

Transformative Use-Cases Shaping the Future

DIGITAL TRANSFORMATION IN MANUFACTURING

Prashanthi Chennupati ,
Transformation Leader





Manufacturing is entering a new era with digital transformation leading the way. Smart factories, Predictive maintenance, and Digital Twins are just a few innovations driving efficiency, reducing costs, and enhancing product quality.

These key use cases explore the potential to revolutionize the industry, highlighting the immense impact of digital solutions in shaping the future, redefining, and empowering manufacturers to stay competitive and sustainable.

1. Quality Management

Description - Defect detection during production with AI models identifies defects in real-time, reducing waste and improving product quality

AI Model Type - Diagnostic Model

Solution Type - Product



2. Supply Chain Management

Description - Predictive analytics for supply chain disruptions anticipates supply chain issues, enabling proactive mitigation and smoother operations

AI Model Type - Predictive Model

Solution Type - Product & Service



3. Production Optimization

Description - Prescriptive scheduling for optimizing production lines recommends schedules to minimize downtime, improving productivity and efficiency

AI Model Type - Prescriptive Model

Solution Type - Platform



4. Waste Management

Description - Waste reduction through AI-guided material planning optimizes material usage, reducing excess waste and promoting sustainability

AI Model Type - Prescriptive Model

Solution Type - Platform



5. Operations Workflow Simulations

Description - Digital simulations for energy-efficient workflows models workflows to identify energy-saving opportunities, reducing operational costs

AI Model Type - Predictive Model

Solution Type - Product



THANK YOU

Contact Details

Name: Prashanthi Chennupati

Linkedin <https://www.linkedin.com/in/prashanthichennupati/>

Email : prashanthi.chennupati@gmail.com

Blog : <https://chennupati108.com>

