

# Alteryx for Manufacturing

Unify data and reduce operational costs across manufacturing

**Global Chemical extended catalyst lifespan by 40% and improved feedstock decisions to deliver \$1.5M in revenue gains** ▶

## Drive smarter, lower-cost manufacturing

Manufacturers are under increasing pressure to reduce costs, improve efficiency, and scale AI initiatives, yet many struggle to turn data into actionable insight.

According to [Deloitte](#), smart manufacturing initiatives can deliver up to 20% improvement in production output and 20% increase in employee productivity. Organizations need a better way to connect data, automate analysis, and enable faster decisions across operations.

## Turn data into operational cost savings

Manufacturing organizations generate vast amounts of data across ERP, MES, and supply chain systems, but much of it remains siloed and underutilized. In fact, [only 44%](#) of industrial data is used effectively, leaving the majority of production value untapped. Analysts and engineers spend significant time preparing data manually, limiting their ability to focus on optimization, forecasting, and performance improvement across operations.

However, AI initiatives are often constrained by weak data foundations. [Nearly half](#) of manufacturing leaders report limitations in data or IT/OT systems, while poor data quality continues to slow progress. As interoperability challenges grow and [one-third of organizations](#) report negative consequences from AI inaccuracy, the need for trusted, connected data becomes critical.

Alteryx One enables teams to unify data, automate analytics, and prepare governed, contextual datasets that support reliable AI outcomes and scalable operational decision-making.

## Common Challenges

Disconnected systems limit visibility across production, supply chain, and operations

Manual data preparation slows analysis and delays operational decision making

Inconsistent data quality reduces trust in reporting and analytics outputs

Difficulty scaling analytics and AI beyond isolated use cases and teams

## 5 AI Challenges in Manufacturing Data

1. AI fails when data lacks context across systems and production processes
2. Poor data quality leads to inaccurate predictions and unreliable operational insights
3. Lack of governance reduces trust in AI driven recommendations and decisions
4. Fragmented data prevents scaling AI across supply chain and manufacturing operations
5. Missing lineage and traceability limit explainability of AI generated outcomes

# 5 Ways to Optimize Manufacturing

## 1. Quality monitoring

**Roquette** eliminated hundreds of hours of manual effort by automating data preparation and analysis across its manufacturing network. A single workflow now performs Sigma Level calculations for **25 production sites in under three minutes**, saving more than 100 working days per cycle. These efficiencies empower employees to focus on innovation, quality improvement, and process optimization.

**Toyo Engineering** saved over **38,000 hours** of manual effort and reduced repetitive engineering tasks **by 85%**. With Alteryx, the team eliminated copy-paste workflows and enabled rapid, repeatable reporting, freeing up engineers to focus on quality, innovation, and reducing downstream rework in large-scale plant construction.

## 2. Predictive maintenance

**McLaren Racing**'s trackside analytics supported 300 million race simulations, powered by 11.8 billion data points and 300 telemetry sensors on each car. Using Alteryx, McLaren turned this stream of data into predictive insights that helped the team achieve a perfect reliability score.

## 3. Throughput performance monitoring

**Global Chemical** extended catalyst lifespan by **40%** and improved feedstock decisions to **deliver \$1.5M** in revenue gains through predictive analytics. Engineers automated time-consuming processes, improved forecasting accuracy, and enhanced operational **efficiency by 60%**, driving measurable impact across production and procurement.

## 4. Warranty and cost of quality analytics

**Polaris** identified 2% more safety-related warranty claims using Alteryx, resulting in over **\$450,000** in additional product revenue from improved customer retention within the first year.

## 5. Emissions and waste reporting

**Anglo American** automated fuel tracking and diamond inventory processes, cutting time spent on one critical workflow by **97%** and reducing month-end balancing from a week to just two days. With Alteryx, the company now enables daily visibility into **\$1B+ in diamond inventory**, while empowering non-technical audit staff to run sophisticated analytics across high-risk domains.

## What Alteryx Provides

**AI-ready data:** Prepare clean, governed datasets for reliable analytics and AI

**Cloud-native:** Connect and blend data across cloud and on-prem systems

**Modern stack compatibility:** Work with Snowflake, Databricks, dbt, and BI tools

**Automation at scale:** Reduce manual work and accelerate analytics workflows

**Empower domain experts:** Enable engineers and analysts to build workflows independently

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*"Alteryx can make the impossible possible. We have automated the complicated 3D modeling work process ... which was considered impossible before introducing Alteryx."*

Daisuke Tsuchiya  
3D CAD R&D Task Leader  
Toyo Engineering

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