

## Competitive Advantage-Driven Technologies for Manufacturers



## Five Technology Use Cases

The innovative use of technology can help drive operational efficiency, increase forecast accuracy, reduce supply chain costs, improve customer engagement and more. Learn how you can create a competitive advantage for your organization with these five manufacturing technology use cases.



**AI & Machine Learning Forecasting**



**Sales Quoting Automation**



**Predictive Analytics**



**Warehouse Optimization**



**Connected Products**

# Five Competitive Advantage-Driven Technology Use Cases for Manufacturers

## AI & Machine Learning Forecasting



A global manufacturer increased forecast accuracy and reduced forecast development time with AI & machine learning. It leveraged historical data and predictive analytics to develop a forecasting model. This new model was tested and proven to be more accurate compared to prior monthly forecasts and actuals. It reduced forecast development time from 18 hours to 10 minutes and increased forecast accuracy by 44%. Featured technologies: Azure Machine Learning, Azure Kubernetes Services, Azure Synapse, Databricks and Power BI.

## Sales Quoting Automation



A global manufacturer used AI & natural language processing (NLP) to reduce the amount of time it takes to provide quotes to customers to gain a competitive advantage in its highly competitive industry. It used AI and text analytics to create a NLP model to process incoming emails in real-time and provide salespeople with information to required quoting tools. Featured technologies: Azure Machine Learning, Kubernetes Services, Text Analytics, DevOps, Databricks, and Spark NLP.

## Predictive Analytics



A leading international technology company sought to improve business operations and client service levels by increasing the speed and frequency at which it processes and interprets machinery and product quality data. It leveraged technology to create a capability to read, write and collect sensor data in real-time to support intelligent decision-making, and monitor product quality and machine performance to mitigate risk and reduce costly production downtime. Featured technologies: Azure, IoT Core (Edge), Stream Analytics, CosmosDB, Azure Machine Learning, Azure Cognitive Services, API Management

## Warehouse Optimization



A global manufacturer accelerated warehouse efficiency with digital warehouse twins, cycle counting automation, and flow optimization. Digital warehouse twins were used to increase material accuracy, minimize wasted picking time, and optimize flow of materials. It leveraged computer vision to automate cycle counting while mitigating quality failures through material analysis. Finally, the flow of intra and inter warehouse material was optimized to minimize movement to produce end products and shipping costs. Featured technologies: Azure IoT Digital Twins, Bot Service, Cognitive Services, Data Platform, Synapse.

## Connected Products



A global manufacturer that sells its products through a distribution network wanted to build a stronger connection with its end consumers. It used product modernization and cloud transformation to create a digital, non product-based customer experience to enhance the in-use product customer experience. This new direct-to-consumer channel further developed customer relationships and insulated the company against unfavorable market conditions. Featured technologies: Azure Kubernetes Services, Azure IoT Hub, App Insights.

## ABOUT CONCURRENCY

Concurrency specializes in helping organizations leverage technology to drive business outcomes and was named the 2020 Microsoft US Manufacturing Partner of the Year for success leading digital transformation at manufacturers. Learn more at [concurrency.com](https://concurrency.com) or contact us directly at 1-866-930-8356 or [contactsales@concurrency.com](mailto:contactsales@concurrency.com).

