Intelligent Manufacturing

Artificial Intelligence, mixed reality and automation are driving Industry 4.0, to herald a new future of Intelligent Manufacturing, where machines communicate with each other, leveraging data, IoT and automation to monitor and control all aspects of production.

TECH FALCON
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What is Intelligent Manufacturing?

Emerging technologies like automation, information technology, Internet, networking, artificial intelligence and machine learning are setting new benchmarks in quality of equipment, production lines, materials, productivity of employees, and experience of suppliers and customers.

The goal of intelligent manufacturing is to make use of a new generation of information technology to build smart factories that are future-ready to meet emerging manufacturing trends like socialization, personalization, service, intelligence, and green.

In short, the goal of intelligent manufacturing is meeting customer needs with **highest possible quality at the lowest possible cost**.

Why Intelligent Manufacturing?

- Ability to proactively identify and respond to events that enhance quality and productivity by reducing downtime and **improve overall equipment effectiveness (OEE)**.

- Ability to **make proactive changes in supply chain**, inventory, and logistics that include packaging and transportation.

- Ability **identify new business opportunities**, new revenue streams, and new monetization opportunities to strengthen competitive advantage

- Ability to **undertake predictive maintenance** to reduce production line failures and prevent downtime by processing and analysing data in real time.

- Automation
- AI
- Information Technology
- Machine Learning
- Big Data & Analytics
- Internet
- Networking

- Equipment
- Product Lines
- Materials
- Employees
- Suppliers
- Customers

The Future of Manufacturing is Smart

Digital transformation helps industries and businesses to capitalize on new opportunities and innovations. However, becoming a digital enterprise requires more than just implementing new technologies. Manufacturers must also navigate a complex world of legal risk and compliance in their journey.

Cloud-based technologies such as AI are evolving at an incredibly rapid pace, leading to additional challenges such as cybersecurity, the potential impact of technologies on the labor market, and the need for digital re-skilling. We believe that governments, industry, and civil society have important roles in realizing the opportunities and addressing the challenges of the Fourth Industrial Revolution.
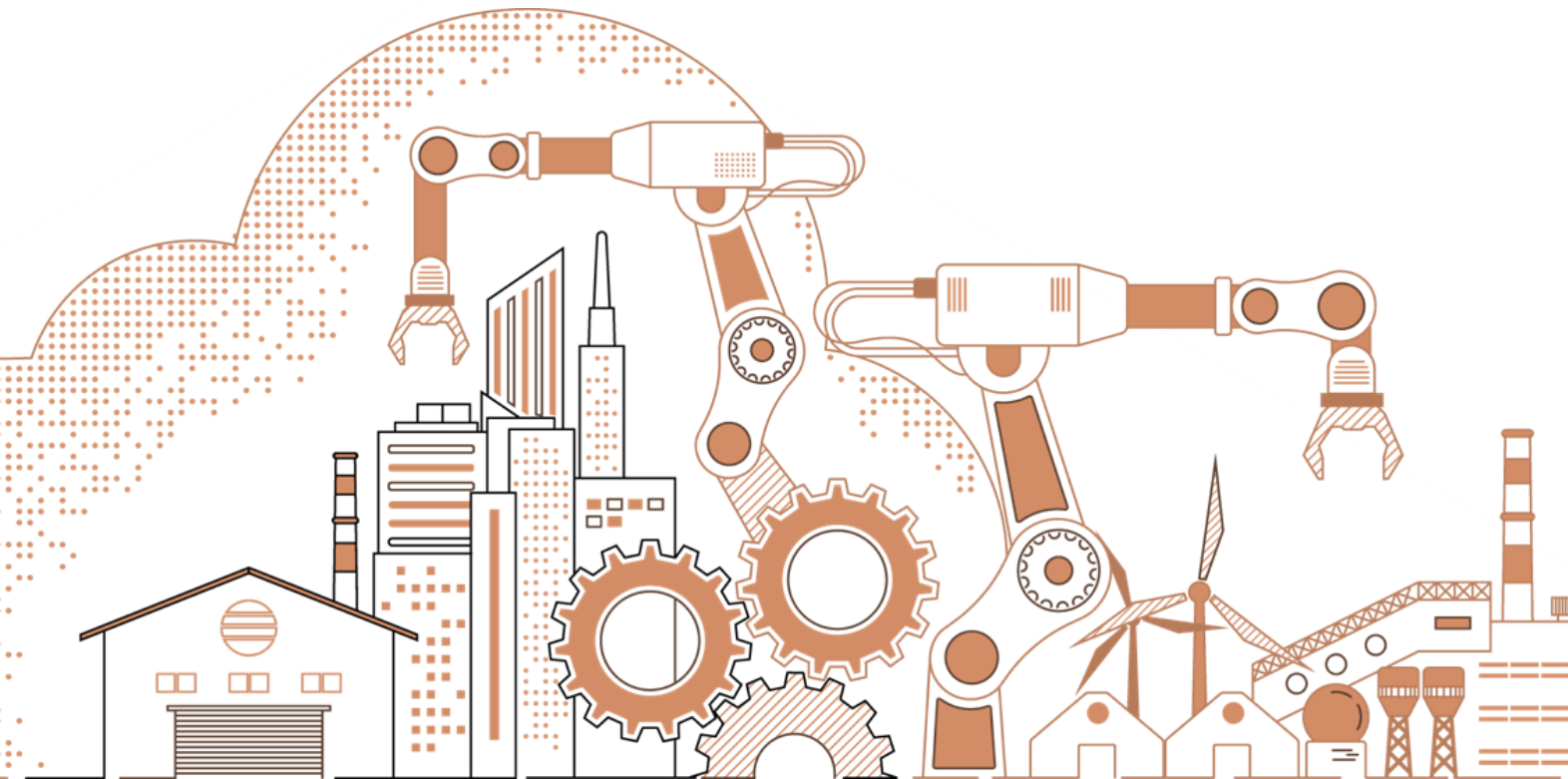
Smart Factory: What do manufacturers gain?

Higher Productivity - Smart factories can operate 24/7 and therefore incur lower direct labour costs.

Increased Flexibility - Smart factories provide operational flexibility using run-time configuration changes to meet demand fluctuations.

Better Safety – As mundane and repetitive tasks like sorting, picking, packing, and transporting get done by machines, employees can take on safer tasks.

Better Quality - A smart factory can detect quality issues faster and can identify the reason for them.

Lower Cost - Optimization leads to more cost-efficient processes, including inventory control, better hiring decisions, and improved sourcing of needs.

Microsoft Dynamics 365 for Manufacturing

Dynamics 365 (previously known as Dynamics AX) was originally designed for the manufacturing industry. Dynamics 365 is capable of supporting multiple business models and offers real-time visibility of plant operations. It empowers your stakeholders to stay connected and informed. With business intelligence and analytics capabilities of Dynamics 365, your employees can make on-the-go decisions confidently and quickly than ever before.

Microsoft Dynamics® 365

Overview of Dynamics 365 Features for the Manufacturing Industry

Production	Supply Chain	Procurement
• Workspaces	• Inventory management	• eProcurement
• Material & Capacity Planning	• Multi-site warehouse management	• Indirect procurement (catalog and non-catalog)
• Production Scheduling & Sequencing	• Tracking and tracing	• Purchasing policies and signing limits
• Resource management	• Demand forecasting	• Category management
• Subcontracting	• Shipping carrier interface	• Direct procurement
• Production Bill of Materials (BOM, formulas, recipes)	• Returns management	• Trade agreements (vendor)
• Product configuration	• Material handling	• Vendor management
• Routing	• Quality management	• Vendor self-service portal
• Production orders	• Master planning, including order promising (ATP/CTP)	• Vendor rebate management
• Production reporting	• Intercompany transactions	• Broker and royalty contract management
• Inventory dimensions for process manufacturing	• Product management of goods and services	• Workspaces
• Potency management		• Procurement reporting
• Lean manufacturing		• Procurement workflows
• Production costing		
• Job card device page		
• Product change management		
• Shop floor control		

Microsoft Business Applications for Manufacturing

Dynamics 365 Finance

Built-in predictive analytics and intelligence capabilities enables you to make better and faster decisions to match the pace of your industry trends.

Dynamics 365 Supply Chain

Enable visibility and management throughout the supply chain by integrating sales and purchase processes with logistics, production, and warehouse.

Dynamics 365 Commerce

An omni-channel solution to unify back-office, in-store, and digital shopping experiences of your customers to engage and retain them.

Dynamics 365 Human Resource

Deliver a modern employee experience by streamlining common HR tasks and enhance employee performance and responsiveness.

Dynamics 365 Customer Service

Meet and exceed customer expectations by delivering smart and personalized support to your customers that they will require throughout the customer journey.

Dynamics 365 Field Service

Boost the productivity and responsiveness of your field technicians to offer exceptional service experience to your customers.

Dynamics 365 Marketing

Raise the impact of your marketing campaigns with smart tools that improve awareness and demand with seamless customer experiences.

Dynamics 365 Project Service Automation

Improve profitability and customer satisfaction by completing projects on time and within budget while maintaining maximum employee productivity

Dynamics 365 Sales

Close more sales by enabling professional buying experiences to prospects by understanding needs to engage them more effectively.

Artificial Intelligence

Platform, tools, and service for developing AI solutions in conversational AI, machine learning, data sciences, robotics, IoT, and more.

Power Platform

One platform built by Microsoft to provide business intelligence, low-code custom apps, organizational process automation, and virtual agents.

Azure IoT

Aggregate, distil, analyse, visualize, and automate processes and systems to proactively avoid costly events or improve revenues and customer experience.
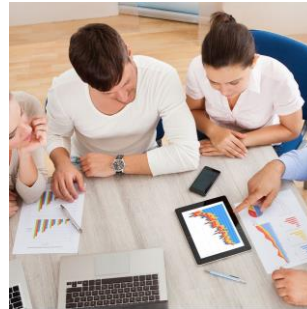
Tech Falcon is a Full-service Digital Transformation Partner

We are a full-service digital transformation partner and our mission is to help organizations take the digital leap to realize business success. We are one of the fastest growing IT Solutions & Managed Services providers in UAE. Our vision is set to become one of the preferred IT Solutions and services organizations globally.

Technology Consulting Service

- Digital Readiness Assessment
- Cloud Migration
- Application Portfolio Rationalization
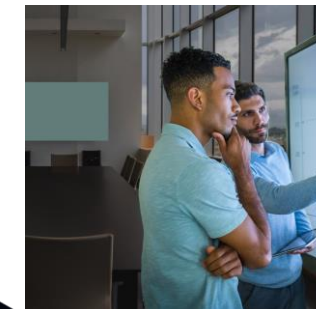- Automation Readiness Assessment

Business Applications Services

- Application Implementation
- Application Modernisation
- Upgrade Services
- Managed Services

Automation & AI

- Intelligent Process Automation
- Cognitive Services
- Machine Learning
- Intelligent Bots

Analytics & Insights

- Enterprise Data Warehouse
- Business Intelligence
- Big Data and Analytics
- Predictive Analysis

We help you take the Digital Leap

More and more enterprises in the MENA region adopt digital transformation to enhance customer experiences, to improve performance and most importantly to remain competitive in the global marketplace. Tech Falcon LLC aspires to be a partner of choice for these enterprises as they embark on their digital transformation journey. We are a technology company offering business applications, automation, and analytics services. We are headquartered in Dubai with ambitions to go global.

Our focused is on enabling our customers in the Middle East, Africa, Europe & India to Align, Structure, Optimize, and secure their strategic Information Technology services by designing, implementing, and supporting enterprise class solutions and services.

Member of Lootah Holding

Through its offices in Dubai and New York, and a team of ambitious young leaders and innovative minds, Lootah Holding fosters its entrepreneurial culture to export home-grown businesses to the global scene and become a driving force for the national and regional economic growth and progress. Born out of the pioneering vision of its founder and Chairman Saleh Saeed Lootah, the business group ventures in diversified industry sectors, contributing to the international expansion of its national economy and creating the most innovative business opportunities.

What makes us different?

- Young Agile, fast growing and aggressive Organization
- Financially strong and part of a large Emirati Business Group
- Dubai Based Local, but global company with operations across the globe
- Global team with rich technology experience
- Domain Expertise
- Structured Approach in Implementation and Development
- Great Credential with Customer reference
- Strong Partnership with Principal

DIGITAL TRANSFORMATION PARTNER
Applications | Automation | Analytics

Tech Falcon LLC is a digital transformation partner for enterprises as they embark on their digital transformation journey. We are headquartered in Dubai. We help clients in manufacturing, projects, distribution, public sector, real estate, and public sector to achive business and operational goals with business applications, automation, and analytics services.

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