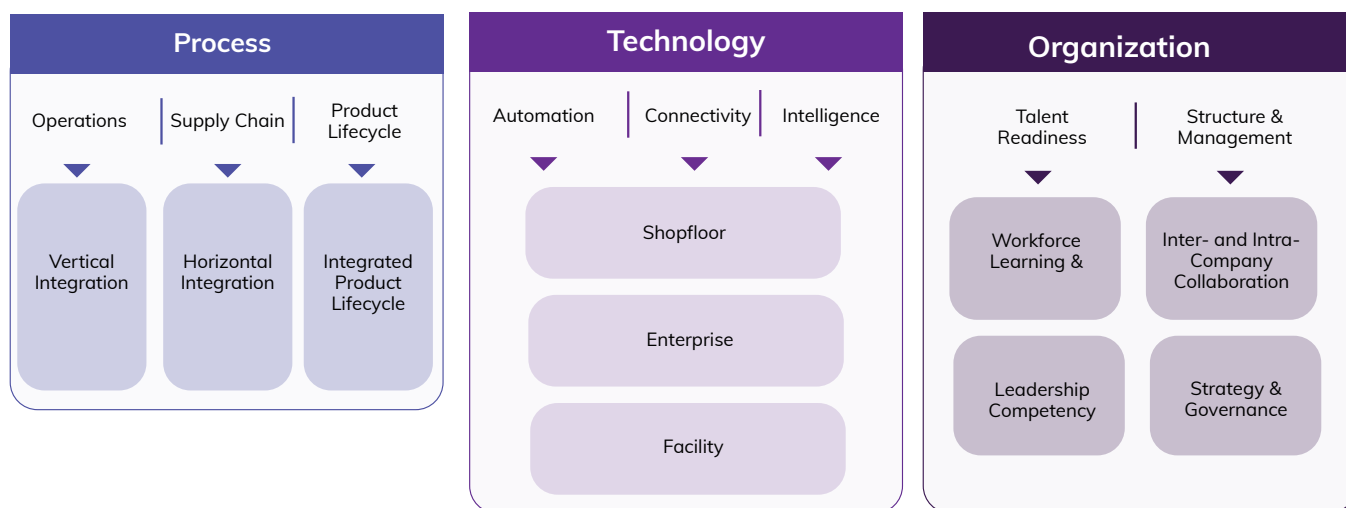
Not every facility is starting from the same place. Before investing in technology or changing processes, manufacturers need an objective view of where they stand today.

Smart Industry Readiness Index (SIRI) is the world's first independent digital maturity assessment for manufacturers. SIRI evaluates facilities across three building blocks:



Across 16 dimensions in total. Each dimension is scored across six ascending bands, with each band describing a specific state of maturity within that dimension. [8]

The table below illustrates what is assessed across the three building blocks —



Research shows that **90% of manufacturers score lowest on the Technology building block**[9] — averaging Band 1 or below across technology dimensions, even when Process and Organization scores are higher. For food and beverage manufacturers, this is typically the highest-value area to address first.

Starting your Modernization Journey with a SIRI Assessment

A SIRI assessment, conducted by a certified assessor, produces an objective maturity score across all 16 dimensions, benchmarked against peer manufacturers globally.

It identifies the specific gaps that prevent progression and generates a prioritized investment roadmap — not a generic set of recommendations, but a gap analysis tailored to your facility and operational context.

Why SIRI is the right starting point

- Provides an objective, third-party baseline — critical when making the business case for investment internally.
- Benchmarks your facility against global food and beverage manufacturing peers using a standardized, WEF-endorsed methodology.
- Identifies which of the 16 dimensions will deliver the most value when improved — preventing costly investment in the wrong areas.
- AVEVA Select Saudi partners are accredited to conduct SIRI assessments, combining the benchmark and a technology partner in a single engagement.



Sources

[8] Coretecs, 'Introducing the SIRI Framework', July 2025. coretecs.be; INCIT. incit.org/what-we-do/siri/

[9] IfElseCloud, 'Smart Industry Readiness Index (SIRI)', citing SIRI Framework and RAMI 4.0 standards data. ifelsecloud.com



4. The Opportunity: What Modernization Makes Possible

Once a manufacturer understands its current position following a SIRI assessment, the opportunity becomes concrete. The same operational areas that generate the most significant inefficiencies today are, when addressed through the right technology investments, the source of the most measurable gains. Three areas stand out for food and beverage manufacturers in Saudi Arabia.

- **Recovering Production Capacity**

For most food and beverage manufacturers, the underlying challenge is fragmentation. Shop floor systems operate in isolation, alarms go unactioned, production decisions are made on data that is hours old, and problems that could have been caught in minutes take multiple shifts to surface and resolve.

The opportunity that SCADA, MES, full-line visualisation, and alarm management brings, when properly integrated, is replacing this fragmented picture with a single live view of the entire operation — one where deviations trigger immediate responses, scheduling changes flow instantly to the shop floor, and the people who need to make decisions have the information to make them faster and with greater confidence. The cumulative effect is an operation that predicts and responds to its environment rather than reacts to it. Throughput increases not because more assets are added, but because existing ones are better utilised, better maintained, and better connected to the business decisions that depend on them. For manufacturers operating under rising demand and tighter margins, that is where the most significant and sustainable gains are found.

- **Turning Energy into a Competitive Lever**

Energy represents approximately 15% of operating costs in food and beverage manufacturing⁶ — yet the sector has achieved only a 6% reduction in energy intensity between 2000 and 2020⁷, compared to 47% in industries like textiles and transport equipment over the same period. For most manufacturers, the reason is straightforward: without real-time visibility into how energy is being consumed across a facility, waste is invisible and therefore unmanageable.

Connected energy management changes this. When production assets, utilities infrastructure, and building systems are monitored through an integrated platform, manufacturers gain a live picture of consumption across every part of the facility — not a monthly bill, but a real-time data stream that reveals where energy is being wasted, when equipment is drawing power outside of production hours, and where setpoint optimization can reduce consumption without affecting output.

That data, when fed into operational decision-making alongside production and maintenance information, transforms energy from a fixed overhead into a controllable variable. Under Saudi Arabia's National Renewable Energy Program and the Saudi Green Initiative, manufacturers that can demonstrate measurable reductions in energy intensity are also better positioned for regulatory compliance and, increasingly, for the sustainability criteria that large supply chain customers are beginning to impose as a condition of contract.

- **Making Compliance a Capability, Not a Cost**

The strengthened SFDA regulatory framework enacted in 2025 raises the stakes for manufacturers still relying on manual quality processes. But for those who invest in integrated quality monitoring and automated batch documentation, compliance becomes an operational capability rather than a recurring overhead.

Automated systems that capture quality data in real time, flag deviations as they occur, and generate audit-ready documentation continuously do more than reduce rework and rejection costs — they give manufacturers the ability to respond to SFDA audits in hours rather than days, and to enter new markets and supply contracts that require demonstrable traceability as a condition of entry.



5. Turning Opportunity into Action: Choosing the Right Partner

A SIRI assessment identifies where the opportunity is largest. Realizing it depends on selecting an operations technology (OT) partner with the right combination of technical capability, sector knowledge, and in-market presence to execute — and to remain a credible partner as your maturity ambitions grow. Four criteria matter most.

- **Saudi Market Presence & Local Support**

Technology is only as effective as the support infrastructure behind it. Implementation speed, issue resolution, and ongoing optimization all depend on partners with in-country engineers, Arabic-language support capability, and a track record of deployments with food and beverage manufacturers in Saudi Arabia specifically — not just regional references from comparable markets.

- **F&B Manufacturing Sector Depth**

Food and beverage manufacturing has requirements — hygienic design, batch traceability, allergen management, cold chain integration — that general industrial automation vendors often do not understand deeply. The right partner brings sector-specific implementation experience from dairy, poultry, bakery, and beverage operations, and can anticipate the compliance and operational nuances that generic deployments miss.

- **Integration Capability**

The right partner approaches integration not as a technical afterthought but as a design principle: building architectures where historian data feeds analytics platforms, where MES connects production execution to enterprise planning, and where quality and batch management systems generate comprehensive electronic batch records (EBRs) to support regulatory compliance and inspections — automatically, in the background, without manual intervention.

The measure of integration capability is not whether a partner can connect systems, but whether they have done it before in food and beverage manufacturing environments where the operational stakes of getting it wrong are high.

- **A Roadmap Beyond the First Deployment**

The SIRI framework is a progression model, and the value of a SIRI assessment is only realized if the technology investments that follow it are sequenced correctly and built to scale. A partner who can deliver an initial SCADA deployment but has no roadmap for how that connects to MES, then to advanced analytics, then to enterprise integration, is not a transformation partner — they are a project vendor.

The right partner brings a structured view of how each investment builds on the last, how capability is transferred to the in-house team over time, and how the solution evolves as operational ambitions grow. Evaluate not just what a partner has deployed, but what their clients have achieved two and three years after go-live.

AVEVA Select Saudi Arabia: Your Partner of Choice

- AVEVA Select Saudi Arabia connects food and beverage manufacturers with AVEVA's world-class industrial software portfolio — including SCADA, MES, energy management, and asset performance solutions.
- With in-Kingdom presence and deep sector experience, AVEVA Select Saudi Arabia offers the combination of global technology and local accountability that transformation projects require.



Ready to Benchmark Your Operations and Begin Modernizing?

Take the first step in improving the efficiency of your operations with a SIRI assessment. Facilitated by AVEVA Select Saudi Arabia, this assessment will give you an objective, peer-benchmarked view of your facility's digital maturity — and a prioritized roadmap for closing the gap.

To request a no-obligation SIRI assessment
or to speak with an AVEVA Select Saudi
Arabia specialist:

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