



09-10
December 2025
DUBAI

Next-Gen Manufacturing for a Next-Level Middle East.



Speakers



Delegates



Sessions



Sponsors



Exhibitors

The Need for a Smart Manufacturing Summit 2025

As industries navigate rapid technological change, global supply chain shifts, and rising demands for sustainability, the transition to smart manufacturing has become a strategic imperative. **The Smart Manufacturing Summit** provides a crucial platform for industry leaders to explore how AI, IIoT, automation, robotics, and data-driven systems are reshaping the factory floor.

This summit brings together innovators, technologists, and manufacturers to share best practices, overcome integration challenges, and accelerate digital transformation. It is designed to equip businesses with the insights needed to drive productivity, resilience, and competitiveness in the Industry 4.0 era.

[Learn More »](#)

Key Takeaways from Smart Manufacturing Summit?

- Get a Clear Understanding of Smart Manufacturing Technologies
- Witness Real-World Case Studies & Success Stories
- Identify Strategies to Reduce Operational Costs & Downtime
- Acquire Knowledge of Vendor Landscape & Ecosystem Partners
- Explore New Collaborations & Partnership Leads
- Develop Roadmap for Digital Transformation
- Plan Workforce Upskilling Imperatives
- Align ESG & Sustainability Plans with Manufacturing

Who Should Attend the Smart Manufacturing Summit?

Technology & Innovation Leaders

- Chief Technology Officers (CTOs)
- Chief Digital Officers (CDOs)
- Heads of R&D & Innovation Labs
- Automation & Control System Engineers

Manufacturing Industry Leaders

- Plant Managers & Factory Heads
- Operations & Production Managers
- Quality Control & Process Improvement
- Maintenance & Reliability Engineers

Business & Strategy Executives

- CEOs, COOs, & Business Heads
- Strategy & Transformation Officers
- Corporate Planning Teams
- Plant Managers & Factory Heads

IT & Digital Transformation Experts

- CIOs / CISOs / Heads of IT Infrastructure
- Smart Factory Implementation Leads
- Data Scientists & Industrial AI Engineers
- Cybersecurity Experts (OT/IT security)

System Integrators & Solution Providers

- Industrial Automation & Robotics Firms
- IIoT & Digital Twin Technology Providers
- Cloud, AI/ML, & Data Analytics Companies
- MES/ERP/PLM Vendors

Academia & Research Institutions

- Engineering & Technology Professors
- R&D Inst. & Centers of Excellence
- Technical Training Institutes
- CMMS / EAM Professionals

Government, Policy Makers & Enablers

- Representatives from Industry & MSME
- Policy Think Tanks & Skill Dev. Bodies
- Export Promotion & Investment Agencies

Investors & Financial Institutions

- VCs & Pvt. Equity Firms focused Inds. 4.0
- Banks & Financial Inst. industrial exposure
- Insurance & ESG-focused investors

Quality, Safety & Compliance Roles

- Quality Assurance & Control Heads
- Process Safety & Risk Managers
- Regulatory Compliance Experts

Why Attend Smart Manufacturing Summit?



Discover Emerging Technologies



Learn from Industry Pioneers



Network with Decision-Makers



Explore Business & Collaboration Opportunities



Align with Sustainability & Productivity Goals



Upskill & Stay Competitive



Benchmark Your Digital Maturity



Gain Insights into Government Policies & Incentives

Conference Agenda Day - 01



**09-10
December 2025**
DUBAI

Session	Session Focus
0800	Registration & Coffee
0855	Welcome Remarks by Conference Chair:
0900 - 0930	Opening Session
0930 - 1000	Building a Roadmap for Smart Manufacturing Transformation The future of manufacturing is undeniably smart, connected, and data driven. To thrive in today's competitive landscape, embracing Industry 4.0 technologies—like the Internet of Things (IoT), artificial intelligence (AI), robotics, cloud computing, and data analytics—is essential, not optional. A well-crafted smart manufacturing roadmap is crucial for your success. This process is not universal; it demands a strategic, phased approach that aligns perfectly with your organization's unique goals and vision. Investing in this transformation is key to staying ahead of the curve.
1000 - 1030	The Power of Real-Time Data in Smart Manufacturing In the era of Industry 4.0, real-time data is crucial for smarter and more efficient manufacturing. By utilizing advanced technologies like IoT, AI, and edge computing, manufacturers can gain valuable insights to optimize production. Embracing real-time intelligence not only transforms operations but also provides a competitive edge in a rapidly changing market.
1030 - 1100	Manufacturing Analytics for Enhanced Efficiencies In today's fast-paced industrial landscape, manufacturing analytics is crucial for enhancing efficiency, productivity, and sustainability. By converting raw data into actionable insights, manufacturers can optimize operations and reduce costs. This approach is not just a tool; it powers the future of smart and sustainable production.
1100 - 1115	Refreshment Break
1115 - 1145	Data Contextualization in Modern Manufacturing In the era of Industry 4.0, raw data alone isn't enough. Data contextualization is essential for converting unstructured data into meaningful insights that enhance decision-making and optimize performance across manufacturing. By linking raw data to production lines, machine performance, environmental conditions, and operator actions, manufacturers gain a clearer understanding of their operations. This context enables smarter decisions, driving significant improvements and competitive advantages.
1145 - 1215	Smart Manufacturing and Cloud Computing In the evolving landscape of Industry 4.0, cloud computing is transforming Smart Manufacturing by unlocking remarkable efficiency, flexibility, and scalability. By leveraging cloud-based platforms, businesses can seamlessly integrate data, systems, and processes, enhancing their production capabilities. As the backbone of Smart Manufacturing, cloud technology connects machines, optimizes processes, and supports data-driven decisions. Embracing this technology drives innovation & positions manufacturers to achieve operational excellence & build the factories of future.
1215 - 1245	Benefits of the Industrial Metaverse for Smart Sustainable Manufacturing The Industrial Metaverse is not just a concept; it is poised to revolutionize manufacturing, collaboration, and innovation. By adopting this immersive digital ecosystem, manufacturers can achieve a smarter, more connected, and sustainable future. With advancements in AI, digital twins, and IoT, the Industrial Metaverse will be essential for manufacturers aiming to lead in competitiveness and innovation.
1245 - 1315	Why is it critical for Smart Manufacturers to Adapt to Emerging GenAI & other AI Technologies? To succeed in today's digital industrial landscape, smart manufacturers must take advantage of emerging AI technologies, including Generative AI. These technologies offer the tools necessary to improve efficiency, reduce costs, enhance product quality, promote innovation, and maintain long-term competitiveness and sustainability in a rapidly changing market.
1315 - 1400	Networking & Lunch
1400 - 1430	Machine Vision and AI-Powered Inspection Systems As AI and machine vision technologies advance, they are poised to revolutionize the landscape of quality control. By mastering complex inspections, analyzing vast amounts of data, and seamlessly integrating with Industry 4.0 systems, these innovations will empower manufacturers to not only elevate product quality but also boost operational efficiency and minimize waste. By adopting these cutting-edge technologies, businesses can secure a competitive advantage and thrive in today's fast-paced market.
1430 - 1500	Are Manufacturing Digital Twins ready for Prime-Time? While challenges remain in scaling digital twins across manufacturing operations, the technology is now primed for adoption. Many companies have already achieved remarkable results in predictive maintenance, operational optimization, and product development. As data connectivity improves & costs decline, digital twins will become essential tools for manufacturers seeking enhanced efficiency, reduced risk, and a competitive advantage.
1500 - 1530	Increasing Significance of Manufacturing Execution Systems in Modern Manufacturing Manufacturing Execution Systems (MES) are rapidly evolving to meet the demands of real-time data, integration, and automation. By embracing technologies like Auto-ID, cloud computing, mobile apps, augmented reality, and advanced analytics, MES has become essential for Smart Manufacturing. This progress enables manufacturers to create a strong digital thread, conduct precise cost analysis, implement consistent processes, and improve decision-making.
1530 - 1600	Strategies to Select the Right MES Solution A Manufacturing Execution System (MES) is essential for linking production processes with enterprise systems. Choosing the right MES solution is crucial for optimizing operations, enhancing efficiency, and achieving a smart, connected factory in the age of Industry 4.0.
1600 - 1615	Refreshment Break
1615 - 1645	Prevent the Next Catastrophe: Convert Big Data into Big Intelligence Transforming Big Data into Big Intelligence is essential for minimizing risks and enabling smarter decision-making. By utilizing advanced analytics, AI, and real-time monitoring, organizations can extract valuable insights that enhance safety and boost efficiency. In today's competitive landscape, don't wait for a crisis—harness the power of Big Intelligence now!
1645 - 1715	Lean Manufacturing and Continuous Improvement in the Digital Age In the Digital Age, Lean Manufacturing has transformed by leveraging technology and data for Continuous Improvement. By combining Lean principles with Industry 4.0 technologies, manufacturers create smarter and more efficient systems. This integration fosters a culture where every process, machine, and worker is empowered by technology to excel.
1715 - 1745	Continuous Asset Optimization (CAO) for higher Productivity
1745	Concluding Remarks and End of Day 1

Conference Agenda Day - 02



09-10
December 2025
DUBAI

Session	Session Focus
0800	Registration & Coffee
0855	Welcome Remarks by Conference Chair:
0930 - 1000	Integrating Physical & Digital Systems - The IT/OT Collaboration in Manufacturing Integrating digital and physical systems enables manufacturers to innovate rapidly using IoT, Artificial Intelligence, Virtual and Augmented Reality, and Collaborative Robots. This evolution transforms humans from passive roles into dynamic, interconnected resources, boosting productivity, quality, and efficiency. In this session, we will explore how digitizing data collection and transmission opens doors for collaborative automation and increased process flexibility, helping your organization thrive in a fast-paced environment.
1000 - 1030	Industrial Applications of Additive Manufacturing: Latest Developments Additive Manufacturing (AM), or 3D printing, is transforming the manufacturing sector through rapid prototyping, customization, and efficient production. Its ability to create complex, lightweight, and high-performance components is driving innovation across multiple industries, from aerospace to healthcare. AM empowers sectors to rethink production strategies, enhance efficiencies, and promote sustainability. As materials and technologies advance, AM will continue to reshape manufacturing and ignite innovation, solidifying its crucial role in the future of industry.
1030 - 1100	Production Process Management in Smart Manufacturing Today's manufacturing environment often suffers from information gaps due to enterprise systems like ERP and PLM focusing on departmental issues. This narrow approach hampers cross-functional integration. To leverage the benefits of Smart Manufacturing, adopting Business Process Management (BPM) and workflow solutions is essential for uniting the enterprise and enhancing efficiency.
1100 - 1130	Strengthening Trust in the Smart Manufacturing Supply Chain To meet customer demands and comply with regulations, food manufacturers are adopting advanced technology solutions. By modernizing communication and data flow, they enhance operations and build consumer confidence. The insights gained from the food industry can benefit various sectors, improving overall supply chain reliability.
1130 - 1200	Refreshment Break
1200 - 1230	Sustainability Imperatives - Transitioning to a Green Factory As the manufacturing industry evolves, the need to balance growth with environmental responsibility is critical. Transitioning to a Green Factory is essential for creating a sustainable and efficient organization. This shift requires innovative technologies, strategic planning, and a strong commitment to sustainability. By leading this transformation, manufacturers can foster a cleaner and greener future for everyone.
1230 - 1300	Creating Analytics for Difficult to Measure Manufacturing Metrics In the manufacturing sector, some performance metrics are notoriously challenging to measure or quantify accurately. These "hard-to-measure" metrics, including employee productivity, real-time machine efficiency, and supply chain agility, are essential for understanding operational health and making informed decisions. However, traditional data collection and measurement methods often struggle to capture these nuanced factors in ways that yield actionable insights.
1300 - 1400	Networking Lunch
1400 - 1430	Neural Manufacturing: Transforming the Future of Production Neural Manufacturing is an emerging concept that combines the principles of artificial neural networks (ANNs) and machine learning (ML) with manufacturing processes to optimize operations, improve product quality, and enable more intelligent decision-making. By mimicking the way the human brain processes information, neural networks in manufacturing can process vast amounts of data from various sources, identify patterns, and make autonomous decisions that improve efficiency, quality, and productivity.
1430 - 1500	Leveraging Data and Implementing Analytics in a "Zero-Trust" Environment In today's digital landscape, the "Zero-Trust" security model is gaining significant traction, especially in industries dealing with sensitive information, critical infrastructure, and high-value data. The core principle of Zero-Trust is that no one, whether inside or outside the network, should be trusted by default. Every user, device, and system must be authenticated, continuously verified, and granted only the least amount of access necessary. However, implementing data analytics in a Zero-Trust environment can present unique challenges and requires a careful balance of security and accessibility to insights.
1500 - 1530	Connected Plants: The Future of Industrial Operations A connected plant refers to a manufacturing facility or industrial environment where various devices, systems, and machines are interconnected through digital technologies. This interconnection enables the seamless sharing of data across the entire plant, from the shop floor to the management level, enabling better decision-making, improved productivity, and enhanced operational efficiency. Connected plants leverage technologies like IoT (Internet of Things), AI (Artificial Intelligence), cloud computing, and big data analytics to create a smart, automated, and data-driven ecosystem.
1530 - 1600	AI and Machine Learning in Predictive Maintenance: Revolutionizing Asset Management Predictive Maintenance (PdM) is a proactive maintenance strategy that leverages data analysis, machine learning (ML), and artificial intelligence (AI) to predict when equipment or machinery is likely to fail or require maintenance. Instead of relying on scheduled maintenance or reacting to breakdowns, predictive maintenance allows for timely interventions before costly failures occur. By analyzing historical data, real-time sensor data, and patterns of equipment behavior, AI and machine learning enable smarter, more efficient asset management.
1600 - 1630	Refreshment Break
1630 - 1700	Human-Machine Collaboration: A New Era in Industry and Technology Human-Machine Collaboration refers to the synergistic relationship between humans and machines, where both work together to complement each other's strengths and capabilities. Instead of machines replacing humans, this collaboration allows humans to leverage advanced technologies—such as artificial intelligence (AI), robotics, automation, and machine learning (ML)—to augment their abilities and enhance productivity, decision-making, and problem-solving.
1700 - 1730	Metrics in Smart Manufacturing: Measuring Success in the Digital Age Smart manufacturing leverages digital technologies such as IoT (Internet of Things), AI (Artificial Intelligence), machine learning, cloud computing, and big data analytics to enhance manufacturing processes, efficiency, and productivity. As manufacturing becomes increasingly intelligent, tracking the right metrics is crucial for optimizing operations, improving decision-making, and driving continuous improvement.
1730 - 1800	Production Process Management in Smart Manufacturing: Optimizing Efficiency and Innovation Business processes in today's typical manufacturing environment is, at best, full of information gaps. Within the major enterprise level systems such as ERP or PLM most processes are based or focused on departmental issues which means the processes are not cross-functional. Business Process Management (BPM) and workflow solutions are a missing link to support Smart Manufacturing across the enterprise.
1800	Concluding Remarks & End of Conference