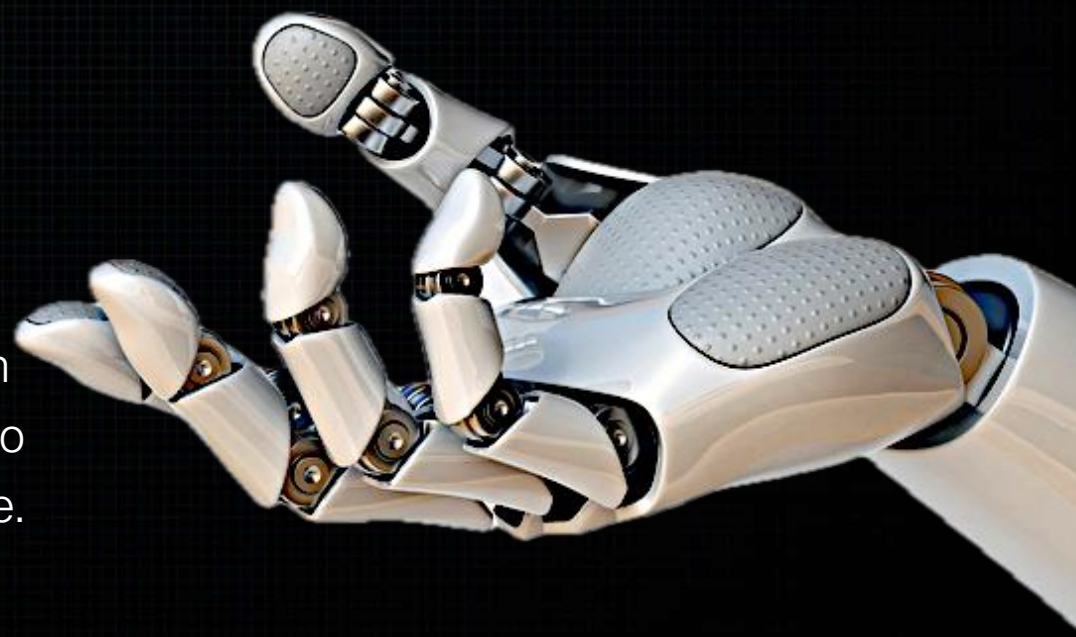
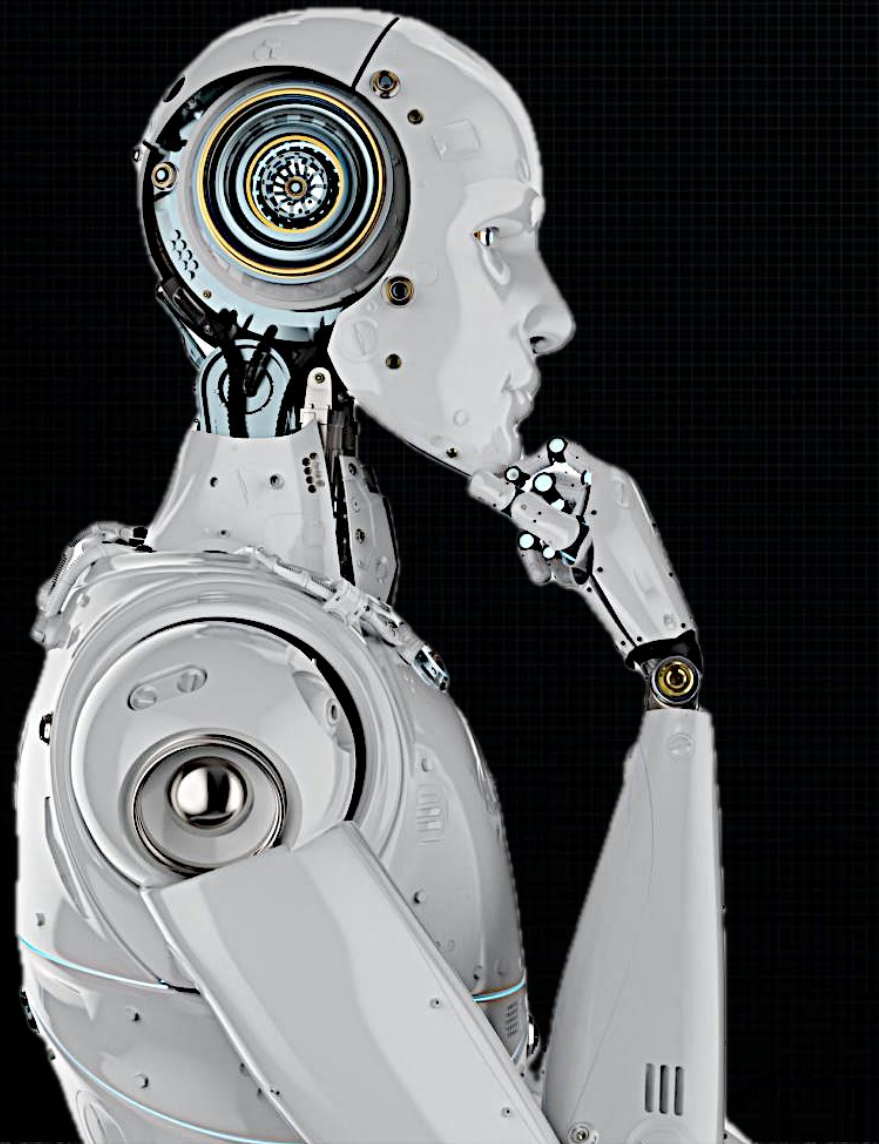
The Ultimate In Quality & Innovation

Smart Manufacturing is a developed system used to improve your operational performance.

Smart Manufacturing solutions reduce costs, enhance product quality, and enable manufacturers to respond quickly to changing market demands and customer needs.

Smart Manufacturing is a key driver of digital transformation in the manufacturing industry, which allows manufacturers to leverage data & technology to gain a competitive advantage.





THE KEY PILLARS OF SMART MANUFACTURING

- Information Technology (IT) & Operational Technology (OT)
- Automation & Robotics
- Data Analytics
- Digital Twin & Physical Systems
- Cloud Computing & IoT (Internet of Things)

DEFINING THE PILLARS OF SMART MANUFACTURING

IT & OT Integration:

Connecting IT and OT systems to enable real-time data exchange.

Automation & Robotics:

Utilizing automation and robotics to enhance efficiency, reduce human error and improve productivity.

Data Analytics:

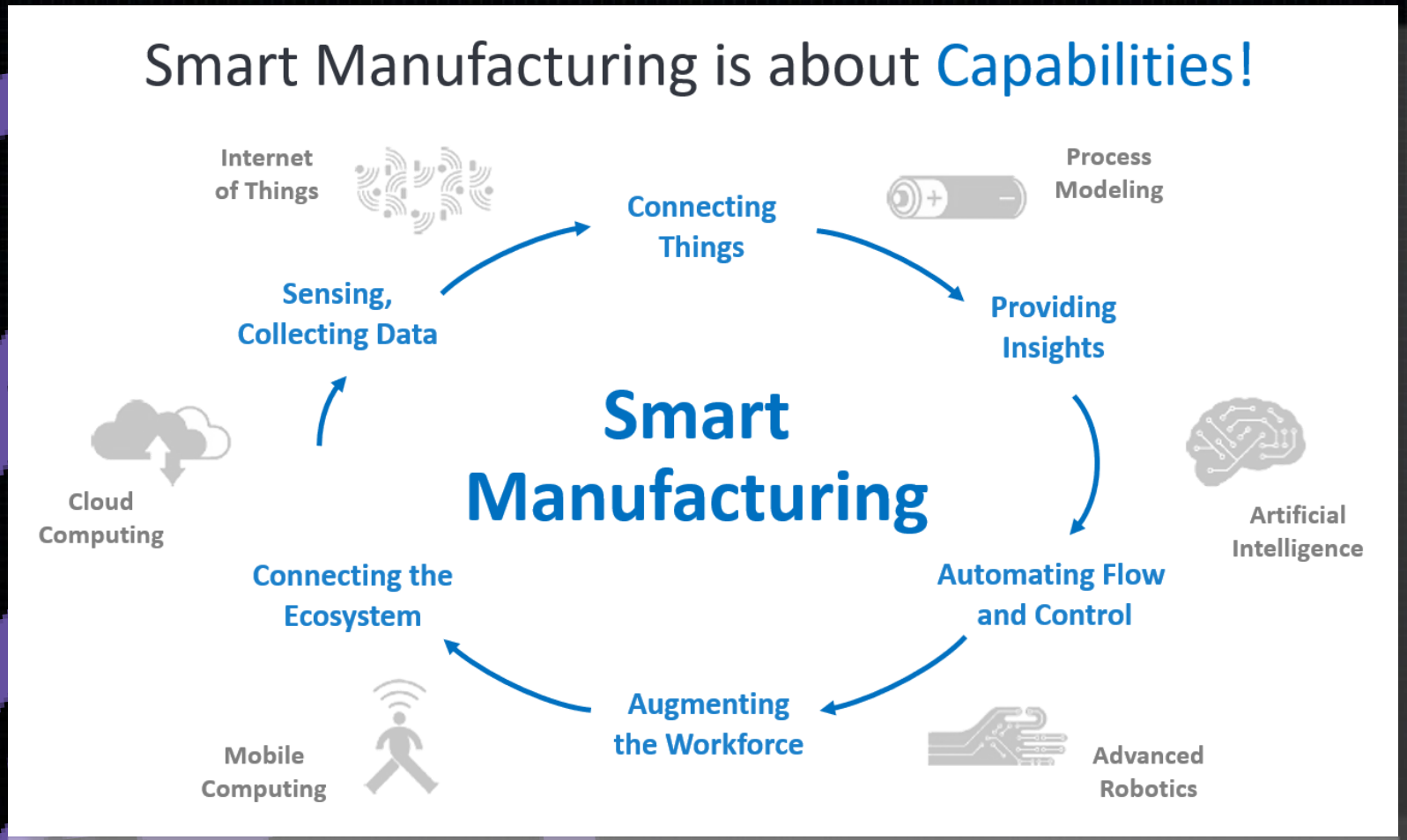
Leveraging data to gain insights into manufacturing processes to predict potential problems, root causes & optimization of operations. Examine data to identify patterns, trends, and insights to inform decision making.

Digital Twin & Physical Systems:

Creating a digital representation of physical assets and processes to enable simulations, optimization, and predictive maintenance.

Cloud Computing & IoT:

Utilizing real-time data processing, remote monitoring and global connectivity.


Smart Manufacturing is about Capabilities!
Internet of Things
Connecting Things
Process Modeling
Sensing, Collecting Data
Providing Insights
Cloud Computing
Smart Manufacturing
Artificial Intelligence
Connecting the Ecosystem
Automating Flow and Control
Mobile Computing
Augmenting the Workforce
Advanced Robotics

BENEFITS OF SMART MANUFACTURING

- Improve Data Insights
- Maximize Plant Efficiency
- Faster Issue Resolutions
- Tracking of Products
- Seamless Data Exchange
- Better
- Safety and Quality Control
- Continual Production Improvements
- Ensuring On-Time Delivery
- Minimizing Human Errors
- Maximizing Energy Efficiency
- More Secure Production

SMART MANUFACTURING TOOLS

Using the Right Tools
Get the Most from Your Investment

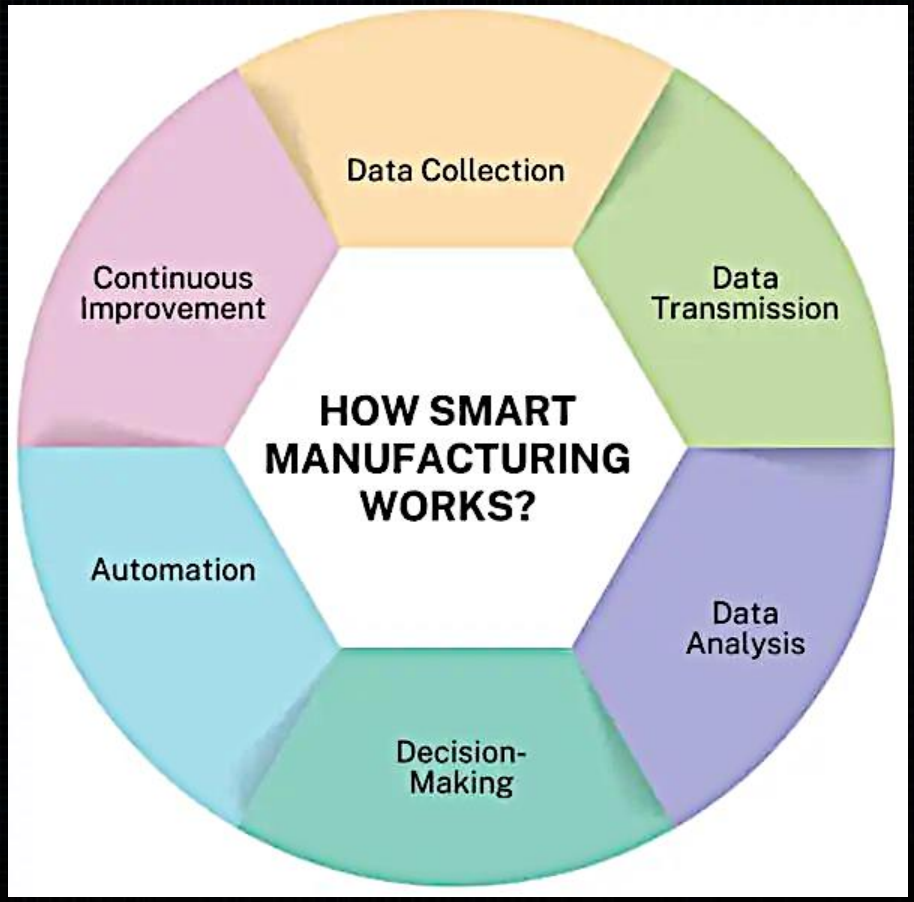
As you decide to change, fine-tune, and enhance your business to be lean and profitable, there are many steps needed to achieve your targets.

The Holistic Approach to manufacturing is considering all aspects of the production process, from raw material to the final product, to optimize efficiency, sustainability and overall performance.

Smart Manufacturing focuses on planning, monitoring, training and collaboration, while considering all factors, like streamlining processes, optimizing inventory and employee retention.

6

KEY STEPS TO SMART MANUFACTURING



6 KEY STEPS TO SMART MANUFACTURING

DATA COLLECTION:

Gathering data and recording information regarding your current process.

DATA TRANSMNISSION:

Transferring of data.

DATA ANALYSIS:

Inspecting, transforming and modelling the collected data.

DECISION MAKING:

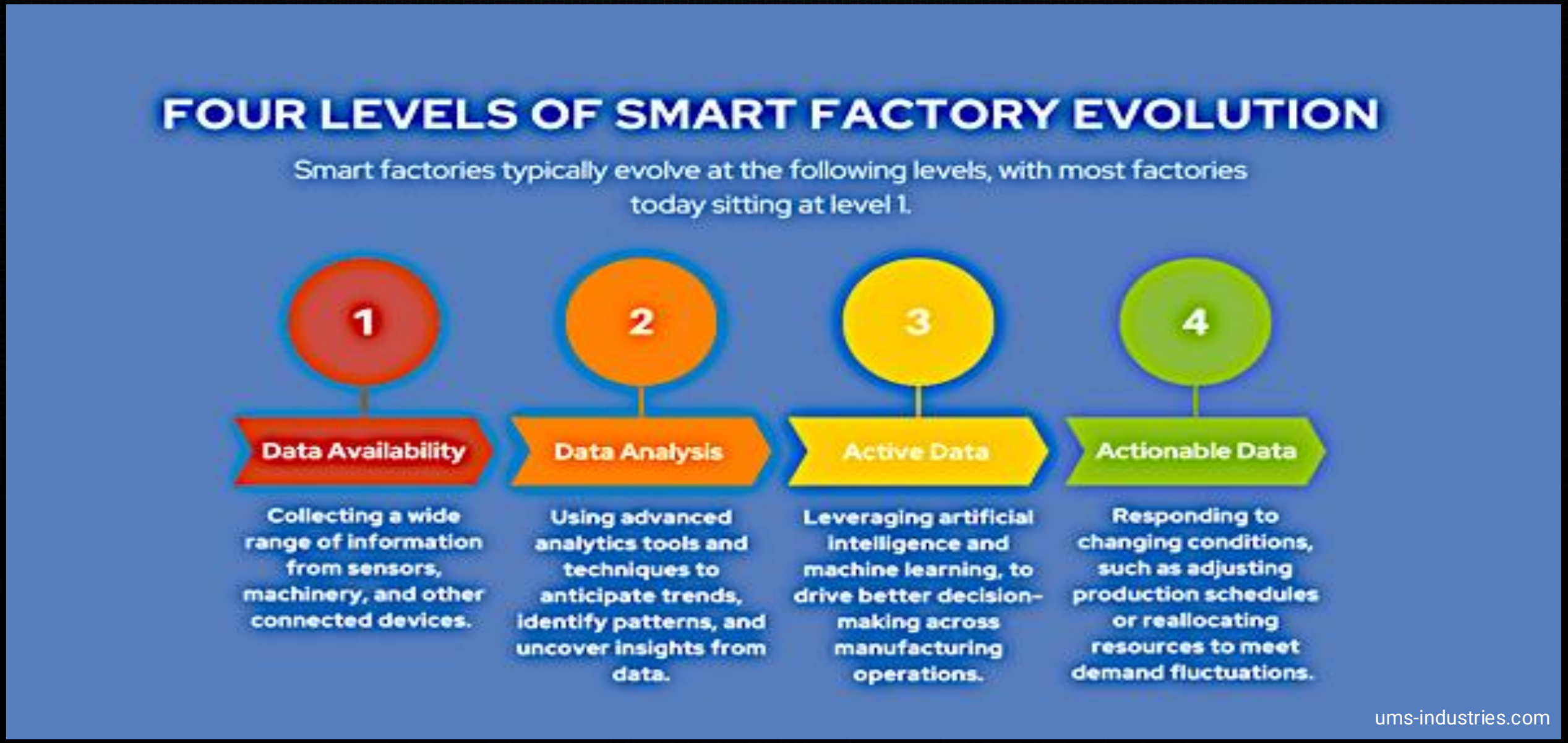
Choosing your best options to lead the course of action needed.

AUTOMATION:

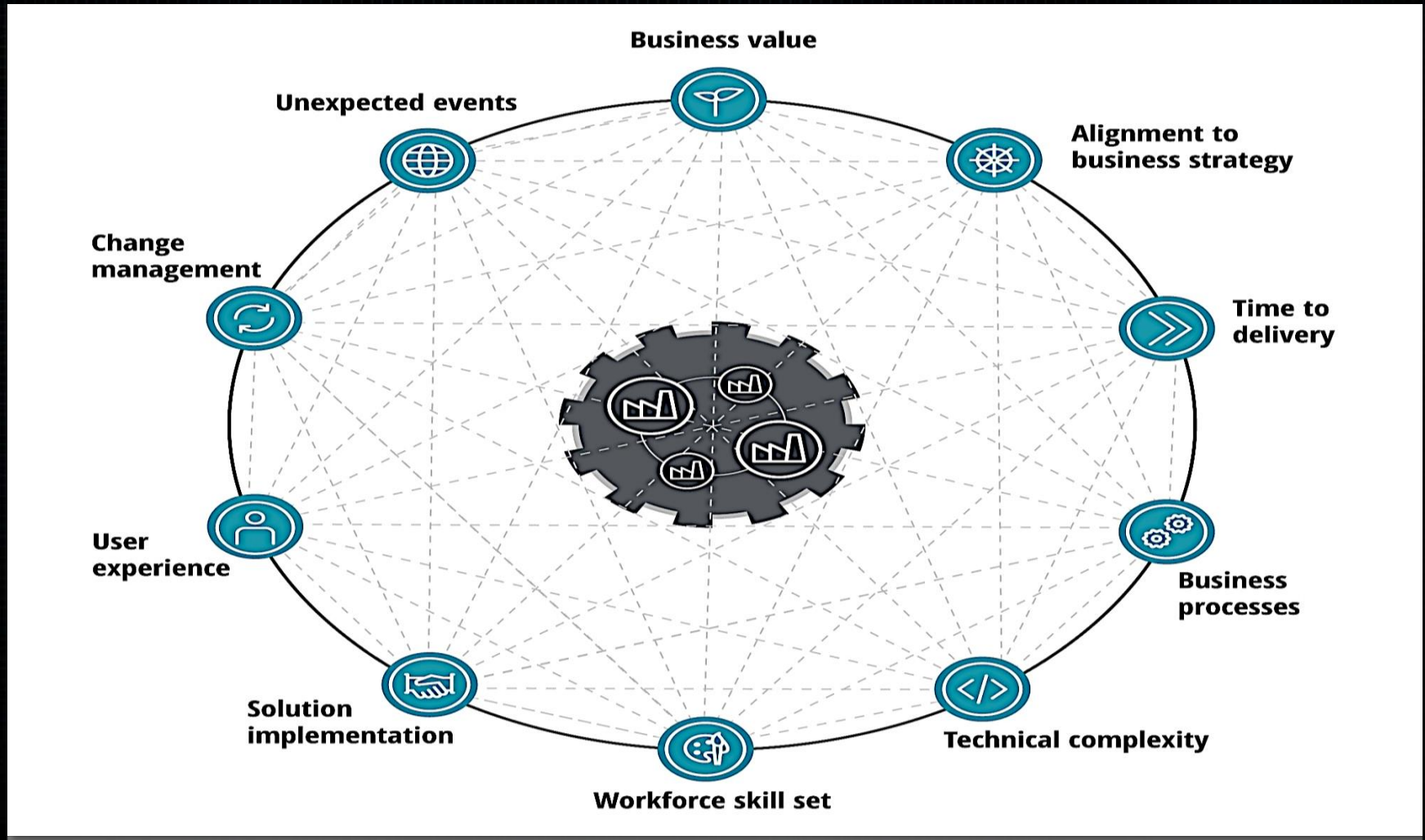
Using technology to preform tasks with minimal human error.

CONTINUOUS IMPROVEMENT:

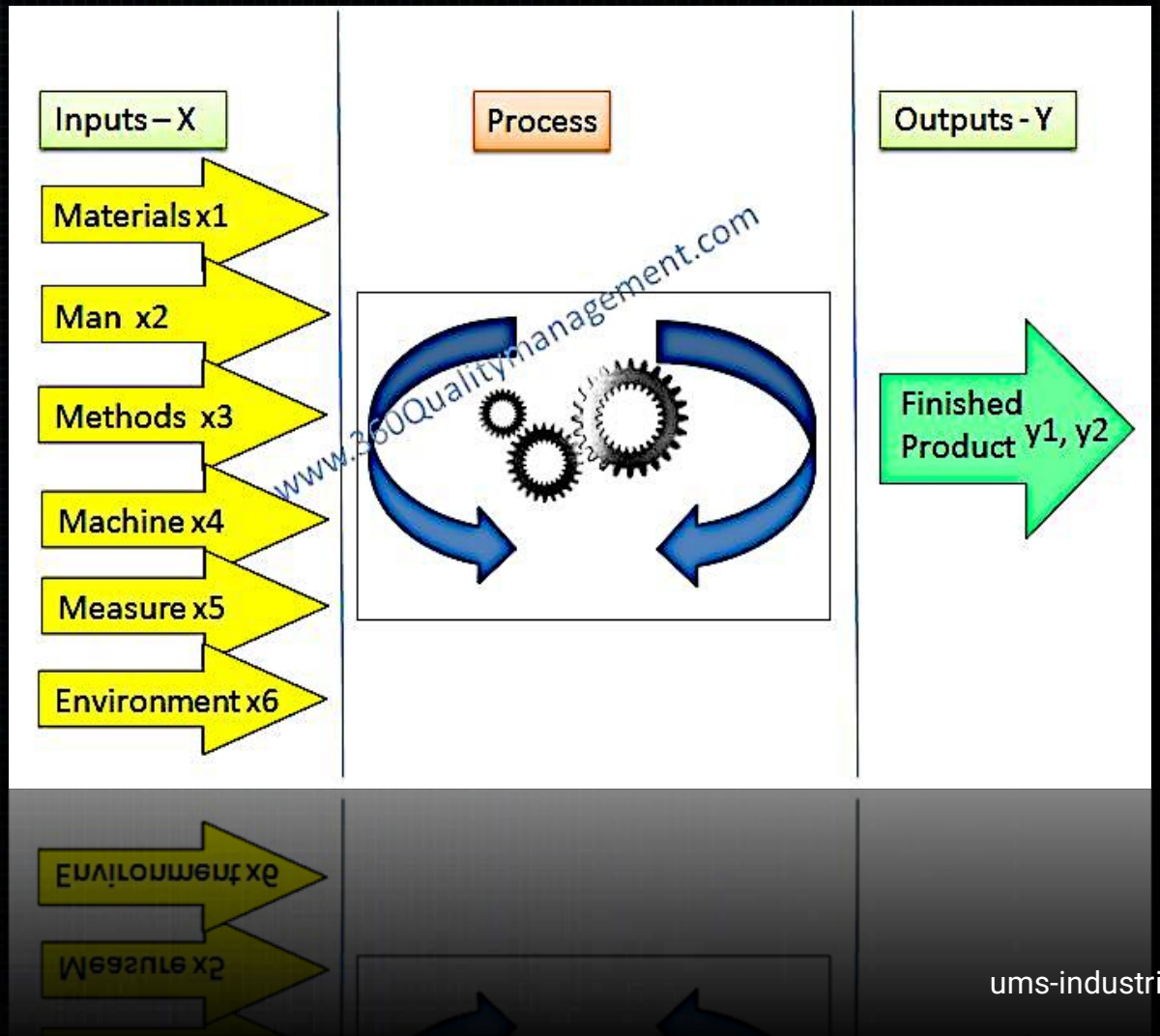
An ongoing process for improvement of products, services, quality and. delivery

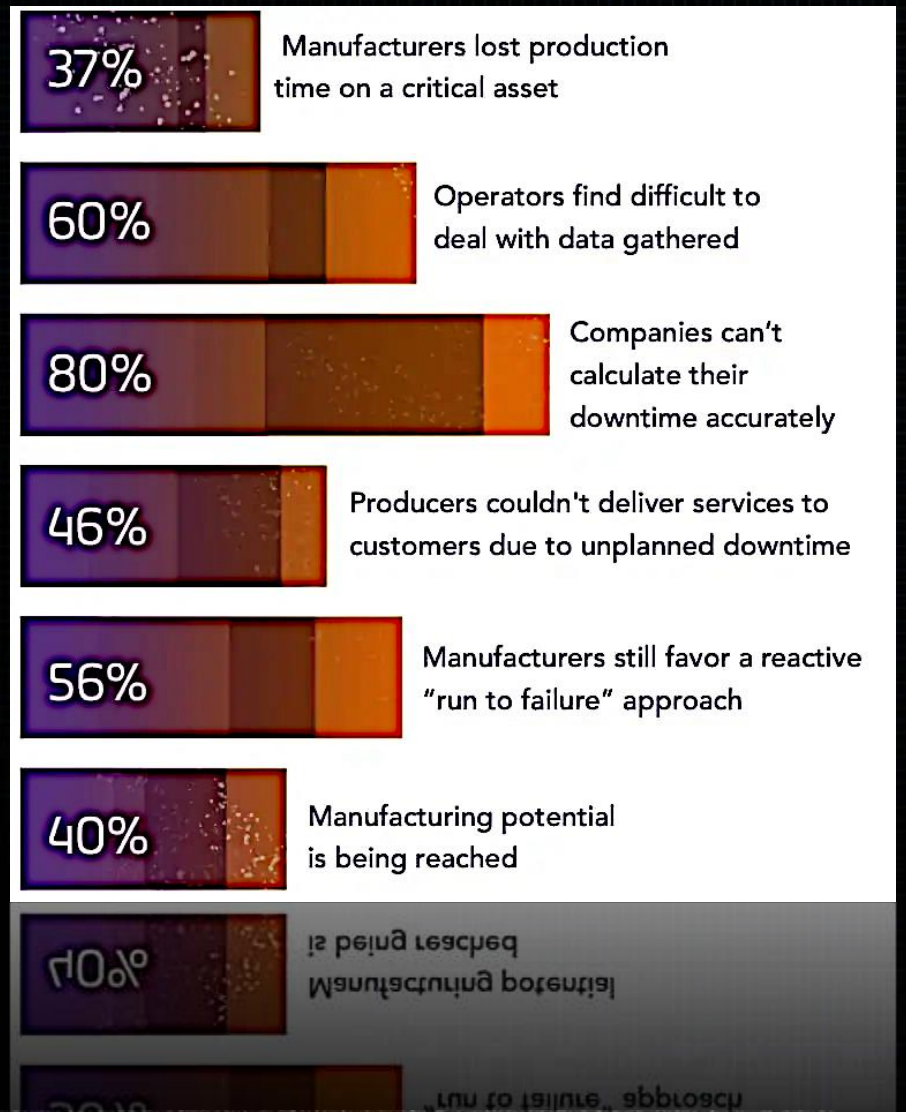

FOUR LEVELS OF SMART FACTORY EVOLUTION
Smart factories typically evolve at the following levels, with most factories today sitting at level 1.
1
Data Availability
Collecting a wide range of information from sensors, machinery, and other connected devices.
2
Data Analysis
Using advanced analytics tools and techniques to anticipate trends, identify patterns, and uncover insights from data.
3
Active Data
Leveraging artificial intelligence and machine learning, to drive better decision-making across manufacturing operations.
4
Actionable Data
Responding to changing conditions, such as adjusting production schedules or reallocating resources to meet demand fluctuations.

BUSINESS DELIVERY APPROACH TO SMART MANUFACTURING



SMART MANUFACTURING STARTS WITH THE COLLECTION OF DATA USED TO DETERMINE THE KEY ELEMENTS FOR DEVELOPING AND EXECUTING EFFECTIVE STRATEGIES IN YOUR CURRENT SYTEMS. THE DATA IS ANALYZED INTO SEVERAL AREAS, WHICH ALLOWS YOU TO DETERMINE WHERE THE SYSTEM NEEDS IMPROVEMENT.





MARKETING STANDARDS: WHY BUSINESSES SUFFER

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- Low Adoption of Automation
- Poor Data Utilisation
- Neglecting System Implementation
- Resistance to Change
- Weak Customer Engagement
- Inefficient Processes
- Lack of Essential Technologies

SMART MANUFACTURING: THE UMS VISION

UMS INDUSTRIES IS A CANADIAN/AMERICAN BASED COMPANY THAT HAS BEEN OPERATING FOR THE LAST 25 YEARS. STARTING AS A STRUCTURAL STEEL FABRICATOR AND LATER DEVELOPING INTO AUTOMATION SERVICING THE AUTOMOTIVE AND AREOSPACE SECTOR, WITH TURNKEY SOLUTIONS.

AT UMS INDUSTRIES, OUR DETERMINATION IS TO ACHIEVE YOUR GOALS WITHIN YOUR ORGANIZATION, ELIMINATE WASTE, REDUCE DOWNTIME, IMPROVE EFFECIENCY, AND INCREASE YOUR ROI (return on investment) INTO A COMPETITIVE BUSINESS.

OUR TEAM AT UMS INDUSTRIES IS A COMBINATION OF PROFESSIONALS. WITH OUR BUSINESS DEVELOPMENT, ENGINEERS, FINANCIAL AND QUALITY TEAM UMS OFFERS A STRATEGIC APPROACH TO ASSIST YOU IN DELEVELOPING YOUR CURRENT SITUATION TO BECOME A LEAN AND PROFITABLE ORGANIZATION.

OUR PROFESSIONALS HAVE YEARS OF EXPERIENCE WORKING IN THE MANUFACTURING INDUSTRY. FROM PART DEVELOPMENT TO THE DELIVERY OF A FINISHED PRODUCT, WE USE THE METHODOLOGY OF SMART MANUFACTURING ON MAXIMIZING PRODUCTIVITY AND ELIMINATING WASTE BY OPTIMIZING PROCESSES, REDUCING LEAD TIMES, AND IMPROVING QUALITY.

UMS industries

Smart Manufacturing Solutions

CORE CAPABILITIES

- Project Management
- Mechanical Engineering Design
- Electrical Engineering Design
- Pneumatic Engineering Design
- Civil Engineering Design
- Project Cost Management Services
- Risk Management
- Public Health and Safety
- Quoting and Estimation