

HCLTech | Supercharging
Progress™

M360 Manufacturing Suite

Framework for accelerating smart
manufacturing apps development

Catalyst for enhanced manufacturing performance

In today's global landscape, large corporations with manufacturing plants spanning multiple locations increasingly seek a unified solution that harnesses a centralized data platform to enhance decision-making and drive process improvement.

M360 by HCLTech is a comprehensive manufacturing solutions suite hosted on AWS Cloud. Our solution offers end-to-end visibility into smart manufacturing operations. The suite provides production effectiveness measurement and analysis to drive operational excellence by utilizing KPIs as business metrics to uncover new growth opportunities and enhance profitability.

Our solution suite seamlessly integrates data from multiple facilities to facilitate visualization, analysis, prediction, recommendation and optimization of the processes with actionable insights. It embraces a multi-geography/multi-plant/multi-use case approach, allowing enterprises to reduce overall ownership costs and mitigate complexity and integration challenges.



M360 manufacturing applications



Product quality

- Automated product quality check using machine vision/ AI techniques
- Product quality prediction



Generative AI Quality Assistant

- Diagnose Quality issues
- Data story telling
- Accelerated Dashboard authoring



Operations (Asset health)

- Rule, pattern, machine learning based predictive maintenance



Production performance

- OEE data visibility at enterprise, plant, line, equipment level
- Automated root cause analysis and recommendation



Sustainability













- Multi-plant sustainable manufacturing tracking



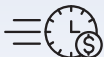






Multi-plant analytics

- Multi-plant analytics,
- Cross use case, cross plant data visibility, correlation


Solution capabilities

 <p>Deep learning for machine vision</p>		<p>Prediction and recommendation system</p> 
 <p>GenAI assistants</p>		<p>Industrial digital twin</p> 
 <p>Edge AI for real-time decision in plant</p>		<p>Knowledge graphs</p> 
 <p>Industrialized machine learning for easy adoption and agility</p>		<p>Analytics dashboards</p> 

Solution benefits

 <p>35-40% reduction in time-to-market</p>	<p>30-40% reduction in application development cost</p> 	 <p>35-40% Improved product quality</p>	<p>37-42% Reduced downtime</p> 	 <p>Increased business agility</p>	<p>25-30% Labor productivity improvement</p> 	 <p>Provides single source of truth for decision-making</p>
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M360 use cases

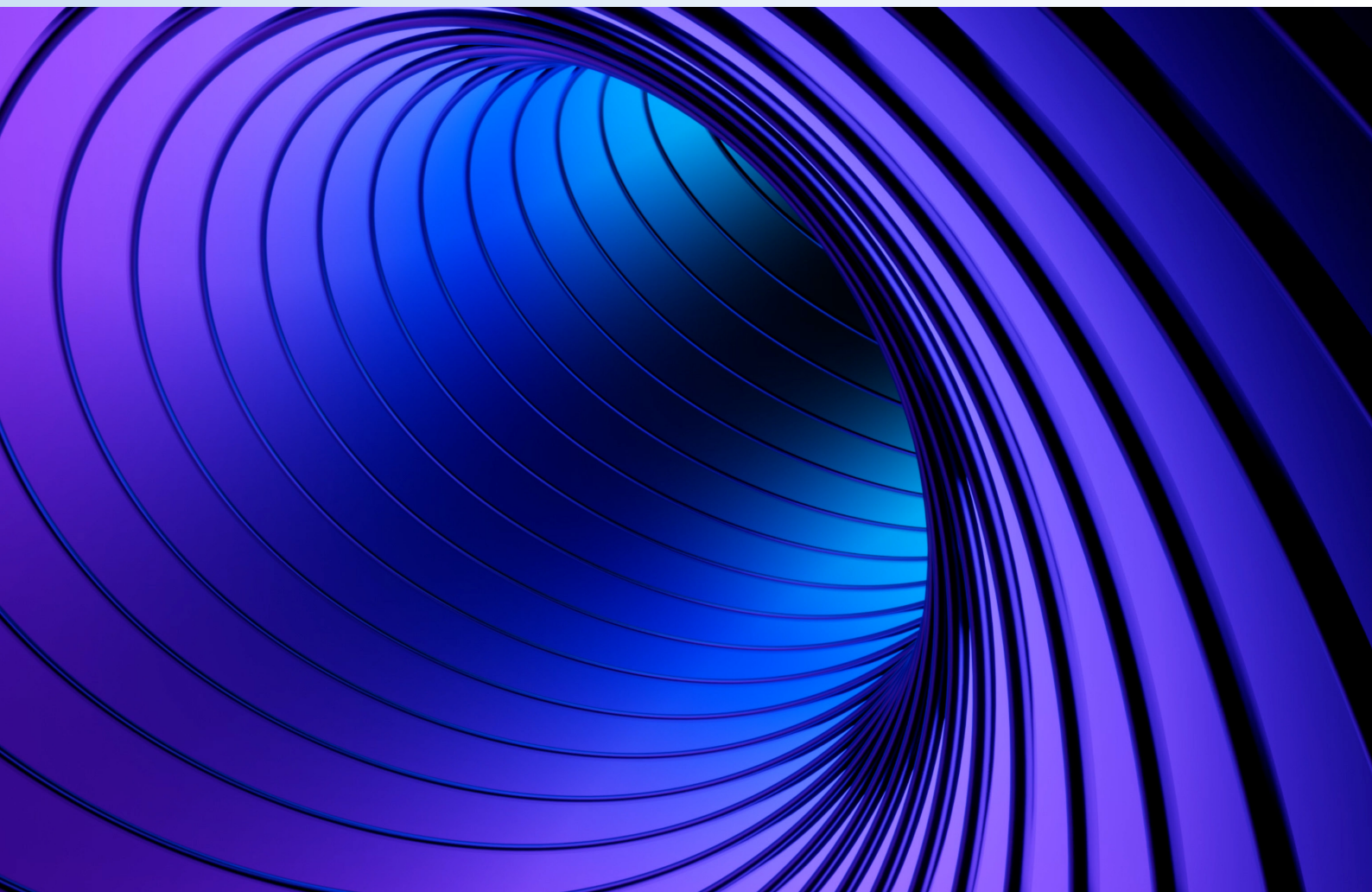
 <p>Identify product quality issues in automotive engine assembly, paint shop and more</p>	 <p>Identify potential equipment failures in food and beverages process line</p>	 <p>Predict product quality using process twin in a chemical plant</p>
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For more information contact on kirankumarv@hcltech.com

Driving innovation and differentiation with AWS services

HCLTech M360 leverages AWS services to create a key differentiated offering, following is the summary of the key AWS services leveraged.

- ▶ M360 leverages AWS services like Lookout for vision, Recognition, SageMaker for identifying product quality issues
- ▶ M360 Edge leverages AWS IoT Greengrass for edge runtime to build, deploy and manage intelligent device software
- ▶ Amazon Bedrock is used for building and scaling Generative AI capabilities in M360
- ▶ Services like AWS IoT Site Wise, IOT Core, AWS Events used to create a secure data hub for operational data and sensor readings
- ▶ Data Lake is created using Amazon S3, Amazon Timestream, PostgreSQL, AWS Glue, Amazon DynamoDB
- ▶ For orchestration and communication services like Amazon Event Bridge Step Functions, Lambda function, SNS, SQS, etc. are used



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